



INSPIRATIONS FOR THE FUTURE OF ECOTOURISM: A FOCUS ON DAR ES SALAAM WATERFRONT DESIGN IN A COLLABORATIVE ARCHITECT'S TRAINING SETTING

DR. SHUBIRA LEONIDAS KALUGILA ¹

¹ LECTURER - DEPARTMENT OF ARCHITECTURE, ARDHI UNIVERSITY, P.O. BOX 35176, DAR ES SALAAM, TANZANIA.

ABSTRACT

Tourism has been an income generating industry to many countries worldwide including those in Sub-Saharan Africa; Tanzania being among them. If not handled well, tourism activities can lead or contribute to big footprints on earth. There is a need to continue to advocate for human activities and interventions that leave less footprint. Eco-tourism is insisting on creating a balance between conservation, communities and sustainable travel; its principles include minimizing physical impact to the environment, creating cultural awareness and education, creating memorable interpretative experiences, empowering local communities and the like.

Most of the principles can be linked to physical developments or architectural space creation in general. It is important for those involved in the creation of space to be well informed on eco-tourism matters so that they can play their part. Through literature review, questionnaires, studying works of architecture students as well as the training processes and implementation of the knowledge acquired by those trained; this paper is aimed at bringing to the surface the different visions architects in training have as far as eco-tourism advocacy is concerned.

Keywords: Eco-tourism, Architecture, Dar es Salaam, Ecology, Footprints, Waterfront.

INTRODUCTION

Tourism has been an income generating industry to many countries worldwide (Mtalima, 2016; Mirumbe, 2018). The nature of local or international touristic attractions differ from one place to the other depending on the geographical location, the nature of the land, available natural resources, manmade investments, conserved areas, heritages etc. African countries, especially East and Southern parts are known for their touristic attractions especially those related to 'nature' including wildlife safaris, visiting conservation areas like Ngorongoro and Zanzibar stone town, mountain climbing, camping, marine related activities, bird viewing, waterfalls and the like¹. All these activities can have in one way or another impact to the ecosystem; also the building activities that come with it, can have impact on nature. If not handled well, tourism activities can lead to leaving big footprints on earth; either environmental footprints, ecological footprints or carbon footprints, be it primary or secondary (URT, 1991).

Eco-tourism is insisting on creating a balance between conservation, communities and sustainable travel (Bricker, 2013); its principles include minimizing physical impact to the environment, creating cultural awareness and education, creating memorable interpretative experiences, empowering local communities and the like.

The International Ecotourism Society (TIES), the world's largest international eco-tourism association with over 90 member countries seeks to be the global source of knowledge and advocacy for ecotourism². Brickers (2013), highlighting on TIES and what it stands for, in her presentation, 'Trends and issues for eco and sustainable tourism,' on responsible travel and travel choices gave a

statement, "Change the way you travel, and help change the world." Tourism activities can be linked to human interventions, behavior in space and interaction with nature and the local people (Pearce, 2005). It can also be linked with building design, specification and construction processes. A study of consumer behavior trends, indicated that 58% people said their hotel choices is influenced by the support the hotel gives the local community (Brickers, 2013); this is one way that travelers can contribute in promoting ecotourism.

Ecotourism and Building Design

The building construction processes and the resulting natural resources consumption depends on the designs that architects produce, the kind of technology they suggest and the materials they specify to be used in realizing the building projects. Architects are leaders of the building team in the construction industry. They are expected to manage the building projects and are involved in making critical choices that can make footprints differences; for example, designing buildings that are resource efficient with less impact to the community, the choice of whether to import or to use locally available materials or the kind of functions to accommodate in an indoor or outdoor space. They have an influence on the resulting end products in terms of how many times per a certain period of time will a building be renovated, its general life span as well as the use of alternative technologies e.g. use of solar energy, wind energy or rain water harvesting and the like. The same spirit that was mentioned by Brickers (2013) regarding 'change the way you travel...' can be applied to those involved in the building industry especially in implementation of

ecotourism design towards effecting positive change through exploring design possibilities i.e. *'Change the way you design or the way you create space and help change the world.'*

Ecotourism and Urbanizing Dar es Salaam

Dar es Salaam is one of the fast growing cities in the sub Saharan region with a population of around 4.1 million people; it is estimated to reach a population of 10 million by 2030s and could reach 21 million by 2052³. The unprecedented urbanization is posing challenges to the urban authorities, habitation and the socio-economic conditions of the people (Kombe and Kreibich, 2000; Kalugila, 2014). The population increase in cities is alarming and calls for the importance of sustainable development including advocating for and promoting ecotourism.

Dar es Salaam is most of the time considered as a gate or a path to other touristic destinations; but in actual sense there are tourism and leisure related activities that are conducted in Dar es Salaam and other cities that are not necessarily related directly to inland tourism i.e. wildlife, safaris and the like. Due to its coastal location it is a home for various touristic activities including those related to waterfront development, for example luxury hotels with sand beaches for leisure activities and recreation. Places for leisure activities here meaning where people can go and rejuvenate away from work and daily routines enhancing quality of life (Torkildsen, 1999) as seen in figure 1.

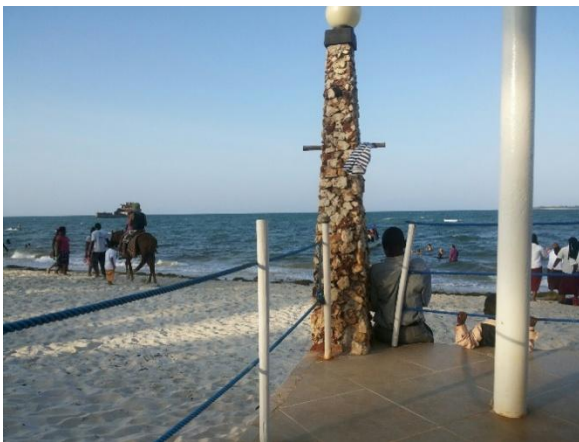


Figure 1: Promoting local economy: Horse-rent riding

Source: Author, March, 2016

Ecotourism and Waterfront Development in Dar es Salaam

Ecotourism and waterfront development is challenged in different aspects including needs for ecological protection. Waterfronts are potential areas for attracting investments and if used well can act as engines for boosting the economy of a city (Malone, 1996). The development of the tourist hotels and entertainment facilities in Dar es Salaam seem to be happening rapidly and in an uncoordinated manner. This reflects the lack of long term visions, policy

and guidelines to protect waterfronts. If the areas along the shores will continue to be developed rapidly without incorporating sustainable urban design principles, the existing eco-system will continue to be endangered; a situation which calls for designing more guidelines and search for construction techniques and implementations that are aimed at intervening and guiding future development⁴. When asked during a survey to comment on the extent of implementing ecotourism aspects from the built environment perspective one of the students commented:

"I don't think that tourism and ecology are closely connected in Dar Es Salam. Also tourists are kept secluded from the daily life of the city. There is no interconnection and tourist only come for the paradisiacal beaches and the local people can't profit from potential tourists (BE19)".

Spatial development is imbedded in the social, cultural and economic activities of people. In this regard, appropriate spatial approaches are needed to create a balance between the extent of development and sustainability in terms of preservation of local culture, economy and ecology⁵. Project for public spaces (PPS) is making an effort to educate people on place making; an approach that is not far from the principles of ecotourism and if well implemented can result into strong urban communities.

"Our pioneering peacemaking approach helps citizens transform their public spaces into vital places that highlight local assets, spur rejuvenation and serve common needs⁶."

PPS emphasises on the importance of designing by following procedures for a waterfront to function well. The steps discussed by PPS insist on giving priority to the goals of the public, connecting spaces by using pedestrian routes and to restrict vehicles as much as possible. When the community is involved in creating a vision, they feel a sense of belonging and ownership of the resulting outcome.

The more variety in activities (Mkenda, 2015) and destinations available and the more people have access to the spaces created, the more it become alive and used around the clock. Apart from the need of destinations to have variety of functions in them, it is also important to connect different destinations preferably with pedestrian routes so as to strengthen the place as a whole. Working with the existing situations to fulfil human needs while preserving the history, culture and nature is also another aspect that is emphasised when visualising waterfront development⁷.

Integrating Ecotourism Theme in Architecture Training Programmes

'Studio Tanzania' that is referred to in this paper is part of an architectural training programme (design studio) that started in the 2014/2015 and was implemented also in the 2015/2016 academic year at Ardhi University Tanzania (ARU) and Hasselt University in Belgium. A set-up was made between these two Universities whereby a group of students from both countries work in parallel on a similar

task, same area under the same theme; in this case 'Eco-tourism and waterfront development in Dar es salaam Tanzania'. Kunduchi waterfront and Kigamboni-Kivukoni waterfronts were worked on in those two academic years consecutively. Workshops, seminars, and fieldworks were conducted at the beginning of the academic year followed by (group then individual work) design consultations and presentations with the purpose of creating design solutions by implementing guidelines and recommendations suggested throughout the course of the task into architectural design projects.

METHODS

Information for this paper was collected using different methods including literature review, questionnaires, participating, experiencing and observing part of the architecture training process, also studying works done by student architects under the theme of eco-tourism and waterfront development. The study included architecture students from Tanzania, Ardhi University (ARU) and also from Belgium, Hasselt University. Those of Tanzania involved year four students who were doing urban design. The questionnaires were structured, customized differently and distributed to Belgian and Tanzanian students. A total of 22 Belgian students and 34 Tanzanian students responded and returned the questionnaires. The names of those who responded to the questionnaires were anonymous, so the respondents are indicated using initials of their countries and numbers e.g. (Belgian Students) BEXX or (Tanzanian Students) TZXX (XX being the number allocated to the student's response). All this information was analyzed and compiled to produce this paper.

RESULTS AND DISCUSSION

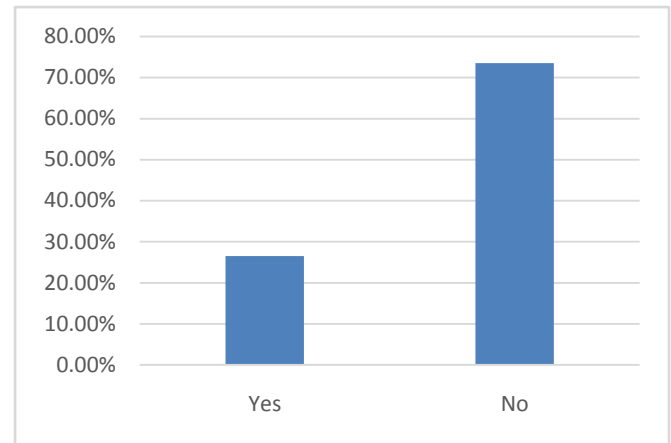
Students Understanding and Application of Eco - Tourism Ideas in Design

One of the challenges facing promotion of ecotourism is lack of awareness among those in the building industry, Architects being among them. During training, there is a great chance and time to explore new concepts; the excitement and enthusiasm of learning and being adventurous is expected to be high. A survey was conducted among architecture students to find out their understanding on the concept of ecotourism. It was discovered that most of them were not aware of ecotourism design before being introduced to 'Studio Tanzania' in class or from the year before (for the intake of 2015/16). For the case of Belgian students, majority of them (more than 60%) revealed that it was their first time to be engaged in the theme especially in architecture design. Some of them had learnt about the theme when they were taking an ecology class in their third year of undergraduate studies.

One of the students commented, *"The setup of the studio was presented to all students of the first Master class at the end of the academic year 2014-2015. Also I learned about the theme and challenges of the studio through students who completed the studio last year (BE2)."* ARU students

responses where somehow similar to those from Hasselt University; majority of them learnt about ecotourism through preceding year four students who took part in 'Studio Tanzania' for the first time (Chart 1). Few of them who were aware of the theme (before 'Studio Tanzania') had learnt about it through private reading (TZ4; TZ32) or studying in a geography class (TZ25).

Chart 1: Tanzanian students on if they were aware about ecotourism theme before studio Tanzania



Source: Survey conducted with TZ students, March-May, 2016

On the definition of ecotourism, a variety of answers were given by the students including, *"It is responsible travel to areas of interest occurring in natural setting, offering environmental education, nature conservation and economic growth also fosters sustainable environment management for the benefit of the local community (TZ7)".* Another response was, *"It is a responsible way of traveling to natural areas but can be in cities or even tasting local food and markets, can be a form of ecotourism (BE13)."* And another response was, *"Tourism which is beneficial to the locals directly and to the tourists without having negative effects to the environment (TZ10)."* And, *"Nature, culture and human rights are not harmed through eco-friendly tourism, where a small footprint is a big must (BE15)".* Another responded, *"A way of tourism, beneficial for locals and local culture, putting ecological issues in the spotlight or working in harmony with the environment (BE12)."* Also another student responded *"A mix of green, cultural, sustainable, durable and local aspects (BE3)."* Looking at these answers it is noted that they all focus in sustainability, ecology, culture, conservation as well as economic growth as reflected in the principles of ecotourism by TIES.

A question was asked to students which stated, 'What characterizes Architecture and urban design for ecotourism?' The responses given by students showed that after taking part in studio Tanzania by literature research, empirical data collection, and analysis; they had some understandings that equipped them with knowledge enough to comment on how a design project in an urban context can be created and executed to meet ecotourism

necessities.

The student's responses can be grouped into major groups including touristic attractions that are environmental responsible design which has less impact to the environment; projects that support local communities in terms of economies; promotion and conservation of local welfare, aesthetics, culture, and social values; designing for the people and use of sustainable local building materials and technologies at the same time respecting the context. Also they mentioned the importance of creating projects and designs that enhance vibrancy, variety and legibility of the urban fabric. One student commented, *"Architecture and urban design for ecotourism is characterized by the way the design has been assembled, terms of movement patterns, energy uses, building forms and arrangements, construction techniques and materials and many other factors, if all of these have been established in such a way that they have to do with community culture, environmental conservation, tourist attraction and economic importance of the community (TZ22)."* All this suggests that it is possible for designers to change the way they conceive and execute architectural projects in urban contexts if sensitized.

Architecture Student's Design Ideas for the Future of Ecotourism

In the process of experiencing Dar es Salaam with a focus on the waterfront of Kigamboni and Kivukoni, with an eco-touristic-design-eye, it was noted that there are several challenges that have to be brought to designers' attention. Issues that were mostly brought up by students from Hasselt University were related to habitation, transportation, waste management, unsustainable fishing practices, education, culture heritage, water and vegetation, public space, floods, enhancing community value and the like. Referring to the preliminary data collection task conducted in Kigamboni site by students from both Tanzania and Belgium, it was noted that it is easier for an outsider to notice potentials of a place than those who are used to that particular context. Some other architectural interventions projects that were proposed by students included; changing swamp areas with a negative outlook to a more positive place by managing the waste disposal and drainage, by creating community gardens (TZ7). Designing a floating restaurant; creating safe pedestrian bridges enhancing enjoyment of sceneries around the coast (TZ5; TZ15).

The main communication language used by Architects is illustrations. In most cases, drawings or visual aids can represent ideas in a more effective way than writing many words (Figure 2).



Figure 2: Example of Architecture illustration from Ardhi University students works. Source: Studio Tanzania⁸

Students of architecture are trained to use both natural (using hand drawings and physical models) and technological (using computer aided design - CAD) method of drawing as seen in the examples of students works (Figure 4). It is assumed that by using 3D (three-dimensional or volumetric) drawings it is easier to communicate with people who do not understand the architectural 2D language. The 3D drawings are not only used for showing the clients how the end product is expected to look like but they are also used as tools (through trial and error exploring different volumes) for the design thinking and development process.

It can be seen in the illustrations how the students have written their design statements and how they are trying to achieve them in their designs. One of them had a goal of maintaining the local community's lifestyle by enhancing cultural values through Swahili lifestyle, sustaining the wellbeing of the local people and appreciating the cultural asset (Figure 3). Another student, in her design project wanted to use design to pull in the local and international tourists by designing conducive and attractive indoor and outdoor environments and also using local construction materials. Another student used illustrations to showcase design ideas how the Kigamboni Community Centre (KCC) can be revitalized so that it can enhance the identity of the place⁹. Another important factor that students proposed to be addressed or incorporated from the beginning of the design stage was the effect of demographic projections in design. This is captured in students works where the students of group 5¹⁰ proposed housing types that reflect the heritage of the place and provide green heart for the town Centre.

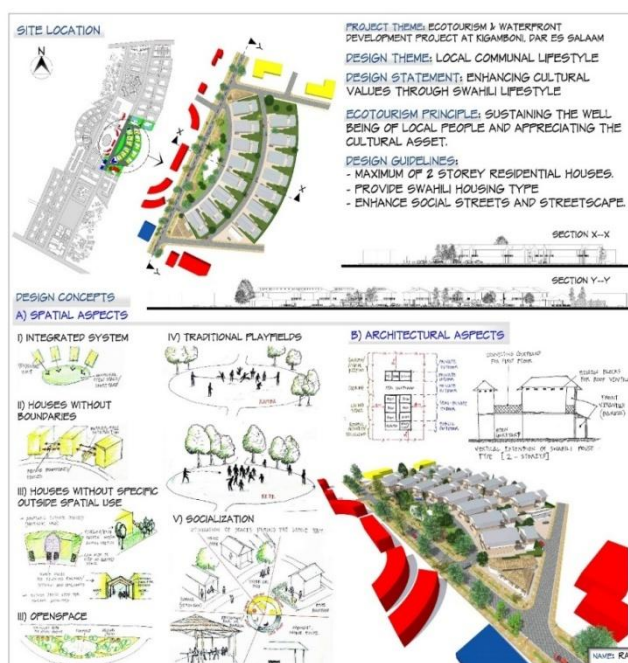


Figure 3: Example of architecture illustrations,
Source ARU-ARCH 4 student(Adnaan Rajbhai Z.) works,
2016



Figure 4: Example of architecture illustrations,
ARU-ARCH 4 student (Nuru Aly) works, 2016

The students also wanted the site to be an active part of daily life of the member of the community where the wellbeing of the people is considered as well as their economic status. The designs are meant to beautify the space for tourist attractions as well as operate with low impact to the environment.

Students from Belgium also demonstrated their design interventions through their project-briefs presented at the beginning of their projects. Some of the project formulations recognized the importance of the fishermen's community to the history of Dar es Salaam and the role it can play in the future¹¹. In his project, 'autarkic place for fishermen', Van Loy Nick proposed a project that had an intention to improve the community; he noted,

"...To make sure the fishermen village can still exist in the future, the fishermen settlement must evolve even more to an autarkic society...in this project the durability will be the centre piece. It gives a space to meet and get aware of the possibilities of an autarkic community."¹²

Another student (Willekens Niels) whose intervention project aimed at fishermen, focused on seaweed farming. In his brief he stated,

"The fishermen society is a living heritage. How can we preserve and empower them within a fast growing city; assure a future for them under the pressure of city development and the dependence on the threatened sea life...the architectural intervention is located on an Island 2 km of Dar's coastline. It will support all facets of the seaweed farming process and provide a seaweed experience to its visitors."

This is an example of an intervention whereby architecture space is intervening on an ecological problem. Sillen Daan concentrated his project on promotion of art and culture; with a design goal stating,

"The aim is to empower creative talent by means of culture production centre and to make urban spaces more interesting with performances...the culture production centre will host spaces for cultural education, workshops and rehearsals...Walking through this centre on itself will be a cultural experience since the building will act as a stage providing the visitors a look behind the scenes of the production and education process."

"I would like to work on the built heritage of Dar es Salaam by trying to show that sustainable urban development is still possible in a city" stated Beauclerq Yannik in his design project brief. His aim was to create contemporary buildings in harmony with traditional historical architecture through conservation; by choosing three historical buildings with noticeable social, cultural, and aesthetic value.

The stages of Architecture works in most cases are displayed to be viewed by the intended audience where comments can be aired in order to be improved for the better output before being processed for implementation on site. Display of works for comments can be a good way to share design ideas to intended community members who most of the time end up being the end users of the spaces created. To support this idea one of the students commented, *"Any development should incorporate public comments during design and implementation phases, with monitoring programs that allow for regular discussion of tourism use and the correction of problems when they occur (TZ11)."* Through this kind of participation, involvement and awareness people get an opportunity to be part of the design process and might feel that their ideas and contributions matter and are considered to be accommodated in the projects. Also they might feel responsible and participate in taking good care of the end product (building projects when finished and is in use) and the surroundings.

Students also learnt how to give priority to users of the end product of their designs as well as the local community where the facilities they are proposing are going to take place. This was exercised mainly through engaging them from the beginning of the data collection step and functional requirement establishment; also by

looking critically into matters that are of priority to the communities focusing on preserving their cultural values, improving their economic status at the same time protecting the environment. Responding to how they were planning to address issues of eco-tourism in design one of the students commented that they are expecting to achieve that by, *"Introducing retail stores and cultural shops to increase the income of the people. Using cobblestone as road surfacing material to decrease vehicle flux in the area. Promoting the use of local materials such as Tanga stone and coral stones, cement blocks, tree logs and used car tires (TZ4)."* Other responses on what they wanted to achieve as far as design is concerned included the use of sustainable energies in buildings, improvement of cultural activities, promoting investment opportunities, managing waste, giving priorities to pedestrians (TZ6), improve public utilities (TZ6), promotion of natural ventilation (TZ5), projects that will build environmental responsibility and awareness creation (TZ3), conservation and nature protection (TZ1) and improving living standards of people (TZ2).

Good Examples of Architectural Ecotourism Projects

Architecture design tasks can be of various types as a result they can demand one to have various background information and inputs in order to carry out a particular project successfully. Part of Architecture training involves inspirations from the existing. It is important to have exposure to matters related to the built environment and also a wide architectural mental library. There are designers around the world whose works can be taken as examples of good practice as far as design with eco-tourism in mind is concerned. During the study, the students were asked to mention projects which they felt to their opinion were good examples. Among the projects that were mentioned were: the proposed Mama Ngina project in Kenya, a road side park that allows views to the ocean and has places to relax, petty traders, also there is a proposal to improve the area¹³ (TZ7). Another student mentioned Port Douglas Waterfront Park Aimed at improving access, opportunities for economic development and investment as well as extension of the already strong environmental and community values of the town in order to characterize the experience of the waterfront in the future¹⁴ (TZ8). Also the example of Oudebos Mountain Camp project was mentioned by some of the respondent as good eco-example:

"Located in the UNESCO world heritage Cape Floral Region, the Oudebos Mountain Camp replaces an existing facility and aims to provide reconcilable facilities for sensitive eco-tourism. The project was officially opened in February, 2012, and consists of five self-catering cabins and a small function room which are lightweight, stilted structures that integrate modestly into the surroundings. The buildings use natural materials and colours to blend into landscape¹⁵ (BE3; BE5)."

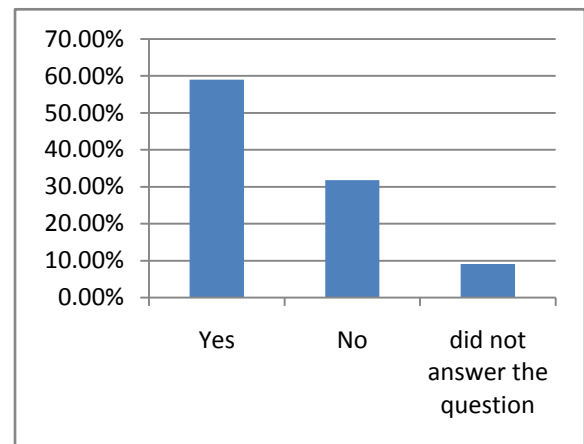
Students also noted eco-tourism projects in countries like

Mongolia (Steppe Nomads Eco Cama), Eco-lodge in Costa Rica, Gardens by the Bay Singapore, the Juvet Landscape Hotel by Jensen and Skodvin Arkitekt kontor in Norway. These projects show that eco-tourism practices are continuing to take place in some parts of the world already and lessons can be learnt from them however, more efforts are needed in mainstreaming and creating awareness to all stakeholders involved, students of Architecture included.

The Influence of International Exposure to Architecture Students

During this study, a survey was made to find out the extent of international exposure (beyond Europe) the students from Belgium had, before joining studio Tanzania. Out of the 22 students who responded to the question; the results showed that majority of them (59 percent) had been outside Europe (chart 2), while for 31.8percent of them it was the first time to travel outside Europe. The countries that some of them had visited included USA (New York, Florida), China (Hon Kong, Shenzhen), Australia (Sidney), South Korea, Turkey, Egypt, Thailand, Cambodia, South Africa and only one student had been in Tanzania before.

Chart 2: International exposure (Belgian students on travel beyond Europe)



Source: Survey conducted with BE students March, 2016

One might ask himself or herself, does it mean once one is exposed to the international platform (countries beyond their own); the majority continue to explore more and engage themselves in international activities if opportunities arise? The study has shown that most of the students who opted for studio Tanzania had travelled outside Europe before. They had broken the barriers of their comfort zone. The aim of their travels involved holidays, study trips and the like. Tanzanian students also commented positively on how the presence of students from another country changed their way of thinking as well as future aspirations, by gaining different ideas that has contributed to their personal growth (TZ1).

The study also intended to find out the influence of the internationality of Studio Tanzania and ecotourism knowledge on architecture students aspirations for the future in terms of their ambitions, their careers and their personal development in general. The responses showed

that for the Belgian students, working in a contrasting context with a different background from their own, was a challenge and at the same time an eye-opening and informing process. The learning journey for most of them had inspired them, taught them on what to prioritize in project formulation and broadened their horizon among other things. They also got to learn the 'new' (culture, context, social networks) and appreciate Africa more. For most of them it was an experience that improved their academic and personal growth. Some of them responded:

"Yes, by getting to know Tanzania and its culture I got to realize the big difference in way of living and thinking between the two worlds. For me the difference of the public space between Tanzania and Belgium was remarkable also that the people of Tanzania were much more social than the people in Belgium (BE3)."

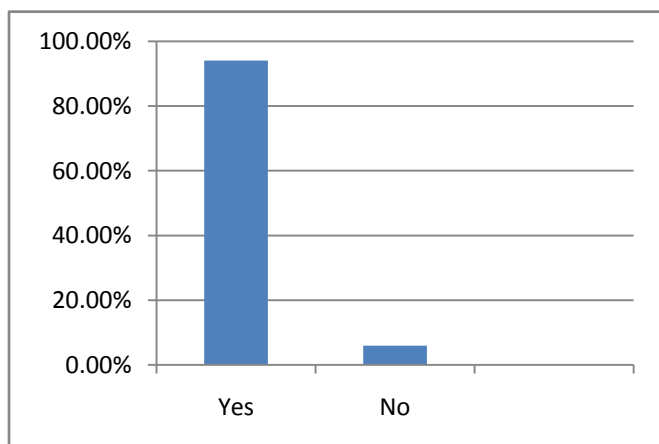
"I really like the challenge of designing in a context different from the one in Europe. This helped me achieve a wider vision on architecture and its meaning. Also Dar es Salaam as one of the fastest growing cities worldwide is an interesting challenge (BE2)."

I was aware of the architectural potential in Africa and way of thinking, however studio Tanzania helped me to develop this and cope with understanding a big city and searching for an opportunity, instead of designing at a given location and cope with a given issue (BE7).

Some of Tanzanian students also commented (Chart 3) that having experienced collaborations and idea exchange from students and lecturers from other countries¹⁶ in this case people from Belgium, Kenya, Rwanda and Sweden, enhanced their thinking:

"...The collaboration brings the sense of what am studying can be practiced worldwide, so I can work my ideas and approaches which can be used also in Belgium. It's kind of an exposure through those researches we did together with the Belgian student and I also learnt how they think and passive architecture (TZ5)."

Chart 3: Tanzania students on international collaboration impact on their way of thinking and future inspirations



Source: Survey conducted with TZ students, March-May, 2016

Some students from Tanzania wished and suggested if they could also have an opportunity to travel abroad so that they can also experience a context from another country by travelling there physically. More than 70 percent of them commented that the presence of Belgian students pushed them to aim higher and challenged motivated them to do better.

Students as Potential Eco-tourists

When students travel abroad for an exchange programme, they get a chance to play the role of both students and tourists. In most cases they get to live in the new country for a long time depending on the programme they are enrolled in and interact with the new context for a longer time (could be a week to months even years) compared to a normal tourist who in most cases schedule their holidays in a shorter time (few days to months). Also in the process of their work and studies; they get the 'learning about the locals' element in depth. They have an opportunity to ask more questions to the seminar facilitators and local members of the community they are in at that particular time and also they get a chance to experience life in the foreign country when they are meeting their daily basic human needs like food, shelter, leisure and recreation. They might even go to an extent of learning a few words or more of the local languages hence enhance their communication and understanding skills. In a study based in the Yucatan Peninsula on service-learning Klein and Lawver (2007) comment that studying abroad is enhancing learning.

Students normally have an assignment to do and have to account for their time spent in the other country mostly in some form of a report. This can help in triggering their minds to explore, enjoy, learn and store memories of their experiences through diaries and other documentation materials¹⁷ (Klein and Lawver, 2007). They can then use their documents after returning back to their home countries and in the process of continuing with the assignments they are supposed to attempt. This situation of revisiting their experiences is different from a normal tourist who might not have the necessity of re-telling the 'abroad' experience to a planned audience i.e. assessors of their assignment. From the aforesaid it shows that students travelling abroad, if exposed to the ecotourism knowledge, can be ambassadors and promoters of ecotourism by being Eco tourists themselves.

Challenges Relating to Difference in Architecture Training Systems in Collaborating Universities

As mentioned earlier, studio Tanzania is a program that is conducted in parallel in Tanzania and in Belgium. The nature of architecture training at Ardhi University (5 years Bachelor plus 2 years Master system) is slightly different from Hasselt (3 years Bachelor plus 2 years Master). This difference leads to the groups being composed of 4th year students of Ardhi University and 2nd year Master students of Hasselt University. In the academic year 2015/2016 before travelling to Tanzania for a joint workshop, the students from Hasselt University had to do a research on

the locally (in Tanzania) available materials which were fire bricks, bamboo, wood-timber, rammed earth, glass, adobe, natural stone, compressed earth blocks, compressed earth blocks, conventional materials, natural temporary materials because at that time the academic year at Ardhi University had not started. The programmes of 'Studio Tanzania' in Hasselt University¹⁸ and ARU¹⁹, shows that lessons starts differently, a situation which create a challenge in the logistics, understanding, delivering and processing of information among the two collaborating universities. Also the timing of sharing information between the students became a challenge. When asked to comment on the adequacy of the interaction time between students of the two universities, most of the students taking 'Studio Tanzania' suggested that the programmes should allocate more time²⁰ so that they can exchange ideas and learn more from each other. They insisted also on the importance of creating a balance of the exchange in terms of visits i.e. students from Tanzania also to have opportunities to travel abroad. As one of the students commented, *"Student collaboration in all stages of design. Presentation by both members so as to share presentation techniques. Ardhi students should also get a chance to visit and design in Europe. In order to design in a different kind of climate (TZ17)."* And another student commented:

"I would suggest the movement of students to be in two directions. They come to us and we get chance to go there. They have the chance to study us more than what we have. We better also have a chance to go there to see how they are living. Only asking them is not enough, we better observe ourselves (TZ29)."

Another difference that was noted is, Hasselt University Master students spend more time on individual work than the fourth year students at Ardhi University who do most of the work in the first semester in groups and individually in the following semester.

Recommendations to Stakeholders

The students were asked what they would have recommended to the authorities on matters relating to ecotourism and design which stated, *"For example if you are given an opportunity to have power or authority in matters related to eco-tourism and built environment in your country and in Tanzania, what policies would you make sure are in place to be followed by responsible actors in the building industry?"*

The responses and recommendations highlighted on built environment matters including design, policy, economy, ecology, environmental issues that the stakeholders can implement in order to promote eco-tourism. One of the students suggested, *"Ask yourself first is this design worth to last fifteen years (BE8)?; "Master Plans for the entire tourism development region should specify green zones...walking paths, public access areas, and the clear rules on the density of development allowed in residential and commercial zones. Zones for tourism use should be clearly designated as are zones inappropriate for tourism*

use (TZ11)." It was also recommended to start with the existing urban fabric and design, construct and build from there (BE2) instead of redeveloping the site completely as if nothing was existing without forgetting the importance of public open spaces (BE10;TZ5).

Other suggestions from the students targeted the importance of promoting local culture and initiatives instead of large projects that might not necessarily benefit the local people directly; conserving the value of economic, social and environmental aspects were emphasized, the use of locally available materials and sustainable means of construction and alternative technologies (TZ7; TZ10; TZ9; TZ11). Another respondent suggested, *"Green building concepts and green architecture should be incorporated in the designs. Use of alternative source of energy, water collection and storage, environmental conservation, building with trees, recycled materials and composites. And also to think globally but act locally when designing (TZ31)."* It was also recommended not to compromise the welfare of the local communities and have minimum interference to the ecosystem, lifestyle and cultural identity of the people in the process of promoting tourism as one of the students stated, *"I would make a policy to make sure profit and business opportunities should never be at cost of nature and eco-important space (BE12)* and another one suggested, *"Don't build to please tourists, but build to please the inhabitants, if inhabitants are happy with it, tourists will come and take a look anyway (BE13)."* Other recommendations focused on the need for the authorities concerned to control prices and ownership as well as lay down regulations that will give the opportunity for people of different socio-economic status an opportunity to enjoy waterfront facilities. Education to the community members was also recommended. In this way more people can benefit from the outcome through tapping the opportunities available, *"Provide education to locals through giving them the general understanding of eco-tourism and how they may create different opportunities in the country since most of the people are not familiarized with this concept of eco-tourism (TZ8)."* Some people miss opportunities just because of lack of information. And some opportunities can be missed just because of lack of participation procedures.

CONCLUSION

From the discussions it can be noted that there is a need to mainstream eco-tourism in as many aspects of life and contexts as possible. If the Architects are eco-tourism-conscious, they can be used as vehicles to transport the message of sustainability, conservation, preserving nature and creating the balance between all these and the welfare of the people through education, participatory design process and the buildings projects they execute.

With the increase of communication technology and social media, the world is becoming smaller. It is now easier to study what is happening in another part of the world. For building designers the familiarity with a particular context is important because practical, efficient and sustainable

solutions can better be achieved if there is awareness of various interdependent factors including economic, cultural, social, political, environmental issues to mention a few. Encouraging study exchange at an international level helps to equip students with knowledge beyond what they are used to and also it gives them an opportunity to become eco-tourists themselves hence good ambassadors of its advocacy. It is the responsibility of the architects or designers in the built environment to involve the potential stake holders of a particular project including local communities, product users and any other who might be affected in one way or another by the particular project or development from the initial stages of the design process.

REFERENCES

1. Bricker, K.S. (2013): *Trends and Issues in Ecotourism and Sustainable Tourism*. Colorado State University, November 12-13, 2013, Fort Collins, CO. (Undergraduate Lecture). Invited Talk/Keynote, Presented, 11/13/2013.
2. Charles Klein, David Lawyer (2007): *Community-Based Ecotourism Design Studio in the Yucatan Peninsula-Enhancing Study Abroad through the inclusion of a service-learning component*. An article in *Journal of international Agricultural and extension education*. January 2007. Volume 14 Number 3.
3. Kalugila, S. (2014): *Housing interventions and its influence in urban development opportunities and Challenges of mixed informal settlements in Dar es Salaam-Tanzania*. Doctor Thesis. Bauhaus University Weimar Germany.
4. Kombe, J.W. and Kreibish V. (2000a): *Informal land management in Tanzania*. Spring Research series no 29. SPRING centre, University of Dortmund.
5. Malone, P. (1996): *City, Capital and Water*. New York USA: Routledge.
6. Mkenda, B.A. (2015): *The quality of Vibrant Spaces-the Case of Dar es salaam City*. Bachelor Thesis. Ardhi University, Dar es Salam Tanzania.
7. Mtalima, D. (2016): *Spaces for Community Activities and ecotourism: case of Saadani National Park*. Bachelor Thesis. Ardhi University, Dar es Salam Tanzania.
8. Pearce, L., (2005): *Tourist Behaviour: Themes and Conceptual Schemes*. Channel View Publications: UK.
9. Torkildsen, G. (1999): *Leisure and Recreation Management*. New York: Routledge.
10. United Republic of Tanzania (1968): *National Environmental Policy 1999*. Dar es Salaam: Government Printer.
11. <https://www.google.com/search?q=tourist+attractions+tanzania&spell=1&sa=X&ved=0ahUKEwiNijb6zPjLAhVFtxQKHRdLAWgQvwUIXSgA> accessed 04/04/2016.
12. http://bsc.smebg.net/ecotourguide/best_practices/articles/files/TIES.pdf 06/04/2016.
13. <http://www.citylab.com/design/2015/02/the-bright-future-of-dar-es-salaam-an-unlikely-african-megacity/385801/> 05/04/2016.
14. Design studio programme for year four of 2014/2015 introducing ecotourism and waterfront development.
15. Design studio programme for year four of 2014/2015 introducing ecotourism and waterfront development.
16. <http://www.pps.org/about/> 07/04/2016.
17. <http://www.pps.org/about/> 07/04/2016.
18. Studio Tanzania (2015/2016) Research on local building materials done by Yannick Beuclercoq, Evelien Van de Vel, Daan Van de Velde.
19. Design statement by Catherine Mrema Arch 4 Student at ARU, 2016.
20. For the first semester most of the works of year four at ARU are done in 8-10 groups. They carry out data collection, analysis and they also propose guidelines for future urban development in these groups before they break into carrying out individual work.
21. Project briefing for Architecture students at Hasselt University- marking presentation guideline held on 14/03/2016 where assessors were looking if the master plans were coherent, appropriate, personal, evident, captivating at all scales i.e. at the scale of issue-case-method.
22. Project brief by Van Loy Nick for Studio Tanzania presentations of 15/03/2016
23. www.travelmombasa.com/exploring-the-beautiful 12/04/2016.
24. <http://douglas.qld.gov.au/development/planning-services/port-douglas-waterfront> 15/04/2016.
25. <https://www.lafargeholcim-foundation.org/Project/s/sustainable-public-eco-tourism-facility-cape-town-south-africa> 05/04/2016.
26. Apart from working with students and lecturers from Hasselt University; the AR 418 class of 2015/2016 got an opportunity of receiving international visitors

from Kenya, Rwanda, and Sweden; an experience which enriched their study program on urban development even more.

17. https://www.researchgate.net/profile/David_Lawver/publication/237472351_Community-Based_Ecotourism_Design_Studio_in_the_Yucatan_Peninsula_-_Enhancing_Study_Abroad_through_the_Inclusion_of_a_Service-Learning_component/links/5557db1408aeaaff3bf77329.pdf.

18. Hasselt-Studio TZ-BE schedule 2015-2016.

19. ARU-AR 417 and AR 418 design studio program

20. This feedback was also mentioned during discussions held with students of Hasselt University in February, 2016.