


**Please cite the Published Version**

Heeks, Richard, Arun, Shoba  and Morgan, Sharon (2005) Researching women's ICT-based enterprise for development: methods, tools and lessons from fieldwork. Working Paper. Department for International Development (UK).

**Publisher:** Department for International Development (UK)

**Version:** Published Version

**Downloaded from:** <https://e-space.mmu.ac.uk/97915/>

**Usage rights:**  Open Government Licence 3.0

**Enquiries:**

If you have questions about this document, contact [openresearch@mmu.ac.uk](mailto:openresearch@mmu.ac.uk). Please include the URL of the record in e-space. If you believe that your, or a third party's rights have been compromised through this document please see our Take Down policy (available from <https://www.mmu.ac.uk/library/using-the-library/policies-and-guidelines>)

# **Researching Women's ICT-Based Enterprise for Development: *Methods, Tools and Lessons from Fieldwork***

**Women's ICT-Based Enterprise for Development project**

Richard Heeks, Shoba Arun & Sharon Morgan  
IDPM, University of Manchester, UK  
2005

Contact: richard.heeks@man.ac.uk

Available at: <http://www.womenictenterprise.org/>

## **Executive Summary**

This paper is for people interested in researching women's ICT-based enterprises in developing countries. It will also be of value to those researching women and ICTs or ICT enterprises and development more generally. The paper reports on, and draws lessons from, one project's experiences in researching a group of ICT-based enterprises (mainly doing data entry, IT training, and hardware assembly work) run by cooperatives of poor women in Kerala state, India. No study findings are presented here; just reflections on the research and fieldwork process. The paper describes the holistic – multi-disciplinary, multi-method – approach to research used to develop the fieldwork instruments for this project. As well as providing copies of these instruments, this paper also describes issues and lessons emerging from their application. These include practical issues, conceptual issues, as well as issues that arise from the holistic nature of the research approach. A bullet-point list of nine lessons is provided at the end of the main paper.

*This report derives from the "Women's ICT-Based Enterprise for Development" project, which is coordinated by the University of Manchester's [Institute for Development Policy and Management](#). The project is funded by the UK [Department for International Development](#)'s Knowledge and Research programme. The views expressed are not necessarily those of DFID or the University of Manchester.*

## Table of Contents

A. INTRODUCTION.....	1
<b>B. CONCEPTUAL BASIS FOR DEVELOPING RESEARCH INSTRUMENTS</b>	<b>2</b>
MULTI-DISCIPLINARY APPROACHES TO RESEARCHING WOMEN'S ICT-BASED ENTERPRISE FOR DEVELOPMENT .....	3
MULTI-METHOD APPROACHES TO RESEARCHING WOMEN'S ICT-BASED ENTERPRISE FOR DEVELOPMENT.....	4
THE ONTOLOGY OF HOLISTIC RESEARCH .....	4
<b>C. EMERGENT ISSUES .....</b>	<b>6</b>
PRACTICAL ISSUES .....	6
CONCEPTUAL ISSUES .....	8
MULTI-METHOD RESEARCH ISSUES.....	9
<b>D. SUMMARY .....</b>	<b>11</b>
REFERENCES .....	12
<b>APPENDIX A1: STORY-TELLING PROFORMA.....</b>	<b>13</b>
<b>APPENDIX A2: GROUP DISCUSSION PROFORMA .....</b>	<b>15</b>
<b>APPENDIX A3: INDIVIDUAL QUESTIONNAIRE SURVEY PROFORMA... </b>	<b>29</b>
<b>APPENDIX A4: KEY INFORMANT INTERVIEW PROFORMA.....</b>	<b>33</b>
<b>APPENDIX A5: CASE SKETCH PROFORMA.....</b>	<b>34</b>
<b>APPENDIX A6: AGENCY CASE STUDY PROFORMA.....</b>	<b>39</b>

## A. Introduction

The purpose of this paper is to report on, and draw lessons from, one project's experiences of researching women's ICT-based enterprises in developing countries. It is aimed at others who are interested in conducting such research themselves: the lessons will hopefully provide guidance for other researchers. The paper also provides details of all the research instruments used; provided due acknowledgement of the source is given, other researchers are welcome to make use of these in original or modified format in their own work.

Although the specific focus of the paper is quite narrow, the discussion and issues raised are likely to apply more broadly; for example to research more generally on women and ICTs, or on ICT enterprises and development.

The particular project reported on is entitled "Women's ICT-Based Enterprise for Development". It is coordinated by the University of Manchester's Institute for Development Policy and Management, and funded by the UK Department for International Development's Knowledge and Research programme. The aim of this project has been to help increase the number of sustainable ICT-based enterprises run by groups of poor women in developing countries. Its outputs include a guidance handbook and workshops that focus particularly on three research topics:

- Operation: good and bad practice in initiating, sustaining, and growing women's ICT-based enterprises.
- Support: needs and provision of assistance from external agencies to help women's ICT-based enterprises.
- Impact: of women's ICT-based enterprises.

The data required to address these topics and produce these outputs has been generated through an intensive study of the Kudumbashree initiative in India's Kerala state, through commissioned studies from other developing countries, and through sharing of experiences on the project's online workspace.

In this paper, we mainly reflect on the research approach and instruments employed for study of the Kudumbashree initiative. These have mainly been applied by PlanetKerala, a research and action network NGO based in Kerala.

The Kudumbashree poverty eradication initiative is a unique scheme that has created a state-wide series of cooperative microenterprises, which are all owned, managed and operated by women from "below poverty line" families. In addition to more "traditional" enterprise, Kudumbashree has facilitated the creation of more than 100 ICT-based microenterprise units that provide jobs for more than 1,000 poor women. Each unit employs ten women from its immediate neighbourhood, plus others on a piece-rate basis. The units are focused around three main activities: data entry/digitisation, IT training, and hardware assembly.

Data was gathered about these units through four main methods: work/life storytelling, group discussion, individual questionnaire survey, and key informant interviews. These methods will now be discussed in greater detail. In the next section, we explain the holistic approach to researching women's ICT-based enterprise

that was used to develop the four main fieldwork instruments. Section C discusses some of the issues that emerged from fieldwork during the application of these research methods. A short summary of key points then follows. Copies of the research instruments are provided in a final Appendix.

Before proceeding, though, we note the definitions of our focal entity. We define ICT-based enterprises as those using ICTs for new economic activities that arise from the advent of ICTs. There are three main categories:

- *ICTs as an enterprise output*: enterprises that produce hardware, software and telecommunications products.
- *ICTs as a primary, processing technology*: enterprises that use ICTs as their core processing technology to provide outputs such as data entry services, ICT-based business services, software customisation, ICT-based distance learning, etc.
- *Other ICT-related support activities*: enterprises that provide computer training, consultancy and other services.

Put more simply, we can ask of any enterprise the question, "Would this enterprise exist without ICTs?". If the answer is "no", then that is an "ICT-based enterprise". They are a "women's ICT-based enterprise" if they are majority-owned or majority-managed by women.

## **B. Conceptual Basis for Developing Research Instruments**

As noted, our focal research task was to build knowledge about the operation (good and bad practice), support (needs and provision) and impacts (good and bad) of women's ICT-based enterprises in developing countries. This therefore fell into a general domain that has seen significant growth in recent years: that of gender-related applications of ICTs in developing countries (Hafkin & Taggart 2001).

A key concern has been the rather non-conceptual, non-methodological way in which such initiatives have often been analysed; typically in an anecdotal way that has not effectively added to our frameworks of understanding about gender, ICTs and development. Very valuable work has therefore been undertaken to develop and disseminate analytical approaches that can be used in researching such projects; such as the APC-WNSP work that delivered the Gender Evaluation Methodology (APC-WNSP 2002).

However, where some conceptual framework is used to research ICT initiatives for women in development, there is a tendency just to use a single framework and to make that framework a "gender framework" drawn from a single discipline. This brings two dangers. First, the generic danger that, in viewing initiatives through a single conceptual lens, key issues and findings are neglected. Second, the more specific danger that the results and value of women-oriented ICT initiatives are "ghettoised" rather than being mainstreamed.

To avoid these dangers, we therefore decided to adopt a "holistic" approach to researching this particular developing country-based, women-oriented ICT initiative.

We felt it likely that such an approach would provide a more rounded and credible picture of women's use of ICTs that can reach a broader audience.

But what does it mean to use a "holistic" approach? Other terms we could apply to such an approach might be "triangulated", "hybrid" or "multiple". In analysing these terms, and the aim of avoiding a single-lens perspective, we drew out two strands in methodology for researching women's ICT initiatives. First, that the methodology should be multi-disciplinary. Second, that the methodology should be multi-method. Each of these will now be investigated in further detail.

## **Multi-Disciplinary Approaches to Researching Women's ICT-Based Enterprise for Development**

We know already that there is a specific value to multi-disciplinary approaches to development research in their provision of complementary perspectives (Harriss 2002). Given our research focus, we identified four potential disciplines that might contribute towards a holistic perspective on women's ICT-based enterprise for development. These were: gender studies; technology studies; business/management studies; and development studies. An initial review of technology studies failed to produce any clear conceptual approach that might be of value. We therefore proceeded with the other three disciplines, and drew from each of those disciplines a different conceptual perspectives of relevance:

- ***Gender-based perspective***: this draws from transformative/developmental streams within gender studies (Reeves & Baden 2000). It focuses particularly on issues of gender equity and the triple role of women. For further details, see Morgan et al (2004). This perspective was seen to illuminate all three research topics: operation, support, and impact.
- ***Enterprise-based perspective***: this draws from business studies. It focuses particularly on the relationship between key enterprise success factors and financial/business outcomes (e.g. Perren 1999). For further details, see Heeks et al (2004). This perspective was seen to illuminate all three research topics, but especially those of operation and support.
- ***Livelihoods-based perspective***: this draws from development studies. It focuses particularly on the sustainable livelihoods framework, including access to assets and livelihood strategies (DFID 1999). For further details, see Arun et al (2004). This perspective was seen to illuminate all three research topics, but especially those of support and impact.

Each of these together, then, was used to help shape the content of the research instruments for investigation of women's ICT-based enterprise. To take just one research instrument example – the focus-group case study instrument – we amalgamated the three perspectives:

- From the gender perspective we asked, for example, about roles and relations vis-à-vis men; and about family roles and changing home/work workload balance.
- From the enterprise perspective we asked, for example, about financial performance (e.g. profits, sales, expenditure); about bottom-up and top-down definitions of success; and about critical success factors.

- From the livelihoods perspective we asked, for example, about impacts on financial capital (e.g. income, loans and savings), human capital (e.g. skills and confidence), social capital (e.g. relations and empowerment), and physical capital (e.g. equipment and household goods); and about vulnerabilities.

## **Multi-Method Approaches to Researching Women's ICT-Based Enterprise for Development**

The theoretical and generic value of multi-method research on key development issues is well-argued (Kanbur 2001, White 2002). This argument has sometimes be reduced to the simplicity of the idea of combining "quantitative" with "qualitative". We certainly wished to do this; for example, combining large-scale quantitative survey data with in-depth qualitative stories. However, our purpose was broader than simply having both quantitative and qualitative data. We wished to approach our research subjects from several different methods in order to build as holistic a picture as possible about women's ICT-based enterprise.

As a starting point, we drew out methods that have been associated with the different perspectives. Gender-based work has, for example, seen use of story-telling and participative group discussions. Livelihoods-based work has made use of broad-scale survey questionnaires. Enterprise-based work has made use of in-depth enterprise case studies. However, there is no strict and necessary relationship between perspective and method: every one of our methods has been used by each of the three perspectives.

In all, then, we made use of four main research methods:

- Story-telling: a one-to-one, in-depth, free-form conversation based around generic themes in which individual women members of the enterprise would tell their story; particularly focusing on their lives just before, during, and after engagement with the enterprise. For further details, see Appendix A1.
- Group discussion: a very structured set of questions. Some of these were very specific and factual, but others made use of group input and discussion to obtain a consensus view on issues such as enterprise impacts, strategies and best practices. For further details, see Appendix A2.
- Questionnaire survey: a structured set of questions asking specifically about individual women's livelihoods and looking at vulnerabilities and changes to assets within the household. For further details, see Appendix A3.
- Key informant interviews: a semi-structured interview directed at key individuals working in agencies supporting the focal women's ICT-based enterprise. For further details, see Appendix A4.

## **The Ontology of Holistic Research**

Having discussed the basis on which our research methods were developed, in this sub-section we look at the philosophical basis for holistic (i.e. multi-disciplinary, multi-method) research. Be warned: this sub-section's content is aimed at those with some grounding and interest in research philosophy.

Many researchers blithely embark on multi-disciplinary and/or multi-method research without any thought for its validity. Here, we will look briefly at this issue, based around the idea that such research can only be justified if it makes ontological sense. Ontology deals with the philosophy of reality; with the way we think about how things actually are. It seems reasonable to argue that you can only combine perspectives within research instruments if there is some common ontological position taken by those perspectives. More simply, if the different perspectives disagree about the fundamental nature of reality and, hence, about the nature of the objects of their investigation, then it is hard to see how those perspectives can be integrated to provide a holistic perspective. If, for example, one researcher thinks gender is objective, real and tangible while another completely disagrees and thinks gender is subjective and intangible, then they can hardly combine their research since they disagree on the most basic foundation of what gender is.

Drawing from standard research philosophy frameworks (e.g. Guba 1990, Easterby-Smith et al 2002), we identified three particular philosophical "meta-theories". In very simple terms, we can summarise them:

- Positivism: believes that the objects of its research are real, objective and can be directly experienced and measured.
- Social constructionism: believes that the objects of its research are not real but are constructed subjectively by each individual through their thoughts and actions.
- Critical realism: believes that the objects of its research are real but that they can only be known through subjective experience.

We investigated whether any of these allowed a shared ontological position across the three perspectives outlined above as useful for researching women's ICT-based enterprises.

Positivism seemed difficult to sustain. There is certainly positivism-grounded research undertaken in all three domains – gender, enterprise, and livelihoods – particularly in North America. However, we felt positivism to be out-of-synch with some important foundations for the three domains; at least with what we perceived to be important foundations (and, ultimately, meta-theory selection should be acknowledged as a subjective process; there is no truly objective basis on which one can choose between meta-theories: "because they are philosophical in nature, none of them can be proved or disproved in any foundational sense (Guba 1990:18).) One example is the concept of gender, which incorporates notions of perception, even social construction, as a way of differentiating it from the more objective and physical concept of "sex". Another example derived from our wish to have participative inputs from the women working in the ICT-based enterprises. This meant that top-down, objective notions of some concepts were balanced or substituted with the women's own perceptions about concepts such as "success" or "impacts".

Research drawing from a social constructionist worldview is growing in popularity, and it certainly would have been possible to design research combining gender, enterprise and livelihoods perspectives based on a social constructionist meta-theory. However, we felt two barriers to doing this ourselves. First, because our research had a practical emphasis. It sought to develop models of best practice that could be shared between women working in different enterprises. It would be hard to do this if we felt



that objects like "critical success factors" had no reality but were solely individual constructions of the mind. Second, the core model for the livelihoods perspective implies that things like assets, structures, processes, strategies and outcomes all have an external reality, and are not merely social constructions.

Instead, we recognised critical realism as being closest to an underlying meta-theory for our research. We regarded key objects of study – gender, strategy, assets, vulnerabilities, etc – to be real and to have regularities of relation, including those of cause and effect. However, that reality can never be directly known or experienced. Instead, it is imperfectly and subjectively perceived by individuals. Our research, then, would not tell us directly about, say, gender. Instead, through our multiple perspectives and methods we tried to (though never completely could) rise above the imperfections and subjectivity in order to learn something valid about gender.

This is not to say that critical realism is a panacea. Tensions still exist, for example, with the ideas about the social construction of gender, and with the need to investigate how women themselves perceive key constructs like "enterprise", "success", "strategy", etc. However, space precludes further investigation of ontologies of inter-subjectivity that might start to address such tensions. In its absence, we found critical realism to be the "best fit" common ontological position from which to conduct holistic research on women's ICT-based enterprise.

## C. Emergent Issues

The previous section described the background to the development of instruments for researching women's ICT-based enterprise for development. Having developed the instruments, they were then applied; covering six stories, thirty group discussions, 150 individual questionnaires, and two key informant interviews, all around the initiative in Kerala. During this data-gathering process, a number of issues emerged, as discussed below. We have, somewhat arbitrarily, grouped this discussion under three sub-headings.

### **Practical Issues**

Three particular issues were thrown up by the practical application of the research instruments:

***Repetition.*** The initially-designed research instruments, because they drew from multiple perspectives using multiple methods, were long. When they were piloted, we found that they often triangulated: providing different views about a particular issue. In some cases, though, they merely repeated: asking the same question (perhaps with slightly different terminology) and getting the same answer. This added nothing and therefore, post-pilot, we were able to remove quite a number of questions.

***Time consumption and research payback.*** Using a single research method derived from a single discipline would make for relatively quick, simple data-gathering.

Using multiple methods developed from multiple disciplines makes, conversely, for potentially very time-consuming data-gathering, even after repetitive questions had been removed. This raises an ethical or instrumental issue: that of research "payback". In this case, as in many others that would involve women's ICT-based enterprise, there is an opportunity cost to the time women give up for discussion, storytelling or interviews. This is time they cannot then spend doing their work. Thus, for example, one hour spent in a discussion is one hour that cannot be invested in completing a data entry task; putting the enterprise one hour further away from receiving the payment that completion of the task produces.

This can be seen as centring around the issue of return or cost/benefit: what is the benefit generated by the cost investment by the women data subjects of their time and effort? As a researcher, one might see this as an ethical issue, dealing with the morality of research, particularly research with subjects on very low incomes. Some of the women in an associated part of this research project (which also commissioned some enterprise studies outside India) took a more directly instrumental view, seeking to understand what they personally would receive to compensate their investment. Some in the Kerala part of the project seemed to have a more general perspective, wanting to understand what the purpose and value of their time investment would be.

In this particular project, we sought to provide an answer in the practical project outputs: the handbook to assist women running or supporting ICT-based enterprises, which could be used by the data subjects (the handbook is translated into a number of relevant languages); plus workshops to help discuss and disseminate good practice in enterprise development and support. We also designed a specific feedback workshop for women involved in the Kudumbashree project.

For us, this still raised some questions. First, about the extent to which this practical payback had been communicated to, and was valued by, the individuals who had been data subjects. We had developed the outputs on the basis of feedback from representatives but not with every individual involved. Second, the question about more conceptual research: what payback answer would be provided for, say, a researcher undertaking work that sought to develop a better conceptual – rather than practical – understanding of women's livelihoods?

**Research context.** All data-gathering was conducted *in situ* in the workplace: there were no private spaces available given the limited accommodation in most enterprises. In some cases, access to the enterprise was provided through introductions granted by the government agency that initiates and supports the agencies. These two contextual issues may have impacted responses. The triangulation of methods and our own analysis suggest that responses have been fairly candid; dealing with both the positives and negatives of work and home life. Nevertheless, there may be some marginal impacts of the fact that women told their stories and gave their interviews with their work-mates around them; and the fact that our fieldworkers in some cases may have had some perceived link to the "governing agency" for the project. Thus, for example, it is difficult to know for certain whether positive comments about that agency are a real reflection of feelings, or have been coloured by the research context.

## Conceptual Issues

Three more conceptual issues emerged from our fieldwork:

***Comparative perspective.*** Pilot work with our initially-designed research instruments showed that they would produce a strong picture of the impact of working in an ICT-based enterprise. However, it also became clear that some women faced choices. These were often constrained choices, but choices nonetheless about types of work. Likewise the state faced choices about what types of enterprise to support. Yet the initial instruments gave no comparative perspective. Put simply, the fact that an ICT-based enterprise provides an income of US\$50 per month to a woman is one thing. But it looks rather different if you then discover that women from the same neighbourhood who have gone into soap-making or catering are earning US\$70 per month. One robust way to investigate this (albeit drawing from the positivist tradition) would be to select "controls": women with very similar life profiles to those in the ICT enterprises but who work in non-ICT enterprises. One could then compare livelihood and other impacts of the controls against the women in the ICT enterprises. The time and expense of such an approach was beyond our project. Instead, therefore, we relied on the second-best approach of asking data subjects comparative questions about earnings, livelihoods, etc. in alternative enterprises.

***Sustainability.*** A related issue that was incorporated from the start of our research was that of sustainability. Again, put simply, a US\$50-per-month income looks rather different if most ICT-based enterprises fail within a few months. Adding in the comparative point, we must remember that most micro-/small enterprises fail within a few years (and that none of our subject enterprises had failed but, instead, had typically been operating for more than three years). Nonetheless, we did incorporate questions about the specific sustainability of focal ICT-based enterprises into our research instruments. To support a focus on sustainability, our investigation was chronological: it looked both backwards and forwards in time. However, we were limited to some extent by the imposed cross-sectional/snapshot nature of our research. Deeper investigation of sustainability issues would require a longitudinal research design.

***The concept of enterprise.*** We deliberately balanced the enterprise perspective with two others in order to ensure that it did not dominate. Nonetheless, during the fieldwork there were constant reminders that mainstream, Western conceptions of enterprise mismatch the realities of women's ICT-based enterprises in developing countries in a number of ways. A few examples can be given here:

- This issue of benefits accruing from work in the enterprise had been approached from an amalgam of all three perspectives to create questions about individual-level benefits and questions about enterprise-level benefits. However, some women respondents found difficulty in understanding the intended difference; finding it easy to relate to identities of themselves as members of households and as members of a collective of women with common purpose, but finding it harder to identify with the notion of some separate entity called "enterprise". This, then, was another area of perceived repetition where questions were cut down to fit the received identities of the respondents.
- Traditional financial analysis of the enterprises was difficult because ideas such as profit or growth were not a clear part of the vocabulary used by the women or,

hence, of their worldview. Financial analysis was further undermined by both the length of delay and financial size of the arrears due to many of the enterprises, which were unpaid by their customers (mainly government departments).

- The discussion above of comparison and sustainability can be seen to derive from an enterprise-driven, finance-based perspective. Some women shared this but others did not. The latter's unit of comparison and sustainability was their livelihood and its social relations, not the enterprise and its business relations. Addressing these concepts in financial terms, then, is partial at best and, in some circumstances, flawed. At the least, one must seek to add in a set of more qualitative and sometimes more subjective elements such as skills, empowerment, confidence, and self-worth. It is these, for example, that sustain independently of any particular job in a particular establishment. It is also these that might justify government intervention in women's ICT-based enterprises if that intervention can deliver such benefits in a way that the market cannot.

In some – though by no means all – cases, then, one must approach the whole idea of a women's ICT-based enterprise with great care since it may be at variance with the worldview of the women involved. Women in some of the "enterprises" appeared to see themselves, and to be seen by others, as an adjunct to some larger customer organisation: for instance, more like the weakly-outsourced department of a public agency than a free-floating competitive enterprise. In these and other cases, respondents viewed their work and their world far more through a social lens than through a financial one. Therefore, a fruitful future line of enquiry may be one that follows up the notion of "social enterprise" as a more appropriate representation of some women's ICT-based enterprises in developing countries.

## **Multi-Method Research Issues**

As already noted, multi-method research can raise issues of repetition and time consumption. In addition, we found four more points about multi-method research that transpired from our fieldwork:

**Case studies.** We noted above that case study is a common method employed not just in enterprise-based research but in many other types of research. Hence, one might expect it to have been used here. However, the notion that case study is a research method is rather misguided. Instead, case study is more of a research strategy that, itself, may employ a number of different research methods. Three of our methods – work/life story, group discussion, and questionnaire – were applied within a case study strategy. In other words, we applied all three within individual enterprises and were then able to use those methods to build up specific case studies. Given the richness of data provided, though, we also found it helpful to develop a much shorter set of structured questions – the "case sketch" – that was used to produce simple case study material from a broader range of case enterprises. For further details, see Appendix A5.

**Method triangulation:** document analysis and observation. Our four main research methods all involved asking questions, either to individuals or groups. Good practice in building a holistic, triangulated picture can involve use of quite different methods (Cassell & Symon 1994, Berg 2001). With this in mind, we planned to also make use of document analysis and observation techniques. In practice, as we anticipated given

the nature of micro-/small enterprise in developing countries, the documentation base available was very limited; restricted in some cases to just a single annual audit document. This listed only the bare financial performance outline and required no particular techniques for analysis. As noted already, our fieldwork was somewhat time-consuming for both field researchers and participants. It was therefore not seen as appropriate to conduct any specific periods of observation even though, in an ideal world, we would have undertaken an observational period of, say, half a day in each enterprise. Instead, we restricted observational data gathering to getting field research staff to summarise their observational analyses from the case enterprises in which they had gathered data. This provided one further empirical perspective to triangulate with our other research methods.

***Stakeholder triangulation:*** household members, customers, and others. Good practice in building a holistic, triangulated picture can also involve gathering data from all key stakeholders related to the focal enterprise (Cassell & Symon 1994, Berg 2001). We were able to cover a number of the stakeholder "bases". In applying group and individual methods within enterprises, we drew out findings from both a "managerial" and "employee" perspective (though in this particular case, such categories are undermined by the cooperative nature of the enterprises). Key informant interviews covered findings from "government/policy context" and "supplier" perspectives because, in this case, the government support agency that initiated creation of these enterprises was also a supplier of key assets including finance, skills and equipment. (We also commissioned deeper study of these stakeholders through case studies of agencies supporting women's ICT-based enterprises: see Appendix A6 for further details.) Limitations of budget and time prevented us from a more comprehensive stakeholder coverage which would otherwise have incorporated stakeholders such as "enterprise customers", "household members" of the women involved in the enterprise, and perhaps "others" who emerged as significant such as peer group members in the women's home communities.

***Field researchers as sources.*** In a large research project with a hierarchy from the principal researchers down through field research supervisors to field researchers, there can be a tendency to see the latter as automatons: mute machines whose only task is to systematically apply a very structured research instrument. We tried to address this somewhat by asking the field researchers to summarise the "grey data" they had picked up: not just the observational material noted above but all their other reflections about the enterprises in which they had been researching.

## **D. Summary**

We end with a summary list of key points/lessons:

1. Holistic research – based on a multi-disciplinary, multi-method approach – can be a valuable tool in studying women's ICT-based enterprise for development (and for studying broader, related topics such as women and ICTs, or ICT enterprise and development).
2. Relevant disciplines to draw from when developing research instruments include gender studies, business/management studies, development studies, and technology studies.
3. Relevant methods to employ include story-telling, group discussion, individual questionnaire survey, key informant interviews, document analysis, and observation. Many of these can be incorporated into a case study framework.
4. Validity can be enhanced by adopting a common ontological position: positivism, social constructionism, and critical realism are all possibilities.
5. Holistic research can run into problems of repetition, time consumption, and methodological limitations. The parameters of the particular research project will determine the extent to which these can be addressed.
6. It is worth thinking about the cost/benefit equation of involvement in research from the data subjects' perspective: what value will they see from giving up their time to answer questions?
7. The research context will shape responses and it is worth trying to identify and, if possible, compensate for any systematic biases.
8. The research focus can usefully be broadened to include comparison with other enterprises, and questions of future enterprise sustainability. However, Western conceptions of "enterprise" will not necessarily apply to all women's ICT-based enterprises in developing countries.
9. In general, the broader the range of stakeholders whose views can be included, the better. This includes the views of the field researchers themselves.

## References

- APC-WNSP (Association for Progressive Communications - Women's Networking Support Program) (2002) *Gender Evaluation Methodology for Internet and ICTs*. <http://www.apcwomen.org/gem>
- Arun, S., Heeks, R. & Morgan, S. (2004) *Researching ICT-based Enterprise for Women in Developing Countries: A Livelihoods Perspective*, IDPM, University of Manchester, UK. <http://www.womenicnterprise.org/>
- Berg, B.L. (2001) *Qualitative Research Methods for the Social Sciences*, Allyn and Bacon, Boston, MA.
- Cassell, C. & Symon, G. (eds.) (1994) *Qualitative Methods in Organizational Research*, Sage Publications, London.
- DFID (1999) *Sustainable Livelihood Guidance Sheets*, DFID, London.
- Easterby-Smith, M., Thorpe, R. & Lowe, A. (2002) *Management Research*, 2<sup>nd</sup> edn, Sage Publications, London.
- Guba, E.G. (1990) 'The alternative paradigm dialog', in *The Paradigm Dialog*, E.G. Guba (ed.), Sage Publications, Newbury Park, CA, pp. 17-27.
- Hafkin N. & Taggart N. (2001) *Gender, Information Technology And Developing Countries: An Analytic Study*, WID Office, USAID, Washington, DC.
- Harriss, J. (2002) 'The case for cross-disciplinary approaches in international development', *World Development*, 30(3), 487-496.
- Heeks, R., Arun, S. & Morgan, S. (2004) *Researching ICT-based Enterprise for Women in Developing Countries: An Enterprise Perspective*, IDPM, University of Manchester, UK. <http://www.womenicnterprise.org/>
- Kanbur, R. (2001) 'Q-squared? A commentary on qualitative and quantitative poverty appraisal', paper presented at '*Qual-Quant*' Workshop, Cornell University, March 15-16.
- Morgan, S., Heeks, R. & Arun, S. (2004) *Researching ICT-based Enterprise for Women in Developing Countries: A Gender Perspective*, IDPM, University of Manchester, UK. <http://www.womenicnterprise.org/>
- Perren, L. (1999) 'Factors in the growth of micro-enterprises', *Journal of Small Business and Enterprise Development*, 6(4), 366-385.
- Reeves, H. & Baden, S. (2000) *Gender and Development: Concepts and Definitions*. BRIDGE Report No 55, Institute of Development Studies, University of Sussex, UK.
- White, H. (2002) 'Combining quantitative and qualitative approaches in poverty analysis', *World Development*, 30(3), 511-522.

# Appendix: Fieldwork Instruments for Researching Women's ICT-Based Enterprises for Development

## Appendix A1: Story-Telling Proforma

*This is not a question-and-answer interview but a long, loose and wide-ranging opportunity to let women speak, tell their own stories, and introduce the issues that are important to them. Story-telling sessions may need to take place over quite an extended period. Sessions should be taped (if possible) and a full transcription into English provided. The session should be held in private (if possible) and conducted in a relaxed and semi-structured fashion.*

*We suggest starting with Theme 1 – Personal Background – first to help the respondent feel comfortable talking about themselves. Then they should be encouraged to tell their own history in relation to the ICT enterprise – how they got started, what happened next, how it has affected all aspects of their lives, what they plan for the future, and their reflections. The other Themes listed (from 2 to 6) roughly follow this path. They can be used as necessary to guide the story-telling, or to guide follow-up questions and discussion once the main story has been told.*

### **0. Photograph**

If possible, we would like a photograph of the woman telling her story, but only if she is comfortable with this.

### **1. Personal Background**

The respondent should be asked to begin by describing herself and briefly presenting her personal story. Elements to encourage include:

- Personal details: name, age, present job, marital status, children, home location.
- Personal history: brief overview of education and employment.

### **2. Involvement with ICT Enterprise**

Discuss the history of the respondent's involvement with ICTs and with the ICT. For example:

- How did the woman come to be involved with the ICT enterprise?
- How did she/the group choose an ICT enterprise?
- What training did she undertake?
- What work does she do in the ICT enterprise?

### **3. Impact of Working in the Enterprise**

Find out what has been the effect on the respondent's life of joining the ICT enterprise. For example:

- Workplace: what has been good and bad about her working life in the enterprise? Issues like colleagues, income, working hours may come up.
- Home: how has life at home changed for good or bad since joining the enterprise? Issues like childcare, income, relations with husband/family may come up.



- Community: how has her involvement with the local community changed for good or bad since joining the enterprise? Issues like empowerment, status may come up.

#### **4. Issues**

Find out how the respondent views ICTs and gender. For example:

- ICTs: what does the respondent reflect about ICTs: are they a good or bad thing in her life and her community?
- Gender: what does the respondent reflect about the different lives of men and women: how are they different, why are they different, do ICTs change these things?

#### **5. Future**

Find out about the respondent's hope and plans for the future. For example:

- Where does the woman hope her work and her life will go in future?
- What challenges face her in achieving this?

#### **6. Reflection and Advice**

Get the respondent to draw lessons from her work/life story. For example:

- On the basis of her personal history, what advice would the woman offer to other women thinking of getting involved in an ICT-based enterprise?

---- END OF THEMES ---

# Appendix A2: Group Discussion Proforma

## PART A : OVERVIEW

### 1. The Enterprise

1a. Name of Enterprise: \_\_\_\_\_ 1b. At Least Two Photographs

1c. Location: \_\_\_\_\_ 1d. City or Town (*circle one*)  
Population: \_\_\_\_\_

1e. Date of Formation: \_\_\_\_\_

1f. Brief History:

1g. Sector/Activity Classification. What work does the enterprise mainly undertake: indicate the rough percentage contribution of each activity:

IT Training                  Hardware Assembly                  Data Entry                  Other - Specify:

1i. ICT used:

<i>Type of ICTs</i>	<i>Used or Not (enter Y or N)</i>	<i>How Many in Enterprise?</i>
Telephone (fixed)		
Telephone (cell/mobile)		
Ordinary (workstation) PCs		
Powerful (server) computer		
Internet connections		
Other (printer/scanner)		
Software		

## 2. The People

2a. Core Ten Women Members of Enterprise:

	Name ( <i>optional</i> )	Job Role/ Designation in Enterprise	Education ( <i>highest level only</i> )	Other ( <i>age, status, if acceptable to ask</i> )
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

2b. How Many Other Employees Does the Enterprise Have?: \_\_\_\_\_

2c. Details of Other Employees:

<b><i>Question</i></b>	<b><i>Answer</i></b>
How many of the other employees are men?	
How many of the other employees work full-time?	
How many of the other employees work part-time?	

2d. Describe the Various Job Roles/Designations of the Other Employees:

### 3. Enterprise Performance/Outcomes

#### 3a. Current Business Data:

<i>Question</i>	<i>Answer</i>
Total number of staff working in the enterprise	
Total value of sales achieved in 2004 ( <i>measured in local currency</i> )	
Total volume of sales achieved in 2004 ( <i>measured in no., e.g. no. of data entry contracts <u>or</u> no. of PCs sold <u>or</u> no. of IT training courses run <u>or</u> etc.</i> )	
Profit/Loss: any idea of overall profit/loss in 2004?	

#### 3b. Comparison to Two Years' Ago:

<i>Question</i>	<i>Answer</i>
Compared to 2002, how many more or less staff are there in the enterprise?	
Compared to 2002, how much higher or lower is the value of annual sales?	

#### 3c. Monthly Income and Expenditure:

<i>Question</i>	<i>Answer</i>
What is the average expenditure each month (salaries, electricity, rent, etc.)?	
Is any help/subsidy provided for this?	
What is the average income each month?	

#### 3d. Annual Audit Statement:

<i>Latest (e.g. 2004/5) Annual Audit Statement Collected? (Enter Yes or No)</i>	<i>Earlier (e.g. 2002/3) Annual Audit Statement Collected? (Enter Yes or No)</i>

#### 4. Success Analysis

4a. What does or would "success" mean for your ICT enterprise?

4b. How would you measure this kind of success?

4c. In these terms, is your ICT enterprise a success or not?

4d. Main Success Factors? (*List a maximum of three factors that have facilitated the success or survival of the enterprise, including any supporting evidence*):

- 1.
- 2.
- 3.

4e. Would things be better for the members if they worked in a non-IT enterprise (e.g. making food or garments)? Please explain why.

## **PART B : POSITIVE AND NEGATIVE IMPACTS**

### **5. Enterprise Benefits**

#### *5a. Baseline Assets of Enterprise:*

<i>Asset</i>	<i>Quantity/Level</i>	<i>Source of Ownership: Purchased or Inherited or Rented</i>
<i>1. Natural assets (e.g. land)</i>		
<i>2. Human assets</i>	<i>Already covered in section 2</i>	<i>Not applicable</i>
<i>3. Financial assets</i>		
3i. Amount of institutional loan taken (from formal banks, specify purpose)		
3ii. Amount of non-institutionalised loan		
3iii. Amount of informal loan (from friends etc)		
3iv. Amount of balance remaining in enterprise bank account		
<i>4. Physical assets</i>		
4i. Building		
4ii. Vehicles		
<i>5. Technology</i>		
5i. Hardware: PC, printer, scanner, UPS	<i>As specified in Part A</i>	
5ii. Telephone, Fax	<i>As specified in Part A</i>	
5iii. Software	<i>As specified in Part A</i>	
5iv. Other Technology		
<i>6. Social capital, e.g. social networks</i>		
<i>7. Political capital, e.g. political networks</i>		

**5b. Overall Changes to Assets During Past 3 Years:**

--

**5c. Direct Benefits to the Enterprise:**

<b>Question</b>	<b>Answer (with an example)</b>	<b>What has helped the enterprise to get this benefit?</b>
1. What technical skills have the women developed during their work?		
2. What skills have the women developed in running an enterprise (e.g. marketing, financial management)?		
3. What managerial/supervisory skills have the women developed?		
4. What income do the women gain personally each month?		
5. What other loans has the enterprise been able to provide the women?		
6. What useful contacts and networks are the women now in touch with thanks to the enterprise?		
7. How is their role in the community different thanks to working in the enterprise?		
8. How are their role and relations vis-à-vis men different from before?		
9. Have their attitudes and confidence changed since before being in the enterprise?		
10. Are they treated differently by their family since working in the enterprise?		
11. Do they participate more than before in any political activities?		
12. Does the enterprise's work have any impact on the local natural environment?		

**5d. Indirect Benefits:**

<b>Question</b>	<b>Answer, including Examples of Benefits</b>
1. What has the enterprise overall spent its money on?	
2. What have the women members spent their income on?	
3. How has the local area and community benefited from the presence of the enterprise?	
4. What benefit have the women experienced within their own household?	
5. Are there particular benefits because they work in an ICT enterprise as opposed to a non-ICT enterprise?	
6. What other direct or indirect benefits have the women experienced?	

**5e. Overview of Benefits:**

<b>Question</b>	<b>Answer</b>
1. Out of all the benefits, which are the <u>two</u> most important?	
2. If the enterprise closed tomorrow, which of the direct and indirect benefits just discussed would the women still have?	

**6. Enterprise Disadvantages/Negative Impacts**

What do you see as the three main disadvantages/negative impacts of working in an IT enterprise? Examples could be:

- Income: Loss of other income due to time spent at enterprise.
- Relationships: Damage to family relations due to work at enterprise or Danger of arguments with fellow enterprise members.
- Workload: Overloading of work due to adding work role to other commitments.
- Vulnerability: Reliance on enterprise for job and income is dangerous if the enterprise does not succeed.

1.
2.
3.



## **PART C : ENTERPRISE PLANNING & MANAGEMENT**

### **7. Value Chain Analysis**

#### **7a. Market Analysis:**

<i><b>Question</b></i>	<i><b>Answer</b></i>
<i><b>1. Demand Analysis:</b></i>	
1i. Who are your main customers?	
1ii. What is the proportion of income/work from each main type of customer?	
1iii. How did you find <u>these</u> customers?	
1iv. Are sales to these customers likely to grow or fall in the future?	
1v. Are these customers quite demanding in terms of the quality of work and delivery time schedule they demand, or not so demanding?	
1vi. How could you find other, new customers?	
<i><b>2. Competition Analysis:</b></i>	
2i. Who are your main competitors?	
2ii. How has the number of competitors changed over the past year or so?	
2iii. Are you more or less successful than your competitors?	
2iv. Why?	
2v. Are you more or less successful than other ICT enterprises?	
2vi. Why?	

#### **7b. Inputs/Resources:**

<i><b>Input/Resource</b></i>	<i><b>How do you obtain this resource?</b></i>	<i><b>Are there any problems in getting this resource?</b></i>
1. Labour/other staff		
2. Technical skills		
3. Management skills		
4. ICT hardware and software		
5. Finance		

6. Information about customers and competitors		
7. Your building		

**7c. Value Chain:**

<b>Question</b>	<b>Stage 1: Marketing &amp; Getting Contract</b>	<b>Stage 2: Preparation for Operations</b> (e.g. getting details of what is required)	<b>Stage 3: Core Activity</b> (e.g. doing the data entry, or doing the training, or assembling the PC)	<b>Stage 4: After Operations</b> (e.g. finishing contract or doing post-contract support)
1. What activities do you do during this stage?				
2. What people and organisations are involved?				
3. What is the most important thing to do very well in this stage?				
4. What problems do you have with this stage?				

## 8. Enterprise Analysis

### 8a. Growth

1. Does the group see growth (i.e. more sales, more staff) as something they would like to achieve? Yes or No (*delete one*)

2. If yes, what kind of growth would they like to achieve?

3. Does growth of this kind bring more problems or more benefits? (explain)

### 8b. Finance

1. Is income greater than costs/expenditure?

### 8c. Competitiveness

1. Do you have a strategy to help you to stay in business?

2. Does that strategy include any of the following (and if so, which)?

- i/ charging lower prices than competitors
- ii/ producing better quality goods/services than competitors
- iii/ doing things differently from competitors
- iv/ selling to customers that competitors don't address

3. How will you achieve your strategy?

## 9. Context Analysis

9a. Stakeholder analysis:

	<i>Who are they</i>	<i>Nature of relationship</i> (independent, linked, etc)	<i>Impact on enterprise</i>
Customers			
Competitors			
Suppliers of ICT hardware and software			
Government organisations			
Family/Friends			
Local community organisations			

9b. What are the particular challenges of running an enterprise based on ICTs (as compared to a non-IT enterprise)?

9c. What are the particular benefits and challenges of being women when running an enterprise (as compared to being men)?

Benefits:

Challenges:

9d. Enabling/disabling influences from the environment (e.g.: impacts from outside influences)

1. Are there specific government policies locally that have affected your enterprise in a good or a bad way?

<i>Government Policies</i>	<i>Positive Effect</i>	<i>Negative Effect</i>

2. Are there specific political practices locally that have affected your enterprise in a good or a bad way?

<i>Political Practices</i>	<i>Positive Effect</i>	<i>Negative Effect</i>

3. Are there specific economic factors locally that have affected your enterprise in a good or a bad way?

<i>Economic Factors</i>	<i>Positive Effect</i>	<i>Negative Effect</i>

4. Are there specific cultural factors locally that have affected your enterprise in a good or a bad way?

<i>Cultural Factors</i>	<i>Positive Effect</i>	<i>Negative Effect</i>

5. Are there specific technological factors locally that have affected your enterprise in a good or a bad way?

<i>Technological Factors</i>	<i>Positive Effect</i>	<i>Negative Effect</i>

6. Are there any other specific factors locally that have affected your enterprise in a good or a bad way?

<i>Other Local Factors</i>	<i>Positive Effect</i>	<i>Negative Effect</i>

## 10. SWOT Analysis of the ICT Enterprise

<i>Enterprise Strengths</i>	<i>Enterprise Weaknesses</i>
<i>Market Opportunities</i>	<i>Threats</i>

## 11. Sustainability

11a. How sustainable are the following key factors in your opinion (i.e. how likely are they to continue in the future)?

<i>Factor</i>	<i>How Likely to Continue (give reasons)</i>
1. Demand and customers for what the enterprise produces	
2. The motivation of the enterprise members to continue	
3. The support and help of government	

## 12. Good Practice

12a. What good practices could you recommend for other women running an IT enterprise in the following areas?

<i>Activity</i>	<i>Good Practice (give examples and explain why this is a good practice)</i>
Finding new customers	
Obtaining/keeping staff	
Obtaining hardware and software	
Building ICT skills	
Managing money	
Managing operations	
Maintaining contacts and relationships	

12b. If you think about your enterprise's work, are there are other good practices – things that you do particularly well – that you can identify?

--

### 13. Actions and Support

13a. What should the enterprise members themselves try to do to address the enterprise's main problems?

--

13b. In their opinion, what outside help and support do IT enterprises need?

<i>Question</i>	<i>Answer</i>
1. What help and support is needed in relation to finance?	
2. What help and support is needed in relation to training?	
3. What help and support is needed in relation to management?	
4. What help and support is needed in relation to marketing?	
5. What help and support is needed in relation to hardware/software?	
6. Is there other help that is needed?	

13c. What organisation should provide this help and support: government, NGO, private sector, or who?

--

---- END OF QUESTIONS ---

## Appendix A3: Individual Questionnaire Survey Proforma

### 1.1. Background Information

<i>Question</i>	<i>Answer</i>
1a. Name	
1b. Name of ICT enterprise	
1c. Other qualifications	
1d. Monthly earnings from enterprise	
1e. Monthly earnings from other sources (please state amount and source)	
1f. Marital status	
1g. No. of children	

### 2. Details of Work in the Enterprise

<i>Question</i>	<i>Answer</i>
2a. Length of employment period within the enterprise	
2b. Training obtained (what and from whom)	
2c. Work undertaken in enterprise	
2d. Decision-making/Managerial power in the enterprise	
2e. Level of job satisfaction	
2f. Long-term career plan	

### 3. Vulnerabilities

3a. Extent of risk/vulnerabilities and their outcomes (individual) before joining the enterprise

<i>Type of Vulnerability</i>	<i>Outcome</i> (Circle one or more as appropriate or add to list)
1. Labour vulnerabilities	- Lack of income - Lack of employment - Other (please specify):
2. Human capital vulnerabilities	- Lack of appropriate skills (please specify): - Disability - Old age - Other (please specify):



3. Economic vulnerabilities	- Debt - Lack of assets/equipment to earn money - Other (please specify):
4. Household vulnerabilities	- Lack of help with children/elderly - Lack of help with other household needs (e.g. disability in household) - Problems of abuse/violence - Other (please specify):
5. Community vulnerabilities	- Crime or harassment - Lack of good contact and relations - Other (please specify):
6. Other	- Any other key source of problems difficulties prior to joining enterprise:

3b. Overall changes to vulnerabilities during time working for enterprise:

--

**4. Relative Contribution to Household Expenditure per Month, by Gender**

<i>Household expenditure</i>	<i>% Contribution by male (all)</i>	<i>% Contribution by female (all)</i>
4a. Food		
4b. Clothing, essentials		
4c. Housing		
4d. Utilities, electricity, fuel, etc.		
4e. Medical		
4f. Education		
4g. Transport		
4h. Savings		
4i. Alcohol/smoking/chewing		
4j. Gambling/entertainment		
4k. Repayment of debt		
4l. Social expenses (e.g. marriage, festivals)		
4m. Other		

## 5. Monthly Income of Household, by Gender

6. Individual Benefits/Outcomes from Participation in ICT Enterprise	<i>Income source for household</i>	<i>Who earns income</i>		<i>Who controls income</i>		<i>Who benefits from income</i>		
		M	F	M	F	M	F	Family
	5a. Farm-related income							
	5b. Business-related income (including ICT enterprise)							
	5c. Other wage labour							
	5d. Remittance income							
	5e. Total monthly income							
	5f. Per capita monthly income by gender							

### prise (leading to sustainable outcomes)

<i>Benefit</i>	<i>Have you had this Benefit? (Yes/No)</i>	<i>If Yes, Give an Example</i>
<i>6a. Employment benefits</i>		
1. Employment stability		
<i>6b. Skill benefits</i>		
1. Technical skills		
2. Language and personal skills		
3. Entrepreneurial skills		
4. Management/supervisory skills		
<i>6c. Financial benefits</i>		
1. Income level		
2. Income stability		
3. Changes in physical assets, e.g. vehicles, machinery, property		
<i>6d. Social capital benefits</i>		
1. Networks/contacts		
2. Community		
<i>6e. Social empowerment</i>		
1. Confidence		
2. Community level participation		
3. Gender awareness, e.g. about women's issues		
<i>6f. Political empowerment</i>		
1. Participation in political activity		

7. Are there any changes in gender roles within household, e.g. main earner, decision making?

8. Who is responsible for childcare – now and before working for ICT enterprise?

9. How would you define success for yourself in being involved with the ICT enterprise? (e.g. income, employment, empowerment, etc.)

10. Are there any negative impacts that have happened because of your work with the ICT enterprise?

11. Would things be better or worse for you if you were working in a non-ICT enterprise (e.g. doing food processing or making garments)? Please explain why.

---- END OF QUESTIONS ---

## **Appendix A4: Key Informant Interview Proforma**

*This is a semi-structured interview guide for those working in agencies supporting women's ICT-based enterprises. You should try to cover all of the issues/questions detailed but the ordering and depth of answers can be guided by the interviewee.*

1. What are the agency benefits of supporting women's ICT-based enterprises?  
(Examples if needed might be achievement of development goals or political kudos)
2. Are there issues related to the sustainability of the enterprises?  
(If needed, these could be seen as related to sustainability of demand for what enterprise produces, of inputs, of motivation, of agency support, etc.)
3. How has the agency determined its support strategy, including issues such as who to support (selection of target groups); what to provide as support (finance, advice, training, social capital, technology, integrated); how to provide support (charged or free, customised or standardised); and how long to provide support for?
4. How are monitoring and evaluation conducted (e.g. via annual reports, meetings, etc.) and what feedback does this provide about enterprise performance (e.g. benefits to women, competitiveness of enterprises, etc.)?
5. Are there risks for women of the ICT-based enterprise route?  
(If needed, examples could include increased dependency, over-exploitation, high debt levels.)
6. Are there particular good practices identifiable among ICT enterprises?  
(If needed, can prompt around issues like enterprise management, client relations, marketing, training, etc.)
7. How do the ICT enterprises compare with non-ICT enterprises supported (for example in terms of benefits, growth, sustainability)?  
7a. Are there any official figures the agency keeps on different enterprises?
8. What key lessons has the agency learned about supporting ICT-based enterprises?
9. What advice would be offered to other agencies seeking to support ICT-based enterprises/

---- END OF QUESTIONS ---

## Appendix A5: Case Sketch Proforma

### 1. The Enterprise

1a. Name of Enterprise: \_\_\_\_\_

1b. Enterprise Photograph

1c. Location (Town/City and Country): \_\_\_\_\_

1d. Town/City Approximate Population: \_\_\_\_\_

1e. Date of Enterprise Formation: \_\_\_\_\_

1f. Brief History, Including Initial Finance:

Source of initial finance:

Other brief history:

1g. Sector/Activity Classification. What work does the enterprise mainly undertake (*circle all that apply*):

IT Training    Hardware Assembly    Data Entry    Web Design    Other (explain):

1h. Customer/Activity Description. Describe what work the enterprise undertakes and who its main customers are:

Work/activity:

Customers:

1i. ICT hardware used:

<i>Type of ICTs</i>	<i>Type Used?</i>	<i>How Many in Enterprise?</i>
Telephone (fixed)		
Telephone (cell/mobile)		
Ordinary (workstation) PCs		
Powerful (server) computers		
Internet connections		
Software		

## 2. The People

2a. Core Women Members of Enterprise (i.e. owner, manager, key full-time staff):

	Name ( <i>optional</i> )	Job Role/ Designation in Enterprise	Education ( <i>highest level only</i> )	Other ( <i>age, status, if acceptable to ask</i> )
1				
2				
3				
4				
5				
6				
7				
<i>etc</i>				

2b. How Many Other Employees Does the Enterprise Have?: \_\_\_\_\_

2c. Details of Other Employees:

<b><i>Question</i></b>	<b><i>Answer</i></b>
What work do the other employees do?	
How many of the other employees are men?	
How many of the other employees work full-time?	
How many of the other employees work part-time?	

2d. Describe the Various Job Roles/Designations of the Other Employees:

### 3. Enterprise Performance/Outcomes:

#### 3a. Current Business Data:

<i>Question</i>	<i>Answer</i>
Total number of staff working in the enterprise	
Total value of sales achieved in 2004 ( <i>measured in US\$ equivalent</i> )	
Total volume of sales achieved in 2004 ( <i>measured in no., e.g. no. of data entry contracts <u>or</u> no. of PCs sold <u>or</u> no. of IT training courses run <u>or</u> etc.</i> )	
Profit/Loss: any idea of overall profit/loss in 2004?	

#### 3b. Comparison to Two Years' Ago:

<i>Question</i>	<i>Answer</i>
Compared to 2002, how many more or less staff are there in the enterprise?	
Compared to 2002, how much higher or lower is the value of annual sales?	

#### 3c. Current Monthly Income and Expenditure for Enterprise:

<i>Question</i>	<i>Answer</i>
What is the average expenditure each month (salaries, electricity, rent, etc.)?	
Is any help/subsidy provided for this?	
What is the average income each month?	

#### 4. Enterprise Factor Analysis

4a. Main Success Factors? (*List a maximum of three factors that have facilitated the success or survival of the enterprise, including any supporting evidence*):

1.
2.
3.

4b. Main Benefits? (*List a maximum of three benefits that the women involved have obtained from the enterprise, including any supporting evidence and monthly income paid to the individual women*):

1. Monthly wage for individual women:
2.
3.

4c. Main Negative Impacts/Risks? (*List a maximum of three negative impacts that the women have experienced (or main risks they fear), including any supporting evidence*):

1.
2.
3.



4d. Management Good Practices? (*List a maximum of three good management practices that the women involved feel they have used in the enterprise, including any supporting evidence*):

1.
2.
3.

4e. Main Challenges? (*List a maximum of three challenges that the women involved face in running this ICT-based enterprise, including any supporting evidence*):

1.
2.
3.

4f: Other Details. Here, add any other information about this women's ICT-based enterprise that that appears interesting or relevant:

---- END OF QUESTIONS ---

## **Appendix A6: Agency Case Study Proforma**

### **1. Agency Overview:**

- 1a. Name of the agency:
- 1b. If possible, attach a photograph of the agency.
- 1c. Location (give town/city and country):
- 1d. Town/city approximate population:
- 1e. Agency sector (i.e. is this a government, NGO or private sector organisation):
- 1f. Date of agency formation:
- 1g. Brief history – give a brief history of the agency since its formation:
- 1h. How many staff work in the agency?
- 1i. Describe the job title and job role of all main agency staff:
- 1j. Very roughly, what is the annual expenditure budget for the agency?

### **2. Why the Agency Helps Women's ICT-Based Enterprises:**

- 2a. What is the reason why the agency helps women's ICT-based enterprises?
- 2b. Does the agency have a particular goal or target in its work with women's ICT-based enterprises?
- 2c. What benefits does the agency itself gain from helping women's ICT-based enterprises (e.g. access to donor funds, political kudos, good publicity, etc)?
- 2d. Are there any risks for the agency itself in working specifically with women's ICT-based enterprises (e.g. danger that such enterprises are "here today, gone tomorrow", difficulties of keeping agency staff up-to-date with ICT skills, poor loan repayment, etc.)?

### **3. Whom Does the Agency Support?**

- 3a. How many women's ICT-based enterprises has the agency supported in the last 12 months?

3b. What type of ICT-based activity are these enterprises engaged in? Please highlight all that apply:

<i>Cybercafe/telecentre</i>	<i>Data entry</i>	<i>IT training</i>	<i>Software programming</i>
<i>Web design</i>	<i>IT consulting</i>	<i>Hardware assembly</i>	<i>Other – please specify:</i>

3c. What size (in terms of number of staff) are the women's ICT-based enterprises?

3d. Please describe any other important characteristics of the women's ICT-based enterprises that are helped (e.g. if they are all from poor communities, or all from rural areas, or all from particular sections of the community, etc):

#### **4. What Support Does the Agency Provide?**

4a. Money: Does the agency provide finance/loans to women's ICT-based enterprises: Yes or No?

If "Yes", explain the nature and purpose of the money provided.

4b. Training: Does the agency provide training to women's ICT-based enterprises: Yes or No?

If "Yes", explain the nature and purpose of the training provided.

4c. Advice: Does the agency provide advice to women's ICT-based enterprises: Yes or No?

If "Yes", explain the nature and purpose of the advice provided.

4d. Technology: Does the agency provide technology (hardware, software, telecoms) to women's ICT-based enterprises: Yes or No?

If "Yes", explain the nature and purpose of the technology provided.

4e. Marketing: Does the agency provide marketing assistance to women's ICT-based enterprises: Yes or No?

If "Yes", explain the nature and purpose of the marketing assistance provided.

4f. Other Business Help: Does the agency provide other kinds of business-related assistance to women's ICT-based enterprises: Yes or No?

If "Yes", explain the nature and purpose of the other business-related assistance provided.

4g. Social Welfare: Does the agency provide social welfare assistance to women's ICT-based enterprises: Yes or No?

If "Yes", explain the nature and purpose of the social welfare assistance provided.

4h. Any Other Help: Does the agency provide any other kind of assistance to women's ICT-based enterprises: Yes or No?

If "Yes", explain the nature and purpose of the other assistance provided.

## **5. Support Good Practice:**

5a. Get the agency to provide three examples of what they feel is good practice in the way they provide support to women's ICT-based enterprises. As well as explaining what the good practice is, the agency should also try to say why they think this is a good practice.

## **6. Needs Analysis:**

6a. What methods does the agency use to find out what help the women's ICT-based enterprises need?

## **7. Methods of Providing Support:**

7a. In providing support such as training or advice, does the agency use existing training/advice sources, or did it create its own training/advice channels?

7b. In providing support to women's ICT-based enterprises, does the agency think it is better to provide a standard package of support, or to tailor-make support to each individual enterprise seeking assistance?

7c. Does the agency charge money to the women's ICT-based enterprises for the support it provides, or does it provide that support for free?  
If it charges money, please give one or two examples of the level of charges levied.

7d. Is it necessary to provide "gender-sensitised" support to women's ICT-based enterprises: Yes or No?  
If "Yes", please give one or two examples of how you can gender-sensitise an agency's support.

## **8. Evaluating the Support Provided:**

8a. Does the agency have any way to evaluate the support that it provides to women's ICT-based enterprises?: Yes or No  
If "Yes", please explain how it does the evaluation.

8b. Does the agency keep any records about the ongoing performance of the women's ICT-based enterprises it supports (e.g. level of sales, profitability, asset base, etc)?:  
Yes or No  
If "Yes", please explain what the records contain and how they are gathered.

**9. Factor Analysis:**

9a. What are the three main critical success factors behind the agency's work with women's ICT-based enterprises? Get the agency also to explain/justify the factors chosen.

9a. What are the three main challenges that the agency faces in trying to support women's ICT-based enterprises? Get the agency also to explain/justify the challenges chosen.

**10. Reflection on Lessons Learned:**

10a. If this agency was giving advice to another agency about helping women's ICT-based enterprises, what would be the three key "lessons learned" that it would pass on?

**11. Other:**

11a. If there are any other useful points about the agency's work with women's ICT-based enterprises, please detail them here:

---- END OF QUESTIONS ---