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Modern Energy: Impacts on Micro- enterprises

Phase 1, Task 2.1

Field Test on Research Methodology

A report produced for UK Department for International Development

Paul Harris Integrated Energy Solutions (Pty) Ltd, South Africa
Chris hazard “ “ “ “ “

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Title | TASK 2.1: FIELD TEST OF RESEARCH METHODOLOGY
Modern Energy: Impacts on Micro-enterprises

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AEA Energy & Environment
The Gemini Building
Fermi Avenue
Harwell International Business Centre
Didcot
OX11 OQR
Telephone +44 (0) 870 190 6212
Facsimile +44 (0) 870 190 6318

AEA Energy & Environment and Future Energy Solutions are business names of AEA Technology plc. AEA Energy & Environment is certificated to is certificated to ISO 9001 and ISO14001

Authors | Paul Harris, Integrated Energy Solutions (Pty) Ltd, South Africa
Chris hazard, Integrated Energy Solutions (Pty) Ltd, South Africa
Denise Oakley, AEA Energy and Environment

Name	Signature	Date
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Reviewed by	Tom Slesenger		
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Executive Summary

Introduction

This DFID research project aims to test the hypothesis that the provision of modern energy services facilitates improvements to standards of living, via the establishment or growth of micro-enterprise, which create jobs and cash income, thus reducing vulnerability and enabling participation in the economy. The research methodology centres on pre- and post energisation surveys of communities. It will gather and assess quantitative data, with qualitative investigations to help understand the context of the data and the broader impact of such interventions. The phase-1 of the project centers on the development and testing of the methodology. This report describes the field trial and provides commentary that serves to provide insights and guidance on the implementation of methodology.

Methodological and Research Lessons

A field trial was undertaken in the South African peri-urban community of Fisantekraal, which had been electrified in 2001. The trial largely confirmed that the method is valid and assumptions on which it is based are sound. There are however a number of practical issues around the gathering of reliable income data from certain business owners who are reluctant to disclose such information. A range of deductive investigation methods had to be used therefore to elicit this information. The questionnaires used by researchers have been refined to address this issue.

Field Observations

Of 1331 properties surveyed, in almost 24% an enterprise was found. Shabeens (selling liquor and entertainment) and Spaza shops account for 80% of micro-enterprises. Some 9 % of micro-enterprise could be classified as manufacturing with some of these having significant potential for growth and serving markets outside the immediate community. The remainder offers services.

3 out of every 20 homes are trying to make some additional income through selling to their neighbours. Whilst Shabeens and Spazas are clearly a significant source of employment, income and service to the community, we have a concern that such a high level of retain activity may simply facilitate the circulation of money within the community but may not draw money into it. This is an issue that needs investigation in phase-2.

78% of the surveyed micro-enterprises offered credit, and on average 17% of micro-enterprise turnover relied on credit. Only 4% of turnover was lost to bad debts. Evidently trust and credit is an important contributor both to micro-enterprise activity and to survival for those households who received their incomes periodically.

At least 68% of the sample of micro-enterprises reportedly only started their businesses after the community received electricity and that all the businesses ranked having electricity as highly important to their business activities.

Conclusion

Though the trial is necessarily limited in scope the results nevertheless indicate that Phase 2, in which the methodology will be implemented in full, should deliver meaningful and important observations.

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1. Introduction

This document deals with the results of the field test that was carried out in South Africa during February and March 2003 to test the proposed methodology as set out in the project document entitled 'Development of the research methodology'. The primary set of results reported in this document are about the efficacy of the proposed methodology and research techniques in a live field situation together with refinements that need to be made to the first methodology proposal. Various practical lessons from the field trial are documented and form the basis for further refinements for inclusion during the preparation of a final, statistically robust and replicable research methodology, techniques and process for stage two of the project entitled, Modern Energy: Impacts on Micro Enterprise in Southern Africa and India (DFID reference KAR project R8145). Information from the field test will also be used to provide more accurate resource and project plans for stage two of the project that will involve four community investigations using the methods described in the final document entitled "Revised Research Methodology".

Although the primary objective of the field trial was to test and refine the research methodology, a secondary aim was to collect relevant (though only notional data, see Sections 8.1 – 8.5) data on modern energy and micro enterprise for the selected pilot community. This information is also reported in this document.

The basic steps that are being enacted to develop and apply the methodology, in the context of Phase 1 and 2 of the project, are as follows:

- Step 1: Develop the methodology and research techniques as a (theoretical) written document.
- Step 2: Agree the proposed methodology document with DFID, Advisors, AEAT and Project Teams in South Africa and India.
- Step 3: Testing the methodology in practical and representative live field situations.**
- Step 4: Taking lessons from the practical field trial (including the quality, reliability and validity of the limited test data gathered and analysed) to refine and modify, necessary relevant parts of the methodology and research techniques.**
- Step 5. Demonstrate the robustness and replicability of the methodology to DFID and seek approval to proceed to Phase 2.
- Step 6: In Phase 2, deploy the research methodology in selected sites in Southern Africa and India to undertake the substantive investigation of modern energy and impacts on micro enterprise.

This document therefore reports on Step 3 and 4 of the above.

Following a brief statement of the objectives of the field trial the whole matter of site selection is described and discussed. This is then followed by an overview of the actual trial that describes such matters as project site set up, gaining legitimacy with the community and the community leaders and a description of the community. Next a description of the quantitative and qualitative research process and techniques that were deployed with an in depth review of methodology has been set out. Then there is a summary of the main modern energy and micro enterprise findings that emerged from this research. Finally the document draws to a close with a section that details the methodological lessons, at each stage of the research process and with each research technique that are reflected in the final methodology document for the second stage of the overall project. This document concludes with a brief review of whether the objectives set for the field test have been properly satisfied.

2. Integrated research process

It is essential to understand from the outset that in terms of methodology, an integrated research process has been tested and is advocated for use during phase two of the project. It is a logical, comprehensive and sequentially phased approach that builds on earlier stages of activity within the community under investigation. Each phase of activity must be effectively carried out to ensure a robust and replicable research methodology. In other words, subsequent phases of research rely very heavily on the earlier phases being properly completed.

Unless the community briefing is properly completed then legitimacy for subsequent interactions with the community will be in jeopardy. Unless community interviewers are properly selected, trained and monitored, then clear communications and initial data gathering from householders in the community about micro enterprise will be compromised. Unless maps of the community are provided and the system of unique micro enterprise location referencing is deployed vigorously, then the reliability and accuracy of data sets will be at risk. A crucial and highly challenging activity are the in depth micro enterprise interviews and unless these are conducted by high level research personnel, are carefully validated and checked, then the quality of further data sets will be in question. It is then from the analysis of this micro enterprise data that part of the subsequent qualitative research questions will be framed. And so it is throughout this modern energy and micro enterprise research methodology. Leaving out a step, failing to conduct necessary cross checks and validation routines, or failure with a host of other detailed methodological research procedures that are involved with this approach may jeopardise the accuracy and quality of the data and therefore conclusions that can be drawn from such data.

With unlimited resources, especially time and skilled researcher hours, it is possible to design eloquent research methodologies that, among other things, have large samples drawn from a variety of sample frames. A multitude of validation routines can be deployed, multiple test sites can be investigated and large multi skilled teams of cross-cultural experts can analyse and interpret data, and so forth. In contrast, in relation to the questions posed for this particular research project and the complexity of the research environment, this project has very limited resources plus a number of rigid time constraints related to before and after energisation research windows of opportunity. The integrated research process has therefore been designed and tested with these realities squarely in mind. It leans therefore more towards pragmatism rather than theoretical normative research mores. This however, must in no way weaken the robustness of the research data gathered and therefore the conclusions that it is hoped may be reliably drawn, in completing the research project.

In attempting to research such a complex and multi faceted subject, as modern energy and micro enterprise, it is absolutely essential to follow the prescribed methodology in its entirety, in the sequence and manner prescribed, with objectivity and intellectual rigour. In conducting such research the need to objectively validate and cross check data from as many reliable sources as possible must be implicit within the research design, so various data gathering techniques to enable this to be done have been included and tested in the research process. The other overarching issue, when doing this type of research across several cultural frontiers, is the imperative of striving to ensure objective and clear communications; and, for the researchers to understand things within the ethos of the community members and micro enterprise operators. These issues have also been a focus of the field test.

The integrated research process that has been field tested and is the subject of this report may be briefly characterised as follows:

1. Selection of a site for investigation, then gathering of the community characteristics record and community log.
2. Preparation of the site for investigation:
 - 2.1 Interaction with community leaders.
 - 2.2 Informing community members about the research project.
 - 2.3 Selection and training of researchers drawn from the community
3. Micro Enterprise identification sweep: calls to all households, buildings and activity areas within the geographical bounds of the study to explain the project and identify micro enterprise and business owners.
4. Analysis of sweep data – targeting of the research.
5. Micro Enterprise owner interviews conducted by members of research team with assistance from community interpreters.
6. Analysis of micro enterprise interview data.
7. Formulation of further research questions and identification of qualitative research related to the specific community ME's under investigation
8. Prepare for qualitative research:
 - 8.1 Composition of focus groups
 - 8.2 Identification of one to one interviewees
 - 8.3 Invitation and briefing of respondents
 - 8.4 Finalise qualitative research questions, aids and so forth
 - 8.5 Conduct qualitative research
 - 8.6 Analyse qualitative results
9. Consolidate all research findings
10. Feedback results and findings to the community
11. Conduct inter site data analysis. (Not tested)
12. Prepare findings, results and final report. (Not tested)

It should be noted that the aim of this element of the project was to test and refine the necessary methodology and not to research ME fully in the test community. The data and information gathered as part of this test, is of necessity only notional, since there were insufficient resources to conduct the full methodology. In terms of testing and refining a robust methodology, this has been achieved. Rich and reliable information was also, as a secondary output, obtained about energy and ME in the South African township of Fisantekraal. These results are also described in the report.

3. Objectives of field trial

Before commencing with the field trial the project team formulated a set of objectives to focus the activities. It was important to have a set of test criteria against which to check the conduct and results of the field test. The objectives were framed in two ways, firstly in terms of the required outcomes of the field test; and, secondly a series of specific questions related to what needs to be tested. These two sets of objectives are described below:

3.1 Outcomes

By the end of the field test we will need a consensus and qualified position on the following issues. If these can be achieved then we will be able to refine the methodology and, equally important, be in a position to define, plan and cost in detail phase 2 of the project.

The content of quantitative research questionnaire

- Whether the interviewees immediately understood the questions?
- Interviewee cooperativeness?
- Level of confidence in the answers?
- Appropriate ranking (where used) of answers?
- What refinements are needed?

The qualitative questions and checklist

- Have we covered everything that we need to cover to characterise the community context and to draw out enabling lessons to present in a case study?
- Answers meaningful and truthful?
- Have we covered too much and lack focus?
- Have we asked the right people, in the right way?
- What refinements are needed?

The feasible interview rate

- A refined estimate of the time to conduct both quantitative and qualitative interviews (assuming we ask basic qualitative questions of interviewees when also gathering the qualitative data).

The data gathering sequence

- What is the most appropriate sequence?
- Is it feasible to collect quantitative/basic qualitative data in a first pass, and then drill down through qualitative research in a second pass? If access to (say) focus groups is going to be limited due to participants availability then we may have to interleave these activities for maximum efficiency.

Community engagement and qualitative research methods

- Basic tactics for community engagement and co-operation?
- Community expectations regarding feedback?
- Community expectations regarding reward for co-operation?
- List of stakeholder groups against issues to be researched (e.g. rather than consulting everyone on everything, can we structure the qualitative research into discrete issues and target individuals in the community – this might result in a research plan involving say, 6 focus groups covering initial consultation, 4 discrete issues, and a closing discussion)?
- Confidence that we have identified all the key stakeholders that would need to be consulted, and past/current interventions of relevance?
- Preferred qualitative research methods that might be employed according to need and circumstances.

Resource allocations and responsibilities

- How much time is needed for each activity?
- Who is to undertake each activity (and what exactly are they to do and when are they to do it); and who is to provide support?

Some of the above can be determined from consultations and observations during the field test. Other questions can only be resolved through informed discussion between the field research team. It may also be necessary to resort to consensus opinion as it will be impossible in the time available to test all the above.

It will not be practical to 'test' all qualitative research methodologies as such. There are a variety of methods for undertaking qualitative participatory research, and the appropriateness is likely to be very dependant on the local context, the issues identified that need further research, and the preferences of the community. Furthermore the conclusions from this field trial might not be fully appropriate to the survey communities where the cultural mix and level of development is likely to be different. The most flexible approach is to have a portfolio of qualitative methods at our disposal, select those that are appropriate for the issues that are identified from the quantitative findings and to agree with each community at the outset their preference from amongst these.

Therefore, we will need:

- A ***rigid quantitative*** questionnaire to allow statistical analysis;
- A clear focus (issues) for the qualitative research;
- A clear idea of which stakeholders need to be consulted to what objective;
- ***Flexibility in qualitative*** research methods employed (though we might decide on a preferred qualitative research method, with alternative approaches to be employed according to circumstances).

3.2 What needs to be tested?

1. Language: can we communicate to obtain necessary information?
2. Cultural barriers or constraints.
3. Will respondents share reliable information about income, expenditure, etc?
4. Reliability and accuracy of data responses/collected.
5. How can we validate data?
What practical validatory routines?
6. Sample size - adequacy for reliable results?
- how representative?
- how indicative?
7. Access to community – safety, co-operation, trust, etc.
8. Does the research framework work for the desired purpose?
9. Do the techniques work in 'practice'? What constraints, weaknesses?
10. Does the notion of Δ have practical and reliable meaning in 'practical field research situation'?
11. Are there identifiable gatekeepers to the information we need to collect?
12. Is there any biasing of community responses? If so, what are they and reasons?
13. Is the research method attainable within overall project resource constraints?
14. What is the competitive dynamic between micro enterprise and does this impede respondents giving true and accurate responses.
15. Time requirements to do different data gathering.
16. Level/skills of researchers necessary.

17. Realistic inputs for Phase Two plans.
18. Are we trying to collect too much data? Are we realistic in being able to gather everything stated in questionnaires?
19. Effectiveness of employing people from the community.

4. Test Site Selection

In parallel to developing the methodology and research instruments, a systematic process was enacted to short list and select a suitable Phase One test site/community in South Africa. This section briefly describes the process deployed, the selection criteria and the site chosen.

4.1 Process

The process involved an initial scan of several poor/developing urban communities and then subjecting each site to a review against an initial set of selection criteria. Visits were made to each of these communities and basic data was gathered from various sources including discussions with community leaders and residents.

From an initial list of potential sites a shortlist of three potential sites was drawn and these were then further investigated. The three short-listed sites were:

- *Bloekombos*, near Kraaifontein
Population: 22065
Households: 4413
- *Khayelitsha*
Population: +800 000
Households: 160 000
- *Fisantekraal*
Population: 6 500
Households: 1 500

Further information about these sites is shown under Appendix 1 (Short listed test sites).

4.2 Selection Criteria

Since the aim was to test the complete research methodology for Phase Two that would involve before and after research, it was deemed essential to select a community where electrification/energisation had recently taken place (within the last 2 to 3 years). In this way, it was hoped that all the necessary variables and complexity would be present, thus enabling a comprehensive test of all the required processes and techniques that will be required in the stage-two research (post modern energy introduction).

Other selection criteria (which form the basis for Phase 2 site selection) are shown in the following box.

Site selection criteria

- A delineated community.
- Multiple social and language groups, i.e. English, Xhosa and Afrikaans.
- Developing/poor community.
- Permanent community, i.e. designated community by local planning authority.
- Permanent/formal housing structures and infrastructure such as roads, water, school, telephones, clinic and churches.
- Politically stable community.
- Safe and secure to enable research.
- Supportive and co-operative community leaders.
- Necessary trust and legitimacy for research team with local community.
- A living community with significant levels of micro enterprise versus dormitory communities with residents working elsewhere.
- Range of different fuel usage.
- Community where micro enterprise plays a role in life of community.
- Accessibility.

4.3 Site Selected

Following comprehensive enquiries within and about the short listed communities; and, a range of initial exploratory discussions with various community members and leaders, the following site was selected:

Fisantekraal

Township Age:	Approx 7 years
Population:	6 500
Households:	1 500
Languages:	Xhosa, Afrikaans, English
Electrified since:	2001 i.e. 2.5 years since electrification
Fuels used:	Electricity, wood, paraffin, LPGas
Building structures:	Legal formal structures
Politics:	Stable
Safety:	Calm
Accessibility:	Located 12 km north east of Durbanville

Further details of the information gathered to under score the Fisantekraal selection are shown under Appendix 2 (Fisantekraal Information). A key aspect of this selection decision, in addition to the criteria described earlier, was speedy access to key community representatives and leaders and this information is also shown under Appendix 2.

4.4 Discussion

The effective selection of an acceptable test site (and when selecting stage two sites) is an important activity to ensure the success of the project.

Critical information on which the site selection must be based are:

- energy interventions
- planned energy interventions
- safety and security for researchers working in the community
- the political and social stability of the community and
- any upcoming events that may significantly impact on the proposed research.

A wide range of other information also needs to be gathered to enable an appropriate selection to be made. Much of this information resides outside the actual communities and a number of organisations, e.g. the local authority, town planning department, electricity utility (Eskom), telephone company, local health department and various other external information providers may need to be contacted.

The majority of this information will need to be gathered via personal calls and interviews with members of the respective bodies. Fisantekraal is a peri urban community located within the bounds of a larger urban metropolitan area. This enabled access to information providers within a reasonably accessible area. For rural research sites however, accessibility of external information providers may be more dispersed calling for greater time requirements to gather the necessary information. Here it may be useful to engage assistants from the community / local area to assist the project team in gathering specific types of information.

In addition to gathering accurate information about various communities, the data must be presented and evaluated in a comparative manner (see Appendix 1) in order to apply the necessary selection criteria and ensure an objective selection decision is made. Before this can be done it is preferable to also visit each community on the selection list to carry out a visual inspection, find out about the relevant community structures, forums and who the legitimate leaders and representatives of the community are and a range of other information. A positive response from the community leaders in terms of a willingness to participate in the research and an interest in its outcomes also plays a major role in final site selection. The overall process of site selection must be managed, or at least reviewed, by a highly experienced researcher who has access to the communities and who fully understands the dynamics of the local community mores, cultures and power/influence hierarchies.

Four matters of special note:

Firstly, certain community members view the appearance of an outsider in many of these communities as an opportunity to gain greater standing or influence within the community. Extreme care must be exercised to ensure the true community leaders are identified and their views sought about the suitability of the project.

The second issue has to do with level of understanding required by community leaders in order to provide the information necessary to make a valid community selection. This is a complex project and time to explain and ensure understanding by

the community leaders is crucial. Invalid information may be obtained from these respondents unless they understand the nature and activities involved with the project.

This then leads onto a third issue, that of creating expectations within the community that they will be selected. Target communities for this research, by definition, have very little and they will often be eager to solicit and obtain the 'project' for their community. Efforts should be taken therefore to avoid any commitments, misunderstandings and the raising of local expectations.

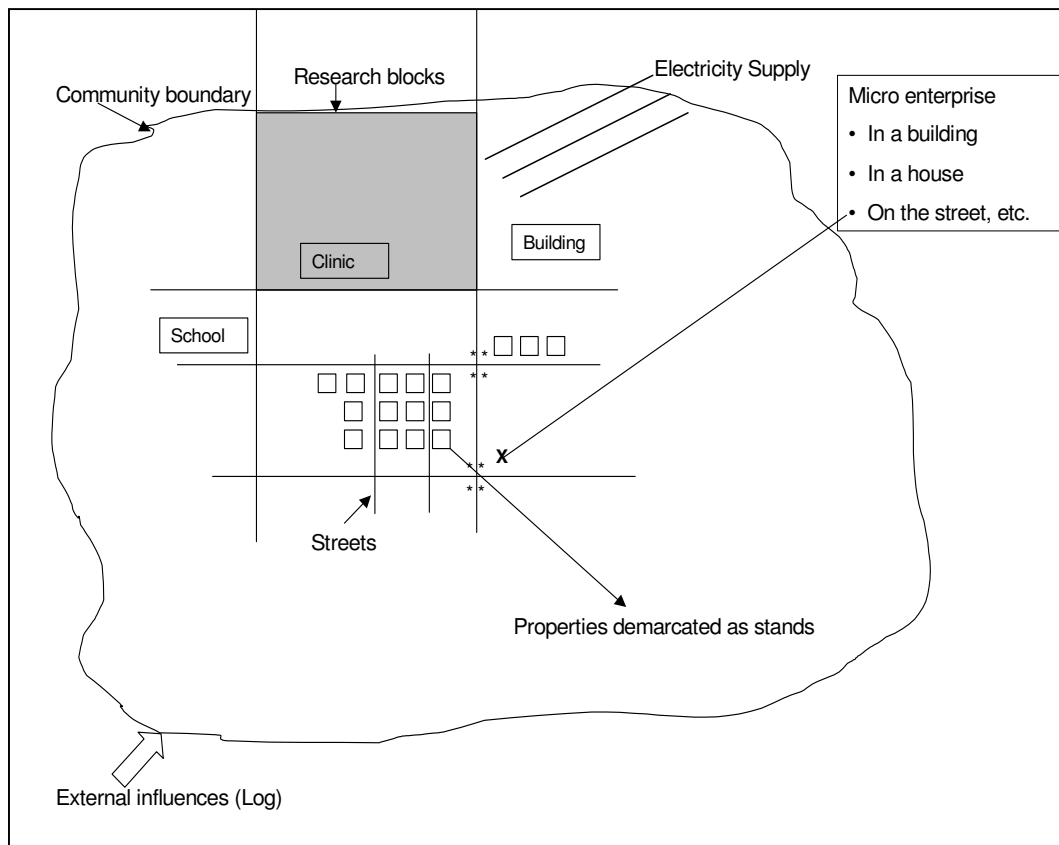
The fourth issue that therefore must be addressed is the matter of objectivity and the risk of community respondents biasing information in favour of their communities being selected. To reduce this potential difficulty, information in areas of crucial importance to the outcome of the research or safety of the research team that has been provided by community members should be cross validated with a number of sources both within and outside the community. For example, in the matter of criminality and safety for members of the research team, the opinion of the local police should also be solicited together with professional members of the community such as the head teacher at the school, or nursing sister at the community clinic.

Social and economic reciprocity are strong mores in many of the poor and developing communities in South Africa, especially Xhosa communities. Community members will give their time (sometimes necessarily by prior arrangement) and will generally be very gracious in answering questions. Courtesy, respect and patience to properly explain matters are minimal requirements in doing this pre selection research, and with a view to initiating relationships with the community, it is advantageous for these early discussions to be done by a member of the research team. Where it is culturally acceptable to reciprocate, the presentation of a small gift to community leaders / members who gave of their time to provide assistance may be appropriate.

5 Overview of field trial

5.1 Field trial context and research process

The following picture describes the community context from the field test perspective.



Detailed information about Fisantekraal is shown under Appendix 2.

Briefly, the research process that was tested was as follows:

- Step 1: Presentation and discussion with community leaders to obtain understanding, support and co-operation. Agree wage and employment/training arrangements.
- Step 2: Community leaders advise community of project, activities, timescales and roles for community members.
- Step 3: Community select appropriate interviewers/community project assistants.
- Step 4: Training of community members
- Step 5: Conduct various surveys.
- Step 6: Analyse data.
- Step 7: Focus Groups/in-depth discussions, etc.
- Step 8: Project Findings/Report
- Step 9: Detailed feedback of project results to community and local businesses.

The above steps comprise four basic clusters of activities, namely:

- Test Site Set Up
- Data gathering
- Analysis
- Feedback to community

Steps 1 to 4 as conducted in Fisantekraal will now be discussed. Steps 5, 6 and 7 are dealt with under Sections 6. Quantitative Research and 7. Qualitative Research. Step 8 and the results are described under Section 8 Fisantekraal Micro Enterprise and Energy Results.

5.2 Test Site Set Up

5.2.1 Initial Documentation

A **Community Characteristics Record** was opened and a member of the IES research team was allocated the responsibility to maintain this information. Much of the initial information for this record was drawn from the site selection information already gathered. However, as more information was gathered it was added to this record that was kept in a large ring binder. A listing of the information gathered for the Community Characteristics Record is shown under Appendix 3.

A critical item of information was the **Fisantekraal Site Plan**, obtained from the Local Authority. This plan was an essential item of information since it showed the layout of the community, the number of formal houses and other facilities such as schools. Of critical importance were the unique erf or plot numbers enabling unique location referencing for the micro enterprises, or so we thought when setting up the project (see Section 6 on Quantitative Research for further discussion). As well as various sizes of site plan, aerial photographs of the community were also taken and a selection of these and other community pictures are shown under Appendix 4 (Aerial and community photographs).

From the outset, a **Project Diary** was also opened that recorded the dates of various project research activities to enable a chronological record of the field test to be maintained. An example of this is shown under Appendix 5.

At this initial project initialisation stage the **External Intervention Log** was also set up. In the case of the full before and after research process, it is intended that this log will record both historical external interventions to the community of relevance to the project; and, events as they happen during the life cycle of the research from before the energy intervention, during the energy intervention and post energy intervention. In the case of the field trial the external intervention log, had in large part, to be deduced from the history of Fisantekraal. We were in effect doing the methodology test in an 'after' intervention situation. Of course the primary point to note was that there had been a major electrification programme in Fisantekraal in August 2001 when all the households were provided with grid electricity. This information, as well as information on a range of other external interventions was gathered through interviews with various respondents and the external intervention log was compiled. While this was somewhat artificial, the need for such a log and the practicality of creating an accurate log were fully vindicated. Shown under Appendix 6 is a copy of the initial External Intervention Log for Fisantekraal.

5.2.2 Notification of Test Site

This activity dealt with notifying the community representatives and other relevant bodies that Fisantekraal had been selected for the study. This was done in both an informal and formal manner. Firstly, the community representatives who had previously assisted with providing information and assistance for the pre selection data were contacted and advised

verbally that the community had been chosen and what the next steps would be. A formal letter was also sent to various community leaders, representatives and other relevant bodies. A copy of this letter is shown under Appendix 7, Fisantekraal Test Site Notification.

As part of the verbal notification, a convenient date for a meeting with the community leaders was obtained. From the site selection phase, the Fisantekraal Development Forum had been identified as the legitimate representative body of the community and the body that we would liaise with in progressing the field test.

5.2.3 Meeting with Community Leaders

On Saturday 22nd February 2003 a meeting was convened with the Fisantekraal Development Forum in the community meeting room in Fisantekraal. It had to be a Saturday because this was the only time that all the members could be present. The meeting started at 14h00 and finished at 16h30 and it was conducted in a mixture of languages, mainly Xhosa, some Afrikaans and English. Various people present interpreted to provide common understanding and exchange of information and views.

This was a crucial meeting that was conducted in a very informal and cordial manner. It had a number of objectives, namely:

1. To formally introduce the members of the research team to the members of the Fisantekraal Development Forum.
2. To explain the project, its aims, activities and relevance for the community. This was achieved with an interactive presentation (See below).
3. To seek the support and active co-operation of the Development Forum to do the field test in Fisantekraal.
4. To seek their specific assistance with notification of the broader community, invitation of members of the community with appropriate ability to be selected as project interviewers for the first sweep survey of households; and, to assist members of the research team as interpreters for subsequent phases of research.
5. To agree suitable rates of pay for members of the community employed on the project.
6. To seek their approval to use the community hall for interviewer selection and training and focus group sessions.
7. To agree next steps, timescales and roles and key contacts.

Refreshments, cool drinks and crisps were provided by the project team. Equipment used was a flip chart and a large site map of Fisantekraal.

Following a welcome by Louis Frause from IES, who had conducted much of the initial data gathering and contacts with members of the community, everyone introduced themselves and names and roles were noted. An agenda was then agreed for the meeting, as follows:

1. Project Presentation and Discussion
2. Exchange of information about Fisantekraal
3. Key matters: Development Forum Support
 - Local interviewers - selection and training
 - Pay rates
 - Notification of community
 - Use of Forum room
 - Feedback
4. Next steps: Who to do what?

1. Project Presentation and Discussion

This was a highly interactive presentation with each topic being explained, meaning being interpreted and views sought. Rather than a conventional presentation it was better characterised as an interactive session with flip chart words and pictures to illustrate and a discussion leader. Chris Hazard, IES led this session. A copy of the presentation that was used is shown under Appendix 8.

Throughout this session there were many questions and matters for clarification. The group discussion presentation effectively became the agenda that every one gradually worked through, sharing information and establishing mutual understanding before seeking decisions from the Development Forum. A key issue raised up front, was the role of the Forum as the legitimate body and representative group to work with for the purpose of the field test. This was established to be the case and the Forum members agreed to give the project their full support and co-operation. They also agreed that we could use their community building.

Throughout this interactive session two issues required overt management. Firstly the use of terminology and project jargon. As an example, the term micro enterprise was meaningless to members of the forum, some of whom were business owners and operators. It only became meaningful when expressed in terms of business you own rather than working for someone else, 1 to 10 people and examples such as spaza's (mini grocery shops), shabeens (semi-illegal pubs), hairdressers, carpenters making furniture and so forth.

The other issue was to swiftly understand the pecking order within the Forum group. The role of the Development Forum Chairman became very apparent and he kindly facilitated much clarity and leadership throughout the session. By deferring to him and encouraging his involvement at key decision points, disagreements and misunderstandings were resolved and collective decisions reached. Without the presence of the Chairman, who clearly had authority within the community and the Development Forum, this set up meeting would not have been as productive and supportive as it was. Many of the other members of the Forum tended at times to pursue their own agenda's rather than the subject matter and aims of the meeting that was to try and serve the community. Thus, the need for leadership, from within the community and that we were fortunate to have identified the Chairman and the Development Forum as key players, proved very important to establishing legitimacy and community co operation for the project.

2. Exchange of information about Fisantekraal

Various questions were posed to members of the Forum about Fisantekraal such as level of unemployment, where people work outside the community, when did electrification take place, how did it impact the community, how many households and micro enterprises were there in Fisantekraal. Responses were very varied in terms of the quality of information. Opinions about the impact of electrification were many and very positive. Level of unemployment was viewed as very high although it was not possible to quantify it further.

There was some confusion about the number of households although the group agreement eventually was that there were 1300 households and 46 flats. This is a confusing issue since there are many additional backyard households on a single erf. When it came to the number of micro enterprises, there was much speculation, although no one present knew the exact number. The general opinion was that there were many and that they played an important role in the community because unemployment and poverty was so high.

The Forum members all welcomed the project and were especially interested to know how the project could help the community. There was some debate about how the DFID Project itself could assist the community in providing information that the Development Forum could deploy to represent the needs of small enterprise and to seek the assistance of appropriate developmental bodies. As a matter outside the DFID Project, it was agreed that IES would explore, after the completion of the project, how it may be possible to assist the community in some practical ways to grow micro enterprise.

3. Key matters

During the interactive discussion session the timetable for the project was explained together with some key areas that the Development Forum could possibly assist. Following a discussion about the precise role of interviewers from the community and the type of educational standard required, members of the Forum offered to invite suitable community members to a selection and training session. There was a lengthy discussion about the pay rates for work done by community members. It was agreed to be R 1 per household sweep interview (whether a yes or no answer was obtained) and R 7.50 per hour for assistance given to project team researchers for subsequent phases of research.

A major issue was how to notify and briefly explain the project to the general community. It was agreed that a handbill be produced, by a community member who had access to printing facilities, which briefly explained the project in Xhosa, Afrikaans and English. This assistance was offered by the Development Forum in that they would nominate someone from the community to do the printing and ensure that school children would distribute a handbill to each household, prior to the commencement of household micro enterprise sweep. A price was agreed, money paid but with hindsight it appears that this activity was not done effectively, leading to many members of the community having received no prior notification of the project and the purpose of the house interviews. Shown under Appendix 9 is a copy of the Community Notification Leaflet.

A golden lesson appears to have been, assume nothing and check everything!

However, this was the single possible failure in everything that the Development Forum agreed to do in support of the project. As described later they certainly provided applicants from the community for interviewing work, made themselves available for further discussions, gave full access to their community rooms; and, provided legitimacy via word of mouth communications within the community for members of the research team to undertake the field test.

The matter of reciprocity was also explained to the Development Forum and that each stage of the research, the project team would provide a small gift to support the interviewee respondents with their businesses. For the ME questionnaire interview a small book and pen would be provided; and, for participation in focus group discussions, to come later, another suitable gift would be provided. The exact nature of the gifts was deliberately not specified at this set up stage to avoid any undue influence in the selection of respondents and their responses.

The final matter clarified with the Development Forum was that members of the project team would return to the community and provide the results of the investigation both to the Development Forum and to other relevant groups, such as micro enterprise owners.

5.2.3 Discussion

The single most important factor to comment on regarding this phase of the research process was the extremely limited timescales and tight deadlines. This was less than ideal although it did not impinge on the efficacy of the test. Indeed, it provided a more rigorous test dimension than would not prevail in the stage two investigations. Therefore, if we could achieve a robust research methodology under these less than ideal circumstances, then it should perform even better when adequate time is provided.

5.2.4 Selection of Community Interviewers

Although the participation and assistance of the Development Forum was sought in providing community interviewers, it was considered essential, that the research team directly select, train, manage and remunerate the community members involved. To have left these functions to the community would have lead to favouritism, potential conflict in the community and poor quality of field research. This is an important lesson for the final methodology blueprint.

Having estimated the workload to carry out the household sweep interviews, in the limited time available, it was decided to recruit six community interviewers. We also wished to provide an opportunity of work to as many members of the community as possible bearing in mind the other project constraints. The Development Forum undertook to invite a number of potential interviewers from the community to a selection and training session organised for Monday 24th February 2003. Minimum requirements were that candidates be unemployed, at least Standard 9 or 10 education, have clear handwriting, live in the community and be bilingual, either English and Afrikaans or English and Xhosa.

Six ladies aged between 20 and 33 years attended the interviewer selection meeting on 24th February that was done by Louis Frause and Chris Hazard of IES. The selection process consisted of obtaining the name, address, education level and languages spoken of each of the candidates. They were asked to fill in their details on a form. Since they all had at least Standard Nine, their writing was neat and they all met the initial selection criteria they were selected to take part in the training session. The basic selection criteria for training were:

- Minimum of Standard 9 Education
- Must live in community
- Bilingual: at least two languages
- Have an ID document

The training was also used to assess their individual skills and capabilities.

5.2.5 Training of Community Interviewers

A structured training process between 14h00 and 16h30 on 24th February was used by Chris Hazard and Louis Frouws of IES that consisted of the following steps:

Issue of Clip Boards, Pens and Paper: Each interviewer was asked to take notes of the training and they were advised that we would go through their notes later in the session to check understanding. They were also advised that there would be some role-playing to also check their understanding.

The timetable for the household sweep interviews was explained, in that it covered the following days in February 2003:

Monday 24 - Select and train interviewers

Tuesday 25 - Interviewing in Fisantekraal. Spot field checks by Louis Frause

Wednesday 26 - Interviewing continues. 11.00 to 12.00 Group Meeting of Interviewers

Thursday 27 - Interviewing continues

Friday 28 - Interviewing continues until 12h00 Finish, Check Forms, Payment

The availability of the six ladies to meet the above timetable was checked and confirmed.

The training consisted of the following steps:

1. Presentation and interactive discussion about the project.
2. Terms of the job were explained, discussed and agreed.
3. ID and Letter from Development Forum.
4. Training on ME Identification Sweep Questionnaire.
5. Role Play.
6. Allocation of areas.
7. Check notes and further questions.
8. Date of next meeting.

1. Presentation and interactive discussion about the project.

A slightly modified version of the presentation used for the Development Forum was used.

2. Terms of the job.

These had been previously discussed and agreed with the Development Forum so it was a matter of explaining these details and reaching understanding and agreement. The terms were agreed as follows:

- R1 per completed questionnaire.
- All houses and flats in allocated area to be interviewed.
- Spot checks by Louis Frause in the field and at group review meetings.
- Interviewers must carry ID and a copy of Development Forum letter to show to all householders.
- Each interviewer assigned own area for which they must take full responsibility.
- Payment made only when complete job finished, after spot checks, accurate information with neat handwriting (for data input staff).
- Payment will be made in full on Friday 28 February at 12h00. Wrap up meeting.

3. ID and Letter from Development Forum

A copy of the Development Forum letter was provided to each of the ladies and they were asked to show this with their ID to all respondents.

4. Training on ME Identification Questionnaire

This was a crucial and time consuming element of the training. Key areas of understanding that were required were:

- Unique location reference.
- Type of micro enterprise.

A copy of the ME identification sweep questionnaire (annotated with lessons learned) is provided in Appendix 10.

A significant amount of time was spent explaining the system of unique location referencing. The ladies were in turn asked a series of questions to ensure understanding. With regard to what we mean by micro enterprise or small business we did a brainstorm of all the different types of small business and emphasised the criteria of 1 to 10 employees.

All the other questions on the questionnaire were understood and this was verified with various checks carried out by the trainers during this part of the session.

5. Role Playing

This proved an invaluable practical training and learning method. Each lady was asked to act as an interviewer and the trainers then acted as householders raising a range of answers and queries to test the ladies understanding. This was done with much humour and each role-play was done in front of the whole group thus providing both an individual and group learning activity.

6. Allocation of Areas

Using the large map of the community, Fisantekraal was broken down into roughly equal areas (a sixth each) and an area was allocated to each lady, after due consultation with the ladies regarding their languages and any preferences for certain areas.

7. Checking notes

Some minutes were then spent checking the notes taken by each of the ladies on a one to one basis. All were thorough and neat. We explained that they should carry the notes with them to refer to during the household interviews in case they needed to provide additional information about the project to respondents.

8. Date of Next meeting.

The session ended by wishing them well with the interviews and agreeing that everyone would meet again on Wednesday 26 February in the Development Forum room.

The other three clusters of activity, namely data gathering, analysis and feedback to the community are now described in the following sections.

6 Quantitative Research

This section of the report covers the detailed statistical and quantitative aspects of the field research. Here the focus is on what actual activities took, place, what additional tools, procedures etc. were developed and the highlighting of learning lessons for phase two of the project (the detailed data from Fisantekraal is provided separately in Section 8).

6.1 Micro enterprise identification sweep

Following the training and tasking of the interviewers the following steps were undertaken to complete this aspect of the research.

Step 0. Management of the interviewers in the field.

On a regular basis over the four days of the sweep activity in the field, regular checks were made on the interviewers. The focus of the checks was on data accuracy, speed and meeting of the deadline and an initial understanding of the sweep success. The step played a very important role as some interviewers were found to be leaving out certain information and secondly one researcher was found to be missing due to problems with a sick child requiring medical attention. In response another researcher was identified within the community, trained and focused on the remainder of the missing researchers area.

Step 1. Collection of the completed questionnaires and payment

Next the interviewers were assembled on the Friday at 12h00 for processing of the completed forms and payment. Each interviewer was required to sort the completed forms into a numerical order to assist with data checks and later capture. Next further spot checks were completed; a correctness comparison against visually collected data on enterprise within the community and for completeness the forms were compared against the allocated area with the aid of a large map of Fisantekraal. Once the project team staff were satisfied with each interviewers work a pay packet was prepared, that included the cash owed and a payslip for signature of funds received.

Step 2. Data capture

An Excel spreadsheet was prepared that contained the correct columns for capture of the sweep data. The columns were based on both what fields the sweep contained and an understanding of what post capture processing would be required. An additional sort or initial processing field was added, that being a business type. Whilst the interviewers would have captured a description of what the business does, a set of standard types was provided to the data capturer with training on how to allocate the correct type against each questionnaire captured. In other words the data capturer was required to perform an initial processing decision during capture. An example from the spreadsheet is given below with some comments on the data:

SWEEP DATA CAPTURE SPREADSHEET												
Geographic position			Enterprise activity			Operation		Business contact details			Interview	
Stand number	External enterprise	Second dwelling	M E	Business	Business detail	Days/ week	Weeks/ month	Owner	Address	Tel	Day	Time
719	A, B, C...	1,2,3...	Y/N/R	List	Description	e.g. 7	e.g. 4	e.g. Mr A. Jones	Same	9767777	Sat	10h30
73	A	0/y		Baker	Baking cake	1	2	Elizabeth Booy	same		Saturday	
271	A	0/y		Baker	Baking cakes, muffin, ba	7	4	Own as a group fo 4	271 Foxtrot Str	072 424 4368	Tues or Thu	Anytime
38	A	1/y		Barber	Barber Shop & Saloon	7	4	??				
627	A	0/y		Carpenter	Carpenter			Mayengeke Melane	Boulevard Str			
817	A	1/y		Carpenter	Furniture builder and Ba	7	4	Linbela Mohale	817/1 Boulevard	072 334 0717	Monday	

Interviewers battled with the correct coding system

List of predetermined business types. Each record is allocated one.

Missing data was obvious on some forms

Step 3. Data processing

Following the capture of the sweep data a sort routine was utilised that prepared the output/information for use in the next phase of the project. The data was sorted with the primary sort being the enterprise type, thereby grouping all similar businesses and secondly on geographic location.

Step 4. Preparation for the quantitative interviews.

By sorting the data by primary and secondary fields, the quantitative interviews can be targeted at the correct enterprises. Firstly, the grouping by type gives an immediate understanding as to which enterprises are found within a research area, and secondly the number of each. From the Fisantekraal data it can be seen that there are a number of enterprises where the total number of each is less than 10 or even 5, yet there are others where there are greater than 20 such as spaza's and shabeen's.

6.2 Detailed interviews – Statistical questionnaire completion and capture

Step 1. Interviews and lessons on the questionnaire

Various members of the project team completed the detailed quantitative interviews. A copy of the questionnaire used during the field trial (annotated with lessons learned) is provided in Appendix 11.

There were various practical lessons from the application of the Micro Enterprise Questionnaire, in the field, in Fisanterkraal. The questionnaire deliberately included a comprehensive range of information, some of which was complex and 'idealised', to provide a rich testing and learning opportunity from the test exercise. It was tested across a wide range of ME types and a diverse range of respondents in terms of language, educational standard, gender and age. In addition to this, the questionnaire was also tested with a number of different interviewers to ensure a range of experience and input to the testing and refinement of the questionnaire instrument. It was also deployed in several instances with an interpreter to test this mode of application as well. From such a comprehensive testing approach it was possible to test the following issues regarding this aspect of the research process:

- Is the proposed questionnaire, with appropriate refinement, a robust research method to collect the required ME information?
- What information is difficult to elicit from respondents?
- What is the reliability of information/answers provided by ME respondents?
- What additional validatory questions or interviewing processes might be necessary to ensure greater reliable and accuracy of data acquisition?
- Comprehension by respondents of various types of questions, terminology and levels of question complexity?
- Differences in responses from different classes of respondent?
- Use of the questionnaire as a structured information gathering instrument, what is the most appropriate sequence and structure?
- How should the questionnaire format, flow and design be made to provide a standardized and therefore objective interviewer guide?
- Replicability of the questionnaire?
- Data and information checking and input routines for subsequent
- Validation and analysis?

Based on experience gained from 63 interviews conducted across 14 different types of micro enterprise conducted by a team of five experienced researchers a detailed critique was

conducted. The various lessons learned and necessary refinements to the questionnaire are discussed below under the key issues, as described above:

Is the questionnaire a robust research method?

In terms of the information gathering requirements for this stage of the overall research process, a structured questionnaire research method proved to be practical and reliable. It is however time consuming with each interview taking anything from 45 to 90 minutes depending on the circumstances of the interview situation. Experienced interviewers are essential together with the need of conducting the interview in the local language, often with the aid of an interpreter. Since much of the information is confidential in nature, the trust of the respondents must be gained and the interviews must be conducted on a one to one basis. Few alternative research methods are therefore available.

It will be essential to provide a brief 'story card' to be used by interviewers to provide ME respondents with a standardized introduction before commencing the interview. This will need to include a statement of how long the interview is likely to take and whether it is convenient or whether another appointment should be made. It should also include an assurance about confidentiality, the purpose of the study, who the interviewers are, their company and other relevant local information.

What information is difficult to elicit from ME respondents?

Generally ME respondents were co operative and very forthcoming with information about their business activities. However certain types of business operator were not comfortable disclosing financial information regarding turnover, costs and profits. There were two classes of reluctant respondent. Firstly, those who were not happy to disclose such information. Reasons included suspicion and fear that their competitors would gain access to the information. These needs must be respected and where respondents showed such reluctance then no further direct questions were asked about these matters. The other reluctance arose where respondents did not know the answers, in the form that the information was being sought.

To address these income, costs and profit constraints it became necessary for interviewers involved in the field test to become innovative and to seek other information, that was less threatening, but nevertheless enabled the income, costs and likely profits to be deduced. This deductive approach will need to be incorporated in the final questionnaire.

Apart from income and profit information, where certain respondents (solely among competitive spaza and shabeen operators) were uncomfortable in disclosing this information, all other questions were answered frankly within the understanding of the different respondents. Thus, all other information is freely available from respondents.

What is the reliability/accuracy of the answers provided by ME Respondents?

From the practical test in Fisanterkraal, all respondents answered frankly the questions asked. There was not any attempt to mislead. However, this is cross-cultural research and it is of paramount importance to listen very carefully to answers given by respondents and to ask a host of supplementary questions to ensure mutual understanding and to cross validate information shared within the interview. To

ensure a robust and replicable questionnaire it will be necessary to add various validity and cross check references to assist the interviewer and the respondent.

It is also recommended that a check sample of ME's be interviewed twice, from a different perspective by different interviewers, to check the understanding of the interviewer and the sampled respondents. This needs to be completed as part of the ME snapshot interview set up arrangements.

In terms of the key information required for this project such as the impact of modern energy on ME, the level of incomes generated, the number of livelihoods, ownership of the business and assets and gender issues, the information obtained via the standardized questionnaire interview approach was extremely accurate, rich and revealing.

What additional validity questions or interviewing processes to enhance accuracy?

The matter of income, costs and profit has already been described. Other concepts that require careful explanation to respondents are matters such as competition, market growth, the connection between energy and business and so forth. Storyboards, role playing and practical locally orientated examples all played a role and were used by the interviewers involved in the Fisanterkraal test. The role of translators is also a crucial area of refinement to ensure full understanding and accuracy of responses. The sequencing of the questionnaire requires re design to provide a more logical flow of questions so that the whole interview discussion becomes more of a flowing discussion about micro enterprise where one topic can logically follow on from others. Something that was found to be extremely valuable was to ask respondents to show the interviewer various aspects of the business. Often by seeing and sharing with respondents the business premises, the customers, the types and range of products being traded and so forth a host of other information becomes clear to the interviewer. This greater understanding then can become the basis for supplementary questions. Various opportunities also arose to talk to others involved in the ME and where this is possible these people also are a rich source of information.

It is very important that interviewers should ask respondents for the opportunity to call again to clarify any other points that may arise. Following each interview, the interviewer must go through the questionnaire in detail noting additional information, before it is lost to memory. At this point should any queries arise then these should be clarified with the respondent.

Comprehension of questions by Respondents?

This was generally very high among both the Afrikaans and Xhosa speaking ME Respondents in Fisanterkraal. No major problems arose regarding comprehension. It must be emphasised however that it is the role of the interviewer to ensure that the questions as written on the questionnaire are made comprehensible to the respondents. The questionnaire is not designed for the questions to be asked verbatim from the questionnaire but as a prompt to the interviewer. Hence, the need for highly skilled interviewers.

Differences in responses from different classes of Respondent?

There were a number of discernable differences in types of response from different types of respondent. Women were more forthcoming generally than men, owners rather than employees of the ME were more knowledgeable and self assured in answering the various questions, Afrikaans respondents were more suspicious than Xhosa and so forth. These differences need to be monitored and managed. However, none of these differences proved to be a major constraint and could be managed within the aims of the project. Responses varied also between different types of business. Shabeen owners by the nature of their trade were suspicious and more time was required to win their trust and some of the many Spaza operators, sensitive to competition, were reluctant to share income and profit information. All of these potential difficulties were identified and solutions found in the case of Fisanetrkraal. However similar differences will exist in every community and they will need to be identified and managed within the values and aims of the project.

Use of questionnaire as a structured and standardized ME information gathering tool?

It proved successful for this purpose. It does however, in the light of the field test, require some refinement (as was to be expected, hence the field test). Once this refinement has been completed (detailed in 'Revised Research Methodology') then the questionnaire will provide a structured and standardized ME information gathering tool for the purpose **of this project**. However, whilst wishing to deploy a standardized questionnaire to ensure objectivity, it must be recognized that it will be the interviewer, their skills and how they deploy the questionnaire that will be relied on heavily to ensure objective, validated and accurate information. This is a complex and challenging sphere of enquiry. However, the major challenge lies not in the area of the respondents understanding of questions or their preparedness to give accurate information. Rather, it lies in the efficacy of the enquirer. Providing the questionnaire is properly deployed therefore, it will provide a robust information gathering tool for the project.

Questionnaire format, flow and design?

The various lessons learned from the field test will be incorporated in a revised questionnaire that will address these matters. Please see appendix 11 for the necessary details.

Replicability of questionnaire?

The questionnaire will be used in Stage 2 of the project (subject to DFID approval to proceed) in other urban and rural settings in South Africa; and, in various locations in India. The aim has been to produce, based on the field test experience, a questionnaire that is replicable in these other situations. Subject to the incorporation of the various matters previously described and input from the Project Partners in India, to contextualise the questionnaire for local conditions, the aim of producing a replicable questionnaire and ME information gathering tool will be met. It will be critical that interviewers be properly trained, as well, to ensure replicability.

Information checking and validation for data analysis input.

As previously mentioned, it was necessary for each interviewer to allow sufficient time to check the contents of each questionnaire immediately following each interview and call back to the ME respondent to clarify any outstanding matters.

Step 2. Post interview initial data processing

Following the interviews, each interviewer was required to complete post interview processing of the data obtained during the interview. The nature of the data recorded during the actual interview was often found to be in a form that did not match the consistent or comparable data format requirement specified in the questionnaire. Hence, the need for the post-interview data processing.

The process was further facilitated by the development of a spreadsheet for the capture of the quantitative data. Once the spreadsheet was developed a guidance note was prepared for all the interviewers to assist with the post interview initial data processing. This took the form of specifying in Red ink on a blank questionnaire the exact fields and ranges that would be needed for the spreadsheet.

As part of this process the types of data were also characterised and included in the guidelines. These were:

1. Numbers – an example would be Income in R/month. Of course the correct units of this data is key.
2. Predetermined lists – for example all the Business types are preset with code letters for each. This ensures that the correct spelling is used for accurate sorting and counting within the table.
3. Capture of written words for descriptive questions such as “why did you start your business” ... “I lost my job and had no other means of income”.

These fields have been added to the copies of the questionnaire shown in Appendix 12, and should be incorporated as a separate column in the final questionnaires for use in phase two of the project. This would be similar to the “For official use” column found on many institutional forms. Note the spreadsheet contains comment boxes giving the data description, type and range were applicable.

Step 3. Data capture

Once the post interview questionnaire processing was complete the data was captured in the Excel spreadsheet. A combination of interviewers and data capture personnel were used for this process. Both categories of person were able to undertake the work, however, the data capturer was found to be much faster and naturally less expensive in terms of person costs.

An additional lesson was that 3 copies of the spreadsheet were populated, with each interviewer capturing data from their own completed questionnaires. The three copies were simply and effectively merged into one full data.

Please note that the data was captured against the sweep data, in other words adjacent as an indicator of which enterprises identified during the sweep were evaluated.

6.3 Data analysis

Having created a populated spreadsheet with all the data, the actual data analysis could now take place.

NOTE. A major assumption or constraint that applies to the Fisantekraal data is the incompleteness in the number of quantitative interviews. As, the purposes of the trial were to test the theoretically developed techniques, approaches and questionnaires and not to produce actual data only a percentage of the interviews were completed per enterprise type.

However, in Phase 2 of the project we would expect to increase, where practical, the number of interviews conducted per enterprise type.

In other words the analysis was completed in the exact way that it would need to be undertaken during Phase 2 however, the information extracted from the analysis and presented in Section 8 will be illustrative only and is not statistically correct.

Presented below are the methodology and analysis activities that have been undertaken on the quantitative data.

Step 1. Data check

Here the raw data needs a primary rearrangement and quality or correctness check. This took the form of sorting the entire data table on primary Column S the enterprise type, then secondary Column B the address. Here the purpose was to group the quantitative interview into one block, the remaining sweep records now being positioned below. Next the data in each row was checked to ensure correctness and type consistencies. A number of changes were introduced, particularly where the data capturer typed notes, or comments in place of values of predetermined list words.

One issue raised was the need to exclude questionnaires that contained insufficient information. Deleting the enterprise type description code and rerunning the sort completed this. These records will now be shown next to the sweep data below the block of qualitative data.

A problem experienced was the inclusion of information with the number or predetermined list symbol as a note. Including this text in the field meant that sorting or calculations on the field would be a problem. In future it is recommended that these be inserted as a cell comment.

Step 2. Statistical significance.

The next step would be to check the statistical significance of the data. Here the number of interviews and qualitative data records obtained needs to be checked against the enterprise numbers obtained during the sweep to ensure statistical relevancy (clearly in the case of Fisantekraal this would not be obtained due to the restricted number of interviews).

For example, for a 95% confidence level to be achieved the number of enterprise needing to be sampled would need to correlate with the following table:

Enterprise number	Required sample size
10	10
20	19
50	43
100	74
200	116
300	143
500	176
800	203
1000	214

An additional column was added adjacent to the enterprise type (Columns S & T) and the number of each type counted by entering count numbers. These figures were then transferred to the **sweep analysis table** to complete the analysis.

Step 3. Sweep accuracy

Accuracy of the sweep data is important as it indicates how trust worthy the sweep data is. During capture of the quantitative questionnaires a Y or N is answered if the address on the questionnaire matches with the list of enterprise identified during the sweep. Analysis took the form of checking and highlighting the “N” cells in column Q and in turn counting them and comparing with the total number of completed qualitative questionnaires.

Step 4. ME activity measure

For the ME activity measure a basket of indicators was selected and the results processed from the raw data. As follows (note actual calculations are in the excel fields):

- Number of households per enterprise, simply based on the sweep data totals.
- Average enterprise turnover per community household, calculated from the total turnover for the 60 surveyed enterprises, increased to represent all the enterprises and divided by the total number of houses.
- Average enterprise profit per community household, calculated from the total profit for the 60 surveyed enterprise, increased to represent all the enterprises and divided by the total number of houses.
- Average enterprise turnover per enterprise, calculated from the total turnover for the 60 surveyed enterprises, increased to represent all the enterprises and divided by the total number of enterprises found in the community.
- Average enterprise profit per enterprise, calculated from the total profit for the 60 surveyed enterprise, increased to represent all the enterprises and divided by the total number of enterprises in the community.
- Total people employed per community household, calculated from the total male and female employed people, plus the total number of business (i.e. number of owners assuming one in each case) divided by the number of houses.
- Total people employed per enterprise, similarly the total divided by the number of enterprises.

Data lessons related to interviews and the capture:

- Some inconsistency in the data related to hours worked, number of employees, owners time etc – need for researchers and data captures to be much more consistent and accurate in the way they record and capture data. Giving the interviews and data capturers more training be undertaking the work will help, together with the immediate post interview completion of the capture columns on the questionnaire. Here check calculations on the questionnaire will help. This discipline will encourage researchers to even return to the enterprise owner to validate data as soon after the interview as possible.
- One particular enterprise the large beer wholesaler is skewing all the data, guidance is needed on how to deal with this data. One immediate response in future would be to approach the beer suppliers to validate the accuracy of turnover figures and correct accordingly.
- Data captured must be the correct format within each column to make analysis work easier, e.g. adding units as per of the data entry, whereas the units are included in the cell formats, and adding comments with numbers should rather be added as “comments”.

Step 5. SL impact indicators

For the SL impact measures a basket of indicators was selected and the results processed from the raw data. Please note that the actual calculations are clearly shown in the spreadsheet, by selecting the results cell associated with the measure.

Step 6. Fuel and equipment statistics

Similarly for the fuel and equipment related statistics a basket of indicators was selected and the results processed from the raw data. Please note that the actual calculations are clearly shown in the spreadsheet, by selecting the results cell associated with the measure.

Step 7. Other quantitative conclusions

Apart from the above indicators and statistics a range of additional calculated conclusions can be drawn from the data.

7 Qualitative Research

This section of the report provides a description of the qualitative, participatory work that was undertaken within the Fisantekraal community during the field trial. The process methodology, i.e. focus group discussions, selected for use in this specific context is examined, together with the lessons learned as a result of testing this key participatory methodology.

Qualitative, participatory research, in the context of the overall project research framework was used for a number of purposes, including:

- To obtain information required for site selection from key stakeholders and informants (refer to Section 4)
- To obtain data and information in order to develop the Community Characteristics Record (refer to Section 5.2)
- To elicit qualitative information from defined groups of respondents to provide insights into the causal relationships between selected factors or variables on Micro Enterprise and other focus areas of project research.

We focus here on the third of these.

Although a number of generic issues have been identified that will be explored using this approach, many questions and factors will be specific to each community setting and will be therefore be drawn from the results of the Enterprise and Livelihoods Snapshot surveys.

Within the time constraints of the overall field test, the intention of the qualitative participatory testing was to:

- Evaluate the feasibility of initiating and conducting focus groups (one of the methodology options) to explore key generic issues with ME owners and community members (i.e. non- ME owners)
- Identify generic lessons learned for inclusion in focus groups and other participatory research methodologies and pointers that facilitators may wish to consider in their planning; key areas of the process that were specifically evaluated following the field test of community focus groups included:

- **Participants / attendance:** *Was the make-up of the group as expected? Did any invitees not appear? Did anyone arrive after the start? Did anyone leave after the session had started? How long did it take to get the session started?*

- **Time / timescale:** *Was the time for the meeting appropriate – time of day, length of the meeting?*

- **Venue:** *Was the community hall the correct venue? Any difficulties? Any pointers for selection of venues for future focus group discussions?*

- **Starting the session:** *Did the introductions proceed well? Did everyone appear to understand why they were there? Are there any additional activities required prior to the holding of focus group session e.g. to provide greater understanding within the community / participants of the aims / process of the focus groups?*

- *Did the interpreters / community assistants understand their role? Were they*

confident and proactive? Was the briefing sufficient and did it emphasis areas / issues of relevance to their role i.e. thinking from their perspective?

*- **Level of participation:** Did everyone feel comfortable and at ease? Were all participants open and active? Some more than others? Did anyone take over the discussion?*

*- **Appropriateness of the questions:** Did everyone follow the questions? Were there 'good' types of questions that enable the facilitators and the participants to drill down and obtain additional information / insight? Which types of questions caused difficulties for the facilitators / participants? Were there any areas where the participants were more reluctance to discuss in the group? Did any questions take longer than expected to explore (any that required several different ways of phrasing?)*

*- **Materials / equipment:** Did the equipment / materials serve the purpose intended in the session? What other materials / equipment would have been useful i.e. have enhanced the facilitation or the ability of the group to provide answers / insight?*

*- **Level and benefit of the group interaction:** Was our understanding of the issues being explored enhanced? What level of improved understanding / insight? In which areas were most benefits observed? Was anything learned that was completely new to the researchers? Any new questions identified for addition to the quantitative survey questionnaire?*

7.1 Selection of issues to be explored

The primary source of issues to be further explored through participatory, qualitative research will be the observations made by the project team researchers as a result of conducting individual interviews with micro enterprise owners. The guidance for conducting the community survey highlights the "post-interview initial data processing" as a key step for organisation of the data in readiness for processing and analysis. At the same time the interviewer is asked to identify and record those issues that he / she believes should be explored through the qualitative research.

In the field test a number of issues were identified and these were used to create a series of questions that were prepared for exploration in the focus group format (see Section 7.3). These generic questions address a broad range of issues and provide 'drill down' opportunities that can be used by facilitators when designing the qualitative research in Phase 2.

7.2 Selection of participatory research methodologies

A range of participatory research methodologies is available (see separate document 'Final Specification of Research Methodology' – Section 5.5) and may be used in a one-to-one or group environment. The overall approach and the methodologies selected will be based on observations of the project team and insight gained during the quantitative survey, discussions with community leaders and representatives and the issues that will be explored.

The following techniques were considered for testing within a 'focus group' environment:

- Open questions and facilitation to 'drill down' on the issues that added insight to the research questions
- Time lines (*e.g. to identify and explore changes that had occurred in the community such as electricity connection, establishment of services, external employment opportunities etc*)
- Social maps (*e.g. to locate services, facilities, businesses and households*)
- Matrix ranking (*e.g. working with ME owners to explore access to assets required for their business and the importance of energy and understand the relative importance of different micro enterprise enablers from their perspective*)

All of the above have the potential to add significantly to the understanding of the data gathered through the quantitative survey however, their use could be problematic in situations where individuals have limited experience of thinking in spatial and / or historical terms or where numerical skills are not well developed. Although the population of Fisantekraal is educated to or beyond a standard that delivers good competency in literacy and numeracy, it was considered that observation of these methodologies would provide valuable lessons for application in Phase 2.

7.3 Preparation of the 'process' methodology and detailed questions

Whilst recognising that each context in which the research will be undertaken is different and that the choice of methodology for participatory research needs to be carefully selected, it was considered that focus group discussions with community members represent an important tool that should be widely applicable across different communities. This approach (see Appendix 12) provided an opportunity for interactive discussion and the bringing together of diverse experience and views. The decisions around the style of organisation and facilitation of the focus groups (and indeed whether these are an appropriate approach) was taken in light of the observations / findings during the community engagement / ME sweep and from the early stages of the quantitative survey.

The overall purpose was:

- To examine whether it is possible to use this approach to explore a set of issues (both the generic issues and any additional ones identified during the quantitative survey)
- To assess whether the information and insight provided by the group discussions added to the quantitative data in a way that enhanced our level of understanding in key identified areas

It was also necessary to test whether this approach was feasible in the community after a relatively short period of engagement and quantitative research. It is important to note that the timescales over which this project will be undertaken mean that this is likely to be limited to 2-4 weeks for early engagement and gaining of legitimacy within the community followed by 1-4 weeks of quantitative surveys (in the pre-energisation survey in communities with no or only a very low level of ME activity, this will be at the lower end of the above timescales and may require additional planning and management).

7.3.1 Community focus groups

Focus group sessions were undertaken with a small number of business owners (Focus Group 1) and with non-ME owners from the community (i.e. customers of MEs / beneficiaries of ME activity in the community) (Focus Group 2). Each focus group session would be facilitated by 2 researchers from the project team and a community assistant / interpreter.

Invitations and selection of participants

One group comprised participants drawn from the owners of micro enterprises (ME) that had been interviewed during the quantitative surveys and the second group has been selected from the wider community and were, in theory, to be non-ME owners (in practice, this was not the case - see lessons learned). These were selected randomly by asking the community researchers to identify customers of MEs that had been interviewed and other members of the community. In order to encourage involvement by all participants and ensure a focused discussion, the size of the groups was restricted to 6-8 community representatives, 2 project team members and a community research assistant (providing interpretation). The ME owners were selected to represent a range of the different businesses operating in Fisantekraal (a total of 14 types of ME were identified during the sweep survey).

Time and date

Date: Saturday 8th March 2003
Time: 13.30 to 16.00

These were selected in response to answers provided by ME owners at the end of the quantitative survey interview.

Location and provisions

2 rooms of the community meeting building were used for the discussion groups. This location was chosen as this is the focus for meetings and information dissemination to the community of Fisantekraal and we were advised that residents are familiar with this environment and concept.

The project team provided cold drinks and snacks for both groups. The aim was to provide a welcoming and comfortable setting for the discussions, and to encourage all participants to remain for the whole of the planned time (cold drinks proved essential and were very much appreciated as the meeting took place in the middle of an extremely hot day).

Questions to be explored

The following generic issues were selected (see Table below).

Detailed planning for the focus groups based on these questions, together with ideas for facilitation of potential 'drill down' areas for each, is provided in Appendix 13. Questions 1-5 were examined with each group as indicated above.

Potential questions for qualitative research <i>(generated to complement ME questionnaire)</i>	Explored with:				
	<i>Group 1: ME owners mixed</i>	<i>Group 2: Non- owners mixed</i>	<i>Indiv. Fem.</i>	<i>Indiv. Male</i>	
1. Purpose and value of ME to the community >>> ranking of SL measures from perspective of ME owners and non-owners	X	X			Select 6 'successful' owners from different types of ME; Community non-owners – select 3 male and 3 female
2. Motivators / barriers for ME activity and growth	X	X			
3. ME volume measures – what is important to you about your business	X				
4. Energy – ownership, access, security, usage	X				
5. Other ME enablers – what are they, relative importance (from owner / community viewpoint)	X	X			
6. Gender perspective – one-to-one interviews			X	X	

7.3.2 One-to-one in-depth interviews

One-to-one in depth interviews were not specifically tested in the field trial as the planning and conducting of these will need to take account of each community context. Whether these are included in Phase 2 will be guided by the knowledge and experience of each local team and other key stakeholders from or working with the specific communities. For example, we are advised that in some rural communities in India it would not be appropriate for a male researcher to interview a female ME owner during the day time while her husband was away from home working in paid employment. Thus care is needed in the selection of interviewers and in the scheduling of this type of interview.

7.4 Capturing information and observations from the focus groups

The focus groups were conducted in a manner that enabled one of the project team researchers to work closely with the community assistant / interpreter to facilitate the session whilst the other project team researcher took detailed notes. The purpose of recording all aspects of the discussion was to capture the answers from individuals within the group to the various questions and subsequent exploration, to observe and document the behaviour and reaction of the group and individuals to particular questions, facilitation techniques and equipment / materials that were employed, and to identify any specific approaches / techniques that were particularly effective or that caused difficulties (including impact on the group / individuals and the nature of the problems encountered).

7.5 Processing and analysis of qualitative findings

At the end of the time allowed for each of the focus groups, the participants were thanked for their contributions to the research and the ME owners were wished success with their businesses.

Each of the researchers wrote a note covering all aspects of the session that they had recorded, and this was passed to the facilitator of that session for checking and to add any further notes and / or observations.

8 Fisantekraal Micro Enterprise and Energy Results

In the following sections the actual results extracted from the Fisantekraal survey are presented firstly to illustrate the data collation and processing techniques that were utilised / tested and secondly to enable lessons learned to be extracted and incorporated into the 'Final specification of research methodology'.

8.1 Sweep results

The following table has been prepared and extracted from the data.

Enterprise numbers identified during the sweep			
Enterprise type	#	% of enterprises	% of total properties
Baker	2	0.63%	0.15%
Barber	1	0.32%	0.08%
Carpenter	2	0.63%	0.15%
Creche	2	0.63%	0.15%
Eskom - Electricity vendor	1	0.32%	0.08%
Arcade Games shop	1	0.32%	0.08%
Hairdresser	3	0.95%	0.23%
LPG Gas refiller	1	0.32%	0.08%
Photographer	3	0.95%	0.23%
Printing T Short logo's	1	0.32%	0.08%
Seamstress	13	4.13%	0.98%
Shebeen	58	18.41%	4.36%
Shoemaker	8	2.54%	0.60%
Spaza	195	61.90%	14.65%
Take Away	3	0.95%	0.23%
Transport	4	1.27%	0.30%
TV Repairs	1	0.32%	0.08%
Vege seller	13	4.13%	0.98%
Vodacom - telephone kiosk	1	0.32%	0.08%
Welding shop	1	0.32%	0.08%
Fire Wood seller	1	0.32%	0.08%
Total Enterprise	315	100.00%	23.67%
Non enterprise properties	1016		
Total properties surveyed	1331		

Key points to note from the sweep are:

- Total of 1331 sweep questionnaires completed and captured.
- In 23.67% of the homes an enterprise was found.
- Shabeens and Spaza shops account for 80.31% of the enterprises!
- Incredibly 3 out of every 20 homes are trying to make some additional income through selling to their neighbours.

8.2 Quantitative results

The following results have been prepared and extracted from the data:

Statistical relevance of the results:

Enterprise numbers identified during the sweep				Qualitative data			
Enterprise type	# from sweep	% of enterprises	% of total properties	# of records	% of sweep	Statistical significance	
Baker	2	0.63%	0.15%	1	50.00%		
Barber	1	0.32%	0.08%	1	100.00%		
Carpenter	2	0.63%	0.15%	2	100.00%		
Creche	2	0.63%	0.15%	2	100.00%		
Eskom - Electricity vendor	1	0.32%	0.08%	1	100.00%		
Arcade Games shop	1	0.32%	0.08%		0.00%		
Hairdresser	3	0.95%	0.23%	2	66.67%		
LPG Gas refiller	1	0.32%	0.08%	1	100.00%		
Photographer	3	0.95%	0.23%	1	33.33%		
Printing T Short logo's	1	0.32%	0.08%		0.00%		
Seamstress	13	4.13%	0.98%	4	30.77%		
Shebeen	58	18.41%	4.36%	8	13.79%		
Shoemaker	8	2.54%	0.60%		0.00%		
Spaza	195	61.90%	14.65%	22	16.92%		
Spaza/Shabeen - count as a spaza				10			
Meat merchant - count as a spaza				1			
Take Away	3	0.95%	0.23%		0.00%		
Transport	4	1.27%	0.30%		0.00%		
TV Repairs	1	0.32%	0.08%		0.00%		
Vege seller	13	4.13%	0.98%	2	15.38%		
Vodacom - telephone kiosk	1	0.32%	0.08%		0.00%		
Welding shop	1	0.32%	0.08%	1	100.00%		
Fire Wood seller	1	0.32%	0.08%		0.00%		
Total Enterprise	315	100.00%	23.67%	59	18.73%		

Notes:

- Clearly insufficient interviews conducted to give statistically relevant data.
- A total of 59 acceptable interviews completed and data captured.

Sweep accuracy:

Sweep Accuracy		
Total interviews	63	100.00%
Geographic match to sweep data	56	88.89%
Geographic mismatch to sweep data	7	11.11%

Notes:

- Only 11% of the addresses noted during the qualitative interview did not match the sweep data. The main reason for this inaccuracy was the illegibility problem with the small copies of the township layout. Hence, the interviewers made mistakes.

ME activity measure:

Micro Enterprise activity composite measure

#	Individual indicators	Units	Result	Comments
1	Number of households per enterprise	Households per enterprise	4.23	One enterprise for every 4.23 houses!
2	Average enterprise turnover per community household	R / household / month	R2,352	
3	Average enterprise profit per community household	R / household / month	R305	
4	Average enterprise turnover per enterprise	R / household / month	R9,937	Average turnover per enterprise
5	Average enterprise profit per enterprise	R / household / month	R1,290	Average profit per enterprise
6	Total people employed per community household	# / household	0.45	Includes an owner, giving nearly half a job per household
7	Total people employed per enterprise	# / enterprises	1.9	Includes as owner, giving nearly two jobs per enterprise
8	Productivity (Income/person hours)	R / hour	R32.1	Skewed by high wholesalers income
9	Average Stock value	R / enterprise	R1,534.5	
10	Percentage of customers internal to community	%	91%	
11	Percentage of customers external to community	%	9%	
12	Average transaction size	R / transaction	R39.0	
13	Others ??			

Notes	
1.	All data corrected to represent the full community, despite being statistically incorrect in this instance as the raw data is not statistically significant.
2.	All data normalised into a per household or per enterprise indicator, to normalise any change in community size between snapshots
3.	These are all measures that will be compared for net change (Delta) from before to after electrification.
4.	

Sustainable Livelihood impact measure:

Sustainable Livelihood impact composite measure

#	Individual indicators	Units	Result	Comments
1	Average employees income per community household	R / household / month	R27	
2	Average owners income per enterprise	R / household / month	R348	
3	Enterprise owners per community household	# / household	24%	
4	Involvement of owner family members	%	28%	
5	Community based ownership	%	100%	
6	Female enterprise ownership		48%	
7	Male enterprise ownership		42%	
8	Joint ownership		10%	
9	Others ??			

Notes	
1.	All data corrected to represent the full community, despite being statistically incorrect in this instance as the raw data is not statistically significant.
2.	All data normalised into a per household or per enterprise indicator, to normalise any change in community size between snapshots
3.	These are all measures that will be compared for net change (Delta) from before to after electrification.
4.	

Energy and equipment statistics:

Energy and equipment related statistics

#	Individual indicators	Units	Result	Comments
1	Electricity consumption per enterprise	R / Enterprise / month	R157.00	
2	LPG consumption per enterprise	R / Enterprise / month	R1.83	
3	Paraffin consumption per enterprise	R / Enterprise / month	R0.42	
4	Wood consumption per enterprise	R / Enterprise / month	R0.83	
5	Battery consumption per enterprise	R / Enterprise / month	R0.47	
6	Average fuel cost per month	R / Enterprise / month	R160.55	
7	Energy importance average	#	4.7	Value is from a 1 to 5 scale, i.e. very high!
8	Equipment penetration - Refrigerator	# / Enterprise	101.7%	Manually calculated totals
9	Equipment penetration - Freezer	# / Enterprise	68.3%	Manually calculated totals
10	Equipment penetration - Coldroom	# / Enterprise	1.7%	Manually calculated totals
11	Equipment penetration - Electric sewing machine	# / Enterprise	3.3%	Manually calculated totals
12	Equipment penetration - Electric iron	# / Enterprise	5.0%	Manually calculated totals
13	Equipment penetration - Manual sewing machine	# / Enterprise	5.0%	Manually calculated totals
14	Equipment penetration - Electric Stove/oven/microwave/kettle	# / Enterprise	8.3%	Manually calculated totals
15	Equipment penetration - Paraffin cooker	# / Enterprise	5.0%	Manually calculated totals
16	Equipment penetration - Hair dryer	# / Enterprise	5.0%	Manually calculated totals
17	Equipment penetration - Radi/ juke box/hifi	# / Enterprise	26.7%	Manually calculated totals
18	Equipment penetration - Lights	# / Enterprise	36.7%	Manually calculated totals
19	Equipment penetration - Woodworking power tools	# / Enterprise	13.3%	Manually calculated totals
20				
21	Others ??			
22	Others ??			

Notes	
1.	All data corrected to represent the full community, despite being statistically incorrect in this instance as the raw data is not statistically significant.
2.	All data normalised into a per household or per enterprise indicator, to normalise any change in community size between snapshots
3.	These are all measures that will be compared for net change (Delta) from before to after electrification.
4.	

Other calculated quantitative data:

Other quantitative based conclusions

#	Calculated indicator	Units	Result	Comments
1	Percentage of enterprise started after electrification	%	68%	At least 68 % of the sample started up after electricity arrived
2	percentage of original owners	%	95%	Most are originally owned businesses
3	Average educational level		5.8	
4	Average yearly activity		94%	100 % would be equal all year
5	Average area of premises	meters squared	17.4	
6	Percentage of businesses giving credit		78%	
7	Credit % of turnover		17%	
8	Bad debt %		4%	
9	Percentage of enterprise having a bank account		48%	
10	Adjudged percentage with growth potential		77%	
11				
12	Others ??			
13	Others ??			

Notes	
1.	All data corrected to represent the full community, despite being statistically incorrect in this instance as the raw data is not statistically significant.
2.	All data normalised into a per household or per enterprise indicator, to normalise any change in community size between snapshots
3.	These are all measures that will be compared for net change (Delta) from before to after electrification.
4.	

Qualitative data from the statistical questionnaires:

The last sheet in the spreadsheet contains a full listing of all the captured data of this type and provides an opportunity for extracting a range of additional conclusions from the quantitative questionnaires.

8.3 Quantitative conclusions

Just a few selective observations:

Comment 1. Types of Enterprise

Very high number of trading businesses rather than manufacturing, 70% of the ME;s are Spaza's selling household consumables and over 18% Shabeens selling liquor and entertainment. Collectively 88% of the 315 total number of ME's identified. However these ME's are a significant source of employment, income and service to the community. There is data available on number of people employed, average income and so forth.

The remaining 12% of the ME's identified displayed a rich diversity of commercial activity with a number of manufacturing activities including:

- 2 small scale bakers
- 2 carpenters
- 1 printer of T shirts
- 8 shoemakers
- 1 welding shop
- 13 seamstresses

Some 9% of the ME's that were identified could therefore be classified as manufacturing, with some of these having significant potential for growth and serving markets outside the immediate community. The balance of the ME's were service activities like hairdressing, crèche, transport and TV repairs.

In terms of growth, some 77% of ME operators felt that their businesses had potential to grow providing constraints to growth could be overcome (see later).

Clearly from the quality and depth of data obtained further analysis can be undertaken relevant to the project including growth versus survivalist ME, those where energy plays a pivotal role; and, ME's that arise through natural versus facilitated growth.

Comment 2. Significance of ME in community economic life

Clearly very significant, with high levels of unemployment and a ratio of 1 ME per 4.23 households in the community. This ratio before and after energy provision will be interesting. Average, typical and range of incomes associated with these ME's also revealing. Total people employed in ME's in the community at 0.45 people employed per household with 1331 households is significant. Clearly ME, however varied and modest that some may be, play a crucial role in economically sustaining this particular poor community.

Significance of types of ME. An analysis of the distribution of incomes from the various ME's will show a high weight towards small survivalist ME's, especially among the smaller Spaza Shops and Shabeens. At the other end of the distribution there are a moderate number of highly successful and profitable business entities within the community

The significance of ME in this community from an economic perspective may be analysed from various perspectives with the data that is available.

Comment 3. Ownership

ME ownership is fairly equally split between men 42% and women 48%. However, that the majority of owners are women indicates the gender empowering element of ME and that in many cases, where there is no income for family the women create livelihoods to support their children. Women are also often more restricted to remain at home to care for children and other dependent family members and therefore more prone to start small homes

businesses, often in spare time to augment family income. That 10% of the ME's are jointly owned by women and men links to mainly to husband and wife partnerships and such partnerships are probably higher than reported in practice.

Clearly from a livelihood perspective, ownership has been quantified and shown to be an important delta.

Comment 4. ME and energy

A most profound finding is that at least 68% of the sample of ME's only started their businesses after the community received electricity and that all the businesses ranked having electricity as highly important to their business activities. It ranked, on average at 4.7 on a 5 point scale with 5 being high. This is clearly a valid delta and criteria for measuring the impact of modern energy services on ME creation and growth.

When reflecting on the appliance ownership data it is clearly evident why electricity is so essential for the ME's in this community. Information gathered about energy also reveals several ways that refinements to energy provision and supply may stimulate yet more sustainable ME in poor communities. Just some of these include:

- Cost of connection: keep the cost low or subsidised
- Cost of energy consumed: perhaps have a ME tariff linked to business success criteria. Prepaid metering is helpful to ME's since they can budget and pay as they go. Many of the ME's are cash businesses.
- Reliability of supply. If electricity supply is prone to disruption it may be worthwhile to consider some standby facilities for essential supplies such as to cooler rooms

It is however, beyond the meter, where there is exciting potential to do more to stimulate and facilitate ME especially in offering ME facilitation packages including appliances and basic business training. In this community, often the business is indeed the appliance, whether it is an electric sewing machine, a cold drinks refrigerated display cabinet, a hairdryer or cooking stove and oven. Energy becomes potent as a livelihood facilitator when it is used, usually via an appliance, for some economic purpose.

8.4 Qualitative Data from ME Questionnaires

Comment 1. Sample of types of data available

This information relates to the various verbal information fields in the ME Questionnaire data base. This contains a rich range of essential information that is available for various analysis routines to meet the needs of the project. Shown below are just three research topics, selected at random, with a rudimentary analysis to illustrate the type and quality of data that may be derived:

Previous Training

This relates to what specific training did the various ME operators have prior to starting their businesses, and where training had been received what was the type of training and where received.

Some 75% of the ME sampled had received no training what so ever before starting their businesses showing a very high degree both of natural entrepreneurship; and, it must be added economic desperation. One is compelled to ask the question therefore just how much

more could be achieved in terms of economic development and empowerment with proper orchestrated training and ME facilitation.

In contrast to the above some 5% of ME operators had received specific business skills training from various local small business development support bodies. Also another 5% had received specific training in their particular trade or enterprise such as hairdressing, carpentry and electricity vending. Another major source of training was learning from others, or alongside others or from previous employment. The owner of the crèche has worked for a number of years elsewhere in a crèche before opening her business. One of the carpenters had learned his trade working in a carpentry business before becoming unemployed. Many of the seamstresses had learned their skill from their mothers and some of the Shabeen and Spaza operators were either under the patronage and mentorship of larger local wholesalers or external suppliers.

In the case of a small successful baker, the Learn to Earn non-profit Christian development group who have a relatively new training facility adjacent to the community had trained and then facilitated with a second hand cooker, the business. This body had also been instrumental in also training several of the seamstresses (and in at least one case provided the sewing machine which was hired for 3R / day which enabled operation of full time business – this was not counted in the Fisantekraal ME data as the energy source for the business was located outside the community boundary defined for the survey).

External Markets

The role of external markets was explored with all ME respondents especially in terms of growing their businesses and increasing income into the community. Some 42% of respondents had some opinion about this issue with the remaining 52% either having not considered it, considered it and concluded it has no relevance for their particular type of business; or, that the external market is beyond their reach. Of the 25 who did respond, 7 ME respondents actively engaged external markets in some manner. Some had a small passing trade such as a hairdresser who had some clients from outside the community, some street vendors had passing trade and some of the manufacturers sold their products either into local markets or far away via family and friends in the Eastern Cape. So what were the major constraints identified by ME respondents to reaching out to these external markets. They included comments such as:

- We are too isolated
- Too far away
- No transport
- No way to do so
- Strong competition elsewhere
- Lack of publicity

Here again lies a rich vein of opportunity where practical support could be provided to enable ME's in poor communities to reach larger markets and thereby grow sustainable enterprise that will increase local incomes and livelihoods. Without this access there will always be a major constraint to economic growth.

ME Growth

Some 77% of the ME respondents believed that their businesses had growth potential. This belief was held frequently in the spirit of 'If only, then yes my business can grow and then I could employ more people etc etc ..' From the verbal information gathered during the

ME interviews and from a simple weighting analysis the constraints identified by MEC operators in this community, according to descending priority, are as follows:

1. Capital, Bank Loan - to buy equipment, build bigger premises, to put in security, more cold storage and so forth.
2. Working cash: to buy more stock, buy in bulk to get better discounts, to be able to advertise and so forth
3. Lack of space to trade/manufacture/ provide service/store products
4. High costs such as rent, rates etc
5. Low incomes and not enough money in the community
6. Too many competitors especially Spaza's
7. Bad debt (a minor problem since credit generally closely controlled)
8. Theft and security
9. Transport (to transport stock from suppliers and products to external markets)

Some 58% of ME respondents identified items 1 and 2 above as constraints to their growth. The capital requirements mentioned were also always modest. Here again lies an important area of facilitation in terms of micro business loans and financial skills training.

8.5 Quantitative General Observation

All the data gathered in this community provides a fascinating looking glass into the world of ME in Fisantekraal. Many questions can be posed and answered with a reliable level of accuracy. However, the overwhelming conclusions that can be drawn are that the coming of electricity has been profound in being an essential precursor to the creation and growth of over two thirds of the ME's that exist today. The other conclusion that leaps out to even a casual observer is just how strong the entrepreneurial spirit and indeed ability is among the people of Fisantekraal and just how much ME they have created and sustain with minimal assistance, guidance or tangible support from others.

Where pragmatic and fit for purpose support has been provided, Fisantekraal has been a highly fertile environment for such initiatives to grow new sustainable enterprise and livelihoods. More can still be achieved in such rich soil with the eagerness of the local people to be economically empowered. So much more can be achieved in the future, with a few modest supportive interventions in parallel of sequentially with the provision of energy.

8.6 Qualitative focus group results

The aim of qualitative participatory research is to provide insight directly from defined groups of micro enterprise owners and / or community members to assist in understanding the data collected from the quantitative surveys. In addition, the causal relationships between selected factors or variable was explored. The priority is to obtain information from the perspective of the community in areas related to energy services provision, micro enterprise establishment and growth, and sustainable livelihoods, and where relevant to explore this further through ranking of various indicators / measures.

The following issues were explored through focus group discussions (for detailed questions, refer to Appendix 13):

- Purpose and value of micro enterprise to the community

- Identification of the motivators and barriers for the establishment and growth of micro enterprise within the community
- What indicators should be used, from the perspective of the community, for the micro enterprise volume delta measure
- Energy – ownership, access, security and usage
- Identification of other enablers of micro enterprise and their relationship to the provision of modern energy

Appendix 14 (Community Focus Groups – reports from Fisantekraal field test) provides a detailed record of the discussions undertaken with each Group, and the findings. The focus groups provided results in terms of the ‘process and methodology’ and, although the qualitative research was not undertaken to the same extent as anticipated in Phase 2, it provided some valuable insight into the quantitative data and a number of observations made during the survey of ME owners.

Process findings

It is essential to fully explain the purpose and confidentiality of the project. The ME owners had previously been interviewed during the quantitative survey and were therefore more aware of the research and its objectives. None of the community members (non-ME owners) had any previous direct contact with the project. The focus groups are an open and interactive environment and the group members (particularly some of the ME owners) were rather hesitant until they became more relaxed later as the session proceeded.

Another observation that supported the need to ensure that the research has a high profile in the community and that all key stakeholders are adequately (from their perspective) briefed is that members of both focus groups raised issues and questions related to:

- why certain business people were selected and others were not
- the purpose of the project
- how they will benefit from taking part in the project

It had become apparent during the quantitative survey that some ME owners are reluctant to disclose certain types of information, primarily relating to profit, turnover and other financial information. The interviewers involved in the survey made a number of attempts to obtain this type of information using a deductive approach through other measures such as sales, stock turn, prices etc. The qualitative focus group provides an alternative environment for discussing these aspects more broadly however, as reluctance to divulge this information is for reasons of competition and special supply terms, these areas may also be appropriate for investigation using one-to-one interviews.

Other process issues and lessons learned are discussed in detail in Section 9.3.6.

Some selected results for Fisantekraal

Clear enablers for small business in Fisanterkraal as identified by this group were:

- Start up money
- Equipment/appliances
- A skill or knowledge such as baking, hairdressing or trading
- Self confidence
- Identification of a community need and market

The motivation for the establishment and continuation of many of these small businesses was economic necessity; there were no alternative means of earning an income or the income from external employment was not sufficient throughout the year (much of the employment in this area is seasonal).

Limiters to small business growth were:

- Lack of working and capital to buy more equipment/appliances
- Restrictive local market place
- Access to external markets
- Business skills

Small business owners have a very clear idea of how they measure their success (e.g. maintaining business turnover and generating a surplus from these sales) and that of others in business in their community. Reluctance to share this information should not be interpreted to mean they do not know e.g. a number of the ME owners in the group kept records. The main businesses that were unwilling or less willing to share this information, even on a one-to-one basis, were those in a strong monopoly position or which had a high turnover (e.g. soft drinks wholesaler).

For some kinds of business, such as wholesale and retail trading, there appears to be a hierarchy of suppliers within the community, with large wholesalers supplying a number of smaller enterprises. An important measure for the wholesalers and others selling to retail businesses is how many other outlets they supply.

The importance of looking after your customers and having a competitive advantage generated through having better and more stock, better prices and a high level of service were also important measures that they used.

In addition to the more general issues explored through using the above areas of questioning as the basis for the focus group discussions, several areas where observations had been made during the quantitative survey were investigated in more detail.

One such issue was:

Availability of credit as a consequence of micro enterprise activity.

Questions had been included on the quantitative survey questionnaire to obtain information on whether the ME offers credit to its customers, how often and the incidence and effect of bad debt.

*Exploring this further during the interviews indicated that: the level of credit available within the community was a direct consequence of ME activity and that this provided considerable livelihood benefits to a large number of ME customers whose income / cashflow occurred at greater intervals than their need for staple food stuffs / consumables / other supplies. This issue was explored in the focus groups and insight was provided that revealed that the high incidence of credit was due to trust and the relationship that ME owners had with **their** regular customers, and the reciprocal relationship that customers had with ME owners which meant that they fully recognised their obligation and therefore always repay credit on time. ME owners viewed the giving of credit as an important and valuable customer service and this was supported by customers who participated in the focus groups.*

The focus group discussions organised and conducted over a relatively short time period were highly effective, and were appreciated and enjoyed by all those who participated. The process was thoroughly tested and a range of lessons learned (see Section 9.3.6) that will be incorporated into the process / methodology for this approach to qualitative participatory research. Much insight was also gained that will be valuable for the design of one-to-one interviews, should this be appropriate for the issues to be explored in the Phase 2 communities.

8.7 Findings in the context of the SL framework

Within the context of the Sustainable Livelihoods framework, we can explore the impact of micro enterprise by understanding how the assets of various groups within the community have been affected. Analysis of the findings from quantitative survey have indicated that the following assets have been enhanced:

Social capital – increase in the networks and relationships that generate the level of trust, reciprocity and exchanges between individuals within the community and which then provides (through availability of financial capital in the form of short term credit (no interest? .i.e. formal or informal safety nets) local access to food and other essential supplies - this is intimately linked to **financial capital**; people travelling for stock are in contact with a wider network of external people and will bring news and information to the community through local networks of customers, and thus bring up the knowledge in the community – this is intimately linked to **human capital**

Financial capital – availability of credit from the micro enterprises within this community that is likely to be less readily available outside the community (where lack of networks / relationships would not provide the necessary trust for credit to be given); this may be linked through the increased opportunity for effective control and prioritisation of expenditure, to **human capital** and **physical capital**.

Human capital (not explored in Fisantekraal field test) – Increased incomes enables more children in the community to attend school and progress to a higher level (may also create differential between children of ME and non-ME households); Health indicators, such as number of people attending the clinic may change – negative impact if ME owners / families do not have the time to attend or positive impact if ME owners and their families become healthier through improved diet i.e. increased income enables them to obtain more, better and more varied food; Less time spent travelling trying to find services / products which are now available within the community >> less stress, more time available

Physical capital - Arrival and growth of infra-structural services such as affordable transport from within the community provides access to goods, services and employment opportunities from outside the community; ME provides access to affordable electricity (although no credit for connection or usage – pre pay meter) and other fuels; Access to information and networks through telephone service providers and ability to buy and use cell phones – linked to social capital as this also stabilises and enables development of personal and business relationships and networks

Natural capital (explored in a limited way within the environmental comments requested in the quantitative survey) – impact will depend on the nature and scale of the ME activity, whether use of natural resources occurs at a sustainable rate and the extent to which existing environmental services and systems can effectively deal with wastes / wastewater / emissions and thus prevent environmental harm; in Fisantekraal, slaughtering activities, nappy washing at crèches and hairdressing all use clean water and produce contaminated wastewater but at the scale involved this does not lead to problems as every house is connected to the mains sewage / waste water system

9 Methodological and Research Lessons

This section reviews the proposed methodological research framework in the light of practical experience gained from the field test. It is in three sections. The first deals with methodological assumptions and propositions as described in the research framework in the Proposed Methodology document. The second section revisits and evaluates the practicality of the proposed Research Timeframe. The third section lists and describes the major practical research lessons gained from the field test and how these should be applied to various research techniques and reflected in the final methodology document.

9.1 Methodological Framework

A series of assumptions and propositions underpinned the design of the methodology that has been tested in Fisantekraal. This section attempts to answer whether these are indeed robust and practical in the light of experience gained from the field test. Each of the assumptions and propositions are therefore revisited with a brief commentary on each.

9.1.1 Community level research

The research will focus on a number of delineated urban and rural communities, areas of poor households, in Southern Africa and India.

- Whilst the communities selected will be typical of many others in the respective regions, they will never form world, or even country wide, basis for extrapolation.
- The research universe will therefore consist of a number of defined poor communities in both urban and rural areas.
- The results will apply to these communities and their particular circumstances.
- General conclusions will however be drawn where it is feasible to do so on a reliable basis.

These assumptions proved sound based on the field test experience. As discussed earlier under Site Selection, it is imperative that this selection process be carried out diligently and objectively with due regard to the site selection criteria.

9.1.2 Modern energy intervention into the community

As a prerequisite to the selection of any community, it is imperative that a modern energy intervention is imminent and will be of a substantial nature.

- The intervention needs to be of a rollout nature, in that it will effect a step change on the community from an energy perspective.
- Delivery of a modern energy intervention would have an impact on the type and nature of the micro enterprise operating in a community.
- The introduction of modern energy to the community will allow for the testing of this exact hypothesis proposed in the project.

Fisantekraal had received grid electrification in August 2001 and this had a profound impact on the community and the nature and volume of micro enterprise in the community. The electrification intervention did provide a major step change energy intervention for the community. The before and after project investigation approach will enable this step change to be measured in terms of micro enterprise impact and then impact on livelihoods.

9.1.3 All micro enterprise will need to be evaluated

At the core of the research framework is a decision to scan, quantify and characterise all legal and reputable micro enterprise active within a community at a given point in time where it is feasible to do so:

- Only by evaluating the total micro enterprise activity within a community can their impact on livelihoods be determined.
- Following the introduction of a modern energy service in a community, failure to evaluate the total micro enterprise activity could give rise to error as the changes in activity could be the closure or reduction in some existing micro enterprise activities.
- Measures will be required for this approach that specifically look at evaluating the operation of each micro enterprise found.
- Only evaluating all micro enterprise will give the necessary statistical basis for comparison, as any sampling techniques across different 'before' and 'after' energy intervention communities would be highly biased and result in unrepresentedness unless all micro enterprise are counted.

Owing to time and resource constraints it was decided not to interview all the micro enterprises identified in Fisantekraal and it was deemed unnecessary for the purpose of successfully completing the field test.

9.1.4 Micro enterprise have a direct impact on livelihoods and incomes

Whilst micro enterprise can be evaluated from the perspective of the enterprise in itself, there is a second major component of the project in determining the livelihood impact of the micro enterprise.

- One implication of having micro enterprise in the community will be an impact on the livelihoods and income of community member's, possibly positive and negative.
- Changes in the nature and number of micro enterprise will correspondingly vary the impact on livelihoods and incomes.
- These impacts need to be measured from the perspective of the community i.e. what are the important livelihood and income attributes from their perspective.

These propositions are not challenged in the light of experience gained from Fisantekraal. ME impact on number and nature of livelihoods in Fisantekraal is measurable and changes over time and in relation to energy interventions are quantifiable. Changes in the nature and number of ME's do vary the impact on livelihoods and incomes.

There are however a number of practical issues around the gathering of reliable income data from certain business owners who are reluctant to disclose such information. A range of deductive investigation methods had to be used therefore to elicit this information. See discussion under Quantitative Research and ME Questionnaire.

9.1.5 Longitudinal nature of the research - time related change

Clearly with a step change with modern energy provision impacting on micro enterprise, the results will be constantly changing for a period, necessitating the need to measure before the intervention, and after the intervention since reportedly many new micro enterprises fail within the first year, at least 12 months need to elapse before the post survey.

- It is proposed that a before and after survey (18 months) be conducted.
- This number of surveys proposed together with the number of sites investigated and the complexity of the research activities, will determine the volume, level and timing of resources required.

These propositions are not challenged in the light of experience gained from the Fisantekraal test. Since the test involved a single 'after' research snapshot, it was necessary to deduce

much of the time related issues from a range of personal interviews, a detailed review of the history of the community and the start dates of the ME's.

In terms of volume, level and timing of resources required for stage two investigations, all the various activities and research techniques used in Fisantekraal were quantified both in terms of time required plus the level of staff required to do these activities. This information has been specified and quantified providing robust input for the stage two project planning undertaken by Future Energy Solutions..

A singularly important issue has arisen in the light of field test experience. It is important essential need to have senior and 'project experienced' personnel committed to the stage-two activities. Whilst it is possible to document much of the experience gained in Fisantekraal, owing to the complexity of this project it is unrealistic to expect others to fully gain the necessary knowledge and practical understanding to replicate the methodology through conventional training or briefing. To be able to apply this methodology in an internally consistent manner it is important that all supervising members of the project team be involved together in at least one survey, and that thereafter there is continuity of supervisory staff and senior researchers for the communities they are responsible for

9.1.6 Delta or net change in micro enterprise activity and livelihood impact.

For both impact of the modern energy services on micro enterprise activity, and in turn the impact of micro enterprise on the livelihoods, it is proposed that the net change (delta) is measured.

- The delta will examine how much the intervention has changed the nature and number of micro enterprise and the variation in livelihood and income impact that the community is experiencing.
- The measures for each will need to be subtracted to determine the change after a period of elapsed time, e.g. Total salary paid to community members before the intervention, subtracted from the total salary paid to community members after the intervention.

From the Fisantekraal results given in section 8, it can be seen that the snap was able to reflect the extent of ME activity and SL impacts at a given time. Having proved that the snap shot is possible the conclusion can be drawn that a delta will be possible. Hence the overall methodology is adjudged to work.

9.1.7 Single community application of the measures

By evaluating one community independently through longitudinal research, a range of externalities and local characteristics are excluded.

- Comparison between different communities would result in the need to try and normalise the data in an attempt to remove differing impacts on the micro enterprise and livelihood impact changes.

This is a sound proposition in the light of experience from the Fisantekraal field test.

9.1.8 Impact of other interventions during the research period

In an attempt to understand only the energy intervention impacts there is a need to monitor what other externalities impact on the community and micro enterprise during the test period.

- A log of all activities needs to be maintained during the research period, together with investigation of such impacts. This will need to be examined and understood through qualitative research.

This is an important element of the research methodology and needs to be under the overall direction and management of a senior member of the research team or a competent and

reliable member of the community. Information about other interventions needs to be drawn from a variety of sources since they are not always obvious. The enquiry net needs to be cast wide firstly to identify all possible interventions that may have an impact. There then needs to be a further series of investigative activities to verify the interventions, gather relevant data and then evaluate the impacts. In some instances this further enquiry will need to deploy both quantitative (e.g. in the case of a special training course how many attended, from what micro enterprises, when they attended, gender etc) and qualitative (e.g. the nature of the training, relationship to business activity, any packages provided as part of the training such as reference manuals, software, appliances etc). It is vital to retain a disciplined focus on micro enterprise since this is the activity that is the locus of study. There are many things happening concurrently, day by day, week by week etc. in all communities. Many are irrelevant in terms of micro enterprise but others have a profound impact. The skill required with this research technique is therefore to know how to distinguish what is and what is not important.

It is also important to understand the possible diversity of other interventions and their impacts on ME. They can range from matters such as a new road and more traffic passing the community, a train service now stopping near the community where there was none before, a change in the routines of external policing, a community health programme, a sudden enforcement of certain trading legislation such as enforcing licensing for illegal shabeens, a major event in far off places connected to the community (such as a major event in the Transkei calling for traditional costumes suddenly providing a market for the sewing businesses in Fisantekraal), a change in the trading practices of external suppliers (Coke, for example, provide free but related to stock turnover, many of the display fridges used by the larger Spaza operators in Fisantekraal), the opening of vegetable markets accessible to community members, the sudden rise in electricity tariffs, the school terms providing more unpaid child labour in holiday periods and so forth.

This research technique is fundamental to ensuring accurate understanding of the cause and effect factors and their interrelationships. It is therefore vital in order to truly isolate the impact of modern energy and to avoid false claims. Without this comprehensive, accurate and in depth understanding about the community under investigation, then the whole methodology is in jeopardy.

As a technique if properly and diligently applied it is a robust method of identifying, tracking and quantifying 'other interventions' having an impact on micro enterprise.

9.1.9 Limitations of assessment of only four communities

Due to finite project resources only a limited number of communities can be assessed, which means that the statistical results, whilst being statistically reliable for the surveyed communities, it will not be possible to extrapolate this data on a predictive basis to a broader spectrum of poor communities receiving energy interventions. However, we will aim to show an unequivocal statistical relationship between the supply of modern energy services on micro enterprise and the resultant livelihood and income impact.

This proposition is fully reinforced by the experience gained from the Fisantekraal field test.

9.1.10 Measurement from the perspective of the community

An approach that needs to be incorporated is the inclusion of the community and individual weighting factors, so that for example the livelihood impacts may be weighted and rated in accordance with the communities' perception and needs.

- It would be incorrect to measure the impact from the perception and needs of the researchers.

- Ranking and finalisation of measures needs to take place within each community surveyed.

Viewing everything from the perspective of the ME owners and operators is fundamental and is covered by many of the quantitative and qualitative research techniques deployed in the field test. The methodology contains the necessary research processes and instruments to provide measurements from the perspective of the community.

In conducting research of this nature it is necessary to sort out the wood from the trees. By adopting a selective research design it is implicit that many other phenomena within the communities that may impact energy and ME are excluded. Providing the full range of the research techniques, tested in Fisantekraal, is deployed in the manner prescribed, then all relevant factors, influencers, impactors and so forth should be identified, quantified and explained. The essential concept is that the approach involves investigating a range of factors via micro enterprises. In so doing, a precision and economy of research activity has been possible that is directed at answering a range of specific questions and statistically proving certain relationships. Viewing everything from the perspective of the ME has enabled this to be achieved while removing much of the noise ever present in such projects that only adds unnecessary complexity and confusion.

9.1.11 Everything will be measured from the perspective of the micro enterprise.

Both the enterprise, livelihood and income impacts will be measured by engaging the micro enterprise and not the community.

- Rather than trying to obtain statistical information from receivers such as the community, individuals, local leaders etc., the outputs of the micro enterprise will be measured. Note, that in terms of the community intervention log and other qualitative engagement a broad range of receivers and influencers will be engaged.
- Measurement by means of the community as receivers would be incredibly difficult as they receive livelihood impacts from countless sources. Differentiation between these, by say, a member of the community would be virtually impossible.
- The micro enterprise, methodologically, will be the independent variable, together with the energy intervention and are the focus of isolation, measurement and study.
- Dependent variables include general community livelihood levels, income levels, financial surpluses, well being and so forth.

This is a robust set of propositions that have been fully supported by the experience gained from the Fisantekraal field test. The singular focus on micro enterprise (with validating qualitative research with various other groups) has proved to be a powerful research tool. Micro enterprises are discrete entities, with owners who are also members of the community. Such respondents provide a unique and generally accurate range of quantitative and qualitative data that through analysis enables powerful generic and specific insights into the community, the role and contribution of ME, the impact of modern energy and a host of other critical questions. ME owners are by nature frequently the more proactive, insightful and entrepreneurial members of the community. Many provide clear role models and learning opportunities to replicate their business success elsewhere. Each business owner can through the appropriate research instruments clearly articulate the role energy plays in their business, its relative importance to other enablers, what the impacts of their business has on livelihoods, gender, assets and the many other sustainable livelihood dimensions. Thus, micro enterprise owners themselves plus visual inspections of their business premises and activities provides a powerful window into the business life of the community and the range of things that can be readily done to deploy energy more effectively in the future to spurn and grow micro enterprise.

In terms of gathering reliable statistical data to support the hypothesis that modern energy services combined with other critical enablers, does facilitate and stimulate micro enterprise then focusing on the actual ME's is a robust approach.

9.2 Research time framework

Shown below is the proposed research time framework for the stage two before and after investigations.

Time line	Research Stage	Research Activities
Start	Initialisation of research site	<ul style="list-style-type: none"> • Site selection and confirmation • Access and legitimacy
First month	Pre intervention research. (Base line data)	<ul style="list-style-type: none"> • Enterprise activity snapshot • Livelihood impact snapshot • Community characteristic • External intervention log
Next 3 months	Modern Energy Intervention For example Electrification or Energisation of the community area. A step change in energy access	<ul style="list-style-type: none"> • Monitoring of the electrification/ energisation progress • Updating of intervention log
		<ul style="list-style-type: none"> • Data Analysis
1.0 to 1.5 years after electrification	Post intervention research	<ul style="list-style-type: none"> • Micro Enterprise identification sweep • Enterprise activity snapshot • Livelihood impact snapshot • External intervention log update • Qualitative interviews • Community characteristic update
		<ul style="list-style-type: none"> • Data Analysis

The proposed time frames are judged to be sound and achievable in Phase two, on the basis of the Fisantekraal test experience.

It will be essential to work effectively around these planned energy scheme timing. These are windows of opportunity; gratuitous research opportunities that once missed are gone forever.

9.3 Research Lessons

It was proposed to deploy the following minimum list of research instruments and activities:

- Micro Enterprise Identification sweep.
- Enterprise activity snapshot.
- Livelihood impact snapshot.
- Community characteristics record.
- External intervention log.
- Determination of net or delta changes.
- Qualitative information gathering.

How did these instruments stand up in the field, are they all necessary and are there additional methods that need to be deployed. Each of these will now be discussed below:

9.3.1 Micro Enterprise Identification Sweep

Core principal within the research methodology is the need to measure the total extent of micro enterprise activity (all) taking place within the community. However, from a research perspective the challenge will be the identification of the micro enterprise.

With the research being constrained to a defined area or community the identification of the micro enterprise can be achieved through a methodical house to house type sweep of the area. The hiddenness of many of these activities means careful investigative sweeping is required.

This first step towards a process of engaging the micro enterprises will be to obtain the following information:

Information	Reason
Geographic position	To facilitate future access
Primary Business type	Initial categorisation for statistical interview
Owner or 'manager' contact details	Access for interviews, focus group
Preferred interview time	Enable greater % first time access

Overall the sweep worked exceedingly well in that it identified all the micro enterprise within the area. However, the following points are noted for attention in the finalisation of the research methodology:

- The days per week and weeks per month fields were not that useful in trying to indicate the size of the enterprises. They should be replaced with an alternate question.
- A greater range of type classifications can be included, with particular emphasis on the combination enterprises i.e. ones that undertake more than one on the list of types. This was already incorporated in the detailed qualitative interviews.
- Statistical advice on sampling for the qualitative interviews.
- How do we know how many enterprises were missed during the sweep, possibly due to not at homes being marked No, protection of illegal activities, research assistant incompetence etc.?
- The map of the community showing dwellings be used to check the location of the ME's

9.3.2 Enterprise activity snapshot

The aim of this research activity will be to determine, at a given point in time, the extent and nature of micro enterprise being undertaken within the community area and a range of information about the business. Subsequent "snapshots" of this data will give the research team the opportunity to evaluate the data change in micro enterprise activity. The micro enterprise information and measures that will be required, are broad and are listed below. This list is an 'ideal' list of data and was used to generate the survey questionnaire that was tested in the field.

Activity	Measure / Indicator
Type of Enterprise - nature of business Date when enterprise started	<ul style="list-style-type: none"> • Types of good produced or services provided • Date
Date of energy connection if different from enterprise start date	<ul style="list-style-type: none"> • Date
What prompted you to decide to start you business?	Note reasons:
Income Income trend Costs – Materials/Stocks <ul style="list-style-type: none"> • Labour • Energy • Other (prompt for other important inputs such as water, raw materials) Profit / Surplus	<ul style="list-style-type: none"> • Turnover Rands Per week, month, year (Estimated Rands if barter “in kind”) • Income trend over last 5 years (if appropriate) • Expenditure Rands Per week, month, year • Surplus – Rands per week, month, year
How do you access/purchase inputs required for your business?	
Number of Employees Man hours worked	<ul style="list-style-type: none"> • Total number • Total number
Skill factor of employees	<ul style="list-style-type: none"> • Education Standard • Training attended • Plus skills inventory matrix
“Value Added” element of the enterprise	<ul style="list-style-type: none"> • Income / (Income – (material costs and overheads))
Productivity	<ul style="list-style-type: none"> • Average Income / Man hours
Energy usage <ul style="list-style-type: none"> • Types of energy used • Purpose of use • Security of supply • Quantity and cost • Connection/up front cost • Any constraints to access to energy How important is energy	<ul style="list-style-type: none"> • Matrix tick box of types • Matrix tick box of options • Units / Rands per week / month / year • Hours/day • Ranking matrix plus reasons.
What positive impacts to your business?	
What negative impacts to your business?	

<p>Assets used</p> <ul style="list-style-type: none"> -Premises -Equipment -Computers / Telephone etc -Stores / Stock <p>Total estimated Asset Value</p>	<ul style="list-style-type: none"> • Number and type • Type, size and number • Type, number • Type and estimated value <ul style="list-style-type: none"> • Rand Value
<p>Type of income</p> <ul style="list-style-type: none"> -Cash / Cheque -Is credit given to customer / how -Bad debt level 	<ul style="list-style-type: none"> • Description • Yes / No Description • %
<p>Does business have a bank account</p>	<ul style="list-style-type: none"> • Yes / No
<p>Market and customers</p> <ul style="list-style-type: none"> -Estimated customers -Internal from community -How accessible is the external market -External from community -Average value of transaction -How has your market changed with better energy services -Has the quality of your product/service improved <p>Nature of market</p> <ul style="list-style-type: none"> • growing • maintaining • contracting <p>Competition</p> <ul style="list-style-type: none"> • Who is the competition • How strong is the competition and why 	<ul style="list-style-type: none"> • Number • Percentage or estimated number • Percentage or estimated number • Rand value <ul style="list-style-type: none"> • Micro enterprise opinion matrix <ul style="list-style-type: none"> • Question: Verbal description
<p>Ownership and control of Assets</p>	<ul style="list-style-type: none"> • Who owns the business – question. • Owner-type matrix tick box <p>e.g. owner community non operator owner community male/female owner</p>
<p>Environmental impact</p>	<ul style="list-style-type: none"> • What waste and emissions Watt usage Raw materials used Noise
<p>Prospects for Enterprise</p> <ul style="list-style-type: none"> -Growth opportunity -Growth constraints <p>What is important to owner, as a business</p> <p>Issues for growth and ranking</p> <p>Family members as employees</p>	<ul style="list-style-type: none"> • Qualified opinion of micro enterprise • Qualified opinion of micro enterprise <ul style="list-style-type: none"> • Qualified opinion of micro enterprise <ul style="list-style-type: none"> • Elicit up to 5 issues for micro enterprise • Micro enterprise to rank issues in order of importance. <ul style="list-style-type: none"> • Number and %

Indicators of importance and value to community of micro enterprise’s will be elicited from micro enterprise respondents i.e. from their perspective, then these factors will be ranked and weighted.

9.3.3 Livelihood impact snapshot

Here the aim of the research activity was to determine at a given point in time the extent of livelihood impact from the micro enterprises within the community area. Subsequent “snapshots” of this data can be compared to enable the research team to understand the extent and nature of the changing micro enterprise impact. The livelihood impact and measures that were captured / explored during the survey are shown in the following table.

Livelihood impact	Measure
Local livelihood choices / opportunities for community members	<ul style="list-style-type: none"> • Total number of micro enterprise’s in community. • Perceived employment opportunities
Household Income <ul style="list-style-type: none"> • -Owner margin / profit • -Employee salaries 	<ul style="list-style-type: none"> • Distribution and averages • Distribution and averages
Job: Livelihoods <ul style="list-style-type: none"> • Men • Women • Part time • Full time • Breadwinner / no breadwinner 	<ul style="list-style-type: none"> • Material headcount members
Well being impact <ul style="list-style-type: none"> • Education • Health • -Quality of local services from micro enterprise’s • -Media • -Choice 	<ul style="list-style-type: none"> • Matrix of education standards of employees • Sickness absence from work • Satisfaction perception rating matrix • TV / radio / computer / newspaper / ownership / usage • Perception rating matrix
Security of income	<ul style="list-style-type: none"> • Perceived livelihood security
Reduced vulnerability <ul style="list-style-type: none"> • -Personal control of affairs • -Asset ownership and control • -Empowerment 	<ul style="list-style-type: none"> • Perceptions matrix of choices, disposable income, Personal aspirations, savings. • Asset Inventory • Economic opportunities matrix • Training / Education opportunities Matrix
Fiscal independence	<ul style="list-style-type: none"> • VAT - Yes / No
Opportunities – Independence <ul style="list-style-type: none"> • -Mobility • -Access to information • -Studying / test / improvement 	<ul style="list-style-type: none"> • Age / number of dependents • Type of transport • TV / radio / newspaper usage • Yes / No What?
Gender <ul style="list-style-type: none"> • -Who owns the business • -Who runs the business and takes major decisions • -Who controls the finances 	<ul style="list-style-type: none"> • Male / female • Male / female • Male / female
Enhanced environment	Perceptions of micro enterprise’s
Prospects for enterprise <ul style="list-style-type: none"> • -Growth opportunities • -Growth constraints <p>Micro enterprise owners provide indicators of how they judge asset success and what is important to them and the community.</p>	<ul style="list-style-type: none"> • Micro enterprise opinion and matrix ranking
Family livelihood / support / empowerment	<ul style="list-style-type: none"> • Number of family members employed in micro enterprise.

9.3.4 Community characteristics

Evaluation of micro enterprise changes within a defined community will require an understanding of the community itself. Hence, at the beginning of the research the community characteristics will need to be assessed and further regularly updated throughout the life of the research project. Types of characteristics will be:

Characteristic	Source
Name of community Size / Area Location / Map Reference Map of community showing infrastructure, schools, churches, etc.	Local Authority Local Clinics Local School Local Church Leaders
Number and type of dwellings	
Population – size / demographics Nature of Population • -Permanent / Migratory • -Language group • -Incidence of AIDS	
Average income per household Employment / unemployment	
Energy supply and suppliers • -Electricity • -Liquid fuels • -Solid fuels • -Biomass ?	• Members of community and respective utility and energy supplier
Other relevant distinguishing characteristics	• Observation / enquiry

9.3.5 External intervention log

Changes in a community and the micro enterprise can come from many sources and drivers. Examples being, energy upliftment, development programmes, macro environmental changes etc. As part of background data, for use during the qualitative analysis, a log of intervention and external influences needs to be maintained during the research period. Typically, the log will include:

- Details of any initiative that impacts on the community e.g. an NGO sponsored training programme for entrepreneurs.
- Duration and scope e.g. 3 year programme for 6 persons at a time.
- Likely impacts on micro enterprise developments e.g. increase in entrepreneurial skills in the community, can be a reason for increased micro enterprise activity during the test period.

9.3.6 Qualitative Information Gathering

A range of qualitative information will be gathered and documented throughout the project. Qualitative research will also be widely deployed to explore and understand the quantitative data, trends, significant local interventions and to validate collected data. However, the most

important role for qualitative research techniques will be to conduct in-depth participatory cause and effect research to fully understand the various factors impacting micro enterprise, especially from a modern energy provision perspective, what the linkages are; and, how they interrelate (if at all) with each other. Qualitative information gathered will also be an essential part of the overall methodology, to ensure reliable information is gathered and understood about how the micro enterprise players themselves and members of the community see things and perceive and rank issues to do with local enterprise, energy matters, gender, health, empowerment, education, environmental matters and so forth.

It will be essential that skilled facilitators are used to plan and undertake the participatory research. This must be neutral and without prejudice. It will also be absolutely essential to ensure confidentiality, legitimacy with the community, micro enterprises and respondents and that trust is established and honoured by the research team.

As part of the project methodology an undertaking will be given to all respondents that the results of the research project will be shared with them, in an appropriate manner and at an appropriate time.

Where appropriate the lessons learned that relate to specific actions and process design have been incorporated into the Revised Research Methodology. Others are presented as pointers and guidance for the facilitators and interviewers responsible for the selection, planning and implementation of the qualitative, participatory research methodologies (further insight is provided within the context of the focus group in the reports provided in Appendix 14).

Research approach

The research approach could utilise a range of methodologies depending on the issues being explored and the context:

- Group sessions with defined groups.
- Individual, in depth, interviews with selected groups.
- Focus groups on livelihood linkages and particular issues.

The nature of this interviewing and discussion approach will include features such as:

- Highly open ended, participatory, neutral and cross cultural.
- Double interviewer from the project team to allow for real time feedback – processing, validation, classification and identifying areas for more investigation.
- Participatory approach with skilled social analysts.

It is essential that the series of 'open' questions used to facilitate exploration of an issue within a focus group session, one-to-one interview or other participatory methodology are carefully prepared beforehand. This needs to be undertaken by a skilled researcher who is able to adapt the various generic approaches to create an open and effective environment in which facilitator / interviewer, interviewee and translators feel able to fully contribute.

Lessons learned

The following lessons were extracted from the process of undertaking the focus group discussions:

- Time is an issue needing careful management
 - people arrived late and we started 40 minutes after the planned start time

(appeared to have been informed about the start time for the meeting but this was not significant in terms of \pm 10minutes)

- people left early (several participants had prior commitments)

[*Lessons learned*: either communicate the importance of starting at the defined time e.g. availability of individuals may be compromised if start / finish times change OR build in the **fact** that the sessions will probably start later than the time given; ask at the beginning of the session if anyone will be leaving before the end]

- Several 'intruders' (not formally invited but heard about the meeting) were included in the groups; time taken to work out that they had not been invited and integrate them into the process

- Focus groups were held under time pressure which is not always conducive to good understanding

- The mixed language group was well managed through the use of interpretation and the ability of most participants to understand / use of English
- Interpreter plays a key role in the proceedings and needs to be very well briefed, facilitated, encouraged and supported during the discussions – the use of pure interpretation would be difficult, cumbersome and time consuming
- On occasions, members of the group were lost due to a failure to interpret the words of others in a manner and at a speed that enables the discussion to flow and for all participants to remain involved
- Proved difficult to achieve conceptual understanding of some items; facilitators and community assistants / interpreters need to remain alert at all times to ensure that where difficulties arise alternative approaches are immediately introduced to describe or demonstrate specific concepts
- Consideration needs to be given to the temperature of the meeting room – may become too hot if outside temperature is high / meeting scheduled too close to mid day; at the time chosen for the meetings in Fisantekraal it was extremely hot and although the majority of people stayed for 3 hours, the room was too hot for comfortable working during the last hour. Refreshments were essential and appreciated by the participants (and facilitators).
- The overall time of each session needs to be kept to 1 – 1.5 hours and separate focus group sessions should be held for each issue being explored i.e. either using different groups of people or by scheduling different times for the same group of people; in Fisantekraal we were attempting to 'trial' all 5 questions (using 2 discussion groups) in the space of a few hours
- The participants need to be well briefed about the purpose of the project before taking part in the discussion groups – this was particularly relevant to the non-micro enterprise owners who would not have been interviewed during the quantitative survey and so will have only engaged with the project / researchers in a very limited way i.e. during the initial sweep survey [*may need to select non-owners at an earlier stage and allow time to explain the project / their role in the qualitative work to them – either individually or in a group*]
- It is essential to fully explain the project, research and the contributions requested from participants at the beginning of the focus group session; some discomfort until participants understood roles, process and requirements of them at focus group discussions
- The selection of participants should be appropriate to the topic being explored in each focus group and those taking part must be willing and agreed to be open with information and their views; it is important to explain why people are being selected; in Fisantekraal the arrival of several curious 'intruders' was a consequence of 'Why were certain people selected and not others?'
- Must be focused (on the particular issue being explored) yet flexible in approach (enabling appropriate tools to be used to elicit views / information and allowing new /

relevant side issues to be explored further)

[e.g. motivators for starting business / key measures – use of post-it notes and stars on paper; test an approach with the group and if it fits make use of it during the session]

- Some group members may need prompting to encourage their full participation in the discussions, to elicit their answers / their views and to counter the dominant participants. It may be appropriate to lead the respondent on from their answer / view to obtain further detailed information or reach an agreement / consensus.
- Difficulties were encountered with recollection of timescales, both dates and periods of time over which events happened (amongst the people present in the focus the recollection of historical facts by individuals was often different). Triangulation and checking of timescales is vital to ensure the information is correct.
- It is essential to deploy group vs individual data capture for relevant needs within the focus group discussions, i.e. question posed for group response = generic matters; individuals prompted for their views – to capture different perspectives [here care must be taken not to focus on specific individuals and to cease questioning if the participant appears uneasy]
- Care must be taken not to build scenarios, i.e. 'what if' proposals, which will potentially create alarm for individuals or the group as a whole – a number of possible generic scenarios should be carefully prepared for use in the focus group sessions once the issues to be explored have been extracted from the quantitative survey findings.
- A variety of materials and equipment should be available for use by the facilitators and participants in the focus group. In Fisantekraal, pictures, maps (*which must be available for retention by the project team – see lessons learned, Appendix 15*), drawings, adhesive stars and stickers, and paper pieces all worked well and proved very valuable in visualising concepts. A flip chart (or similar large areas for drawing / writing that can be seen by all participants) is essential.
- The ability of the participants to contribute to the priority or preference ranking (1, 2 and 3 etc) of a group of items needs to be carefully examined if this is to be effectively used in the focus group. Ranking exercises undertaken with the focus group in Fisantekraal did not work particularly well. The facilitator needs to initially 'test' this methodology and provide the necessary level of guidance (whilst maintaining their own impartiality) to move the process forward.

A key observation from Fisantekraal was that women were dominant in both of the focus groups (1 man was briefly present in the business owners group and 1 man in the community / customer group) and also all the community assistants were women. The focus of the field trial was to test the methodology and therefore further exploration of the underlying reasons for the dominance of women in these activities was not possible.

An area that requires consideration in planning the Phase 2 activities is the interest from particularly the ME owners is a response to the question 'How are we going to benefit? Will you help us?' which was frequently posed to the research team. The provision of feedback to the community leaders / members on the results of the work presented in a way which addresses their priorities from their perspective is essential. This will add to the legitimacy of the team and increase the level of trust from the community; this is an essential component in ensuring the smooth transition into the post-energisation quantitative survey and participatory research. In Fisantekraal, there was a very positive response to the feedback provided by the project team following collation, processing and analysis of the data.

An important consideration for the **pre-energisation qualitative research** is that although there will be a consistent level of interaction / discussion with the community leaders, key stakeholders etc, the amount interaction with community members may be limited in

communities with no or limited ME activity. The initial micro enterprise identification sweep work will provide some visibility for the project (community researchers) within the community however, the low number of quantitative questionnaires that would be completed in the pre-energisation phase would not maintain this profile prior to the qualitative research work. Under these circumstances consideration should be given to specifically raising the profile and visibility of the research work within the community prior to inviting community members to the participatory focus groups or for one-to-one interviews.

10 Overall Conclusions

The field trial conducted in Fisantekraal tested the research methodology using a rigorous and defined process, and within a challenging and rich environment.

The quantitative and qualitative methodologies proved to be appropriately designed and, using the many and varied lessons learned, have been adapted and improved to provide the Final Specification of the Research Methodology for implementation in Phase 2.

Appendix 1. Short listed test sites

The following three communities were evaluated from a selection perspective, having been identified as possible sites for the initial test of the research methodology. Based on this data Fisantekraal was selected as the test site.

1. Fisantekraal – near Durbanville

Criteria	Fisantekraal (-Zwelethu)
Township age (years)	Approximately 7 years since the first informal shacks were built. Formal housing was built in phases during the past 3 years.
Accessibility	Located 12 km North East of Durbanville, 500m East of Fisantekraal station. Good tar road access on the Durbanville - Wellington road. The passenger rail commuter service between Malmesbury and Cape Town is used. Serviced by minibus taxis and private road transport.
Population number	6500 (estimate 5 persons per household), also backyard dwellings for extended families and acquaintances.
Household number	1300 families could increase to 1550 or 2300 in next two years depending on purchase of adjacent property.
Delineated community	Planned township with tar roads and approved zoning with legal tenure.
Water/sewerage	Bulk fresh water pipeline supply from Durbanville. Sewerage pipeline to Kraaifontein wastewater treatment works.
Fuels used	Reticulated electricity supply, LPG, wood, paraffin.
Electrified since	2001
Electricity uptake	Estimate 95% penetration.
Community mobility	Permanent
Building structures	Legal formal structures, brick houses with some informal additions and backyard dwellings.
Education & Health	Primary school with 1000+ scholars from grade 1 to grade 9. High school children are bussed to schools in Durbanville. Phase 3 of the school development will make provision for grade 10 to 12. There is a Fisantekraal Community Health Centre.
Culture	Cultural diversity with English, Afrikaans and Xhosa spoken. Religion representation.
Politics	Stable
Leader co-operation	Political leaders Business leaders Religious leaders Educational leaders
Safety	Calm
Socio-economics	Many visible micro enterprises.
Representativeness of urban poor.	Since 1995 informal settlers from the area, other townships and the Eastern Cape built shacks on government property. There was no infrastructure, e.g. roads, water supply, sewerage or formal dwellings. Political pressure to develop the area created development and job opportunities for poor people. Most development took place between 1999 and 2002. Poverty is reducing. Living standards are improving.
Level of employment	Estimate by community leader 70% employed, currently many seasonal workers used on farms.
Employment opportunities	Located in a rural farming area provides opportunities for farm work, e.g. wheat, cattle, sheep, vineyards, dairy, poultry, roll-on lawn. Within 2 km East of the township is a large brickworks (Corobrik), mushroom farm, wood processor/furniture manufacture, chicken abattoir (Tydstroom), chicken farming (County Fair), Equi feeds and manure processor (compost nursery). Urban growth in Durbanville approaches 7% p.a. for the past 10 years. Residents are employed in the building of houses, industrial structures, shopping centres and roads (labour-based construction in the civil

	<p>engineering industry).</p> <p>Domestic work and gardening in Durbanville employs some residents. Industrial township development is imminent with 40 industrial sites for sale in the same area.</p> <p>The Fisantekraal to Klipheuwel area has been identified as a Rural Development Area (RDA) and preparation of a development plan has been initiated by the City of Cape Town.</p> <p>Extension of the R300 ring road with proposed toll access near Durbanville. Development of the airstrip 3 km East of the township.</p>
Does micro enterprise exist?	Yes, detail to be researched.
Does micro enterprise play an economic role?	Yes, extent to be researched.
Telecommunications	Fixed telephone line phone booths, and cell phone reception. TV reception and estimate 70% have TV and radios.

2. Bloekombos –near Kraaifontein

Criteria	Bloekombos
Township age (years)	Approximately 14 years since the first informal shacks were built. Formal housing was built in phases during the past 7 years.
Accessibility	Located 3 km East of Kraaifontein, North and South of the old Cape Town to Paarl tar road.
Population number	22065 (estimate 5 persons per household)
Household number	4413 houses/families. Bloekombos was an informal settlement in 1995 with approximately 2000 families. The settlement originated North of the old Paarl road. Due to the difficulties associated with in-situ upgrading, 65 ha open land adjacent to the settlement and South of the road was developed comprising 1885 erven. During 1994/5 this resulted in employment of 520 people involved in site clearance, storm water drainage, water supply, bitumen roads, and electricity reticulation.
Delineated community	Planned township with bitumen roads and approved zoning with legal tenure.
Water/sewerage	Bulk fresh water supply. Waterborne sewerage.
Fuels used	Reticulated electricity supply, wood, paraffin, LPG.
Electrified since	1996/7 estimate
Electricity uptake	95% estimate.
Community mobility	Permanent
Building structures	Legal formal structures, brick houses with some informal additions.
Education & Health	Primary school with instruction in Xhosa/English. Secondary school tender closing date 15/11/2002.
Culture	Cultural diversity with Xhosa, English, Afrikaans spoken. Religion representation.
Politics	Stable
Leader co-operation	Formal structures exist and co-operation likely.
Safety	Calm with intermittent lawlessness, relating to taxis, break-ins and murders.
Socio-economics	Level of economic activity unknown
Representativeness of urban poor.	Since 1990 informal settlers from the area, other townships and the Eastern Cape built shacks on government property. There was no infrastructure, e.g. roads, water supply, sewerage or formal dwellings. Political pressure to develop the area created development and job opportunities for poor people. Most development took place between 1995 and 2000. Poverty is reducing. Living standards are improving.
Level of employment	Unknown
Employment opportunities	Located in a rural farming and smallholding area provides opportunities for farm work, e.g. vegetables, fruit, vineyards, dairy, poultry. Near the industrial areas of Kraaifontein and Brackenfell.
Does micro	The Cape Metropolitan Council (CMC) provided funding to Oostenberg

enterprise exist?	municipality for the construction of business premises (3 buildings – R300 000 in 1998/99) for emerging entrepreneurs. Business hives are supported by the City of Cape Town.
Does micro enterprise play an economic role?	Yes.
Telecommunications	Fixed telephone line phone booths, and cell phone reception.

3. Khayelitsha

Criteria	Khayelitsha
Township age (years)	Approximately 20+ years
Accessibility	Located 22km South East of Cape Town, 7 km South East of Cape Town international airport, 12km West of Somerset West/Strand and just South of the N2 national road. Good tar access roads. Passenger railway line.
Population number	Estimate population at 800 000+ (originally planned to house 500 000 people)
Household number	160 000 families (based on an estimate of 5 per family)
Delineated community	Planned township of 3374 hectares with tar roads and approved zoning with legal tenure. Four Towns subdivided into four or five villages each. Formal single level and single family houses, 'site and service' shacks and informal settlements.
Water/sewerage	Bulk fresh water supply. Waterborne sewerage.
Fuels used	Reticulated electricity supply, wood, paraffin, LPG.
Electrified since	Electrification started in 1988/89, by 1991 approximately 10 000 houses were electrified, and by 2001 some 53 000 households had electrical supply.
Electricity uptake	Estimate 80% legal and informal connections.
Community mobility	Permanent
Building structures	Legal formal structures, brick houses with some informal additions, shacks in many developing areas.
Education & Health	Many primary and secondary schools serving each town and village.
Culture	Mainly Xhosa with English understanding Religion representation.
Politics	Stable
Leader co-operation	Many leaders in each Town and village.
Safety	Calm with intermittent lawlessness, relating to taxis, break-ins, turf protection and murders.
Socio-economics	Level of economic activity unknown
Representativeness of urban poor.	Mainly populated with settlers from the Eastern Cape. Development of the area created job opportunities for poor people. Poverty is reducing. Living standards are improving.
Level of employment	Unknown
Employment opportunities	Located near developing townships, e.g. Blue Downs and Delft. Employment opportunities in industrial areas. Relatively far from major urban developments. Transport cost is a big factor travelling to remote job opportunities. Some of the population relocates to other formal and informal townships within a 30km range.
Does micro enterprise exist?	Yes
Does micro enterprise play an economic role?	Yes, taverns, refrigeration, cooking, entertainment, shebeens, spray painting, welding, hair salons, appliance repairs, vending stations,
Telecommunications	Fixed telephone line phone booths, and cell phone reception.

Appendix 2. Fisantekraal information

Contact's Position	Contact	Information obtained & Comment	Action
Chairperson Churches committee	084 368 7428	<p>Afrikaans speaking. Michael Julies is the LPG vendor and a community leader.</p> <p>There is a Development Forum (Inkamfulethu)</p> <p>The Town committee is subdivided into interest groups, e.g. Church, politics, sport, health, youth league, etc. and meets monthly. A special meeting can be set up to discuss ("approve") the proposed micro-enterprise research.</p> <p>Girls with a grade 12 education would be available to assist with micro enterprise research. Discussed remuneration. For the City of Cape Town, 'Homecare' educational project R6.00 per house was charged for training new home owners.</p> <p>Suggest an hourly rate of R12.00. (negotiable)</p> <p>Mr Julies is keen to co-operate and offers to participate with the training of research assistants.</p> <p>Community is negotiating another 250 erven (purchase of 3 smallholdings) or 1000 erven (purchase from Garden Cities).</p> <p>School upgrading in phase 3 to include grades 10 to 12.</p> <p>Power supply to houses is 20A, but upgrading to 60A for approximately R1000 + R500 (Certificate of Compliance)</p> <p>Electrical power is used for lights, radio, TV and small appliances, whereas LPG is used for cooking.</p> <p>Current Eskom price R0.435/kWh for pre-paid electricity. No free initial electricity as provided by municipalities.</p> <p>Main power to Fisantekraal township trips often at main supply point.</p> <p>Micro enterprise exists, e.g. spazas, refrigeration, baking, mobile phones, welding, shebeens, hairdressing.</p> <p>Claude Ipser - Ward 8 - is the DA Councillor. (check)</p> <p>Koos Bredenhlan is the NNP Councillor. (check)</p>	<p>Write a letter outlining background information, purpose, benefits and requesting community participation.</p> <p>A venue for training research assistant can be arranged by Mr Julies, e.g. the community meeting room.</p> <p>Inform Eskom</p>
	0835350 674	ANC - Xhosa/Zulu political leader	Meet
School Principal			
Town Planner Durbanville			Buy map
Branch Manager Durbanville	021 976 6227 083 504	Learn to Earn trains anyone over the age of 18. All courses are heavily subsidised, e.g. The full-time sewing course over 5 weeks	Write an e-mail outlining the background,

Learn to Earn	3988 dville@learn.org.za	<p>costs only R95 per person and includes all materials and 7 manufactured garments, which become the property of the student. The baking course, using the “Snowflake recipe book” costs R100 for 5 days spread over 5 weeks. Baked items become the property of the student.</p> <p>Refer to detailed brochure. The home management course is an additional course for domestic workers and the hospitality industry.</p> <p>Learn to Earn investigates entrepreneurial and labour market needs and structures courses accordingly. There is some further involvement in trainee placement, raw materials and equipment facilitation, however Learn to Earn is limited through its constitution regarding further vertical integration. An economic hive or multi-activity centre is being planned on a 2000sq meter plot (Consolidation awaiting survey). Future training ideas discussed are, carpentry, nursery, pruning, gardening, flowers. Also training involvement, e.g. Educare, pre-primary and Primary School. Currently three baking entrepreneurs want to upgrade from 20A to 60A, but have difficulty saving up for the new connection fee and certificate of compliance. Mark is an ex Baptist minister, e.g. Graafwater & Prins Albert.</p>	purpose and inviting participation. Prepared to participate in micro enterprise focus groups. (due to time constraints, they were not involved in the initial research)
Research Student for M-degree thesis	083 985 4249	A Master student from the University of the Western Cape, Department of Human Ecology. Research is done to determine the effectiveness of the “Learn to Earn” model.	Consider for possible involvement in micro enterprise focus groups
Chairperson Learn to Earn, Durbanville		Met at local branch and explained micro enterprise research.	
Public Relations Learn to Earn	021 361 5972 ewr@learn.org.za	Met at local branch.	
ex School Principal Durbanville Schools Foundation	083 720 7660	Name given by Mark Anthony, not contacted.	
Electrification Manager, Eskom	021 915 2738	Fisantekraal designed for an ADMD of 0.6KVA per site.	Feedback about community research selection

Summary of meeting held with the Fisantekraal Development Forum (Ikamvaletu Development Forum) 22 Feb 2003

Discussions and decisions

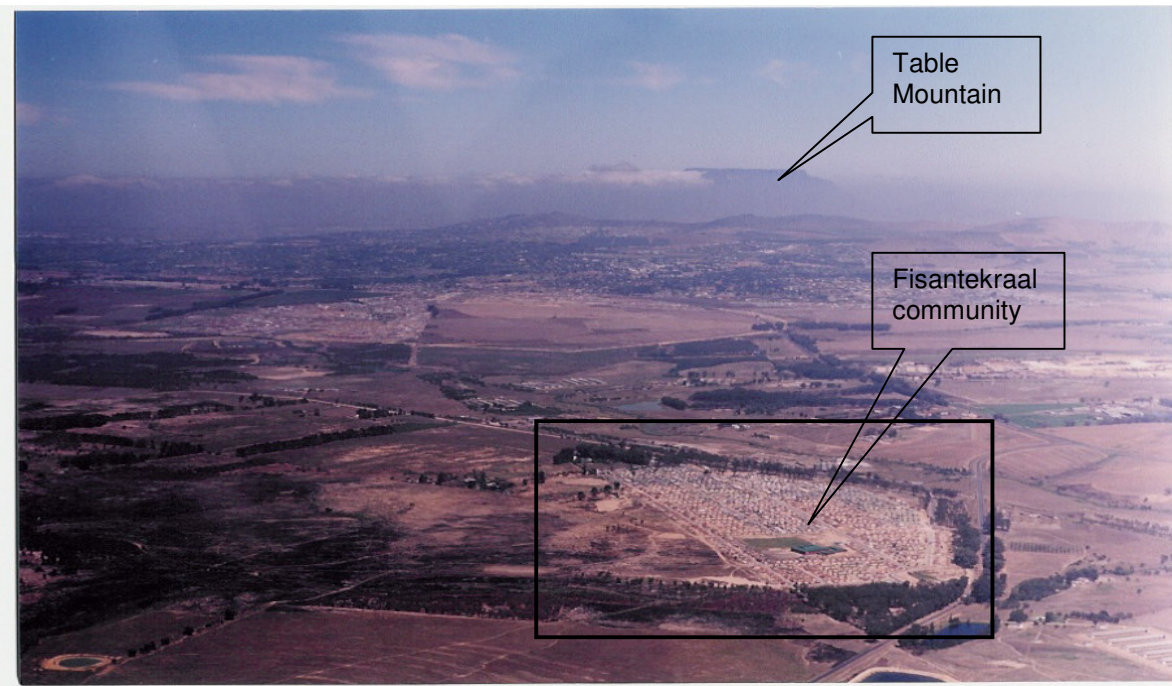
1. Introduction of Personnel representing Integrated Energy Solutions (IES) and thanks to the Community leaders for their time and the venue.
2. Presentation by Chris Hazard outlining the purpose and method of micro enterprise research.
3. Agree to remunerate research assistants R1.00 per house/business call (initial sweep of area to determine micro enterprise population).
4. Agree to remunerate translator research assistants R7.50 per hour during micro enterprise research (detailed questionnaires).
5. Design and distribute a pamphlet, outlining the research objectives, in the community. The pamphlet will be in English, Afrikaans and Xhosa. Circulation 1700 at R0.20 per photocopy. Xhosa translation to be arranged by Mrs N Magoda.
6. Research Assistant training to start at Community office at 14:00 on Monday afternoon 24 February 2003.
7. The meeting started at 14:00 and closed at 16:00.

Appendix 3. Community characteristic records

Characteristic	Data	Source
Name of community	Fisantekraal	
Size/area	60 ha	Approx measurement on Map, South Africa, 1:50000 3318DC Bellville
Location/map reference	33°47'S; 18°43'E	Co-ordinates from Map, South Africa, 1:50000 3318DC Bellville
Map of community	Map of Fisantekraal with site numbers and temporary street names. (Streets might be renamed)	Tygerberg Administration: North Service Area Map: Fisantekraal Informal Settlement
Number and type of dwellings		Site numbers on map, observation and estimates after micro enterprise research
Brick houses	1355	
Brick flats	46	
Informal dwellings	300	
Population size	8505	Assume 5 persons/dwelling
Nature of population		Observed during research
Permanent or migratory	Permanent	
Language groups	Afrikaans, Xhosa, English	
Incidence of AIDS	Unknown	
Average income per household	?	Estimates based on micro enterprise research
Employment	70%	Community leader discussion, but seasonal
Energy supply and suppliers		
Electricity	Eskom, overhead reticulation	Eskom
Paraffin	Lingelethu cash store, Fisantekraal	Micro enterprise interview
Wood	Wood vendor, vines, Fisantekraal	Micro enterprise interview
LPG	LPG vendor, Fisantekraal	Micro enterprise interview

Appendix 4. Arial and community photographs

Arial Photographs



Community photographs



Sweep researchers checking notes



Community hall used for training



Community view



Typical house and occupants



Houses and flats



Project team workshop in SA



Qualitative interview preparation



Interview with "customers"



Interview with entrepreneurs



Entrance to the community

Appendix 5. Project diary

Date	Action details	Who involved
Nov 2002	General investigation into micro enterprise methodology and possible research site selection criteria.	Chris, Paul, Mark
12 Feb 2003	Introduction to Field research Briefing of Field Research Manager regarding phase 1 of micro enterprise research. Internet search of possible townships for micro enterprise research.	Chris, Louis Louis
13 Feb 2003	Situational research Field research of Fisantekraal township site and leadership.	Louis
19 Feb 2003	Site maps, meeting Fisantekraal leaders, deliver letter for leaders of Community Development Forum	Louis
22 Feb 2003	Presentation/discussion with Community leaders Meeting with Fisantekraal Development Forum.	Chris, Paul, Louis, Bryan and Community leaders.
23 Feb 2003	Community notice Community notification about micro enterprise energy research.	Louis, Mrs Magoda (community leader)
22/23 Feb 2003	Research assistants Candidate project assistants are selected and proposed by the community leaders and community members.	Community leaders & community members
24 Feb 2003	Micro Enterprise identification sweep Selection and training of community research assistants to carry out a door-to-door sweep of the entire community. (Approximately 1350 sites and 46 flats)	Chris, Louis & six research assistants.
25/28 Feb 2003	Sweep of community, progress meeting and one researcher replacement.	Louis, Mr Thandeka (community leader) & six research assistants
28 Feb – 3 Mar 2003	Data entry and sort potential micro enterprise	Paul
2 March 2003	Fisantekraal aerial photographs	Louis
3/4 March 2003	Enterprise activity snapshot Detailed interviews with selected micro enterprise.	Chris, Paul, Louis and three research assistants.
5 March 2003	Introduction AEAT, Denise Oakley, Methodology meeting	Denise, Chris, Paul, Louis
6/7 March 2003	Continue detailed interviews with selected micro enterprise.	Denise, Louis and two research assistants.
8 March 2003	Focus groups & in-depth discussions Focus meetings with micro enterprise and customer groups	Denise, Chris, Paul, Louis and two research assistants
10/12 March 2003	Continue detailed interviews with selected micro enterprise.	Louis, Bryan and two research assistants.
11 March 2003	Wrap up meeting	Chris, Paul, Denise
13 to 30 April 2003	Analyse and prepare data for captures Analyse data Write report Report appendix summaries	Chris, Paul, Louis, Bryan
26 April 2003	Feedback to the community leaders	Chris, Paul, Louis

Appendix 6. External intervention log

Date	External intervention	Organisation
1999	Building of Fisantekraal infrastructure, roads, water, sewerage	Government Consultants Private contractors
2000	Building of houses	Government Consultants Private contractors
2001	Building school	Government Consultants Private contractors
2001	Electrical distribution, reticulation and electrification	Eskom
Oct 2000	Training of potential entrepreneurs	Learn to Earn
Ongoing since houses were built	Provision of Spaza shop structures and refrigerators	Coca Cola
Ongoing since houses were built	Provision of Shebeen and tavern refrigerators	SA Breweries
	Telephone franchise	Vodacom

Appendix 7. Fisantekraal test site notification

The Chairman
Fisantekraal Community Forum

Dear Sir

Micro Enterprise: Impact of modern energy on micro enterprise

Following a detailed review of suitable locations the Fisantekraal Community has been selected as a focus area for an important research project. We are writing to advise you of this work and to request your co-operation, in the next few weeks, to enable us to complete this work.

The purpose of the project is to examine the linkages between the provision of modern energy, such as electricity, on the creation of new and support of existing micro enterprises within poor communities. The project is aiming to improve understanding so that practices can be devised to stimulate more sustainable local enterprise by the better delivery of modern energy services and associated enabling initiatives. In this way it is hoped to further empower local people, create more employment opportunities, and to improve local incomes.

The research we need to do in Fisantekraal will involve a survey of households and in depth interviews with the owners and operators of micro enterprise in the community. The Project is being done for the British Department for International Development (DIFD) and we are also working with research partners from India.

All the specific information gathered will be treated with the strictest confidential. We will only use any data gathered solely for the purpose of this project. We will also be pleased to share with the community the results of this research project, once they are available.

We are having to work to very short timescales and will need to start our initial field research in the community from the 24 February 2003 through to the middle of March 2003.

If you have any questions or would like a meeting in the near future please let me know.

In anticipation of your assistance with this matter, may I thank you.

Yours truly,

Louis Frouws

Field Research Manager
Integrated Energy Solutions

Cell 084 311 5228

Office: 976 0580

INTEGRATED ENERGY SOLUTIONS (Pty) Ltd

POSTAL ADDRESS

P.O. Box 5158
Tygervalley
7538

PHYSICAL ADDRESS

4 Keurboom Street
Durbanville
South Africa

CONTACT DETAILS

Tel: +27 21 976 0580
Fax: +27 21 976 0578
pdharris@mweb.co.za

COMPANY DETAILS

Reg no. 2000/004167/07
Directors: P. D. Harris
C. J. Hazard

Appendix 8. Fisantekraal development forum – Presentation

<p style="text-align: center;">Modern Energy</p> <p style="text-align: center;">Impacts on Micro Enterprise in Southern Africa and India</p> <p style="text-align: center;">Fisantekraal Community, Cape Town, South Africa</p> <p style="text-align: right;">1</p>	<p style="text-align: center;">Who are we ?</p> <ul style="list-style-type: none"> • Integrated Energy Solutions (IES), Cape Town Focus on energy and poverty alleviation • British Department for International Development - DFID. Based in London, Scotland and Pretoria • AEA energy research from Oxford, England • People involved in the project: Louis Frouws, Chris Hazard, Paul Harris, Bryan Hazard from IES. Denise Oakley from AEA. • Louis Frouws: Field Project Manager. Point of contact. <p style="text-align: right;">2</p>
<p style="text-align: center;">Purpose of the Project</p> <ul style="list-style-type: none"> • Survey developing communities: Fisantekraal chosen from several studied in Western Cape. • Survey Micro Enterprise (1 to 10 people): Small businesses such as Spazas, Sewing, Baking, Shabeens, Hairdressers, Carpenters, Energy Shops, Cafes etc. • Look at how modern energy helps Modern energy: grid electricity, LP Gas, solar energy etc Not wood, dung, open fires indoors etc. Micro Enterprise JobsIncome...etc • What other things help micro enterprise? • Negative impacts of modern energy on micro enterprise? • What you, community members think, very important! <p style="text-align: right;">3</p>	<p style="text-align: center;">Features of the Project</p> <ul style="list-style-type: none"> • Very limited time and urgent deadlines to complete the work: Start 24th February • Limited budget and resources • Want to help community employ local people to do surveys and assist researchers pay for work done small gift for micro enterprise owners for interviews • Confidentiality: All information gathered only for DFID Project and will be treated in total confidence. Interested in general information not details of individual businesses. • Very important: What you the community think and feel about energy and micro enterprise • We will share the results of our work with you at the end of the project <p style="text-align: right;">4</p>

<p style="text-align: center;">Research Process: How it will be done</p> <p>1. How many households are there? Need to call on all homes to ask micro enterprise Yes/No Simple questionnaire. Need 6 to 8 interviewers. Pay interviewers; select/train 24th Feb. Fee per questionnaire. Unemployment levels?</p> <p>2. Study information: More questions.</p> <p>3. How many micro enterprises are there in Fisanterkraal? We will need to interview them. Questionnaire 60 mins. Need research assistants to interpret. Fee per hour</p> <p>4. Study information: More questions.</p> <p>5. Further focused research: Group Discussions & Case Studies. Research assistants to interpret. Fee per hour</p> <p style="text-align: right;">5</p>	<p style="text-align: center;">Next Steps</p> <ul style="list-style-type: none">• Development Forum to advise community.• Letter/notice that interviewers can show householders• Household sweep interviews: 6 to 8 interviewers. Community to source.• Venue/Training• Liaison – who with? <p style="text-align: right;">6</p>
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Thank you for your time, kind assistance and opportunity to work together

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Appendix 9. Community notification leaflet**Micro enterprise research**
(small business research)

- The Fisantekraal Community has been selected for an important research project.
- The research has been discussed with the Development Forum.
- The project aim is to collect information on small businesses and will be confidential.
- We ask for the assistance of the Community during this project.
- Researchers from the Community will visit your house/business during the last week of February and early March 2003.
- Thank you for your co-operation.

Klein onderneming navorsing
(klein besigheid navorsing)

- Die Fisantekraal Gemeenskap is gekies vir 'n belangrike navorsingsprojek.
- Die navorsing is met die Ontwikkelings-Forum bespreek.
- Die doel van die projek is om inligting in te samel i.v.m. klein besighede en sal vertroulik wees.
- Ons vra hiermee u ondersteuning tydens die projek.
- Navorsers van u Gemeenskap sal u huis/besigheid gedurende die laaste week van Februarie en vroeg in Maart 2003 besoek.
- Dankie vir u samewerking.

Xhosa translation was arranged by Mrs N Magoda, the Treasurer of the development forum.

Appendix 10. Micro enterprise identification sweep questionnaire

(annotated to indicate items requiring modification)

Micro Enterprise identification sweep questionnaire – Fistantekraal

1. Stand number or business position -
[e.g. 5369 plus A,B,C, ... for external street positions and 1,2,3 ... for dwelling/building number]

2. Micro enterprise No Yes Not at home – repeat visit

3. Business activity _____

4. Days of operation S M T W T F S not every week
Comments: _____

5. Owner/Manager details: Name: _____
Address (if different): _____
Tel: _____

6. Preferred interview time: Day: _____ Time: _____

Date: _____ Time: _____

Researcher: _____ Signature: _____

[Note: This is designed for an A5 or 2 per A4 page.]

Days of the week not useful in trying to indicate size of the ME – replace with size indicators

Include range of type classifications in order to identify combination micro enterprises

Post-energisation micro enterprise sweep should also ask whether there was previously ME activity in order to capture businesses that started after energisation but subsequently failed

Appendix 12. Focus Group Approach

Design

The use of focus groups must be to explore defined project research focus areas. A list of key questions or exploration topics should be drawn up, customised to the particular community under investigation and the specific further in depth research needs that arise from the earlier phases of research, particularly the quantitative techniques. Care must be exercised in the design and composition of community groups and must be related to the nature of the research topics.

Focus Group Research Technique

In the context of this research project, focus groups are used with specific groups of different types of participants, such as, business owners, non-business owners from the community, women, men and so forth. Thus each group is focused in terms of composition and being a representative group of a wider sub set of the overall community population. It is also focused in terms of the range of subject matter or questions to be discussed.

There is however another critical aspect to the deployment of this research technique. A focus group is also a method to enable researchers to focus specifically and objectively, without value judgement, on the way the community members themselves view things, what their perceptions are about the matters under discussion and how they judge such matters. The focus group technique must therefore, firstly elicit these 'participants issues, views and opinions'; and, then focus on how they interrelate in the minds of the group members. Focus groups should therefore aim to enable external researchers to enter the world of the respondents and then to review topics in the context of the participants world and ethos.

Essential Skills

There are a number of essential skills required by facilitators (project team and community assistants) in order to conduct effective focus group research, as defined in this context. These are:

- Listening and communication skills. The ability to focus on the reality of the respondent and to attentively listen and understand responses. This should be without value judgement or reinforcement. Clear your mind and relax.
- Probing ability. The ability to gently probe to seek further explanation and to share understanding.
- Empathy (i.e. get out of your own shoes and into those of the respondents) whilst still maintaining focus on the selected areas for questioning.
- Ensure the whole group is involved. Avoid a few dominating.
- Observant throughout.
- Cross questioning – issues raised and answers given by certain respondents can be verified and clarified with the rest of the group (use of triangulation).
- Facilitation and keeping the group together.
- Recording and exploring issues systematically. Note issues and matters of importance and return to them when it is appropriate to do so. [Use at least 2 researchers / group in order to effectively facilitate and record all aspects of the session]

Focus Group Research Methods

Depending on the nature of participants, language, culture and the questions being investigated there are various methods that can be deployed when working with focus groups to facilitate effective mutual understanding between researcher and respondents, and vice versa; and, to aid objective and relevant information gathering. These include:

- Straight forward open ended questions and then further open ended probing questions
- Demonstrations of actual equipment or procedures. e.g. kettle for appliance, LP Gas bottle when talking about bottled gas or other actual products and physical things
- Flip charts for researcher and respondents to draw pictures and other visual aids to understanding
- Role playing such as asking respondents to enact matters of importance
- Maps (actual) or diagrams drawn by the participants

Focus Group: Initiation

Welcome everyone and explain purpose, confidentiality, generic information and not specific to any individual or business, what is going to happen (role of other researcher, flip charts or other external persons/equipment) and the anticipated finishing time. Check that this is acceptable to everyone. Any questions. Put the respondents at ease.

At this point make it easy for anyone who is uncomfortable or wishes to leave to do so.

Explain the point the research project is at, progress made and co-operation from the community.

Researchers to introduce themselves with a little personal background.

Invite each respondent to introduce themselves; WRITE OUT NAME TAGS (first names)

Researcher then introduces the topic to be discussed. Pictorial, physical examples (kettle) and other visual aids can be used to illustrate what the subject matter is going to be. Ensure that these are relevant to the group and the context (no 'western' photographs).

Write up some key words on the flip chart to describe the topic. For this example they might include:

Energy wood, coal, electricity, bottled gas, paraffin

Appliances fridge, braai, cooker, electric kettle

Business Spaza, hairdresser, carpenter, baker

Explore the groups understanding of the topic and ask for questions. Move on to the discussion phase of the focus group session.

Appendix 13. Qualitative research – examples of generic questions

The qualitative research may be conducted using a number of different techniques. The following potential questions provide examples of issues that may be addressed and have been divided into:

- Group discussions
- One-to-one semi-structured interviews.

1. Group discussions

Within each of the following examples there are also a number of ideas that are more generally useful in setting the scene / orientating the discussion group participants to the overall research aims, the specific question being addressed at the meeting and the community itself.

The following questions (from Table provided in Section 5.5) have been developed to provide examples of issues that could be further explored using participatory research interviews / discussion groups:

Question 1	Purpose and value of ME to the community. This discussion will focus on exploring the difference between life in the community with and without the observed level of ME activity. What have been the changes for them as individuals? This will enable key areas of change to be identified and matched to measures linked to attainment of sustainable livelihoods and reduced vulnerability. It should therefore be possible to explore the ranking of the various SL measures from the perspective of both ME owners and non-owners.
Respondent group	Separate discussion groups: <ul style="list-style-type: none"> • Existing enterprise owners – non competitive i.e. different businesses • Community members – non enterprise owners
Techniques and aids	<ul style="list-style-type: none"> • Focus group session • Name badges / sticky labels (for all participants) • Continuous note taking (by at least one project team member) • Flip chart, pens for drawings, stickers / 'post its' • Map of the community (photographs from around the community may also be helpful)
Questions and notes	<p>Setting the scene and orientation</p> <p>Find out some background on individuals / group (maps and diagrams could help for this so that individuals are not required to just talk about themselves in the group – try to get them to work together on the questions and help each other):</p> <p>Number and who is present?, Which part of Fizantekraal (use map)? What type of house, how they use the rooms, any structures outside? Who else lives there? Any employment in the household? How many children? Educational level of all people living there? Who asked them to come to the meeting? How did they get to the meeting? Has anyone not arrived – try to find out from the group if they know why? How well do they know each other – any obvious tension / any one uncomfortable / quiet?</p>

	<p>Once any diagrams / maps etc are on the table or wall, use these if possible as the focus for Qs rather than directly to individual people or group:</p> <p>Try to encourage and make use of any time lines and maps drawn by participants (look out for other ways in which people are expressing themselves and capitalise on this)</p> <p>Explore how the community has developed and changed over time</p> <p>How long have you lived in Fizantekraal? How many small businesses were there when you first lived here?</p> <p>Ask them to draw a map themselves or use a large scale map (but they may not be able to orientate to an overview of the settlement) to show the layout of the settlement and where the businesses were?</p> <p>What was it like to live here then?</p> <p>Explore more about how they obtained different types of services and products that they needed? Where did they go? How difficult was it? Were there some things that they wanted but couldn't get? What difficulties did this cause? How did they overcome these?</p> <p>Where are the houses and businesses now? Use the maps provided or drawn at the beginning – add more sheets of paper etc if community has expanded – don't ask where any specific businesses are, let them tell you so you can get a perception of what they are aware of / what is important to them and why</p> <p>How have things changed for you in terms of getting the goods / services that you need?</p> <p>Now explore individual services and products that have been highlighted by the group as important:</p> <p>How would you obtain X if there was no Y ME in the community? Where, how, what difficulties would this cause you now (or is it relatively easy e.g. job in a bigger town)</p> <p>Areas of interest to us:</p> <ul style="list-style-type: none"> • Food availability, choice and quality (has health improved in the family – this could be due to many other things especially clean water and sanitation but explore the role of food) • Access to credit from small local shops where people are known and are trusted (if they had to travel to an external shop or into town may not get credit and would have to wait to the end of week or month for cash – and this may be spent in shebeen!) • Access to telephones – fixed line and cell phones <p>What do you buy / use that you did not have before? How does this help you?</p> <p>How do you pay for these things? How important is credit to you? Do you pay on time at the end of each week? DO you always pay – WHY? – explore individual perception of being trustworthy, honest, continued access to these services / product locally etc</p>
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Question 2	Identification of the motivators and barriers for the establishment and growth of micro enterprise within the community. The focus of the qualitative research is to try and uncover what have been and are the barriers to firstly setting up a business and secondly to try and grow the businesses. This line of questioning would need to lead into the role that energy did or did not play in establishing businesses in the community. Care needs to be taken that the enabler identification in question 5 is different!
Respondent Group	<ul style="list-style-type: none"> • Existing enterprise owners – non competitive i.e. different businesses • Community members – non enterprise owners
Techniques and aids	<ul style="list-style-type: none"> • Focus group session • Data capturers • Flip chart & pens for drawings
Questions and notes	<p>Introduction and scene setting:</p> <ul style="list-style-type: none"> • Why are we doing the research? Understanding the role that energy e.g. electricity plays in the establishment of the micro enterprise, plus what can we deliver with it to get more going ... • Confidentiality ... their individual responses will never be used, rather we take out lessons and learning from their responses. • How it is going to work ... them talking us questioning, showing of examples etc. • How long it will take ... • What is a business example/sketch/skit perhaps? • Demonstrate a manufacturing, trading and service business ... how??? <p><i>Needs the contextual understanding amongst participants of what is a business entity:</i></p> <ul style="list-style-type: none"> • Activity for gain and profit • Less than 10 people • Some people have others don't have .. <p><i>Why do people set up businesses?</i></p> <ul style="list-style-type: none"> • What is the root cause? • Why do they choose a particular kind of business? • Use examples of business ... spaza, shebeens • What makes them different? <p><i>Why do they not set up businesses?</i></p> <ul style="list-style-type: none"> • Why do some un-employed not start business? • Why do some people in the community not <p><i>Why do some micro enterprise grow?</i></p> <ul style="list-style-type: none"> • What has made them grow? <p><i>What can be done it get more businesses going?</i></p>

Question 3	Micro enterprise volume delta measure – what are the correct dimensions and associated indicators? Are these the correct ones from the perspective of enterprise owners? If so which are the strongest? Can they be ranked to get a weighting between dimensions and a understanding of the primary indicators.
Respondent Group	<ul style="list-style-type: none"> • Existing enterprise owners – non competitive i.e. different businesses
Techniques and aids	<ul style="list-style-type: none"> • Focus group session • Data capturers • Flip chart & pens for drawings • Voting stickers?
Questions and notes	<p>Do they compare their businesses?</p> <ul style="list-style-type: none"> • How do they compare them? • What do they take in to account? • What goes through there minds? <p>How can we ask them about income in there businesses?</p> <ul style="list-style-type: none"> • What do we need to do to get them to give the true answers? • Why do they feel hesitant to share on these issues? • Do they perhaps not know turn over and margins? • How do they feel about sharing information on what they take out of the business? <p>Is the number of businesses they own important to them?</p> <p>Is it the size of the business?</p> <ul style="list-style-type: none"> • If so is it on turnover, stock, profit/margin? • Etc <p>How well do they know expenditure in there businesses?</p> <ul style="list-style-type: none"> • Do they track expenditure by category? • Do they think about what they spend in the community versus without? <p>Do the ME's employee other people form the community?</p> <ul style="list-style-type: none"> • If yes how many, if no why not? • What sorts of salaries/wages are paid? Why these levels? • What about family members? <p>{Interviews to record key dimensions and related measures on a series of charts}</p> <p>Ask the group to vote by sticking stickers on the ones that mean the most to them ... give three stickers each with about 6 to 8 dimensions?</p>

Question 4	Energy – ownership, access, security and usage
Respondent group	Focus Group: This list of questions is intended for use by owners/operators of micro enterprise.
Techniques and aids	Flip chart, two researchers, some examples of energy in use and structured recording forms. (e.g. column for each respondent)
	<p>Ask each respondent to describe their business briefly. How long established.</p> <p>How many of you use energy in your business? How much do you use?</p> <p>How do each of you use energy in your business?</p> <p>What appliances and energy equipment do you each have in your business?</p> <p>Do you own this equipment? If not, who does? How does this work?</p> <p>How did you get this energy equipment – buy, from a friend etc ?</p> <p>How do you obtain the different energies that you use?</p> <p>Do you have any problems in getting the energy you use? What are these problems?</p> <p>Do you have standby energy arrangements?</p> <p>What other things do you use in your business? Write up list on flip chart? Water, phone, materials, money, labour, energy etc.</p> <p>What do you feel about the cost of the energy you use?</p> <p>How do you view the importance of energy in your business ? 1 to 5 scale 5: Essential 4:Very Important 3: Important 2. Less important 1. Do not need it.</p> <p>Explore reasons behind the above judgements by respondents.</p> <p>What is good about energy and your business? What is bad about energy and your business? How important is energy in relation to the other things you use in your business?</p> <p>Rank things previously elicited under question 9.</p> <p>How could energy help your business to grow more?</p> <p>Which type of energy is most important for your business and why?</p>

Question 5	Identification of other enablers of micro enterprise and their relationship to the provision of modern energy services
Respondent Group	Focus Group: business owners/ operators and non business owners/operators.
Techniques and aids	Two researchers and flip chart
	<p>Start by establishing a common understanding of micro enterprise: A small business with 1 to 10 people, owned by a community member and different types of business: Spaza, Carpenter, Shoe Repairer, Shabeen etc. Discuss and explain the notion of 'business enablers', i.e. what you need to start and grow a small business. Ingredients for a cake.</p> <p>Owners: Why did you start your own business? Non-Owners: Would you like to start your own business?</p> <p>Owners: How did you start your businesses? Non Owners: How would you set about starting your own business?</p> <p>What things do you need for a small business? Write them up on flip chart.</p> <p>Explore groups views on each of items identified? What are they precisely, how do you get them, who supplies them, barriers etc</p> <p><i>Check list is comprehensive and covers all critical enablers, probe for any missing enablers, including:</i></p> <ul style="list-style-type: none"> • <i>Money Capital and cash flow; Skills and Training: In actual business plus business/marketing skills; Mentorship; Premises; Energy; Water; Phone; Equipment; Raw materials; Products: Stock; Access to market: internal to community / external to community; Transport; Business/Entrepreneurial Skills; Contacts/Patronage/Family Support</i> <p>How important are these various things? Get each person to rank them with a number (1 importantn). Note major reasons for each ranking.</p> <p><i>Do a cross addition and calculate average ranking for the focus group.</i></p> <p>Do you think these different things are more important at different times: Explore importance at start up phase and then to grow business. What are 'absolute' and/or 'incremental' enablers'.</p> <p>What do you think the effect would be if you did not have: (Flip chart). Could start/run business / Could not</p> <p><i>Business skills/knowledge; Water; Telephone; Electricity; Capital; Transport; LP Gas</i></p> <p><i>List others from respondents</i></p> <p>Owners: What are the top three things you need to grow your business?</p>

2. One-to-one semi-structured interviews

Semi-structured interviewing is a technique that has value for exploring issues that are identified during the quantitative surveys but which are not appropriate for group discussion due to their sensitivity or the need to obtain independent views from a number of different sources / individuals. The following example focuses on understanding the impact of micro enterprise activity in the household and community from a gender perspective.

Objective: To use a series of open questions and real time feedback to explore the impact of micro enterprise activity from a gender perspective

Care and sensitivity will be needed in the approach to the questioning and in the questions themselves; take advice from the community and use insight gained from the quantitative surveys to decide who should undertake these interviews (it may be more appropriate for a woman to be interviewed by a female member of the project team, by a local person or possible even someone from the community – training and detailed briefing may therefore also be required prior to the interviews).

Any discussion of roles and responsibilities and how these have changed, the vulnerability of women, 'control' systems which may exist etc may be viewed as encouraging changes to the cultural norms; in some cultures / areas this may put women in difficult or dangerous positions. There may have been changes in the recent past in the gender roles but these may have been associated with tension / conflict situations in individual households or even in the community. Particular care will be needed if you are interviewing a women in the presence of her husband, a relative or another member of the community. The interviewer must remain alert at all times for indications of unease in the interviewee or those accompanying them.

When conducting interviews with either men or women it will be necessary to cross check statements to ensure that they are not just providing the answers that they think you want to hear or which they believe they should give (particular care should be exercised when men comment on women's roles or where a women interviewee appears to be giving 'standard' answers; explore further / confirm by questioning from several angles)

Begin by explaining the aims of the project and any relevant findings to date. The support of community leaders etc for the research and the total confidentiality of the information provided should be stressed; take all the time necessary to ensure that the interviewee is comfortable with answering the questions. It may be appropriate to briefly run through the overall theme of the questions and ask if they are willing to continue with the interview.

Exploring the following with the interviewee:

Roles, duties and responsibilities of men and women in the household?

Gender split of productive activity (employed work, ME, kitchen garden, labouring on land, processing of produce etc)?

- Draw up a list of all tasks undertaken by the household (diagram draw by them using the house as a focus, add place of employment, garden etc)
- Who does what tasks? When, Where?

How are these task divided in other households that they are in contact with?

Explore access to services, people, information:

Who do you see each day (explore their networks of contacts, is there any lack of access to other people, explore whether the women are not allowed to go to certain places or meet particular people, any overall control involved? – need to be very sensitive here and take a lead from the answers given)

Explore access to assets that enable them to fulfil their roles:

How do you do your duties each day? How difficult is this? Try to identify if there are items, services, help that is missing and why? (Access to essential assets – physical, financial, social, human (skills, education, help etc)

Particularly for women, explore whether the ME places an additional burden on them:

How do you cope with undertaking your duties in the home and with running your business – explore the amount of help provided by other members of the household – or do they take over some of the household duties (can speculate that this is unlikely)? How often do you see your relatives, has this changed since you started your business?

How does it make you feel now that you have a business of your own? Explore positive and negative taking a lead how the answers given – may have more money in the household but have less time / be more isolated

Explore what the additional income is spent on – talk about how things have changed in terms of expenditure (what are the key new items / services that are now available to them). Also explore whether some or all of this income is taken by another member of the household or any external people?

Appendix 14. Community focus groups – reports from Fisantekraal field test

Focus Group 1

Group: Small business owners from Fisanterkraal

Purpose(s):

- To explore the motivations of the group members for starting their business.
- To understand how they evaluate business success and identify the key measures that they use for this purpose.

Discussion Leader for the first two questions: Paul Harris, IES

Observer: Chris Hazard, IES

Interpreter: Rose

Businesses represented: Creche (F)
Baker and cake maker (F)
Spaza (F)
Soft Drinks Wholesaler and Spaza (2) (F)
Hairdresser (F)
Sewing business (F)
Carpenter (M)

Group members were all small business owners from the community and the main language spoken and understood was Xhosa. The discussion session was carried out in English with the aid of an interpreter. It was clear however that many of the group did understand English and responded in English. There was a single male in the group, the carpenter.

Question One: Identification of the motivators for and barriers to the establishment and growth of micro enterprise within the community

Paul opened the session explaining different types of business: Trading, Service and Manufacturing with a simple flip chart diagram. The distinction between being employed and working for oneself was an important distinguishing feature. This was understood by everyone and led into a series of open ended questions, namely:

Why are you business owners?

Many spoke about because we do not have jobs or work and need to earn money to support themselves and their children. Also mentioned that they do not do crime. Another reason, although of less importance, was to support the community.

So why did you all start your own particular businesses?

The crèche owner responded that she started because she liked working with children and there was a need for this in Fisantekraal.

The Spaza/soft drinks wholesaler pointed out that it costs too much money for residents to travel to the nearest shops outside Fisanterkraal to buy cool drinks and other groceries so there is a need for her business. In setting up her business she looked around and observed others doing business and realized she too had the necessary skills so started her business. If others can do it, so can I.

The Hairdresser said that she was making a career of her business and had some training in hairdressing. She also saw an opportunity for this service in Fisantekraal providing a range of hairdressing from cutting and styling.

The lady with the sewing business said it was lack of employment that had led her to start sewing with a single electric sewing machine so that she could survive together with her children.

The Carpenter started this business because he had previous training and learned to be a carpenter.

The cake baker started her business through the Learn to Earn Charity who taught her to bake and provided a low cost electric cooker with oven and hotplate.

Why don't your friends who do not have a business, start one?

The immediate response from several of the group members was that it was because they did not have money to start a business. Other reasons included because they did not want to, did not know what to do or have skills to do so.

Most of the small business owners in the group started their business in a small way and had built them up over time.

Do you want your businesses to grow?

The unanimous response was, yes.

What is stopping your businesses from growing?

The sewing lady mentioned no money for more raw materials, sewing machines and to pay salaries to employ more people to sew. The Carpenter also mentioned not enough money to buy materials and machinery and that much of his money goes towards simple living costs of food, rent and energy.

So how could you get more business going to expand your businesses?

After some reflection group members said that Fisanterkraal is too small, that the local market place is therefore too restricted. Also that costs of personal living are too high, water, food, and energy – all too expensive.

What external markets do you have?

The sewing, carpentry and hairdressing businesses all had some custom from outside Fisanterkraal, mainly from adjoining rural settlements. Sewing and carpentry products were sold to a broader area but even so on a spasmodic manner. The Creche, Soft Drinks, Spaza and Bakers were all dependent on the immediate Fisanterkraal market.

Can you just start a business or do you need permission from the community or anyone?

You do not need permission, you can just start a business.

OBSERVATIONS:

2. This was the first interactive session and the group members were still rather hesitant as they became more relaxed later as the session proceeded.
3. Clear enablers for small business in Fisanterkraal with this group were:
 - Start up money
 - Equipment/appliances
 - A skill or knowledge such as baking, hairdressing or trading
 - Self confidence
 - Identification of a community need and market
4. The motivation for many of these small businesses was economic necessity, no alternative means of earning an income.
5. Limiters to small business growth were:
 - Lack of working and capital to buy more equipment/appliances
 - Restrictive local market place
 - Access to external markets
 - Business skills

Following a brief break for some refreshments, the discussion continued with the same group. The next topic was:

Question Two: How group members themselves judge business success. How do you judge success in your business ... what makes one business in Fisanterkraal better than another how do you compare your businesses ?

Various factors were mentioned by several member of the group that included:

- How many customers come to my shop
- Stock turnover
- Selling to competitors
- Low prices
- Plenty of stock
- Cleanliness of the shop and staff
- Appearance of our premises

How do you judge your own business ?

There was initially some reluctance to answer this question. Then after further probing the lady baking cakes said that she adds up her costs and her income and does not like to make a loss. Others said that they must sell their stock for more than it cost them. Then there was general agreement that they like to make a surplus ... or profit, and this is important.

Lets consider the various things on which you judge your business

A number of indicators or measures were mentioned by the group, that were then written onto a piece of paper and stuck on the wall. These included:

- Customers
- Profit
- Turnover or business income
- Stock turnover, purchased per month
- Low prices
- Cleanliness/neatness – visual attraction
- Multiple businesses
- Stock volume held and diversity

After exhausting possible measures that the group members themselves would use, Each group member was provided with a number of coloured stickers and asked to affix the sticker to the measure they used and considered most important.

The results of the colour sticker exercise:

Indicator area	Score
Customers	5
Profit	1
Turnover or business income	5
Stock turnover, purchased per month	0
Low prices	2
Cleanliness/neatness – visual attraction	6
Multiple businesses	0
Stock volume held and diversity	3

How do we find out about income?

Paul then re explained the purpose of the project and the notion of before and after micro enterprise measurement and our need to measure the income of the different businesses. He emphasised that it is the total income before and after that we need and perhaps total income by class or group of businesses.

The soft drink wholesaler said it was too difficult for her to talk about such things. It was also difficult for her to talk about such things in a group.

There was further explanation, that this information would only be requested on an individual one to one basis and that the information would remain confidential.

The lady baking cakes said we should ask to see the business records because the owners keep records. Again, the soft drink wholesaler said that she had a major problem.

The hairdresser said she would have no problem with giving this type of information.

The lady baking cakes said she would provide this information.

How many people do you employ in your business?

The crèche employs one other and the soft drink wholesaler has another Spaza with a person running it. The baker employs a few part time people but the rest do not employ others because they are very small businesses.

OBSERVATIONS

1. Essential to fully explain the purpose and confidentiality of the project.
2. Disclosing profit, turnover and other financial information is a problem for certain business types such as soft drinks wholesalers. It is for competitive and special supply terms that they are reluctant. To obtain this data will require a deductive approach using other measures such as sales, stock turn, prices etc.
3. Small business owners have a very clear idea of how they measure their success and that of others in business in their community. Reluctance to share this information should not be interpreted to mean they do not know.
4. With some kinds of business, such as trading, there appears to be a hierarchy of suppliers, with large wholesalers supplying a number of smaller sellers operating within the community. An important measure for these business operators is therefore how many other outlets they supply.
5. The importance of looking after your customers and having competitive advantage with better and more stock, better prices and service were also important measures that they used.
6. Other issues and questions were raised and dealt with during the discussion that had to do with process and therefore omitted from the above record. They included:
 - o why certain business people were selected and others were not
 - o the purpose of the project
 - o how they will benefit from taking part in the project

Discussion Leader for the second two questions: Chris Hazard, IES
Observer: Paul Harris, IES

Question three: The role of energy in their businesses.

Note:

- At this point two members of the group left due to the time commitments. (carpenter and the spaza owner).
- Further all the remaining members felt severely time constrained and as such the remaining two questions were rushed and shortened.

Do all use electricity in their businesses?

Yes all use electricity and electricity was the only fuel used. One respondent indicated they also use water ... in formed this lay out side the scope of the interview.

Flip chart exercise to determine what the electricity is used for?

Business	Users of electricity
Baker	Oven, cooking plates, fridge, lights
Spaza/cooldrink wholesaler	Cold room, fridges, stove, music, lights
Hair dresser	Kettle (for hot washing water), hairdryer, hair cutters, curling tongs, music, lights
Sewing business	Electric sewing machine, steam iron, lights

What do you feel about energy in your business?

- Expensive
- Electricity is needed to grow
- Electricity outage causes sever problems
 - No haircutting
 - No baking possible
 - Spaza can survive with cold room space for a day
- Spaza owner had a much smaller business before electricity.
- Sewing business and hairdresser only started after the arrival of electricity.

How did you obtain the appliances/equipment?

- Baker – subsidised /2nd hand stove, assisted with the original working capital for the ingredients.
- Cooldrink Wholsaler – Sponsored fridges form Coca Cola, purchased the oven, more fridges would be available form Coca Cola but premise space is needed first.
- Hairdresser Geysers is needed. Purchased her equipment up front.
- Sewing lady – purchase her own appliance.

Question Four: Enablers to micro enterprise establishment.

The question – “what do you need for the establishment of a micro enterprise?” - was simply asked and written up on a flip chart then priorities via a 1st, 2nd, 3rd choice from each respondent:

Enabler	Scores
Money – start up capital	1,1,1,3
Equipment/machines	1
Training – knowledge	2
Skills	
Premises	2,2,2,3
Customers and a market	3,3
Profit	
Idea	
Entrepreneurial drive	
Transport	
Permission or licence	

The meeting was then closed by thanking the attendees and giving each person a calculator as a gift of thanks for their time.

Focus Group 2**Group:** Community members (in theory non-ME owners)**Purpose(s):**

- To explore how micro enterprise activity has impacted on the community and how the 'assets' of the various groups within the community have been affected
- To explore whether the non-ME owners have considered establishing a business and to identify the motivators / barriers to the establishment and growth of small businesses in Fisantekraal

Discussion Leader for the questions: Denise Oakley, AEA Technology**Observer:** Louis -----, IES**Interpreter:** Eugina (also participating as a customer of the small businesses in Fisantekraal)**Members of Group:**

- M (f), ex Transkei, Umsata, has lived in Fisantekraal since June 2002
- G (f), ex Transkei, has lived in Fisantekraal for 7 years, had worked with children for 2 days / week for a year and had also previously worked as a char and taxi driver, currently has a small spaza
- A (m), ex Transkei, has lived in Fisantekraal for 2 years, has a small shop and also works as a mechanic (car engines) and undertaker
- N (f), ex Transkei, has lived in Fisantekraal for 10 years, has been using 'Learn to Earn' machines since Oct 2002 (3 Rands / day)
- V (f), ex Transkei, 1 year in Fisantekraal, has a small shop started in 2002

The plan had been that group members should not be owners of small businesses however, this proved difficult in practice. There appeared to have been some confusion regarding the invitations that were issued to potential members of this group – some additional owners attended and asked why they had not been interviewed during the quantitative survey, they were interested in participating in the group and were invited to stay; others had been invited but the criteria of 'not being ME owners' had not been emphasised by those requesting their participation. The main language spoken and understood was Xhosa, several participants preferred Afrikaans and English was understood and spoken well by all participants (indeed much of the discussion was in English with only limited translation at a few points during the meeting). There was a single male in the group, the mechanic / undertaker.

Introductions

As each person arrived they were asked to write their first name on a badge. Denise Oakley gave the introduction and explained the aims of the research project and the focus group meeting. Our key interest was to explore what impact small businesses have in the community and on them as customers, and whether this ME activity brings advantages and / or disadvantages. Those present were asked if they were comfortable to stay and participate in the discussion. Denise and Louis introduced themselves and their background, and then Denise asked each person to introduce him / herself (focusing on how long they had been in Fisantekraal and where they lived previously, their employment / business and where their house was in the community).

In order to understand where each person lived in Fisantekraal and identify the businesses that they use, each person was asked to place a sticker on their house using the schematic plan of the community. They were then asked 'Which businesses are in their vicinity and

where do they do most of their business i.e. where do they buy things from and what about other services such as taxis, electricity pre-paid cards, etc'. Stickers were placed on the map for spazas, taxi rank, clinic, electricity vendor, community meeting room.

Lessons learned

Using the map was a useful 'ice breaker' exercise to put the group at ease and very valuable in orientating all the participants to the community and to the location of the businesses known to them. However, sufficient time must be allowed for this and it must be facilitated to ensure that it does not take an excessive amount of time. A key problem identified during this activity was the difficulty encountered in orientating house location and numbers on the 2 dimensional view of the community. It is also very important that the map that is used in the focus group is available to be kept by the team for later review, and this will also enable it to be written or have marker stuck onto it (the map actually used was borrowed – it was handled carefully and all the stickers attached during the meeting were removed resulting in loss of valuable information)

The next issue to be explored was how the arrival energy (primarily electricity) had changed the community. The key issue mentioned was that it was dark but also unrelated issues were that taxis were very scarce and that the community itself was much smaller then (\pm 500 houses, ~ 7 years ago).

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>
Date	1999	2000	2002
Houses built	500	500	500 + flats (300 not built yet)

The group then discussed the date when electricity arrived - there was some degree of debate about this and the recollection of historical dates appeared to cause some difficulties. Their view was that electricity began to be supplied in 2000.

'What businesses were here 2 years ago?' The group thought that there were 4 spazas (few but very busy) and maybe 6 shabeens.

Lessons learned

Difficulties encountered with recalling timescales, both dates and periods of time over which events happened. Constant facilitation is required to encourage some of the participants to be forthcoming with answers / their views and to counter the dominant participants. It was necessary to lead the respondent on from their answer / view to obtain further detailed information or reach an agreement / consensus (often the recollection of historical facts by individuals was different).

'What businesses and services do you need which are not available in the community?'

Materials etc for sewing business – travels to Cape Town by train
 Petrol / punctures – need to go to Durbanville
 No police station in Fisantekraal- need to get in touch with Kraifontaine (~ 19 km away)
 Clinic is only open 2 days / week – the alternative is in Durbanville but that is only open Mon-Fri. Nearest hospital is Kreipetal.

The quantitative survey had identified that the availability of credit within the community appeared to be a very important service that was provided through a number of the small businesses, particularly the spazas. This was further explored with the focus group using questions such as 'Why do you need credit and who do you obtain this from?' and 'Why would someone give you credit?' This revealed that the credit system is used for 'bigger'

items from the shops in Durbanville and Bellville. In order to better understand how the service offered by MEs in Fisantekraal, the discussion was facilitated and we learnt that many people get paid from their external employment at the end of the week / month and are then able to pay the shops for their purchases made during the week / month. The general feeling was that the participants (who comprised both customers and a spaza owner) believed that businesses 'don't take care of us if you don't give us credit'. We pursued this further and confirmed that the credit system was widespread and necessary in Fisantekraal – it provided a regular means by which people could buy everyday staples and other necessities without having to pay cash at the time of purchase. Employment in organisations outside the community provides many residents with a cash income which in turn is spent in the small businesses and is the source of the cash flow necessary to support these enterprises (and the households that are dependent on these). The question of paying on time was also explored and the consensus (from customers and owners) was that the majority of customers pay their agreed balances on time. This was universally considered to be important in terms of maintaining trust and continued access to this service. *[the quantitative survey had, however, revealed that businesses did not necessarily stop serving customers who did not pay on time, even those that had large outstanding debts continued to be considered as valuable customers]*

The questioning now moved to focus on exploring the motivators and barriers to establishing and growing small businesses (in theory aimed at those who did not already own a business).

Have you thought about setting up a business?
What stops you setting up a business?

The reasons given were:

- Need money for initial stock
- House is too small
- Not patient enough
- Just not keen on this idea, just wants to be employed to earn money

Those that were small business owners were asked what they needed to grow their business:

- Need to have a separate space at home or have a container
- Need more or different tools (a second hand industrial sewing machine @ 2000 Rands, an overlocker @ 1500 Rands – need cash / credit for this; some people thought they could borrow necessary tools from friends or other owners if they did not have the cash to buy them)
- Must be competitive
- Must provide good customer service (including providing credit if required)

What new businesses do you think are needed in Fisantekraal and how would you choose what business to start?

- Spaza owner – expand into meat and more cold drinks
- Furniture shop
- Pharmacy
- Petrol station
- LPG sales

- Clothes shops
- Some co-operatives

An overall conclusion from the group was that there would be no ME activity without electricity. Most people were aware that the cost for a 60 Amp supply was 1000 Rands and that this type of supply would be very beneficial for larger shops / shabeens. The electricity was considered to be 'weak' (i.e. it goes off especially when it rains).

The discussion then moved on to other enablers that the group considered to be important (generally as well as for ME activity). The key issue raised by the group was communications. No-one had heard of the Internet and there was only a very low awareness of computers as a means of communications (no knowledge of e mail). The group thought that there maybe a computer and fax machine at the school. Mobile phone use was the norm, and fixed lines appear to be limited to a small number of Telekom public phone boxes and a Telekom vendor (in a container unit; Telekom phone book available). Cell phone air time is considered to be expensive and there was some awareness of text messaging.

Do you think that there are sufficient customers for all the spaza shops?

- 'Many people need many things'. Opinion was that people go to the shops where they are treated well (*facilitators comment – this also includes the trustworthy relationship that results in the availability of credit*) and where there is an environment of 'people who like each other'.
- Speaking of the same language was an important consideration (Fisantekraal has a number of language groups).
- Fresh produce
- Customer care is also important.
- Has anyone received any training that might be useful for establishing a business?
- One person (the male) had received some **business skills training** in Johannesburg.

The group was asked what kind of training they would like to have if this could be made available within the community. One person (the male) answered with any degree of certainty and identified **computer skills**.

We then wanted to explore the source of the cash economy that had been identified during the quantitative survey (i.e. although credit was widely available, people almost always settled their debts weekly / monthly when they got paid). Although pensions were mentioned during the survey, it was also evident that there was a wide range of employment opportunities in the local vicinity and in the neighbouring suburbs of Cape Town. The group were first asked 'How many people were employed within the enterprises in the community?'

- Approx. 7 people employed in the micro enterprises (possibly at the crèche, spaza and shabeens)
- 4 teachers
- 5 staff at the clinic
- Approx. 10 as taxi drivers

'How and where are people from Fisantekraal employed?

This identified that there are a large number of people employed in Durbanville and Cape Town particularly in restaurants, shops, cleaning, maids, etc. The group thought that in the surrounding factories (chicken processing, vegetable processing, animal feeds etc) there was a lot of employment but some of it was seasonal. Work in the many vineyards in the area is also very seasonal. The ability to earn money from outside the community was considered by all to be very important.

We then attempted to build a scenario of what might change in the community if there was a major reduction in or no external employment. This created some alarm within the group as they rapidly began to think that this maybe about to happen. We then explained that this was purely hypothetical and a way for us to better understand the impact that the availability of external employment has on the community and the ME activity.

Lessons learned

Care must be taken not to build scenarios, i.e. 'what if' proposals, which will potentially create alarm for individuals or the group as a whole – a number of possible generic scenarios should be carefully prepared for use in the focus group sessions once the issues to be explored have been extracted from the quantitative survey findings.

An important finding was that although in the quantitative surveys, the majority of enterprise owners interviewed did not indicate that their business was seasonal, the owners that attended the focus group (particularly spaza and seamstress) said that they noticed the difference in trading conditions when a proportion of the employment in the local area stopped e.g. the main period of employment in the vineyards is between September and March.

Lessons learned

Add the following question to the quantitative survey form at the same point as the % level of activity per month: Do you notice any seasonal change in your business income?

Finally the group were asked 'Do you like living in Fisantekraal? A positive response was received and we then asked Why?

- Work is close e.g. in the factories
- Clean surroundings
- No squatter camp nearby (a number of local places with a large number of shacks were named as not being as good)
- Generally safe

General lessons learned

The importance of rapid and clearly understood translation cannot be over emphasised – the interpreters must be briefed to ensure that all conversation in the focus group is constantly observed and where difficulties are evident, immediate translation is provided (into which ever language is appropriate to improve the level of understanding of the issue in question, the question or the answers being provided)

If focus groups are to be planned with non-ME owners, there needs to be early engagement with relevant people to ensure that potential participants are fully aware of the projects and the role they may be asked to play. This is particularly important if the level of micro

enterprise activity at the pre-energisation stage is very limited leading to a very low level of visibility of the researchers / project within the community.