

THE VALUE OF DESIGN RESEARCH

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DESIGN FOR CREATING POSITIVE CHANGE: ENVIRONMENTAL DESIGN ISSUES FOR COMMUNITY DEVELOPMENT

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ABSTRACT

There are many ideas these days about how to create positive social and environmental change for low-income communities. These ideas, associated with terms such sustainability, urbanism, community mobilization or community development to design new principles of strategies and structures for giving an opportunity for a better life. In doing so, design research will be a strong tool of establishing scenarios for social development to repair and revitalize of local built environments. However, the design vision of "retrofitting" of low-income areas is still far from the real needs and potentials of the region and its inhabitants, effectively enabling people towards sustainability. This issue of this paper is to obtain a better understanding of the design's contributions for environmental, social and economic challenges for increasing the ability and skills of people from local community. It is a case study approach to the question of developing platform of design thinking with the expectation that a more focused participatory design processes will bring insights into the needs and potentials of local community. After analysis of data gathered from the outcome of project "Mobilization of Dahshour World Heritage Site for Community Development" in close cooperation with counterpart Industrial Modernization Centre in Egypt and Faculty of Applied Sciences and Arts at the German University in Cairo (GUC), in which exiting conditions was mapped in order to sustain this district environmentally, economically and culturally, we argue that design has to move for beyond the stylistic and rigid approaches of idea generation. Social Thinking and social dimension of sustainability makes design itself a kind of research that affects of possible future movement of people into and out of the region; climate adaptation issues; economic and cultural development prospects.

Keywords: Sustainable Design, Social Innovation, Localization, Design Research Methods

1 INTRODUCTION

The World Bank predicted in 2001 growth of 5.2% in Egypt's emerging markets, yet in 2012 they predicted only 1% growth in markets due the political instability (World Bank, 2008). But analysts expect that Egypt would regain its growth curve once political stability returns. Egypt has a wide variety of assets, including fast-growing ports, a growing tourism network and cast untapped natural gas reserves (Greenwood, 2011). Egypt's major industries are cement, chemicals, construction, energy, food processing, Hydrocarbons, light manufacturing, metals, Pharmaceuticals, telecommunications, textiles, truism, and transportation (Ann C. Logue, 2011)

But taking a deeper look over Egypt's street and people, one can tell there are a lot of other resources that are not fully made use of. One of the resources, that this research is focusing on it the natural resources and cultural heritage assets.

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Most relevantly, the Egyptian socio-economic status after the revolution, a series of actions by ILO, UN and other international organizations are taking place to create positive steps in the direction of social development. Furthermore, the non-profit organizations (NGOs) such as Resala, Misr El Kheir and Bdaya started to gather volunteers and help the underprivileged. Some of the poorer youth managed to escape and immigrate to foreign countries looking for a better source of living. Others lost hope in the country's development thus diverted to crime. These examples are proof that Egypt is at its highest peak of change, where if some investment was made this change will defiantly be a positive one. From another dimension, the tourist industry collapsed after the revolution and it still has not showed signs of recovering. Moreover, the revolution had a powerful effect upon the mood of all stakeholders at every level.

The paradox is that, there has been a long history of attempts to improve the socio-economic conditions of dense community located in informal areas of Cairo including actions by international organizations and by NGOs, the impact of these actions is still very limited and many programs fail to make a difference, despite good intentions. For this reason, to utilize design efforts as a vehicle for raising family incomes, this research shows how design from different point of views can be seen as tool of establishing scenarios for social development to repair and revitalize of local built environments. However, the design vision of "retrofitting" of low-income areas is still far from the real needs and potentials of region and its inhabitants to effectively enabling people toward sustainability. The issue of this paper is to obtain a better understanding of the design's contributions for environmental, social and economic challenges for increasing the ability and skills of people from local community. It is a case study approach to the question of developing platform of participatory design process that will bring insights into the needs and potentials of local community. On the other hand, this attention to the community's local knowledge is seen as valuable source for developing sustainable solutions, as it helps bridge the ever-widening gap between architects and designers and the societies they serve (Wilson, 2008).

In this research, two main methods of inquiry of qualitative research have been used, namely focus group and in-depth interviews. These methods were carried out in the project of "Mobilization of Dahshour Word Heritage Site for Community Development". It is a UN joint program in close cooperation with counterpart Industrial Modernization Centre in Egypt and Faculty of Applied Sciences and Arts at the German University in Cairo (GUC), in which exiting conditions were mapped in order to sustain this district environmentally, economically and culturally. From the project's inception, institutional and community involvement have been a crucial element and a key factor in support community-based initiatives aimed at environmental upgrading, as well as the potential to generate new income opportunities. In light of such goals, We argue that design has to move for beyond the stylistic and rigid approaches of idea generation. Design thinking and social dimension of sustainability makes design itself a kind of research that affects possible future movement of people into and out of the region; climate adaptation issues; economic and cultural development prospects. This Joint program runs from April 2009 until April 2013.

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1.1 STRUCTURE OF THE RESEARCH

The main argument of this research is that design can be deeply entangled into the economic problems of local community. The guiding question was: what role does the design of local environment play in terms of understanding, acting, influencing and creating a positive change related to the problems and potentials of social sphere. In order to answer this question, this research has three main parts. First, it explains design thinking as an approach related to economic and social change. And, it describes key principles of participatory design as a research tool to create an accurate picture of cultural and contextual behaviours. The active participation includes the "active" involvement of the researcher as a co-subject in the design activity. In doing so, co-creation workshops were carried out with participants of five villages of Dahshour district to observe and understand a real case of social innovation. Second, an approach to the development intervention of Dahshour community is described as a case study included observing participation at project workshops and design activities. This leads to the third and final section in which I locate design's contribution in a local context, showing how design can foster sustainable development in the community of Dahshour through attracting tourism by using existing potentials of natural resources and skills of crafts sector. In this discussion, I point to examples of developed products based on traditional materials and techniques that are not only aim at creating unique designs but also at using these examples in order to change the way of the design process are carried out. I conclude the research by summarizing how design can catalyst the process of development and encourage positive attitudes by focusing on the skills of people and potentials to better fit their surrounding environments.

1.2 CHANGE BY DESIGN THINKING

The increasing awareness of the role of design has been addressed in different studies for making the building environment truly conducive to positive transformation at the local level. Viktor Papanek has proposed the use of design for revitalizing "vernacular design" to improve the quality of lives of local community (1985). The political scientist Herbert Simon once wrote that design is "changing existing situations into preferred ones" (1972). This vision has become mainstream. Daniel Williams (2007) mentioned that design has the potential of changing how buildings, communities, and societies function. Design has the power of both satisfying a need and providing value.

From the theoretical perspective, several recent academic writers have contributed to the concept of design thinking such as Cross (2007 & 2011) who argues in *Designerly Ways of Knowing* that "design practice does indeed have its own strong and appropriate intellectual culture.... It has the tradition of knowing, thinking, and acting. Cross and others (e.g., Brown, 2009; Buxton, 2007) focus on central issues in design thinking in which the designer develops an increasing understanding of the use domain through research, experiments and interventions.

In this research, I employ the term design thinking as a tool for observing and considering the social, economic and ecological dimensions of solutions that can address ways for improving the quality of life of community and for encouraging sustained community participation in the developing process. This sustainable

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approach is seeking the possible connections and compatibilities of knowledge for merging multi-perspective solutions with critical social, economic, and environmental issues. Emphasizing on sustainability, design thinking can help promote local skills making use of local material and indigenous knowledge as well as meeting market needs. This way of doing design is in line with the approach of Manzini (2007) who locates design in a social context, asking for a particular role by local initiatives that, for several reasons, can be seen as promising cases of new behavior and new ways of thinking.

Design in its local context, draws from both material culture and social systems. It utilizes the characteristics of community and its surroundings to create objects that can contribute to the changing process of social, human, financial and political assets of residents in an aim to alleviate poverty. This type of change must come from several fields and especially from designers and architects due to their dynamic design thinking methods. They should create and visualize cross-disciplinary tools that can be a common motivational horizon shared by all stakeholders and in planning activities and outputs.

A major incentive for this research is the conviction that design must be more research-oriented, and we must stop defiling the earth itself with poorly designed objects and structures. Said by Victor Papanek, he enforces the fact that interdisciplinary coordination between design and other fields is of high importance and is accordingly one of the routes to success. Papanek, (1985) again argues that designers need to ask themselves the following; "Am I on the side of the social good, or will the object that I design be an addition to the catalogue of unnecessary fetish objects?" Admittedly designers do have an impact on the social good, this was proven vividly in the collection in "Design like you give a damn".

1.3 PARTICIPATORY DESIGN

According to Bradely and Schneider, the participatory approach is a response to "top-down" approaches to development, in "which power and decision-making is largely in the hand of external development professionals. In opposition to the "bottom-down" approach which focuses on the evaluation of communities from the bottom of the pyramid rather from people with influential power. The Socio-Economic development Sourcebook stated that "Participatory methods and techniques are relevant to a broad range of sectors and interventions including programs in sustainable agriculture, urban transport, education and training, health, and rural and urban development and regeneration. There is increasing recognition that bottom-up involvement of local people in the development process is a key to achieving broad policy objectives. Involvement here implies active engagement of local people and agencies that goes beyond electing the views of individuals, to processes of interactive dialogue, collective learning and joint action" (2004). The common principles in participatory monitoring and evaluation include:

- Participation: opening up the design of the process to include those most directly affected and giving the intended beneficiaries the chance to speak out about local impacts
- Negotiation: between the different stakeholders to reach agreement
- Learning: a focus on cumulative learning by all the participants
- Flexibility: in adapting the evaluation to the wider external environment and to the set of local conditions and actors. (Evalsed, 2009)

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In this paper we use participatory design as a tool of research. Although it has sometimes been seen as a design approach characterized by user involvement (Johnson, 1998), participatory design has its own techniques that are driven from action research. As well as the main focus of this research is to co-create workshops as a research method with the participants of five villages of Dahshour district to observe and understand a real case of social innovation, where researcher-designers can come to conclusions in conjunction with craftsman. Poverty in these villages of Dahshour can be attributed to the predominance of low-income agriculture activities (70%). A recent socio-economic study, carried out by International Labour Organization (ILO) showed that economic activities in the villages comprising the Dahshour area are characterized with limited size revenues and profits, and limited capacity for job-generation (UN report, 2013). Participatory design can help create an accurate picture of cultural and contextual behaviors for playing a key role in building an entrepreneurship culture in the area to be marked widely. We believed that designing a physical product, process or service by involving the people who will be producing or selling it makes for a better result and it reflects an integrated approach to community engagement and development.

2 CASE STUDY: DAHSHOUR

2.1 APPROACHING THE DEVELOPMENT INTERVENTION OF DAHSHOUR

Dahshour is located south of Cairo within an hour's travel distance and it is a part of the World Heritage site of Memphis and its necropolis. With a current population of about 40,000 inhabitants, it consists of a tightly bound community with natural resources and potentials to engage in organized social action and has a resident community of distinguished crafts. Dahshour happens to be a necropolis for the blue blooded ancient Egyptians. It's found around 40 kilometres south of Cairo on the west bank of the River Nile. Since it's a cemetery, it's known for it's number of pyramids, two of which are the most immense and oldest of Egypt's pyramids. Due to the fact that these pyramids where built from 2613-2589 BC, Dahshour is partially a touristic area (ILO, 2013).

Moreover, the city also hosts a beautiful lake that distinguishes it from the famous Giza pyramids touristic area. Thus if well marketed, more tourists can enjoy such an exquisite site. Not only does it have touristic areas, but also Dahshour holds the most palm trees in Egypt, over a million trees. Palm trees are known to be a merit to its host. They provide dates, coconuts, oil, wax and gardens. In additions, it represents emotional values to some people and as well a palm tree has a historical value, as it was a symbol of victory in the roman times, champions were prized with palm trees, war was also celebrated with palm trees. Jewish people also had their own traditions with palm trees by carrying them during festivals.

Admittedly after acknowledging all of Dahshour's assets and opportunities, one might assume it has a lot of potentials or that its inhabitants ought to be living off these assets and enjoying tourism as a line of work. However, According to Egypt Human Development Report 2008, recent socio-economic study showed that economic activities in the chosen five villages comprising the Dahshour area

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are characterized with limited size revenues and profits, and limited capacity for job-generation (UN report 2013). Thus a generous coordination between 3 programs was constructed to help develop the Dahshour's human development inconsistency. The UNDSF (United Nations Development Assistance Framework), the UNDP (United Nations Development Program) and the ILO (International Labour Organization) currently share the goal of closing focusing on reducing the gender gap and elevating environmental sustainability. The main purpose of this initiative is to sustained development and socio-economical generation in the Dahshour informal community. This could hopefully take place through effectively using Dahshour's touristic accounts plus still conserving and carefully use its pyramids and ecosystem.

The initiative's goals were mainly the following:

- Outcome 1: "Employment, especially of youth and women in heritage arts, crafts, tourism and creative industries increased, contributing to poverty alleviation and empowerment"
- Outcome 2: "Enhanced institutional capacity to manage cultural heritage and natural resources" aimed to develop institutional capacity for the long-term preservation and sustainable development of natural and cultural heritage assets in and surrounding the Dahshour community.

The program is fully aligned with National partners' mandates as well as with UNDAF. However, the position of design – particularly at the start of the project - among the project activities wasn't perceived from the project's parties as vital. Most relevantly the lack of involvement of key design's approaches, which lead to implications on the implementation phase and on the results achieved.

The guiding question of this research was: what role does the design of urban environment and public products play in terms of cultural heritage and natural resources aimed to develop co-relationships between designers and their society for sustainable development? Thus, It has assumed in the context of this research that to come up with successful approaches to socio-economic phenomena, requires taking into account cultural heritage and natural resources components. This can lead towards not only to meet certain functional or aesthetic requisites for certain products, but also to understand the social dynamics within the community of Dahshour.

2.2 THEORY OF CHANGE FROM DIFFERENT PERSPECTIVES

As mentioned above about NGOs approaches, there is substantial growth nowadays in interest of the use of "local systems" in creating sustainable societies, where the change of people attitudes, skills and abilities are seen above all the material products, which are part of their life and the economy. When people get to know their skills, energy and abilities and put it in the right direction, they can improve their standard of living, rely on themselves to find jobs that suite their abilities. This will open up opportunities for them and for others to utilize their skills and capabilities.

The traditional approach to dealing with the subject of change for social and environmental sustainability is basically focused on the theory of management where a common platform of actions should be developed. A number of propositions for controlling the communication process are provided to develop the interactions (Kessler, 2010).

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In particular, communication as a practical tool that is needed to deal with different interests considered not only in terms of quick change, but also for positive effects of the happened change. In the case of Dahshour’s developmental intervention, based on a number of given outputs from papers and testimonials of consultants, a model of the theory of changed was created. The proposed theory thus exposed some expectations to the change will take place. The Figure below presents an overarching goal, which in a way increase socio-economical levels in Dahshour. One of the aims of the pilot project is to make use the already existing resources in the areas whether environmental or vocational. Thus attracting tourists as a main target group and accordingly increasing the living of the inhabitants of Dahshour. In order for the tourism business to develop, two main aspects must take place. One is to innovate the touristic needs into products where the inhabitants can create and sell to the tourists. Also it’s important to develop the readiness of the Dahshour community to welcome and host the tourists. This healthy attitude will bring the inhabitants closer to understanding and studying the needs, wants and taste of the tourists. Therefore, qualitative findings – generally gathered through group interviews with representative members of NGOs – provide insight into ways of upgrading the community of handicrafts.

We labelled the “offer” and the “promotion” as key support items for the project of development of Dahshour community. All stakeholders involved stressed on the fact that promotion and marketing where two important step into the process of development. The diagram below shows how design can interfere towards overarching goals.

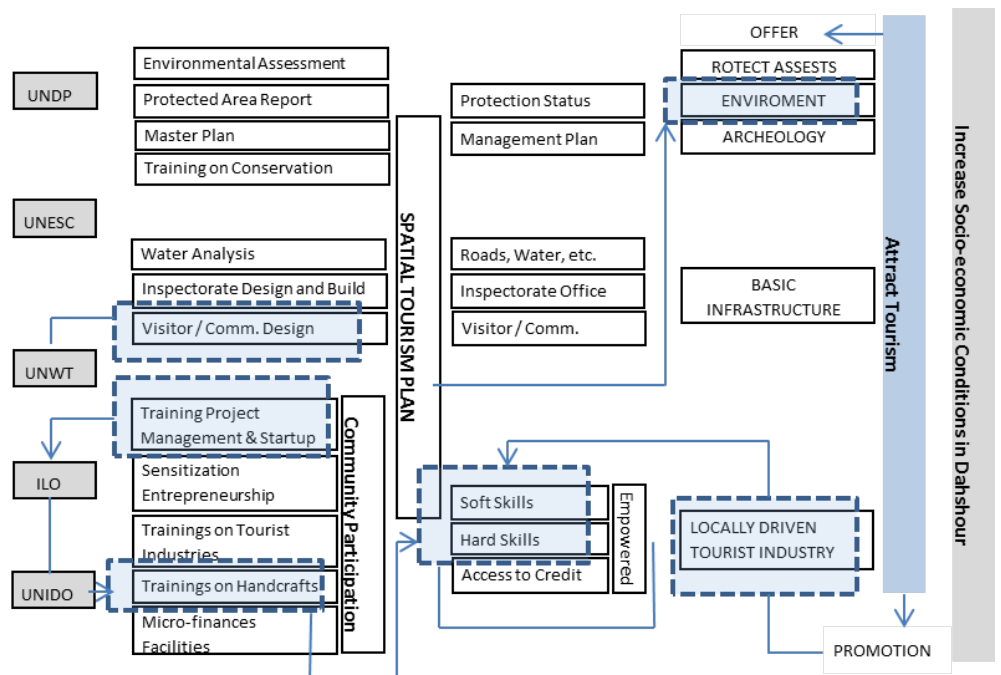


Figure 1: The theory of change from different perspectives and how design can interfere towards overarching goals.

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2.3 PROMOTING EMPOWERMENT FROM THE COMMUNITY TO THE COMMUNITY

As mentioned above many entities are taking charge of transforming the cultural potentials of Egypt and threats into opportunities. The joint program aimed at raising the environmental awareness of the local community – Dahshour – and creating a platform for dialogue between the community members and the governmental authorities about the environmental issues.

The program addressed that the main key players in changing is the Egyptian government itself. Over the past 30 years the Egyptian economy has faced several obstacles ending with the 25th of January 2011 revolution where all banks and companies were closed for 18 days. This was a result of an unfair routine that caused the Egyptians to simply erupt after years of suppression.

Nevertheless, local Egyptian NGOs' projects are very promising. Several NGOs - initially starting - from university students have developed sustainable development systems to be applied in informal areas all over Egypt. These systems mainly work on equity, where the NGO provide a certain amount of money to a person in need, after studying his/her case. Then the money is returned along a period of 12 months for instance. These micro finance projects involve sewing machines, tricycles, vocational workshops and food mobile carts. Moreover the developmental initiative don't stop at that, NGOs also provide the underprivileged with vocational trainings, mini business plan workshops and awareness sessions.

Admittedly, the only affiliation with design thinking these NGOs have is graphic design, mainly used for marketing and advertising purposes. Consequently adding to the belief that designers are artists and that design is only a mean of beautifying things rather than using it for problem solving.

The accelerating movement of NGOs led to innovating a more sustainable approach: social enterprises. Social enterprises simply provide enhancements in people's living and thus effectively increasing their profits and promoting enterprise development and self-employment through a promotional campaign, allowing young people to find jobs.

3 DESIGN CONTRIBUTION

3.1 CHALLENGE OF DISCOVERING REALITY

The joint project provides a strategy of developing the socio-economic aspects of Dahshour's community and how to foster sustainable development and revenue generation in the community of Dahshour through attracting tourism and upgrading the area and its ecosystem. This is based on the fact that Dahshour's community is quiet enclosed within itself yet is rich with potentials and opportunities and handicrafts sector that need to be tackled creatively. These potentials exist in natural and vocational levels besides availability of materials such as palm trees, kilim, carpets and accessories. Our starting point is to transform these materials into sellable products to all market segments specially tourisms. Thus motivating craftsmen to continue working even after the pilot intervention ends.

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One of the aims of the design's initiatives was to add value to the existing opportunities rather than start from scratch. Thus in order to create a fully designed product, four essential aspects were taken into consideration; encouraging a sense of community responsibility and participation, supporting community-based initiatives aimed at environmental upgrading, reviving the traditional Egyptian patterns and using the existing materials and the inhabitants' vocational skills. These aspects shaped the product development process and framed its quality and profitability. Also craftsmen from Dahshour' community were briefed with the marketing potentials of green, environmental and cheap materials.

The greatest challenge posed by design is to intervene in an urban context with a strong cultural heritage and in social and economic development programs that can be foreseen to have a significant impact on sustainable performance. The existing handicrafts value chain was analyzed. Its main members are artisans – individuals who produce crafts – and NGOs who fill the role of an intermediary agent/trader and provide the artisans with raw materials. The handicrafts sector is very attractive to labor and capable of job creation when its value chain is expanded to include the needed functions – design and marketing. The two highest priorities are to improve the product development and design capabilities in the value chain by accessing designers and introducing a design/crafts cluster model for the NGOs that would play a vital role in accessing more market segments.

A number of tourism and business development trainings for different sectors were held to prepare artisans and NGOs to accept new way of thinking towards eco-friendly products. But however, the results were unsatisfactory due to the trainers having high expectations and also it was difficult for the craftsmen to get outside their comfort zone of business. This led to a waste of time without satisfactory outcomes. Consequently it was necessary to approach professional designers into the training process who entertain on ground experience and capable of participating actively in building prototypes that show the potentials of materials and techniques.

The development strategy was to work on three main components: analysing of the existing nature materials of the region, the skills of people and the product. The materials of Date palm and Dom palm are mainly the common materials used in the production. The technical skills of people was focusing on the techniques of material processing such as coiling, weaving, twined, plaiting, looping, binding, and piercing. Finally, the product that developed in terms of range, design concepts, and quality specifications so as to maintain the character of handicrafts in the region while giving them a contemporary edge. It was also essential that the trainings took place inside the inhabitants' workshops thus changing the overall acceptable and perspectives. These modifications lead to different handcrafted products with new forms and technique supported by constructing mock-ups that how the 3D forms rather than the 2D drawings that might be misleading.

The realistic design thinking demanded to consider research methods that reflects the increase of income for craftsmen families. Since it is a touristic region therefore studies of the needs of tourists were held and a work plan was devised for starting the design processes, upon a new need assessment was

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conducting using focus group checklists and discussion sessions in collaboration with employment program for the region and surveyed various crafts centres.

As a results, the distinctive character of the region, its unique location and the historic period it belonged to, the design process formulated an Eco-lodge concept for Dahshour based on four principles that have been taken into account while designing: 1) design solutions grow from the physical surroundings of the place and its interaction with the cultural setting around it, 2) design should be based on environmental criteria and environmental constraints, 3) local community should be involved in the design and implementation processes, 4) design should be integrated harmoniously with nature and architecture forms should not compete with, but should complement, the natural landscape. On the whole, the designed proposals of eco-lodge's structure relied on using palm trees. It is assumed that this concept will add immeasurable value to the region of Dahshour if this concept will come true.

Designing home accessories items for local market or tourists was another challenging task, as these products should match the natural materials and cultural resources of the region of Dahshour and at the same time must be more appealing, practical, and durable. The craft community was faced by the lack of any guidelines or design reference, and the aim was to produce furniture items, baskets, and souvenirs inspired by the local materials, a long process of designing took place, and after a several modification and developments, and after producing a number of prototypes for the different items, the production started. In addition, the number of developed products based on traditional aesthetics and techniques formed a kind of challenge to them to fulfil the functional requirements with a good quality.

It should be mentioned that Women in Dahshour appreciated their own culture and produced a variety of different shapes and functional products like miniature baskets, basket-covered bottles, compote bowls, and large baskets. On the other side, there was a big tendency from the young designers to use the advantages of palm tree materials in designing concepts for furniture pieces that can be built from the surrounding environment. The effect of all these activities can be felt by the increase in number of skilled craftsmen who became able to abide by strict Quality Control measures, as they were engaged in a number of professional production operations.

Due to the success of the participatory design process achieving these results, enhancing cooperation between young designers and artisans is expected that will eventually lead to create an attractive sector and opportunity to new career paths.

3.2 BUILDING TRUST BETWEEN DESIGN AND THE COMMUNITY

Participatory design sessions revealed that the artisans of Dahshour community possess a spirit of openness and mutual support. However, there is a relation of mistrust with any governmental initiatives where the project was organized by the Industrial modernization centre of Egypt (IMC). In practical terms it was observed that governmental entities were completely in charge of facilitating the entire program, however a number of obstacles took place due to their unprofessionalism. These obstacles delayed the approved program plans and lead to mistrust between them and the Dahshour community. Another drawback

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was the government's approach towards Dahshour's inhabitants, which led to a rather cautious attitude. Therefore, during the development process it was needed to create a social relationship between the designers and the artisans. This relationship was on a daily basis not just on a professional level but also on a personal level, where the designers learned from the craftsmen as well. Since both parties came from different backgrounds, after spending days together they started learning each other's languages.

After the ice-breaking phase, all attendees made a number of suggestions and requests, the craftsmen started believing the purpose of this program. This created a two-way dialogue between both parties, consequently leading to disagreements, where each party was representing and defending his identity. The craftsmen started to be convinced once the designers explained the purpose of product marketing. Also once the designers used the craftsmen's tools and participated in the manufacturing process, the learning process developed into a production process by which new directions of products were developed and became clearer to the craftsmen.

As a matter of fact, the multidimensional approaches developed through the workshop whether small or big were challenging for the craftsmen. It was a challenge for the designer to work with new people, materials and manufacturing methods with a different diverse target group, and on the other hand the craftsmen were facing another challenge of in-depth interaction with creative minds rather than the traditional productive minds they're used to.

Surprisingly, the female craftsmen participants were dominant in the learning and detailing process. These participants were of 18-38 years of age and looking to support their husbands and children. Trust in this case can be defined as a trial and error strategy where it was achieved once a pleasant smooth act of participation took place from both ends.

3.3 CO CREATION AS COMPLEMENTARY KEY ACTOR FOR SOCIAL CHANGE

Following the need assessment findings, and the analysis of existing value chain of Dahshour environment, the marketing consultancy team reached the conclusion that the crafts sector will be attractive when we build a strong co-union of handicrafts, where people involved share ideas, build on each other's work, praise and complete. As well as design playing a role of facilitating the change process by developing contemporary products that easily used for different purposes but have ethnic elements, it was also necessary to co-create a corporate identity with the participants in the design/crafts cluster workshops. A brand for the "Dahshour Crafts" is to give identity and recognition to the product range that is developed according to the strategy and allows targeted marketing. There were three steps for a successful co-creation process for the branding of the project which are: belonging to the region, shift thinking from "I am creating a product" to "I am creating a platform", and actualizing target groups needs into products and evolve the design of the engagement platform itself. Co-creation in this project was not limited to simply creating something in collaboration with craftsmen but also it was concerned with establishing a co-created value for both the designer and the craft man. Developing a solution for packaging was an integral part of the co-creation workshops to support the identity of the brand. Designers and artisans developed eco-friendly packages

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that suit the various products accommodating the products sizes, shapes, fragility, travel, in addition to appeal. The production of packages from recycled paper was considered.

The concept of co-creating followed by coaching on the processes during implementation and roll out to make sure by the end of the participatory workshops that skills and know-how are transferred. In the long run, achieving these results and ensuring the continuity of collaboration will help in alleviating poverty by providing the NGOs and craftsmen of Dahshour with the technical and professional experience needed to compete with other skilled craftsmen in Cairo. Thus the reputation of the products of Dahshour will change from them being cheap, low quality products, to high quality, eco-friendly, well-designed products meeting the needs of different strata of tourists and local society.

4 CONCLUSION

The aim of this research is to use design thinking and participatory design as a tools for understanding the social, economic, and ecological dimensions of solutions that can address ways for improving the quality of life in particular within local community of Dahshour. The design intervention in the joint programme constructed under United Nations Development Assistance Framework for 2009 - 2013 was targeting the challenges of how the ability and skills of people from local community of Dahshour can be increased. The focus group methods was chosen to share experiences, ideas, and such gives the "cascading effect" that links other experiences and encourages participants from different background to interact. It was a case study approach to create a participatory design process that leads to attracting tourism and developing creative industries for protecting the area of Dahshour and its ecosystems.

The research direction introduced the design ability to community engagement and development is based on defining themes that involve social and cultural aspects and creating solutions throughout the entire design process. In pre-design phases we started to discover the existing opportunities of the area and its fundamental values. We figured out that four essentials factors should be taken into consideration: encouraging a sense of community responsibility and participation, supporting community-based initiatives aimed at environmental upgrading, reviving the traditional Egyptian patterns and using the exiting materials and the inhabitants vocational skills. At the same time, we looked at more concrete attributes of exiting products and services.

In the design phase, a development strategy was developed focusing on three main components: analyzing of the existing nature materials that have an environmental value of the region, the skills of people and the product life cycle, and Finally, the product that produced in terms of range and quality specifications so as to maintain the character of handicrafts in the region while giving them a contemporary edge. It was obvious that the handicrafts sector is the main integral part of culture, traditions and economy in Dahshour' community not only to provide income generation opportunities for people which

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have limited access to resources, but also to contribute in elevating the poverty line as well as empowering the craftsmen and their communities.

By designing with people from the handicrafts sector, we achieved range of products- utility items - that represent local traditions and indigenous knowledge that symbolize the place visited by tourists and embody some story of the culture they have seen and experienced. In parallel with the development of products, brand identity for "Dahshour" was created, by designing a logo, promotional materials, hang tags, business cards, and eco-friendly packaging materials.

It was very encouraging to find the mind-set of Dahshour NGOs – mostly women - welcoming new forms of corporation with designers and open to new ideas that would promote the future of the crafts sector. However, NGOs have been the main players in the development of the handicraft sector in the governorate. Their role in any further development plan needs to be well designed in order to gain their support and benefit from their legacy in the community. That is, to operate in a positive change in the activities towards sustainability that will take place.

The starting point of this proposal is the expansion of value chain as recommended by all participants in the joint program so as to include new parties (designers, trainers, hotel chains, export companies ... etc). From here, it is recommended to establish a link between handcraft producers and NGOs to the service providers, designers and raw material suppliers on the supply side and the buyers on the demand side. For a successful co creation process on the social level, it is of utmost priority that the "knowhow" design transfer of the processes are the knowledge and the tools that evolve out the existing constraints and conditions. This can be achieved through Co-Union of development that creates a culture from the people's understanding, acceptance and developing ownership of the values in order to perform the networking, linkages, and business development activities required for a positive change.

Generally, and going back to the beginning of this research, design can catalyst the process of development and encourage positive attitudes by focusing on the skills of people and creating business opportunities that lead to job creation. To realize the potential of design in social issues, we have to take into consideration a range of social, commercial and environmental factors. Through intensive community participation, design solution can wave people's activities together and create sustainable environments in which they live and work.

5 REFERENCES

Anne C., L. (2011). *Emerging Markets for Dummies*. For Dummies, Canada

Bradley, D., Schneider, H. (2004). *Participatory approaches: a facilitator's guide. How to facilitate participatory processes with multiple stakeholders*. London: VSO

Brown, T. (2009). *Change by design: How design thinking transforms organizations and inspires innovation*. New York, Ny: HarperBusiness

Buxton, B. (2007). *Sketching user experiences: Getting the design right and the right design*. San Francisco, CA: Morgan Kaufmann

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Cross, N. (2007). *Designerly Ways Knowing of Knowing*. Basel, Switzerland, Birkhaeuser

Cross, N. (2011). *Design Thinking: Understanding How Designers Think and Work*. Oxford, UK, Berg

EVALSED (2009). *The Resource for the Evaluation of Socio-Economic Development*. EU cohesion Policy. SOURCEBOOK

Herbert, S. (1972). *The Sciences of the Artificial*. Cambridge, MIT Press

ILO. (2013). *Dahshour World Heritage Site Mobilization for Cultural Heritage for Community Development*. Final Report. Geneva: International Labor Organization.

Greenwood, J. (2011). *Financial Development, Growth, and the Distribution of Income*. Journal of Political Economy XCVIII, pp. 1076-1107.

Johnson, R. (1998). *User-centered Technology: A Rhetorical Theory for Computers and other mundane Artifacts*. New York. NY: SUNY Press

Kessler, E. (2010) *Management Theory in Action: Real World Lessons for Walking the Talk*. USA, Palgrave Macmillan

Manzini, E. (2007). *Design Research for Sustainable Social Innovation, in Design Research Now: Essays and Selected Projects*, Berlin, Birkhaeuser

Papanek, V. (1985) *Design for the real World: Human Ecology and Social Change*. London, Thames and Hudson

UN. (2008). *Egypt Human Development Report*. United Nations Development Programme and The Institute of National Planning, Egypt, 2008

UN. (2013). *UNIDO Activities in Egypt*. Report. United Nations, 2013

Williams, D. (2007). *Sustainable Design: Ecology, Architecture, and Planning*. London, Wiley

Wilson, B. (2008). *The Architecture Bat-Signal: Exploring the Relationship between Justice and Design, in Expanding Architecture: Design As Activism*, Edited by Sryan Bell and Katie Wakeford, Bellerophon. New York

World Bank (2008b). *Global Economic Prospects 2009*, Washington D.C. in *The global economic crisis and developing countries: transmission channels, fiscal and policy space and the design of national responses*, ILO publications, Geneva, 2009