

## TIE - DYE (ADIRE) AMONG THE JUKUN PEOPLE

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### **Abstract**

*Tie-dye is a craft that is widely practiced in many parts of the world. As an indigenous craft it could be used to forge local identity in the form of dress code. This is especially true for Africa, and Nigeria where Adire, an important Yoruba died cloth, is a product of the tie-die technique. Adire is inextricably connected to the economic and social fabrics of the Yoruba people. Apart from its role in the socio-cultural milieu, it also serves important economic roles by providing the people with job opportunities, source of income, among other benefits. The major material for this craft mostly derives from local sources and the process is slow while the finishing seems poor most of the times. This paper argues that to be able to make Adire art more attractive to the future generation, the finishing needs to be improved.*

### **Introduction**

One can simply define Tie-dye as a method of tying or stitching fabric together to prevent the absorption of dye to a particular area (Ogumor, 1993:110). Collier (1990:86) states that, dyeing is the process of applying colour on cloth to produce a design. *Nkeonye* (1993:67) views tie and dye as a method of introducing coloured or white pattern on cloth, by tying it with strong strings in various ways before immersing it in the dye bath; the colour is absorbed in all except the tied areas thus revealing a patterned result which is seen by untying the dyed material. Although the techniques of tie and dye vary from culture to culture, the concept of dyeing remains one of the oldest methods of printing design on fabric. Another viewpoint of tie and dye is expressed by Peter (1993:47), who states that tie-dye resembles both printing and dyeing in

different ways. It resembles printing in that it enables colour pattern to be introduced on the fabric as in textile printing, the technique employed is different. It also resembles printing in that, ordinary dye liquor and not a printing paste is used in each case, and yet can be applied to the fabric by immersing it in the dye solution containing the necessary fixation chemicals. Both methods of colouration employed dye resist printing to introduce patterns on clothes; that is, patterns are introduced by restricting or inhibiting the absorption of colour in selected area of the cloth. The design obtained from the placement of the pleats, stitches and ties, can never be an absolute means of predetermining the final visual result as agreed by Balfa (1972:40). Balfa also argued that the common African desire for a pattern of square is achieved by sewing pleat variation. The thread is sewn through one or more layers of fabric and one end is knotted. The thread is then drawn up until the fabric is held tightly together in a closely packed pleats or folds.

Although the exact origin of tie and dye remains unknown, documented evidence indicates that the art has been practiced in China between 615 and 906 AD, in Japan between 555 — 794AD and in some parts of Asia, Indonesia, India, and Africa, particularly Nigeria (Gausa 2005). The concept of tie and dye has provided a medium for creating an explosion of beautiful colours (Banjoko, 2000:64 — 70). Another forum for achieving tie and dye is through the use of resist technique, where a section of the fabric is either tied, folded or clamped with block or covered with wax to keep fabric area from the dye. The protected section does not absorb the dye and un-dyed pattern against a dyed background is the result.

In western parts of Nigeria, one of the many traditional methods of Tie-dye is *Adire*. This method of design is practiced particularly in areas where indigo dye cloths are produced. '*Adi*', means 'to tie' and '*re*' which means 'to dye'; these are Yoruba words used in towns where resist dyeing techniques is popular (Areo and Kalilu 2013). *Adire* patterns are made by pleating of cloth, as affirmed by Hodge (1982), who also states that patterns are made by pleating of the cloth so that the colour is kept from inside of the folds by knotting and dyeing it or stitching with raffia fiber from banana leaves or thread.

The simplest tied design is made by pulling up portions of the cloth at an interval, and either knotting or binding round them before dyeing. The tied portion is later removed after dyeing thereby creating a pattern of circles. Seeds or pebbles are sometimes tied into the cloth to create patterns; some impressions may be sown into the fabric with thread and the stitches drawn up tightly before dyeing.

However, in the tie-dyeing centres of northern Nigeria, cloth dyed with indigo patterns are made by pleating and to assure that colour is kept off the inside of the fold, knit, tie and sometimes stitching is done with raffia fibre from banana leaves or thread (Polako 1981:16). This method of patterning leaves the original un-dyed area as background for the design in the dyed area (Hodge, 1982:41). In this method of tie dye, fine cloth is more adaptable to fine binding or stitching and small pattern, while heavier cloth tends itself best to larger patterns. Dendel (1974:52) affirmed that instead of the thread in sewing and wrapping area which are to resist dye; Raffia is widespread in Africa; raffia is larger than sewing thread. It is often spread on the fabric, with small decoration holes at regular intervals.

Most dyeing in Nigeria are done through the aid of mordant (fixer). Mordant is a chemical solution that is applied before or after the dyeing so as to enhance its fastness to light, washing, and to have a brilliant colour (Balfa 1972: 40). Local ash is also used by our local Nigerian dyers as mordant (Dendel 1974:70).

The selection and the preparation of mordant depend largely on dye type and bath type. In both Northern and Southern parts of Nigeria, for example, where pit bath is popularly used for dyeing, wood ash is used as mordant (Gausa 2005). Mordants are also made from the mixture of chaff or bull rush millet and wood. It is also derived from dye pit sediments “katsi”. Mordants can also be sourced by roasting pale earth containing lime and burning it with chaff and the resulting lye cake is put into a hole in the ground, covered with more grass and chaff and burnt to produce a white ash known as “zarta”. In a situation where pot is used as bath, mordant is obtained by filtering water through ash. The new ash balls are broken up and mixed with fresh ash and the mixture is sprinkled onto prepared sieve layer upon layers and allowed to settle for three hours before the water is added on top of it (Stanfield 1972:2 1). The water drip through the ash taking the salt from the ash with it, when the salty water is good, it has bitter taste and is a colour of a weak tea.

This research focuses on the tie-dye (Adire) among the Jukun with emphasis on improving the sheen finishing, making it look attractive and lustrous. Adire in Jukun land is not very different from the aforementioned, because it is not only the Yoruba that practice *Adire* dyeing. The Hausa people of Kano, Zaria and some other parts of the north too practice the tie-dye as an occupation. Gausa (2005) states that “for many centuries, the great center of Kano situated as it was the end of the caravan routes across Sahara, was famous for its cotton cloth which was reported as far as the Mediterranean and the Atlantic coast”. Hodge (1982:37), also notes that Kano, where Bagauda ruled from 999 to 1063AD, was the first city where the famous Kano dye pots were probably constructed soon after his arrival, making it possible to dye the locally woven cloth before exporting it. It is believed that other parts of the north such as Sokoto, Zaria and the Kororafa kingdoms where the Jukun originated probably got their concept of pit dyeing of indigo (Attire) from the Yoruba.

The above cited examples of tie-dyeing and its processes are not different from the method applied among the Jukun people of Taraba state. The Yoruba are particularly skilled at tie-dye, which is called ‘Adire ONIKO’ (meaning to take the tie and dye). Indeed, it is among the Yoruba that these patterns of dyeing are most complex. Abeokuta, Ibadan and Osogbo are the main centres of Adire, although they could also be found among the Hausas and along the west coast (Senegal and Sierra Leone). Adire ‘ELEKO’ which dates back only to about 1910, mostly seen among the Lagos and Abeokuta dyers, is a starch resist method similar to batik of India and far East. The process of making Adire ELEKO involves the boiling of Cassava flour, lafun, together with white alum, which prevents the starch from dissolving in the indigo Vat until it thickens to the consistency of Pap. The boiled starch ‘EKO’ is strained through a cotton cloth and wrapped with ketemfe leaf, which keeps it fresh for up to two weeks. It is painted onto the cloth either using free hand or stencils. Formally, the cloth was woven locally on home spun yarn, but most recently white shirting is used almost exclusively and this gives a pale blue pattern on dark blue ground. Alison Hodge (1982) also confirmed that the starch is painted thickly onto the cloth to prevent the dye from penetrating under it. It is painted on one side of the cloth only, and is allowed to dry thoroughly before the cloth is dyed. In general, every *Adire* and every design on it has a special name.

Examples of such special names are the popular cloth ‘Ibadandun’ (we enjoy Ibadan), ‘pele oyo’ (a facial mark common in part of oyo), “Sokoto” (Trousers), “eiye” (bird), and oke mapo (mapo hill in Ibadan), among others. In fact, this proves that all types of Adire have names. Other forms of Adire in their ascending order include Adire Oniko, Alebere (stitch resist), Adire

Eleko (starch resist) and Adire ‘Eleso’ (pebbles resist), and Adire Batik (wax resist). These are the various adaptations that these local craft undergo through the ages. Areo and Kalilu (2013) confirm that, contemporary adaptation of the *Adire Eleko*, the traditional paste resist *Adire*, into the batik version, which uses wax as a medium of resist, started in Osogbo in the Mbari Mbayo workshop organized by Suzanne Wenger, Ulli Beier and Georgina Beier in the 1960s.

Although Bukola (2013) claims that another fundamental issue that must also be noted is the tendency to consider *Adire-Eleko*, *Adire-Alabere*, *Adire-Oniko*, etc, as different types of *Adire* there is only one *Adire*, *Adire-Eleko*, *Adire-Alabere*, *Adire-Oniko*. These are used in other literature as different types of Adire when in actual sense they are mainly different designs based on patterns and depth of dye. But this findings tend to disagree with Bukola’s stand which states that it is not only the patterns and depth of dye that differentiate them but also a sharp contrast in the techniques of the craft. As elaborated by Olufunmilayo (2014), lighter, tightly-woven commercially made fabric substituted for heavier, coarser homespun; commercially printed cottons, brocades, and other luxury textiles were used, sewing machines were used to produce *Adire alabere* - more detailed patterns, new patterns such as "Chieftaincy tree" (*Igi oye*) and embellishment with machine embroidery - late 20th century. The introduction of starch and wax resist techniques around 1910 (painted, stenciled or stamped paste or wax resist Exotic fold and dye 1977, advent of Festac).

### **Textile recycling**

Textile recycling is the process of salvaging and re-using or re-processing used clothing, clothing scraps or fibrous materials from municipal waste stream (Wikipedia, 2014). Recycling of materials is a key component of sustainability and the recycling of textiles is surely one way of contributing to sustainable use of resources. Available literatures indicated that about 8% of textile materials which would have been sent to landfills are recovered annually in the United States through recycling processes such as resale of used textile materials, donation to charity and conversion to rags (Wikipedia, 2014). Although such statistics do not exist in Nigeria, empirical evidence suggests that there is a huge potential for recycling of textile material. For example fabric that has been tie-dyed can be recycled and used as lamp shades, table covers, window blinds, bed sheets, pillow cases and clothes, among others. In some cases, used old clothes are tie-dyed to look new and interesting to wear again. The recycling of textile materials has the potential of reducing pressure on environmental resources such as fibres as well as protection of the environment from over exploitation of its resources (Textile recycling, 2014).

### **Brief history of tie-dye among the Jukun**

The tie-dye attire among the Jukun is a way of life which, among many other things, serves as a means of motherhood identification. The Jukun people have different types of cultural attires made from different colours, patterns and weaves. Weavers among the Jukun people produce their materials ranging from narrow strips of cloth from narrow loom to a large piece of yard for garment making which is used during their cultural festivals. During festival the king and his prominent chiefs made a display of authority and power to their subjects using these varying colours, pattern and weave. A good example of Jukun Adire is: the *Kyadzwe*, *Ayin* - po, *Adire* and *Baku*. *Kyadzwe* is used by the Jukun rulers for royalty. My Life (216) states “Jukun strip weavers used locally spun cotton. Only yarn dyed blue or black was available. These blue

threads were woven with a dull white cotton yarn to produce time and block simple geometric patterns for local people.” The finer weaving of King’s royal Kyadzwe cloth was highly restricted. Skilled royal weaving groups were established to produce high-quality materials.

The weaving technique was jealously guarded and kept secret. Traditionally, the king would never wear the same cloth in public more than once, hence hundreds of clothes were woven for him to use. The Jukun Adire also contains some patterns which resembles the ones on Adire ‘Eleko’. These patterns resemble fish, birds (eiye in Yoruba), fruits, leaves, sunsets, rainbows, stars and moon and other spectacles of nature. The symbolic meaning of the cloth inter-woven with golden thread represents wealth, green-freshness and newness, black — sadness, red showed danger and white purity and joy.

Gausa (2013) states that the traditional *Nyikpo* gown is split longitudinally at both ends. It flows from the neck to the feet. It is decorated with triangular patterns in a blue colour (which signifies him as a rain maker). Also prominent among other colours is red which partially forms the background colour depicting the warrior nature of the Jukuns. The gown has a long white strip pattern at the front which runs from the neckline to the base or end of the cloth. The white line stands for the peaceful nature of the Jukun people. The *Nyikpo* garments are worn by the Aku for a variety of important ceremonies and religious functions; and they clearly take pride of place in Aku’s official wardrobes. Baku is another traditional cloth which is strictly used by slaves: Aku (the king: supreme. after God) presents this attire to the slaves that are loyal to the palace. It consists of black with white strips on it. The portion of the black colour is mostly bigger than the white portion. The black colour, according to the jukun legend, means the bad character or sadness, while the white colour means peace. This means that despite the fact that the slaves seem loyal to the king, their bad characters belie their peaceful loyalty or allegiance. According to the Jukun people, one of the typical examples was the one *AKU-UKA* of Wukari gave to *TOR- TIV* of Tiv people on his coronation day a long time ago when they were his slaves. But now, the name was changed to *BAGU* by the Tiv people.

Lastly is the Adire attire which looks like the *Adire ONIKO* of the Yoruba people. This is generally used by all except the King or the royal family. It has two colours which are blue and white; where white symbolizes peace or joy, blue symbolizes rainfall. The Adire is produced by stitching the cloth with thread or raffia, banana leaves fibre to produce fold which is formed as the result of tightly drawing the yarn stitches to make it stand tightly close. This prevents colour from penetrating the fold thus it is dyed in indigo dye liquor. This adire cloth is mostly used as symbol of identification. Wherever a Jukun man sees a man or woman wearing this material, they will quickly call out “Nwuza” (meaning brother).

The Jukun people are highly conservative people and very proud of their historical past. They have kept larger part of their cultural norms, value and beliefs until date. The ethnic group evolved from a Kingdom known as *Kwarorafa* kingdom in Nigeria which today are found in about conjoined states in Nigeria: Kano, Kaduna, Niger, Bauchi, Plateau, Bernie, Taraba Nassarawa, F.C.T, the Kano people (Jukun) conquered most of Hausa land in the 17 century. Meek (1931) states that “this famous tribe, whose kingdom was called *Kwarorafa* wielded great power for some centuries. They describe themselves as the *Wapan* but they are best known by the name “Koro”. Their capital was at *Bepi* or *Apa* and situated south of the Benue, about 40km North east of *Bantaji*. When *Koro* broke up from their capital city *Apa*, large number of Jukuns moved to northern region, settling and becoming chiefs in the country of the *Butuwa*, *Warjawa*, *Shira*, and *Misau* there are said to be descendants of *Wapa-Waku* and son of *Akitapa Kwararafa*

or *Kororafa* or *Kwarorofa* and Jukun are generally considered to have been ancestral to the modern Jukun state centering around *Wukari*.

Tie-dyeing (Adire) is a resist technique of cloth dyeing to produce a design. World book (1997:420) says Tie-dyeing Adire is one of the first methods of printing designs on fabric and various techniques are used in many cultures. Among which are: stitching, tighten, Waxing, knotting starching, etc. While so much has been written on tie-dye, little or nothing has been documented on the tie-dye among the Jukuns. Although tie-dye Adire has been a symbol of identification, beauty and cultural festivity, the finishing of the Adire is poorly done. Hence; this paper is a studio process aimed at improving the finishing aspect of the Jukun-made Adire for better appreciation. This process shall involve the examination of the method of Adire production and its finishing, its cultural value among the Jukun people, and the symbolic meaning of the colours in relation to the Jukun culture. The type of dye stuff used in dyeing are studied, as well as the educational and economic significance of the Jukun Adire.

## **Dyes**

A lot has been written about dyes and dyeing processes in Journals, Textbooks, magazines; where dye has been described as colouring agents. It cannot be directly applied on fabric, but has to be mixed with some chemicals (mordants) and water. According to the world book (1992) which stated that “dye must be dissolved before it can work”. When fabrics are placed into a dye-bath, there occur two forces in action that is the force of attraction and the force of repulsion. The fiber absorbed the dye molecules through the help of the force of attraction while the force of repulsion occurred between the water and the dye molecule via its separation from water. The molecules give the fibres a desired colour. Dyed textile varied in their ability to hold colour. Colour fast fabric does not fade under sunlight, washing, perspiration or rubbing when in use. The new Encyclopedia Britannica (1997: vol 5:227) describes dye as complex organic compound that are intensely coloured and are utilized to colour other materials because of the presence of chromophores and auxochrome radicals.

Oguntona (1999:43) says dyed shades are obtained by treating the fabric with a solution of dye, which in most cases has an affinity for the material either with or without special preparation through an event of the yarn or fabric by the dye liquor is of most importance and is basic of all successful dyeing. Lexicon international Encyclopaedia (1983: vol 8:30 — 31) defines dye as a coloured substance used to impart more or less permanent colour to other substances. Dye colour is used in the manufacture of plastic products, but their most important use is in colouring of textile fibre and fabrics. New Cebton Encyclopaedia (1969: vol 11:420 — 434) defines dye as organic or inorganic compounds of the so-called transition metal which are generally those elements that have incomplete electronic orbit present in intense colours. For Coller Encyclopaedia (1995: vol 8: 31-34) dyes are chemical substances used to impart colour to material such as textiles, paper, leather and wood. Dyes are different from paints because they bond with the fabric and have no hand (the feel touched with hand) unlike the paint which lie on top of the fabric I do have hand.

It is a class of material used to render colour to inks as opposed to dyes are normally completely dissolved in the chemical any type of colourant that transfer colour by dissolving in a solution are called dyes. Also according to Wikipedia net resource (2001), Sail dye is a coloured substance that has high affinity to the substrate to which it is being applied. The dye is usually

used as an aqueous solution and many required a mordant to improve the fastness of the dye on the fabric (in contrast, a pigment generally has no affinity for the substrate, and is insoluble). Dye as a colouring agent varies one from another due to the method of their application and origin and we have basically two types of dye.

1. Natural dyes.
2. Synthetic dyes

Natural dyes are saffron, henna, cochineal and logwood and most of them use mordants, says McGraw-Hill Encyclopedia of Science and (470 — 474). It states that synthetic dyes are manufactured later because natural dyes are limited in colour shades, with the aid of the synthetic dyes, colour variation and more brilliant colours are easily obtained. Natural dyes are also classified into animal plant natural dyes. Those obtained from animals are called animal dyes that is Tyrain purple, kemes, codineal, techelet, while plant dyes are the ones derived from plants which include Sunflower, Turmeric, Woad, Alizarin (modder) Dyes broom, Logwood, Brazil wood Quercitron bark, weld old fustric, Cudbear as affirmed by the Columbia electronic encyclopedia (2003).

Synthetic dyes are classified as acidic or basic largely according to their application. Columbia electronic encyclopedia states that “dyes are classified also as ‘acidic or basic according to the medium required in the dyeing process.”

### **Techniques of the craft**

Tie and dye is a method of resist dyeing. It has many techniques that are used in Nigeria. These are binding, knotting, stitching/sewing (Tritik), woven strips, clapping etc.

**Binding:** is the method of tying firmly, the portions of cloth to be dyed and pulled up to make round, square or oval shapes on the cloth to project the original colour of the cloth.

**Knotting:** is a method of twisting and tying parts of a fabric together to project the original colour of the material.

**Sewing (Tritik):** is a method of resist common among African textile practitioners. In this process, sturdy thread is stitched into a fabric in a predetermined line direction — straight, wavy or zigzag. The thread is then pulled so that the cloth gathers. When they are tightly bunched up along the line of cord, it is tied up, forming the resist. The dye cannot penetrate into the enclosed tightened gathers close to the cord or thread.

### **Stages of Adire execution and finishing**

Before starting anything like Adire material all purchased, de-sized in water to remove any impurities (wax) from the fabric. The white cotton fabric is stitched in some geometric shapes such as squares and triangles as displayed in plate 1.

**Tie - Dye (Adire) among the Jukun people – *Gausa Solomon and Abubakar Ezra***

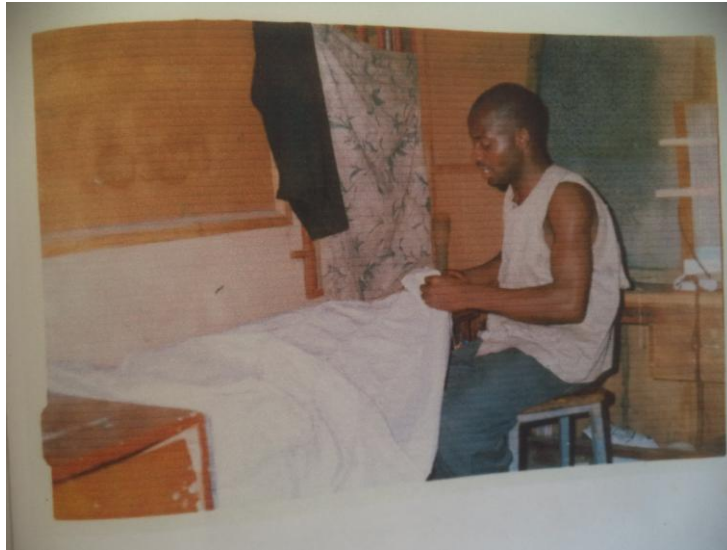


Plate 1

The stitched thread is firmly pulled or tied together then the fabric submerged into the dye liquor. The photograph of the dyed fabric is shown in plate 2.



Plate 2: untied stitches

The dyed fabric is then scoured in detergent and water to remove excess dye or colour after which the Adire is dried on dry line as displayed in plate 3.



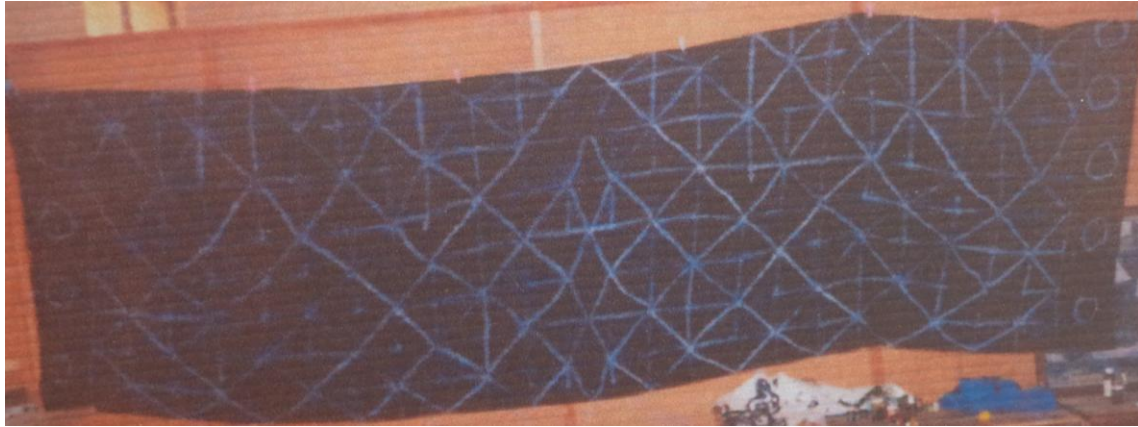


Plate 3: Adire fabric on drying line.

As far as the present Jukun Adire production is concerned, this is the last stage of production. But this research cannot be successful without the researcher exploring a way to give it the sheen effect so as to obtain a better finished appearance on the material.

### **The Finishing**

The production of any good is not a problem but the finishing of the product is what attracts most customers. Hence, the need to improve Adire finishing becomes very paramount. The following are the various steps used in carrying the finishing:

Step I. 5 grams of Karo<sup>®</sup> or Arabic gum and 20 grams starch are collected separately for the experiment

Step II. The Karo or Arabic gum is first of all washed in a cold water to remove any form of impurities such as sand and sticks.

Step III. The washed gum is then soaked in hot water to allow it to melt into liquid.

Step IV. The dissolved gum is mixed with the starch solution.

Step V. The Adire is then wetted, sized and allowed to dry under the sun

Step VI. The local calendaring method is finally applied and the resultant effect is the permanent sheen appearance as displayed in plate 4.

**Tie - Dye (Adire) among the Jukun people – Gausa Solomon and Abubakar Ezra**



Plate 4: calendared Adire fabric.

Differences between the local Jukun Adire with the Studio experimented Jukun Adire fabric production:

Local Jukun Adire fabric	Studio experimented Jukun Adire fabric
Natural dye is used for the production of the fabric	Artificial (Synthetic) dye is used for the production
Stitching techniques is used in the Adire execution	Stitching techniques is used in the Adire execution
Reagents used are local mordant	Reagents used are caustic soda & hydrous chemical
It stains underwears and it is not fast on fabric	It does not stain underwears and it is fast on a fabric
No additives: starch and karo or Arabic gum	There are additives: starch and karo or Arabic

	gum
Not calendared	It is well calendared and packaged
Poorly finished and is not lustrous	Well finished and it is lustrous like Senegalese

### Conclusions and Recommendation

The craft of tie-dye is like an industrial sector where different parts contribute their quota via division of labour to achieve a successful end. In the sector we have the farmers that cultivate the cotton and the indigo plant as raw materials. We also have the weavers who weave the fabric and the dyers who produce the Adire material. This craft, because of the trend of operation, tends to provide employment for the local community and also serves as a source of income to the farmers, weavers and dyers. If it is produced on a large scale it will encourage reduction of price and patronage of foreign goods and other fabric materials, and at the other end enhance the patronage of local fabric and expansion of local market in our country.

The craft of tie-dye tends to influence the educational, cultural, aesthetic and economic lives of the people of Nigeria. Its adaptability to the environment and the up-to-date demand of the product has made the craft a popular trade. That is why today in most institutions, the craft is encouraged. The tie-dye craft is also seen as an adornment of the people and is used extensively at houses as a means of beautification, in form of interior decoration. And the cultural significance of the craft can be seen among tribal groups and individual.

Tie-dye craft is produced for various reasons, which includes social, cultural, aesthetic, political and religious. Its creative characteristics influenced the consumers to crave for them if they are well finished. Taste and regards for tie and dye as well as the acceptable norms and traditions reflect the type of tie-dye that is produced. Being that the factor that influence their production differ from one area to another. But most importantly, the major function of tie-dye is found in the dress code of the people. Though Taste, beauty and correct sense of judgment of product finishing is at increase every now and then, the thought for change should always be remembered as we look forward to producing Adire material for our cultural identity and economic purposes. I suggest and recommend that to be able to hold fast to our cultural identity in this technological, advanced and developed society, we should also consider people's preference and choice as regards beauty and finishing. Secondly, it is possible to preserve cultural identity only if this seemingly outdated clothing style is not boring to the people every now and then.

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