Introduction

The nations of the modern world are battling with economic growth. This struggle leads to competition which ultimately results in environmental degradation. This triggers a significant blow to the globe’s eco-system and assimilative ability. This phenomenon has made the economies to rethink their concept of sustainable development. Sustainable growth means human communities have to live and fulfill their needs without undermining emerging generations’ capacity to fulfill their own needs (Saarinen, 2020). It incorporates two main principles within it. Vander Merwe & Van der Marwe (1999) add that environmental sustainability is a program to reform the stable growth model so that it provides the minimum quality of life for all citizens, while protecting the environment and environmental processes that make life better and desirable.

Ecological sustainability is related to the natural world and how it sustains and stays healthy and sustainable. The quality of the air, water and atmosphere are of special importance, since natural resources are extracted from the environment. Environmental protection allows society to organize strategies to achieve needs of human beings while maintaining the planet’s life-support structures. This includes, for example, the
Sustainable Practices or Cost Efficiency: A Case Study of Selected Hotels in District Swat

sustainable use of water, the use of renewable resources and the sustainable procurement of resources.

Tourism and hotel industry in early 21st century, is one of the most powerful strategic practices in the world in pursuit of leisure enjoyment, the process of enjoying time outside of the home in different places. Pollution, CFC emissions, waste food, waste oil, noise, smell, workers’ well-being, waste water, haze, biodiversity in agriculture, waste management, transport policies, selling endangered species souvenirs, position of hotels in vulnerable areas are the major environmental impacts related to the hotel industry. It is recognized that environmental concerns will become even more influential as a force affecting customers, policymakers, interest groups and destinations.

Hotels are one of the fastest growing business industries, contributing to boost the volume of tourism in every region or country. Hospitality industry is still increasing foundations of this field, offering 24/7 comfort facilities. The sustainability of tourism and the provision of clean nature reflect indirectly. The success of tourism indirectly depends on the availability of clean and natural environment. Ecotourism is also viewed as an instrument for developed countries to support sustainable growth. Ecotourism assists in economic growth by supplying urban people with a more viable potential means of livelihood. Eco tourism is seen by many as a feasible way to conserve the green environment and achieve social and economic gains for local areas. Ecotourism encompasses a number of nature-focused activities that facilitate tourists’ enjoyment and appreciation of natural and cultural resources and are preserved to be physically, financially and ecologically sustainable. Ecotourism is also recognized as an alternate kind of sustainable growth. In the recent past, ecotourism has gained growing interest, Not only as an alternative to mass tourism, but also as a way of fostering economic development and protecting the region’s climate. Its purpose is to maintain resources, particularly biodiversity perspective, and to preserve the productive use of resources that can provide travelers with ecological knowledge, preserve the environmental resources and acquire resources (Bansal & Kumar, 2013).

The existence of hotels and visitors may damage the natural environment and the habitat of species of indigenous animals. The hospitality industry leads to waste problems, such as food waste, oil and chemical disposal. A lot of energy and water, such as electricity for air conditioning, refrigeration, are used by the hospitality and tourism industries.

According to the national tourism Board, tourism industry directly added US$ 7.6 billion (PKR 793.0 billion) to Pakistan’s GDP in 2016, contributing 2.7 per cent of overall GDP. By 2025, the government predicts that tourism will contribute Rs1 trillion to the Pakistani economy (US$ 6.0 billion) (UNWTO, 2018).

Pakistani tourism spending is rising quite rapidly. Because of the rising demand and future growth in this field, KP Government has initiated its tourism development strategy that will build new tourist sites to improve the tourism industry. There is currently a rise in the number of hotels, though existing hotels still attract visitors. There is a disparity with the understanding of acceptable environmentally sustainable activities by managers for hotels, which means a need for improvement and enhanced understanding of green management. The Studies on the sustainable practices of the hotels in District Swat’s hotel industry are scant. Such practices require further research.
The earth is currently facing environmental threats, including global climate change, ozone depletion, deforestation, high water use and rising solid waste. Hotels exert a huge impact on the environment. The magnitude and nature of the environmental effects of hotels mean an immediate need to resolve this issue. The concern that emerges is whether hoteliers understand in their establishments the need for environmentally sustainable measures. Adopting environmental friendly practices results in lesser threat to the environment as well as it also bring cost efficiency to a firm. In connection to that, this study aim to analyze the environmental friendly practices adopted by hotels in order to bring cost efficiency. In addition the study explores the contribution that hotels make to mitigate the detrimental impact on the climate.

Literature Review

Along with accommodation hotels are considered as a source of leisure and entertainment, but due to the growing overload of waste materials and the use of water and electricity, they are experiencing environmental problems. Mbasera et al., (2016) discusses the eco-friendly practices implemented in three to five start hotels in Zimbabwe. Initially there were no green management mechanisms in the selected hotels. The hotels started renewable energy through green initiatives as a marketing strategy. This was done to draw customers attention and have a competitive advantage in the industry. Renewable energy, paper less printing, water saving by controlled supply of water in the toilets and bathrooms and solid waste management were some of the practices adopted in the hotels. In a similar study Khatter et al. (2019) examined a comparison between hi-star rated hotel accommodation and lower-star rated accommodation. The study suggest that most of the hi-star rated hotels put relevant information regarding their sustainable practices while low-star hotels rarely do so. The findings clearly showed that chain-affiliated lodging are much more interested in spreading information to the customers about the environment. Further research shall be carried out to discover why lower star-rated accommodations do not share knowledge as aggressively on their internet sites and whether this correlates to their actual practices. Mensah (2005) examined the environmentally friendly practices of accommodations and identified discrepancies between the different categories of hotels in the degree of adoption and implementation of such practices. The outcome indicates that the most common eco-friendly practices undertaken by hotels were the use of energy-efficient light bulbs and less frequent change of used towels and linen. The survey also explain that 17.3% of accommodations reused their waste, 8% reprocessed food leftovers, and 7.7% created recycled paper brochures. The findings clearly indicate that hotels don’t pay attention to reuse. Food, waste water and other waste produced in hotels are wasted. Hotels will can rather bring cost efficiency by recycling these wastage. The study proposed that the millions of tons of waste water that flows down the gutter every day should be recycled. Used water can be reused across the establishments to water plants and flowers or to flush toilets while food leftovers may be used as fertilizer or to feed livestock. Mensah (2005) further suggested that hotel must provide their own small separate garbage cans for the processing of papers, plastics and bottles to promote the work of waste management companies engaged in recycling.

Booyens (2016) discussed how tourism industry, in the light of sustainability, can provide a basis for conceptualizing and fostering tourism development. The report points
out rapid adoption by tourism industry of both creativity and environmental practices. Overall findings of this cross-sectional analysis make a contribution to the debate on sustainability in hospitality. Iraldo et al., (2017) investigated the relationship between green strategies and competitiveness. This study showed that the management model built by the entrepreneur is also important in the tourism industry to make "green" strategies functional for competitive advantage. The conceptual model consists of three dimensions of competition which are market edge over rivals, consumer satisfaction and motivation of employees. Ultimately, only at management level, the introduction of internal sustainability monitoring systems is evaluated by entrepreneurs and owners as an effective help to improve their competitive efficiency.

Kang et al., (2012) concentrated on the demand of tourists in the US hotels for environmental sustainable practices. The fundamental goal of the study is to figure out the correlation between the extent of environmental severity of US hotel guests looked for by environmental model scale (NEP) and willingness to pay. They also explored the willingness of hotel guests to pay a premium to the U.S. hotel industry for environmentally friendly practices. This study also showed that U.S. hotel guests with higher levels of environmental concerns declare a greater willing to spend premium rates. The social identity theory and the means-end theory are supported by this avowed willingness. Manaktola & Jauhari (2007) examined the variables affecting the attitude and actions of consumers towards green practices in the lodging industry in India, as well as figuring out the intentions of consumers to pay for these practices. The perceptions and behaviour of customers towards green practices in the lodging industry were analyzed. The findings suggest that customers would like to use accommodation that meets these practices. Indian hotels, if they follow green standards, have a competitive advantage over comparable goods. In order to look at long-term gains, the hotels have to invest in environmentally sustainable practices and government need to consider the practice by instituting incentives and providing tax benefits. They indicated that the tourism industry has a great responsibility to ensure that business models that are sustainable in the long term are implemented and that green practices should also be observed as a preferred business model. Robin et al. (2019) conducted a study on 24 hotels wherein semi-structured interviews were carried out. The results showed that the organizational actions defined by the hotel managers, the size of the establishment where large and medium-sized hotels were more committed to long-term growth and the environmental technology taken and implemented by the hotel.

**Material and Methods**

The questionnaires were designed to collect the primary data from the selected hotels of district Swat, Khyber Pakhtunkhwa. The questionnaire is composed of three different sections. Section one include questions related to sustainable energy consumption, section two is about water recycling while section three includes question related pollution and waste management. A total of 22 hotels were selected from three different areas where majority of the hotel exist. These areas are Mala Jabba, Mingora city and Bahrain. The hotels were selected through random sampling technique. The data is analyzed through descriptive statistics.
Results and Discussion

The hotels were selected from three different locations i.e. Malam Jabba, Bahrain and Mingora city. Majority of the hotels are located in these areas. Among these majority of the samples were collected from Malam jabba followed by Mingora city and Bahrain respectively. As the local hotels don’t have any star ranking mechanism therefore hotels were categorized on the basis of room occupancy. Hotel were classified into four different categories i.e hotels having less than 10 rooms, 10 to 20 rooms, 20-30 rooms and hotels with more than 30 rooms.

| Location     | Rooms          | Total |
|--------------|----------------|-------|
|              | 10 & Below     | 10-20 | 21-30 | 31 & above |
| Bahrain      | 2              | 2     | 0     | 0          | 4     |
| Mingora      | 2              | 3     | 0     | 2          | 7     |
| Malam Jabba  | 7              | 3     | 0     | 1          | 11    |
| **Total**    | **11**         | **8** | **0** | **3**      | **23** |

Literature shows that the adaptation of sustainable practices bring environmental efficiency and ultimately lead towards cost efficiency as well as increasing revenue. As observed during the survey that whatever practices adopted by these hotel are primarily adopted only to reduce cost. Thus by reducing cost these hotels in some shape ultimately bring greening of the hotel. The results indicate that most of the hotels installed low consumption energy saving bulbs. Electric card control system are not available in hotels industry of swat. Air conditioning system is available in most of the hotels except Malam Jabba where there is a no need of Air-conditioning because of the cold weather. Time lightning control and automatic light control in corridors are installed in most of the hotels in order to save energy. Solar panel for electricity generation are widely used the hotels due to the shortage of electricity as well as it also reduces the cost of electricity generation.

| Electricity consumption in hotels | Yes | No |
|-----------------------------------|-----|----|
| Installation of low consumption bulbs | 22(100) | 0 |
| Electric card control             | 0   | 22(100) |
| Air conditioning system           | 8(36.4) | 14(63.6) |
| Time control lightning in corridor | 22(100) | 0 |
| Automatic light control in corridor | 1(4.5) | 21(95.5) |
| Daily time control for permanent light | 17(77.3) | 5(22.7) |
| Washing machine in rooms          | 10(45.5) | 12(54.5) |
Practices regarding the consumption of water are explained in the following table. The hotels adopted their own wells (a shaft sunk into the ground to obtain water) so hotels are not paying for public water. They also give clients the option of replacement towel in bathrooms and recommend moderate consumption of water to client. Solar panel for hot water generation is available.

Table 3
Consumption of water in hotels

| Water consumption                                      | Yes     | No      |
|-------------------------------------------------------|---------|---------|
| Water consumption reduction in shower                  | 21(95.5)| 1(4.5)  |
| Flushing water reduction system in hotel               | 12(54.5)| 10(45.5)|
| Water treatment system                                 | 22(100)| 0       |
| Pay for public water                                   | 0       | 22(100) |
| Give clients the option replacement of towel           | 22(100)| 0       |
| Recommend moderate consumption of water to client      | 7(31.8)| 15(68.2)|
| Solar panel for hot water                             | 12(54.5)| 10(45.5)|
| Other saving and water treatment measures              | 4(18.2)| 18(81.8)|

Table 4 shows that majority of hotels use cooking oil for once. Most of the hotels are using those windows which protect noise. The hotel can’t afford machines/equipment which recycle the glass and make the environment clean. The local government doesn’t provide such apparatus to the hotel which recycle papers nor do hotels have their own apparatus to avoid glass waste and recycle them. Moreover, few hotels serve individually packaged food to their customers but the rest doesn’t serve individually packaged food. Besides, there is a mix approach towards provision of soap pack in the bathrooms.

Table 4
Pollution and waste of the hotels

| Waste And Pollution      | Yes     | No      |
|--------------------------|---------|---------|
| Carry out oil waste      | 18(81.8)| 4(18.2) |
### Table

| Service                                | Yes (%) | No (%) |
|----------------------------------------|---------|--------|
| Isolate machine room                   | 15(68.2)| 7(31.8)|
| Noise protection window                | 22(100)| 0      |
| Glass recycling provide by city council| 0       | 22(100)|
| Private glass recycling                | 0       | 22(100)|
| Paper recycling provide by city council| 0       | 22(100)|
| private Paper recycling                | 0       | 22(100)|
| Separate out plastic waste             | 0       | 22(100)|
| Don’t serve individually package       | 12(54.5)| 10(45.5)|
| Don’t provide individual soap in bathroom | 12(54.5)| 10(45.5)|

### Conclusion

This study reveals that local hotels main objective is to earn more revenue while they are less concerned about the sustainable practices in their hotels. Although they have adopted certain practices which are environmental friendly but these are aimed at reducing cost rather than bringing sustainability. With increasing demand for green practices in hotels these hotels are now experiencing a pressure from their customers to adopt more environmental friendly practices in their existing financial constraints these hotels can’t expand their greening efforts. Therefore, in order to promote sustainable tourism in the local area the government needs to provide facilities in the form waste disposal management and supply of sewerage system to the hotels. The results show that currently there is no waste disposal system provided by the local municipality. The hotel take initiatives on their own for the disposal of waste. Besides, there is no government preferential tax policy for those hotels which cater for sustainable practices. In order to stimulate the green practices government may initiate preferential tax policy. If government support hotels this will lead to preserve environment and resources. Furthermore the local administration should encourage environmental friendly practices of hotels in district Swat.
References

Bansal, S. P. & Kumar, J. (2013). Ecotourism for community development: a stakeholder’s perspective in Great Himalayan National Park. In Creating a Sustainable Ecology Using Technology-Driven Solutions (pp. 88-98). IGI Global.

Bina, O. (2013). The green economy and sustainable development: an uneasy balance. Environment and Planning C: Government and Policy, vol. 31, pp.1023–1047.

Booyens, I. (2016). Responsible tourism in the Western Cape, South Africa: An innovation perspective. Original scientific paper Irma Booyens / Christian M. Rogerson Vol. 64 No. 4, pp.385- 396.

Iraldo, F. Testa, F. Lanzini, P. & Battaglia, M. (2017). Greening Competitiveness For Hotels And Restaurants. Journal of Small Business and Enterprise Development Vol. 24 No. 3, pp. 607-628

Kang, K. H. Stein, L. Heo, C. Y. Lee, S. (2012). Consumers’ Willingness To Pay For Green Initiatives Of The Hotel Industry. International Journal of Hospitality Management, Vol.31, 564-572

Khattar, A. McGrath, M. Pyke, J. White, L. Binney, L.L. (2019). Analysis Of Hotels’ Environmentally Sustainable Policies And Practices. International Journal of Contemporary Hospitality Management, Vol.31 No.6, pp. 2394-2410

Manaktola, K. & Jauhari, V. (2007). Exploring Consumer Attitude And Behaviour Towards Green Practices In The Lodging Industry In India. International Journal of Contemporary Hospitality Management, Vol. 19 No. 5, pp. 364-377.

Mbasera, M. Plessis, E. D. Saayman, M. Kruger, M. (2016). Environmentally-Friendly Practices In Hotels. Independent Research Journal in the Management Sciences.

Mensah, I. (2005). Environmental Management Practices Among Hotels In The Greater Accra Region. International Journal of Hospitality Management. www.elsevier.com/locate/ijhosman

Robin, C. F. Pedroche, M.S.C. Astrorga, P. S. & Almeida, M.A. (2019). Green Practices in Hospitality: A Contingency Approach.

Saarinen, J. (2020). Sustainable growth in tourism?: Rethinking and resetting sustainable tourism for development. In Degrowth and Tourism (pp. 135-151). Routledge.

Wilson, E. D. (2011). Going Green’ in Food Services: Can Health Care Adopt Environmentally Friendly Practices. Canadian Journal of Dietetic Practice and Research, Vol.72 No.1, pp.43-47.

UNTW O. (2018). Tourism Highlights. Madrid: UNWTO.
Vander-Merwe, I. Van-der-Merwe, J. (1999): Sustainable development at local level: An introduction to local agenda 21, Pretoria: Department of environmental affairs and tourism.