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Theft or norm? A tale of electricity theft in rural Kwaximba, eThekwini region of South Africa

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Abstract: The focus of this study was on the investigation of the prevalence of illegal electricity connections in KwaXimba. The study aimed to identify the root causes of illegal connections and explore potential solutions to reduce their occurrence. A qualitative research approach was adopted, and 20 participants were interviewed from rural areas in KwaXimba. Thematic analysis was applied to the data collected. The study revealed that illegal electricity connections were commonplace in the community, with individuals making personal decisions to engage in the activity. Some individuals inherited homes with pre-existing illegal connections. The study recommends implementing an electrification program to reduce illegal consumption of electricity and to prevent harm to vulnerable community members such as children. Organizations such as Eskom and community safety should work together to develop programs aimed at discouraging the normalization of illegal electricity connections in KwaXimba and other communities.

Subjects: Anthropology - Soc Sci; Sociology & Social Policy; Criminology and Criminal Justice

Keywords: electricity Theft; illegal electricity; rural; theft or norm; KwaXimba; Thekwini; Eskom

1. Introduction

The widespread issue of electricity theft is apparent in all communities, including the Republic of South Africa. While the electrification of both rural and urban areas is a top priority for the government, certain areas such as informal settlements have been left behind due to low consumption levels and high operating costs. The lack of formal connections in these areas leads to illegal connections, which are dangerous and contribute to electricity theft. The factors contributing to electricity theft vary in different sectors such as rural, formal urban, and informal urban settlements, with socioeconomic factors such as electricity prices, poverty, literacy, and corruption playing a significant role. This study focuses on the issue of illegal connections in KwaXimba, a rural community in, KwaZulu-Natal Province, South Africa, where the dangerous nature of the connections has prompted an investigation into the causes and potential solutions to reduce the rise in illegal connections. Illegal connections to electricity in KwaXimba have not only caused significant risks to the community's safety but also resulted in a loss of revenue for power companies. Therefore, this study is crucial in addressing the issue of electricity theft in rural South African communities.

The research involved conducting a comprehensive literature review of the existing research on the issue of electricity theft in South Africa and other countries. The study employed a qualitative approach, to report on the experiences of KwaXimba residents on the issues of electricity theft. The data was collected through interviews and focus group discussions with community members, electricity suppliers, and other stakeholders involved in electricity distribution in KwaXimba. However, for the purpose of this paper only data collected from the community members will be presented and analyzed.

The study aims to identify the root causes of electricity theft in KwaXimba, including social, economic, and environmental factors. It will also explore the current approaches implemented to address electricity theft and evaluate their effectiveness. Based on the findings, the study will recommend appropriate measures that can be implemented to reduce the incidence of illegal connections and enhance access to electricity in rural communities.

The results of the study will contribute to the existing literature on electricity theft in rural South African communities and provide valuable insights into the challenges faced in providing electricity to underserved communities. The study's findings will be useful to policymakers, electricity suppliers, and other stakeholders in addressing the issue of electricity theft in KwaXimba and other similar communities in South Africa.

2. Background of the study

It is commendable that the South African government has made efforts to increase the number of homes connected to the national grid, especially in rural areas that were previously considered too costly to electrify. However, the fact that 3.3 million homes are still unconnected as per the 2011 census is concerning According to Statistica,[1] as of 2021, the number of South African households connected to electricity via a pre-paid meter was 79.6 percent, while 12.5 percent received it via a conventional meter. Some eight percent of households obtained electricity through other sources. Most of these households left without electricity were in rural areas that were considered remote and very costly to electrify than other areas. 75% of these unconnected homes were in Eskom's jurisdiction while the rest were municipalities' responsibilities. Not only rural areas faced the challenges of not being installed with electricity, but the informal settlement also suffers the same fate. It is also worth noting that the 10% of South Africans who live in informal settlements that are neither rural nor urban face unique challenges when it comes to accessing electricity. These settlements are often characterized by inadequate infrastructure, lack of basic services, and high levels of poverty. As a result, many residents resort to illegal connections and electricity theft as a means of accessing electricity (Gaunt et al., 2012).

Gaunt et al. (2012) classified electrification into three sectors: rural electrification, formal urban electrification, and electrification of informal urban settlements. Although electricity is crucial for all these sectors, the drivers of electricity theft differ. In rural areas, where economic activities are sparse and infrastructure is poor, underdevelopment is the main factor contributing to electricity theft. However, in urban areas, including informal settlements, overpopulation is a significant driver.

Socioeconomic factors, such as electricity prices, poverty, literacy, per capita income, urban unemployment rate, total population, infrastructural investment, and economic structure, are essential in understanding electricity theft. Additionally, corruption among public utility employees is a growing factor in enhancing electricity theft in rural areas of developing countries states that utility employees often take bribes from individuals who have been fined for illegal connections or meter tampering in various communities in South Africa. For most individuals, the opportunity to pay a bribe to keep the electricity running at the cost of an R6000 fine for meter tampering is tempting (Clarke, 2016). This highlights one of the issues that contribute to electricity theft in rural areas.

The escalating cost of electricity is another significant contributing factor to electricity theft. The electricity utility bill in South Africa has continued to rise over the years, posing a considerable challenge for the poor. According to Chihore (2014), between 2006/7 and 2009/10, the rate of electricity increased from 5.1% to 31.3%. Eskom justified this increase by citing the need to address the power crisis of blackouts that persisted from 2007/8 to 2023. However, the impact of these rate hikes has been substantial, particularly for impoverished South Africans.

It is important to note that electricity theft has consequences in the society, and some of these challenges is that it has led to the loss of billions of rands in annual revenue by the government-owned, power distribution company Eskom. Electricity theft is also one of the contributors to load-shedding in South Africa, which threatens the country's development prospects (Mujuzi, 2020). He also pointed out that because electricity theft is not a statutory theft in South Africa, unlike other countries like Canada, India, Australia etc, the deterrence to steal it is minimal.

However, in trying to ameliorate the situation, the government launched the Electricity Basic Services Support Tariff (Free Basic Electricity) Policy of 2003 which states that the groups of people who meet specific criteria will qualify for the allocation of free basic electricity, which is limited to a maximum of 60kWh per household per month and anything over this limit will be charged to the customer. This policy still has not reduced electricity theft

3. Literature review

3.1. Understanding global perspectives on electricity theft (developed and developing nations)

Electricity theft is a global issue that takes on different forms in different parts of the world. Although it is often associated with developing countries, the problem is not limited to such nations. The financial costs of electricity theft are high, with billions of US dollars being lost each year worldwide. A study by Smith (2004) found that theft accounts for 1–2% of the generated amount but can result in significant revenue losses due to the large amounts of electricity being generated. In the United States, theft costs the country between 0.5 to 3.5% of annual gross revenues, resulting in revenue losses of between US$1.4 billion to US$9.8 billion per year. Developing countries such as Brazil, India, Malaysia, and Lebanon can lose up to 40% of the total electricity distributed due to non-technical losses (NTLs), which have become endemic. While the prevalence of electricity theft in developing countries ranges from 20 to 30 percent, some studies suggest it can be as high as 10 to 40 percent. In South Africa, losses due to electricity theft range from R2.5 to R3.6 billion. The rate of electricity theft varies widely between developing and developed countries, with developed countries recording lower rates. However, it is difficult to explain the problem solely based on a country's income level as there are exceptions such as China, which has a lower rate despite being a high-income country. Therefore, it is crucial to examine other factors beyond income when investigating electricity theft.

4. Causes of electricity theft in South Africa

4.1. Unemployment, service delivery, and lack of accountability and corruption

Unemployment causes many of the problems faced by South Africa e.g. increased crime rates. According to Geyevu and Mbandlwa (2022, p. 1) *" … Unemployment rates are on the rise and people look for alternative solutions to support themselves and their families"*. Electricity theft is one of the alternatives for families to mitigate the effects of unemployment. Members of the community will install electricity illegally because they do not have the means to have legal (billable) electricity. Geyevu and Mbandlwa (2022: 11.69) classify electricity theft by the unemployed and poor into two groups: The first group is the group of people that utilize illegally connected electricity because they claim not to afford to pay for the electricity. The second group is the group of people who illegally connect electricity as a form of employment and illegally connect electricity for community members for a specific amount of money as remuneration.

The government also provides fertile ground for the commission of electricity theft by lack of service provision. For example, certain municipalities experience severe organizational capacity constraints. These failures by the municipalities and Eskom lead to increased electricity theft rates. While poverty and unemployment can be attributed to increased levels of theft in electricity, lack of accountability is also a contributing factor. With increased accountability in electricity theft, one would see a decline in the levels of theft. Mujuzi (2020) attests that Eskom requested the Justice Department and the National Prosecuting Authority to change the law to make electricity theft a form of sabotage. This would mean stricter penalties for those who offend. Currently, however, members of the public are met with a minimal consequences when it comes to the offense of electricity theft. For example, one of the penalties imposed by Eskom is the changing of the meter which is seen to be inadequate as the public would resort to meter tempering as soon as the meter is changed and Eskom has left. Changing the law around electricity theft sanctions cannot prove to be effective because of issues of corruption. This issue of corruption is mainly attributed to the employees and management of Energy providers. For example, Khonjelwayo and Nthakheni (2021) argue that Eskom turns a blind eye to municipalities that do not pay for power due to political reasons (an example being Soweto Municipality not being held accountable for their bill).

5. Electricity theft in the rural areas

There are various crimes that happen in rural areas all over the world. Criminological literature often ignores the distinction between rural and urban crimes. It is not gain saying that South Africa is one of the countries with high rural crimes which range from murders to livestock theft. World Bank statistics have put the rural population in South Africa at 35.2 % of the total population in 2015 (Trading Economics, 2016). The South African Police Services in their National Rural Safety Strategy (2013) established that high levels of poverty and underdevelopment in rural areas are the major factors that drive crime. Pelser et al., outline that some 18 million people—more than 46% of South Africa's population live in rural areas, and years of racial discrimination have ensured that this population is predominantly very poor, undereducated and underemployed. It is important to understand that the consequences of poverty and underdevelopment are embedded in history. However, the failure to redress these factors of the past by the government remains one of the major factors that sustains rural theft. With the understanding above, one can zoom into the problem of electricity theft. Though there has been an increase in rural electrification in South Africa since the 1990s, the process remains slow. Therefore, considering that electricity is a necessity for survival various communities in rural areas have engaged in illegal connections.

More so, it is important to note that poverty and unemployment in South African rural areas are very high. This means that most people in rural areas cannot afford to pay for electricity. Clarke (2016) clarifies that for those in low-income brackets in South Africa, electricity bills take up a large percentage of their income. This means that if there are any options for getting electricity without paying for it they would do it without hesitation. For instance, in the Channing village in Zandspruit, meter tampering is a customary practice since they cannot afford to pay for high electricity bills due to their low income of R29, 900 per annum. According to Katiyar (2005), high costs, both at the entry-level and in terms of regular electricity bills, also lead to a higher incidence of theft. Thus, electricity costs for people in rural areas are slightly high and unaffordable thus electricity theft. Vuk'uzenzele (2011) outlines that poor people in South Africa are the culprits of electricity theft through illegal connections. Though suggestions have been made and processes are said to be put in place to make electricity accessible for the poor in South Africa, it remains immaterial. Chihore (2014) outlines that, though the concept of Free Basic Energy was introduced as a means of providing energy for the basic needs of indigent households, implementation has not been without its challenges. The major challenge, as highlighted by the DoE, is the lack of indigent policies; the registration, verification, and management of indigents; contravention of policy; and token collection. In other words, the execution of this concept is complex and has not been carried out effectively. Corruption of employees in public service utilities is also one of the factors which have increasingly enhanced electricity theft in rural areas in most developing countries (Katiyar, 2005). Utility employees often take bribes from individuals that have been fined for illegal

connections or meter tampering in various communities around South Africa (Clarke, 2016). Therefore, it is not gain saying that the opportunity of paying a bribe to keep the electricity running at the cost of an R6000 fine for meter tampering is always welcome for most individuals (Clarke, 2016). This outlines one of the issues constituting electricity theft in rural areas.

6. Effects of electricity theft

6.1. Load shedding, investor confidence, and the cycle of unemployment

Power Production requires revenue in order to procure materials for production, human resource, etc. Eskom (2022, p. 1) announces that the "World Bank approves R9 billion concessional loan facility for Komati Power Station repurposing and Just Energy Transition". The organization is not able to sustain itself due to loss of revenue through theft and other contributing factors. This then leads to issues of load shedding which ultimately contribute to a lack of Investor Confidence. The South African economy has seen a decline in economic activity and livelihood increasingly becoming expensive. On a smaller scale, this amounts to decreased employment opportunities and ultimately increased criminal activities in the country.

Electricity theft is a major problem in many rural areas of South Africa, with significant effects on both the individuals who engage in this activity and the wider community. Some of the effects of electricity theft in rural areas of South Africa include:

(1) ***Economic loss***: Electricity theft leads to a significant economic loss for power companies and the government. This, in turn, leads to higher tariffs and reduces the amount of money that can be invested in improving the electricity infrastructure in rural areas.

(2) ***Safety hazards:*** Illegal connections, bypassing meters, and other forms of electricity theft can be dangerous. They can cause fires, electrocutions, and other safety hazards, particularly in areas where electrical infrastructure is old and poorly maintained.

(3) ***Power outages:*** Electricity theft can also lead to power outages in rural areas. When individuals illegally tap into electrical lines, it can cause overloads and power failures. This can lead to disruptions in daily life and hamper economic growth in the region.

(4) ***Social issues:*** Electricity theft can also have social implications. It can cause tension between neighbours, as those who pay for electricity may feel resentful of those who do not. Additionally, electricity theft can lead to illegal activity and increased criminal behaviour in the area.

(5) ***Environmental damage:*** In many cases, electricity theft involves individuals tapping into electrical lines in a way that is not sustainable or safe. This can lead to environmental damage and pollution, particularly in areas where electrical infrastructure is not properly maintained.

In summary, the effects of electricity theft in rural areas of South Africa are numerous and wide-ranging. They include economic loss, safety hazards, power outages, social issues, and environmental damage. It is important for the government, power companies, and individuals to work together to combat this problem and promote sustainable and safe energy use in these communities.

7. Understanding free basic electricity (FBE) in South Africa

According to Eskom (2022), all you need to do is dial × 130 * 269# on your mobile phone in order to access Free Basic Electricity (FBE). If you are verified to receive free services, you will receive the expected units. FBE is a policy that was initiated in 2003 which recognizes electricity as a basic energy need and seeks to ensure that electricity is accessible and affordable for all and mostly the poor (Eskom, 2016a). This was a policy passed by the national government and approved by the cabinet in acknowledgment of the various socioeconomic challenges that face the poor in South Africa (FBE Guidelines, 2003). FBE then assists in minimizing electricity theft. Eskom has employed

another initiative such as Operation Khanyisa, an electrification project that worked alongside law enforcement agencies and led to the arrest of many (Eskom, 2016c).

The Electricity Basic Services Support Tariff (Free Basic Electricity) Policy of 2003 states that certain groups of people who meet specific criteria qualify for the allocation of free basic electricity, which is limited to a maximum of 60kWh per household per month and anything over this limit will be charged to the customer. Most households fail to meet these stipulations due to the overuse of electricity through illegal connections. As Chihore (2014) highlighted that:

> … high electricity consumption on the one connection places the households in higher tariff blocks and coupled with the premium charged by the resellers, it results in higher energy bills and the households fail to benefit from the pro-poor initiatives. The main challenge is the arrangement of the informal settlements and the lack of awareness of the benefits of the pro-poor initiatives. To resolve the challenges that remain, action is required from several different stakeholders including Eskom and other government departments.

Therefore, it is these realities identified across literature, which help one to understand the factors surrounding energy issues and the consequences thereof. Thus, South Africa acknowledges and understands that electricity is a basic commodity and must put significant measures in place to make it an accessible and affordable utility considering the poor background of the majority. And as such, relevant authorities have a duty not only to educate the communities on the importance of saving energy but to quickly facilitate the availability of electricity in various households (urban poor, and rural) to ensure proper regulation to limit electricity theft.

The literature review gave an insight into understanding global perspective on electricity theft in developed and developing countries and narrowed it down to the causes of electricity theft in South Africa. It highlighted that theft of electricity in South Africa are caused and perpetrated by unemployed people, poor service delivery to the community, and general lack of accountability and corruption. These negligence fuels the theft of electricity in the rural areas, which has an effect that range from Load shedding, reduction of Investor confidence, and increases the cycle of unemployment which again leads Economic loss, Safety hazards, Power outages, social issues, Environmental damage.

The literature also pointed out the strategy implemented so far to prevent electricity theft which includes the detection and reduction of the theft of electricity and narrated how to understand and use Free Basic Electricity (FBE) in South Africa. However, the literature did not dwell on the consequences of electricity theft, which is one of the reasons why people still steal electricity unabated because there is no statutory offence which should serve as a deterrent.

8. Theoretical framework

The following discussion pertains to the theoretical framework that underpins this study.

8.1. Rational choice theory and social learning theory

The rational choice theory, first proposed by Cesare Beccaria in the late 18th century and advanced by Anthony Downs in 1957, posits that all humans make decisions based on rational calculations and aim to maximize either pleasure or profit. This theory suggests that individuals weigh the risks and benefits of committing a crime, including the likelihood of being caught and punished, before making a decision. In the case of the KwaXimba community, members are guided by hedonism and weigh the benefits of stealing electricity against the risk of being caught. Despite the criminalization of electricity theft, the community continues to engage in this activity because they perceive the benefits as greater than the consequences. This behavior can be attributed to the high cost of legal electricity rates and the profitability of bribing officials for illegal connections.

The rational choice theory helps to explain the inconsistencies in service delivery processes in the country, which force individuals to engage in illegal activities as they act in self-interest. This theory also highlights how individuals attempt to maximize their financial gains and minimize their losses in their acts of criminality. While some acts of criminality may be rational, others may be non-rational. In the case of electricity theft, it is not necessarily the entire community that rationalizes this behavior, but rather individual members who make decisions that affect the whole community. It is important to understand that individual decisions can define the structural outcome for communities, and thus policy interventions should aim to address the underlying factors that lead individuals to engage in illegal activities.

The Social Learning Theory was developed by psychologist Albert Bandura in 1977 as an alternative to the earlier work of fellow psychologist B.F. Skinner, known for his influence on behaviourism. Social learning indicates that individuals learn from those around them by basing their morals and activities on what they see others in their social environment do, thus they observe and imitate the behaviour of others.

The social learning theory operates on the assumption that people learn through observation, and learners can acquire new behaviour and knowledge by merely observing a model; reinforcement and punishment have indirect effects on behaviour and learning, and that people form expectations about the potential consequences of future responses based on how current responses are reinforced or punished; mediational processes influence our behaviour, that cognitive factors that contribute to whether a behaviour is acquired or not; and learning does not necessarily lead to change. It postulates that just because a person learns something does not mean they will have a change in behaviour

To this end, as people in the rural areas in KwaXimba, Kwa-Zulu-Natal sees that electricity theft is almost a social norm, and that there is not any punishment, others will likely steal electricity since the incentive for them to follow the official process of connectivity, purchase and consumption of electricity is non-existent, and others steal and bribe officials to continue to use the stolen electricity, others that had not stolen, will also steal.

9. Research methodology

9.1. Research design

This study uses a qualitative research approach wherein data were collected by interviewing 20 community members (10 female and 10 male) from KwaXimba rural area. Interviews allowed for a depth of understanding the lives and experiences of the KwaXimba community members better as far as electricity theft is concerned, their involvement in the theft process and/or their contribution to facilitating the electricity theft, and their experiences on causes of electricity theft. Also, to attempt to identify new insights, new understandings of factors related to electricity theft from the KwaXimba community member's perspective.

Even though electricity theft is not an entirely new social science issue, the researchers seek to bridge the gaps by bringing new insights, and new knowledge contributions to the body of literature on the causes of electricity theft in the rural area and provide solutions to this problem. Therefore, the exploratory nature of the study avails the researchers to gain insight into the plight of KwaXimba community members on the issues pertaining to electricity theft and how this impacts their everyday lives.

9.2. Subject selection and participation

The researchers sampled 20 participants (10 females and 10 male) from KwaXimba rural community. These participants were selected according to their knowledge of the issues of electricity theft in their community and their experience in the context of the phenomenon under study. These participants were sampled by using a purposive sampling technique. This technique helped in

selecting the most relevant and knowledgeable participants regarding electricity theft in KwaXimba. They needed to meet the following criteria for inclusion in this study: (i) they must be Permanent residents of KwaXimba rural area; (ii) to have bridged or stolen electricity or performed an illegal connection; (iii) from any socio-economical and ethnic group; and (iv) they must show readiness and willingness to answer questions about their involvement in the electricity theft.

9.3. Protection of human subjects

All participants were ensured protection first through the University of KwaZulu Natal ethics. Background information on the focus of the study, description of the interview, research procedures, risks and benefits of participating, and protection of confidentiality were all provided to the individuals interested in participating. This information was given to the individual in a consent form that was provided and reviewed prior to the interview to ensure any questions the participant had were answered and so voluntary participation was ensured. The interviews were held in the comfort of their households.

Before the start of the interview, the authors and participants reviewed the consent form and each participant was required to state their approval. The participants were made aware that at any time they were free to skip any question. In addition, they were informed that they could end the interview at any time with no consequence. Confidentiality was upheld by not recording any identifying information on both the recordings and the transcripts. Any identifiable information such as street name, household address, or household number was not included in any way in this study to maximize anonymity and confidentiality. Audio recordings were made on a password-protected cell phone and then transferred to a computer and erased from the phone recording. All the transcripts and audio recordings were held on the authors' computer in a locked password-protected file.

9.4. Procedure

The data were obtained from 20 (10 females and 10 males) KwaXimba rural community through face-to-face semi-structured interviews lasting approximately 60 minutes per interview. "Semi-structured interviews also allow informants the freedom to express their views in their own terms" (Gillham, 2005)." The participants were requested to share their experiences and revealed circumstances and perceptions relating to the phenomenon under investigation (Punch, 2014). The interview questions focused on how the participants' experiences regarding electricity theft, the causes, and ways in which it can be prevented. The questions were open-ended, that is, the interviewer had more room to probe the interviewees. The probing is done along the lines of the interview guide that the interviewers have set prior to the interview. The interview was recorded using a cell phone to later transcribe the information. Prior to the interview the authors read through the consent form with each participant and asked questions to ensure that they understood the content of the form. Participants were given a copy of the consent for their records. The consent form contained contact information for the authors. The interview was conducted in IsiZulu because that's the dominant language spoken in KwaXimba rural community and most of the commuters preferred it than English. The IsiZulu interviews were later translated into English by a certified and qualified translator to minimize the loss of translation in meaning, as some of the Zulu words are not found in English.

10. Data analysis

Interviews were recorded and later transcribed verbatim and field notes were also taken. The researcher identified common themes relevant to the study objectives and research questions. Bless, Higson-Smith, and Sithole (2013) reflect that a core component of qualitative data analysis is coding. This refers to the process of reading carefully through transcribed data, dividing it into meaningful analytical segments, and marking the segments of data with symbols, descriptive words, or unique identifying names. The original transcripts were broken up and classified all the solicited fragments into various categories. This was done by looking for themes and patterns

within the data itself guided by the study's aim and objectives and to ease the categorizing process, labeling to ease retrieval and management thereof. These labels included descriptions of the study about the conducted one-on-one semi-structured interviews and consulted literature studies.

11. Findings and discussions

The findings of this study revealed that the issue of electricity theft is normalized within the community. Individuals steal electricity based on personal decisions and preferences, and are also motivated to steal since there is no strong deterrent like punishments from those who had stolen. The majority of the participants indicated that the high cost of electricity and poverty were the major causes of electricity theft. They argued that they could not afford to pay for electricity bills and therefore resorted to illegal connections. The minority of the members stole electricity because they had bought houses that had readily stolen electricity. The participants also revealed that electricity theft is prevalent among tenants who do not pay electricity bills and therefore resort to illegal connections.

Illegal connections to electricity are a major problem in KwaXimba, with poverty being one of the major causes. Punitive measures such as fines and imprisonment have not been effective in reducing the rise in illegal connections. An electrification program should be made to save both Eskom Revenue from illegal consumption and to save the lives of the community members, especially the vulnerable group, children who fall victim to exposed cables. Organizations such as community safety and Eskom should formulate programs that are aimed at de-normalizing the act of electricity theft in the community of KwaXimba and across other communities.

12. Is the rural community aware that illegally connected electricity constitutes theft?

When asked if the rural community are aware the illegal connection to electricity is theft, the whole participants confirmed that they are aware.

One participant said:

> Yes, I am aware that it is illegal to steal electricity, but we have no choice, even today we are still waiting for Eskom to install electricity for us.

It is of interest to note that the KwaXimba society perceives electricity theft in their area as a common practice that is now socially acceptable. Seger and Icove (1981) posit that electricity theft is a silent crime that even when people acknowledge that it is wrong they will not report it, therefore it is not as effective to rely on a tip-off. This was attributed to the high number of people who are connected illegally in the area and nobody in the area complain of the practice. It is something that they have embraced, accepted, and see no wrong in doing as a society.

This clearly confirms the understanding of rational choice theory and social learning theory, which clarifies that consistent practices in communities are often ignored even though they are wrong, people feel it is part of their lifestyle. Moreover, since there they have observed to note that no punishment has happened to the ones that have stolen electricity in the community before them, they are therefore motivated to steal also. One can relate the findings of responses and findings of this study to that of Eskom (2016b) in Operation Khanyisa which revealed that 96% of South Africans acknowledge that electricity theft is wrong, however, despite this acknowledgment, only 16 percent believed that they will be caught. Generally, the people of KwaXimba are aware that stealing electricity is an illegal act. However, financial constraints resulting in their failure to pay electricity bills compel them to steal electricity, and the fact that there is no deterrent to them through punishment, it motivates others to also steal.

The delay by Eskom to come and install electricity and meters also forces residents into stealing electricity. Some blamed the high unemployment rate and poverty as part of the main reasons

why people steal electricity. Although they suggested ways to end electricity theft in their area, all those who are using electricity illegally reported that they will feel hurt if the use of illegal electricity is stopped. Utilization of one meter by two households was reported to be a way of saving as they would share the electricity bill when paying.

It is likely that some members of rural communities may not be aware that illegally connecting to electricity constitutes theft. This could be due to a lack of education or awareness about the laws and regulations related to electricity use. However, it is also possible that some individuals may intentionally choose to illegally connect to electricity without acknowledging the legal consequences of their actions, and the lack of consequences reinforces behaviours. As this was postulated by the rational choice theory and social learning theory. Their low chances of being caught are evident through the lack of Eskom checking each household of the illegal connection in KwaXimba. This lack of checking facilitates the calculation of the benefits amongst the commuters to be higher than the chances of being caught.

It is also important for governments and electricity providers to educate communities about the importance of legal and safe electricity connections, as well as the consequences of illegal connections. This can include outreach and education programs, as well as enforcement actions against those who engage in illegal connections. Ultimately, increasing awareness and understanding of the importance of legal and safe electrical connections can help to improve the sustainability and safety of rural communities.

This awareness and advocacy campaign also come with the deconstruction of social behaviour learned by the rural dwellers who may have internalise the fact that electricity theft has become a social norm in the community

13. Causes of electricity Kwaximba rural community

13.1. Socio-economic ills as a motivation for electricity theft

The setting within the rural areas is the most probable reason for the theft of electricity. The economic status of the families and the communities are one of the contributory factors that were attributed by the participants of the study. Upon the identification of patterns and themes within the interviews, the researcher observed that the issue of money formed a large portion of households that are utilizing stolen electricity. This is because most people are unemployed and have no other source of income to cater for bills. One respondent revealed that:

A participant said:

> Only my granny works in this house. The money she gets is not enough to feed all of us and to add electricity on top of that would be an extra strain. Government should give us free electricity the same way it has given us free water in this community.

This assertion is in line with Depuru (2012). According to them, electricity theft is proportional to the socio-economic conditions of the consumers of electricity. This clarifies that people are strained economically and as such choose to engage in electricity theft. The community is of poor economic status but claims to need electricity at this age. One participant went further to say that they can't even use wood now as a source of energy because even the forests are now cleared off from deforestation. Electricity is a necessity that they require for their livelihood.

Socioeconomic ills can be a significant motivation for electricity theft, particularly in rural or economically disadvantaged communities. In many cases, people living in poverty may not be able to afford the high costs of legal electricity connections, or they may be frustrated with the slow pace of government or utility company's efforts to bring electricity to their communities. As

a result, they may resort to illegal connections in order to access electricity, even if it means putting themselves and others at risk.

From the foregoing, it is plausible to say that socio-economic factors motivate electricity theft, and apart from unemployment stated above, others are lack of access to other basic services such as healthcare and education, and a general lack of trust in government or utility providers. In some cases, organized criminal groups may also be involved in electricity theft, using it as a source of income or as a way to exert control over communities.

Addressing the root causes of socio-economic ills and providing affordable, reliable electricity to communities can help to reduce the incidence of electricity theft. This can involve government or utility company efforts to expand access to legal and affordable electricity connections, as well as efforts to address other social and economic issues that may be driving people to engage in electricity theft.

Another participant also said:

> We do not pay for electricity, we are using illegal electricity because conventional electricity is it expensive. Eskom installed electricity meters and never came back for check-ups.

The above response reflects that the members of the community took advantage of the fact that the chances of them being caught are minimal. This is because Eskom does not come for check-ups and does not have any monitoring systems put in place to install some degree of fear and compliance with electricity policies. It is also indicative that the electricity thieves have learned that it is a norm in the community

13.2. Poor (reluctant) service delivery and the increase in households since 1996

When the government is unable to provide the basic needs promised in the constitution of South Africa, members of victimized communities tend to find alternative means to bridge this gap. While at times, these may be within the legal framework of the country, most times it is not. The rural and marginalized community of KwaXimba responded by saying they connect electricity for themselves because Eskom does not come to the table when requested to either come and install or fix existing and faulty meters.

These are some of the remarks from the respondents:

Participant 1 said:

> … We robbed it, and our electricity was faulty we called Eskom to come and fix it but they never came, therefore we were forced to get someone else to help us. The electrification of rural areas began in 1990 in South Africa but slowed down around 2013 due to a lack of resources. The KwaXimba community falls victim to such as there has been no electrification program in the area since 1996. Twenty-four years later, families have had to make alternative means of electric installation.

Participant 2 said

> … Everyone who came here after 1996 should be attended to first by Eskom and install new electricity for them. Eskom last came to this community in 1996 so all of us who came after were never given the opportunity to have power in our homes.

The lack of commitment by Eskom to the rural community of KwaXimba is a major contributor to electricity theft in the area. When service providers fail to meet the expectations of consumers, they tend to withhold payments and resort to illegal activities. This is why the reasons behind the electricity theft in KwaXimba are apparent. Community members rationalize their actions before

they engage in illegal practices such as tampering with meters and making illegal connections. If the benefits outweigh the consequences, they continue with their actions without considering the possible outcomes, as they believe the chances of being caught are minimal (Cesare de Beccaria). Besides, there are people before them that have been involved in illegal electricity connectivity in the community, and are still enjoying the facility, therefore this serves as an incentive for them to do same haven observed their behaviour

13.3. The choice not to purchase electricity

Human beings are logical beings who weigh the option of being caught with the benefits. Upon studying the interviews, the researcher also noted that one of the twenty households was utilizing illegal electricity because they were merely avoiding putting money towards electricity. In understanding that this research utilized Rational Choice Theory, one can understand that people always make conscious decisions considering their advantages and benefits. This means individuals will weigh the risk of being caught committing criminal acts with the benefits. Almost half of the respondents expressed their dislike for legal connections of electricity because it would deprive them of free electricity.

Participants 3 said:

> I would hate to have to pay because then we would stay in the dark. No one works in this house. How would I pay then?

Electricity is necessary for lighting, cooking, heating, and powering essential appliances such as refrigerators and medical equipment. Lack of access to electricity can have significant impacts on quality of life, particularly for vulnerable populations such as children, the elderly, and those with health conditions.

Governments and utility companies have a responsibility to ensure that legal and affordable electricity connections are available to all communities, regardless of their individual choices about whether or not to purchase electricity. This can involve efforts to expand access to electricity in underserved communities, as well as outreach and education programs to help people understand the importance of safe and legal electricity connections. Ultimately, improving access to electricity can help to promote economic growth, improve quality of life, and support environmental sustainability.

Participant 4 said:

> Why should I pay for electricity when I can use free electricity? At first, I was scared. I was away and when I came back they had tempered with the meter. I shouted at everyone here at home but over time I got used to this life of not having to buy power. Back in those days, we would go get wood from the fields if we want to cook things that take a long to get ready, I remember hating Stamp, Beans, and Steam Bread for this reason. We were not allowed to put it on the electric stove because it wasted electricity and sometimes we would sleep in the dark. Free electricity has made life easier for me. We don't go to the fields for wood, but we get to cook four-hour-long dishes because of this kind of electricity. I am not saying it is right but I am enjoying the benefits of it but I pray every day that we don't get caught and sent to jail.

The lack of a legal framework to regulate this type of crime and the absence of a reporting category make it easier for community members to justify their decision not to purchase electricity. Since the punishment for not buying electricity is only disconnection, which is not a severe penalty, individuals continue to reconnect illegally after being disconnected. This creates an endless cycle of non-payment and illegal reconnection.

It must be stressed that the principal motivation for KwaXimba rural dwellers to steal electricity is buoyed by the fact that as they rationalise and weigh the benefits and consequences of their action, they also note that it has become a norm in the community. The social learning theory postulates that individuals learn behaviour from their community. Members of the households that have not hitherto stolen electricity sees that others in the community is stealing, and has been so stealing for a long time, and this will also influence their own behaviour to steal since it is in their estimation a norm

14. Houses bought with readily installed electricity

This is the fourth reason which was less popular among the households. Only four households reported that they bought a house that had electricity installed already. This electricity was illegal in nature. While two of these households were reported to have made attempts to have this kind of connection removed. Two of them are said to have made no attempt and are enjoying the fruits of such connections.

A participant said:

> We bought the house from a family that was moving from the community. The house had electricity and water. Both utilities are not legally paid for. At first, I was very reluctant about using the electricity but eventually, I and my husband decided it was okay to use it, it is not us who put it here. We bought a house and there it was. I know that if the police came they would arrest one of us but that is a risk I am willing to take—it's not like they will come. It has been years and years now and I don't even know how long exactly, and it is true, the police have not come.

15. Findings and discussion

This study therefore notes the nuances of the electricity theft in South Africa by highlighting the efforts of the South African government as well as efforts made in other climes.

16. Strategy implemented to prevent electricity theft

The South African government has implemented several policies to combat the problem of electricity theft, which is not unique to South Africa but a global issue. Various approaches have been proposed in the literature to prevent electricity theft. Although electricity theft is criminalized in South Africa, the rate of occurrence is still high. Given the economic, political, and social implications of electricity theft, there are multiple policies and strategies aimed at addressing this issue, such as the detection of electricity theft, awareness campaigns, and the prosecution of those responsible for electricity theft which has not really yielded much success.

Literature shows some of the motivating factors that leads to electricity theft in Kwaximba, eThekwini Region of South Africa, and highlights that theft of electricity in South Africa are done by unemployed people more, and their excuses are that their houses are not connected to the grid. While it is difficult to connect their houses to the grid because of how the houses are built without any plan, their activities however cause economic loss, Safety hazards, social and environmental issues. The literature also pointed out the effort of government to address their issues because of their socio-economic bracket using Free Basic Electricity (FBE) which is supposed to provide them with free electricity supply.

16.1. Detection and reduction of electricity theft

The struggle against electricity theft continues in all countries and is conducted through different special devices, engineering techniques, and other various detective methods. In recent years, detecting electricity theft has emerged as an active area of research as governments all over the world seek to find ways of dealing with this very economically costly and deadly practice phenomenon. To estimate electricity theft, some countries such as Kenya through their Last Mile Connectivity Project have applied only traditional methods of detecting electricity theft i.e.

verifying connections by analyzing power stations. This project was very successful as it resulted in the arrests of a number of members of a syndicate that connected illegal lines (ESI Africa, 2016). However, this kind of success is not guaranteed because as mentioned before electricity theft occurs in a number of ways and illegal connections are not the only form of theft. In addition to periodic physical checks and utility meter readings, utility companies also rely on consumers reporting electricity theft sometimes in return for big rewards. For example, Eskom has promoted the reporting of electricity theft through affordable and anonymous messaging services, free hotline services, emails even door-to-door engagements with community members (Eskom, 2016a; News24, 2015). Electricity theft cannot be virtually stopped in any power system despite some very efficient systems being observed in Japan, Western Europe, and North America. These regions achieved their success by improving their managerial and technological methods necessary to reduce theft to tolerable levels (Smith, 2004). This is possible in the presence of a governance culture that endorses good organization and law enforcement against theft (Jamil, 2014). Electricity theft can be curbed by applying technical solutions such as tamper-proof meters, managerial methods such as inspection and monitoring, and in some cases restructuring power systems ownership and regulation (Smith, 2004).

The findings of the study however indicate that individuals who just move into new houses engage more in this unethical behaviour for personal gain. Instead of reporting an illegal electricity connection when moving into a new house, they choose to continue using the electricity that was stolen to avoid purchasing electricity irrespective of their socioeconomic bracket. By not reporting the illegal connection, they weighed the potential benefits against the risks and chose to act in their self-interest, and are incentivised by the social norm of electricity stealing in the community

However, buying a house with an illegal electricity connection can lead to various problems and risks. Firstly, illegal connections are dangerous and can cause electrical accidents, which can harm people and damage property. This truth is lost on them as they seldom think of their own safety, but the incentive to benefit from paid electricity.

17. Conclusion

The study concludes that approaches implemented to reduce the rise in illegal connections are punitive measures such as fines and imprisonment, and an electrification program should be reinforced to save both Eskom Revenue from illegal consumption and to save the lives of the community members, especially the vulnerable group, children who fall victim to exposed cables. Also, organizations such as community safety and Eskom should formulate programs that are aimed at de-normalizing the act of electricity theft in the community of KwaXimba and across other communities through community engagement programmes.

18. Recommendations

Electricity theft is a complex problem that requires a concerted effort from all parties involved and by implementing a combination of legal, technological, and social measures. Some of the preventative measures to be employed by Eskom and the government to end electricity theft drawn from this study are recommended as:

(1) ***Public education:*** Eskom and the government can educate the public on the dangers of electricity theft and the consequences of engaging in this illegal activity. This education can take the form of awareness campaigns, community meetings, and media outreach programs.

(2) ***Legal measures:*** The government can strengthen laws and regulations related to electricity theft and impose harsher penalties for those caught engaging in this illegal activity. This can act as a deterrent to potential offenders and discourage them from engaging in electricity theft.

(3) ***Installation of smart meters***: Eskom can install smart meters that detect and report illegal connections, making it easier to detect and track down electricity thieves.

(4) ***Community involvement:*** Eskom can involve the community in the fight against electricity theft by encouraging them to report illegal connections and providing a reward system for those who report electricity theft.

(5) ***Improved access to legal electricity***: Eskom can improve access to legal electricity by ensuring that electricity is affordable and accessible to all members of the community, particularly those living in poverty. This can help reduce the need for illegal connections and promote compliance with legal electricity connections.

(6) ***Regular inspections:*** Eskom can conduct regular inspections of the electricity network to identify and remove illegal connections, ensuring that the network remains safe and secure.

(7) ***Collaboration with law enforcement agencies:*** Eskom can collaborate with law enforcement agencies to improve the detection and prosecution of electricity theft offenders. This can help increase the success rate of legal action against electricity thieves and reduce the prevalence of electricity theft in the community.

19. Limitation of the study

While the researchers attempted to probe in-depth into the factors and influences that motivate residents of the rural community to steal electricity, the study was however limited with the sample size which was small. And some of the prospective participants declined to continue with the interview. The study was also limited because it did not explore contiguous communities to establish if the influences and factors are similar.

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Note

1. https://www.statista.com/statistics/1116050/distribution-of-electricity-sources-in-households-in-south-africa-by-type/ - Accessed 13th August 2023

References

Depuru, S. S. S. R. (2012). Modelling, detection, and prevention of electricity theft for enhanced performance and security of power Grid. *Doctor of philosophy degree in Engineering dissertation*. The University of Toledo.

Eskom. (2016a) . *Factsheet: The power is in your hands*. Operation Khanyisa, Eskom.

Eskom. (2016b). Free basic electricity. Retrieved June 16, 2017. from http://www.eskom.co.za/news/Pages/Apr18.aspx

Eskom. (2016c) Illegal connections can be deadly. Retrieved May 28, 2017. from http://www.eskom.co.za/news/Pages/Oct13.aspx

Gaunt, T., Salida, M., Macfarlane, M., Maboda, S., Reddy, Y., & Borchers, M. (2012). Informal electrification in South Africa: Experience, opportunities and challenges. *Cape Town, Sustainable Energy Africa*.

Geyevu, M. M., & Mbandlwa, Z. (2022). Economic conditions that leads to illegal electricity connections at quarry road informal settlement in South Africa. *International Journal of Special Education*, *37*(3).

Khonjelwayo, B., & Nthakheni, T. (2021). Determining the causes of electricity losses and the role of management in curbing them: A case study of city of Tshwane metropolitan municipality, South Africa. *Journal of Energy in Southern Africa*, *32*(4), 45–57. https://doi.org/10.17159/2413-3051/2021/v32i4a8704

Mujuzi, J. D. (2020). Electricity theft in South Africa: Examining the need to clarify the offence and pursue private prosecution? *Obiter*, *41*(1), 78–87. https://doi.org/10.17159/obiter.v41i1.10549

News24. 2015. Report illegal electricity theft. Retrieved May 21, 2017. from http://www.news24.com/SouthAfrica/Local/Maritzburg-Fever/Report-illegal-electricity-theft-20150811

Smith, T. B. (2004). Electricity theft: A comparable analysis. *Energy Policy*, *32*(18), 2067–2076. https://doi.org/10.1016/S0301-4215(03)00182-4

Vuk'uzenzele. 2011. Operation khanyisa: Stop electricity theft-the power is in your hands. Retrieved May 15, 2017. from http://www.vukuzenzele.gov.za/operation-khanyisa-stop-electricity-theft-%E2%80%93-power-your-hands

World Bank approves R9 billion concessional loan facility for Komati Power Station repurposing and Just. (2022). Retrieved November 29, 2022. from https://www.eskom.co.za/world-bank-approves-r9-billion-concessional-loan-facility-for-komati-power-station-repurposing-and-just-energy-transition/.