The impact of electricity cuts on tourism businesses in South Africa: a case of accommodation establishments

15 March 2024
Department of Tourism Research Seminar

Dr Lorren Haywood







Objective of the study

Since 2007, South Africa has been battling an ongoing energy crisis where for numerous reason our national supplier consistently fails to generate enough electricity to meet the country's demands.

As a significant contributor to the economy, composed mainly of SMME's, the tourism sector has struggled to recover from the COVID-19 pandemic and now continues to be hampered by the electricity crisis.

- To analysis the operating environment of tourism SMMEs, mainly that of smaller accommodation establishments, post COVID 19 and amidst prevailing power outages.
- To assess the impacts of power outages on the operating environment of tourism SMMEs, namely that of smaller accommodation establishments.
- To identify measures and coping mechanism that tourism smaller accommodation establishments have put on place to mitigate the impacts of power outages.
- To assess the development needs of smaller accommodation establishments amidst prevailing power outages.
- To explore mechanisms that may assist smaller accommodation establishments to continue to operate amidst prevailing power outages.
- To provide recommendations to assist smaller accommodation establishments to continue to operate during power outages.





Research Methodology



- Survey Research: Predefined questions on a questionnaire
- Questionnaire was designed to investigate:
 - Demographics of accommodation establishments
 - Operating environment and electricity needs
 - Impact of electricity cuts
 - Application of alternative energy sources
 - Alternative energy source needs
 - Small scale alternative energy sources,
 - Guest experience,
 - Energy saving behaviour
 - Assistance to overcome electricity cut challenges, and
 - Electricity cuts and food waste.
- Questionnaire was hosted on Google Forms
- Target population were micro and small accommodation establishments
- Databases:
 - DoT (2917),
 - CSIR created a database from Accommodation SA website and those listed on the TGCSA website (2599).
- Sample size:
 - Taking into account duplications (20%) and undelivered email approximately 3868 establishments were requested to participate in the survey.
 - 331 responded...just less than 10% response rate.



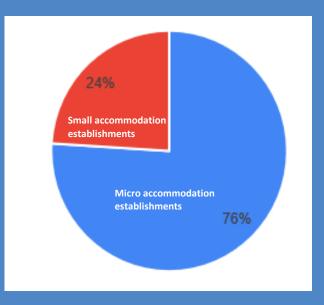


Sample Size

331 accommodation establishments

Accommodation type

72% BnB and Self catering



Occupancy potential

60% have an occupancy of 11-50 guests

All nine provinces represented

Years in operation

63% > 10 years

21% = 5-10 years

13% = 2-5 years

3% = 0-2 years

Micro tourism enterprise: 1-10 formal employees Small tourism enterprise: 11-50 formal enterprises

73% have a TGCSA grading















Iron

Sockets for

recharging

devices

Toaster

TV

Lighting

95%

Security Electric system heater

Amenities

across the 331

establishments

92%

Hot water

Fan

Electric blanket

Telephone system

Kettle/coffee machine

Outside lighting for security

Spa and wellness facility

Entertainment and recreation facility

76% Laundry service

Sport facility

Restaurant facility

Facilities across the 331 establishments Bar facility

Conference and function facility

gym facility

Dishwasher

Electric oven

Electric stove/hob

Microwave

Refrigerator 95%















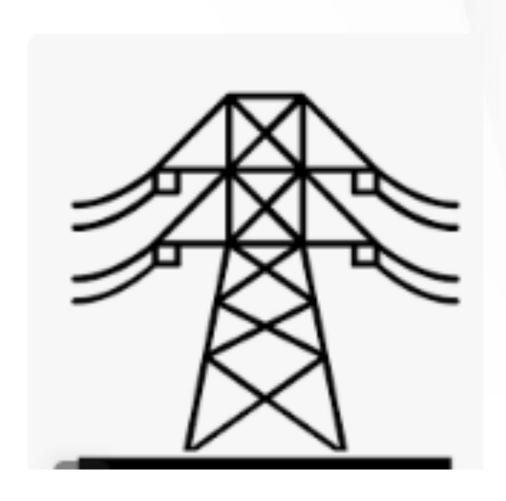
Swimming

pool

60%



Impacts of electricity cuts on business operations



	Operating costs	/8%
95%: moderate and	Revenue	63%
very high NEGATIVE impacts	Security and safety	61%
5%: low to no impact	Guest experience	59%

Additional impacts

Damage of equipment due to power surges	85%
Laundry services	81%



700/

Alternative Energy Sources



Use of alternative energy sources



9% = No

16% only one; alternative source; 84% more than one alternative source Diversification of alternative sources being used Gas appliances 65%

Generators 59%

Batteries and inverters charged by Eskom 41%

UPS 38%

Solar lighting 38%

Batteries and inverters charged by solar panels 30%

Solar geyser 22%

Gas geyser 16%

Batteries and inverters charged by wind turbines 1%

Alternative Energy Sources

Relationship with high negative operational costs

Increase in use over the last 12 month (33%)



Gas appliances 65%

Generators 59%

Batteries and inverters charged by Eskom 41

UPS 38%

Solar lighting 38%

Batteries and inverters charged by solar panels

Solar geyser 22%

Gas geyser 16%

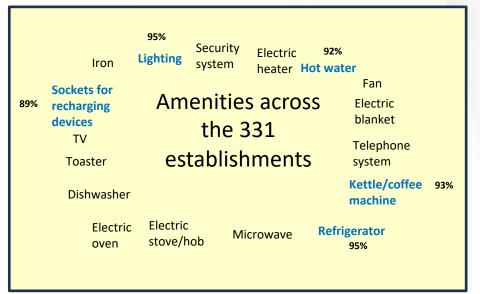
Batteries and inverters charged by wind turbines 1%

Predominantly use over the last 10 + years

Relationship with no operational costs

30%

Preferred alternative energy source choice of establishments





25%: No amenities are available

54%: Only use of amenities that draw minimal energy

21%: Can use full range of amenities



Observation: tends to be a greater reliance on use of generators and gas to power amenities and the least on batteries and inverters charged by Eskom. This suggests a generator in the alternative energy source diversification mix is key to being able to maintain full operational capacity

Regardless of the alternative energy sources still an overall struggle for full services



No one solution rather diversity of sources is required









Guest experience

The understanding of guests of electricity cuts and their expectations of the establishment's operations during such times

12%: Guest not understanding

50%: Guest somewhat understanding

38%: Guests very understanding

Dissatisfaction during electricity cuts

65%: No or poor wifi/Internet connectivity

58%: No being able to charging of electronic devices

58%: Having weak or no cell phone connectivity

53%: No hot water

53%: No air conditioning for heating or cooling

53%: Inability to watch TV

Origin of dissatisfied guests

37%: Domestic guests

17%: International guests

41%: Combination of domestic and international guests



Energy saving behaviour

- Only 3% of the establishments do not engage in energy saving behaviour to address energy efficiency in their establishments
- 92%: Use of energy efficient LED light bulbs
- Less than 50% of other energy saving behaviours have been adopted – clear GAP that needs to be addressed





Financial support for alternative energy sources



- Utilising revenue from the business
- Tapping into medical aid savings
- Drawing from personal savings
- Selling assets
- Investing their own capital

35% financial support

- Loans
- Government grants (16%)
- Tax rebates/incentives



Preferred form of financial assistance, followed by tax incentives = highlight need for non-repayable financial support

General feedback: Not aware of grants, they move at a very slow pace, restrictive eligibility criteria

Green Tourism Incentive
Programme
(GTIP)

63%: not aware of it

34%: aware of it

3%: have received a grant

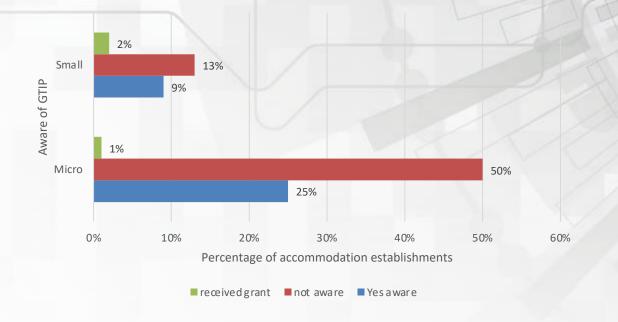


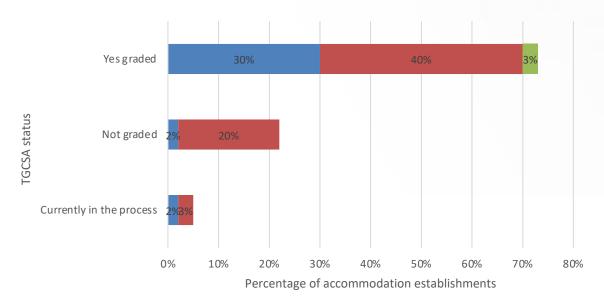
- Lack of feedback or communication from the GTIP
- Prolonged duration to process applications
- Issues around system efficiency and staff capability
- Grant amount to low
- Process perceived as very costly and to complicated



3% received a GTIP grant:2% small1% micro

Trend suggests that micro establishments are less aware of the GTIP as compared to small establishments

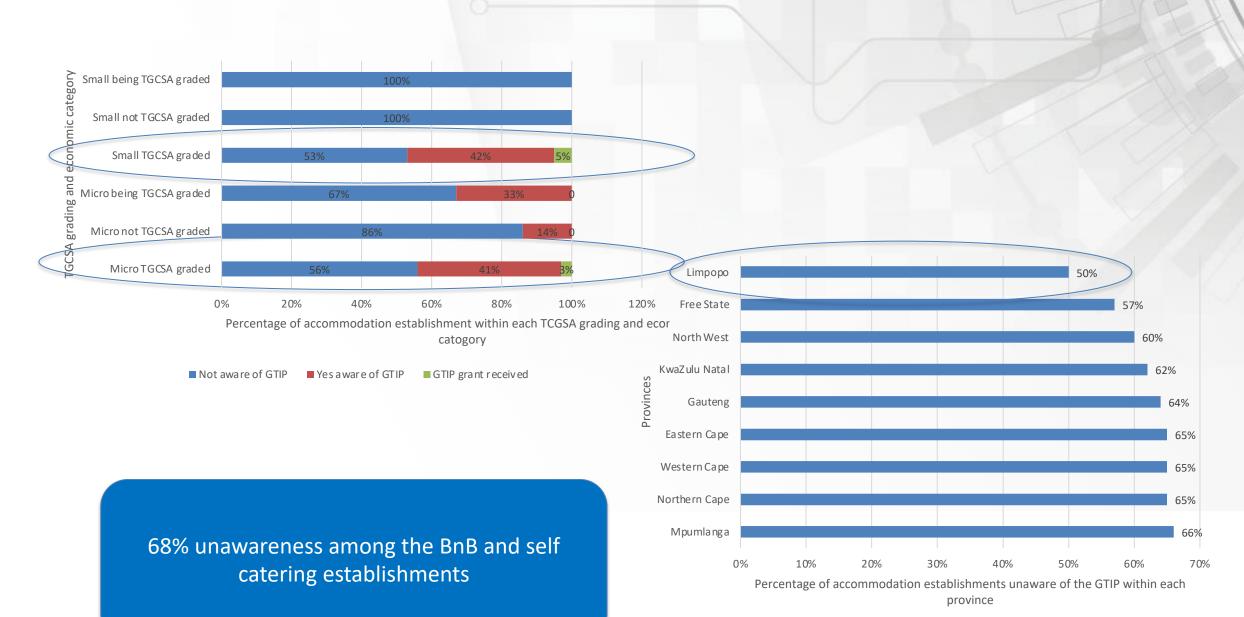




■ Yesaware ■ not aware ■ received

40% of TGCSA graded establishments **not aware** of the GTIP, 30% graded are aware of GTIP

Touching lives through innovalion





Electricity cuts and food waste

3 distinct areas where food is wasted;

- Inedible preparation waste
- Spoilage of food due to electricity cuts
- Plate waste

To reduce food waste due to electricity cuts key mitigation measures in place:

- Only purchasing food as needed
- Adapting menus
- Utilising alternative energy sources for food preparation and for cold shortage

Immediate and long-term actions for accommodation establishments to address operational challenges due to

electricity cuts



- Conduct an energy audit before deciding on alternative energy sources
- Before investing in alternative energy sources implement energy efficiency measures to reduce overall consumption thereby reducing energy demand
- Evaluate long-term savings (over short-term savings) on energy costs and the long-term benefits of independences from the national grid
- Take careful consideration of the diversification of reliable alternative energy sources
- Seek government grants and other incentives for assistance transiting towards alternative and renewable source
- Investigate and adopt creative solutions. For example, community solar projects, collective purchasing agreements, partnerships with business
- Stay in informed about advancements in alternative energy technology and energy storage solutions
- Promote energy consciousness among staff and guests
- Give priority to energy solutions that can maintain connectivity
- Maintain open communication with guests on the abilities of the establishment during electricity cuts

Policy Recommendations to support tourism SMMES overcome operational challenges due to ongoing electricity cuts

- Improve government support and financial assistance for energy efficiency and off-grid independence for tourism SMMEs
- Government to support and encourage energy efficiency infrastructure and technology support
- Capacity building and education to strength energy efficiency and the use of alternative energy sources





Brief Overarching Summary

- The energy crisis is not going away anytime fast.
- SMMEs, particularly in the tourism sector, face significant vulnerabilities due to energy issues.
- Adaptation through a transition to renewable energy sources is crucial for future resilience.
- Renewable energy is the most viable long-term solution, emphasising the need for accessibility and affordability for SMMEs.
- Immediate actions include implementing energy efficiency measures to reduce electricity demand and exploring renewable energy options.
- Financial challenges are a major hurdle for SMMEs in adopting sustainable and renewable energy solutions.
- Programs like the GTIP are vital for financial support, but there is room for improvement in such initiatives.
- There is a critical need for educational awareness and government-supported programs to help tourism SMMEs navigate and lessen the impact of electricity shortages.



