



REPORT ON
**PRODUCTIVITY ENHANCEMENT
RESEARCH IN THE ECO TOURISM**
SECTOR IN MALAWI



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Acronyms

GDP	Gross Domestic Product
ICT	Information and Communication Technology
MTC	Malawi Tourism Council
PEP	Productivity Enhancement Programmes
PER	Productivity Enhancement Research
TEVET	Technical, Entrepreneurial and Vocational Education and Training
TSBPE	Trade/Sector Based Productivity Enhancement
MSCE	Malawi School Certificate of Education
JCE	Junior Certificate of Education
SPSS	Statistical Package for Social Sciences

Glossary

Gemba Walk	A tour through a company/Organization to collect information by monitoring and interacting with workers.
Kaizen	A Japanese business philosophy of continuous improvement.
Productivity	The efficiency with which entities convert inputs into outputs.
PEPs	Value adding interventions designed to address performance gaps in entities for increased efficiency in the delivery of quality products and services.
TEVET Levy	The sum of money equal to one to per centum of the basic payroll in respect to the previous year of a company/organisation and this paid to the TEVET Authority.
5S	Means Sort, Set in order, Shine, Standardise and Sustain to organise work spaces for efficient and effective performance of employees.
Domestic Traveller/Tourist	A person who travels within the borders of their country other than their usual residence.
Ecotourism	Is the form of tourism that emphasises the travel to natural areas.
International Tourist	A person who travels to a country other than where you live typically less than a year.
Protected Area	A piece of land/water body dedicated to the protection and maintenance of biological diversity, natural and associated cultural resources.

1.0. INTRODUCTION

1.1. Background

Tourism is one of the fastest growing sectors in the world, contributing significantly to the global economy. In Malawi, Government recognizes the significant role that tourism plays as a vehicle for inclusive socio-economic development as recognised in the MW2063 and Agriculture Tourism and Mining (ATM) Strategy. The industry also promotes inclusive involvement of local communities including the youth, women and other vulnerable groups, through creation of entry level employment and business opportunities in both urban and rural areas.

Malawi is endowed with rich natural and cultural resources that make it one of the attractive tourist destinations, both regionally and internationally. The country offers a diverse range of beach and water experiences, scenic landscapes, wildlife, favourable climate and unique cultural assets.

According to the Tourism Master Plan, Malawi receives an average of 800,000 tourists per annum. It is estimated that this number could increase to over 1.25 million tourists by 2029 if the tourism sector is nurtured sustainably. Out of the top 10 countries from which tourists frequent Malawi, about 75% of the tourists are from within Africa. On average, 25% of the total tourists are from the neighbouring country of Mozambique.

To promote sustainable utilization and development of the tourism industry and making sure that tourism benefits trickledown to the local communities, the Ministry of Tourism developed the National Eco-tourism Strategy in 2021.

The objective of the strategy is to provide direction on product development and diversification, infrastructure development, manpower development, community participation, conservation of nature and preservation of cultural heritage as well as marketing and promotion strategies for Eco-tourism.

In cognizance of the growth and relevance of the Eco-tourism Sector in Malawi the TEVET Authority, in collaboration with the Ministry of Tourism and the Malawi Tourism Council (MTC) conducted a Productivity Enhancement Research (PER) in the sector to assess challenges that affect productivity.

1.2. Objectives of the Study

The overall objective of the study was to assess challenges that affect productivity in the Eco-tourism sector in Malawi. Specifically, the study sought to;

- i. Evaluate methods of productivity and performance measurement in the eco-tourism sector;
- ii. Evaluate customer satisfaction measurement tools/methods in the eco-tourism sector;
- iii. Identify skills gaps in Eco-tourism sector;
- iv. Assess productivity drivers and barriers in Eco-tourism sector;
- v. Assess management of service delivery wastes; and
- vi. Evaluate the overall business efficiency and productivity.

1.3. Rationale of the Study

Technical Entrepreneurial and Vocational Education and Training Authority is a regulatory body that was established in 1999 by an Act of Parliament. The TEVET Act Section 4 (c) mandates the TEVET Authority

to satisfy the demands of the labour market with employees that have trade skills in order to improve productivity, ensure maximum efficiency and relevance of technical education and training programme. Additionally, Section 4 (k) of the same TEVET Act mandates the TEVET Authority to promote and to provide short tailor-made course programmes and in-service training in order to improve the performance and productivity of the various enterprises let alone the national economy.

It is against this background that the TEVET Authority's 2018-2023 Strategic Plan advocates for the enhancement of productivity in organisations through short-term interventions that are organised based on demand and identified productivity gaps in various levy compliant companies /organisations. One window through which these interventions are implemented is Trade/Sector Based Productivity Enhancement (TSBPE). The TSBPE are defined to be interventions that have been designed and implemented to address common productivity capacity gaps for a specific sector(s) or trade(s) and associations. The TSBPE is premised by two processes, Productivity Enhancement Research (PER) and Validation of the Productivity Enhancement Research.

1.4. Limitations of the Study

The sector has few service providers such that the study population was minimal and not all targeted respondents participated in the study. Further, most of the respondents did not provide financial records such as gross-profit, wage bill and total assets to facilitate quantitative analysis on productivity in the sector. Furthermore, literature on productivity in the sector to inform the study was very limited.

2.0. LITERATURE REVIEW

The review indicated that there is limited, if any, research around productivity in the sector. There are numerous gaps to understand the ecotourism industry to develop sound policies and interventions for development of the sector in Malawi.

2.1. Definition of Productivity

The concept of productivity entails the operational performance of a firm or country and is usually defined as a ratio between the output and inputs volumes. Productivity measures the efficiency and effectiveness with which production inputs (land, capital, labour, energy, and materials) are used in an economy to produce a given level of output (Krugman, 2001). Productivity improvement is the result of managing and intervening in the transformation of work processes either by reducing the inputs needed to create the same output or by generating more output from a given set of inputs.

Productivity is measured at two levels. The first level determines operational and financial performance ranging from an individual to the firm as a whole. The second level determines the productivity of particular sectors and the country as a whole. It is considered a key source of economic growth and competitiveness and, as such, is basic statistical information for many international comparisons and country performance assessments (Schreyer, 2001).

2.2. Measuring Productivity

The study employed principles of measuring productivity in tourism as a proxy for measuring productivity in ecotourism. According to Joppy and Penny-Lee (2014) measuring productivity in tourism industries requires identification of appropriate inputs and outputs, determination of appropriate measures of those inputs and outputs, and ascertaining appropriate ways of measuring the relationship between inputs and outputs. The adoption of appropriate measures of productivity depends on the aim of the productivity measurement and/or data availability. Ultimately, all aspects of inputs, intermediary products and outputs require acceptable measures that can be compared across units, sectors, and countries.

Other studies highlight the significance of Key Performance Indicators (KPIs) in measuring productivity as employed in business development and management including in tourism industries. A KPI provides performance information that enables organisations to ascertain whether their performance is on track or off track. These provide managers and employees with clear goals and objectives, coupled with an understanding of how they relate to the overall success of the organisation.

In light of the above approaches to measuring productivity, this study adopted the use of KPIs to measure productivity of the ecotourism sector. The following are the KPIs that were adopted;

- i. Sales revenue
- ii. Number of guests per month
- iii. Cost of services (production)
- iv. Profit

2.3. Productivity Drivers

Research has shown that productivity drivers can be summarised into three themes namely, physical capital, human capital innovation and the competitive environment. For instance, Blake and Soria (2006) postulate that physical capital, human capital innovation and the competitive environment play a big role in determining productivity in the tourism sector. Ottenbacher (2007) indicates that the main drivers of productivity include Information and Communication technology (ICT), size of firm, competition versus

cooperation, and clustering. However, most research in this area focuses on the critical role played by human capital (Krugman, 2001). Research has also shown that productivity growth is more likely to come from innovations that result in enhanced product and service quality than from cost cutting (Chen and Soo 2007).

Coka argues that tourism productivity is driven by skilled workforce, investment in capital and technology and innovation in attracting customers (Coka, n.d.). On the other hand, other researchers argue that productivity can be driven and measured through assessment of service quality vs customer expectations. For example, Lewis and Booms (1982) regard service quality as an assessment of whether the service delivered is compatible with the needs and requirements of customers. Parasuraman, Zeithaml, and Berry's (1985) study considered service quality to be the overall evaluation of a specific service delivered by a firm as a result of comparing the firm's performance with a customer's general expectations of how firms in that industry should perform. Heung, Wong, and Qu (2000) introduced the term "perceived quality" to refer to the extent of the gap between the perceptions and expectations of consumers. Finally, in the context of tourism, Briggs, Sutherland, and Drummond (2007) view service quality as a general assessment of a destination or its product offer.

According to the Malawi Tourism Investment Masterplan (2022), the government recognises the importance of physical capital, human capital, technology and innovation and the competitive environment of the tourism sector. The National Tourism Policy (2019) focuses on creating an enabling environment for the development, regulation and promotion of a sustainable tourism sector. The Policy proposes several reforms to transform the sector as listed:

- i. Establishment of appropriate semi-autonomous Tourism Authority which will be responsible for regulation and marketing;
- ii. Review of the tourism law to strengthen enforcement and compliance with minimum standards;
- iii. Strengthening the Tourism Sector Working Group (TSWG) as a platform for stakeholder dialogue aimed at improved coordination and implementation of tourism interventions;
- iv. Empowerment of local authorities to monitor and enforce standards for tourism developments in their vicinities.

As indicated by the National Tourism Investment Masterplan, besides facilitating economic activity in general, tourism facilitates innovation and discovery of new entrepreneurial activities in the economy.

On the other hand, the Annual Economic Report (2022) for Malawi indicated that the country is promoting investment and competitiveness in the tourism sector through various interventions and development strategies. For example, Malawi implemented the Promoting Investment and Competitiveness in Tourism Sector (PICTS) Project. The project aimed at increasing efficiency and effectiveness of institutions in the tourism sector by strengthening management capacity to generate revenue and create employment.

The PICTS project aimed at contributing towards addressing challenges affecting the country's performance in attracting investment and tourists into the country. The project projected that the competitiveness of the sector shall be enhanced through the country's ability to invest in touristic infrastructures and services, and in attracting and satisfying the needs of tourists through well developed products and improved service delivery.

2.4. Barriers to Productivity

There are several barriers in the ecotourism sector that need to be improved. These include:

- i. Inaccessibility of some areas, particularly those that provide tourists with specific tourist segments.
- ii. Climate change impacts.
- iii. Insufficient quantitative and qualitative data for most protected areas
- iv. Low skilled and temporary labour force and high labour turnover.

3.0. RESEARCH METHODOLOGY

This section outlines the research methodology which was the foundation on which the study was based in order to meet the study objectives. In addition, the section stipulates techniques and processes that were adopted to collect and analyse data.

3.1. Conceptual Framework

Initially the study establish measures of productivity used in the sector. These measures help businesses to evaluate performance in relation to their strategic goals and objectives. In this regard, the study adopted the internationally recognised productivity measures in the sector outlined by Maitra & Srivastava (2016) and these are;

- i. Sales revenue
- ii. Number of guests per month
- iii. Cost of services (production)
- iv. Profit

Furthermore, customer satisfaction was considered. The study sought to establish if businesses in the sector collected, analysed and used information on customer feedback to assess performance.

Thereafter, the study assessed factors that negatively affect productivity in the sector. On this assessment it adopted a model by Blake et al (2006) which postulates that the factors of productivity are categorized into four:

- i. Physical Capital (equipment and infrastructure),
- ii. Human Capital,
- iii. Technology and Innovation,
- iv. Competitive Environment.

Therefore, the study formulated questions around these categories to assess factors of productivity in the ecotourism sector in Malawi. In addition, information on the elements within the factors of productivity, is used to assess workforce capacity (training and skills), distribution and efficiency (output per labour cost/ input).

The study also assessed principles that are put in place by ecotourism businesses in organising operations aimed at continuously improving delivery of quality services. Thus, the study evaluated knowledge and application of 5S and Kaizen principles. These are internationally recognised principles that ensure continuous improvement and consistency in the delivery of goods and services. The premise for Kaizen principle is elimination or reduction of the seven business wastes; waiting, inventory, duplication, motion, unclear communication, errors and opportunity lost. Therefore, this component of the model, also sought to establish the extent to which these wastes manifest in the ecotourism sector.

Following the assessment results on measures of productivity, drivers and barriers to productivity, implementation of 5S and Kaizen principles; recommendations were drawn to improve and sustain high levels of productivity in the ecotourism sector in Malawi.

3.2. Study Design

The research used a combination of quantitative and qualitative approaches to establish challenges affecting productivity in service providers in the ecotourism sector. The quantitative research approach enabled the research team to collect and analyse numerical data to provide measurements in assessing the sector. The qualitative method allowed the team to provide elaborate interpretations of context. The qualitative information was also used for data triangulation.

3.3. Target Population

Due to the existence of few operators in the sector the study targeted 29 operators, both TEVET levy compliant and non-compliant. A business entity is TEVET levy compliant if it stays current and does not owe arrears in remittance of the TEVET levy. *Table 1* below provides the summary of response rate.

Table 1: Response Rate

Target	Responses	Response Rate
29	26	90%

Source: Field Data

3.4. Sampling Technique

The study used purposive sampling which included all known micro, small, medium and large service providers. Categorisation was based on the number of employees for meaning analysis to serve the purpose of the study.

3.5. Data Collection Tools

The study used a questionnaire and checklist to collect data for assessing productivity of operators in the ecotourism sector. Development of the instruments was guided by objectives of the study and information obtained through literature review.

3.6. Data Collection Methods

The study employed three data collection methods.

3.6.1. Desk Research

Various documents including the National Ecotourism Strategy, The National Tourism Masterplan, the National Tourism Policy, Annual Economic Reports, the MW2063 and MIP 1 were reviewed to establish the context and productivity of the ecotourism sector in Malawi.

3.6.2. Survey

Using a questionnaire deployed through Kobo toolbox, face-to-face key informant interviews were conducted. In addition, some respondents that were not available for face-to-face interviews opted for self-administration of the questionnaire.

3.6.3. Gemba Walk

Gemba walk was conducted to gather qualitative information on the units. The data gathered through these walks was used to triangulate the information reported in the questionnaire.

3.6.4. Data Quality Control

To ensure quality data, research assistants were trained on quality data collection techniques to minimize errors. The study team was also oriented on data collection using Kobo Toolbox. Data collection was also supervised throughout the field work.

The use of electronic data collection tools eliminated the need for manual entry which removed the likelihood of data entry errors.

3.7. Data Processing and Analysis

Data was analysed using Statistical Package for Social Sciences (SPSS). Part of the qualitative data collected from the interviews and Gemba walks was analysed through a brainstorming exercise in which the data was then grouped into themes and context analysis.

Table 2: Measurement of Productivity for Ecotourism Services

Unit of Measure	Proportion
Number of Guests per Month	17%
Cost of Service/Production	4%
All of the Above	33%
Sales Revenue and Number of Guests per Month	33%
Sales Revenue, Number of Guests per Month and Profit	13%
Total	100%

The study also established that some business units also used other KPIs, such as, participation of communities around the business, number of partnerships with strategic stakeholders, number of inquiries per month, percentage increase in number of guests, percentage of repeat business (loyal customers) and fixed dollar value of tourist as well as length of stay negotiated with number of days spent.

Through the Gemba walks, the study established that the business units that offered accommodation services registered mixed quality of services. For example, most large businesses provided high quality services as evidenced by clean and well-furnished rooms including beddings, toilets and bathrooms. Furthermore, the units were well spacious, well ventilated and properly paved that allowed easy accessibility. In addition, they also had fire extinguishers in several places near the rooms and fire assembly points which showed commitment to guest safety.

On the other hand, the study established that small and medium businesses also offered rooms with adequate space, organised furniture, toiletries and towels for guest's convenience. It was also established that some of the businesses involved local communities in their business especially through provision of food stuffs like fruits and vegetables as well cultural tourism.

The major shortfalls observed were poor visual controls and signage. The units also could not demonstrate clear involvement of the surrounding communities in the operations. The study also established the inadequacy in qualified staff across business units. It further established that most of the business units did not have customer satisfaction measurement mechanisms.

The study also established that small and medium scale operators faced challenges with visual controls and signage. The other major challenge that was observed is the poor sanitation and inadequate staff complements. In addition, some operators did not provide well serviced fire extinguishers which showed lack of attention towards guest safety.

4.3 Trends in Productivity

The study sought to establish trends in productivity in the ecotourism sector. However, less than 20% of the respondents provided data on this variable. Thus, the study suffered nonresponse bias of 80% on this variable. As such, the study did not present the results on this variable to mitigate against the potential of bias.

4.4 Drivers of Productivity

The study sought to establish the drivers of productivity in the ecotourism sector. It analysed the drivers of productivity in four categories namely; physical capital, human capital, technology and innovation and competitive environment.

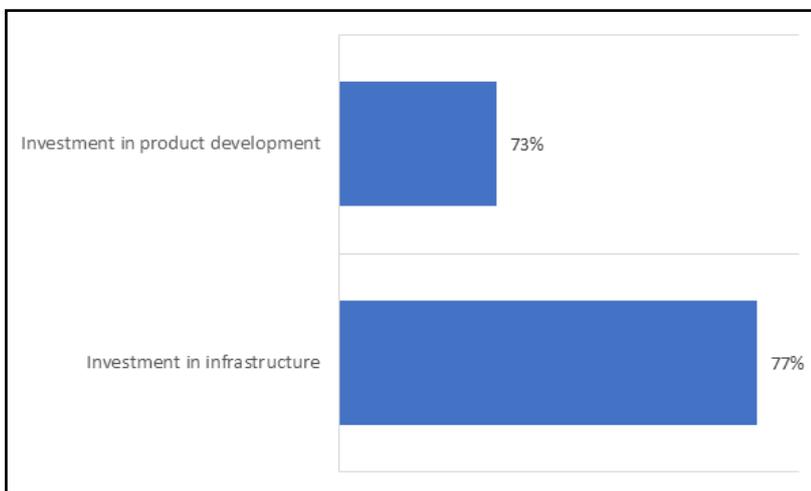
4.5 Physical Capital

The study established that a majority of business units in the ecotourism valued investment in physical capital, both equipment and infrastructure, as a key driver of productivity. It was established that 77% of businesses invested in infrastructure to enhance productivity of their operations. The respondents indicated that such investment was key to ensure adequate space for service provision, easy access to the business units, customer satisfaction as well as maintenance of the environment which will ultimately lead to attraction of more tourists and greater customer satisfaction.

The study also established that product development was a key driver of productivity in the sector. Specifically, about 73% of business units invested in product development to enhance productivity. Among other activities, businesses worked on their product packaging to include new services. This resulted into increased bookings and visits, increased service options and positive feedback hence customer satisfaction.

Some respondents attributed their failure to invest in infrastructure and product development to the Covid-19 pandemic which negatively affected their investment capacity.

Figure 2: Drivers of Productivity (Physical Capital)

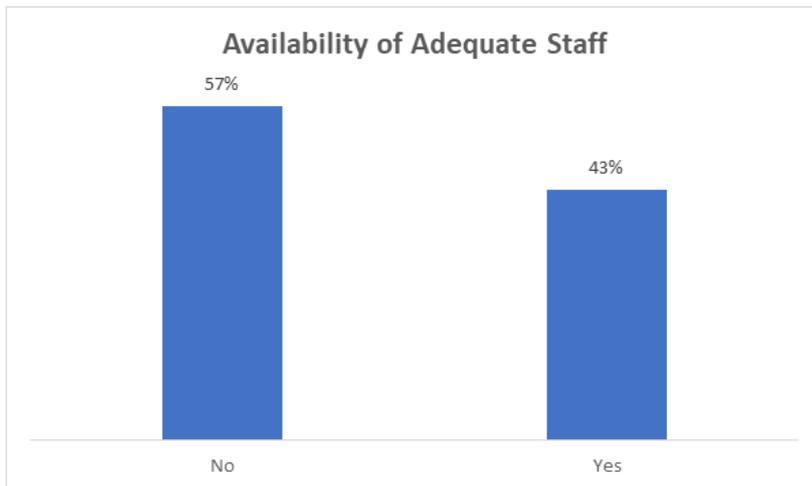


The results on physical capital indicate that majority of businesses have invested in physical capital to improve productivity. Gemba walk observations confirmed this finding as it was observed that most of the businesses had sufficient infrastructure for provision of ecotourism services.

4.6 Human Capital Development

The study established that majority of the businesses valued human capital development as a key driver of productivity in the ecotourism sector. As seen in figure 3 below, inadequate staffing is one of the major challenges affecting businesses in the tourism sector. It was established that 57% of operators did not have adequate staff compared to 43% that reported to have had adequate staff. Some of them reported that they scaled down on the number of staff due to covid-19 and cholera pandemics which had affected tourist numbers. Others however, attributed to lower employment of staff due to inadequate funds to meet the payroll needs. Other businesses attributed the lower staff numbers to unavailability of specialist skills for some of the vacant positions as well as staff attrition due to uncompetitive salaries.

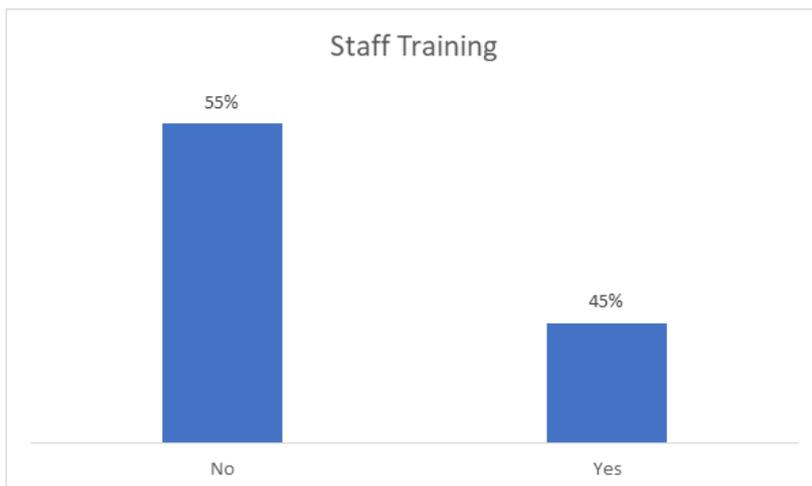
Figure 3: Availability of Adequate Staff



The inadequacy of staff was confirmed by the Gemba walks where it was observed that staff worked long hours while others manned more than one department.

The study sought to establish type of skills that are in short supply within the ecotourism sector. It was established that some of the most demanded skills that are in short supply are business management, tour guiding, marketing, ICT, customer service, housekeeping and nature conservation. It was established that despite human resources being a key driver of productivity, only 45% of operators invested in staff training over the preceding 12 months of the study as presented in *figure 4*. Operators that conducted staff training, registered improvement in business productivity. Lastly, respondents were given an opportunity to recommend training interventions to help improve their productivity. Among other trainings, respondents recommended trainings in cultural tourism, cookery, customer service, business management, book keeping, tour guiding, basic ICT, front office and customer service.

Figure 4: Investment in Staff Training in Last 12 Months



Source: Field Data

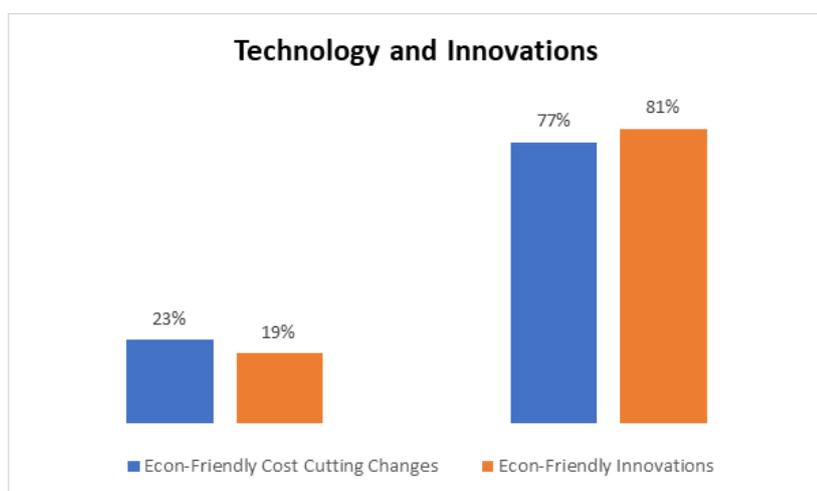
4.7 Innovation and Technological Progress

The study established that the majority (77%) of ecotourism providers introduced eco-friendly cost-cutting changes in the last two years preceding the study. This is compared to 23% of businesses that indicated

that they did not introduce any eco-friendly cost-cutting measures in their businesses as presented in figure 5. Some of the eco-friendly interventions introduced by the businesses included: use of reusable napkins, recycling plastics, using compost, using wine glasses made from bottles, filtration of guests' water instead of using bottled water, harvesting human soil as manure, use of gas and solar energy and construction of eco-toilets.

The study also established that 81% of businesses introduced eco-friendly innovations that led to improved productivity as presented in figure 5. Some of the innovations included introduction of matching grants in surrounding communities to promoting tree planting, establishment of tree nurseries for use in art works as well as introduction of permaculture gardens, among others. Other innovations included partnerships with like-minded enterprises and to distribute energy saving stoves in the surrounding communities to deter charcoal burning, plant trees around the catchment area to be used by communities for firewood and engage volunteers to train communities on tree planting and care.

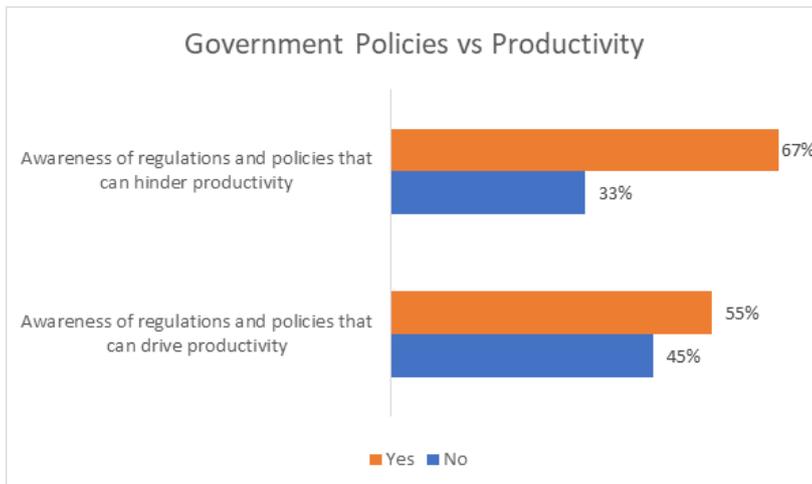
Figure 5: Drivers of Productivity (Technology and Innovation)



4.8 Government regulations and policies

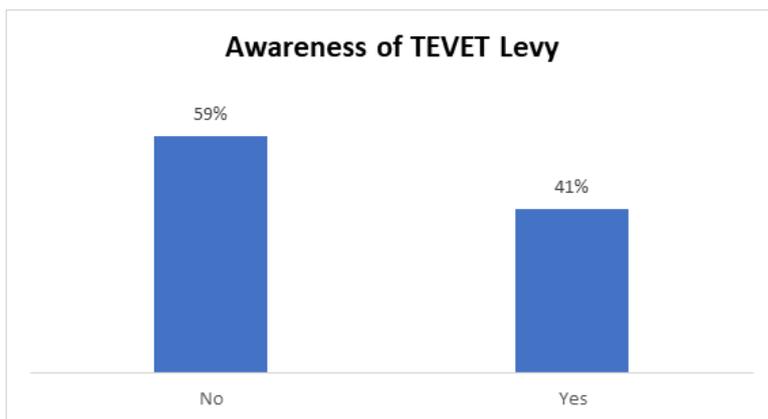
The study also sought to establish the level of awareness of government regulations and policies that can drive or hinder productivity in the ecotourism sector. It was established that only 55% of respondents were aware of government policies that can drive productivity in the ecotourism sector (See figure 6 below). This is compared to 67% of respondents that reported to be aware of government policies and regulations that can hinder productivity in the ecotourism sector. In this regard, examples of policies and regulations that can drive productivity in this sector include the National Tourism Policy, National Wildlife Policy, lifting of covid-19 restriction measures, introduction of gate fees in protected areas, conservation trees and abolishment of visa fees on foreign tourists. On the other hand, examples of government policies and regulations that can hinder productivity in the sector include delays by government to implement the policy on removal of visa fees, too many tax measures and levies, absence of waivers for small scale businesses as well as high park entry fees for domestic tourists.

Figure 6: Drivers of Productivity (Government Regulations and Policies)



The study also assessed awareness levels of the TEVET Levy among operators in the ecotourism sector. It was established that only 41% of respondents were aware of the TEVET Levy and its benefits to companies. This is compared to 59% who reported not to have been aware of the levy (See figure 7 below).

Figure 7: Awareness of TEVET Levy



4.9 Barriers to Productivity

This research also sought to examine factors that hinder productivity in the ecotourism sector. The respondents were asked to outline barriers in line with the four factors of physical capital, human capital, innovation and technological progress and government regulations. The study established that poor infrastructure was one of the commonest barriers to productivity as it had a negative bearing accessibility to the business units including road infrastructure and network as well as poor bridges, lack of appropriate physical structures to support cultural villages. It was also established that inadequate human resource capacity due to lack of tailored training was another barrier to productivity.

Under technology and innovation, the study established that low or lack of adoption of digital business promotions was a barrier to productivity. On the regulatory and policy aspect, it was established that high visa fees charged on foreign visitors was a major barrier to productivity in the sector and so was lack of budgetary prioritization of eco-tourism entities. Huge taxes and levies were the other policy and regulatory barriers to productivity in ecotourism. In addition, high fuel prices and restrictions, high flight costs, high cost of goods, high food and maintenance materials, high import costs and lengthy process to import goods were also identified as big barriers to productivity in the sector. The bureaucratic red tape in different government offices that has a role in the sector was another barrier that was indicated by the respondents.

The other barrier to productivity as identified by the operators was systemic in nature. In this regard, it was stated that lack of adequate capacity to market Malawi's ecotourism product offering was another big barrier to productivity. Further, other barriers to productivity included: deforestation and timber production, encroachment and poor media coverage of negative news.

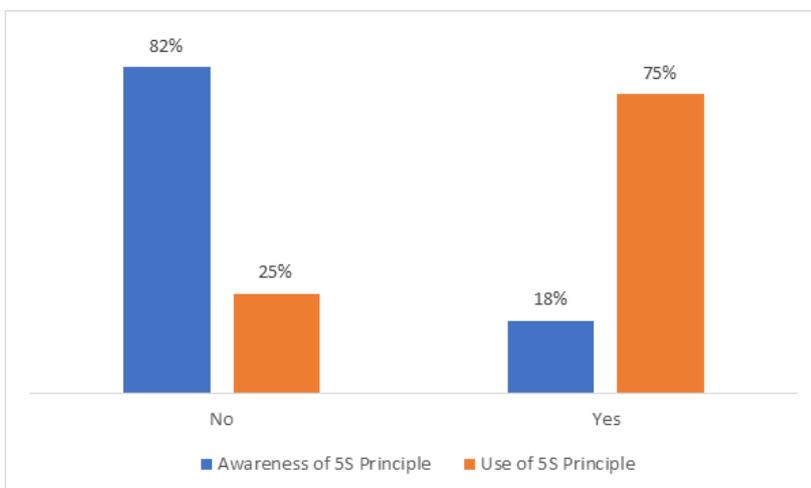
4.10 Workforce Capacity

As argued earlier, human capital is one of the key drivers of productivity in the ecotourism sector. Furthermore, qualified staff with requisite skills for a particular job is key in every business. In this regard, the study investigated the available human resource capacities in the ecotourism sector. A matrix to collect data on staff capacities and training from all the operators was developed and used by the study. This was circulated to respondents prior to the study and additional time was given after initial data collection to allow for ample time for respondent to complete the matrix. However, out of the 7% of the respondents that provided data on staff complement, only 3% provided all the requested data. In light of this, the study failed to conduct an informative analysis on the workforce capacity in the ecotourism sector.

4.11 Assessment of awareness and implementation of 5S and Kaizen principles

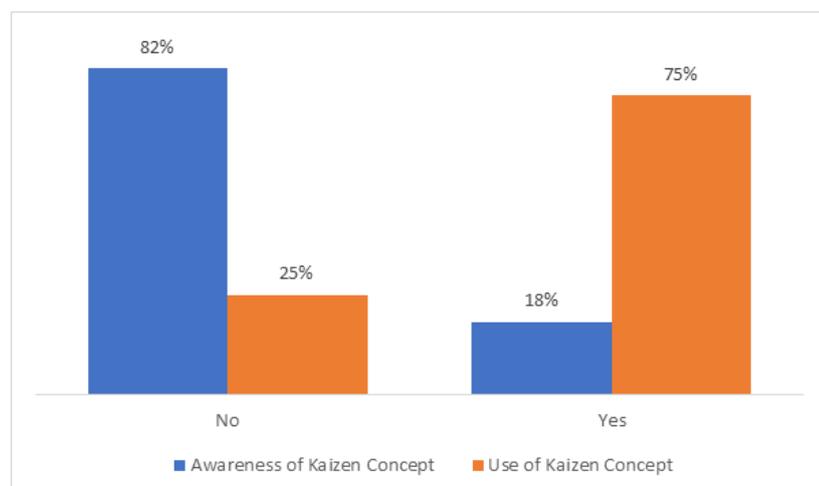
One of the objectives of this study was to assess management of service delivery wastes including awareness and implementation of 5s and Kaizen principles among operators in the ecotourism sector. Figure 8 below presents results on the awareness and usage of 5s principle. The study findings established that overall, awareness of 5s is 18%, out of which only 75% implement its principles.

Figure 8: Awareness and usage of 5s principle



Similarly, an analysis on the knowledge and usage of Kaizen principle operators was conducted. Overall, the study established that only 18% of operators were aware of the Kaizen principle, out of which 75% applied it. Figure 9 presents results on the awareness and usage of Kaizen principle.

Figure 9: Awareness and usage of Kaizen principle



The study also sought to learn from respondents if they were aware of TEVETA's Productivity Enhancement Programme (PEP) that supports organizations with the 5S and Kaizen principles. It was established that none of the respondents were aware of the TEVETA PEP and its interventions.

4.12 Assessment of service wastes

Service wastes such as unnecessary waiting, inventory mismanagement, duplication of efforts, unclear communication, errors in delivery of services, staff's lack of knowledge on product offer, lack of coordination, unnecessary movements, over processing and transportation challenges can affect productivity of in the ecotourism sector. The study therefore, sought to establish the extent to which these wastes occur in the sector. Index scores were computed on each factor from the raw scores that were given by the respondents and have been presented in *table 3* out of maximum score of 5. The study found that on average, all of these wastes existed in the sector to a low extent.

Table 3: Existence of service wastes

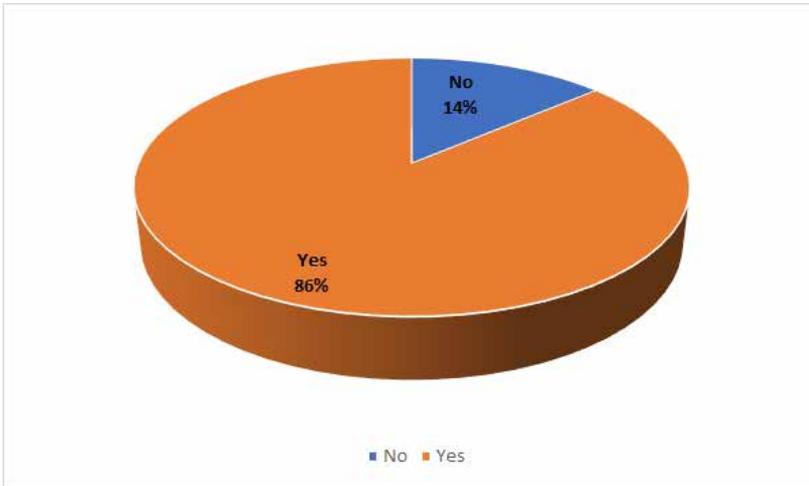
Waiting: (employees/guests forced to wait because another activity has not been delivered on time)	2
Inventory: (items kept in stock for future use beyond minimum level)	2.5
Duplication; (same work being done twice by one or two people)	2.5
Unclear communication	2.5
Errors: (Mistakes or defects in supply of services)	2.5
Staff's lack of knowledge on products and services provided by the Business Unit	2.8
Lack of coordination among internal staff	2.0
Motion (walking to deliver paperwork, non-economic office layout, chasing for information, searching, and people moving up and down)	2.5
Over processing (non-value-added steps)	2.5
Transportation (Using mail where email could be used, especially those which require main original signatures or physical delivery of articles)	2.8

4.13 Customer Satisfaction Feedback Mechanism

Lastly, the study investigated if enterprises operating in the ecotourism sector measure customer satisfaction. Measuring customer satisfaction helps businesses identify problems, nurture customer relationships and find potential brand advocates. As presented in *figure 10*, the study established that 68% of operators had systems to collect customer feedback. Some of the channels used for collecting customer feedback

included online platforms such as company websites, emails, social media, trip advisors etc, guest books, customer surveys, suggestion boxes, visitor surveys and verbal feedback.

Figure 10: Measurement of Customer Satisfaction



Source: Field Data

5.0. CONCLUSION AND RECOMMENDATIONS

5.1. Conclusion

This productivity enhancement research assessed drivers and challenges that affect productivity in the ecotourism sector in Malawi. The study assessed the methods of productivity, workforce capacity, management of wastage in service delivery, customer satisfaction measurement tools and, awareness and implementation of 5S and Kaizen principles.

The study findings suggest that there is knowledge gap on productivity enhancement tools in the ecotourism sector. Specifically, the study established that there are gaps in the knowledge and understanding of the 5S and Kaizen concepts. It further established that there are huge gaps in knowledge of the various regulatory and policy instruments governing the sector. There are also gaps in the knowledge of the TEVT Levy and its benefits as well as the Productivity Enhancement Programme run by TEVET Authority.

The study also established that most operators have well established systems to measure customer satisfaction. Among other issues, the study also established that the sector is hampered by challenges such as inadequate investment in critical infrastructure (good road network and structures for cultural villages), deforestation, encroachment and inadequate human resource capacity.

The main challenge of the study was the reluctance of targeted institutions to share financial performance and human resource complement data. This affected the analysis on the financial performance trend of the sector as well as skills gaps.

In conclusion, this study has revealed productivity gaps in the ecotourism sector. The findings present insights on possible areas requiring intervention.

Recommendations

In light of the foregoing, the study recommends the following;

- i. Operators in the ecotourism sector should embrace use of continuous productivity enhancement tools like 5S and Kaizen to ensure improved product offer and customer experience
- ii. The Ministry of Tourism and Malawi Tourism council should conduct a comprehensive skills audit of the ecotourism sector to identify skill gaps and develop necessary interventions to address the same.
- iii. TEVET Authority should intensify customer awareness campaigns on the TEVET Levy and benefits that accrue to levy compliant companies or organisations.
- iv. TEVET Authority should intensify customer engagement campaigns on the Productivity Enhancement Programme (PEP), its interventions and benefits to businesses in the ecotourism sector.
- v. The Ministry of Tourism should finalise development of policy interventions that seek to review visa payment requirements that are a hindrance to the growth of the sector and increased productivity.
- vi. Eco-Tourism operators should invest in capacity development of their human capital to boost their productivity.
- vii. TEVET Authority should ensure that PEP in the ecotourism sector assist operators to adopt technological innovations that would scale up marketing of the Malawi's product offer.
- viii. The Ministry of Tourism should enhance stakeholder collaboration for improved services in the sector.
- ix. Ecotourism operators should establish an association for sectoral collaboration.

- 
- x. The Ministry of Tourism should periodically conduct consultative stakeholder meetings.
 - xi. The Ministry of Education in collaboration with the Ministry of Tourism should review existing curriculum and develop new programmes that will address the training needs of the ecotourism sector.
 - xii. The Ministry of Tourism should intensify marketing of the ecotourism product offer for Malawi.

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Annexes

Annex A: Questionnaire



**Technical, Entrepreneurial and Vocational
Education and Training Authority (TEVETA)**

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ECO-TOURISM SECTOR PRODUCTIVITY ENHANCEMENT RESEARCH

Dear Respondent,

The Technical, Entrepreneurial, Vocational and Education Training (TEVET) Authority is a regulatory body established in 1999 by an Act of Parliament to regulate, promote and facilitate sustainable provision of quality technical, entrepreneurial and vocational education and training in Malawi. To achieve its mandate, the Authority conducts productivity enhancement research which aims at assessing productivity gaps to establish interventions for addressing the gaps. Currently, the Authority is conducting productivity enhancement research in the eco-tourism sector. In this regard the Authority would like to invite you to participate in this research.

Specifically, the research aims at:

- a) Evaluating methods of productivity and performance measurement in the eco-tourism sector;
- b) Evaluating customer satisfaction measurement tools/methods in the eco-tourism sector;
- c) Identifying skills gaps in Eco-tourism sector;
- d) Assessing productivity drivers and barriers in Eco-tourism sector;
- e) Assessing management of service delivery wastes; and
- f) Evaluating the overall business efficiency and productivity.

Note: The information provided in this research will be treated as confidential, and the data will be analyzed in aggregate. Should you have any questions please contact Emmanuel Banda on 0995 563 173 ebanda@tevetamw.com.

Basic Information

Z1	Name of Business Unit	
Z2	Name of Respondent	
Z3	Department	
Z4	Position	
Z5	Contact number	
Z6	Email	
Z7	Date of interview	
Z8	Name of interviewer	

A. Productivity and performance measurement

A1. How do you understand by productivity in the ecotourism sector?

.....

A2. At this Business Unit, what are your major products or services?

.....

A3. What methods are used to measure productivity of each of the above products or services among the following? (Tick all that apply)

Sales revenue Number of guests per month Cost of services (production) Profit

B. Productivity Drivers and Barriers for Eco-tourism Sector

B 1. In your opinion what are the drivers of productivity in the Eco-tourism sector?

.....

				Remarks
		Yes	No	Please provide reasons for your answer
	Physical Capital			

				Remarks
		Yes	No	Please provide reasons for your answer
B1.1	In the past two years have you invested in infrastructure to enhance productivity of your operations?			
B1.2	If yes how has this investment contributed to improvement in productivity?			
B1.3.	In the past two years have you invested in product development to enhance productivity of your business?			
B1.4.	If yes how has investment in product development contributed to improvement in productivity?			
Human Capital				
B1.5.	Do you have adequate staff in all departments of your Business Unit? (Please complete Annex 1 on staff details)			
B1.6.	What skill shortages are you experiencing in your Business Unit?			
B1.7	In the past 12 months have you invested in training of your staff to enhance productivity?			
B1.8	If yes how has investment in training contributed to improvement in productivity?			
B1.9	What training interventions would you recommend for improving productivity in your Business Unit?			
Innovations in Eco-tourism				
B1.10.	Has your business introduced eco-friendly cost-cutting changes in the last 2 years?	Yes	No	<i>Please indicate the changes introduced</i>
B1.11	Have you introduced any eco-friendly innovations which have led to improvement in productivity?			
Government regulations and policies				
B1.12	Are you aware of any government regulations and policies which can drive productivity in Eco-tourism sector	Yes	No	<i>Please indicate them and explain how</i>
B1.13	Are you aware of any government regulations and policies which can hinder productivity in Eco-tourism sector	Yes	No	<i>Please indicate them and explain how</i>
B1.14	Are you aware of the TEVET Levy?	Yes	No	<i>If yes, are you aware of the benefits of being levy compliant?</i>

C 2. In your opinion what do you consider as barriers to productivity in the Eco-tourism sector?

1	
2	
3	
4	

C. Management of service delivery wastes

- C1. Are you aware of 5s principles? Yes [1] No [2]
- C1.1. If yes, are these principles being applied in your Business Unit? Yes [1]
No [2]
- C2. Are you aware of Kaizen concept? Yes [1] No [2]
- C2.1. If yes, are you using Kaizen concept in firm? Yes [1] No [2]
- C3. Are you aware of the TEVET Productivity Enhancement Programme that offers Kaizen and 5S training? Yes [1] No [2]

C3.1 If yes, how did you know about it?

.....

.....

C4. To what extent do you observe existence of the following wastes in your Business Unit?

		Not at all	Very low extent	Low extent	High extent	To a very high extent
C4.1	Waiting: (employees/guests forced to wait because another activity has not been delivered on time)	1	2	3	4	5
C4.2	Inventory: (items kept in stock for future use beyond minimum level)	1	2	3	4	5
C4.3	Duplication; (same work being done twice by one or two people)	1	2	3	4	5
C4.4	Unclear communication	1	2	3	4	5
C4.5	Errors: (Mistakes or defects in supply of services)	1	2	3	4	5
C4.6	Staff's lack of knowledge on products and services provided by the Business Unit	1	2	3	4	5
C4.7	Lack of coordination among internal staff	1	2	3	4	5
C4.8	Motion (walking to deliver paperwork, non-economic office layout, chasing for information, searching, and people moving up and down)	1	2	3	4	5
C4.9	Over processing (non-value-added steps)	1	2	3	4	5
C4.10	Transportation (Using mail where email could be used, especially those which require main original signatures or physical delivery of articles)	1	2	3	4	5

D. Customer satisfaction measurement

- D1. Do you measure customer satisfaction for your Business Unit? Yes [1]
No [2]
- D2. How do you measure customer satisfaction for your Business Unit?
-
-

End of Questionnaire.

Thank You

Annex B: Staff Information Data Collection Form

	NAME	PERMA- NENT / CASUAL	PROFESSIONAL QUALIFICA- TION	ACADEMIC QUALIFICA- TION	DESIRED QUALIFICA- TION	YEARS IN SERVICE	TRAINING RE- CEIVED
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Annex C: Financial Performance Last 5 Years

YEAR	PROJECTED REVENUE	ACTUAL REVENUE	REMARKS

Annex D: Gemba Walk Checklist

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ECO-TOURISM GEMBA WALK CHECK LIST				
NAME OF BUSINESS UNIT:				
Checked by:				
General Observations and Management	No.	Item	Y/N	Explanation
	1	Availability and cascading vision, mission and core values to all staff		
	2	Provision of visual controls and signage		
	3	Provision adequate furniture in good condition in all sections		
	4	Provision of functioning fire extinguishers in all sections		
	5	Well-equipped based on the type of Eco-Tourism product		
	6	Availability of natural habitat and cultural artifacts		
	7	Educational linkages within the scope of the unit		
	8	Evidence of involvement with local communities		
	9	Evidence of working with other establishments		
	10	Use of tour guides to accompany visitors		
	11	Organization and orderliness of all sections and surroundings		
	12	Provision of adequate and qualified staff in all sections		
	13	Efficient business layout		
	14	Availability of customer satisfaction measurement mechanisms		
15	Availability of SOPs for all processes			

Reception	1	Orderliness and neatness of reception area and lobby		
	2	Provision of adequate and qualified reception personnel at all times		
	3	Time management in servicing guests		
	4	Availability of adequate and appropriate record keeping materials		
	5	Availability of adequate furniture in good condition		
	6	Availability and use of guest register		
	7	Vision, mission and business licences and rates clearly displayed		
	8	Presence of adequate visual controls and signage		
	9	Presence of fire extinguisher		
	10	Good Work distribution among staff		
Bedrooms	1	Availability of adequate space		
	2	Good quality walls and floors		
	3	Well ventilated and adequate lighting		
	4	Bathroom and toilet in close proximity to the room		
	5	Traditional bathroom and toilet with good sanitation		
	6	Bathroom and toilet have adequate space		
	7	Adequate visual controls and signage		
	8	Is there a set of clear instructions regarding safety in an event of fire in all rooms		
	9	Is the room furniture in good condition		
	10	Availability of adequate and trained housekeeping staff		

Kitchen	1	Availability of adequate space		
	2	Are all utensils and equipment well organized		
	3	Are all utensils and equipment stored in clean spaces		
	4	Availability of adequate equipment and facilities		
	5	Availability of adequate and sanitary food storage facilities		
	7	Provision of a qualified supervisor		
	8	Presence of functional fire extinguishers		
	9	Good workforce distribution		
	10	Provision of an easily accessible first aid box		
	11	Adequate visual controls and signage		
	12	Availability of adequate and trained staff		
	13	Regular medical checkup for staff		
	Dining Area	1	Availability of adequate facilities and space for all guests	
2		Adequate signage and visual controls		
3		Clean, sanitary and organized area		
4		Availability of adequate furniture in good condition		
5		Availability of a supervisor		
6		Good workforce distribution		
7		Availability of adequate qualified and trained staff		
8		Presence of staff at all times		
9		Implementation of continuous improvement strategies		

Bar	1	Availability of adequate facilities and space		
	2	Adequate signage and visual controls		
	3	Clean and organized area		
	4	Availability of adequate furniture in good condition		
	5	Availability of a staff supervisor		
	6	Good workforce distribution		
	7	Availability of adequate qualified and trained staff at all times		
	8	Availability of toilets in close proximity to the bar		
	9	Availability of functioning fire extinguisher		
	10	Implementation of continuous improvement initiatives		
	11	Display of liquor license		

Other comments



