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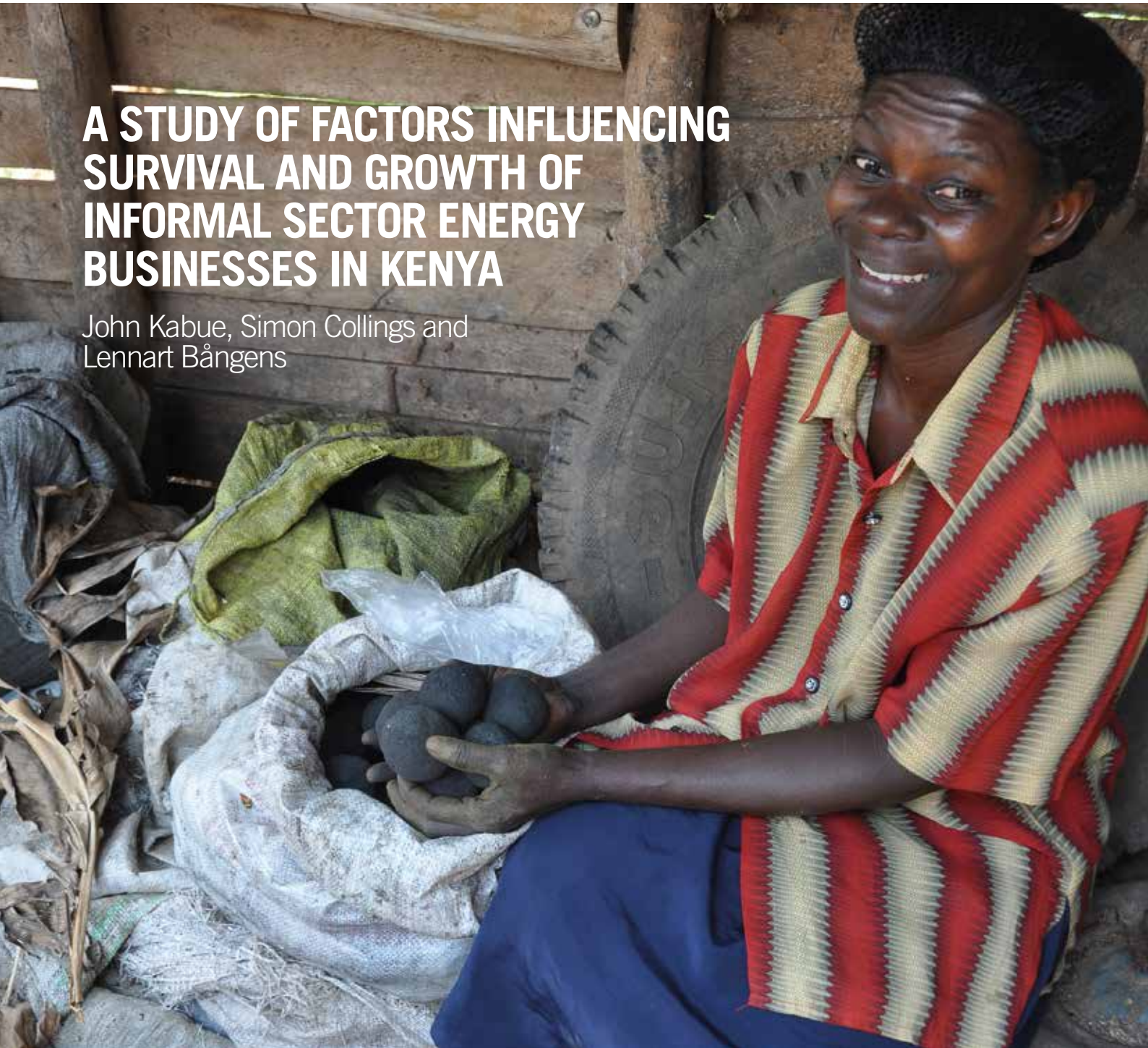
HOW DO ENERGY MICRO-BUSINESSES GROW PART2



A STUDY OF FACTORS INFLUENCING SURVIVAL AND GROWTH OF INFORMAL SECTOR ENERGY BUSINESSES IN KENYA

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CARE2 ....Capital Access to Renewable Energy Enterprises
DEEP .... Developing Energy Enterprises Project
eMSMES ....Energy Micro, Small and Medium Enterprises
GVEP .... Global Village Energy Partnership
SACCOs ....Savings and Credit Cooperative Society
ICS.... Improved cook stoves
LPG....Liquefied Petroleum Gas
SIDA....Swedish International Development Cooperation Agency
ROSCAS .... Rotating Savings and Credit Associations

EXECUTIVE SUMMARY

This post project survey was conducted in Kisumu, Kisii, Central and Coastal regions of Kenya in the month of March 2015.

The target respondents of this study were energy micro entrepreneurs who benefited from the Developing Energy Enterprises Programme (DEEP) that ended early 2013. The objective of the survey was to study a small set of factors potentially correlated with growth across these Kenyan DEEP businesses. A secondary objective was to try to establish how many of the enterprises were still in business, and how many had expanded after the programme closed. The research built on a previous qualitative phase in which in-depth interviews were conducted with 17 enterprises (How do energy micro-businesses grow? Bångens and Collings, GVEP, 2015). These interviews were used to generate a series of research questions to be further addressed in the wider sample.

The survey findings identify three categories of entrepreneurs: businesses that closed, businesses that are still operating but are stagnant, and those that are experiencing growth and expansion. Most of the surviving businesses were still offering energy products and services but a small number had switched to other types of commercial activity. A little under half of the surviving businesses exhibit various indicators associated with growth including: opening new outlets, buying new machinery and tools, and diversifying stock.

The following were key results of the survey findings:

- 125 (79%) of the 159 businesses surveyed still exist, 34 (21%) had closed down.
- 52% of the entrepreneurs with surviving businesses derive their main livelihood from energy business, while 26% depend on agricultural activities, and 22% rely mainly on other sources of income e.g. paid employment, trading in foodstuffs.
- Out of the 125 surviving businesses, 57% specialise in the same technologies as under DEEP, while 33% sell the same products but have also diversified into other energy products. A small number (10%) shifted the focus from energy business to other product lines.
- 61 businesses (49%) reported that their business had expanded and for 35 (28%) businesses the enumerators were able to physically verify evidence of investments in machinery, buildings and stock.
- 58 of the entrepreneur's reported that they had created both permanent and temporary jobs in the last two years (that is 46% of the surviving businesses.)
- 63% of the surviving businesses reported that they still practice record keeping while 37% do not. Inspection of records held by those who claimed to keep them showed record keeping was incomplete or not up to date for around half.
- 42 entrepreneurs were granted loans in DEEP. 86% of these (36 businesses) took out further loans after the programme ended.

- 83 entrepreneurs did not secure loans in DEEP. 30% of these (24 businesses) secured loans after the programme ended.

Survival and growth rates are high for the informal sector, a reflection in part of the way the project selected businesses for support but also a result of the support provided. There was a strong correlation between businesses reporting growth and those which secured loans. The correlation between growth and good record keeping was less clear cut. The entrepreneurs leading the 'growth' businesses were more likely to have a secondary education or above, when compared to all 159 businesses surveyed. But a minority of growth businesses were led by people with no formal education. Growing businesses were more likely to be led by people under 35 years of age or over 47, though people from all age groups were represented in the 'growth' segment.

Men and women showed equal levels of business achievement, with no significant differences observed between the sexes. Female entrepreneurs whether successful or not were almost all married. Very few were widowed or single. New jobs reported by the surviving businesses were fairly evenly divided between men and women, with a slight tendency for temporary jobs to be occupied more by males.

The majority of the businesses which grew and added jobs are amongst a group selected to also participate in a subsequent programme called Capital Access for Renewable Energy Enterprises (CARE2). GVEP staff deliberately selected those businesses it considered the strongest from DEEP to join others recruited to the new programme. Under CARE2 the businesses supported are stove and briquette makers with a minimum threshold set for production volumes. The involvement of these businesses in CARE2 means some of the data has to be treated with caution. The findings are broadly consistent with the observations in Bångens and Collings (2015), though there are also some differences.

SURVIVAL AND GROWTH RATES ARE HIGH, A REFLECTION IN PART OF THE WAY THE PROJECT SELECTED BUSINESSES FOR SUPPORT BUT ALSO A RESULT OF THE SUPPORT PROVIDED. THERE WAS A STRONG CORRELATION BETWEEN BUSINESSES REPORTING GROWTH AND THOSE WHICH SECURED LOANS.

INTRODUCTION

Developing Energy Enterprises Project (DEEP) was a five-year project funded by the European Commission and the Dutch government.

The project was implemented by GVEP in Kenya, Uganda and Tanzania from March 2008 to March 2013. During the implementation period a total of 1,190 eMSMEs were engaged with, of which 380 entrepreneurs were located in Kenya, 466 and 343 in Uganda and Tanzania respectively. Some of these businesses dropped out during the course of the programme. Some had expected to receive funding and withdrew when they realized they would not get grants, some lost interest, moved or changed focus. In a few cases the entrepreneurs died and trading ceased. The project supported a wide range of technologies across the three countries with solar phone charging, improved cook stoves and briquettes being the predominant technologies. Other technologies being supported were: sales of solar PV lighting products, and biogas.

Entrepreneurs were recruited and trained on a variety of skills key among them being customer care, record keeping, business skills, marketing, etc. Capacity building on technical skills was also delivered in order to ensure continuous delivery of services to the customers. Marketing development activities and networking events were key pillars of driving sales and accelerating growth. These market development events were held with the aim of assisting entrepreneurs to reach new customers, make sales, and build customer relationship and loyalty. Networking events were held with a purpose of creating business linkages and commercial relationships within value chains. A customized action plan was developed by each entrepreneur with the support of project staff. These action plans were intended to guide the entrepreneurs on how to independently identify their business gaps, propose mitigations and implement action plans with timelines.

Towards closure of DEEP a similar initiative funded by Swedish International Development Agency was launched as the Capital Access for Renewable Energy Enterprises (CARE2) project. CARE2's project model and approach is similar with slight changes based on the lessons learnt from the previous project. During the recruitment of entrepreneurs for the new project there was a request to consider some DEEP entrepreneurs. The request was granted but subject to new recruitment selection criteria, which meant only the stronger businesses were eligible for CARE2. This post impact survey has studied 159 micro businesses that could be reached (49 are currently CARE2 enterprises while 110 are non-CARE2 businesses) and analysis of their performance is discussed later in this report. The report aims at informing future project implementation strategies.

THE SURVEY OBJECTIVES

The programme team, with the support of GVEP's Director of Innovation and Learning and the monitoring & evaluation department, documents lessons from programme delivery in order to continuously improve programme effectiveness.

Research is undertaken from time to time as part of this process, and this study is part of that ongoing exercise. The post-programme survey was carried out in Kisumu, Kisii, Central and Coast regions of Kenya where the DEEP project was implemented. Of the original 380 businesses engaged with during DEEP contact details were verified for 210 businesses. Of the other 170 businesses which GVEP did not have contacts for, 52 were found to have moved or closed, and in a further 7 cases we found the entrepreneur had died. For the other 111 we either did not have contact records on file or the enterprises were in remote locations and could not be visited to check their status.

We attempted to interview all of the 210 businesses for which there were valid contact details – including those which had closed. The businesses were not selected on a random basis, and the businesses that were interviewed were those it was physically possible to access during the field work. A total of 159 energy enterprises were reached during the survey period. The businesses found by the enumerators were asked a series of standardized questions covering business ownership/organization, business finance, loan management, record management, and performance.

The study built on 17 in-depth interviews conducted in late 2014 with micro-businesses supported by DEEP in Tanzania and Kenya (How do energy micro-businesses grow, Bångens and Collings, GVEP, 2015.). These interviews were used to generate a series of research questions which were explored in this quantitative survey.

The main objectives of the post-project survey were:

- To find out if the businesses supported during DEEP still exist.
- To find out if there has been expansion and growth.
- To establish whether the factors identified in the in-depth interviews as possibly correlated with growth, e.g. education level, experience, securing of multiple loans, were also present in the larger sample.
- To understand whether the performance of male and female enterprises differed.

The survey was designed to capture data which could help address the above objectives.

METHODOLOGY

4.1 SURVEY INSTRUMENT

This study employed a questionnaire as the instrument for collecting data. The questionnaire contained open-ended and close-ended questions (multiple choices). The questionnaire was divided into two sections: (a) demographic details (b) information on matters regarding business ownership/organization, business expansion, and business finance (see Annex 1). The questionnaire was considered appropriate in this study because it was quick to administer and the researchers were able to collect information from many respondents in a short space of time. Respondents were interviewed in private.

Content validity of the research instrument was established in order to make sure that it reflected the concept variables in question. A research instrument is considered valid if it actually measures what it is supposed to measure and data collected should accurately represent the respondent's opinion. The validity of the instrument was ascertained by conducting a pilot study with the first four questionnaires during the first day of the data collection exercise. The objective of the pilot was to eliminate any ambiguous items, establish if there were problems in administrating the instrument, test data collection instructions, establish feasibility of the study, anticipate and amend any logical and procedural difficulties regarding the study. After the pilot there were no amendments recommended.

4.2 SAMPLE SELECTION

The survey did not aim to select a representative sample from the entire population but sought to interview all the respondents for whom GVEP had contact information prior to interviews. Out of 210 entrepreneurs for whom contact details were available, the survey team managed to interview 159 respondents with 49 in central, 50 in Coast, 18 in Kisii and 42 in Kisumu cluster.

4.3 RECRUITMENT AND TRAINING OF ENUMERATORS

Four enumerators were recruited to conduct the data collection exercise. The enumerators were recruited from the localities to be surveyed to ensure they understood the social composition and cultural dynamics of the study area. The understanding of their respective geographical regions was an advantage in tracing the entrepreneurs since it had been exactly two years since the closure of the DEEP project. To enhance quality in the data collection exercise, the survey employed enumerators who were used previously for conducting a customer satisfaction survey for the CARE2 project. They were therefore recommended for this survey based on their previous experience.

The enumerators participated in a training prior to the survey. They were trained on understanding the content of the questionnaire, purpose of the survey and expected deliverables. The enumerators were supervised by GVEP staff to provide quality control.

4.4 DATA COLLECTION, CODING, ENTRY AND ANALYSIS AND PRODUCTION OF REPORT

The data collection exercise was conducted using a questionnaire. The exercise was carried out concurrently for all the clusters and lasted for four days from 23-27 March 2015 . Only Kisumu cluster had an extension of an extra day (28 March) due to long distances in locating the entrepreneurs. Interviews were held at the business location site as this enabled the enumerators to record some information through observations. Out of 159 interviewees, 116 were owners of their business while 43 were not the owners – some were sons, daughters, or other relative of the owners, or in some cases staff. The questionnaire was filled in during the interview by the enumerator and additional comments were provided where applicable. The responses of the entrepreneurs were coded sequentially to allow data to be cross-tabulated. The data entry exercise was conducted on a daily basis, and remaining pending data was entered four days later. A sample of 30% of hard copy questionnaires were picked randomly per cluster and reconciled with data entered in a soft copy. On average there were 2 questionnaires per cluster not entered correctly for 1 or 2 questions. These errors were corrected but the possibility of small numbers of miscoded responses remains for forms which were not checked.

The data analysis was generated by aggregating the data and plotting responses for each question. Relevant data fields were then cross tabulated to establish whether there was a correlation between businesses reporting growth and those which also had loans, claimed to have created jobs, and those which were keeping records. Overlap of this group with the businesses participating in the follow on CARE2 programme was checked. Any variances between this 'growth' group and the wider sample of 159 businesses were checked for age profile, time business had existed, education, gender, and marital status.

4.5 POSSIBLE RESEARCH BIASES ENCOUNTERED.

1. **"Sample bias."** As noted earlier this was not a random sample. We interviewed all of the businesses we could locate within the time available.
2. **"Respondent bias."** Respondents may be tempted to provide incorrect answers especially in the event they suspect that their responses may lead to support from donors. For each enterprise, the enumerators explained the objectives of the study to avoid this bias.
3. **"Cultural bias."** Enumerator's dress code and use of slang language may hinder openness while responding to the survey questions. In every cluster enumerators dressed decently and were advised to use the local language during the interview.
4. **"Enumerator bias."** Enumerators may be tempted to give their own personal view of the subject matter in question during the interview. During the training the team emphasized this using role play to train the enumerators in facilitating the interview and recording responses exactly as given. Enumerators were also cautioned not to show verbal or non-verbal responses to the answers given by the interviewee as this may skew the results.
5. **"None response bias."** The entrepreneurs who were not recommended for CARE2 project might be less willing to respond to questions. To minimize the bias the respondents were informed that the CARE2 project wanted to support a new group of energy entrepreneurs rather than those GVEP had worked with before. The purpose of the study was also described. Interviewees were told that their honest responses would help us shape our programme delivery approaches.
6. **"Confidential bias."** In order to ensure the confidentiality of the responses from the respondents, the enumerators were advised to conduct the interviews in the absence of the crowd. All data in this report has been anonymised.

The following measures were taken to further minimize the risk of bias:

- Hired university graduates who are conversant with local language and cultural dynamics. The enumerators were previously used by GVEP to conduct a customer satisfaction survey in their respective regions.
- Proper pre-planning of the survey, training of the enumerators and close supervision of the exercise.
- Completed questionnaires were sampled daily for verification and feedback provided back to the enumerators before conducting field work the next day.

SURVEY FINDINGS AND ANALYSIS

A total of 159 people were interviewed during the field work. Of these 125 were found to still be operating businesses of which 61 said they had 'expanded' since the end of DEEP.

This section presents data on the overall demographic of the 159 businesses interviewed, and then sets out the data relating to the 125 businesses still in operation. This broadly follows the structure of the survey questionnaire which first asked general questions of the whole sample and then a series of follow-up questions for businesses still operating.

5.1 CHARACTERISTICS OF THE RESPONDENTS

5.1.1 BUSINESS SURVIVAL AND CONTINUITY OF LEADERSHIP

Most of the businesses that were interviewed still exist. One hundred and twenty-five (79%) of the businesses were still operating while 34 (21%) had closed (see Fig.1). Some of the reasons that were given for closure of energy businesses include: offering goods on credit and failing to follow up, unable to break-even, better employment opportunities elsewhere, mismanagement of the business by employee, lack of finances to boost the business, lack of market, family conflicts, old age, lack of water and clay for briquettes production, relocated with the family, land conflicts where clay was mined. Female led businesses were 56% of all surviving businesses, a slightly higher percentage than for the surveyed businesses overall (53% of the 159 are female led). Conversely male led businesses were more likely to have closed than female led businesses (20 compared to 14). The findings therefore suggest that female led businesses may have a greater tendency to survive though the difference is small.

Figure 1: Enterprises existence verses gender (n=159)

Almost all of the surviving businesses were led by the same person who managed the business under the DEEP programme. Out of 125 businesses that still exist 108 (86%) said the same person was operating the business as during DEEP. In only 7 (14%) has the person managing the business changed. The main reason for a change in leadership was 'old age' (4 cases) or a son/daughter taking over (2 cases.) In one case a manager who was employed in the business left and was replaced.

5.1.2 LENGTH OF TIME SINCE BUSINESS FOUNDED

Most of the businesses surveyed had been in existence for between 5 and 10 years (Fig.2).

The surviving businesses had a slightly higher proportion of those which had existed for more than 10 years (26 out of 125 or 21% for surviving businesses compared to 5 out of 34 or 17% for failed businesses). Businesses which had closed had a higher proportion of those less than 5 years old (7 out of 34 or 20% for failed business compared to 19 out of 125 or 15% for surviving businesses). The findings suggest that survival rates may be higher amongst well established businesses, which is perhaps unsurprising.

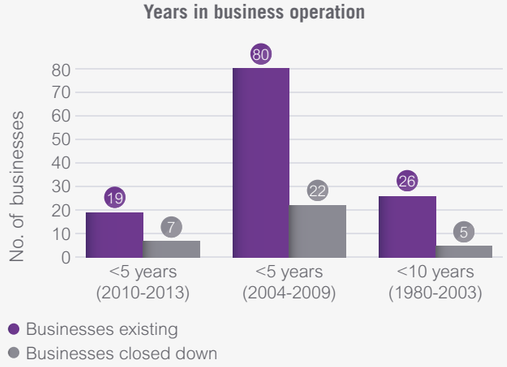


Figure 2: Years of operation of the business for both surviving and failed businesses.

5.1.3 MARITAL STATUS OF THE RESPONDENT

The respondents were almost all married (87%), followed by widowed (7%), never married (4%) and separated (2%) (Fig.3). This is a typical of the adult population as a whole where the proportion of people who are married is much lower. According to the Kenya Demographic and Health Survey 2008-9 (2010), 58% of women and 49% of men are currently married or living with a partner. Four percent of women are widowed and 6 percent are either divorced or separated. Less than 1 percent of the men are widowed, and 4 percent are divorced or separated.

THE FINDINGS THEREFORE SUGGEST THAT FEMALE LED BUSINESSES MAY HAVE A GREATER TENDENCY TO SURVIVE THOUGH THE DIFFERENCE IS SMALL.

When surviving and failed businesses are analysed few major differences are observed in terms of the marital status of the owner. Widows/widowers seemed more common in existing businesses than failed businesses, while people who were separated were more numerous in failed businesses. Family conflict and relocation were given as reasons for failure by some respondents. This may be related to separations between couples. The numbers involved are small however.

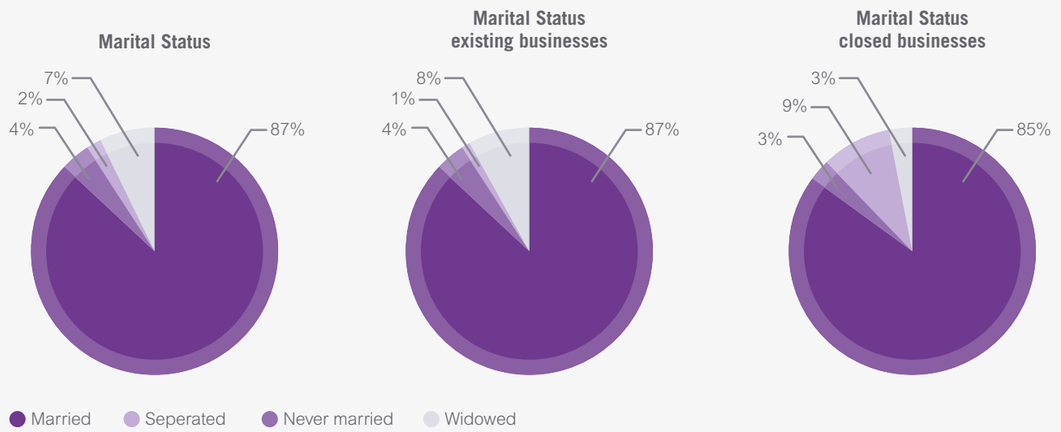


Figure 3: Marital status of the Respondents (n=159)

5.1.3AGE OF THE RESPONDENTS

The survey results show that adults with over 47 years of age constituted 33% of the 158 respondents who answered the question (Fig.4a). The respondents within the age bracket of 42-46 years were 22% while those aged 35-41 years of age were 25%. Respondents within the age bracket of 26-34 years were 20%, and the smallest number was within the age of 19-25 years (2 respondents). The majority of businesses are led by people over the age of 35.

When surviving businesses are compared to failed businesses (Fig. 4b) a higher proportion of the surviving businesses are seen to be led by people over 47 years old – 36% of surviving businesses (45 or 125) compared to 20% of failed (7 or 34.) Conversely a higher proportion of failed businesses are led by people in the 35-41 age group – 34% of failed businesses (12 of 34) versus 22% of surviving businesses (27 of 125.) This suggests that age may be a factor influencing whether a business survives. It may also be a function of the fact that the surviving businesses have existed longer (21% of them more than 10 years) and are therefore likely to be led by older people.

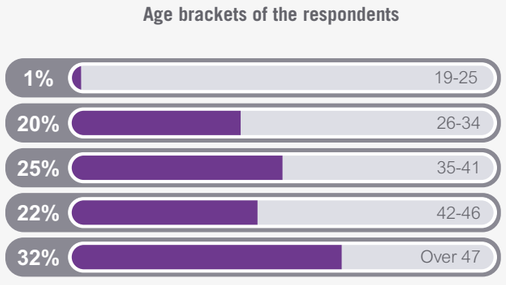


Figure 4(a): Age of the respondents (n=158) One respondent was from a group business with members of varying ages and therefore did not answer the question.

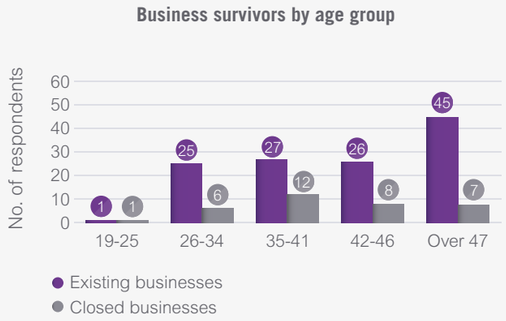


Figure 4(b): Age of the respondents analysed by whether business still existed or had failed (n=158).

5.1.4 EDUCATION LEVEL OF RESPONDENTS.

The largest group of the respondents, 47% of 158 who responded to this question, are primary school graduates, 22% of the respondents are secondary school graduates while 15% are college/university graduates (Fig. 5a). Customarily the education system in Kenyan makes sure that most primary school graduates are able to read and write and do basic arithmetic which would help them to keep simple business records and accounts for their businesses. Only 16% of respondents have less than basic primary school education.

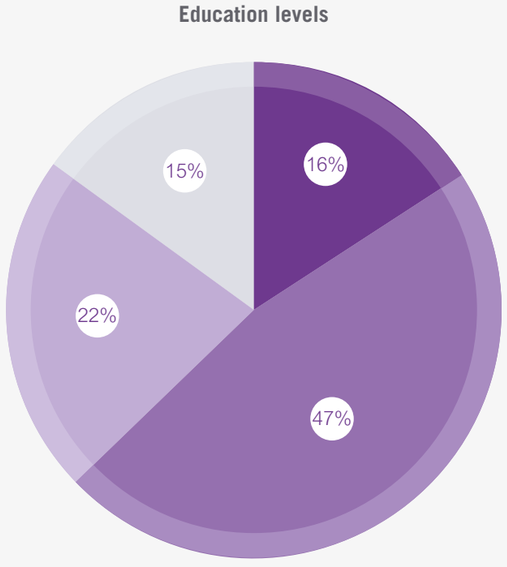


Figure 5(a): Education levels of the respondents (n=158). One existing business is a group business with members of various levels of educational attainment. They did not answer this question.

When failed businesses are compared to surviving businesses (Fig. 5b) we see that businesses which failed are more likely to be led by people with no formal education or primary certificate only (26 of 34 or 76% compared with 74 of 124 or 60% of surviving businesses.) Surviving businesses on the other hand are proportionately more likely to be led by someone with at least secondary school education – 40% (50 of 124) compared to 24% (8 of 34).

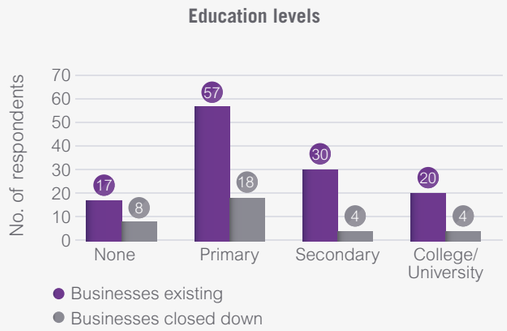


Figure 5(b): Education levels of the respondents for failed and surviving businesses (n=158).

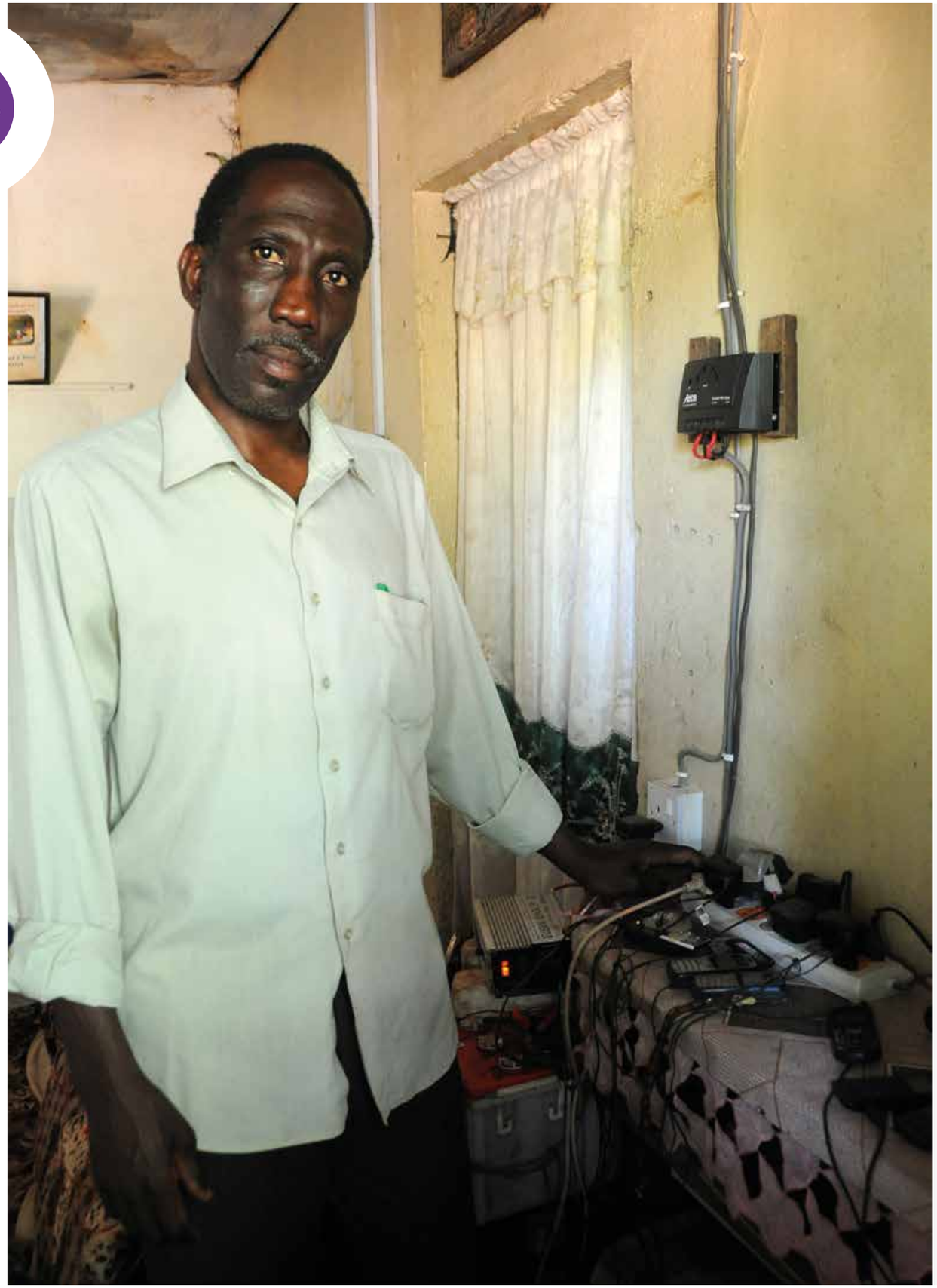
5.1.5 SUPPORTING PROGRAMS

Out of the 159 respondents interviewed, 110 (69%) were only supported by DEEP program, i.e. the support was discontinued in March 2013, whereas 49 (31%) transited into the CARE2 program (Fig. 6). The businesses supported under CARE2 are all surviving businesses. The ongoing GVEP support for this latter group of businesses is a factor to consider when analysing the results of this survey.

Figure 6: Businesses supported by DEEP only versus those also supported by CARE2 (n=159)

5.1.6 MAIN SOURCES OF CASH INCOME OF THE RESPONDENTS.

Interviewees were asked about the households 'largest source of cash income.' The majority of respondents derive the largest share of their earnings from energy businesses (52%), followed by 26% who depend on agricultural activities as the main economic activity (Fig. 7). Eight per cent of the respondents said they operate other micro enterprises while 7% are employed and therefore depend on salaries. The respondents who operate food stuff shops which forms their main source of income were 6%. Though we did not seek to analyse cash and non-cash income as a whole, it is our assumption that all of these households will have a mix of income sources and that many grow food and keep livestock.



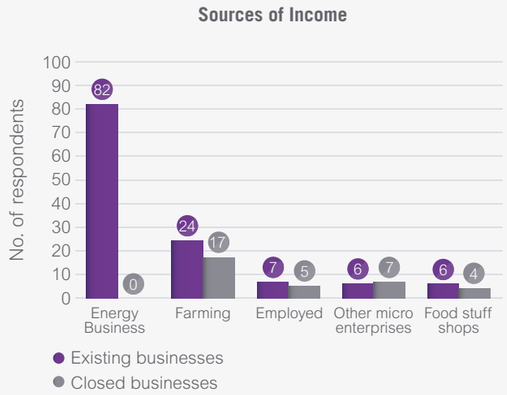


Figure 7: Main source of income of the respondents (n=158)

5.2 BUSINESS ORGANIZATION

The following section provides further presentation of findings and analysis of the 125 surviving businesses in terms of product specialisation, job creation and record keeping.

5.2.1 PRODUCT SPECIALISATION

Most energy entrepreneurs still specialize in the same technologies that were supported by the DEEP programme with 57% (72 entrepreneurs) of the entrepreneurs (Fig. 8). The businesses that are still selling the same products but have diversified to also sell other products such as different cook stoves, solar lanterns, tree seedlings, and soap were 33% (41 businesses). The male/female split is the same for non-diversified and diversified businesses (around 40/60). Only 10% (12 businesses) shifted the focus from energy business to other product lines. The respondents gave the following reasons for changing the product line: expensive to purchase solar phone charging kit after breakdown, inadequate raw materials, business not profitable, national grid where a solar phone charging business was being operated, stiff competition, low quality of solar phone charging kits, other businesses are more profitable compared to renewable energy businesses, and lack of market.

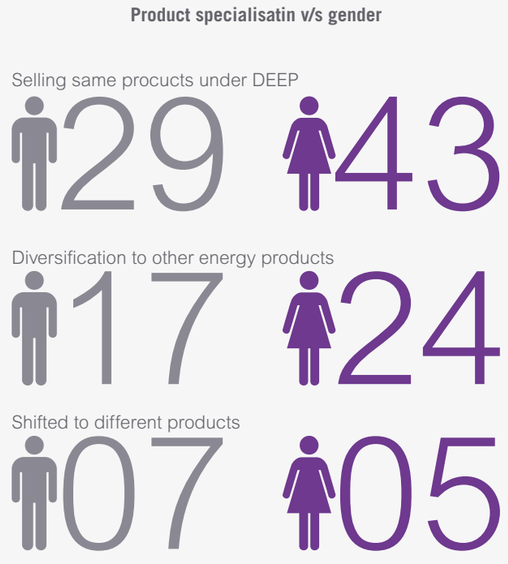


Figure 8: Product specialisation (n=125)

5.2.2 BUSINESS THAT CREATED NEW JOBS BROKEN DOWN BY GENDER

One hundred and seventeen businesses responded to this question about whether or not they created new jobs in the last two years, i.e. since the end of DEEP (Table 1). [2]Fifty-eight businesses (50%) created jobs, 26 of which were male headed businesses while 32 were female headed businesses. The other 59 respondents stated that no new jobs were created. Of these businesses, 23 were male-headed businesses while 36 were female headed businesses. There is no significant gender difference in the results, the proportions of male and female led businesses broadly reflecting the gender profile of the surviving businesses.

	Businesses that created jobs	Businesses that created no jobs
Male headed Business	26	23
Female headed Business	32	36
Totals	**58**	**59**

Table 1: Business that created new jobs by gender (n=117)

5.2.3EMPLOYMENT LEVELS BEFORE AND AFTER DEEP

The businesses reported an increase in permanent staff with 34 new permanent jobs created, 0.58 jobs per business (Fig. 9). The number of new, permanent jobs increased by 17 for each gender. In the category of temporary staff there were 80 new jobs created, 1.38 jobs per business. Temporary staff are hired on an as needs basis, which varies from month to month, so the survey indicated the average monthly number of temporary staff hired across the year. On average the number of temporary male employees increased with an additional 49 staff compared with an extra 31 temporary female staff. Temporary employment therefore shows a bias towards males.

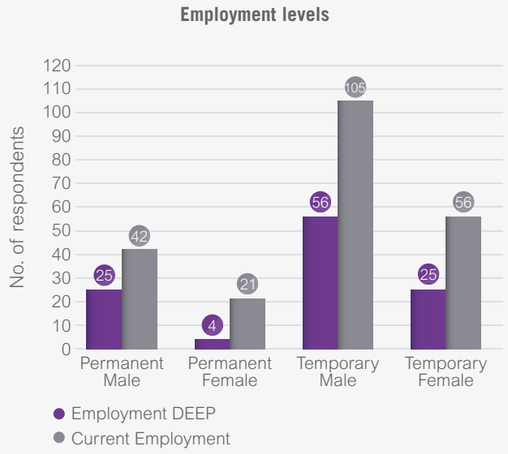


Figure 9: Business employments levels before and after DEEP (n=58). Employment figures exclude the business owner.

5.2.5 RECORD KEEPING BEHAVIOUR OF RESPONDENTS

Seventy-four of the surviving businesses (63% of the respondents to the question) said that they keep business records (Table 2). During the interviews the enumerators were validating responses by physically checking the business records. The enumerators asked to see records of sales, income and expenses, and lists of debtors/creditors. Out of the 74 respondents only 40 (54%) had well presented sales records which were up to date. The records of some entrepreneurs also showed a list of creditors. Of these, 34 are being supported by CARE2. This may indicate that businesses primarily maintain records in order to satisfy the requirements of the programme, rather than because they see value in them. On the other had, as the CARE2 supported business are amongst the strongest performers record keeping may be valued and part of an approach to business which contributes to success, at least for some.

The remaining 34 respondents (46%) did not have good records. Some records were not updated while others were not up to standard. Forty-three surviving businesses (37% of the respondents to the question) didn't keep records at all. Those who didn't keep records gave some of the reasons as: 'feeling lazy to record sales', 'forgets when selling different products at different prices', 'the sales are too low to record', 'the sales book got lost', 'overwhelmed by other household chores'. The major reason that the business owners gave for not keeping records was that sales were too low to record. Interestingly, male business owners were more likely to have records than women business owners.This may reflect the size and nature of the businesses.

	Sales Records Kept	Sales Record NOT Kept
Male headed Business	39	11
Female headed Business	35	32
Totals	**74**	**43**

Table 2: Record keeping behaviour of the respondents (n=117)

5.3 BUSINESS FINANCE

5.3.1LOAN ANALYSIS

The number of businesses which secured loans under the DEEP programme was 42 while those who did not access loans were 83, that is 34% did secure a loan. Out of 42 who secured a loan under the DEEP programme 36 (86%) obtained another loan after the programme, with 21 of those businesses being supported currently by CARE2 programme (Table 3(a)). This suggests that entrepreneurs who obtained loans under DEEP have the confidence and capability to approach a financial institution and are able to meet loan application requirements, even without ongoing support from GVEP. Only 14% (6 businesses) out of those who were given loans during the programme did not apply for further loans.

Businesses secured Loans under and after DEEP		
$CARE_2$ Businesses	21	58%
Non-$Care_2$ Businesses	15	42%
Totals	**36**	**100%**

Table 3(a): Business which secured loans under DEEP and went on to secure further loans after DEEP programme ended. (n=36)

The respondents who did not acquire loans during the DEEP programme were 83 (66% of all surviving businesses) out of which 24 (30%) secured loans after the programme ended (Table 3(b)). Eleven of these are CARE2 supported business, meaning that some of the DEEP businesses were successful in securing loans without further support from GVEP. However, 59 out of 83 (70%) of the businesses which did not take out loans during the programme did not seek or obtain loans after the program.

Businesses without Loans during DEEP but secured loans after DEEP		
$CARE_2$ Businesses	11	46%
Non-$Care_2$ Businesses	13	54%
Totals	**24**	**100%**

Table 3(b): Business which did not secure loans under DEEP but did secure loans after DEEP program ended. (n=24)

In total, 66 of the surviving businesses had loans either under DEEP or in the period after DEEP ended. Some businesses had more than one loan.

5.3.2ANALYSIS OF THE LOANS.

The loan analysis in Table 4 shows the number of entrepreneurs who applied for loans, the financial institution which disbursed the loans, the amount given and repayment status. The 36 businesses which benefited from loans during the DEEP programme, and then went on to secure further loans, borrowed the highest amount of money from banks (1,600,000 Ksh loaned to 14 entrepreneurs), followed by KIVA ZIP (655,000 Ksh loaned to 14 entrepreneurs.) Saccos disbursed 392,000 Ksh to 6 respondents, while Roscas lent out 292,000 Ksh to 7 entrepreneurs. Of the 24 businesses which secured loans after DEEP ended, 11 are CARE2 supported business and 13 non-CARE2 business. Banks had the highest lending amount (1,942,000 Ksh loaned to 12 entrepreneurs). Roscas loaned 140,000 Ksh to 10 entrepreneurs while KIVA Zip loaned 180,000 Ksh to 6 entrepreneurs). No loans were disbursed by Saccos. Overall repayment rates have been good (repayments made in line with agreed loan repayment schedule) with no defaults.
Most respondents who benefited from financing after DEEP ended acquired loans from banks and KIVA. In the case of bank loans the amounts available were higher than could be obtained from Saccos or Roscas. For those wanting small loans Kiva charge(s) no interest and the application process was easy, making this an attractive option.

IN TOTAL, 66 OF THE SURVIVING BUSINESSES HAD LOANS EITHER UNDER DEEP OR IN THE PERIOD AFTER DEEP ENDED.

Business secured loans during and after DEEP							
		Businesses secured Loans **AFTER** DEEP		Financial Instituations	Loan amount applied after DEEP (Ksh)	Paid	Being paid	Default
Businesses **secured** Loans in DEEP	42	CARE2 Businesses:	21	Banks	1,600,000	11	3	0
				Saccos	392,000	3	3	0
		Non-CARE2 Businesses:	15	Roscas	292,000	5	2	0
				KIVA ZIP	655,000	11	3	0

Businesses granted no loans in DEEP but secured loans after DEEP							
		Businesses secured Loans **AFTER** DEEP		Financial Instituations	Loan amount applied after DEEP (Ksh)	Paid	Being paid	Default
Businesses granted **NO** loan in DEEP	83	CARE2 Businesses:	11	Banks	1,942,000	5	7	0
				Saccos	0	0	0	0
		Non-CARE2 Businesses:	13	Roscas	140,000	5	5	0
				KIVA ZIP	180,000	4	2	0

Table 4: Numbers of loans and repayment status. Note some businesses have more than one loan.

5.3.3BUSINESS USAGE OF THE LOANS.

Fifty-nine businesses (out of a possible 66) which secured loans, whether before or after the close of DEEP, provided information on how the loans were invested. Some loans were used for more than one purpose, e.g. stock purchase and marketing activity. The survey revealed that 79% of the respondents invested in their business while 21% of the respondent spent a portion, or in some cases the whole loan, on personal needs (Fig. 10). Out of the loans invested in the businesses 63% of the respondents said they spent all or a part of the loan on purchasing more renewable energy stock, while 17% of the respondents used the loan to stock their shops with other products not related to energy businesses. Three per cent of the respondents used the loan in part for sales and marketing, while another 3% was spent on funds for opening new outlets. Thirteen per cent of the respondents used all or part of the loan for other business needs like adding staff, bought a motorbike, shop repairs, bought new machinery and others paid salary arrears of staff.

Figure 10: Business usage of the loan (n=59)

5.3.4PERSONAL USAGE OF THE LOANS

The justification for a loan application was purely to invest in the business in order to stimulate growth. Twenty-one of the respondents spent part or all of their loan not for the intended purpose of investing in business but on one or more personal needs. The most pressing need was paying school fees (13 respondents), while 5 respondents bought household items (Fig11). Two bought land while 5 used part of the loan on other personal needs like buying a cow, bought steel door, leased land, paid medical bills. These loans were all repaid or were being repaid at the time of the survey.

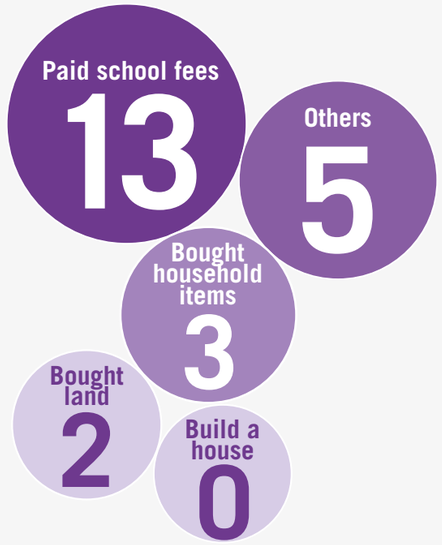


Figure 11: Personal usage of the loan (n=21)

ANALYSIS OF BUSINESS EXPANSION

The section presents the findings on business expansion, including results of a series of cross-tabulations showing how the characteristics of the 'growth' group compare with the businesses which failed or did not grow.

The analysis shows that a group of around 60 businesses demonstrates evidence of growth, and this is strongly correlated with access to loans. The people running growth businesses were more likely to have secondary education or above, and be either under 35 or over 47, when compared to the businesses which failed or did not grow. There were slightly more women in the overall sample and slightly more women led businesses in the growth group. No significant differences were observed between the sexes in terms of business performance.

It is important to note that the 'growth' group overlaps significantly with those businesses which continue to receive support under CARE2. This is the group of businesses which had participated in DEEP which field staff believed had most potential to grow. The ongoing support under CARE2 is likely to have influenced business performance. In this study we were interested in trying to determine whether 'growth' businesses exhibit specific characteristics which might be used to further strengthen the filtering at recruitment stage, but also as ways of better aligning GVEP support to those with growth potential once the businesses have joined the programme. Many of these characteristics are likely to be inherent (e.g. age, experience, etc) rather than the result of the business development services provided. The potential to use the findings from the study in this way are discussed in the Conclusion section.

6.1. BUSINESS EXPANSION

The survey reports that out of the 99 respondents who replied to this section, 61 respondents (29 male and 32 female) said that their businesses had 'expanded' since the end of DEEP (Fig. 12). Thirty-eight respondents (10 male and 28 female) said they did not expand. The respondents whose business had not experienced expansion cited the following main reasons: lack of market, relocation/family conflict, lack of enough raw materials, and health/old age. There appears to be no appreciable difference between the sexes in those reporting expansion, though women were more strongly represented in the group reporting no expansion (75% female) when compared with the gender split of the whole sample (53% female). However, a disproportionate number of women answered this question (60% of respondents were female) making the results difficult to interpret.

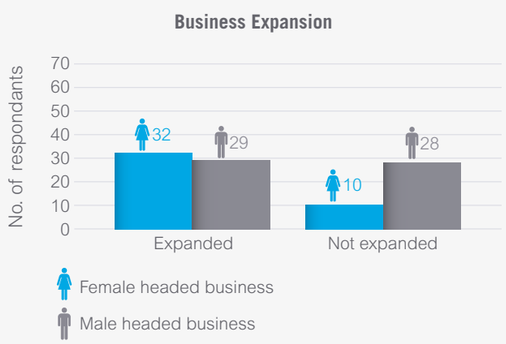


Figure 12: Business expansion by gender (n=99)

Most businesses do not keep reliable sales data making it impossible to verify objectively whether businesses grew or not. Of businesses which reported they had expanded 50 kept some sort of business records, while 11 kept no records at all. The enumerators did however look for physical evidence of expansion such as new machinery, buildings and equipment and were able to verify claims in 35 cases. For the other 26 businesses the nature of the expansion was such that the enumerators could not physically view the evidence, for example where new outlets had been opened in a different location which enumerators could not travel to, where liner producers indicated that they had secured extra land for extraction of clay which was some distance away, or where business had secured large orders from supermarkets in the nearby towns. The analysis in Figure 13 illustrates the nature of the business investments which the enumerators could verify. Within any given enterprise there may be multiple dimensions of growth. Out of 35 respondents for whom evidence of expansion could be observed, 14 (40%) had bought new machineries while 13 (37%) had opened additional workshops. Ten (29%) ventured into new businesses outside the scope of renewable energy, while 9 (26%) experienced business expansion as a result of increasing energy stock and realizing more sales. Five (14%) added raw materials, while 4 (11%) expanded on other dimensions like owning a workshop after splitting of a group business, expanded the business on other aspects like building a store room, or buying a vehicle for transporting products. Most of the investment was in machinery, new workshop capacity and stock.

There appears to be some discrepancy between reported use of loans and observed areas of investment (see Fig. 10). This is possibly due to the way the survey questions were phrased. Purchase of machinery or of workshop space were not explicitly listed on the question about loan use (Q13) and respondents therefore probably picked a response most closely matching use of the loan, rather than selecting 'other' and providing details. At the same time, the number of respondents to the second question was much lower, 35 compared to 59, which may also explain some of the difference.

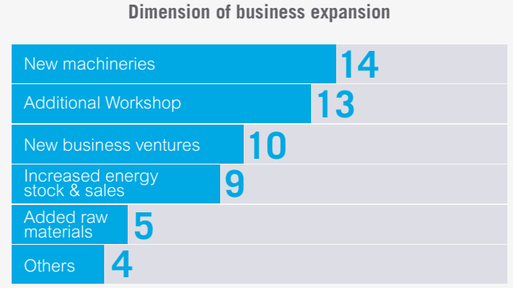


Figure 13: Dimension of business expansion (n=35).

Among the 61 businesses which reported expansion 54 said the energy business was their main source of income. In seven cases energy business was ancillary to the households' main income source.

6.2. BUSINESSES EXPANSION AND LEVEL OF EDUCATION

Twenty businesses (33%) of the 61 which reported expansion were led by an entrepreneur with secondary school education, and 12 (20%) had university degrees (Fig. 14). Twenty-one (34%) hold primary school certificate, while 13% did not hold any education system certificate. A higher proportion of the businesses which expanded were therefore led by owners with at least secondary school education (53%) when compared with all 158 businesses which gave education data (of whom 37% had at least secondary school education.) Entrepreneurs with only a primary school certificate were less likely to report growth (34% compared to 47% of the 158 having a primary school certificate.)

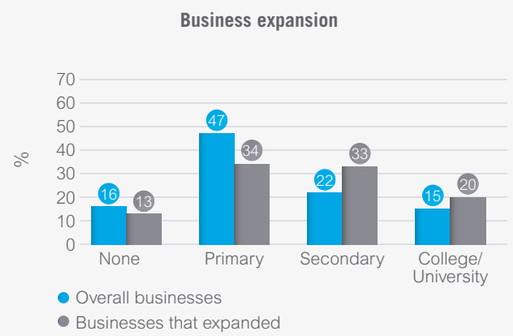


Figure 14: Business expansion based on level of education

6.3. BUSINESSES EXPANSION VERSES AGE GROUP

One business operated by a respondent between the ages of 19-25 years expanded, and 14 respondents within the ages of 26-34 years reported expansion (Table 5.) Ten of the businesses that expanded were managed by the respondents within the ages of 35-41 years while 8 were run by respondents within the ages of 42-46 years. At the top end of the age spectrum, 28 of the businesses that expanded were operated by respondents over the age of 47 years. When compared to the age profile of the 158 businesses which provided age data we see a disproportionate number of under 35s and over 47s reporting growth, with growth less likely to be reported by businesses owners who are between 35-46 years. There appears to be no significant difference between men and women across the age bands.

Analysis of age versus business expansion						
Age brackets	(19-25)	(26-34)	(35-41)	(42-46)	(Over 47)	Totals
No. all respondents	2	31	39	34	52	158
Percentage (%)	1%	20%	25%	22%	33%	
Business expansion	1	14	10	8	28	61
Percentage (%)	2%	23%	16%	13%	46%	
No. male expanded	0	8	4	3	14	29
No. female expanded	1	6	6	5	14	32

Table 5: Analysis of age verses business expansion (n=61) compared to all businesses providing age data (n=158) with breakdown by gender

6.4. CORRELATION BETWEEN LOANS AND EXPANSION VERSES GENDER

The total number of businesses that obtained loans was 66. Businesses that secured loans during DEEP were 42 while those which secured loans after were 24. Forty-four (67%) of the business that secured loans expanded while 8 (12%) did not expand. Fourteen (21%) of the respondents who secured loans did not respond to the question about whether or not their business had expanded. For those who responded there is a strong correlation between businesses obtaining loans (in some cases multiple loans) and business expansion. This is consistent with what we observed during the in depth interviews. However, overall 61 businesses said they had expanded (Fig. 15) but only forty-four businesses with loans report expansion. This suggests a significant number of businesses are able to expand without loan finance, perhaps because they have other sources of capital.

Male and female led businesses with loans appear to perform in a similar way. There is no significant difference between the sexes in relation to expansion.

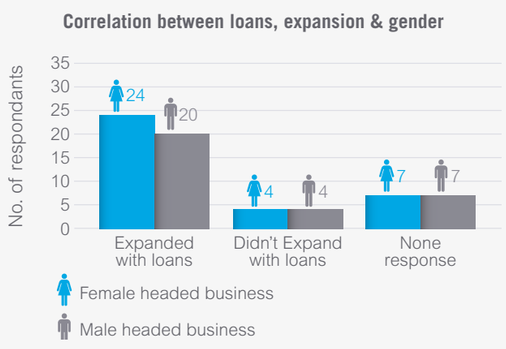


Figure 15: Correlation between loans, expansion and gender (n=66)

6.5. CORRELATIONS BETWEEN GROWTH AND JOB CREATION

Out of 58 businesses which created new jobs, 40 also said they expanded. Ten didn't expand while 8 did not respond to the question. Out of the 10 which said they did not expand, 3 businesses took a loan and bought additional stock. It is possible that after adding stock some staff were employed but later the business did not expand. The reasons the other 7 employed additional staff is not known.

Of 61 businesses which reported that they had expanded 21 either said they had not created jobs as a result of that growth, or did not answer. This raises some questions about what the respondents understood by expansion, and the degree of any growth in the business which might have occurred. Some of the reported 'expansion' may be very modest.

Twenty-seven of the businesses which reported both growth and job creation are being supported under CARE2, 13 are businesses no longer receiving GVEP support.

	CARE2 Businesses	Non-CARE2 Businesses	None Response
Businesses created jobs only	33	25	
Business created NO jobs	15	44	
Business created jobs and expanded	27	13	8
Business created jobs and DID NOT expand	6	4	

Table 6. Relationship between 'expansion' and jobs created.

6.6. DISTRIBUTION OF JOB GROWTH AMONGST BUSINESSES

The 40 businesses which expanded and created jobs are the same businesses which expanded and had loans. There is therefore a core of businesses for which we have some evidence of actual growth. A closer analysis of this group shows that 11 of these businesses account for most of the additional jobs (Fig. 16). The largest number of additional jobs created by a single business was seven, reported by just one entrepreneur. Two businesses said they each added 5 jobs. Most respondents had added only 1 or 2 jobs. This is consistent with observations in the literature on the informal sector. A very small number of businesses grow to employ ten or more people. According to Gomez (2008) 99% employ five or less workers.

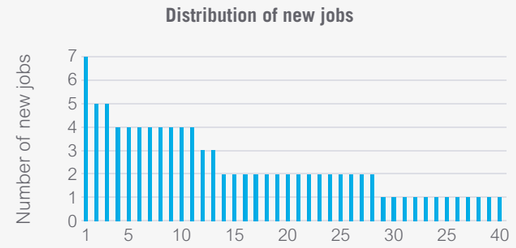


Figure 16. Distribution of new jobs across 40 businesses reporting that they expanded and created additional employment.

Looking at the 11 businesses which added 4 or more jobs in the post-DEEP period the following characteristics can be seen (Table 7). Six of the businesses are male led and 5 female led. Five of the business owners are over 47 years old and 2 are aged 42-46 years. Most of these businesses have existed for 9 years or more. So the best performing businesses appear to be well established and managed by people with significant experience. These businesses all had loans.

Business Respondents	Gender	Age	Years in business	No.of new jobs
Business 1	M	42-46	7	7
Business 2	F	42-46	29	5
Business 3	M	Over 47	9	5
Business 4	F	Over 47	15	4
Business 5	F	Over 47	30	4
Business 6	M	26-34	6	4
Business 7	M	Over 47	4	4
Business 8	M	26-34	9	4
Business 9	F	Over 47	10	4
Business 10	F	26-34	10	4
Business 11	M	35-41	9	4

Table 7: Characteristics of 11 businesses which added most jobs.

CONCLUSION

Contact details were available for 210 Kenyan micro-businesses which participated in DEEP and attempts were made to interview all of them.

Not all could be interviewed, some because of their remote locations, some because they declined or could not be found. In total 159 businesses were surveyed, of which the large majority (79%) were still in business 2 years after the end of the programme.

These businesses are a subset of a larger group of 380 Kenyan businesses which were engaged during the entirety of DEEP, around 170 dropping out of the programme for various reasons. We do not know what happened to these businesses. It is possible that some continue to operate but this cannot be established because contact information was not retained for these businesses.

Of the 159 businesses it was possible to interview 34 (21%) had closed. The main reasons given for closure were: offering goods on credit and failing to follow up, unable to break-even, better employment opportunities elsewhere, mismanagement of the business by employee, lack of finances to boost the business, lack of market, family conflicts, old age, lack of water and clay for briquettes production, relocated with the family, land conflicts where clay was mined.

Businesses which failed tended to be younger than businesses which had survived, suggesting businesses are more likely to fail in their early years. A higher proportion of failed businesses were led by people with no formal education or primary school only when compared to surviving businesses, suggesting that level of education is a factor in survival. Businesses led by women showed a slightly greater tendency to survive than male led businesses. The age band 35-41 tends to fail more than other entrepreneurs. The data do not explain why this is the case but the obligations of this group with young children and parents to support may be a plausible reason for less success.

Of the businesses which survived a significant number say they 'expanded,' 61 of 125 (or 49%). The degree to which they grew is difficult to ascertain as business records are often not maintained, and in only 35 businesses could evidence of expansion be physically verified. Twenty-one of these businesses say they added no jobs, implying that any expansion was modest. Around 40 businesses made investments and added jobs with 11 businesses accounting for almost half of the new employment created.

There is a strong correlation between those businesses which grew and those which secured loans. Some businesses secured more than one loan and repayment rates were good with no defaults. Thirty-five businesses were able to show evidence of investments made in physical assets such as machinery and additional workshop space. The other major area of investment seems to have been in stock. Some borrowers used part of their loan to meet other household costs, school fees being the most common. From the perspective of a lender it is however challenging to identify these businesses ex ante, in particular because of the poor documentation of growth.

These results can be considered to be strong given the high churn rates in the informal sector and the very small number of micro-businesses, around 3%, which grow to employ four or more people (Mead & Liedholm, 1998, and Liedholm, 2002). DEEP set out to improve access to efficient energy products and services by working with informal businesses. A significant number of the businesses

which stayed with the programme are still operating and around one third of these have expanded since DEEP ended. This is a striking result.

Clearly this is in part a function of the recruitment methods used. The DEEP programme was successful in identifying a large number of businesses with potential to survive and grow. Further, the 159 identified businesses may show more resilience than the average micro business as staying in DEEP for four years is an indicator itself of sustainability. Given the programme objectives the selection of strong candidate businesses to work with was appropriate. The findings from this follow up survey help to identify some of the factors likely to influence whether a business succeeds or not. The personal traits of the entrepreneur, their commitment, tenacity, and problem solving ability will obviously be important. Beyond this there appear to be a number of findings in the data which point to other observable characteristics which influence the sustainability of these businesses.

Most of the businesses are led by people who are married which is perhaps surprising, given that many adult Kenyans are not married. The in depth interviews conducted prior to this study provided some evidence that for married female entrepreneurs a supportive spouse is critical if they are to succeed in business. More than half of the respondents in the survey were women and generally female led businesses performed as strongly as male led enterprises. Women led businesses appear more likely to survive, while male led businesses appear more likely to expand. The numbers are small, however, and firm conclusions hard to draw given the non-random nature of the sample. The reality is that these are typically family businesses with both spouses involved to some extent, whoever takes the lead. How couples work together in making a success of these businesses might be worth investigating further.

Businesses which grew were mainly lead by the under 35s and the over 47s. But all age groups were represented. Why we see this is not clear but there does seem to be a strong indication that the more successful businesses tend to be led by older people. Longer established businesses also appear to have a greater likelihood of continuing to survive, a perhaps not a surprising conclusion. The business owner's level of education is also clearly a factor influencing the likelihood of business succeeding. Entrepreneurs whose businesses were reported to have expanded tended to have a higher level of education (33% secondary school graduates and 20% college/university graduates) when compared with failed businesses or businesses which did not grow.

Among the businesses which survive there appear to be two types, what might be called 'survival businesses' which provide an income for a household but do not grow, and growth orientated businesses which are investing, expanding and creating jobs. Survival businesses make up around 65% of the micro-enterprises surveyed, with growth businesses accounting for around 35%. An even smaller group accounts for most of the growth. This is to be expected. In any market situation the Pareto principle tends to apply with around 20% of firms accounting for 80% of sales. Identifying early on businesses likely to be in the high growth group may be beneficial as it enables providers of business support services to tailor their interventions in ways which maximise the impact on these high growth businesses. Having said this, even 'stagnant' businesses may still be providing a valuable service, such as phone charging, to the local community and therefore merit support.

The ways entrepreneurs respond to training and mentoring, is obviously one factor business development staff look for (which we did not address in this survey). Attitudes to finance and a willingness to invest in the business also appear to be critical factors, and this includes the ability to make effective use of loans. Some of the more successful businesses have accessed several successive loans. Ultimately sound business management should result in increased sales and job creation but this may take time. Identifying behaviours and inherent features of businesses, which contribute to growth early, might be helpful in refining how business development services are provided.

RECOMMENDATIONS FOR FURTHER STUDIES:

1) BDS for non-growth vs. growth businesses should probably be customized but this has rarely been addressed. (most support programmes assume that businesses want and will grow)

2) The market for BDS is currently poor and the immediate impact of withdrawing support will surely not lead to micro businesses searching for support elsewhere. However, the willingness to pay for such services is not known

3) The destiny of failed businesses is not known. Do they simply resort to unemployment or do they start another business (maybe not in energy)

5) The impact of GVEP support on long term survival and growth was not explicitly addressed which should be the focus of a DEEP/CARE2 evaluation study

6) The CARE2/DEEP collection of data on businesses could be a possible check list for financial institutions of creditworthy businesses

7) To cross check findings with a literature review of micro businesses' growth dynamics (we did this partly for the in-depth but a similar review would be interesting for this survey.)

AMONG THE BUSINESSES WHICH SURVIVE THERE APPEAR TO BE TWO TYPES, WHAT MIGHT BE CALLED 'SURVIVAL BUSINESSES' WHICH PROVIDE AN INCOME FOR A HOUSEHOLD BUT DO NOT GROW, AND GROWTH ORIENTATED BUSINESSES WHICH ARE INVESTING, EXPANDING AND CREATING JOBS.

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GVEP International

DEEP POST SURVEY (KENYA)

DATA COLLECTION TOOL

ESSENTIAL INFORMATION	
Grant Agreement Number:	9 ACP RPR 49/20
Program Name:	Developing Energy Enterprisesprogramme(DEEP)
Type of the Survey:	Post-project data gathering survey
Target Respondents:	Enterprises Supported by DEEP
Target Country:	Kenya
Clusters:	Kisumu, Kisii, Central and Coast.

Prepared by: GVEP International

SECTION A: IDENTIFICATION

Basic Information	
Interviewers Name:	
Interviewers Mobile Number:	
Questionnaire Code:	
Cluster:	
Interview Date:	
Energy Enterprise Information:	
Respondent Names:	
Respondents Mobile Number:	

Instructions to the interviewer: The question should be read out exactly as given in the questionnaire. The interviewer should not modify the question as per his understanding, if the respondent is not clear about the question; the interview should repeat the question word by word (in the appropriate language that is understood by the interviewer)

N/B: Interview **MUST** be conducted at the business site in order to verify data and record observations.

To mark the answers, the interviewer should cross-check the code or circle the grid provided below per every question.

The interviewer should introduce himself or herself as follow. Hello, my name is (*introduce your names*) and I work with GVEP International. Thanks for taking your time to talk to us. GVEP International is a nongovernmental organization supporting energy enterprises through provision of technical support, business mentoring, and providing financial linkages. We would like to ask you a few questions relating to the DEEP programme that supported you sometimes back. We are gathering some basic information to find out what happened to the businesses we supported and how they are performing. Please note that the information you give us is for OUR USE ONLY, and will NEVER be used with any other institution. **Do you have any questions, before we proceed? (Please indicate language for the interview; English, Swahili, other vernacular.)**

SECTION B: GENERAL INFORMATION

1. Gender of the respondent	☐ Male	☐ Female
2. Marital Status	☐ Never married ☐ Separated	☐ Married ☐ Widowed
3. Age brackets	☐ Below 18 ☐ 26 – 34 ☐ 42 – 46	☐ 19 – 25 ☐ 35 – 41 ☐ Over 47
4. Completed Education	☐ None ☐ Secondary ☐ Others specify	☐ Primary ☐ College/University
5. Are you currently benefiting from CARE2 program?	☐ Yes	☐ No
6. What is your **household's** largest source of cash income? (probe for the **main one**)	☐ Energy business ☐ Other specify	☐ Farming

SECTION C: BUSINESS OWNERSHIP/ORGANIZATION

Q1A) You had a clean energy business (briquettes / Cook stoves / Solar) when you were in the DEEP programme. When did you start operating your business?

Year:	

Q1B) Does this business still exist? **(Single Coding)** [The interviewer will know in advance whether they are visiting an existing business or a failed business.]

Circle Option Code		Instructions to the interviewer
1	Yes	Go to Q2
2	No	Terminate the interview **AFTER** highlighting the **REASONS** below.

Highlight reasons for business termination:

Q2) Are you the one who was operating the business under DEEP support? (**Single coding**) This question has not been recorded in the findings yet??)

Circle Option Code		Instructions to the interviewer
1	Yes	Go to Q3
2	No	Indicate below the grid who now operates the business (wife, brother, business partner etc) and the MAIN REASON for change of persons operating the enterprise.

Q3) Are you still selling the same renewable energy products / services that DEEP was supporting?

Circle Option Code		Instructions to the interviewer
1	Yes	Go to Q3A
2	No	Indicate below the grid the MAIN REASON for shifting business product/service line and some current products being sold (list some products through observation)

Q3A) Do you sell exactly the same products or have you added more products/services to your business?

Circle Option Code		Instructions to the interviewer
1	Same Products	Go to Q4
2	Additional Products	List the additional products:

Q4) Have you increased the number of employees in your business in the last two years?

Circle Option Code		Instructions to the interviewer
1	Yes	Go to Q5.
2	No	Probe for a reason

Q5) kindly tell me who many employees you have and their nature of employment (***To the interviewer****: kindly take the minimum and maximum number of temporary employees and indicate the average)*

During DEEP Program:		**Current Employment Status:**	
Permanent Employees:	Male: Female:	Permanent Employees:	Male: Female:
Average Temporary Employees:	Male: Female:	Temporary Employees:	Male: Female:
Instructions to the interviewer: Go to Q6			

Q6) Do you keep sales records and practice basic accounting of your business? (If yes the entrepreneur should be asked to produce them.)

Circle Option Code		**Instructions to the interviewer**
1	Yes	Below the grid list current monthly sales, then Go to Q7.
2	No	REASON for not keeping records.

SECTION D: BUSINESS FINANCE

Q8) Did you secure a loan during DEEP program?

Circle Option Code		**Instructions to the interviewer**
1	Yes	
2	No	Go to Q9

Q9) Have you taken other loans during the last two years, since the DEEP programme ended?

Circle Option Code		**Instructions to the interviewer**
1	Yes	Go to Q10
2	No	Go to Q14

Q10) How many loans have you had in total during this period?ended?

Q11) Which financial institution provided the service and how much did you borrow?

Banks:	**Amount (ksh)**	**Sacco's:**	**Amount (ksh)**	**Roscas$_1$**	**Amount (ksh)**
1.		1.			
2.		2.			

Roscas$_1$ – Rotating Savings and Credit Association

Q12) What is the current status of the loan? (Tick appropriate box)

Paid		**Instructions to the interviewer:** Go to Q13
Being Paid		
Default		

Q13) How did you use the loan? Tick the grid below where applies.

Business usage:		**Personal Usage:**	
Bought more renewable energy stock:		Build a house	
Bought more "other" stock:		Paid school fees:	
Sales & Marketing promotions:		Bought house hold items:	
Opened a new outlet:		Bought land:	
Others specify:		Others specify:	
Instructions to the interviewer: Go to Q14			

Q14) Have you experienced expansion in your business? *(**To the interviewer:** kindly request to verify this through physical observation and tick the grid below)*

Tick where applies:			
Additional workshop:		Additional tools:	
New machinery:		New investments:	
Others specify:			

HOW TO END AN INTERVIEW:
Take time to thank interviewee for his/her availability and valuable contributions. Kindly inform the interviewee that we may need to call him/her for further clarifications if need be. Don't promise any further assistance after the outcome of the survey and try as much as you can to manage expectations. Give him/her a chance to ask questions even if not survey related and respond as appropriate.

THANK YOU!!

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