

كلية الفنون التطبيقية جامعة حلوان

ملخصات الأبحاث

مقدم إلى

اللجنة العلمية الدائمة للفنون التطبيقية للتقدم لوظيفة أستاذ بقسم الغزل والنسيج والتريكو

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## **First research**

Advantages and disadvantages of selected spiral interlacing techniques in achieving novel weaving structures in jacquard men ties

First International Conference of the Arab fifteenth domestic economy - home economics and youth issues Faculty of home Economics - Menoufia University - March 2012

Assistant prof. / Tarek Ahmed Ibrahim Khalil

### Advantages and disadvantages of selected spiral interlacing techniques in achieving novel weaving structures in jacquard men ties

#### **Introduction :**

Neckties fabrics Considered as one of the fabrics that need to high performance techniques in terms of the applied method used and which includes both: raw materials and colors and weave construction methods, where this subject fabrics for innovations fashion and is considered as a complimentary uniform user (suit) either for men or women and children which requires continuously development in order to fit functional performance, as well as to attract consumers it is negative and the positive spiral weave construction methods of critical importance and that can be developed and updated so that it can get them on the effects of textile innovative in terms of all the structural composition factors such as: raw material and appearance, color and texture and by creating variants in colors and materials for both warp and weft, as well as many of the compositions textile whether in agreement or disagreement between the mentioned elements.

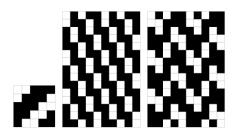
#### **Research** problem

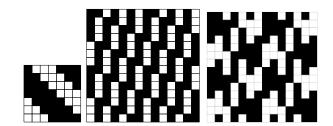
The problem and the importance of this research could summarized as to take advantage of the offer rules and looting and spiral and effects that can be obtained in the technical performance of the design and development of functional fabrics for neckties.

#### Aim of the research

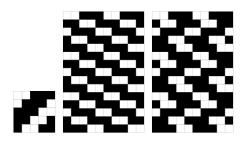
The aims of This research to increase awareness of innovation and creativity of the designers of textiles in general and also the development of scientific and technical foundations in dealing with Advantages and disadvantages of selected spiral interlacing techniques in achieving novel weaving structures in jacquard men ties

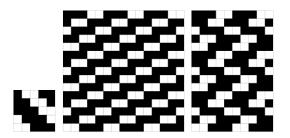
Models of textile structures used, which shows the influence of warp:





#### Models of textile structures used, which shows the impact of meat:



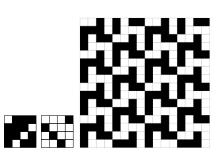


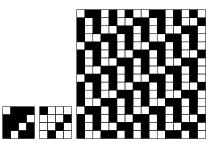
#### **Textile integrate installation with the negative image:**

Many textile effects it can be derived from primarily from the installation of certain textile through the integration of this installation with the negative image of the real time or with a negative image patterns once again be one of the following two methods:

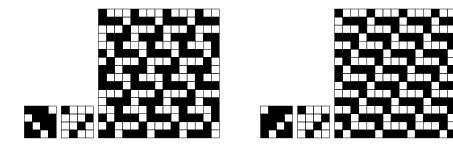
Integration of basic Textile repeat installation with the negative image through the warp. Integration of basic Textile repeat installation with the negative image through the weft.

#### **Examples of integration through warp:**





**Examples of integration through the weft:** 



### Clear models of the product of applied research topic:



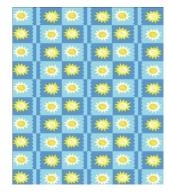


### Applied product of the research:





### models of the product of applied research topic:





#### research results :

lobtaining the effect of the spiral radiator that achieves positive and negative idea in both Textile Product of the warp or weft

2 -using two types of yarn, one with the properties of natural and mechanical and aesthetic quality in wefts and appeared positive value and the other spinning lower quality shows a negative value which has achieved economic added value of the product applied technical research topic .

#### **References used**:

أولا : المراجع العربية ١- محد عبد المنعم مراد غالب – المنسوجات الزخرفية و الموشاة – ( هندسة التشغيل و الإنتاج ) – البيان العربي – ١٩٦٠ .

> ٢ – مصطفي زاهر – التراكيب النسجية المتطورة – دار الفكر العربي – ١٩٩٧ . ثانيا : المراجع الأجنبية

- 3 Blinov design woven fabrics, Mir publisher, Moscow, 1988
- 4 H.Nibset grammar of textile design Bombay 1978.
- 5 Watson advanced textile design, Longman green, London, New York, Toronto, 1975.
- 6 Watson textile design and colour, Longmangreen, London, New York, Toronto, 1975.

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## Second research

## The Possibility of Implementing Concavity and Convexity Phenomena as one of the Aesthetic Manifestations in Winter Fabric Shirts

International Conference between innovative design and sustainability - Faculty of Applied Arts -Helwan University - 8 to 10 October, 2012

Assistant prof. / Tarek Ahmed Ibrahim Khalil

### The Possibility of Implementing Concavity and Convexity Phenomena as one of the Aesthetic Manifestations in Winter Fabric Shirts

#### **Introduction :**

Fabric cover factor considered a important element of fabric construction , which reflects the amount covered yarn warp or weft threads or both of the spaces resulting from weave construction-threads warp and weft of the fabric woven, and may express as the ratio of cover yarn warp or weft or both of the surface area woven fabrics, which at the same time the relationship between the tiger and threaded its kind and the number in the unit of measurement inside cloth correlation Textile user installation, and also known as the waiting period to get a coherent fabric construction

#### **Research problem :**

the problem and the importance of this research could summarized as winter fabric shirts winter were produced with traditional ways were based on unrealized manufactured deal of valuable technical, aesthetic and Received acceptance among consumers, which requires the addition of some aesthetic values other such concavity and convexity which results from shad effects change in the limits of space and through a scientific framework is subject to special factors, methods of sports coverage of the cloth and through the following:

1- change in weave construction checkst Plain 1/1 and other checks Plain extending from the warp 4/4). 2- Change in raw materials (the usage of raw cotton for warp and the usage of raw polyester for weft varns).

In addition to benefiting from regular weaving looms with one warp beam to get this quality of fabrics.

#### Aim of the research :

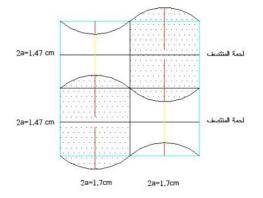
This research aims to achieve economic value of the product in terms of the possibility of the use of dyeing method (dyeing cotton or dyeing polyester or dyeing cotton and polyester together) and not to resort to the method of dyeing the yarn, which in turn leads to the proportion of reducing the losses in

the used raw materials higher than the dye method repentance.

#### Models of weave structures used:

	سادة ممتد من	سادة ممتد من
	السداء 4/4	اللحمة 4/4
-دلغة 2 <b>a</b> = 48	مساحات بيضاء	مساحات مخلوطة
	خام	من الخام والاسود
حدفة 2 <b>a =</b> 48-	سادة ممتد من	سادة ممتد من
	اللحمة 4/4	السداء 4/4
	مساحات مخلوطة	مساحات بيضاء
	من الخام والاسود	خام
	فتلة 2 <b>a</b> = 96	فتلة 96 = 2a

### How to get ripples for the wefts:



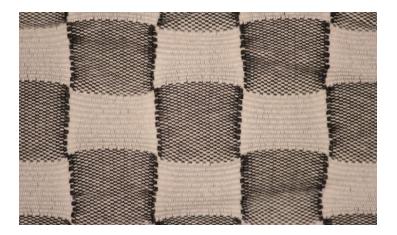
#### Image shows the applied product of the research:



#### Magnification part of the connective blended between raw and Black:



### Magnification part of the connective white:



Comparative studies between the different elements in the case of cloth on the loom and raw cloth and cloth-equipped and illustrated in the following table (Table 1)

The data	Reed / loom	Row fabric	Finished fabric	
1- warp / cm	48	51.18	54.8	
2 – weft / cm	24	29.76	33.6	
3 - Macrophages dimensions.	2 x 2 cm	1.8 x 1.6 cm	1.7 x 1.47 cm	
4 - Display	1 + 161 + 1	1 + 151 + 1	1 + 141 + 1	
5 - Total area lines without	48 x 161 = 7728	51.18 x 151 = 7728	54.8 x 141 = 7728	
Brussels.				
6- Cover warp coefficient =	<u>2.54 × 48</u>	<u>2.54 × 51.18</u>	<u>2.54 ×54.8</u>	
Number wicking inch ÷ square	6.32 6.32		6.32	
root of the Shrew	19.29 = 20.56 =		22.02 =	
English numbering.				
7- Cover cohesion coefficient =	<u>2.54 × 24</u>	<u>2.54 × 29.76</u>	<u>2.54 ×33.6</u>	
Number of nevi inch ÷ sqrt	4.2	4.2	4.2	
<b>Tigress English numbering.</b>	14.51 =	17.99 =	20.32 =	
8 - Cloth cover coefficient =	14.51 +19.29	17.99 +20.56	20.32 + 22.02	
Cover warp coefficient + cover	33.80 =	38.55 =	42.34 =	
plants weft.				
9 - Balance cloth coefficient =	19.29 ÷14.51	20.56 ÷17.99	22.02 ÷20.32	
Cover warp ÷ coverage coefficient weft.	1.32 =	1.14 =	1.08 =	

It is clear from the above table that the cloth-equipped research topic balanced engineered reaching 1.08 value where it is known that the cloth balanced worth the correct output per number of dividing the cover warp coefficient divided by the cover weft coefficient

#### **Results and recommendations:**

**The produced cloth** has achieved the main aim purpose of the research , based upon scientific hypotheses.

And we completed an recommend scientific studies in the field of spinning and weaving industry to be based on the link between specialization and other engineering disciplines such as: general mathematics and plane geometry and spherical geometry and descriptive geometry and that the research on one of its elements, a ellipse

#### **References used :**

أولا : المراجع العربية ١ – المعجم الوجيز – الهيئة العامة لشئون المطابع الأميرية – ٢٠٠٢ . ٢ – أوتو شميدت – ترجمة مهندس / رضا محمود سليمان – الرسم الهندسي – سلسلة الأسس التكنولوجية – دار الأهرام – دار النشر الشعبية للتأليف – لايبزغ – جمهورية ألمانيا الديموقراطية – ١٩٧٠ . ٣ – حسن سليمان علي رحمه – تطوير بعض المعادلات الرياضية المستخدمة في تصميم الأقمشة القطنية – مجلة الإقتصاد المنزلي – جامعة المنوفية – ٢٠٠٧ . ٤ –حمدي العطار – الرياضة التطبيقية للخيوط و الاقمشة – كلية الفنون التطبيقية – وزارة التعليم العالي – ١٩٧٣ . ثانيا : المراجع الأجنبية

5 – F.T.Peirce – A classic textile reprint – cloth geometry – the textile institute – Manchester – 1978.

6 – Gordee – p – volkov – cotton weaving Mir publishers – Moscow – 1987.

7 – J – E Booth – textile mathematics. Volume two, 1975 / volume three, 1977 – the textile institute – Manchester.

8 – R.sengupta – weaving calculations –taraporevala – India – 2000.

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# Third research

## Honeycomb Fabrics between Innovation and Development

International Conference between innovative design and sustainability - Faculty of Applied Arts -Helwan University - 8 to 10 October, 2012

Prof. /Hassan Suleiman Ali rahma

Assistant prof. / Tarek Ahmed Ibrahim Khalil

#### The third research Research title:

### **Honeycomb Fabrics between Innovation and Development**

#### **Introduction :**

This type of textiles belongs to the rhombs textiles, is that due to the effect of output in woven and which is similar in appearance hives and has called this name to distinguish it from other aids. This method used in to get the product to the sustainability of the textile drying purposes such as kitchen towels, used also in linen, as well as in the allowance fabrics and wool shirts and vests and ladies clothing, and in Thebans inscriptions. The Hives (honey comb decorative and deciduous) used in getting Fabrics t jacket or trousers. And different structural installation specifications for fabrics honeycomb whether regular or engraved (decorative) or falling according to the usage goal. We find using woolen yarn warp or weft densities and in different tiger Textiles vests and ladies clothing. While using cotton yarn warp and weft densities and also in different count linens and fabrics and family shirts and linen fabrics.

#### **Research problem :**

Although there are several methods currently used and accepted for honeycomb but it is typical method and not accompanied by something of development both in the Textile thought or achieve aesthetic values fabrics and mostly produces a solid color or use t longitudinal and transversal strips (cheks ) in some of them distinct species, and this type of production is currently limited to fabrics weaving looms equipped with dobby device and is considered to be of limited possibilities for the possibilities available on Jacquard machines.

#### Aim of the research:

This Applied research aimed to :

1 - Innovation in Applied method using a mathematical approach (inverse numerical sequences and growing) of high repetition Textile area, according to the possibilities of Jacquard devices.

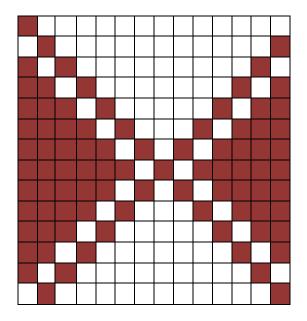
2 - Product Development in Textile (subject matter) and get your aesthetic values and a new color in fabric jacket and trousers.

3 - to achieve the phenomenon of Art ops or optical illusion in the innovative design and achieve a prominent and low and flat values at variable rates.

4 - The possibility of use of the product Textile duplex Consumer accordance with the technical and aesthetic vision.

## Models of weave structures used:

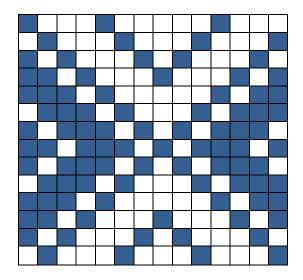
#### Weave structure No. 1:



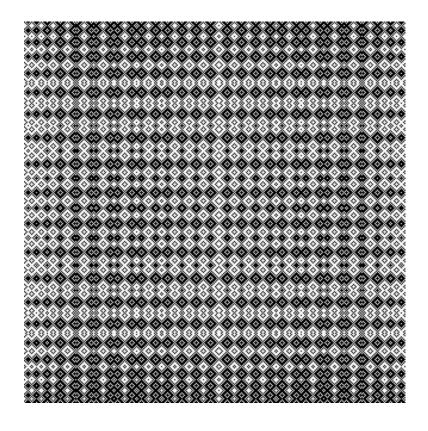
## **Innovative design (1):**

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#### Weave structure No. 2:



#### **Innovative design (2) :**



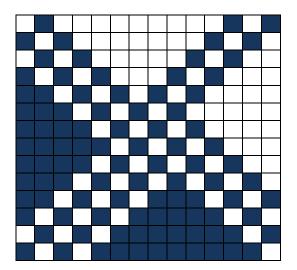
## **Applied Product:**

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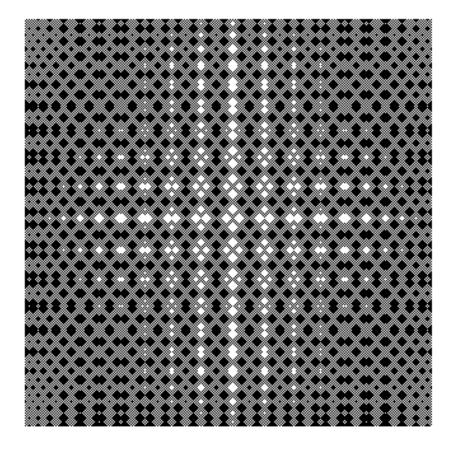


**Figures illustrate the former product applied research topic** 

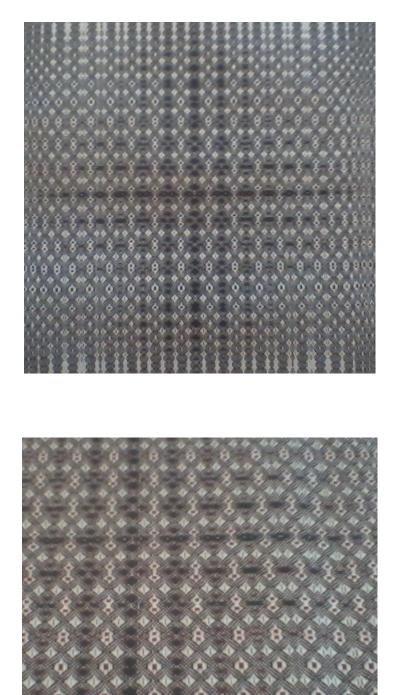
#### Weave structure No. 3:



## **Innovative design (3) :**



## **Applied Product:**



Figures illustrate the former product applied research topic

#### research results :

## Through the implementation of their innovative design research topic can achieve the objectives of the research and get the advantages of following and briefly as follows:

1 - Take advantage of jacquard machines with regular networks for product technical applied research topic.

2 - Maintain the features and advantages and characteristics of the fabric which is characterized by honeycomb style of the emergence and decline and flattening float length and the emergence of the warp and weft on one time.

3 - The use of compositions textile accepted and processed in line with the possibilities and float length in innovative designs account and produced in accordance with the applied product that was obtained and employed in the Fabrics t and jacket trousers, which do not exceed the float length phenomenon of warp or The meat of half a centimeter in raw cloth.

4 - Enrich the Egyptian market in the field of textiles in general and foreign fabrics for Women, in particular, product technical application contain the aesthetic values of the following :

A - changes in the size of the aids and formulation of different arrangements lead to new optical vision to attract consumers to this product.

B - the achievement of shade and light in the base fabrics with one color of meat or two-colored so that can be translated into the values of light and dark.

C - to achieve the phenomenon of optical illusion - ops Art, a new value has been added to the hives fabrics (honeycomb).

D - The product is equipped cloth to suit the target used and impart some sort of softness and tenderness in proportion to the ladies and fabrics.

And we recommend following a few foundations and rules and other sports in the renewal of the design thought in various areas of fabrics and multi-use.

#### **References used :**

#### <u>أولا: المراجع العربية</u> ١ – إبراهيم صالح و محد محد الشاعر – تراكيب المنسوجات – الجهاز المركزي للكتب الجامعية و المدرسية و الوسائل التعليمية – الهيئة العامة لشئون المطابع الأميرية – ١٩٧٩ . ٢ – المعجم الوجيز – الهيئة العامة لشئون المطابع الأميرية – ٢٠٠٢ . ٣ – محد عبد المنعم مراد غالب – المنسوجات الزخرفية و الموشاة – ( هندسة التشغيل و الإنتاج ) – البيان العربي – ١٩٦٠ . ٤ – مصطفي زاهر – التراكيب النسجية المتطورة – دار الفكر العربي – ١٩٩٧ .

#### ثانيا : المراجع الأجنبية

5 - H.Nibset - grammar of textile design - Bombay - 1978
6 -.- Watson - advanced textile design , Longman green , London , New York , Toronto , 1975.
7 - Watson - textile design and colour, Longman green, London, New York, Toronto, 1975.

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## **Fourth research**

## Hand-weaving between creativity and innovation and development ( loom for every home )

Second International Conference on Environmental Studies and Research (Natural Resources and Future Challenges) - Institute of Environmental Studies and Research Menoufia University - between 25-27 February 2 013

Assistant prof. / Tarek Ahmed Ibrahim Khalil

#### The fourth research Research title:

## Hand-weaving between creativity and innovation and development (loom for every home)

#### **Introduction :**

Art is a necessary element to complete the merger between the individual and the society it represents the human capacity is limited to meet others and to exchange views and experience and experiment with them. Art and nature Balhi not rigid, but rather his job change with the changing world in which we live. And all art is the outcome of his time as a human as much as fits with the prevailing in a specific historical situation with the aspirations of this era ideas.

It is known that applied art is a close correlation between art and industry through the technology available and the main tasks of the designer address societal problems in his field with a view to upgrading and development of this community in the technical aspects and industrial.

#### **Research problem :**

The problem in this research depend on self-questioning:

How does Applied Arts designers in their fields and the process of finding immediate solutions and inexpensive to the problems of society which are as follows:

A - the problem of unemployment and lack of running graduates.

B - Take advantage of leftover exhaust and operating in various industrial areas (recycling), where they pose an environmental problem must find solutions to get on the same utilitarian value products and low-cost aesthetic.

C - protect the community and maintain a safe social through the exploitation of the potential of youth work in small businesses invest in leisure for the benefit them economically and on society.

#### Aim of the research:

This research aims to answer to the previous question in the field of specialty yarn, textile creating the nucleus of some small businesses through optimizing the exhaust and leftover yarn spinning produced from factories and Egyptian textile and reclassified and run on looms fabric of the table to get a practical technical product bearing qualities of creativity and innovation of the Egyptian man, which inherited across generations and preserve the artistic identity and profile of the Egyptian and the revival and development and preserved from extinction for the operation of the looms in the Egyptian homes, whether by housewives, elderly or young people of both sexes and seeking opportunities working and who want to invest their free time, including return on them and on the community benefit and interest.

#### **Specification manual table loom :**

- This type of the simplest types of looms weaving because it contains is considered three basic textile operations, namely: shed opining –weft insertion – beat up additional to let off and take up for cloth.

- Also contains four or eight harnesses to open the shed and these constitute a high technological value in the textile designers as it allows the implementation of a variety of designs and textile shafts be moved manually using hands instead of the pedals, which is famous for its regular hand looms. - Allows the production of textile products currently in the range of 50 cm and this offer with control in the desired length can be employed in many of the areas mentioned supplements or complements of uniform and some other household fabrics

- It does not occupy a lot of space where the dimensions (currently: 71 cm, length: 86 cm, height: 62 cm) and is placed on a table and then easily move it or put it on the space available inside the houses and the desire by workers to it.

- Work on the table loom needs one person to run it and the desired product manufacturing.

- Easy to manufacture Carpentry work shop and at low cost.

Based on the foregoing are visible applied a utilitarian value technical product can be used as supplements to uniform or various household purposes, but is characterized by all of these products Btafrdh design and engravings vary from one user to another investigator from which his character, which is the harvest technical Muruthath that inspired them aspects of creativity and multiple product innovation.

#### Search designs developed:

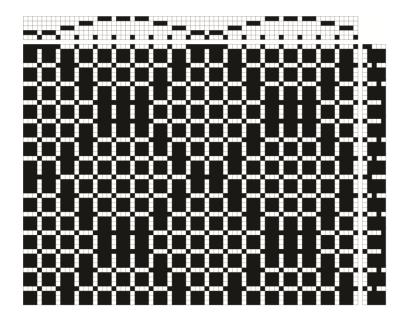
16 innovative textile designs produced to fit functionality and achieves the objectives of the research and consistent with the manual table loom fabric and that fabric specifications using the extended age both directions third. Application base deletion, addition or deletion and add together to get the decorative effects and aesthetic design as described in all shapes and explain them next to each of them finds followed, as well as moving the harnesses and system software are as follows:

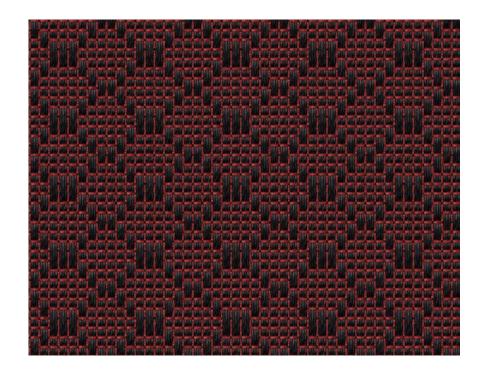
No.	Style building	Number	Warps and	The dimension	Harnisses program	What has been
Design		of shifts	wefts repeat	of repetition		implemented
1	Delete	6	32 x 32	2 x 2	Extrusive - Reverse groups	
2	Addition	5	36 x 28	2.25 x 1.75	Extrusive - Reverse	achieved
3	Delete	6	60 x 40	3.75 x 2.5	Extrusive groups	
4	Addition	5	64 x 16	1 x 4	Extrusive groups	
5	Addition	7	48 x 24	3 x 1.5	Extrusive groups	
6	Delete	7	40 x 40	2.5 x 2.5	Extrusive - Reverse	
7	Addition	6	40 x 32	2.5 x 2	Extrusive - Reverse	
8	Delete	6	40 x 40	2.5 x 2.5	Extrusive groups	achieved
9	Delete	7	40 x 40	2.5 x 2.5	Extrusive - Reverse	
10	Delete	7	88 x 24	5.5 x 1.5	Extrusive groups	
11	Delete	6	40 x 20	2.5 x 1.5	Extrusive groups	
12	Addition	5	40 x 28	2.5 x 1.75	Extrusive groups	
13	Addition	6	40 x 32	2.5 x 2	Extrusive - Reverse	
14	Addition	6	32 x 32	2 x 2	Extrusive - Reverse	achieved

15	Delete	4	32 x 24	2 x 1.5	Extrusive groups	achieved
		-			8 <b>F</b> -	
16	Addition	3	32 x 32	2 x 2	Extrusive groups	achieved
		-			8 - <b>1</b>	

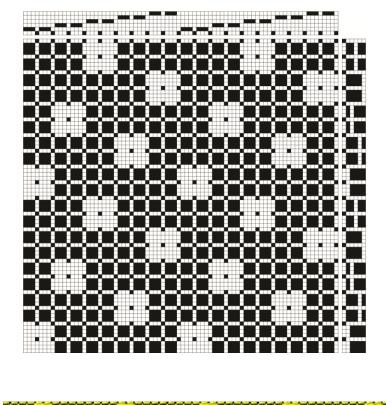
Search designs describes the models developed and implemented:

The second achieved design :

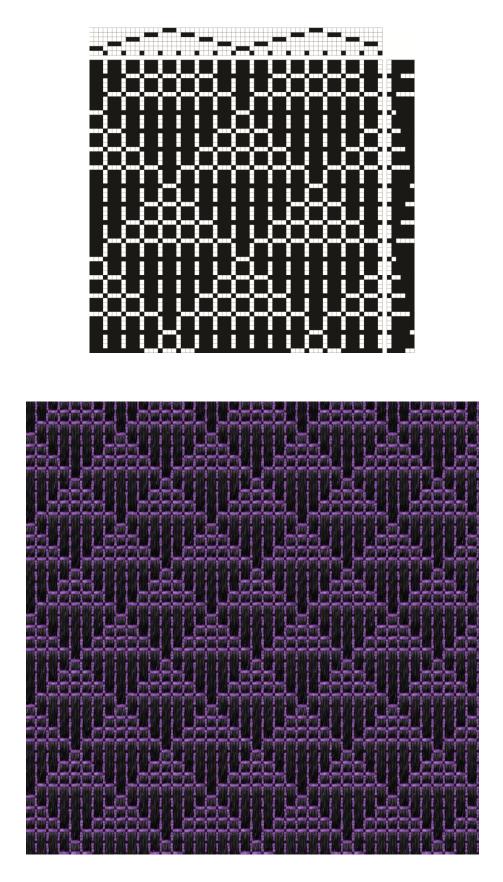




The eight achieved design :



The fourteenth achived design :



#### research results :

1 - Not only advanced technology can achieve the innovation and creativity in applied art, but can get those technological possibilities associated with this simple thought and culture and giving the designer. 2 - Find technically achieved this remarkable product and solo through innovation and creativity in the artwork, with elements of Egyptian human philosophy that is inherited through the ages and keeping the Egyptian character and protect the fabric hand craft from extinction

#### recommendations:

1 - that is a different parties such as community organizations or businessmen or Social Fund for Development with funding these projects and supervision, as well as overcome the obstacles in front of users.

2 - are also those institutions to provide the necessary yarn at low prices by pooling leftover yarns and exhaust spinning factories and Egyptian textile and recycled and re-classified and presented for those engaged in this craft.

3 - to take some quarters relevant product marketing process to achieve physical yield rewarding for those who work in this area.

4 - to take over the Department of spinning and weaving and knitting, Faculty of Applied Arts, represented by the faculty members to supervise the technical and scientific on this project in the form of simplified educational courses to put them on the path to innovation and creativity in the artwork

#### **References used :**

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## **Fifth research**

Maintaining the ecological crafts by rehabilitating young people - especially the development of hand-weaving craft (past profession and future hope) - Field research – Fowa city

Second International Conference of the Arab sixteen for domestic economy - home economics in the service industry, Faculty of Economics, University of Menoufia Almenzla- - September 2013

Prof. /tarek Abdel Rahman Ahmad

Assistant prof. / Tarek Ahmed Ibrahim Khalil

#### The fifth research: Research title:

#### Maintaining the ecological crafts by rehabilitating young people - especially the development of hand-weaving craft (past profession and future hope) - Field research – Fowa city

#### **Introduction :**

The environmental crafts and traditional industries heritage nationally - symbolizes the ancient identity and the authenticity of the country T-where are stationed many types of crafts, and which we hope to be used in all tourism activities - and all of these crafts still exist and experiencing high demand in Egypt - because of the nature and nature most of the population in different governorates - everyone has inherited from ancestors - generation after generation - and we are still, thank God, to adhere to them to this day - despite diminishing numbers missions course.

#### The definition of handicrafts and traditional industries:

Are those crafts that are exercising - individual or group of individuals for the purpose of production or manufacture of artisan products from natural local material by conventional methods to be used in the daily needs of individuals or facilities or for the purpose of permanent or temporary acquisition, and supports literal in his work on individual mental and manual skills acquired the evolution of his practice to work the literal using raw materials available in the local natural environment. Varied handmade fabric sources, according to its uses - and indicate historical sources to the concentration of the textile industry in Egypt since ancient Among the most famous products: kilims and carpets and bedspreads, blankets and socks, also produces yarn used raw wool yarn after cleaned and laundered by the spindle to be the leads wrapped on the spherical body - and are then used in textile products, such as many products as we mentioned before.

#### **Research problem :**

Hand-weaving is an important character upon which many citizens in various governorates of Egypt to live the return of the craft - handmade textiles are also artistic and cultural value as well as aesthetic - is a recording of the heritage of different t places - has been observed the start of the demise of the craft and the flight of workers by - and not to enter the new generations of the craft due to lack of physical return of the craftsman - began disappearing stage and this is a big problem because they are working to increase unemployment among young people - and also will lose the craft of important Egypt character if the demise of the profession on the rise continued.

#### Aim of the research:

This research aims to:

- 1. Work on the training of young people on manual weaving craft.
- 2. Working to reduce the unemployment rate area madder (study site).
- 3. Work on development of the craft to improve the product through design and materials used to compete in global markets.
- 4. Environmental heritage of the area madder recording because of its historical importance, as there

are cultural heritage and the effects of Pharaonic and Islamic significantly. 5. Work on the open market through a local tourist province and also open global markets through offices and cultural centers and business offices of the Egyptian embassy and scattered all over the world.

#### Entrance to the research idea Human development by human to human beings:

The human being is the cornerstone of any society, and we have to prepare a good setting that makes it a productive economic power for himself and his family and to his community and to the world. Comprehensive development is a high-end always begin Square human development, because the human element quality is the first inputs required by the overall quality system in the system of the new global economic which is based on universal knowledge, and the human element quality plays a pivotal role in the civilization of the new knowledge of the civilization of the mind and thought - exemplified by During the last two decades of the twentieth century

The textile craft manual of high aesthetic value character of its reliance on precision in production and the system of production apiece - as it works to create jobs for young people because it is easy to be learned by young people - and then become a source of livelihood - The establishment of a manual fabric centers in villages and provinces far from the capital, this will increase the cultural growth of those areas, where it becomes after the establishment of those working on the renovation of roads and transportation, lighting and also work on the marketing of the products of these centers and working visits and organized tours of foreign tourists to visit these areas centers, and work on the deployment of such a culture and cultural areas through local and international exhibitions and marketing of those products and tourist areas.

#### Some of the designs produced by the trainees at Fowa city:







#### **Results and discussion :**

After it was split number 200 advanced training to 40 trainees each cycle where it becomes the number of sessions 5 sessions - each session in the number of 40 trainees for a period of 3 months - The results of the sessions as follows:

1. The appointment of the top ten in each session Businesswomen Association of the future - so that the Assembly a number of skilled labor to craft kilims - carrying out any required number of meters to Clem.

2. The Assembly action loans begin three thousand Egyptian pounds and up to ten thousand pounds - each trainee wants to be doing a small project for the production of kilim - a loom one hand attached to a Mkmlath of tools help to loom such as the pilot needed to rotate or pistils hand. . etc

3. A group configure a dozen individuals have been lending the amount of the value of five thousand pounds each - so they can work a collective project for the production of hand kilims and pendants textile wall - but is noticeable in this group that some of them the process of marketing and the other to bring the agreements to work for the production and achieve Orders necessary .omenhm Hamid Naji - Mr. Khamis - Imad Abdel Moneim - Atef Abu curl - Mostafa Alaa Khairallah - Ahmed Mohamed Ahmed Khamis - Gad Mahmoud Abdel Samie - Yamani Hassanein Hassanein - Mahmoud Samir quality - Mahmoud Ahmed Mahmoud.

4. has been opened permanent outlets in Sharm El-Sheikh products trainees and Assembly - and this port free of charge - where it was agreed between the chairman of the future work of the Association of Women Pfoh Kafr El-Sheikh and the Governor and the Governor of South Sinai.

5. It was also to identify a permanent exhibition in Hurghada - the province of the agreement between the governor of Kafr el-Sheikh and the Governor of the Red Sea - to be a permanent exhibition of products of trainees and products dealing with the future work of the Association of Women Fowa city.6. Access to many innovative designs of trainees and that are suitable for use in the production of a bed of ground - and certified in the use of environmental designs decorations madder area with abstraction sometimes

7. You must activate the role of educational, scientific and research institutions with the role of civil society of NGOs, public sector and also in the development of environmental handicrafts - to become competitive in the domestic and global markets.

8. Because of the effects of the economic changes globally and locally - the development of handweaving craft and subsequent other symbols - will work to increase sales markets which affects the individual and society - as we mentioned before.

9. Access to the production of aesthetic and artistic value and high registered by the Egyptian heritage and environmental motifs textile works of art - very high quality raw materials and at a lower cost is a major goal.

10. To increase the labor force and reduce the unemployment rate in the region and extend to the rest of society as a whole areas.

#### recommendations:

1. Create a database be a special information center literally hand the environmental and traditional industries, through the work of the field study and the inventory of these crafts

2. Follow-up the development of these crafts and craft a private textile and exploitation of tourism and economic and work to diversify

3. Study the factors affecting positively or negatively in the development of the Egyptian environmental character and work to resolve them without prejudice heritage

4. Preserve and record the values and beliefs that are passed down from generations in the field of artistic and technical creativity popular environmental character

5. Subjecting those trades to the appropriate specifications and measurements for human use are safe and scientific

6. Study the development of this handicraft with interest ongoing training methods

7. Attracting a new generation of young people wishing to set up projects for handicrafts after being trained

8. Establishment of pilot projects for the development of handicrafts through social and other Fund

9. Hold training and guidance from experts for young people through programs of its activity and NGOs interested in the Egyptian handicrafts government institutions

## Sixth research

## The effect of different warp densities on enhancing aesthetic values for summer men shirts.

International Design Journal – accepted 30 th August 2015 – this should appear online on the 1st of October 2015

Assistant prof. / Tarek Ahmed Ibrahim Khalil

#### The sixth research: Research title:

## The effect of different warp densities on enhancing aesthetic values for summer men shirts.

#### **Introduction :**

The cloth of summer shirts is one of the most widely consumed cloths by Egyptian people, because of its functional suitability to weather changes throughout the year. Good quality types of this cloth is made of cotton warp and weft, it can also be made of cotton fiber blended with synthetic fibers (eg. Polyester fibers) in different ratios to be commensurate with customer buying abilities.

This type of cloth can be produced in different forms as follows:

- Solid-color for both warps and wefts.
- Vertical stripes formed by warps of different colors, and wefts are solid-colored
- Checkered cloth (vertical stripes crossed by horizontal ones) where wefts form the horizontal stripes, with order that may correspond to the order of vertical stripes.

The common factor between all productive methods of the aforesaid cloth is their interlaced weave 1/1 method to produce this type of cloth, which is clear of floats, the harmony of their thread intersections), and achieving of the highest ratio finterlaced weave comparing to other methods.

In addition to that the clothes are produced through various sets of densities and numbers of warps and wefts from one place to another according to the available facilities and abilities.

#### **Research problem :**

The textile designer role is adding new creative aesthetic and functional values in addition to their functionalities using variable applicable production methods, taking into consideration the costing values.

From this point the research focus on adding new creative aesthetic to summer shirt cloth, where the designer can benefit from the different warp densities, depending on using different weaving warp reeds sets throughout the weaving (reed eyes) to achieve an aesthetic value to the fabric, without any change for all the productive operation factors which are conducted by the standard specification. As the different distribution of threads in the reed eyes is considered one of the methods of weaving design which give special weaving effects which appears as vertical strips with different densities in warp direction, and this is cleared throughout the technical production of the samples of the research.

#### Aim of the research:

The importance of the research reveals in designing a fabric (summer shirts fabric) based on technical scientific mathematical bases having an additional aesthetic value. Where using different warp densities through the reed eyes as a method for making different spaces and intensities between warps (especially designed to reveal an aesthetical effect for the design), revealing into different fabric construction between vertical warps of various reedings.

On the other hand the research also focused on not making a hike of production cost due to the unchanged of all productive operation factors. x

#### **Applied study research topic:**

The distribution of the warp yarns in different sections and comb means primarily the different spaces occupied by the warp yarns Mounsug. Especially when using a Gentlemen fabric due to free from Altshipiqat and compatibility intersections. Which in turn leads to the emergence of different ratio wefts between warp yarns in the woven fabric? Since the distribution of the threads in the doors of the comb different, its impact appears in cloth in the form of pens longitudinal offerings vary depending on the system used in (Ttrih the thread), through:

A. Ctavat warp yarns in distributions (heavy Ctavat - Ctavat light).

B pens longitudinal resulting Offers (dilated offers Pens - Pens minutes).

C yarn warp and weft specifications in terms of: the type of raw material - the type of spinning and twisting - different tiger and appearance leads.

(D) the order of colors warp or weft yarn or both:

1. arrangements of warp only (different shape after Alttrih)

2. The arrangements of the weft only agree with gradations of color to the resulting warp yarns of different densities

3. The color arrangements of warp and weft together - (characterized by a wide field of impacts) (E) the use of compositions textile Statistics (Basic)

And the use of some mechanical factors such as different tissue during Alhdd the yarn warp

(G) include densities wefts similar forms or similar to the warp

(h) the use of certain processing methods and that are related to the chemical properties of the warp and weft yarns

#### **Product Applied research topic:**

**First sample** : Summer striped shirt fabric (ideal sample) with regular Alttrih. It has been implemented in accordance with the operational specifications mentioned above on 2 crank / door of the patch and 4 crank / door of the messengers



Figure 1 shows the color scheme carried out sample repetition (longitudinal pens)

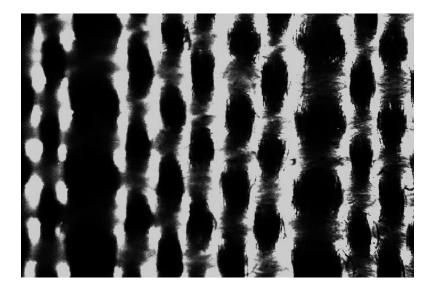


Figure 2 shows the user Alttrih microscope-mail system

**The second sample :** T-shirts with fabric summer Tkulaimat longitudinal and cross-(Karohat) It is the same specifications bomber implementation of the first experiment but using cross Tkulaimat of woof perfectly matched to the same order of colors and color scheme repetition warp yarns. So as to get the fabrics Karohat balanced vision it can be used during cloth detail from any direction and the second figure shows the sample.



Figure 3 shows the color scheme carried out sample repetition (Karohat)

#### The third sample : Fabrics summer striped shirts.

It has been implemented in accordance with the operational specifications mentioned above but Ttrih system: 3 crank / door +3 crank / door + door empty

An average of 6 crank / 3 door any  $6 \div 3 = 2$  crank / door

Consistent with achieving the goal of a firming Find the average number of wicking poison a crank 36 / cm.



Figure 4 shows the color scheme carried out sample repetition (longitudinal pens)

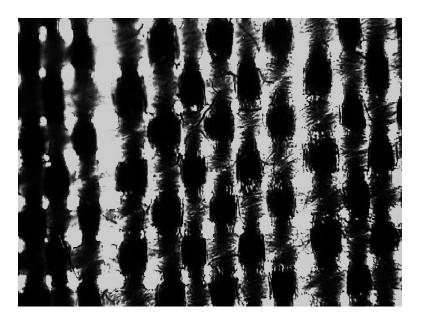


Figure 5 shows the user Alttrih microscope-mail system

**Fourth sample :** T-shirts with fabric summer Tkulaimat longitudinal and cross-(Karohat): It is implementing the same specification and implementation of the third sample but using cross Tkulaimat of woof perfectly matched to the same order of colors and color scheme of repetition and warp yarns so as to obtain fabrics Karohat balanced vision in enabling the use of cloth with him during the detail from any direction. The figure shows the sample is executed.



Figure 6 shows the color scheme carried out sample repetition (Karohat)

#### **Fifth sample : Fabrics summer striped shirts**

It has been implemented in accordance with the operational specifications mentioned above but Ttrih system: 1 crank / door +2 crank / door +3 crank / door

An average of 6 crank / 3 door any  $6 \div 3 = 2$  crank / door

Consistent with achieving the goal of a firming Find the average number of wicking poison a crank 36 / cm.



Figure 7 shows the color scheme carried out sample repetition (longitudinal pens)

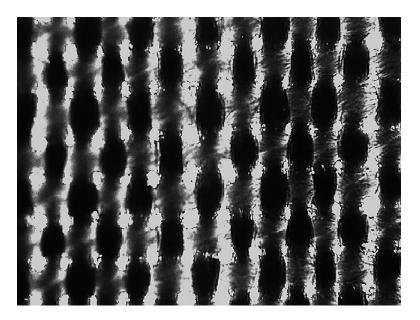


Figure 8 shows the user Alttrih microscope-mail system

**Sixth sample :** T-shirts with fabric summer Tkulaimat longitudinal and cross-(Karohat) It is implementing the same specification and implementation of the fifth sample but using cross Tkulaimat of woof perfectly matched to the same order of colors and color scheme of repetition and warp yarns so as to obtain fabrics Karohat balanced vision in enabling the use of cloth with him during the detail from any direction. The figure shows the executing sample:

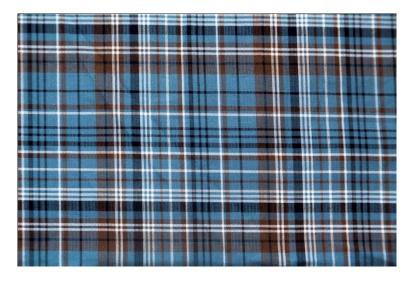


Figure 9 shows the color scheme carried out sample repetition (Karohat)

#### Search Results and discussion:

Through all of the above, which was explained in detail in the Technical Specifications and applied to research samples of woven and described in the previous forms, we find that there are constants and variables.

Where are constants in?

(A) Prove all installation factors certain amount of fabric research topic which has already been referred to.

(B) The stability of coverage coefficient for each of the warp and weft cloth, as well as in all research samples.

(C) The stability of weight per square meter for each of the warp and weft yarns and therefore the weight of square meter of fabric output.

(D) The use of one comb with several fixed in the unit of measurement.

As for the variables, which are?

A-different densities for the warp yarns and resulting from the different systems used in Alttrih get the product applied research topic.

B -use more than repeat the chromatic in both the warp and weft in the production of research samples. Through these constants and variables, and analysis of scientific and technical research woven samples were obtained the following results:

#### First, technological and aesthetic results:

1. The emergence of the black colors in varying degrees according to density door yarns and related Alttrih system user is then possible to obtain varying degrees of single color (shade and achieve the value of Light).

2. Get the pens of longitudinal weft colors used deeply chromatic larger than they appear in other areas as a result of differing Alttrih system.

1. That the appearance of the color of the meat Koqlam longitudinal inversely proportional to the number of wicking each door. Ie: it appears rows of the original (the color of the meat without Tashqat with warp - Chiev weft) in the doors of Alttrih peacock and at least a depth of color that gradually Alttrih using other systems because of a dovetail connection between the weft thread and yarn used warp.

2. Alttrih systems using different places to get a variety of relative voids in the cloth output and these blanks inversely proportional with Alttrih rates Or: The lower the relative blanks and vice versa so as to maintain the ideal ratio of the relative spaces for fabrics research topic which is 25% of the total area of the cloth in the standard unit..

#### Second: economic results:

1. The added aesthetic values that were obtained through various Alttrih systems and their application in technical product in question did not pose any additional costs on conventional production, including not constitute an increase in the price meter product costs.

2. Provide multiple artistic visions of class one at no cost to the factory or production unit.

3. Use a pocketknife and one each warp pens surpass the conventional case, a multiplicity of weaving warp with multiple densities in the pens of fabric which reduces the cost of the product.

#### recommendations:

The researcher recommends the following:

1 - rationing scientific and technical fabrics and typical subject for sports studies in order to give it an aesthetic and technological added values.

2 - work on improving the technical and aesthetic aspects of the product Textile without impact on the final cost of the product.

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# Seventh research

Traditional Egyptian industries (hand weaving craft) and its role in community service to confront the effect of globalization on national heritage

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Assistant prof. / Tarek Ahmed Ibrahim Khalil

#### The seventh research : Research title:

## Traditional Egyptian industries (hand weaving craft) and its role in community service to confront the effect of globalization on national heritage

#### **Introduction:**

That the threat of globalization on the Egyptian cultural identity and privacy is one of the dangers (New World Order), which threatens national and cancellation privacy and pluralism and the unification of different cultures and thereby diminish cultural boundaries and national each culture will expire national identity of the culture of the Arab countries it is then dissolves in a global culture New from this excellence that will cancel each culture versus cultural openness. And based on two great civilizations of Arts (Arts or high official and folk arts and crafts and environmental) and usually carry cultural vision and religious, social and political state official art from the standpoint of philosophy and creators in all fields. The folk art and traditional environmental and crafts and for he usually carry pulse and human mood by nature and automatic sense and on this popular Valphenon and environmental character is the embodiment of true beliefs and habits and traditions of a particular people through his emotions and honorable, and on that history has told us that environmental crafts and arts People never stop and do not disappear, but remained the vessel in which the people unload their aspirations and hopes as it is one of the tributaries which is characterized by a number of them originality in Egyptian history Vtmzena design and innovation Egyptian environmental character and traditional industries is the only way for global uniqueness and through Export Egypt our art exclusive to the countries of the Arab world after development while preserving the character of the national Egyptian and refer to the heritage and adhere to the Egyptian national identity Examples include Khan el-Khalili industry and kilims and pottery and works arabesque, copper and through the use of appropriate technology supported by the local designs of reality Egyptian environment and not Western designs expatriate to us from the outside and that by referring to the heritage and updated and access to the era of globalization and on that we can address the risk of contemporary globalization on cultural identity and national character of the past mix and the future and the present, between privacy and globalization and melted down in the new reality and requirements of the times.

#### **Research problem :**

The problem for this research in the demise of hand-weaving craft (kilims) as a result of labor migration her and Functioning another character brings in more profit as and that this extinction is another reason and is not to learn the children of parents as was the case before, and which would also affect the existence of unemployment that the craft, as well as some other character has become material revenue return is weak does not fit and the requirements of life we live now increase in population and higher prices, as well as economic conditions experienced by the country, and that there is another problem that helped the demise of the craft not It is not popular artistic heritage which serves as documentation of cultural identity art Egyptian record and must therefore be interested to this kind of arts and crafts to do on an equal Allosaq behind the revival of all crafts to work on recording heritage in the image of art work hand in which we can emphasize the Egyptian cultural artistic identity.

#### Aim of the research:

This research aims to

1 - the development of handmade craft and fabric development and private kilims products.

2 - the development of the economic situation and work to increase the per capita economic growth and from then on society.

3 - work training programs to raise the efficiency of workers in this profession and work as well as simplified training programs and encouraging access Baharvp newborn.

4 - Work to reduce the unemployment rate among young people.

5 - emphasis on the Egyptian cultural identity by producing artistic Egyptian Clem using authentic Egyptian motifs from different eras, and the production of suspensions check ancient Egyptian heritage application of various technical Basorh starting from the Pharaonic art and the Coptic and Islamic and finally popular.

#### **Results :**

1. preservation of handicrafts and non-extinction through those various programs, which aims to revive such handicrafts and then the emphasis on the Egyptian cultural identity and the protection of all crafts in general and craft kilims in particular the risk of globalization and the invasion of cultures.

2 - Reduce unemployment and increase labor and create new job opportunities for young people.

3 - The high level of economic living standards of the citizens, which dates back to the community height of the economic growth rate.

4 - and the emphasis on preserving the cultural identity of Egyptian art.

5 - Raise the efficiency of Almstgliyn craft handmade fabric works on the product in terms of shape and increase production, as well as an increase in the quality of the product development.

6. Open new markets locally and globally working to increase the marketing of the product, leading to increased product.

7 - The deployment of Egyptian artistic culture by opening many markets around the world.

#### recommendations:

1 - Expansion of the further opening specialized in the various governorates of the republic training centers.

2 - The spread of a culture of training and raising the efficiency of the Mstgliyn Baharvp helping to increase textile with handmade products keep increasing their quality.

3 - Registration of Egyptian cultural heritage and various different Egyptian motifs for the Arts which contribute to emphasize the Egyptian artistic cultural identity.

4 - Shows open sale of textile products and handicrafts marketed in the provinces and contribute to each governor to open a permanent exhibition of products.

5. Open international exhibitions through the Commercial Attaches Egyptians and cultural advisers in the Egyptian embassies abroad, which work to promote the product.

6 - Work to revive the weaving craft and preserved from extinction and this results in the creation of new job opportunities for young people and train them on how to produce handmade kilims and other handmade textiles.

7 - Increase the establishment of the technical exhibition runs at an altitude of cultural taste and artistic community.

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