

Full Length Research Paper

The Impact of Cottage Textile Industries on Students' of Textile Designs in Tertiary Institutions in South Western Nigeria

¹Kashim, I. B.,² Adiji. B. E and ³ Oladumiye, E. B.

Department of Industrial Design, School of Environmental Technology, Federal University of Technology,
P.M.B. 704, Akure, Ondo State, Nigeria

Corresponding Author E-mail: ibykash@yahoo.com, +2348054582028

Abstract

Cottage textile outfits have played significant role in the quest for fashionable garments and decorative attires that have traditional root within Nigerian populace which has continued to develop and promote indigenous culture and tradition. The preference of Nigerians for imported foreign textiles seems unsuitable yet the consciousness for made in Nigerian good is actually aiding the campaign for people to return back to their root. The advantage of this is that it has made the production from these local entrepreneurs to flourish. The tertiary institutions in Nigeria that offer textile designs as course of study have a well-developed curriculum but are handicapped by dearth of functional equipment for effective teaching and learning. The industrial training programme that is embedded in the curriculum of tertiary institutions in Nigeria is aimed at promoting interaction with work world, a gap these community based textile industries had been attempting to fill. This paper takes a swift look at how some of these cottage industries in south western Nigeria have been able to contribute to the upgrading of the students skills, re-orientating their psyche for self-employment, develop their ability for innovations in idea and material resources and learn about merchandising/marketing of their goods and services. The cottage industries whose interactive relationships with academic institutions are reviewed were Nike Research Centre for Art and Culture Osogbo, Asero Kampala/Adire International Market, Abeokuta, Felix Tie and Dye Textile Design Company, Ijeshatedo-Surulere, Lagos, Ondo State Skill Acquisition Centre, Akure

Keywords: Cottage industries, Tertiary institutions, Textile design curriculum, entrepreneurship and self-employment.

INTRODUCTION

Nigeria textile craft industries have long established tradition of weaving which was in the beginning made of individual uses and for local markets. Though this local textiles craft consumption are faced with challenges from industrialized and commercialized productions coupled with unrestricted importation of foreign textile goods. According to Ogunduyile (2001) the study of textiles design both at institutional and craft based level is about

the study of mankind which could be viewed from the historical chronology of fashion clothing and trends. The indigenous handcrafted textiles and fabric productions, decoration and embellishment are created manually with artistic dexterity in textiles areas such as resist fabrics design, screen printing, beading, appliqué, sewing, woven fabrics and panel designs. They are integrated in the living pattern of Nigeria and inseparable from culture.

Textile traditional handcrafts production as explained by Ogunduyile (2005a, 2005b) enables the craftsmen understand the entire process of fabric production as it is involved in planting, harvesting, collection of fabrics, ginning, carding, spinning, dyeing and weaving. And also of paramount importance is their technology of managing the dye and fabric fastness.

To survive the odds and changing world, Nigerian home textiles craft workshops attempts to develop entrepreneur production that focuses on capturing audience that are either tourist or export marketers. The aim of this paper is to identifier the functional small scale craft industries in South Western Nigeria with the objectives of assessing them on the following:

- Areas of textiles production
- Production methodologies
- Contributions to training of textile students in Nigerian tertiary institution and also their traditional apprenticeship system
- Commercial potentiality and
- How much this supplementary training had imparted on the theories learnt by students of higher educational institutions in Nigeria.

Data were collected from in-depth interviews and participatory observations by the students in tertiary institutions from Federal University of Technology Akure, Nigeria, and direct student supervision by university appointed supervisors at various craft/internship centres. This engagement in Student Industrial Work Experience Scheme allows for interaction between students and work place which happens to be one of the basic background experiences for this paper. This paper therefore addresses production stages from preparation to marketing at textiles craft centres in South Western Nigeria while allowing student under internship understand scientific and theories of quality control management learnt in the classroom. According to Tamraz (2009) the environment is circumstances and condition which affects the activities of human being and react with his needs and wants in order to develop him and strengthen his activities and ability to create the experience that he gains. Students learnt the symbolic signs of folklore of the Yoruba as express in legend religious and language base of the western part of Nigeria, in which the study is situated.

Nike Centre for Art and Culture Osogbo

Nike centre for art and culture was established in the year 1983 in Osogbo, Osun State, Nigeria, with the sole aim of re-enacting the original concept of the art workshops held by Georgina Beier in Osogbo in the 1960s which led to the birth of the Osogbo School of Artists. Osogbo

workshop was run by the Beier between 1962 and 1964 and it was taken over by Suzanne Wenger in 1967 with a focused style that is truly African devoid of academic influence. According to Adepegba (1989), it was an experiment in individual vision, abstractions of folkloric themes and genres which were popular in the 1960s. The traditional folklores, myth or legend is expressive in their paintings, sculptures, prints and batiks. The school does not require academic qualification and most participants were primary school dropouts and artisans trained by Ulli and Georgina Beier which was later taken over by Suzanne Wenger, a famous instructors (Filani 1998). Nike centre for art and culture was founded by Nike Davies Okundaye one of the key visual artist to have emerged from the renowned Osogbo School of Artists. She is an indigene of Ogidi-Ijumu Local Government in Kogi State and was educated by her great grandmother who was a weaver and dyer (textile artist) during her life time. She derived a lot of inspiration from her teachers like Madam Susan Wenger. In 1983, she established Nike gallery and workshop which was located along old Ede road Osogbo, Osun State. The centre now has four annexes with galleries in Lagos, Ogidi, Abuja and New-York (U.S.A). The centre specializes in the making of batik, wood carving, bead making, oil painting on canvas, imported crafts techniques like reversed appliqué, quilt making and cultural dances. The centre was established to satisfy the following functions:

- To create jobs for young Nigerians and encourage Nigerian women in the arts.
- Enrolls students, encourage artists to produce art work and sell for living.
- Encourage volunteered to teach upcoming students.
- Train cultural troupes called Nike cultural troupe.
- The centre also maintains traditional ties with traditionalist throughout Nigeria as resource for those interested in investigating in Nigerian traditional details.

In the year 2007 there were 200 full time students from all part of Nigeria including countries like Kenya, Zimbabwe, United States of America, United Kingdom and other European countries learning how to make Yoruba *adire*, quilting, reversed appliqué, embroidery, painting, carving, bead making, dances and contemporary art forms. In 2008 the centre parades about 34 resource artists and more than 70 apprentices with the Industrial Training Students from different tertiary institutions in Nigeria which happen to be the thrust of this paper. They work for six days in a week with thorough supervision by the workshop manager.

The Student Industrial Work Experience (SIWES) programme was introduced in 1973 by the Federal



Figure 1 An indigo quilt made with local materials

Government of Nigeria under the Industrial Training Fund (ITF) in collaboration with the training institutional supervisors as part of efforts toward providing adequate practical skills for students in higher institutions of learning. Covering the period of six months with such aim as to:

- expose students to work ethics or professional ethics in their various fields of learning.
- prepare student for future challenges.
- allow student to build inter personal relationship among individual in their chosen field of study.
- enlist and strengthen the employers involvement in educational process of preparing students for employment in various inspects of commerce and industry.
- expose students to more skill and new technological development in their various disciplines.

Textile Educational Activities

The major educational exposures the student goes through are in the areas of Quilting, appliqué, patch work, tie and dye. Tye and dye locally referred to as *adire* which are in different versions based on production technique and materials utilized. There is *adirealabela*, (wax resist patterning “batik”), *adireeleko* (paste resist patterning) and *Adireleso* (tie and dye). The centre uses natural dye recipe made from indigo plant.

Appliqué: It is the word used to describe the process of adding further materials to already woven textile base .It can be simply put also as French word meaning to apply and a craft of stitching of multi coloured pieces of fabrics to a contrasting background while reverse appliqué is a process of adding further materials to an already woven textile base. Bonesteel (1985) defined appliqué as a decoration or ornament to a large surface which could be used as warm thick cover for bed made of cloth that is attractive.

The making of reverse appliqué involve different stages such as making a draft of an intended design which could either be (figurative or abstracted) on paper (card board and brown papers) putting into consideration the basic principles of design. The stencil for the draft is made, transferred or traced on fabric with the unwanted part eliminated by blading off, the bladed fabric is then mounted on a textile base and held in place with pins and in the final stage the mounted materials are slip stitched to create a decorative effect also tiny running stitches can also be used.

Quilting and Patchwork: Quilting is a process of stitching together two layers of fabrics filled with some soft substances usually cotton to form a kind of textile sandwich. It has its origin from a Latin word “culcita” meaning stuffed mattress or cushion. The decoration and patterning however depend on the quilter because some prefers to work with imported fabrics while other prefers locally made fabric like tie and dye and batik.

Patchwork is the joining of pieces or scraps of fabrics together to form desired patterns or the art of sewing textile fragment together to form larger clothes which does not overlap but are sown together along their common boarders. The top layer of the quilt is known as patch work while the whole material is known as quilt which includes the patch work, padding and the backing. Nike centre for art and culture specializes on most cases on the production of lap quilting of varying size such as:

Baby size 50inches by 40inches, 25 inches by 30 inches
Queen size 100 inches by 95 inches
King size 110 inches by 120 inches.

The core materials used are fabrics; padding (polyester, local foam). The back is treated with any fabric and materials such as needles, threads thimble, scissors, office pins, tape rule, long and short ruler, biros and pencils are used. The figure 1 shows indigo quilt that was locally made by the participatory effort of one of the students in the Department of Industrial Design, Federal University of Technology, Akure, Nigeria during an Industrial attachment training at the centre.

Adire(Indigo dyed Cloth)

Adire is the name given to indigo dyed cloths produced

by Yoruba textile designers of the South Western Nigeria using a variety of resist dye techniques like batik, tie and dye which is an integral part of the Yoruba cultural textile craft. Just as the talking drum is significant to Yoruba music so *adire* expresses Yoruba traditional clothing and design. *Adire* is a resist method of patterning fabric by withholding dyes from certain areas of the fabric. This leaves the untied areas as a background for the design in the dyed area (or vice versa). The design among the Yoruba's of the South Western Nigeria has been perfected into their textile art form called "*adire*" literally meaning "to take, to tie and dye". It is categorized in to three different techniques which are:

AdireAlabela (wax resist patterning "batik" using candle)

AdireEleko (paste resist patterning using starch or paste of flour)

AdireEleso (tie and dye using small pebbles of stone).

***AdireAlabela* "Batik"**

The word Batik by contemporary understanding and meaning is a resist method of applying a substance such as melted wax, paste of flour, corn, cassava, or rice to the surface of a fabric to form designs (Polakoff 1982). The word is also derived from *ambatik* meaning a cloth with little dots, little means bit while dots means tik. Batik is an Indonesian word meaning "to write with wax". When the applied substance is hardened on a textile surface, it resists dyes and when it is removed, the design of the reserved areas remains showing a light pattern against the background. As it is in Nigeria, it is also commonly used in China, Japan, Indian, Indonesia, the near and middle east, part of North and West Africa. The resist methods both with tying or resist with waxing and pasting may have originated from Asia during the early Christian era. Batik production at Nike gallery involves different stages such as drawing practice using the sketch pads, transfer of design on to the fabric as either one colour or multi colour, free hand designs, figure cutting designs and pattern work. They are either in 1 colour, 2 colour, free hand design and, patterning figure cutting. Figure 2 and 3 shows such example by a student trainee.

***AdireEleko* (Paste Resist Patterning)**

The qualifying term *eleko* (means the one with corn pap or cassava paste) indicates the type of resist used. This resist with corn pap differ from resist with *AdireAlabela*(melt wax) as the use of wax covers the portions of the cloth as it is repeatedly dipped in various coloured dyes. The *AdireEleko* method uses a paste made from cassava which is applied using chicken feather and stencil. The paste dissolves faster than wax. Since the

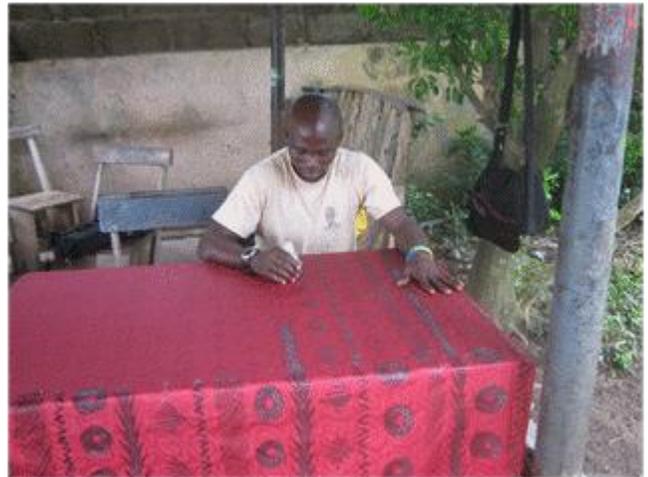


Figure 2. A University student trainee working with waxing a fabric for dye resist



Figure 3. A finished wax resists design

cassava paste does not soak through the cloth like wax used in making batik, the reverse side is of stunning array of different shades of blue instead of coming out in solid dark indigo. The Nike centre uses free hand painting and stenciling techniques which has the advantage of freedom of expression than some of the other resist methods used such as the tie-dye variations or the application of paste through stenciling. A lot of motifs are used and named with phrases related to Yoruba speeches and thoughts such as "*Omolereaiye*"-Children are the heritage of life, "*Ori mi pe*"-my head is sane, "*Sanu mi Oluwa*"-have mercy on me lord. Other designs of significance are *Ibadan dun* (Ibadan is sweet place to



Figure 4a and 4b. Textiles finished with tie dye

live). There are very many different traditional patterns conveying exuberant expressions of life such as two calabash (*Igbameji*), maracas (*Sekere*), children are the pride of the world (*Omolereaiye*), fat lizard (*Alangbaberekete*), Lame Man's kneel (*Orokunaro*), Bat (*Adan*) cassava leaves (*Ewe ege*) Crown (*Ade*) the talking durum (*Gangan*), Muslim slate (*Wala*).

The words are combined with traditional visual forms to become an integral part of the pattern. The design types are in one square for symmetry, expanded to fill the whole square on the fabric. The *AdireEleko* design to speak through the cloth as observed from the example of common pool of motifs in existence at Nike art and cultural centre.

Some of these designs borrow from nature are stylized representations of floral and fauna, everyday objects and abstract patterns are also used as fillers, to banish or void or balance the squares while some bear writing phrases directly related to speeches are also used. Ojo (1993) expressed that *adireeleko* could be viewed also as partly religious and spiritual activity which was meant to colour the costume of *obas*, that is, the traditional chief, secret societies, and the masquerades.

Production techniques of AdireEleko

The cassava paste is prepared and boiled with *somiro* [blue coloured alum]. The boiling paste with alum takes place for 15 minutes. Palm ribs and feathers from life chicken are used. Those plucked from the right wing are used to create clockwise designs while those from the left are used to create or paint anti clockwise designs. The application and release of pressure on the feather widens and narrows the feather strokes thus controlling the application of starch. The dyeing is done when the starch

on the surface of the fabric is dried. The fabric are loosely folded, held by the middle ends of the cloth and kept levelled as it is immersed in the dye vat. This is to avoid cracking up the paste and prevent the potential seepage of dye into the resist areas. The cloth is carefully hung on a pole to drip dry. It is refolded to ensure that all areas of the fabric not yet covered are dyed in the subsequent immersion. The number of these depends on the depth of colour desired. The process is slow and tedious. It is not very attractive for production because it is time consuming and ill rewarded, therefore Nike centre for art and culture emphasis is placed on imported craft technique based on (reverse appliqué and quilting).

AdireEleso (Tie and dye)

This is a resist method of patterning on fabric that is achieved through withholding the dye from certain areas of the fabric. This leaves the original untied area as a background for the design and (or vice-versa). It is achieved in Yoruba land and at Nike gallery by tying and sewing as appraised by Polakoff (1982) and this makes it to differ from the *adireeleko* or *alabela*, as the designs are formed by the application of a cassava paste resist and melt wax. Figure 4 shows a typical example of material produced using the tie and dye technique.

Batiking

A lot of batik are done with AdireEleko, that is, using cassava paste as resist for the Yoruba blue colour derived from indigo dye. They are done through stamping of direct carved objects on fabric or indirectly using the wax. Designs are also created from splashes of wax that



Figure 5. *AdireEleko* (cassava paste resist)



Figure 6. Trainees working at the dye pit for boubou fabric finish with indigo dye

generates impression that are unique.

Use of indigo dye

Indigo dye is the principal dye used by local textile designers for the traditional classic *Adire*. Indigo is the oldest dyestuff on record in the textile world and the foundation of other textile traditions in West African and particularly Nigeria. It is obtained from several plants of the genus *indigofera*, but the Yoruba wild indigo vine *ioncho carpus cyanescens* is believed to produce the more permanent dye. They are usually cultivated. Ogunduyile (2004) affirms that indigo dyeing as a textile craft is widely practiced by the Yoruba's of south western Nigeria within the Yoruba clothing culture which has evolved over the years. It was sometime made based on shared values in the society and at another time it became complex as it is been driven by commercial interest. Eicher (1976) was of the opinion that natural and

synthetic dye stuffs are available and used but indigo cloths with intricate patterns stands out vividly as Nigerians contribution to textiles art.

At Nike centre for art and culture in Osogbo, the preparation are in two parts; pounding of the immature leaves to break down the plant structure and facilitate fermentation process and preparation of the mordant or alkali medium. Though the process is lengthy, tasking and tedious, the free immature leaves are collected, pounded, molded into balls usually the size of a tennis balls or fairly larger and left to dry in the sun for two to three days for possible preservation purposes for future. Since it is insoluble in water, mordant water is used.

For proper dyeing of fabrics, the cottage dyers prepare mordant water by setting dry cocoa pods on fire until it turns in to ashes. The ashes are put in a small pot which is perforation at the base, but wire gauze is placed over the perforated holes before the ashes are put inside. Water is poured into the pots containing the ashes as it is filtered through the perforated holes with the wire gauze. The ashes contain alkali or potash that helps to make the insoluble dye in the indigo leave soluble. Usually over 40 balls of the pounded indigo balls are kept in the pot. The mordant water from cocoa pod ashes are used to soak the dye balls between 7-14 days to allow for fermentation.

The cloth to be dyed are dipped in the dye solution and stirred for about 50 minutes. It is then hanged on a pole to oxidize and dry. This process is repeated several times depending on the depth of colour desired. A cloth may be dipped into the dye for between fifteen to twenty times to obtain the real deep live of rich indigo. The rich blue dye with coppery or metallic luster/sheen is the undisputed king of dyes.

The 1st synthetic dye was discovered by William N. Perkein in 1856. Prior to the advent of synthetic dye only few wealthy individuals or families that could afford textile designed material made of indigo dye because of the cost and rigour involved in the extraction of such natural dye. Synthetic dye according to charwal() gives brighter colour and better fastness compared to natural dye stuffs and so Nike gallery uses synthetic dyes a lot because of this advantage.

Indigo dye is obtain from indigo plant known in the Yoruba land as *elu—aja*(the botanical name being *ionchocarpus cyanescens*. It is pounded to a blue black colour, juicy pulp-shaped into round balls and left to dry in the sun. it is crushed with wood ash dye solution, carefully stirred and ensuring no air is introduced. It is usually covered overnight, left between 3-7 days and stirred at regular interval. When it starts to ferment and the air is permeated with acridly sweet smell that indicates that it is ready to be used.

The demand for indigo on indigenous fabric is on the increase locally and internationally. This is because there



Figure 7. Displayed finished batik, cassava paste resist and tie dye fabrics at the gallery



Figure 8. Finished simple panels for wall decoration at the gallery

is growing appreciation of handmade African fabric as piece of art material appropriate for high fashion clothing. The range of technique for production offers unique process and flexibility. The process of dyeing the fabrics are indicated in figures 5 and 6.

The experience gained by the students

The centre assisted the students through direct participation to develop their ability to market finished products. The students learnt more textile production skills that enhances their personal interaction with customers and visitors from Europe, Asia, America and North America, a quality that maintain good customer relationship and keep customers patronage. Works are displayed for sale in the gallery and 20% shares of any students work sold at the gallery are retained. The

students developed further their abilities to make free hand traditional patterns using the starch paste and candle wax. The students also mastered the production of very many adire patterns which were unique to the symbols from the western world. The motifs that they attempted to produce were like hybrids of the traditional designs that they learnt.

On the overall, apart from the student's theoretical rudimentary concept they learnt from the classrooms, they were able to combine practical with theory and that gave them an edge over the local apprentice. It is a local entrepreneur centre where the deadline for job resumption is set at 7:30am, and this timing is enforced that students sometimes find it tough to adhere to and cope with. They encounter lot of burn on their fingers due to inexperience at controlling wax and handling of foam, but all the shortcomings were surmounted before the end of their training.

Computer aided design were not yet adopted at the centre to meet up the ICT global challenges but if it must be adopted it has to be done with caution so that the traditional ideas and concept are not eroded.

Nike centre is patronized because of the following factors:

- The centre imbibes so much traditional cultural outlook that makes it unique for international tourists to patronize.
- Uniqueness of her works, quality of products, good service delivery, originality and proficiency in handling traditional motifs and forms.
- It has tie with embassies, culture and tourism ministries, travel agencies where visitors from diasporas are directed to her annexes in Lagos, Abuja, Ogidi, Osogbo. The annex has well equipped guest houses.

Felix Tie and Dye Textile Design Company

Felix tie and dye company that is located at No 3 Suleiman Street, Cole-Canna area, Ijeshatado, Surulere Lagos is an indigenous handcrafted textile design institute founded in Gambia in 1980 by Mr. and Mrs. Felix Ogunakin. The major work is tie and dye, tritik, batik and starch resist patterns (*Adire Eleko*). In 1996 the company has 10 workers; with 3 of them as professional pattern makers from Gambia. Some of them are involved fully in the dyeing section, some in starching while others are involved in ironing and trannes. By the year 2006, the work force for the tenders and professional had risen to 30. Felix is one of the major suppliers of fabric to the marketers at other Oke-Arin market in Lagos. The fabrics used for textile designs are either 100% cotton or silk or wool. The preparation of these fabrics requires washing to remove sizing synthetics especially with the Guinea brocade. Water is used with addition of common salt to make it ready to accept dye.

Type of Designs

Most of the designs are generated by the Gambians who are in the employment of the cottage industry. Customers also have the freedom to bring their designs but they are assisted at embellishing such design after having been dully advice by the workers. Patterns are usually in regular or irregular shapes. The original designs are traced on fabric to assist in folding, in running stitches with the needle both in and out. The tracing of design are done using tracing paper and original designs are mirror repeated. The design are also generated by stitching, tie and dye, flag pattern, half rainbow, Aso rock ground work resist salad pattern, spider and starch resist patterns.

Stitching

The stitching resist consist of drawing up a thread sewn within the fabric, so that the created pattern could be drawn on the fabric with string or thread. When the stitching is pulled tight, the fabric puckers create folds. The thread is firmly tied so that it doesn't loose grip while in the dye bath.

Design with sewing machine

It is one of the recent developments in the tie and dye industry in which developed pattern is executed on the sewing machine. It mode of production with the machine is called "*Surusuru*" a pattern in diamond shape made from crisis-cross diagonal line. Another is called "Scissors" made with machine for different patterns and the areas that have already been stitched by machine would maintain such dyeing.

Tie and dyeing of fabric

This method involves the use of twine raffia either in tying, twisting, binding, folding, or stitching and sewing of some areas of a piece of cloth. Varieties and differences can be achieved on pieces of fabrics as planned. The cloth could be rebounded, twisted and placed in nylon bag, and another twisted and placed in nylon bag and another twisting at the neck and tie. The dye cannot enter the revoke pinholes through both bags to let dye seep in. The designs that can be generated with these methods are half rainbow, spider, groundwork, Aso rock flag and folding of numerous shapes and patterns. The ground work resist originates from Gambia. Light starch is applied to fabric to make it wet and sticky. The fabrics are folded in tiny rows and different colour dyes are sprinkled on them. After the dye is set, the residual chemical is removed by rinsing the cloth in a soap of water. Dyeing of fabrics is done in big bowls using either indigo or vat dyes passing through all the necessary procedure required for

dyeing of fabrics.

The students that undergo their training at this textile handcraft centre are left with such lessons as being informed that at cottage levels, employment can be generated aside government and it act as complimentary practical lesson to the academic theories students receive in the classroom.

Ondo State Skill Acquisition Centre (SAC) ,Akure.

The centre was established by the Ondo State government as a parastatal under the Board for Technical and Vocational Education in the Ministry of Education and operated through supervisors, trainers who are also referred to as facilitators. The aim of the programme is to empower and create employment for the people at the end of the training. The centre is responsible for the training of different categories of citizens such as young men and women in the art of fashion designing, traditional vertical loom handcrafted weaving called *AsoOke* weaving, tie and dyeing, soap making, catering and hotel management. The graduates are assisted with loans at the end of the programme to set up their independent businesses. The centre has the following equipment: a mixer for dying cloth, wooden frame for fixing of cloth in preparation for batiking, show glass for display of end products, hand gloves worn while dipping cloth in the dye, store for boiling water and mixing wax.

The textile aspect of the centre has five instructors with 30 trainees at a time during the class. The instructor experiments a lot on samples while the students participate actively in the process. They are been supervised and guided appropriately.

The major activities of the centre is making of tie and dyeing textiles design with patterns. The motifs are generated from natural man-made objects and abstract shapes. Patterns used are from natural objects such as leafs, flowers, animals, insects, birds and man-made objects such as tea spoon, combs, cups, houses.

The method used in dyeing of fabrics or stitching to prevent certain area from absorbing dye are circle tying, stitching, knotting, folding, and pleating.

Asero Kampala/Adire International Market, Asero Abeokuta Ogun State of Nigeria

AseroAdire/Kampala international market was established on the 2nd may 2001 during the regime of Chief Olusegun Osoba, the Akinrogun of Egba land as the Executive Governor of Ogun State. The major reason for establishing the market was to decongest the popular Itoku market, the home of adire in Abeokuta following the gastly motor accident that occurred there leading to loss of many lives. The market was established to prevent occurrence of such incident. It was established to create



Figure 9. Student-on-training working on a loom for production of woven fabric



Figure 10. Knotting of fabric for tie dye design

decent environment for the practice of the handcraft textile by all the stake holders involved in the craft and marketing. The market consists of 100 lock up shops with more than 70 students as apprentice attached to the studio textile craftsmen which has good infrastructural amenities and exhibition hall.

The *Adire* is a resist method by tie or stitching to prevent colour dye from penetrating the cloth. The tying methods involve the use of pebbles, create tying, twisting and coiling, marbling, knotting, stitching, pleating, and splashing.

The dyes used are dyes of different trade names such as vat, indigo dylon and Naptol. They are classified in accordance to their activators. The process of each is different. The type of fabric determines the type of dye to be used. The materials produced are AdireEleko, batik using the following materials: tracing paper, drawing pin, brushes, tjanting foam, candle or bee wax, sauce pan for melting wax, dye caustic soda, low flat table, rubber glove and fabric materials.

The designs to be produced are drawn with pencil or

directly with wax. The wax are either applied or soaked in dye bath. De-waxing are done by cracking off when dried or use of hot water or iron.

Screen printings are done using silk screens with materials like Nylon, polyester, organdy cotton, stainless steel, copper brass and bronze. The process requires the use of mesh with firm interwoven strands that allow ink to pass through the tiny holes. The image is usually in and out from paper or stencil material. The area that is cut out of the stencils to allow ink to pass through on to the fabric. A squeegee is used to draw the ink across the screen, forcing it through the fabric mesh and through the cut oil part of the stencil to make image on the printing cloth. Different process of preparing the screen for printing includes the use of stenciling, liquid filler and, photographic emulsion.

The merchandizing of these products are all over the world. Purchase of this textile materials are through bulk purchase and retail from the market.

UNAAB African Print

UNAAB African print is by extension as a School of Art which serves as a community annex of the Home Science and Management Department of the University of Agriculture, Abeokuta established to boost practical knowledge of the students and also train people for skill acquisition in textile. The school is under the supervision of Funmi Braide, a textile lecturer at the University and in charge of the entrepreneurial craft outfit. She is the curator of UNAAB African prints. The school has a dual operations, the formal aspect of it is the training of fine artists and designers that have affiliation with the University of Agriculture, Abeokuta and its casual enrollment of students who are yearning for skill acquisition. The centre serves as tourist attraction stop-over point in Abeokuta and it is also involved in the sale of art and artifacts. It stages exhibition to showcase work of art in order to sharpen the cultural norms of the immediate environment with reference to the neighborhoods'.

The centre is made up of different sections handling printing, hand-stitching, tying and dyeing, sewing accessories, household and showroom. The screen printing method is used for designs produced using motifs from plant and still life. The designs are repeated in various ways and in different sizes; the colour separation is done based on the number of colours to be used. Before the designs are exposed on a mesh, the mesh is usually prepared by coating it with ammonium dichromate mixed with blue emulsion. The coated mesh is placed in a dryer for it to dry in a dark room. With designs placed in a reversed order on it, a glass is placed above it and below it is placed a soft object such as foam to achieve good positioning. The set-up in which the



Figure 11. Dyeing of fabrics in dye vat



Figure 12. A finished fabric with dye resists design

design is made is placed under the sun between 3-5 minutes for the design to be transferred on to the mesh. The mesh is washed to expose the design on the mesh.

Before application of dye on fabric, design could be derived through hand stitching of the shapes and patterns on cardboard or chipboards in form of stencils. After stitching the designs, the yarns are pulled and tied while some of the patterned areas are preserved by tying nylon around it. The fabric is then dyed with whichever colour the designer desires to use. The other type of tying are in different forms such as:

“*Elesowewe*” (small circles) – tie done in small circles

“*Senge*” (spiral) – tying with spiral look.

“*Egbalawa*” (waves) A popular design in *Egba* land meaning “we are the *Egbas*”

Owonikoko (cocoa shape) “It means money is important”

Blade – as usually straight.

Folds are made in squares or in angles.

Dyeing of cloths are done using vat dyes, indigotrene

dyes and dylon dye which is mostly used for chiffon fabric are done under heat application. Dye preparation are based on textile and colour of fabric to be dyed using chiffon or guinea brocade, hydrosulphite, caustic soda, hot water. After removing the fabric from the dye-bath, it is washed, while the dye is fixed by adding little caustic soda to water as the fabric is dipped in to it.

The data which were gathered through personal interactions with student on training during the supervision at work sites and their seminar presentation after the programme reveals that they had:

- Better understanding of the mixing of opaque to avoid bleeding, washing and also the art of fixing pigment on fabric by the addition of binder.
- Conceptualisation and execution of independent design, developing ability for consultancy and purchasing through participation in large commissioned job by religious organizations, traditional institutions (palaces), academic institutions such as the (Bells university of Technology) request for the making of souvenirs like bags and handkerchiefs had developed the students psychology for self-reliance and sustainability through handcrafted textiles at cottage level. The students came into conclusion that there are no free services rendered there and that the lesson learnt are as enumerated below:
 - learn a lot about colour bleaching, dyeing of cloth from deeper to light colours, that is, black, brown, deep green fabric can be dyed with orange red and other lighter colours
 - the craft is seen as self-sustaining and no free services are rendered.
 - the indigo dyeing is associated with training that is handed down from generation of family rather than the learning that is obtained in a formal institutions. The level of craft development and patronage reveals that indigenous fabrics are demanded from both local and international ends. Thousands of jobs has been created, and more hands seems to be required.
 - International exhibitions for craft promotion are still required to further enhance their capacity building through public and international market.

Research methodology

The research method adopted for this study is survey. Structured interviews and direct observations of practical activities at the cottage textile industries were conducted to elicit the opinions of the respondents (practitioners, apprentice and buyers) of handcrafted textile products within the South-Western Nigeria. The questions asked were based on issues and variables bothering on the successes and problems encountered in these industries.

Information's were gathered from students who were

directly involved in the activities of these industries for six months as a compulsory requisite in the academic curriculum at 400L at the Federal University of Technology, Akure, Nigeria. The courses are scored as IDD402 Industrial-based Supervisors Assessment (4units), IDD404 FUTA Supervisor's Assessment (2units) and IDD406 Students Report and Seminar Presentation (4units) respectively with total of 10 credit units. Another source of data gathering was through the Students Industrial Work Experience Scheme supervision of the participating students. The direct supervisory roles on the students during this scheme allows for interaction with both students, industries and the consumers of these products. Camera and video tapes were also used as instrument of data collection. The photographs and video clips were subjected to critical analysis.

Result of findings

The result of the findings from this research showed that bulk of the Students Industrial Work Experiences were gathered at the cottage level industries with very few of them having opportunity to work in the few of the surviving big time industries. A practical step towards addressing these problem is the Federal Government of Nigerians release of bail-out fund in billions of naira to textile industries to revamp the sector which in the 1960s and 70s happened to be one of the highest employer of labour. The money is expected to be accessed through Bank of Commerce and Industry. The removal of oil subsidy in Nigeria January 1st, 2012 was expected to facilitate governmental policy towards assisting the small scale industries at financing their business through loan disbursement from Bank of Industries and Micro Credit Scheme operated by the state governments in Nigeria. All of the above is expected to give more room for employment opportunities including the apprentice's opportunity by students from the tertiary institutions.

Challenges of Handcrafted Textile Industries and Training

The textile industry of Nigeria is the third largest in Africa after Egypt and South Africa accounting for 25 percent of manufacturing value added, though the recession of the mid 1980s took its toll on its cumulative production index on a decline. The crude oil evolution was one of the major causes of closure of textile industries in Nigeria when government itself paid lip-services to other manufacturing sectors and there were difficulties at obtaining textile raw materials. There are about one hundred and seventy textile industries according to Ulasi (2009) but only twenty five are still working till date. The mirage of problems that befell the textiles industries did

not only affect the employment of graduates of textile design and technology but also limits the level at which students in tertiary institutions can be absolved for internships which was a necessary prerequisite that can make them to fully accomplish their academic curriculum which stipulates that certain period of their study should be devoted to student industrial work experience with the work world. The cottage industries from the 1990s to date have actually provided significantly spaces for the training short fall created by the big manufacturing textile concerns which Emeruwa (2009) described as revolving on most cases around family set up in home environment.

Recommendation

Experience from this study requires that government should make it compulsory to industries that create a synergy between work world and classroom Education tax must be paid by industries so as they can showcase how important the output from the classroom can support industrial devolvement through quality graduate.

Conclusion

Handcrafted textiles in Nigeria readily serve as alternative to industrially manufactured printed textiles from the textile mills. It reduces the gap of unemployment, encourages youth for capacity building and discourages restlessness. This centres allows intern students and craftsmen understand the entire process of fabric production as it involves planting, harvesting, collection of fabrics, ginning, carding, spinning, dyeing and weaving. It allows them to know the local technology of managing the dye and fabric fastness.

The continuous development of the traditional *Adire* and *Kampala* as modestly done by these textile cottage industries had already been attracting patronage that cut across international boundaries and shall in the long run change the psyche of the educated elites who wear less of indigenous apparel for western dresses. The production is a challenge to threat from imported fabrics on African indigenous handcrafted cloths. The former Nigerian president Chief Olusegun Obasanjo and the current Governor of Ondo State of Nigeria have demonstrate this through their regular patronage of dress attire in traditional *Adire* dresses, a trend that advertises the industry and gave it high hope of continuous existence and public patronage. The strive for continual survival by these cottage industry has led to the protection of the technical and artistic heritage value of hand crafted textile, maintenance of the cultural tradition and standard that can enhance performance quality of these traditional textile products.

Acknowledgement

The following students who are graduates of The Department of Industrial Design of The Federal University of Technology, Akure-Nigeria are duly acknowledged for the useful information they provided through the written technical reports, Student Industrial Work Experience (SIWES) seminar presentation, and on the spot direct participation in the cottage industrial training.

Emidun, O. O., trained at Kampala/Adire International Market, Abeokuta.

Ajakaiye, O. A. trained at Ondo State Skill Acquisitions Centre, Akure.

Akinsola, K. A. trained at Felix Tie And Dye Textile Company, Lagos.

Aregbesola, O, Tade, O. and Salami O. F., Ajani, W. worked as Student Trainees at Nike centre for Art and Culture, Osogbo.

Orhotowho, P. trained at UNAAB African print, A.G Leventis memorial Centre for learning, 14 Aka road, Ijemo – Abeokuta. Feb. 2007

References

- Adepegba C. O. (1989) Modern Nigeria Art: A Classification Based on Forms *Kurio-Afr. J. Art and Criticism*, Ile-Ife, 1(2):111-138.
- Bonestriel, G (1985). More Cap Quilting. Alabama USA: Oxmour House Inc. 12-15
- Emeruwa, V. (2009). Textile Industry in Nigeria: A Case Study. Retrieved 12 December 2009 from www.textiles-nigeria.com
- Eicher JB (1976). *Nigerian handcrafted Textiles*. Ile-Ife: University of Ife Press.
- Polakoff C (1971). *The Art of Tie and Dye in Africa. African Art*, African Studies Centre, University of California USA
- Polakoff C (1980) *.African Textiles and Dyeing Techniques*. London:Routledge and Rihan Paul.
- Temraz SA (2009). Relevance of textile Handcrafts in SIWA OASIS: Internationalisation and Role of University Networks Proceeding of the 2009 EMUNI Conference on Higher Education and Research. Poxtozev, Slovenia, 25-26th, 2009.
- Ogunduyile SR (2005). *Cottage Textile in Nigeria: the Need for Environmental Protection*. *J. Arts and Ideas*. 3:104-116
- Ogunduyile SR (2004). Indigo Dyeing as a Craft among the Yoruba's of Southwestern Nigeria. *J. Niger. Crafts and Technique*. Federal University of Technology, Akure.
- Ogunduyile SR (2005). *Cottage Textile Production: A step out of poverty*. Inaugural lecture series 41 delivered at the Federal University of Technology, Akure.
- Ulasi U (2009). The State of Textile Industry in Nigeria. Retrieved 12th December 2009 from http://www.articlesbase.com/journalism_article/the-state-of-textile-industries-in-Nigeria-129589.html.