THE IMPACT OF BASIC ICT SKILLS TRAINING ON THE LIVELIHOOD OF COMMUNITY MEMBERS: A CASE STUDY OF OSHANA REGIONAL LIBRARY

Jakob Muleka

Oshana Regional Library, nyingika@gmail.com or jtmuleka.edu@oshanarc.gov.na

ABSTRACT: *One of the national strategic initiatives of the Library and Information Sector in Namibia for 2011 was for community libraries to offer information and communication technology (ICT) literacy training for community members. This plan became a reality in 2012 through the Libraries for Development project, which was the result of development cooperation between Finland and libraries in Namibia and Tanzania and ran from 2012 to 2014. The main purpose of the project was to contribute to poverty reduction strategies of the partner countries, in line with the United Nations Millennium Development Goals. The objectives of the project were to create a sustainable model for ICT access through community/public libraries; to build capacity of library personnel through training in ICT skills; and to empower library personnel to teach community members basic ICT skills. The project targeted members of the general public, particularly out-of-school and unemployed youth, owners of small and medium enterprises (SMEs), health workers and farmers. Oshana Regional Library started to offer basic ICT training to community members in August 2014, and this training continues to date; the library had trained 2 273 community members by March 2019. This study was conducted to investigate and determine the impact made by ICT training on the livelihoods of library ICT training graduates. An online survey guided by a problem statement and three sub-questions was conducted. The study revealed commendable impacts by the training on the livelihoods of the graduates, who varied from individual community members to owners of SMEs. The findings also show that 89% of the graduates attained general livelihood changes after attending the ICT training at Oshana Regional Library.*

KEYWORDS: *information communication and technology skills, social impact, livelihood, community members, basic information communication and technology training.*

INTRODUCTION

Oshana Regional Library started offering basic information and communication technology (ICT) training in August 2014, as part of the Libraries for Development project initiative, which was part of development cooperation between Finland and Namibian and Tanzanian libraries, and which ran from 2012 to 2014. Today, individual libraries, including Oshana Regional Library, still present this type of training. The main purpose of the project was supporting poverty reduction strategies of the partner countries, in line with the United Nations Millennium Development Goals. According to Mchombu (2015, 4),

> the objectives of the project were: to create a sustainable model for ICT access through community/public libraries; to build the capacity of library personnel through training in ICT skills; to empower library personnel to teach basic ICT skills to community members.

The project target groups were the general public, particularly out-of-school and unemployed youth, owners of small and medium enterprises (SMEs), health workers and farmers.

In Namibia, general community members were trained, and they continue to be trained, though there is a special focus on end-user groups, namely, entrepreneurs involved in SMEs, women and unemployed youth.

Currently, this type of training seeks to achieve Sustainable Development Goals (SDGs), particularly goals 1 and 5. Hence, in addition to providing basic ICT training, the Oshana Regional Library conducts and facilitates ICT training sessions that are tailor-made for SMEs, and the majority of the beneficiaries are women and unemployed youth.

SDG 1 relates to ending poverty in all its forms, everywhere, while SDG 5 advocates for the achievement of gender equality and empowering all women and girls United Nations (2019a; 2019b). In the context of this study, the ICT training offered by the Oshana Regional Library could impart ICT skills to youth and women, to enable them to be employed or start businesses, and improve their livelihoods.

PROBLEM STATEMENT

By March 2019, Oshana Regional Library had trained a total of 2 273 community members in basic ICT skills, of whom 1 707 were women and 566 were men, quite a large number, which the library lists as an achievement. However, the question remains: What impact does the training have on the livelihoods of community members?

The survey results by Mchombu (2015, 5–6) on the impact of ICT training on community members reports some notable general impacts on SMEs and youth. However, these general findings applied to the whole of Namibia, and referred to the period soon after the implementation of the ICT training at Oshana Regional Library.

Based on this background, this study was conducted to investigate and determine the impact of the ICT training offered by Oshana Regional Library on individual graduates' livelihoods.

The questions explored during this study were the following:

1. How did the ICT training affect the livelihoods of the trained SME owners, women and unemployed youth?
2. What value did the ICT training add to inputs and outputs of individual SMEs?
3. What other effects of the ICT training directly or indirectly benefit the unemployed youth's personal development and livelihoods?

LITERATURE REVIEW

The researcher identified very limited literature on the specific topic of this study, which focuses on Namibia-related key sources.

The Libraries for Development impacts assessment survey conducted by Mchombu (2015, 6) assessed the impact of ICT training on community members, in Namibia, and reveals the following: of SME owners, 24% indicated that, after the training, their businesses improved; 54% of youth indicated that, after the ICT training, they were able to search for information on education independently – 39% searched for health information and 14% for governance and civics-related information. Mchombu also points out that 92% of the respondents indicated that their ICT skills had improved.

Mcharazo et al. (2017, 8), in their evaluation report about the impact of the Libraries for Development project, indicate that the majority of the beneficiaries of the ICT training confirmed that the training had improved their chances of being employed and, in Namibia, 27% of these beneficiaries started further education after training.

In Namibia, an SME is described as a "sector of business organisations composed of small business enterprises with full-time employees ranging from 6 to 100 employees" Kambwale, Chisoro, and Karodia (2015, 82).

Ogbokor and Ngeendipi (2012, 5–7) indicate that SMEs play a major role in the economy of Namibia, because SMEs provide employment, contribute to the transition of agriculture-led economies, and add value to the country's gross domestic product (GDP). In Namibia in 2005, the contribution of SMEs to the GDP stood at 12% and the contribution to employment at 20% Stork (2010, 14).

ICT is regarded as a crucial enabler for achieving the SDGs, particularly in low-income countries. For example, ICT can help to end poverty by providing possibilities to improve the productivity of millions of people, so that they can provide for themselves and their families better. ICT can enhance gender equality and empower women, by giving women and girls access to information that is of importance to their productivity Earth Institute and Ericson (2016, 17–18).

According to the MDR/NIDA consultancy report of 2011, which is based on the Namibia Library and Information Sector strategic assessment study, one of the national strategies of libraries in Namibia is the concept of "one-stop service libraries", which advocate ICT literacy for community members in order to support the development of ICT skills MDR/NIDA (2011). This envisaged dream of the Library and Information Sector in Namibia has become a reality through regional libraries, of which Oshana Regional Library is one that offers basic ICT training to community members. What remains is to assess the impact of this noble practice.

RESEARCH METHODOLOGY

The study was a qualitative survey conducted online through a Google Form-designed, self-administered questionnaire.

The targeted population was 150 library ICT training graduates who had attended the ICT training at Oshana Regional Library from August 2014 to March 2019, and for whom we had email addresses. The research targets were randomly selected from the list of 300 email addresses obtained from the Oshana Regional Library's email address list, oshanalibraryict@gmail.com, to which graduates also submitted their final test results. A quota sampling method was applied to end with 150 email addresses, to which the questionnaire was sent; each year from 2014 to 2019 was represented by 25 email addresses.

FINDINGS

Response rate
Response or return rate refers to "the number of people participating in a survey divided by the number of selected in the sample, in the form of a percentage", or the percentages of questionnaires sent out that are returned Babbie (2011, 261).

The study produced a low return rate of 25%, possibly because of limitations related to time and access to the internet, and because ICT graduates did not all have smartphones. Only 37 questionnaires, out of the 150 that had been sent to the target population, were returned. The researcher termed the return rate of this study as satisfactory. According to Fryrear, (2015), "generally, the external surveys receive on average 10–15% response rate as compared to an average of 30–40% or more response rate for internal surveys". The response rate may be lowered by influencing factors, such as using unreliable contact information, a population that is seldom targeted for research or little incentive to respond.

Survey results and analysis

Demographics of respondents

The majority of respondents were women, as 24 of the 37 questionnaires completed and returned were from women and 13 were from male respondents. Eighty-nine per cent of the respondents were youth, because 33 of the 37 respondents were aged between 20 and 35 years, 2 were teenagers (17–20 years) and 2 were young adults (35–45 years). No respondents were older than 45 years.

Twelve of the respondents were students, another 12 were employed, nine were self-employed (SMEs), three were unemployed and one was a learner. Table 1 summarises the demographics of the respondents.

Table 1: Demographics of respondents

Demographic factor		No.
Gender	Male	24
	Female	13
Age	17–20 years	2
	20–25 years	14
	25–30 years	11
	30–35 years	8
	35–45 years	2
	Older than 45 years	0
Occupation	Learners	1
	Students	12
	Unemployed	3
	Employed	12
	Self-employed	9
TOTAL		37

Value of basic ICT Training to SMEs

Section B of the study questionnaire enquired about the value of the basic ICT training for SME inputs and outputs. The two questions of the section were meant to be answered only by owners of SMEs who had attended the ICT training.

Question 1 of this section was formulated to assess the level of ICT skills improvement of the respondents in six listed aspects of individual SME business inputs, namely, *downloading of online forms (e.g. SME certification), designing and printing of quotations and invoices, designing and printing of promotional flyers and posters, sending business communication through email, usage of MS Excel formulas for business calculations and marketing the business on social media.* The answer options were four-point intervals of a Likert scale, which were significantly improved, improved, somewhat improved and not improved.

On average, 56% of the respondents this section indicated that there had been a significant improvement in their ICT business inputs (listed as six aspects in question 1 of section B) after attending the basic ICT training at Oshana Regional Library. In total 67% of the respondents indicated that their business inputs had improved, none of the respondents selected the option "not improved", for any of the six aspects listed. Figure 1 presents the results of Question 1 of Section B.
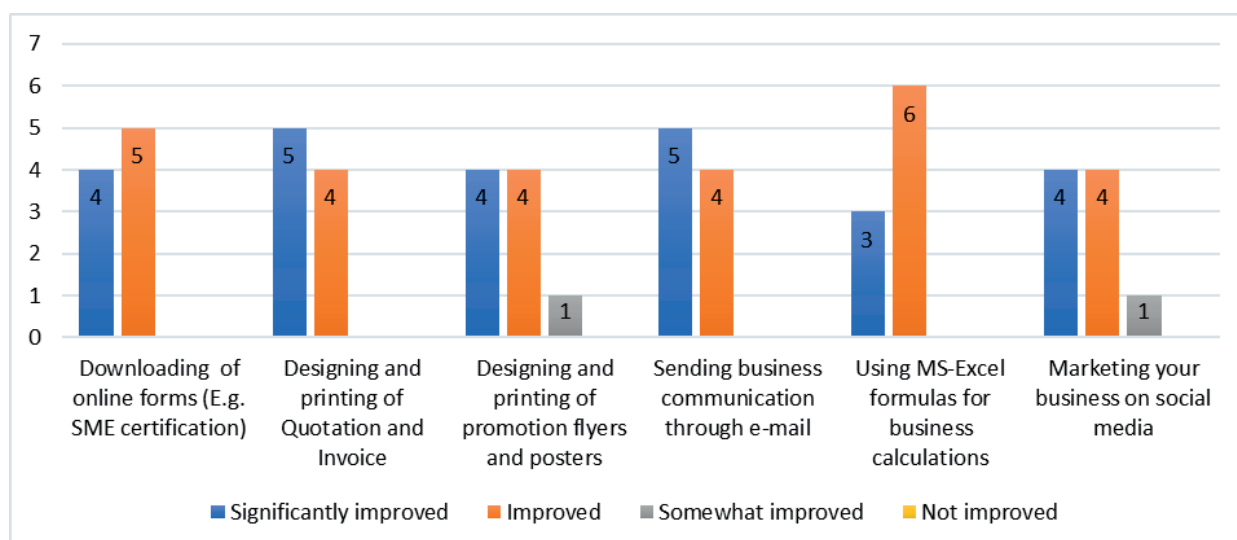
Figure 1: Level of ICT skills improvement on SME business input

Effects of basic ICT training on SME business outputs

Question 2 of Section B of the questionnaire required the respondents to indicate which of the three listed business outputs of their respective businesses increased after attending basic ICT training at Oshana Regional Library. Respondents were also given the option to indicate, if applicable, other outputs that were not listed. The listed business outputs were *profit, revenue* and *customer referrals.* The question was designed to allow respondents to choose more than one output, and 17 respondents answered this question.

Revenue is defined as the income that a company generates before any expenses are deducted, while profit is a net income on the income statement Boyte-White (2019).

Half (50%) of respondents to this question indicated that their profit increased after they had attended the ICT training, 31% recorded an increase in customer referrals, and 19% reported that their revenue had increased. No respondent selected the "others" option.

The Table 2 represents a summary of respondents who were entrepreneurs to Question 2 of Section B.

Table 2: The effects of basic ICT training on SME business outputs

Business outputs	Number of entrepreneurs
Profit increased	9
Increase in customer referrals	5
Revenue increased	3
Other benefits	0
TOTAL	17

General impacts of ICT training on the livelihoods of graduates

Section C of the questionnaire had three questions to assess the general impacts of the ICT training on the livelihoods of the graduates of the Oshana Regional Library free basic ICT training.

Question 1 asked respondents to indicate whether they *strongly agree, agree, disagree or strongly disagree* with the four listed statements in Figure 3.
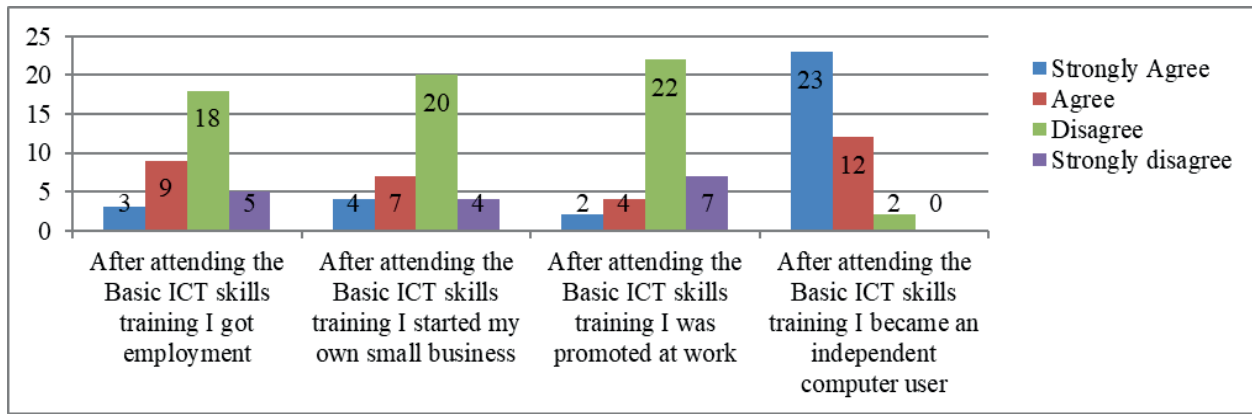
Figure 2: Livelihood changes of respondents after basic ICT skills training (n=37)

Question 2 of Section C was formulated to assess how well the individual ICT graduates learned the five different ICT applications offered by Oshana Regional Library. These ICT applications are *MS Word, MS Excel, MS PowerPoint, Social Networking,* and *Internet and email.* The respondents were required to indicate their individual skill levels after the training on a five-point Likert scale, namely, *excellent, good, fair, poor and very poor.* Figure 4 summarises the responses of the respondents to Question 2.
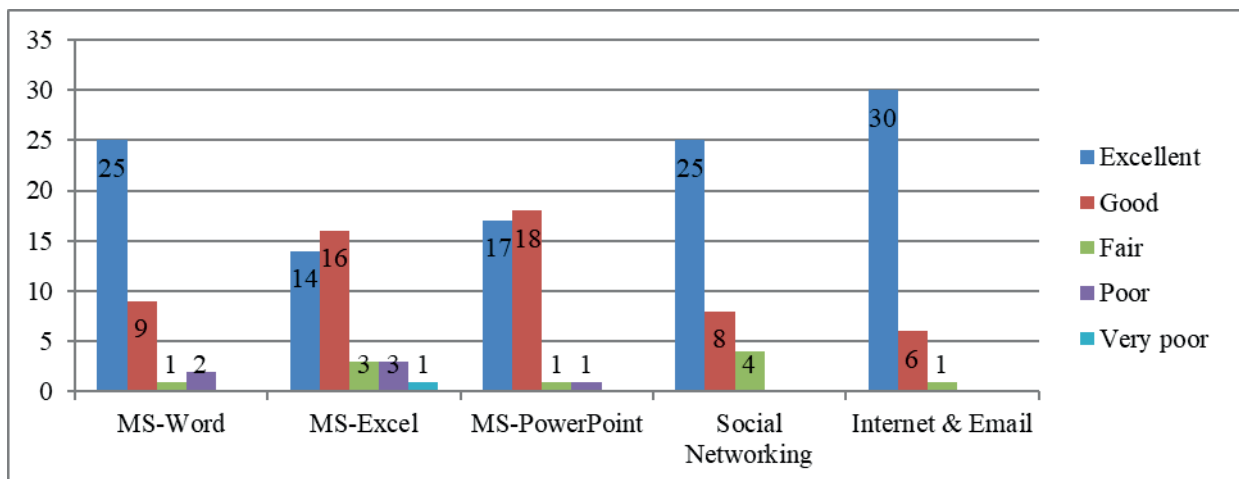

Figure 3: Respondents' current level of skills in the trained ICT applications (n=37)

Question 3 of this section was an open-ended question formulated to assess the general impact of the ICT training on the lives of individual basic ICT graduates. The respondents had to indicate 'yes' or "no" for changes, and if the answer was yes, they could describe the specific change/s they had experienced. The "yes" option was chosen by 89% (33) of respondents; some of the changes they specified are below. Only four respondents said "no". The pie chart in Figure 5 shows the proportion of respondents that indicated that their lives had been impacted by the basic ICT training course.
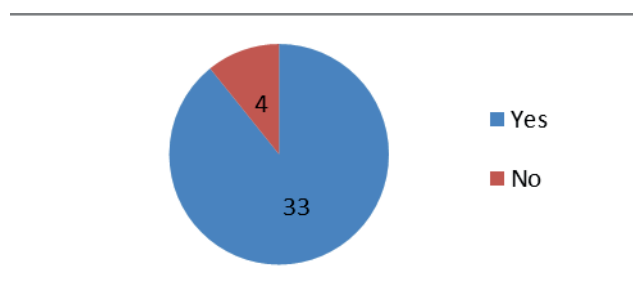

Figure 4: Question 3: Whether respondents' lives had been impacted by basic ICT training (n=37)

The general changes specified by the 33 respondents vary widely, though they correspond with or are related in the context. Below are some verbatim comments given by respondents who had indicated that their lives had been impacted by basic ICT training (Part 2, Question 3).

> *It becomes easy for me to operate my PC during the study*
> *As a student, it is now very easy for me to do my daily schoolwork activities and submit on time*
> *It became easy for me to apply online for further studies on my own*
> *I never know how to create an email or to send an email message, now I know*
> *It helped me to do better in the practical computer interviews*
> *I became an independent user and got employed at one company*
> *Now I can use the computer better and also apply the skills to my business, it saves time and books since now everything I type and save in the computer*
> *Now I can apply to different institutions online without any difficulties*
> *It changes my life like I never knew how to create email or sending, now I know how to create folders and save documents in the folders*
> *I never know how to do a presentation, now I can do it myself*

General comments about basic ICT training

Question 4 of Section C was formulated for respondents to give general comments on the basic ICT training and the general impact of this training on individual respondents' personal development. Below are some of the general verbatim comments of respondents.

> *Yes I now acquired more skills and I often use my leisure time to teach people in my community*
>
> *I had a good experience with the training, the instructors are very good teachers*
> *I strongly believe that learning computers at Oshana Library helps me a lot and I'm so blessed for that*
>
> *Oshana library changes our lives of using computer and now we are dealing with technology*
>
> *I am digitally empowered and enhanced my ICT skills after I attended this noble program, so the program should continue persistently*
>
> *"The certificate that you are giving to trainees should indicate the level of the score...i.e. how many a trainee scored*
>
> *It is for free and very useful and helpful*
>
> *Now I can make my business cards, birthday cards or wedding cards*
>
> *I understand personally that Oshana regional Library is improving the standards of the youth that do not have computer skills*
>
> *I am strongly recommending that ICT Training at Oshana Library should continue as it benefits the communities*
>
> *A big compliment to the Oshana Regional Library, it improves life standard and creates job opportunities*

DISCUSSION

The study revealed that SME owners who had attended ICT training at Oshana Regional Library attained and recorded a significant improvement in their business inputs. These gains were reported by an average of 56% of respondents, who indicated improvements in the six assessed business outputs, namely, downloading of online forms (e.g. SME certification), designing and printing quotations and invoices, designing and printing promotional flyers and posters, sending business communication through emails, using MS Excel formulas for business calculations, and marketing the business on social media. Generally, the findings are that the ICT skills acquired by the SME owners through training at Oshana Regional Library helped them to improve their business inputs; this was confirmed by 67% of the respondents.

Regarding gains in business outputs, the study reveals that the ICT skills acquired by SME owners from Oshana Regional Library's ICT training had a good impact on their business profit, resulted in more customer referrals and improved impact on revenue.

The study also revealed that most of the ICT graduates' livelihoods changed after they had attended the ICT training at Oshana Regional Library. For example, respondents indicated the following changes: "After attending the Basic ICT skills training I became an independent computer user" = 95%; "After attending the Basic ICT skills training I got employment" =32%; "After attending the Basic ICT skills training I started my own small business" =30% and "After attending the Basic ICT skills training I was promoted at work" =16%.

It is also evident from this study's results, as indicated in Figure 4, that this training helped the graduates to enhance their ICT skill levels on the six ICT applications they were trained in.

Overall, the study found that 89% of the graduates experienced some general livelihood changes after attending the ICT training at Oshana Regional Library, as indicated by individual respondents' specified changes and general comments.

CONCLUSION

Based on the findings of this survey, which was guided by the problem statement and three sub-questions, the study concludes that the ICT training offered by Oshana Regional Library had commendable impacts on the livelihoods of the ICT graduates. This conclusion is reached because ICT training significantly impacted the individual SME owners' inputs (improved by 56%) and outputs (improved by 67%).

The contribution of the ICT training to the livelihoods of women and youth is evident because youth constituted 89% of the respondents in this study, while women were 67% of the total respondents.

The results of the study also show that the livelihood changes of the ICT graduates varied. Some reported personal development, others business achievements and greater life sustainability, and so on. Some respondents indicated that they were promoted at work, some started their own businesses, and some were employed. Most of all, 95% of the respondents indicated that they became independent computer users.

RECOMMENDATIONS

Based on the findings and conclusion, the study recommends the following:

- That ICT training should continue, and the content of the course or training manual should be updated regularly to match the latest Microsoft applications and internet updates.
- Oshana Regional Library should consider introducing intermediate and advanced level ICT training, as a follow-up for their mass basic ICT training graduates.
- Regular user assessment should be conducted for SME owners' ICT training needs.

- The exam results of individual trainees should be printed on the back of the certificate, to motivate the graduates.

REFERENCES

Babbie, E. R. 2011. *Introduction to Social Research.* 5th ed. Wadsworth: Cengage Learning.

Boyte-White, C. 2019. "Revenue vs. Profit: What is the Difference?" Investopedia. https://www.investopedia.com/ask/answers/122214/what-difference-between-revenue-and-profit.asp.

Earth Institute and Ericson. 2016. "How Information and Communications Technology Can Accelerate Action on the Sustainable Development Goals - ICT & SDGs: Final Report". https://www.oneworld.net/sites/default/files/resources/2016-06/ict-sdg.pdf.

Fryrear, A. 2015. "What's a Good Survey Response Rate?" SurveyGizmo. https://www.surveygizmo.com/resources/blog/survey-response-rates/. (Accessed September 02, 2019).

Kambwale, J. N., C. Chisoro, and A. M. Karodia, 2015. "Investigation Into the Cause of Small and Medium Enterprise Failure in Windhoek, Namibia". *Arabian Journal of Business and Management Review 4*(7): 80 – 109.

Mcharazo, A., M. Koskinen, K. Mchombu, and N. Hamwaalwa. 2017. "Libraries as Engines of Social and Economic Empowerment: Best Practices and Results From a Partnership Project Between Tanzania, Namibia and Finnish libraries". Paper Presented at the World Library and Information Congress (WLIC), Intersectionality: Libraries at the Intersection of community identities, 19-25 August 2017, Wroclaw, Poland. http://library.ifla.org/1648/1/139-mcharazo-en.pdf.

Mchombu, K. 2015. *Libraries for Development project: Evaluation report.* Finnish Library Association, Namibia Library and Archives Service and Tanzania Library Service Board. [Report submitted to the Namibia Ministry of Education, Arts and Culture: NLAS].

MDR/NIDA. 2011. *Namibia Education and Training Sector Improvement Programme (ETSIP), Sub-programme, Information, Adults and Lifelong Learning (IALL), Library and Information Services (LIS) sector strategic assessment: Final Report of the MDR/NID Consultancy Team.* Windhoek: Management, Development and Research in the Information Society, and Partners and Network for Information and Digital Access.

Ogbokor, C.A., and E. J. Ngeendepi, 2012. "Investigating the Challenges Faced by SMEs in Namibia". http://ir.nust.na/bitstream/handle/10628/355.

Stork, C. 2010. "The State of SME Development in Namibia". Paper presented at the 12th Annual Symposium of Bank of Namibia, 'SME Development in Namibia' 29 September, Windhoek, Namibia. https://www.bon.com.na/090414-a055-4dfe-911e-e93984ea4851.pdf.

United Nations. 2019a. "Sustainable Development Goals. Goal 1: End Poverty in All its Forms Everywhere". https://www.un.org/sustainabledevelopment/poverty/.

United Nations. 2019b. "Sustainable Development Goals. Goal 5: Achieve Gender Equality and Empowering All Women and Girls". https://sustainabledevelopment.un.org/sdg5.