



Proposed Vernacular-Ecotourism Guidelines as A tool to Preserve Vernacular Architecture in Nubia, Egypt.

Case study: Katoo-dool Nubian House, Aswan – Egypt

Mostafa Gabr¹, Wael Kamel², Ghada Gamal El-din Gaber³

¹Professor of Landscaping Architecture and Environment Design Dept., AASTMT,

²Professor of Environmental Engineering Construction and Building Engineering, AASTMT

³College of Engineering and Tech., AASTMT

Abstract

Nature and culture have always offered a variety of resources for tourism in different areas. Furthermore, the fact that these assets are key for choice makers whatsoever, levels on aggravate suitable arrangements for the enhancing of ecotourism. As per the World Tourism Organization, ecotourism has been estimated to account between 10% to 15% of all international travel expenditures, it seems to be even faster than the tourism industry, as it represents 20% of the world travel market. Research assumes that despite large portions of vernacular dwells exist in Egypt, (but desired) to package vernacular architecture traditions and quantitative design knowledge to modern building designers. The aim of this study is to develop and preserve the identity of vernacular architecture in ecotourism sectors in Nubia, Egypt so that they could develop the economy and urban texture as well, and to outline the role of natural and cultural Egyptian rural communities to protect and preserve their heritage and their ecotourism resources as well. This study will assess and analyse six different international, national and local ecotourism rating manuals and certifications as well to seek the common ecotourism criteria to preserve vernacular architecture, then outline preservation vernacular-ecotourism Guidelines passed on ecotourism criteria and indicators, then validate it with efficient scale like Likert scale to be easy to use by decision makers. The research main findings based on the performance of selected vernacular-ecotourism case studies in Nubia, Egypt, were the criteria of vernacular-ecotourism preservation. The research will accentuate that the Nubian building technology could be useful for redesign ecotourism resorts in rural community in Egypt. Sustainable architecture planning is a capable apparatus for making ecotourism offices that encourage aware and widening social exchanges.

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Keywords

Vernacular Architecture; Ecotourism; Sustainable Planning; Ecotourism Rating System

1. Introduction

Tourism need taken a paramount part in the Egyptian economy, generating remote exchange, pushing development, lessening salary Also work disparities around regions, what's more serving with allay neediness. The environmental impact of tourism is considered as a social-ecological phenomenon that can be categorized into the two aspects of natural and social-cultural impacts. But mass tourism in Egypt faces problem and causing them too, it will not

carry on successfully this way. The alternative was ecotourism, it is a term which has grown because of frustration with traditional forms of tourism, which have, ignored socio-cultural features and environmental impact of destinations of a profit-centered approach to delivery of tourism products (UNWTO Tourism Highlights, 2016).

To do as so, there is a need for ecotourism certification and standardization on building and construction with a separate certification for operation and management. Ecotourism confirmation could a chance to be utilized similarly as an instrument that gatherings give some methods to visitors also other stakeholders for example, such that the local community or ensured decision makers, on pick wisely what with preserve furthermore the thing that will keep in brain to development vernacular heritage (UNWTO Tourism Highlights, 2016).

The key successful ecotourism is the incorporation of local cultures and populations into the industry. It obliges collaboration furthermore actually partnerships between legislature and indigenous people, what's more supervisors included on comprehension those social issues that might emerge from establishing protected areas. The main point is that ecotourism aides to ensure conventional information from being lost similarly as new generations become more assimilated into the global culture (Blamey, 2001).

The basic purposes of ecotourism are to preserve and utilize natural and cultural resources in a sustainable way and to enable economic development of local people. Ecotourism's recognized possibility concerning illustration a viable apparatus for reasonable advancement will be the principle reason the reason creating nations are right away grasping it and including it for their investment improvement and conservation strategies.

Vernacular architecture is the fundamental expression of the culture of the community because it is a non-renewable resource. Vernacular building design will be association for its domain and, during the same time, those statements of the world's social assorted qualities. Vernacular based legacy a chance to be 'the substance from claiming sustainability', continuously constructed for local materials and the least waste of resources (Synergy, 2000).

Certification will be an approach about guaranteeing that an action alternately and meets certain standards. In this research six examples of ecotourism certifications will be presented, four International ecotourism certifications: first, process-based: The Global Sustainable Tourism Council (GSTC) and Mohonk Agreement, then, Performance-based: The Green Globe 21 and The Green Key eco-label, and two National ecotourism certifications: Hawaii Ecotourism Association and Botswana Ecotourism Certification.

The research aimed to investigate the average of higher rank vernacular-ecotourism preservation criteria on different types of ecotourism certification program based on survey of selection criteria. The selected criteria and indicators to form the value were the common ones in all eco-rating system, and the final value was to show the highest value of ecolodge criteria. Finally, the rating system that had been selected for study in Nubia was the proposed vernacular-ecotourism preservation Guidelines.

The analysis of International vernacular-ecotourism resorts examples, indicated that, then Vernacular-Ecotourism resorts design should integrate the enhancement of both natural and physical well-being into the notion of a high standard vernacular-ecotourism resort design. The main aim of the research was preserving the Egyptian architectural identity thoroughbreds of private old Nubian vernacular architecture and the substance of the beauty, culture and traditions.

2. The Concept of Ecotourism

The protection of the environment is usually considered one of the least important concerns for traditional mass tourism. But "eco-tourism" gives an eco-responsible solution for the expansion about tourists' stream same time preserving the natural and historical heritage of a country.

The concept of preservation, known as ecotourism, not only seeks to create a sustainable connection to nature, but it strives to educate tourists on how to preserve the world they wish to experience as well as the world in which they live. Ecotourism contributes to conservation of biodiversity, maintains the prosperity about local people, pushes little and medium tourism enterprises, obliges most reduced workable utilization from claiming regular

assets (Cattane, 2011).

The definition of Ecotourism is a traveling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations found in these areas” (TIES, 2015).

(Blamey, 2001) defined the Community-based Ecotourism as the concept of community-based ecotourism indicates that community has a critical control and involvement in the project of ecotourism and revealed that most the benefits of ecotourism will remain in community.

Per the UN World Tourism Organization (UNWTO Tourism Highlights, 2016), the differences between ecotourism and sustainable tourism that, the sustainable tourism is the tourism development with a balance between environmental, economic and socio-cultural aspects. The ecotourism, for the International Ecotourism Society (TIES), is defined as: ”Responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education” (Blamey, 2001).

The International Ecotourism Society (TIES, 2015), defined the principles of ecotourism as, build environmental and cultural awareness, and respect, minimize physical, social, behavioral, provide certain encounters for both guests and local hosts, produce fiscal profits for both local people and private industry what’s more design, construct and operate low-impact facilities.

3. The Concept of Vernacular Architecture

Vernacular architecture is a representative element which reflects local identity. Vernacular architecture tries on seek after learning on the traditional architecture that is conceived out of the put the place it originated, due to its particular idea regards should its contexts what’s more traditional way of life (Glass, 2000).

(Vellinga, 2006), agreed that the vernacular architecture works in space as history woks in era. The history interrupts time’s ceaseless flow, segmenting furthermore rearrangement it on sake of the human need for significance. The forms of vernacular houses have been outlined with react will their ecological contexts what’s more vernacular houses are gave down similarly as a legacy starting with era.

The differences between vernacular architecture and sustainability, that, the vernacular rural building is based on low investment and high maintenance, where monetary transactions are minimal and high maintenance work creates regular employment for local community. This is one of the important factors of economic sustainability of community.

The design strategies of vernacular architecture can be split into two levels, the first relates to general building and environmental control characteristics such as materials, plan shape and section that can also be dependent on cultural and social values, the second relates to specific aspects of building form such as the plan orientation, landscaping, verandas and courtyards. (Elkaftangu, Elnokaly, Awad & Elsereagy, 2015)

The term ‘vernacular architecture’, as opposed to traditional, vernacular or folk buildings, first appeared in the post-war period of the 1950s and 1960s when architects sought to appropriate simple traditional buildings to legitimize prevalent functionalist theories of design. Vernacular architecture was characterized as a functional shelter for people, animals and stores, ‘built to meet needs’, constructed per the availability and performance of materials and formed in response to environmental and climatic conditions. (Oliver, 1989)

In the late 1980s and 1990s, the study of vernacular architecture has become, or become again, the study of the cultural impact of a specific people upon building practices in a specific place (a geographic area defined by historic socio-cultural boundaries). By the time, vernacular architecture turned to fiscal element that causes mass tourism within ecotourism zones, at the meantime of vernacular architecture causing mass tourism problems, the concept of cultural preservation had been added to ecotourism, as shown in Figure 1.

(Burd, 2008), agreed that the principles of vernacular architecture are environment and materials (materials and technology), the long lifespan of buildings is part of what allows them to grow, adapt, and evolve, the way of life

of building occupants, and the way of local are using their buildings, is of great influence on building forms. The identity comes from using available cultural resources from a spectrum of cultural presentation place, likewise incorporates that which impacts the intending occupants provide for it through personal, social, what's more social courses also at last, the site features, that might confine the house manifestation anyway it doesn't choose those type. Around comparative site, diverse house types might be seen while looking into separate locales comparable house might be seen.

(Glass, 2000) illustrated that the vernacular architecture preservation and community developments, is expected to consider the changes that take place in the community if it is going to provide a genuine experience for tourists. Preservation of cultural heritage and its presentation for tourism should incorporate the dynamic nature of living cultures and account for changes in local culture and way of life.

4. Examples of International and National Ecotourism Certifications

Ecotourism's worth lies in its potential to provide a win/win/win situation – a win for the environment, an win for those economies, and also a win to the neighborhood group keeping and existing social also social structures.

4.1. International Ecotourism Certifications Examples

The Process-Based Certification Programs certify businesses that have established and documented systems for assuring the improvement of quality or environmental performance. Process-based certifiers do not set performance standards, rather honor eco-labels to advance to internal goals, for example, decreasing power and water utilization, such as Mohank Agreement and Global Sustainable Tourism Council. (Honey, 2002)



Figure 1. Vernacular architecture turned to fiscal element. (Researcher).



Figure 2. A Sample of Existing Ecotourism Certification Programs Source: (Honey, 2002)

These certifications were eliminated from the study because they consider to be the first step assessment in each First, Second, or Third Party Certification program and Performance-based program in their way before upgrading to higher certification level in third party certifications or before set the performance measurements in Performance-based certifications.

The Performance-Based Certification Programs is a front-end assessment; they certify whether a business or activity complies with objective outside criteria. This permits a regulate examination the middle of two organizations should show which you quit offering on that has better environmental performance, such as the Green Globe 21 (GG21) International Ecotourism Standard and the Green Key Eco-label for Tourism Facilities. (Honey, 2002)

The Green Globe 21 (GG21) International Ecotourism Standard was selected to study in research for the clearness of its criteria and indicators. The research main aim was to propose a Vernacular-Ecotourism Preservation Guidelines for sustainable development of vernacular architecture within ecotourism areas in Egypt. To do as so, the common Vernacular-ecotourism preservation criteria were selected in each certification for further validation and comparison study. The common criteria in Green Globe 21 (GG21) International Ecotourism Standard are: site, energy, water, material and resources and emissions.

The Green Key Eco-label for Tourism Facilities was selected for the clearness of its indicators, and for the large number of ecolodges facilities that were certified by it in the Middle East, for example, Radisson Blue Hotel Alexandria, Egypt and Atlas Kasbah Ecolodge, Morocco. The common Vernacular-ecotourism preservation criteria in Green Key Eco-label are: water, waste, energy and indoor environment.

4.2. National Ecotourism Certifications Examples

The National objectives of National ecotourism certifications were establishing common work tools for member programs, and defining strategies to promote the application of best practices. That defining certification processes to ecotourism operations, particularly the individuals which are little also medium-sized ecotourism offices.(Honey, 2002)

The National Network members for each country were assented to an set about benchmark criteria to ecotourism which were formed toward incorporating components from existing regionally and nationally accepted standards. (Honey, 2002), agreed that, the three parts of The First, second, or third party Ecotourism Certifications are: First-party certification that is self-evaluation. For example, when a company declares that its product meets certain standards but no one from outside verifies the claim. Second-party certification that is when a purchaser or industry body assures that the product meets the purchaser's standards.

Finally, Third-party certification that is when a neutral, independent third party evaluates the compliance of the product with clearly defined standards. Most credible certification programs require third-party assessment, such as Hawaii Ecotourism Association (HEA) and Botswana Ecotourism Certification program.

Hawaii Ecotourism Association was selected in the research to study for its environmental biodiversity criteria. It have program that is model for effective certification programs which contribute to furthering the goals of socially responsible tourism. The only common vernacular-ecotourism preservation criteria within Hawaii Ecotourism Association Certification was environmental managements.

Botswana Ecotourism Certification program was selected to study for its criteria and indicators that matches with USAID Manual Eco-Rating. USAID Manual Eco-Rating was selected to be compared with the previous National and International ecotourism certification programs, then outline the Proposed Vernacular-Ecotourism Preservation Manual that designed especially for Egypt.

The common Vernacular-ecotourism preservation criteria within Botswana Ecotourism Certification program are: operation an effective and sustainable policy, maximize local community benefits and minimize negative impact on environut produced by physical design and operations.

4.3. Ecotourism Development Programs in Egypt

Egypt contains 28 protected areas, that cover 12% of the country. Per Ministry of Tourism and Environment, the number of protected areas will be grown to 44 by the end of 2017 and encompass 24 percent of the Egyptian land. Luckily, enough individuals for positions secondary Also low have in the secret word battled and need aid still battling with preserve Egypt's biodiversity. (Cattane, 2011)

Recently, Ministry of Tourism and Environment had emphasized how maintaining ecotourism contributes an incredible arrangement will maintainable advancement also social justice, stating that a investment methodology ought further bolstering make taken the place the legislature might raise income what's more support tourism through those protection and expansion of protected lands. It's a decidedly refreshing perspective amidst the Egyptian economy's current orthodoxy of rampant development and construction projects taking place across the country, guzzling up virgin coastlines and untouched desert terrains. (Cairo Scene Team, 2017)

The Egyptian Environmental Policy Program (EEPP) includes 20 ecotourism development programs and rating systems that were designed for rural and vernacular communities in Egypt. The classified programs as Process-Based programs are: The Green Star Hotel Initiative, Eco-Tourism Development in Siwa Oasis, Ecotourism Site Development in Siwa Oasis, and Nubian Sandstone Aquifer Study, Protected Area Management Plan Baseline Study. The classified programs as Performance-Based programs are: The USAID Wadi El-Rayyan Rest-house Management Plan and the USAID-Egypt Eco-Rating Manual for red sea. The USAID-Egypt Eco-Rating Manual were selected for validation and comparison with the previous International and National ecotourism certification programs.

The USAID-Egypt Eco-Rating Manual was selected for its' environmental criteria, and ecolodge design, construction, and operations that was specifically designed for Egypt's Tourism Development Authority. It was designed in the best interest of the investor to follow the guidelines as closely as possible to achieve the maximum number of points. (Cattane, 2011)

5. The Proposed Vernacular-Ecotourism Perservation Guidelines for Egypt

To achieve an objective reliable ecotourism Guidelines for vernacular-ecotourism resorts, a correlation analytical study that aims to assess the features of ecotourism criteria for preserve vernacular architecture in rural communities in Egypt. The study aimed to investigate the average of higher weight of perservation criteria within different types of National and International ecotourism certification program.

The comparison analytic study ended with the eight higher and common criteria that were selected to perform the vernacular-ecotourism preservation Guidelines. These criteria are: Site selection, Sustainable Architectural Planning, Building Materials, Construction Techniques, Energy Conservation, Water Conservation, Waste management and Recycling and finally, Air Quality.

Table 1 represented the correlation study of the outlined common criteria from ecotourism systems that asses vernacular architectural (such as Botswana Ecotourism certification and Hawaii Ecotourism Association certification), and ecotourism systems that assess mass tourism and ecotourism (such as The Green Globe 21 International Ecotourism Standard, and The Green Key eco-label). Each ecotourism system in Table 1 include the percentage of every criterion out of the total value of the certifications' weight.

For example, the percentage of Site Selection criteria at Botswana Ecotourism Certification is 11.7 % from the total weight of the certification. Each percentage at every criterion presents the weight of the common vernacular-ecotourism preservation criteria at all the ecotourism certification programs presented in Table 1, compared with its weight at USAID-Egypt Eco-Rating Manual.

The findings of the correlation study aimed to reveal the best practice for applying ecotourism criteria to preserve the vernacular cultural in rural ecotourism areas.

Each criteria from the selected eight ones includes weighted indicators. For example, the selected common

weighted indicators of Site Selection criteria are: Site inventory and analysis (special features, topography, views, vegetation, etc.), Screening and visual integration with landforms, Facility location, layout and orientation, Natural/cultural resource protection measures, Landscape (and biodiversity) enhancement, and finally, Use of native trees to provide shade and reduce heat gain on buildings. The selected indicators to present

the weight of each criterion were the common ones in all the National and International ecotourism certification systems.

Table 1. The weighted value for The Proposed Vernacular-Ecotourism Manual for Egypt.

Ecology criteria	The weight of each criterion within Ecotourism Certifications validated with The Proposed Manual for Nuba, Egypt.					
	Botswana Ecotourism Certification	Hawaii Ecotourism Certification	Green Globe 21 Ecotourism	The Green Key eco-label	USAID-Egypt Manual	The Proposed Manual for Egypt
Site selection	11.7%	33.2%	12.8%	9.7 %	17.2%	11.8%
Sustainable Architectural Planning	4.8%	17.1%	1.8%	9.1%	16.4%	11.8%
Building Materials	11%	9.3%	5.9 %	7.3%	8.9%	9%
Construction Techniques	8.2%	3.1%	6.8%	4.3%	7.8%1	9%
Energy Conservation	25.4%	13.2%	41.6%	16.3%	18.8%	19.6%
Water Conservation	20.5%	10.1%	13.4%	21.8%	11%	14.9%
Waste management & Recycling	13.6	7%	2.7%	23.6%	11.9%	14.6%
Air Quality	4.8%	7%	14.9%	7.9%	8%	9.3%

Due to the variance of the criteria weight at every ecotourism certification compared with USAID-Egypt Eco-Rating Manual for Egypt in Table 1, the rating system that had been selected for preserve vernacular architecture in rural communities in Egypt was The USAID-Egypt Eco-Rating Manual for Egypt with its ' criteria and value indicators

6. Applying the Proposed Vernacular-Ecotourism Guidelines to Preserve Vernacular-Ecotourism Resorts in Nubia, Egypt

Throughout the history of ancient Egypt, Egypt required been clinched alongside contact for various societies close and much starting with their home. Each for the those cultures given a few sort contact What's more relationship; if that might have been political or budgetary or indeed as a adversary.

One culture in particular, Nubia required been done contact and required An relationship with Egypt since Similarly as initial as the initial century B.C. Nubians are residential architects through multi-generations' knowledge practices and they succeeded to adapt to their environment and create personal architectural features that are environmentally, socially and culturally passive.

6.1. Background of Case Study, Nubia

Nubia was home to some of Africa’s earliest kingdoms. Known for rich deposits of gold, Nubia was also the gateway through which luxury products like incense, ivory, and ebony traveled from their source in sub-Saharan Africa to the civilizations of Egypt and the Mediterranean (Fahim, 1975)

As a “definable groups”, the Nubian lived isolated from the Egyptian society and totally separated from the Egyptian way of building their homes. Also, Nubian didn’t profit starting with common administrations for example, the medical, telecommunication and even the educational services.. (Bayoumi, 2016)

Sustainable architecture must seek to minimize the negative of tourists’ cultural impact in vernacular regions by enhancing the character and identity of traditional vernacular place during design process. The idea of sustainability is to ensure that the Nubians’ actions and decisions today do not inhibit the opportunities of future generations.

This idea can be achieved in vernacular architecture which is distinctive by its historical, cultural, social and environmental features. . (Fernea, Gerster & Jaritz, 1973).



Figure 3. The Kingdom of Ancient Nubia or Kush. Source: (Fahim, 1975)

The tenants of old Nubia framed riverine groups grouped clinched alongside towns along those banks of the Nile River. Former with relocation. Nubia was located between Aswan in Egypt and 150 kilometers into Sudan. The Kenuz occupied the northern area, the Arabs resided in the middle, and the Nubians were in the south of Egypt and the north of Sudan. About 50,000 Sudanese Nubians and 70,000 Egyptian Nubians were relocated. (Fahim, 1975)

6.2. Description of Studied Nubian Resort

The Nubian villages with wider agricultural land were smaller, required higher populace thickness Also held fewer hamlets. Those village is both An territorial Furthermore family relationship unit for settlement. The inhabitants are related to each other by marriage and descent.

The selected Nubian resort was Kato-dool Nubian House in ‘West Seheil’ Aswan. It was selected for its’ unique location and Nubian architectural style, as shown in Figure 4.

Kato-dool Nubian House, “West Seheil”, Aswan, situated opposite the town of Aswan, 3.6 km from Aga Khan Mausoleum. The Kato-dool Nubian Houses boasts a barbecue and views of the mountains. The ecolodge has a terrace and a private beach area, and guests can enjoy a meal at the restaurant. An porch alternately gallery in certain rooms, based Similarly as an accepted Nubian house, this bright guest house comprises of three buildings offering a tree-framed terrace over the Nile River, as shown in Figures 5 and 6.

The Proposed Vernacular-Ecotourism Guidelines were designed to be applied on appropriate area and location, the area and location criteria were applied on Kato-dool Nubian House by measuring the dimension of each type

of the resort room, guest areas, all services (bathes, meditation room and kitchen), outer cafeteria and resorts' landscaping. The rooms of the Katoo-dool Nubian House are colourful and simply furnished. They are decorated in traditional Nubian style, with bright contrasting colors. A large secular tree shades the terrace where guests can relax with a drink, while enjoying views of the Nile. Several additional seating areas can be found in the courtyard. Katoo-dool landscaping, rooms, guest areas and all services (bathes, meditation room and kitchen) were measured and calculated individually, as shown in Figures 7 and 8.

The Nubians designed a special models and architectural forms of their own in Katoo-dool Nubian House based on the domes rising. Will help on the air currents in the alleviation of high temperatures without the need for air conditioning, thereby decreasing loads of electrical surplus and lessen nursery gases, similarly as those form, also they also planted many trees high-and medium-length side of the lake to help also in smooth air, as shown in Figures 9 and 10.



Figure 4. Katoo-doolNubian house location (Researcher).



Figure 5. Katoo-doolNubian house location layout (Researcher).



Figure 6. Katoo-doolNubian house location layout (Researcher).

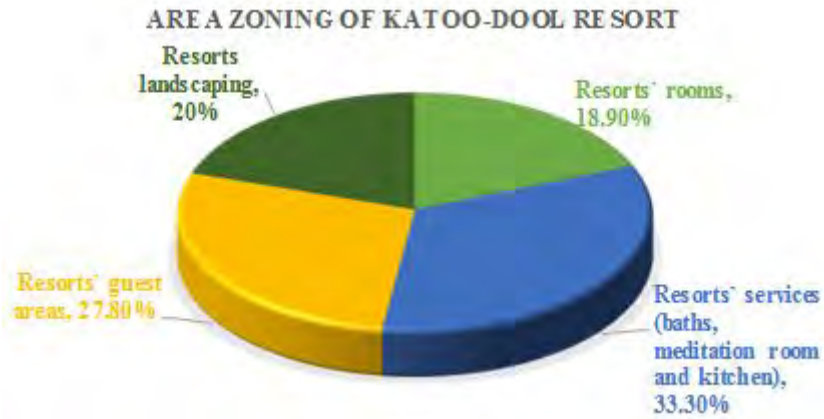


Figure 7. Katoo-doolNubian house area zoning. (Researcher).



Figure 8. Katoo-doolNubian house rooms layouts, (a)Room size of Standard ecolodge, (b) Room size of Suite ecolodge, (c) Room size of Deluxe ecolodge. (Researcher)

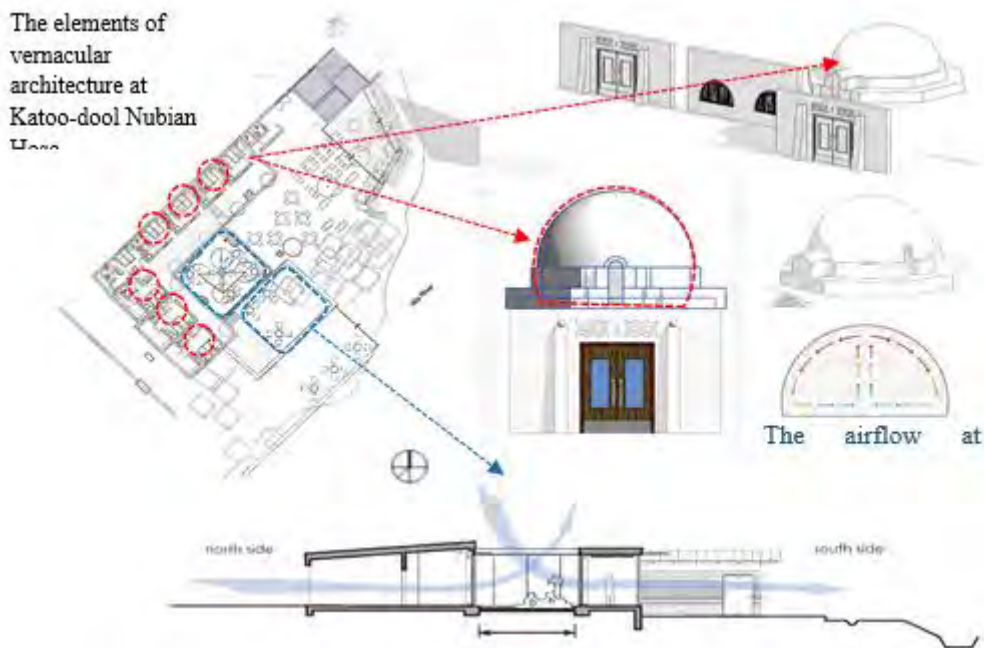


Figure 9. Theflow of natural ventilation at internal opening



Figure 10. Vernacular Architectural elements at Katoo-dool Nubian House. (Researcher).

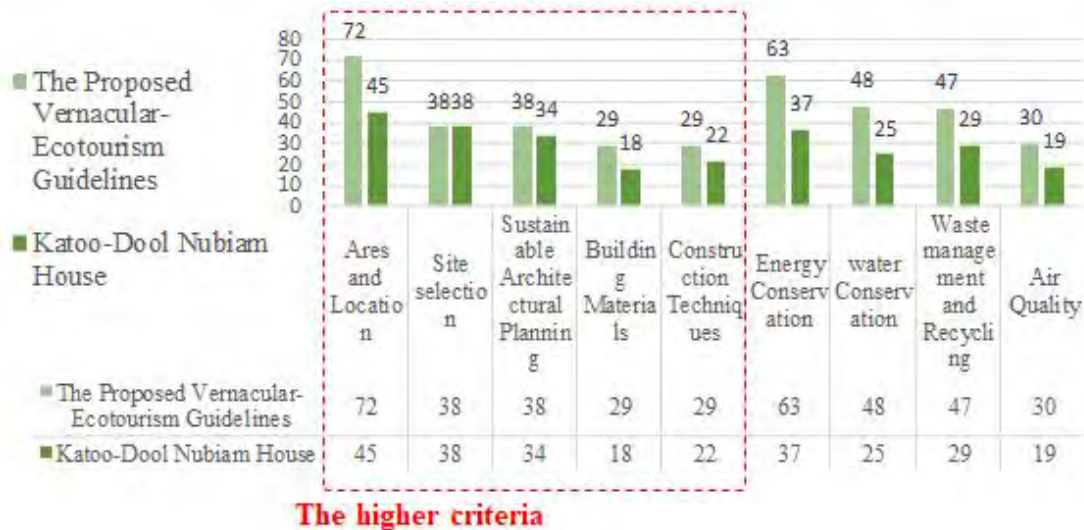


Figure 11. The validation of the Proposed Vernacular-Ecotourism Guidelines with Likert Scale. (Researcher)

The higher indicators performance of Katoo-dool within Sustainable Architectural Planning criteria are the following: Architectural Motif (use of indigenous forms and materials), Material Life-cycle Analysis, Use of colour, Muted colours that blend with the local environment and reflect light and Interior ambience. The higher indicators performance of Katoo-dool within Building Materials criteria are the following: Use of Local (and natural) Building Material, Selection of durable (long-life) Building Material, low maintenance materials when buying building materials. The total performance of Katoo-dool Nubian house at the Proposed Vernacular-Ecotourism Guidelines is shown in Figure 11.

Figure 11 The performance of Katoo-dool Nubian house at the Proposed Vernacular-Ecotourism Guidelines. (Researcher).

Based on the preservation vernacular-ecotourism Guidelines, and the performance of the selected vernacular-ecotourism resort in Nubia (Katoo-dool Nubian house), the criteria of vernacular-ecotourism preservation are Site Selection, Sustainable Architectural Planning, Building Materials and Construction Techniques.

A new validation rating value were proposed based on Likert scale from (1 to 10) to reflect the actual value of each indicator, this scale will offer higher degree of measurement precision, and provide better opportunity detect changes and more power to explain a point of view.

The values that was given to the preservation indicators where based upon the following: The average of the real performance of the Nubian resorts and not exceed the value that given by USDA-Egypt Manual that reflect the environmental and social impacts on community. For example, when indicator weighted 7 by USDA-Egypt Manual and was fully applied by the resorts it equals 10-points at Likert scale, as shown in Figure 12.

7. Conclusion and Recommendations

Ecotourism should be seen in direct relation to nature conservation (protected areas), for protection of the true What's more directing, including local communities altogether phases of the process. With preservation of the authentic and involving local communities in all stages of the process. It is a true request summarizes What's more knows those illustrated vernacular protection guidelines through ecotourism criteria and indicators.

It is a real demand that vernacular-ecotourism resorts must be eco-friendly buildings and building materials can be recycled, Furthermore of the visitors turn to Egypt on searching for those characteristic surroundings and the vernacular culture and architecture.

Nubian building technology could be useful for redesign ecotourism resorts in rural community in Egypt. Sustainable architecture planning is a capable apparatus to making ecotourism offices that encourage aware what's more widening cultural exchanges. Participatory building approaches create longstanding relationships among all members of the team, local and from abroad.

New resorts construction in Nubia could be studied for its relationship to the city's rich historical architectural heritage and vocabulary and unique character. Remembrance, or materialization of Nubian cultural and identity will detract numerous structures in the future, what's more these separate types of recognition in the built environment could be studied.

This research identified that these vernacular, every-day purse are highly vulnerable to damage within community development prosses due to their construction materials and quality. They are also vulnerable to demolition after development because they are not necessarily identified on an historic register, and many are owned privately and not subject to historic preservation process.

It is necessary to draw up long-term programmes for the protection, restoration and re-use of vernacul ararchitecture , such as would safeguard the optimal distribution of funds by the priority ranking of the set goals.

The future of vernacular architecture which creates a substantial part of cultural heritage depends on various factors which develop about the economic, social and cultural life of each country. Current development brings with it fundamental changes in human activities and in living standards in almost all regions both rural and urban.

Integrated conservation and rehabilitation recommendations should be developed in order to prevent loss of Nubian vernacular architectural identity. Urgent preservation and precautionary measures should be taken for the surviving of Nubian heritage buildings, which should be kept as unique instances representing aspects of an important era.

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