THE SMALL-SCALE DYE INDUSTRY IN KADUNA STATE PROBLEMS AND PROSPECTS

BY

OJOMOH, JOSEPH

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OCTOBER, 2000

CERTIFICATION

This thesis titled: The Small-Scale Dye Industry in Kaduna State. Problems and prospects written by Ojomoh Joseph meets the regulation governing the award of Degree of M.A. Industrial Design of Ahmadu Bello University and it is approved for its contribution to the knowledge and literary presentation.

Prof. Toyin Ogunsona 9/11/20
Supervisor — Date and Signature

DR. K. A. BELLO 7/11/2000
Member, Supervisory Committee — Date and Signature

B. A. Sanni 9/11/2000
Head of Department — Date and Signature

..... 27/02/02
Dean, Postgraduate School — Date and Signature

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DEDICATION

Dedicated to the memories of my parents:

Chief Aiyegbusi Ejigbo Ojomoh and

Mrs Ajibare Ojomoh

ACKNOWLEDGEMENT

I owe a great deal of gratitude to the Almighty God for His great love bestowed on me in seeing me through in all my endeavours in the course of my studies. I am particularly grateful to Prof. Toyin Oguntona, my Supervisor, who never relented his effort from the start of my studies in providing me with relevant materials, books, words of advice and financial support for the success of this write-up.

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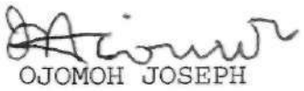
Finally, I wish to express my profound appreciation to my beloved wife, Florence Ojomoh for her moral support, encouragement and the care for our children and home in general during the period I was away.

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DECLARATION

I hereby declare that this thesis has been written by me and it is a true record of my own research work. It has not been presented in any previous application of higher degree. All sources of information were adequately acknowledged by means of references.



OJOMOH JOSEPH

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ABSTRACT

THE SMALL SCALE DYE INDUSTRY IN KADUNA STATE: PROBLEMS AND PROSPECTS

This study sought to investigate the operation system of some small-scale textile dyeing industries in Kaduna State. This social enquiry investigated the nature of the industries and sources of raw materials. It also sought to know the significance of the industry to the people of Kaduna State and the nation as a whole. The study also has social-economic educational and cultural significance. It would set the blue prints for the industrial development of Kaduna State. It would also encourage self employment, preservation of cultural heritage, indigenous skills and investment, utilisation of local resources and contribution to the literature in this subject.

A review of literature was done to show the contributions made by some old masters. The study also looked into the problems and prospects of small-scale textile dyeing industry in the state.

At the end of the research it was observed that there were some factors that contributed to the setback of small-scale textile dyeing industry in Kaduna State. Suggestions were made for improvement.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY:

With the introduction of austerity measures by the civilian regime of President Shagari, and the most recent structural adjustment - programme by the current administration, individuals and state governments started looking inwards with a view to solving the socio-economic problems of this nation. The government set in motion the National Directorate of Employment (N.D.E) with a view of producing financial and technical assistance to individual and private organisations to set up small-scale industries, thus, the government intends to inject the spirit of self-reliance, at the same time minimize the problem of unemployment.

Small-Scale textile industry in both rural and urban areas is of fundamental importance in nation building especially as a factor of promoting industrial self- reliance Yusuf (1990). There is no doubt, the present economic hard-ship was largely affected by the nations import orientated type of economy and over-dependency upon foreign machinery by the industrial sector. The long term effect of this economic phenomenon is the nations huge foreign debt. The country therefore, needs a better economic policy that would lead to self-subsistence.

One of the Federal Government's priorities towards a better economy was the embargo on importation of various items

like textile fabrics. This would encourage local production and exportation to other countries too. To further buttress this drive, the Federal Government introduced small-scale loan scheme through the National Directorate of Employment and Peoples Bank to encourage establishment of small-scale industries.

Kaduna State is one of the ancient Hausa States in Nigeria where traditional indigo dyeing has been practised before the coming of the white man. However, this craft is on the extinction. Out of the many 'Marinas' known within and outside Kaduna state, only one remains in existence, that is the one in Zaria city in Zaria town. I was inspired to carry out this research primarily because of my concern for finding out the state of the traditional dyeing industry in Kaduna State and make it a potential small-scale industry.

Textile was basic in the industrialization of the Western world and is understood to be playing an important role in the industrial development of developing countries such as India, Brazil and Korea. The developing countries even with their limited resources of capital and skill, can quite effectively venture to expand and diversify the products of their traditional textile industry. Kaduna state in particular and Nigeria in general are not exception.

The outcome of my research on an improvement of Traditional dyeing as a potential small scale textile industry in Kaduna state would be very invaluable to the local craft-

men, Students, the Educational Resource centre (E.R.C), the Ministry of Commerce and Industries private organisation, National Directorate of Employment (N.D.E), individuals and the nation as a whole.

1.2 STATEMENT OF THE PROBLEM

Kaduna State was among the famous States for its traditional indigo dyeing pits (Marina), during the trans-saharan trade in the northern part of the country. Dyeing was one of the traditional means of fabric decoration used to change the colour of the cloth permanently. Heathcote (1976) stated that: The Hausas were once renowned in West Africa for the quality of their indigo-dyed cloth, and considering the competition from factory made material, a surprising amount is still produced, though most of the products came from larger towns. Almost all the many dye-pits in the rural areas have been abandoned. An examination of literature on dyeing and establishment of small scale textile industries, revealed that no previous study has been conducted on the improvement of traditional dyeing as a potential small-scale textile industry in Kaduna state.

No wonder why it has not been found necessary to conduct a study in the past to find out why the craft of dyeing, and how much effort has been geared to improve it to face the challenges of the competition from factory made material. Is the craft of dyeing vanishing because of the synthetic dyes? or is the traditional indigo dyeing no more appeals to the

consumers compared with the factory made colourful dyes? or is it because of the government non-challant attitude towards the craft? Oguntona (1987), stated that the first commercial textile industries were established in Nigeria in the early 1950s, to my observation, however that year marked the beginning of the end of traditional dyeing industries in Kaduna state. Since the establishment of the modern industries, the traditional dyeing started disappearing from villages and cities in Kaduna state.

Against this background a study like this dealing with an improvement of traditional dyeing as a potential small scale industry in Kaduna state becomes imperative. However, the federal Government has realised that survival of the small scale industries is the backbone of our industrial and technological progress. Hence the establishment of National Directorate of Employment (N.D.E).

The study will also be a meeting point between traditional and contemporary techniques, and the researcher will look into the two techniques in the aspects of the production, skilled manpower and market for the finished products. This will help the researcher to take into consideration and investigate the concept of design and organisation of the industry.

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1.3 RESEARCH QUESTIONS

In order to facilitate the accomplishment of the purpose/objectives of the study, the following research questions are formulated.

1. What are the factors responsible for the gradual decline of traditional dyeing craft in Kaduna states?
2. What are the possibilities of improving the quality and diversity of design techniques of traditional dyeing craft in Kaduna state?
3. To what extent can the traditional dyeing craft be transformed into a potential small textile industry in Kaduna state?
4. To what extent has the government of Kaduna State been encouraging small-scale and cottage textile industries based on its policy on small scale industrial.
5. In what ways does the small-scale textile dyeing industry contribute to the economic social and cultural development of the state?
6. What are the nature of raw materials used in dyeing?
7. What method does the industry use in distribution of the finished products?
8. To what extent has the small-scale textile industry in Kaduna state got the required raw materials, skilled manpower and market prospect for its products?

1.4 PURPOSE OF THE STUDY

As an objective of this study, efforts will be made:

1. To find the means of saving traditional dyeing from total collapse.
2. To determine the possibilities of improving the dyeing methods of the synthetic vat dyes to the craftsmen.
3. To determine the possibilities of improving the quality and diversity of the finished products by making it more appealing to the consumers.
4. To determine avenues of transforming the small scale textile industry in Kaduna state.
5. To reveal the contribution of batik industry to the cultural life of the society.
6. To find out the problem facing the industry in Kaduna state and how to tackle them.
7. To enable the researcher to identify reasons why there are few small scale textile industries in Kaduna state.
8. To enable the research to identify the reasons why the practitioners of small scale textile dyeing industries continue importing textile dyeing materials.

1.5 SIGNIFICANCE OF THE STUDY

This study is significant in the following ways:

1. Educational value: Educationally, this study will be of great importance not only to the professional practitioners but also to the nation generally.

According to Belfer (1975), the importance of studying the past art and culture is to provide a "store house" of valuable knowledge and record. To my own opinion, Belfer (1975) was trying to show the importance of historical documentation of the past, present and future of the craft. The past documented knowledge on small-scale industry will be up-dated for the new generation of textile designers and researchers. This study seeks to validate that concept of dignity of labour. Batik art involves a lot of manual labour, and through practice, knowledge is disseminated by watching, imitation and practice. Hence, professional practice is an integral part of education.

I am of the opinion, like other art educators that practice is central and crucial to art education. (Read, 1966) invigorates this position thus:

> ....Perfection of art must arise from its practice from the discipline of tools and materials... art must be practiced to be appreciated, and must be taught in intimate apprenticeship....

In Nigeria today, modern education is producing thousands of young men and women who are not only unemployable because of incompetence but also do not want to exert themselves to earn a decent living (Majasan, 1967). Many Nigerian artists are self-employed and employers of labour. Names like Bruce Onabrakpeya, Demas Nwoko, Yusuf Grillo, Jimoh Ibraimoh, Twin,

77, to mention a few fall into this category. They have come thus far through self-discipline and dedication to the course of art, because their brand of art is a form of social behaviour, and in the word of Eugene Kaelin, "an institutional means of intensifying the quality of human existence" (Kaelin, 1970).

2. **Cultural Value**:- Culture is a way of life of a people, how they eat, dress, greet and dance, are all part of the culture of people. According to Kafgon and Touchie (1971), culture is a product of creative human response in meeting the needs of a group in the society. Nigeria has a culture and tradition that are rich in motifs and design concepts. It is now left for the designers of batik art to utilize these advantages and dig down to the grass-root these culture and make use of them in the study of small-scale industry.

Through this, one learns of his own culture that of the past, present and as well as those of other people. Let us take an example of what happened during the festival of a Art and Culture (FESTAC. 1977), where different people of different cultures came together. They interact with each other, learnt many things from one and other, new styles and techniques were revealed.

This helped many to improve on their cultures.

Culture also helps in presentation of cultural heritage. According to Isah (1985), throughout the world small scale

industries have their origin from traditional heritage. The present large scale-textile industries all over the world originated from traditional weaving and dyeing. The traditional heritage and occupation reflect the social cultural values. Eicher (1976) terms this as a social documentation. Therefore, the production of batik art designs should depict important occasions such as the FESTAC of 1977. These and many other political events could appear on fabrics with the use of batik techniques. This will give the wearers a kind of identity with their cultures, religions and political parties.

Some colours can be said to be traditional to some certain ethnic groups of people in Nigeria. Some motifs also are taboo to certain people, for instance, Hausas would not like to wear a cloth designed with human motifs, though this is fading away. The Yorubas and the Ibos prefer real-wax or imitation wax prints. The reason for this preference can be traceable to (Adire- Eleko), a traditional resist techniques. Eicher (1980) claimed that traditional colour preference among Yorubas are deep-blue-red (maroon), whereas Ibos on the other hand seems to prefer green, yellow, and orange. Hausas prefer wearing plain coloured fabrics which are purely white and pastel hue.

An informant has suggested that the difference in traditional colour preferences among Yorubas was because Yorubas live in the densely forested region of Nigeria. The

forest environment provides a range of deep colours for them to imitate. The Hausas on the other hand live in the wide plain, where the rays of the sun constantly come down and lightens up almost everything and consequently their preference for lighter shades and plain fabrics.

3. Economic Value: This study is significant in that it will provide Kaduna State with a comprehensive information on small scale industry. The result of the study will no doubt be of great value to the policy-makers in that it may be included among the viable small-scale industries to be financed by the State Government. The establishment of small-scale industries is fundamental to economic growth of the state and the nation as a whole. Also because of the present economic situation in the country, many small-scale industries and companies have packed up and as such the naturally gifted artists with creative talents cannot develop their talents, because they don't have enabling environment for regular practice. When resources are available and utilized talents will be enhanced. The study of small-scale textile industry will encourage the utilization of local resources, because it will afford the entrepreneur the opportunity to mobilize a lot of local raw materials and capital for future investment. Isah (1986) claimed that Nigeria is blessed with mineral resources and therefore this study will help in going into investigation on how

these materials resources can be tapped and utilized for the benefit of the state and the nation.

According to Oguntona (1999) small-scale industry has revealed the ingenuity of the local craftsmen in using the abundant raw materials that are in abundance within the environment. Nigeria is very rich in material resources and skills. The researcher will do some inquiries on how these material resources and skills can be tapped and utilized for the benefit of the industry.

4. Self-reliance: Information dissemination from the study could stimulate indigenous entrepreneurship into establishment of small-scale business. That means that those who set up small-scale industries would be self employed. The University and Polytechnic graduates who have the means to set up their own small-scale industries will in one way or the other help in minimizing the problem of joblessness (Erukanure, 1985).

5. Self-Actualization: When one sees the fruits of one's labour in terms of producing and utilizing batik materials, one is elated and happy and one is encouraged to do more. Backyard small-scale creative effort is capable of improving the living standard of rural women who spend most of their time at home, performing the traditional roles. Through the practice of batik art, these women can aurgument the scarce resources of the family.



6. Aesthetic Value: The aesthetic significance of this study will be found in the use of resist techniques for wall-hanging. The use of painting for wall hanging is now giving way to resist techniques, in that wall hanging made of resist technique looks solid and it is more lasting than painting. It is cheaper because dyes are cheaper than oil paints and canvas used in painting works.

Also, the study will promote the art of textile dyeing in Kaduna State, because the potential raw materials which have not been identified will be revealed and be made use of by the practitioners. The study will reveal how the finished materials are accepted by the consumers which will also help the textile dyers in putting more efforts.

1.7 BASIC ASSUMPTIONS

For this study it is assumed that:

(i) Indigofera Arrecta (L) cannot be obtained easily in the immediate environment.

(ii) Whatever results that are obtained are authentic and will meet the requirements of the Post Graduate School.

iii) All substances obtained from field work are genuine since they have been identified by authentic persons before major studies commenced.

1.8 SCOPE OF THE STUDY:

i) The study will not go beyond Kaduna and Zaria where the traditional and contemporary textile dyeing are in practice.

ii) It is only the traditional and modern small-scale textile dyeing industries that will be studied to know how they affect the socio-economic and the culture of the state.

1.9 OPERATIONAL DEFINITION OF TERMS

1. Traditional small-scale industry:- Locally based small-scale industry which is in most cases operated within the household, and the members of the household, especially in villages such as pottery making, weaving and dyeing.
2. Large-scale industries:- A very large manufacturing and commercial business, employing large number of both skilled and unskilled labour.
3. Entrepreneurship:- The act of organization and managing a business. In small-scale industry the entrepreneur is responsible for the financial risk and management responsibilities.
4. Elu: An Indigo leaves growing wildly or planted in the farm. The leaves are cut and pounded, rolled into balls, dried and mixed with water and locally produced alkaline in a pot for fermentation.
5. Tjanting:- A small copper cup with one or more tabular spout with wooden handle. The cup holds the hot liquid

wax and retains its heat as the wax flows through the hole into the fabric fine lines.

6. Batik:- It means waxing or putting wax on the fabric. It is a Javanese word.
7. Iya Mapo:- A name of a woman who is believed in Yoruba land to be the first person to discover Indigo dyeing techniques through trials and errors.
8. Tradition:- Beliefs and customs of group. This is an inherited pattern passed down from one generation to another.
9. Marina:- A Hausa term meaning traditional pits.
10. Cottage Industry:- Traditional based small-scale industry.
11. Adire - Eleko:- A Yoruba terms, refiring to the traditionally dyed and designed attire.
12. N.D.E. National Directorate of Employment.
13. E.R.C:- Educational Resource Centre.
14. Dye:- A subsistence that is dissolved in water, which can change the colour of fabric permanently.
15. Toka:- Hausa name for ash.
16. Katsi:- Hausa term, meaning saturated indigo used by Hausa traditional dyers.

1.2 NAMES AND ACTIVITIES OF SMALL SCALE INDUSTRIES

Kaduna State was carved out of the defunct Northern region of Nigeria in 1976, and has formed a policy on establishment of Small-scale industries. Fig. 1 Appendix shows

the map of Kaduna State, some of the small-scale industries identified as viable, according to the Northern Nigeria Gazette 1975.

No	Names	Activities
1.	Candle making:-	Candles are produced mainly for domestic use such as giving light in our rooms when ever there is black out. Some spiritual Churches also make use of candles for prayers and solving spiritual problems.
2.	Soap making:-	This is also for domestic use, such as bathing and washing of our clothes.
3.	Black-smithing	The blacksmithing produces simple farming tools, such as hoes, cutlasses, hand forks, band trowels, rakes and knives.
4.	Block-making:-	This is the making of blocks for building of our houses.
5.	Furniture making:-	Specially for the construction of wooden chairs, tables, cupboards and bookshelves.
6.	Leather-work:-	Mainly for making of shoes and hand-bags.
7.	Pomade production:-	Pomades are used domestically, such as creasing our body.

8. Engineering:- This includes the road-side mechanics. They are responsible for the services of vehicles, building of bridges, construction of building, machines, beds and metal furniture.

9. Pottery making:- The practice of making pots, cups and jugs.

10. Tinkering:- This is the production of those domestic items, such as buckets, lanterns and stoves.

11. Tailoring:- This is the sewing of dresses for both gents and ladies.

12. Printing press:- This is for the production of newspapers, magazines and textbooks.

CHAPTER TWO

2.0 THE REVIEW OF RELATED LITERATURE

This study is going to be handled logically in connection with research questions and objectives. In an attempt to find possible explanation or answers to the research questions, the relevant literature will be reviewed along these perspectives.

2.01 - Historical Background

2.02 - Traditional and contemporary Dyeing Industries.

2.03 - Small-Scale Industry and its Types

2.04 - Problems of Small-Scale Industries

2.05 - Kaduna State Government Policy on Small-Scale Industries.

2.06 - The Role of Federal Government in Development of SSI Sub-Sectors

2.07 - Industrial Development Centre (I.D.C) in Kaduna

2.08 - The National Directorate of Employment (IDC) in Kaduna State.

2.09 - Incentives offered to SSI in Kaduna State.

2.10 - The Contribution of SSI in Kaduna State.

2.11 - Industrialization of the State

2.12 - Use of Local Resources for small scale industries.

2.13 - Commercialization

2.14 - Export.

2.15 - Traditional and Modern Small-Scale Textile industries.

2.16 - Financing of Small-Scale Industry

2.17 - The Government.

2.18 - Financial Institution (Commercial Banks)

2.19 - Dyes/Chemical and Their Types

2.20 - Traditional Dyeing in Nigeria

2.21 - Colours and Their Classification

2.22 - Contemporary Resist Dyeing Techniques.

2.23 - Traditional and Contemporary Resist Techniques compared.

2.1 HISTORICAL BACKGROUND

Textile dyeing is a prominent activity in many parts of Nigeria, most especially in big cities. Notable among them are: Lagos, Abeokuta, Ijebu-Ode, Ibadan, Oshogbo, Ede, Kaduna, Zaria and Kano. Salako (1972) rightly stated that the foundation of textile industry in Nigeria was built around narrow fabric weaving on indigenous hand-loom and indigo pits and pots dyeing.

As one of the earlier industries to be exploited by Nigerians, dyeing techniques were carried out in pits and pots behind houses of the dyers based on indigenous technology using indigo leaves (elu) and the extracted chemical "alkaline from wood-ash for dyeing. It shows no innovations on the dyeing methods or improvement on the age-long ingredients which have been in use, because the dyers do not make any move to do researchers in order to improve on their dyeing techniques and sources of getting chemicals.

Stuart and Robinson (1982) state that the exact source of textile dyeing patterning lies in the antiquity. This is because contemporary records did not exist and old fabric had long perished. It was not until the ancient Babylonians and Assyrians that sculptural representation of patterned garments on walls were discovered. The tablets from US around 2200 B.C. record and the presence of weavers and dyers were found. It could be summarized therefore that the early development of dye among primitive peoples consisted of trials and errors. Successful recipes were handed down by the words of mouth.

Definitely, progress must have been very slow with mistakes and missed opportunities. It is known that in remote time China, India and Persia had achieved flourished textile industries for their own use and exports. Stuart and Robinson (1982) opined that in medieval period, weavers and dyers in Europe had formed their own guilds which controlled methods and materials with utmost severity. High standards of dyeing were maintained using local dye-stuffs, mordants and chemicals from the East and the New-World as the exploiters and merchants sought for new markets.

In the middle of 19th century, Mauveine was the first of a long series of dyes manufactured from coal which heralded other classes of dye-stuffs and dyeing processes. These have largely superseded natural dyes, just as man-made fibres have gradually replaced natural fibres. In England, when the

process was introduced the industrialists were already printing fabrics reasonably. Attempts were made to introduce batiks on a large scale but the cost was too much. Initially, vegetables were used as dyes, and then after 1800, when the synthetic fibres were available the process became more feasible.

2.2 TRADITIONAL AND CONTEMPORARY DYEING INDUSTRIES

Eicher (1976) asserted that dyeing has been an enterprising trade in Nigeria for years. Evidence has shown that many Nigerians including Hausa, Nupe, Yoruba and Tiv-have been good at it. Indigo-dyes are the most commonly used throughout the country, though many other indigenous plants are used for dyeing textiles. Indigo dye is known by many people for many years, this was also confirmed by Oyelola (1981).

Before the advent of modern textile industries into the country, hand-woven cotton materials were used for dyeing. But most of the dyers today use white materials as produced by the textile industries. Tie-dye and starch resist have been the main methods of pattern dyeing. Oyelola (Ibid) observed that while pattern dyeing is mostly practiced by the Yorubas, other tribes especially the Hausa dyers used blue-black dyed cloth without any pattern on it.

Weaving and dyeing may have been brought into Nigeria by the ancient immigrants from some empires in the deserts such

as Mali, where a large cotton industry existed in the 14th century (Nzekwu, 1966).

These places, according to him, existed as trading centres with Kano. At these centres, raw woven and dyed cotton and traditional starch design were exchanged with silks and other precious fabrics from Tripoli and North African Towns. In the Southern parts of the country, he said, the Egbas of Abeokuta and Ijebu people were responsible for most of the textile production. Their Indigo dyed cloths were exported to Senegal, Brazil, Angola, Guinea, Italy and other European countries. Nzekwu (Ibid) noted that Lagos area exported about 50,000 yards of native cloth to Geneva and other Yoruba areas also exported about 200,000 yards of native cloth to Brazil. At this period in particular, he said (Adire) dyeing alone was employing 80% of the Abeokuta local population. According to him, Nigeria has since turned from exporter to importer because of our preference or increasing taste for imported fabrics.

Contemporary small-scale textile industry began to surface in Nigeria as far back as 1960. This is the reproduction of the traditional starch designs with silk-screen method and variations of traditional tie-dyed patterns in many colours. Eicher (Ibid) acknowledged that one firm called (Aladire) in Lagos started in the late 1960s, by an American lady who trained Nigerian men to prepare silk-screen with traditional (adire-eleko) designs and to print the cloth.

Another innovation was the use of a single motif from traditional cloth, such as 'wire' which was enlarged and used as sole motif. Other silk-screening have also developed and produced many original designs with traditional motifs from Nigerian folklore. One such firm is located in Onitsha and called African screen printers.

2.3 SMALL-SCALE INDUSTRY AND ITS TYPES

There is no concise or universally accepted definition of Small-Scale industry or what might constitute a Small-Scale business by both academic and the practitioners. What constitutes Small-Scale in one industry might be large in another, Singh (1970). The third National Development plan (1975-1980) defines Small business thus: Manufacturing establishment employing less than ten people or whose machinery and equipment do not exceed ₦600,000, for the purpose of this study the above definition will be considered.

The most important thing is that small business of any kind, especially textile oriented plays a very important role in the social, economic and cultural development of the people. However, according to Waziri (1975) the most common distinct characteristics of small-scale industry as highlighted by most books include the following:-

a) Equity base is relatively small and usually distributed over a much smaller base than in a larger firm. The same manager/proprietor handles or supervises the financing,

production marking and personnel of the enterprise.

b) Less sharing decision making, decision is more subjective (based less on analysis).

c) Great concern with financial matters, greater difficulty in attracting funds for expansion. The manager/proprietor finds it difficult to borrow short term or long term capital from organised financial institution and so relied heavily on relations, money lenders, personal saving or the profit of his enterprise.

d) They are more reluctant about risk taking.

e) They are capital intensive, tie their objective closely to the PRODUCT line than to other matters, such as use of capital.

f) Employer - employee relationship tends to be more difficult especially in recognising and correcting inefficiencies or bargaining for wages.

g) Performance standard are almost impossible to establish and enforce under the kind of informality that prevails.

h) Lower, employee turnover, high labour investment ratio.

i) Small Scale Industry (S.S.I) have special problems with respect to the growth in corporate size. Their limited resources and financial vulnerability usually increases rather than diminish the risk.

j) The level of education of the proprietor is usually very low with a consequent low level of business management, techniques, skill or market information.

2.4 PROBLEMS OF SMALL-SCALE INDUSTRIES

Small-Scale industries have a number of short-comings and many scholars, in treating the subject view these shortcomings from different angles. For example, Nigal and Sign (1976) have attributed these shortcomings to management, while Baumback (1980) lays emphasis on financing and management.

However, for the purpose of this study, the following are considered as the general problems of Small Scale Industry.

i) management

ii) technical

iii) commercial

iv) capital

Management

The management problems arise from the one side ability of the manager-owner of the enterprise, the problem of finding the right successor to him after his retirement or and the shortage or absence of personnel-capable of advising him on management policies. His limited education and training and the rural and sub-urban nature of his functions, and location further deny him access to modern management techniques. "Poor management has remained the major single factor that has crippled many Small Scale Industry in Nigeria". (Salisu 1992)

Small Scale Industry are not disciplined in the sense that they deliberately divert loans obtained for project support to ostentatious expenditure. Some refuse to pay back loans as and when due. The interest and principal on loans

from government-owned financial institutions are often misconceived in no small way to banks accumulation of bad debts.

Technical

The technical problems of Small Scale Industry arise from limited access to modern equipment and their low technical know-how, which result to limited education and training, the limited extent of the market in which they are operating and their inaccessibility to further source of finance outside their own savings.

Commercial

The commercial problems of Small Scale Industry consist of the limited possibilities of market expansion and the absence of a study and guaranteed market and the disadvantages of small-size in buying market. The financial problems derive from their own limited capital, their limited possibility to loan funds, the liquidity of their operating capital and the indebtedness of their customers to them. Since many of their customers usually have lower income than them, most of their irregular purchases from Small Scale Industry are on credit which is paid in bits at irregular instalment or not paid at all over a long period of time, (Aluko 1993).

Capital

Many Small Scale Industries suffer from inadequate working capital and thus have difficulty in funding their business operation, especially for the purchase of raw

materials which inturn restricts their productivity. The limitation of managerial ability with limited technical and commercial possibilities make the risk of lending money to small industries very high. In turn, the shortage of business capital further aggravates the technical, commercial and managerial problems.

2.5 KADUNA STATE GOVERNMENT POLICY ON SMALL SCALE INDUSTRIES

In its efforts to see the rapid industrial development of the State, the small scale industrial credit scheme (SSICS) was established in 1988. The scheme is intended to provide financial assistance for the improvement of the small-scale industrial sector which has not been assisted by the commercial banks and other financial institution in the country. In order to attract a large section of the population into industrial activities of the state, the scheme has been playing some useful roles through the provision of funds to small scale industrialists with promising project (Garba 1994).

Loan applications are submitted to SSI section of the Ministry of Trade and Industry where they are processed and submitted to the state's loan management committee which has the responsibility of approving the loan application. Such approvals are normally based on commercial merits and the bankability of the projects which apply for the loans. The Director General Ministry of Commerce and Industries is the Chairman of the committee.

Loan funds are usually issued on behalf of a loan beneficiary directly to the supplier of machinery and equipment. The rate of interest is 5% on the total loan issued. In collaboration with the newly established Industrial Development Centre, and other government agencies, the scheme advises on correct choice of machinery. It also supervises their installation, maintenance and operation. The area trade officer in each of the 26 local governments in the state also assists in collection of loan repayments made to the scheme by the borrowers. Short training courses in form of workshops in industrial management, production techniques, book-keeping etc., are occasionally arranged by the Ministry of Commerce in collaboration with the Industrial Development Centre in the State.

2.6 THE ROLE OF THE FEDERAL GOVERNMENT IN THE DEVELOPMENT OF SMALL SCALE INDUSTRY SUB-SECTOR

The government has for long recognised the vital role Small Scale Industry sub-sector plays in the overall industrial development of Nigeria as a nation. However, in the early 60s, the government provided very little funds to local entrepreneurs. The government has not done much to formulate a comprehensive policy to aid development of Small Scale Industry along a given path. In 1969 sequel to a national conference on Small Scale Industry the government re-emphasized the potential impact the SSI has on the industrialization of the economy.

As a result, various institutions were set up to provide financial and technical back up service to the SSI. The programme commenced in the mid-1960s with the establishment of small scale industrial credit scheme (SSICS). Under this scheme funds were made available to state that were expected to contribute a matching amount for on-lending to small scale industrialists (Bullion, 1991).

Another vital step taken, was the take over of regional Industrial Development Centres in Zaria and Owerri. A third one was then set up at Oshogbo, Initially, the centres were established by the then regional governments for the promotion of SSI in their areas. The federal government later set up Industrial Development Centres (IDC) in all the states.

The (IDC's) are to provide technical and management assistance to SSI. However, it is regrettable to note that despite these commendable gestures, the colossal amount of scarce resources pumped into them, the overall performance has not been satisfactory in the delivery of needed technical back-up service to SSI (Yero 1985).

Sequel to this, and to remedy the situation, the government established the Nigerian Bank for Commerce and Industry (NBCI) a specialized development Bank - exclusively relied to channel funds to SSI. However, due to mismanagement of funds, the bank folded up in 1992. It was gathered that funds that were meant for eligible industrialists were diverted to personal use by officials of the bank.

Another bold step taken in 1989 by the government was the establishment of the National Directorate of Employment (NDE) under the auspices of Ministry of Labour, Employment and Productivity. The financing of the this scheme is to operate through some approved commercial banks under a loan guaranteed by the NDE at concessional rate of interest (Hassan, 1994)

The most ambitious of all the programme so far initiated by the government is the setting up of the National Economic Reconstruction Fund (NERFUND) which is a clear demonstration of government efforts to improve the performance of the sector.

2.7 THE INDUSTRIAL DEVELOPMENT CENTRE (IDC) IN KADUNA

The industrial development centre in Kaduna was established in 1991. Some of its primary duties to SSI include Consultancy, extension, training research and development and information services. For the purpose of this research, consultancy service and extension shall be reviewed for their importance.

Consultancy Service

According to (Mustapha 1984), the consultancy services of IDC in Kaduna include:

i) Entrepreneur guidance and counselling on investment opportunity for modern Small Scale Industry.

ii) Preparation and appraisal of pre-investment proposal and

feasibility studies for modern Small Scale Industry.

iii) Preparation of market studies and area economic survey.

iv) Functional consultancy service in production management, book-keeping, marketing and sales promotion, selection and procurement of machinery and equipment.

Extension Services

Industrial extension services are universally regarded as the most important programmes for the development of SSI for the provision of technical economic and managerial assistance for the upgrading of the skill or the workers, to increase their production, improve the quality of goods produced and strengthen the competitive position of the enterprises (Alujo 1973).

The services usually include advice on improved technical processes and the use of modern machines and equipment, the demonstration of the use of modern technical processes through factory workshop, mobile workshop and in technical institutes, colleges and trade centres: conducting classes for artisans and entrepreneurs and the provision of information necessary for the more efficient functioning of the small units. These services, which should be as close as possible to the industrialists are usually rendered to existing industrialist, or to those planning to start new industries. (Mustapha, 1994).

Unfortunately, as (Muhammed, 1995) has stated "The gap between good intentions and achieved performance is a

substantial one". Many of the well intentioned policies outlined by IDC in Kaduna have not been achieved, an obvious reason for this being the lack of adequate funding to the IDC in the state by the Federal Ministry of Commerce and Industries. Its two workshops under construction have been uncompleted up to the time of carrying out this research. The centre is also facing the problem of manpower, having only three senior staff and handful of some junior staff.

Despite its shortcomings, the centre has successfully conducted a survey on existing SSI in the southern part of the state. It has also made a reasonable preparation and appraisal of pre-investment proposals and feasibility studies for those planning to start new industries. In 1992, it jointly organised a workshop with the state ministry of commerce and industries, for small scale industries.

2.8 THE NATIONAL DIRECTORATE OF EMPLOYMENT N.D.E IN KADUNA STATE

In the 80s, the worldwide economic depression caused alarming discomfort in the Nigeria's economy. Industries shrank to an all time low and commercial activities were consequently reduced, leading to the loss of employment opportunity for millions of Nigerians. By the end of 1996 the Federal Government created NDE in its effort to combat unemployment problem in Nigeria (ADE 1988).

The state NDE office was opened years back. The Directorate has major programmes including small-scale

employment programme which seeks to create employment by facilitating the establishment of small and cottage industries particularly in rural areas of the state. Under this programme, selected young Nigerians with proven abilities who can produce viable business proposals, are given financial assistance to set up cottage and small-scale industries, thus creating employment for themselves and others. (Sirika 1994).

The NDE in Kaduna recorded great success in its pilot project scheme. According to Hassan (1994), 35 businesses were sponsored by the NDE with ₦.5m allocated to the state in 1988". He further said the creation of the scheme in the state, a total of ₦3,806,000 was released for disbursement to beneficiaries, for establishment of agro-allied and hand craft business".

Apart from its success in sponsoring the establishment of small business which include among others furniture making, mechanical workshops and hand craft business, the NDE faced some problems. Its biggest problem encountered was non-payment of loan or diversion of money on the part of beneficiaries. "Loan from NDE is expected to be revolving, without repayment others cannot benefit" (Ali 1994).

2.9 INCENTIVES OFFERED TO SSI IN KADUNA STATE

In realization of the fact that economic self reliance cannot be achieved without the establishment of both large, medium and SSI, the state government through the Ministry of

Commerce and Industries is putting a lot of effort towards the industrialization of the state. It gives incentives to all willing investors or industrialists.

According to Salisu (1992) incentives given include granting of land to industrialist within 30 days from the date of application, reduction on the amount charged from 55 - 1% and fully developed industrial layouts and estates with all the necessary infrastructure in them. Others include the preparation of project profits and feasibility survey and offering counselling and management services to small-scale industrialists.

2.10 THE CONTRIBUTION OF SMALL SCALE INDUSTRY IN KADUNA STATE

The development of small-scale industries is considered very vital by developing countries, especially to help them achieve the much needed rapid industrialization. Much role importance is attached by various governments to the development of SSI because of the significant role they can play in the industrialization of a country (Iyang, 1985).

Despite financial problem generally being faced by the SSI, the sector has continued to play a significant role in the economic and social development of the young state; thus, it contribute in:

i) Employment generation

ii) Industrialization of the state

iii) Use of local resources

iv) Commercialization

v) Export

2.11 INDUSTRIALIZATION OF THE STATE

It is no doubt, that in this age of modern technology, no nation can neglect the industrial sector. Industrialization had been as a necessity to our lives as water is to living. There can never be industrialization without the industries. SSI are the spring board for any meaningful industrialization, the development or industrialized nations of today became what they are through the contribution of SSI. Therefore, SSI are playing a vital role in the industrialization of the state in particular and the nation in general.

2.12 USE OF LOCAL RESOURCES

The survival of any industry depends largely on its ability to utilize the local resources available within its location. Small Scale Industry usually use resources that are obtainable locally either from the natural habitat or through other contemporary industries (Okeji, 1985)

Kaduna State has been one of the largest producers of cotton in the country which gained a lot in the utilisation of this important raw materials used by the Textile industries. Kaduna Textile mill, Arewa Textiles Ltd. and other small cottage. All the utilized the cotton produced by farmers in the state and outside the state. The use of local resources

has been identified.

2.13 COMMERCIALIZATION

Kaduna has been noted as one of the major commercial centres in Hausaland during the 18th century. In its effort to regain its past glory as a commercial centre, the state government is gearing its resources to develop the small scale industries. As a result of this gesture, some of its markets in the major cities like Kafanchan, Brini Gwari, Zaria and the state capital are coming with businesses. Businessmen from the neighbouring states of kano, Sokoto, Kaduna and Jigawa come to purchase items that are made by the Small Scale Industry. Such items include: plastic wares, carpets, traditional textiles, leather works etc. Thus, the SSI is contributing immensely towards the commercialization of the state.

2.14 EXPORT:

One of the major contributions of Small Scale Industry to the state in particular and the nation in general has been the conservation of foreign exchange through importation-substitution. Salihu (1992). Kaduna was opportuned to be the headquarters of the defunct former Northern region of Nigeria. It has net-work roads and railway lines which link the other parts of the country. It also has an international Airports. This has given it an advantage over the rest cities in the North in terms of exportation and importation of goods of SSI

in the state. The daily market in the town and the weekly ones in other parts of the state coupled with the dense population of Kaduna town make it possible for the Small Scale Industry to boost its products and by contributing to the economy of the state and the nation in general.

Agbenyo (Ibid) further said: "in constrats, the modern sector is predominantly urban and industrial in nature. He went further to add that it is wholly market oriented with modern commercial, financial and transport facilities, public services. Utilities and education are also provided. There is also modern technology and new innovations which bring about growth with modern methods of production which are in most cases capital intensive.

From my observation, traditional textile industries are the industries that we "inherited" in both rural and urban centres that use tools, techniques of production and raw materials devoid of modern technology. In other words, their method of production are manual, their techniques and tools are traditional. Such industries are more of cottage, they include the hand spinning that is predominantly women business among the Hausas. The weaving industry can be classified into two main groups. Thus, the horizontal and vertical weaving industries. In the horizontal industry, the weavers used horizontal looms, it may be narrow or wide, while the vertical weaving industry use vertical looms. Men predominate in using the horizontal loom. while women predominate the latter. An

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example of such industries include, the Akewete Weavers in Imo state and the Narrow band weavers in Oyo and Kwara states.

Dyeing is another important traditional industry. Indigo plant grows naturally in Nigeria and abounds in the northern and southern parts of the country. In the north, it is predominant in kano, Katsina, Zaria and Sokoto where local dyeing is practiced. Dyeing is carried out in the pit called "marina" or "karofi". In the south, dyeing is carried out in pots around Abeokuta, Oshogbo and Oyo. In the traditional dyeing, ash, "katsi, and baba" are used mainly as agents that facilitate the fastness of the dye. Whereas in the modern dyeing industry synthetic dyes are used with chemical such as caustic soda and hydrosulphite, (Ukponwan 1980)

From the foreign review, the traditional small scale textile industries have been in existence in Nigeria from time immemorial, while the modern textile industries began to show up in Nigeria in the late 1960s. One of such firms according to Eicher (1976) as cited by Ahmad (1988) was started by an American woman Mrs. Morgan. She started the Aladire in early 70s before she sold it to another Nigerian woman. Example of other firms include: African Screen printers in Onitsha. The products of these industries became so popular even among the foreigners because of their quality and variety of colours.

Agbenyo (Ibid) reported that when there was serious unemployment in India, especially in the rural areas, Mahatma Ghandi opposed mechanization and instead advocated slight

improvement in traditional techniques. He views that when there are enough hands to do the job, then mechanization is irrelevant. Spinning and weaving mills deprived the villagers a substantial means of livelihood. Ghandi's contention was that the way to take development to the villagers was not through mechanization but through revival of the industries they were used to, and should be encouraged to work in their cottages as they have done from time immemorial, but with some improvement like in hand carding, hand spinning, hand weaving and dyeing.

2.16 FINANCING OF SMALL-SCALE INDUSTRIES

Financing of small-scale industries is a major area that needs to be given a special attention by both government and private financial institutions. Many Small Scale Industries attribute their failure to expand or improve their productivity due to limited sources of finance. For the purpose of this study sources of finance for the Small Scale Industry will be categorized into three main groups, namely:

i) Individual saving/friends and relatives assistance

ii) The government

iii) Financial institutions (Commercial banks)

INDIVIDUAL SAVINGS/FRIENDS AND RELATIONS ASSISTANCE

For the smooth take-off of small-scale industry, usually the source of finance may come from personal savings, Though, sometimes friends and relations come to the aid of

individuals, but the greater portion is from individual savings. It is important to point out " said Iyang (1985), that the availability of the source of finance depends partly on the profitability of the firm, partly on the amount of tax which it has to pay, and partly on its policy with regards to distribution of profits.

2.17 THE GOVERNMENT

In promoting small-scale industries, the federal government has naturally been out at the forefront, Mustapha (1986). In 1971, said Salisu (Ibid), the then Federal Government started to provide a more direct form of financial assistance to Smal-Scale Industry through cooperative societies and development banks. Thus, the following institutions were established:

i) Nigerian Bank for Commerce and Industry (NBCI)

ii) National Industrial Development Bank (NIDB)

iii) National Economic Reconstruction Fund (NERFUND)

Recently, the National Directorate for Employment, (NDE) and peoples' Bank of Nigeria are established. These and other commendable moves have been made to ensure the sustained growth of Small-Scale Industries in the country. On paper, they appear marvelous, (Mustapha 1968). He further said "there is no gain saying the fact that government has always had good intentions. The snag comes during implementation". In reality, the small-scale industrialists find it difficult and

sometimes impossible to get assistance in form of soft loan from the aforementioned institutions. It is pertinent to mention that the state governments are not left behind in the promotion of Small-Scale Industry. Small-Scale Industries Credit Scheme (SSICS) were established in each of the State Ministry of Commerce and Industries. However, the disbursement of budget allocation for the promotion of Small-Scale Industry constitutes a major constraint.

2.18 FINANCIAL INSTITUTIONS (COMMERCIAL BANKS)

Another important institutional arrangement for financing SSI is the commercial banks. These banks are abundantly located in various local governments of Katsina State and they include among others:

a) Union Bank
b) First bank
c) United bank for Africa (UBA)
d) Allied Bank
e) Bank of the North
f) Habib Bank
g) Peoples' Bank
h) Community Bank
i) Nigeria Universal Bank

2.19 DYES/CHEMICALS AND THEIR TYPES

According to Stuart and Robinson (Ibid) almost any

substance will stain to a greater or lesser degree, many will be partially retained by fibres after washing or exposure to light. Relatively few will form firm bonds between dye and fibre and become fast to light, able to withstand washing or even boiling, resistant to atmospheric conditions and resistant to rubbing. They also added that there are two forms of colouring that have been used for textile decoration since the earlier time. In fact, there is the true dye stuff which unites with the fibre and leaves it with its natural look and handle.

Natural dyes have almost vanished, except for those that are still available for use by the individual hand-craft man, and a large number of the earlier chemical dyes, particularly, those developed for natural fibres which we now use. Even, so, more than 8,000 different dye stuffs are still in use in most of the major countries of the world, Stuart and Robinson (Ibid)

Today, in the country, not only demand for dyes is higher than the supply, but dyes have become a scarce commodity. The reason being that the users are over dependent on imported dyes. According to Wangboje (1985), this situation will be averted, if serious efforts are geared up towards tapping local resources and making do with what is available within our environment. A successful exploration of local resources and subsequently extraction of dyes from them will not only attempt to reduce the problem of over dependency

on imported synthetic dyes, but will attempt to obtain an equilibrium between demand and supply and conversely lower the cost of dye in this area.

Again, if the extracted dyes are found to be significantly suitable (as it is with the case of Indigo), this will provide an alternative to, and save the home-dyers from paying exorbitantly for the synthetic dyes.

1. **Natural Dyes**

It is possible to use many plants and vegetable to obtain dyes. Some of the most useful include the substantive dyes that are fast but do not require mordants, such as lichen and walnuts. Also, there are those called adjective dyes that do require mordants to make them fast. They include, onion-skins, elder barrier and weld.

The imported natural dyes based on plants or vegetable sources include indigo, obtained from the plant (Indigo fera tinctorial) which gives a deep blue colour. It is one of the most ancient dyes known. Dyes based on animal sources include cochineal obtained from the dried bodies of the insect (Coccuscacti), and providing a rich red dye.

2. **Direct Dyes:**

These are among the earliest man-made dye that were developed in the late 19th century for dyeing cotton and other cellulosic fibres. Most of them are reasonably fast to light.

3. **Acid Dyes:**

These dyes are usually classified with the direct dyes

but they are of special use in the dyeing or when suitably thickened in the printing of wool and natural silk. They are easy to use, require only short dyeing period for many of the wide range of colours and are relatively cheap.

4. Vat Dyes:

Vat dyes provide deep dyeing and of the fastest dyes ever known, and many are still in use. As the dye is insoluble in water and unable directly to dye the fibre, as such, dyers utilize the ability of vat to form (Leuco) compound when treated with chemical reducing agents, for the dyers and workers in wax or batik. It is the most useful substantive colouring matter and one of the most important and prized dyes in history.

5. Reactive Dyes:

These types of dyes developed in 1950s on new chemical principle, reactive dyes form a stable and covalent linkage with cellulosic fibre to produce brilliant colour with maximum all round fastness. Since these dye stuffs are especially fast and will stain almost anything in their working area and to avoid scattering the dry powder, clean as soon as possible with cold water after use.

6. Naphthol dyes:

Naphthol dyes are generally not recommended by chemists or dye distributors for home dyers. Naphthol dyes, also are also called Azoic. They are not packaged for craft men, and sources for the ingredients are not easily got. Yet many

craftsmen use Naphthol dyes for cottons and linens because they are extremely colour fast. They are the dyes used by Javanese.

7. Chemicals:

Some chemicals used in combination with dye stuffs are:

	Common Name	Chemical Name
i)	Washing Soda	Sodium Carbonate
ii)	Common Salt	Sodium Chloride
iii)	Glauber's Salt	Sodium Sulphate
iv)	Potash	Anhydrous Potassium
v)	Soda Ash	Anhydrous Sodium Carbonate

2.20 Traditional Dyeing in Nigeria

(i) History

Briefly, the historical context of indigo dyeing indicated that this was extensively practiced in many parts of the world with variety of different natural colouring matters. This art is as old as man himself. Up till today some tribes in Nigeria still continue with the art of decorating their bodies with pigments. No doubt, this art has been inherited from our ancestors. However, with the intensive modern researches and technological advancement, new variety of colours came into the market, staining and painting increased and thereby almost every object whether of personal adornment,

decoration utility all are coloured or painted.

(Iya Mapo Agbee, Aredue), this is the common Yoruba greetings for a dyer at work. Which means she the dyer would be favoured by Iya-Mapo in getting the cloth dyed fast... Ladipo (1996). Iya Mapo, according to legend is believed to be the originator of the Yoruba dyeing techniques. She was known to have first lived in Oshogbo, now Osun State capital. Oshogbo is another commercial centre for both traditional and contemporary batik art. Iya-Mapo later moved to Ibadan, the state capital of Oyo State. Ibadan is also a centre in the field of dyeing. Almost every backyard of many Ibadan people have dyeing pots and young girls and women are all engaged in the business of traditional art of dyeing. This woman, (Iya-Mapo) used trials and errors before she succeeded in getting the right techniques of preparing Indigo dyes. Her first experiment was that she added charcoal and (elu) balls to the solution of water. When she noticed this was not fast enough, she added ordinary earth, and finally through much efforts she discovered two types of ashes as agents of making the (elu) dye fast. Her discovery later spread fast to all parts of Yorubaland.

The study of the indigo dye begins with dye-plant itself. The indigo leaf has been known thousand of years ago in Yoruba land. Extracting of indigotine from the leaves is a laborious process like pounding yams. According to Stuart and Robinson (Ibid) Indigo dye belongs to the genuine indigo fera, a group

of about sixty tropical plants and shrubs of the pea family. It has many forms and botanical names, but the most important is indigofera which is purely native to Africa.

For many years, the chemistry of the process that produced dye from the fermented green plant could not be understood. The chemical phenomenon of oxidation that develope the blue colour is still a mystery to the Yoruba traditional chemists. The dyers of the product of indigo dye do not understand what actually happens in their pots concerning the chemistry, yet they are able to perfect that method of producing indigo blue dye.

According to Ladipo (1996) the oxidation or setting of indigo takes place almost immediately, when the oxygen in the air reaches the liquid on the fabric. First put the alkaline into a pot that is well sitted on the ground, if possible dig the ground and put the pot, then break the indigo leaves which had been already pounded and rolled into balls. The pot is covered and left for about 6 - 7 days for fermentation. After the fermentation, the indigo dye in the pot is now ready for use. Dip the fabric to be dyed into the dye-pot. Continue to turn and open the fabric in the dye-pot. As soon as the fabric is brought out of the dye-pot and has contact with air, oxidation takes place immediately.

(ii) Preparation of Mordant Ash

Materials and Tools needed:

(a) Mud kiln

(b) Dry wood

(c) Old ash cakes or balls

(d) Basket sieve

(e) Pots

(f) Dry grass

Describing the building of the mud kiln, Stuart and Robinson (1982) said that the kilns are made of mud and they vary in sizes, but the standard mud kiln is about one and half metres high and one and half metres in diameter.

The mud walls are thick and should be without cracks. There should be, also, mud-pot of which one is perforated to serve as the sieve and it is about thirty centimeters from the top of the shelf.

There is also an opening at the bottom of the kiln through which it is fed with dry logs of wood for firing. Old ashes which have been previously used are collected rolled into balls, dried into hard cakes and are also arranged on top of the green wood which have been arranged on it. These green sticks could be from any type of tree, cut into pieces of about thirty centimeters each and arranged layers upon layers till they get to the top of the kiln. The kiln is then lighted from the bottom. The heat burns down the green sticks in the kiln to ashes.

(iii) Processing of Indigofera "Elu"

According to Oguntona (Ibid) Indigo dye is obtained from the various species of lochocarpus and indigofera

known in Yoruba language as "Elu". This plant which grows to a height of 3 - 4 feet, creeps, twists, turns and seeks support of young plant. The leaves are crushed or pounded in a wooden mortar. The crushed materials are moistened with water and covered up for some days for enzymic fermentation. After about one week, the fermented leaves are molded into small balls which sun.-dried or smoked on fire into dark grey balls that are sold to prospective dyers. Dye solution is prepared by disolving the dried indigo fera with alkaline solution. The colouring matter in the indigo plant exists naturally as a glycoside known as indican which is a combination of glucose and indoxyl.

(iv) Preparation of Indigo colour

The first thing is the preparation of two dye pots. The dye-pots are dug into the ground to prevent shaking. The preparation of the dye-pots is followed by breaking the dry dye balls, that is the indigo leaves which have been pounded, rolled into balls and ready for use. An average of dye balls is put into the dye-pot.

The mordant water is then poured into the dye pots containing the dye balls. The contents of dye are occasionally stirred, fermentation occurs slowly and it may take about five to six days before the dye is ready for use. It also depends on the temperature and humidity.

(v) Indigo Textile Dyeing in Nigeria

Oguntona (1986) after observing the position of indigo dyeing in Nigeria has this to say, that how pertinent it is to recall here that the ancient industry of indigo dyeing cannot be said to be developing in Nigeria, rather it appears that it is loosing ground to the welter of western mechanization of imported textiles. Although the practice of pattern dyeing is confined to certain ethnic groups in both South and North of the country, the market of the finished products goes beyond the Nigerian borders.

Dyeing in the South is confined to the Yorubas. Large pots of earthen wares are characteristic features in every compound. The towns that are notable for this business are Abeokuta, Oyo, Ibadan, Oshogbo, Ede and many others. Women are solely engaged in the practice of this trade and they have developed it to a state of excellence. It is done in a cooperative venture in which every female member of the family is involved. In the areas where the practice of dyeing is popular, it assumed the name (Adire), meaning to tie and dye in Yoruba. The Yorubas have their peculiar ways of tying and dyeing which make their finished products different from other tribes in Nigeria. See page 58 Sample II

In the North, as indicated by Nzekwu (1966), dyeing and weaving came into Nigeria through ancient immigrants from some empires in the desert areas, such as Egypt, Tripoli and other desert countries, large cotton industries existed in the 14th century.

2.21 COLOURS AND THEIR CLASSIFICATION

Meilach (1982) defined colour as the excitement of Batik and tie-dye. A lot of explanations can be said about colours, but there is no substitute for one experiencing that wonderful changes that occur in a plain white fabric as it is dipped into dye-bath, the dyed and over dyed fabric are interesting and wonderful. Colour is one of the elements of design. Three terms are used in describing the characteristic of colour. That is Hue, Value and intensity. Hue refers to basic colour. That is primary colours, Value refers to the lightness or darkness of colour. For example, if white colour is added to a colour the result is a tint that is lighter than the original colour, and again if black is added to a colour, the result is a shade that is darker than the original one.

Intensity means chroma or level of saturation of colour. This, in colour, is a state of being completely filled or soaked to the point where a hue is as strong, pure and unadulterated. Intensity of a colour is the strength or the ability to shout, stand out or be lost in the midst of other colours. Full intensity denotes brilliancy which can add to its complement. For example, a normal green can be made duller by adding a little of red. In painting, the word 'Saturation' and intensity are interchangeable. The stronger the hue, the greater its intensity or saturation. Every colour has a point of ultimate saturation or intensity. Artists never speak of or think of brilliance of a dark

colour, only bright and light colours have brilliance.

Oguntona (Ibid) giving attributes of colour stated that, colour is life, just as flame begets light, so light engenders colours. Colour aesthetic may be viewed from three angles.

(i) Impression: = (Visually)

(ii) Expression: = (emotionally), and

iii) Construction: = (symbolically).

The doctrine of aesthetic colour theory originates from the experience of a painter or an artist.

He classified all colours under two basic categories, that is simple and compound. Simple colours are those ones that can not be spilt up into other colours, and in the pigment theory. These include the primary colours which are red, blue and yellow. Compound colours are those that are obtained by mixing two other colours together. These are secondary and tertiary colours. The tertiary colour could be got by mixing two secondary colours.

Colour Classification

(i) Primary colours = Red, Blue and Yellow

(ii) Secondary colours = Red + Yellow = Orange

iii) Tertiary colours = 2 Red + 1 Yelllow + 1 Green = Brown

= Yellow + Blue = Green

= Red + Blue = Purple

To go further on the classification of colours, Meilach (Ibid) makes the classification of colours mathematically thus:

3/4 Red + 1/3 Yellow = Red-Orange

1/2 Red + 1/2 Yellow = Orange

1/4 Red + 3/4 Yellow = Yellow-Red

3/4 Yellow + 1/3 Blue = Yellow-Green

1/2 Yellow + 3/4 Blue = Green-Blue

3/ Blue + Red = Blue-Purple

1/2 Blue + 1/2 Red = Purple

1/4 Blue + 3/4 Red = Red Purple

Daniel (1975) ably describes the views of women concerning dye in Liberia thus: God made every plant with beautiful colour but the knowledge of how to get them out for men's use is secret between God and plant itself. Only certain deserving people, those with cool clean hearts, may learn the secret... while indigo is the very queen of dyes, other plant dyes have yielded God's secret and are in common use in Africa particularly cam-wood.

Indeed, the idea of coolness represents the composure and a loofness by the blue of indigo. In Daniel's (Ibid) view, the Yoruba have what Robert Farris Thompson calls "an aesthetic of the cool" a concept explaining the physiological influence which the blue indigo has on the Yorubas as a people.

(a) Colour Notation:

Centuries ago people said, unless musical sounds be retained in the memory, they perish for they cannot be written but the seemingly impossible was accomplished, and by 1700

A.D. a complete system of musical notations had been perfected that made it possible to write scales, key, pitch, intensity, measured interval, and duration. Without this system, musicians will be severely handicapped, (Maitland, 1951). It is significant that the word's greatest music has been composed since the perfection of a system of musical notation.

Until recently, the composer of colour was in the same predicament as the medieval minstrel. In the matter of notation, the painters have lagged centuries behind the musicians. Although, earlier, some what similar attempts had been made by others, it was not until 1912, that Albert H. Munsell of Boston, perfected a satisfactory system of colour notation and terminology. Today the colourists may avail themselves of the advantages and freedom that this system offers. Many small-scale textile industries have sprang up from this foundation.

Maitland (Ibid) describing colour has this to say: Colour like sound, is a vibratory phenomenon. Each colour is like a musical note. For instance, red at one end of spectrum, has the lowest frequency, increases in passing through the spectrum. Again, violet, at the other end has the highest frequency than the shortest wave length. Beyond the end of the spectrum are the invisible colours, such as infrared and ultra-violet. Like extremely low or high frequency sound waves, infrared and ultra-violet are also beyond the threshold of human sensory range, their presence, can only be detected

by means of special instrument.

(b) Warm and cool colours

According to Mainland (1951) artists have long refered to yellow-orange and red as warm colours and blue-green, blue-violet as cool colours few of them are aware that this is literally true, the red is always warmer, the blue is cooler. Green and red-purple are between the spectrum and relatively neither warm nor cold. The purple and red-purple do not exist in the solar spectrum but are made by mixing the extreme, red and violet.

Storey (1978) maintained that fabrics to most consumers have no meaning without colour. The importance of colour in human life can never be over-emphasized. Ireland (1971) stated that expression and responses through the language and symbolism of colour are among the most primitive, basic and at the same time sophisticated and subtle instincts. Webber (1979) also describes colours as a private and personal responses to what we look at. Vegetable dyes for instance are not far fetched locally.

2.22 CONTEMPORARY RESIST DYEING TECHNIQUES

Specifically speaking, there is no clear distinction between traditional and contemporary resist in dyeing techniques. The preparation in the techniques is the same. In both sides, dye is prepared, and starch made from corn

flower or cassava is used to cover the areas to be resisted. Also the same ingredients or dyeing chemicals are used, but in traditional techniques local herbs from organic materials are converted into chemicals. For instance, the water which are etracted from ash does the same work as caustic soda, and indigo which are leaves (elu) are broken by the alkaline extracted from ashes. It is left to ferment for about five to seven days. In case of the contemporary resist techniques the result is seen immediately.

Another area where we have differences between the contemporary and traditional resist in dyeing techniques are the recent development in the use of starch design with stencil methods and the various tie-dye designs and patterns in many colours.

(ii) Kampala Style

Direct application: the application of wax on cloth is also called Kampala. Kampala is the capital of Uganda. During the civil war between (1967 and 1969), Kampala was chosen by the two faction leaders of the war. During this period an austerity measure was introduced in the country.

The Federal Government banned all formal importation, with textile materials inclusive. The public had no option than to direct its energy to the development of the popular "Adire" fabric in order to supplement the locally produced commercial textiles. As a result, various backyard dyeing industries sprang up and the now familiar "Kampala" fabric

came to life. The name Kampala was given to the produced textile materials to mark the peace - talk in the city kampala.

Batik is an ancient versatile techniques known before the seventh century A.D. in China, and India (Stuart and Robinson, (Ibid). It reached very high level in Indonesia, where wax batik was often combined with black printing and the use of gold and silver. In West Africa, Batik was developed with starch paste resists, stencils and indigo dye. Batik is a resist technique in which wax or starch is applied to the fabric design so as to form colouring parts of the fabric. (See page 58 sample (No.iii)

Wax for batik must always be heated in container e.g double source-pan with water in the lower container and wax in the top one to avoid the risk of the wax catching fire. Do allow the bottom container to boil dry or water to be dropped in the wax. Always allow sufficient time for the wax to melt fully. Wax that is only warm will not penetrate the fabric but will lie on the surface when cold and so freaks off, allowing the dye to penetrate the resisted areas.

To start resist techniques one needs to equip oneself with the necessary dyeing materials and equipment. Such dyeing materials and equipment include:

(i) Rubber basin, for dyeing the fabrics

(ii) Brushes, for waxing

iii) Electric Boiling ring, for boiling water

(iv) Cups, for mixing dyes and chemicals

(v) Tjantings, tools used for intricate designs that brush cannot do.

(vi) Spoons, for measuring dyes and chemicals

vii) Stove, for boiling water which is used to dissolve the chemicals

viii) Kettle, for boiling water in the absence of boiling ring

(ix) Hand rubber gloves to put on when dyeing

(x) String, for tying fabrics and a host of many other tools.

(iii) Stamping Technique

A new dimension has been introduced in kampala techniques whereby principles of designs are applied. Simple or intricate designs cut in relief pattern on wood or linoleus mounted on base with a handle are used for stamping melted wax on cloth. The approach is identical to the hand carved wooden tampon used in Senegal and the carved calabash, the adinkra stamps of Ghana (Oguntana 1982).

Cloth to be stamped is spread flat preferably on padded surface while the melted wax is stamped on the fabric, depending on the design. The technique calls for a lot of

Sample (i)



Plain indigo dyeing

Sample (ii)



Traditional Technique
dyeing in indigo dye

Sample (iii)



Waxing method of Kampala

Sample (iv)



Marbleizing technique

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Sample (v)



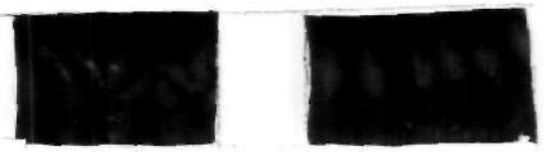
Tying in objects method of tie-dye

Sample (vi)



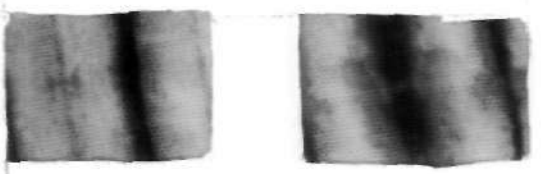
Tritik techniques

Sample (vii)



Pleating technique

Sample (viii)

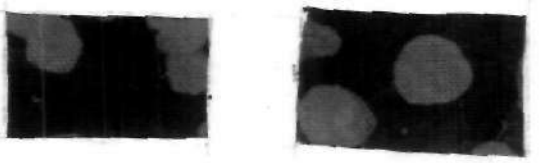


Folding method

Sample (ix)



Stitching



Sample (x)

Stamping method

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diligence and careful handling. After stamping the material is then dipped in dye accordingly. The number of the colours to appear on the fabric determines the number of time of stamping and dyeing. See page 60 Sample (x)

(iv) Tie-Dye

For centuries, the craft of tie dye was wide spread in all parts of the world except Oceania and Australia (Stuart and Robinson, (Ibid). It was developed in great silk regions of India, China and Japan as well as in West Africa and parts of Central Africa. They opined that until the discovery of synthetic dye-stuff the colours used were natural ones, such as the wonderful blue indigo, the rich browns and reds of walnuts, madder and cochineal and colours from lichens. Many of these are still obtainable from some dealers of these dyeing materials.

Other fact about the origin of tie-dye indicates, Meilach (Ibid) that tie-dye fabric remnants reveal in history that probably began in ancient Asia and spread down the sub-Indian continent to Malaya and across Africa. Relics of such textiles were also got from burial grounds in China and Persia along the ancient caravan and silk routes.

Tie-dye was probably well developed in India earlier than in Japan. Clothing of the people depicted in Fresco paintings in the caves at Ajanta between 16th and 17th (centuries) have white circular patterns similar to those made by tying circles known in India as "Plangi". These circles varied in sizes.

He opines that the examples of tie-dye fabrics also exist from Thailand Cambodia, indications are that it spreads from there to Indonesia. It is still a prevailing method for decorating fine silk used for shawls, veils and Sarongs for men and women of Java and Bali. African nations have used tie-dye methods for years and still do. Many Americans practicing the craft today learned natural dye recipes while serving in Peace-Corps among these peoples. They also brought back bolder design concepts than that originated in the Indonesia and oriented cultures. Tie-dyed textiles from each country exhibit distinguishing design and colour characteristics by which scholars have been able to chart the origin and types of fabrics produced throughout the world at different times in particular culture.

The earlier tie-dye on the American continent dated back from pre-columbian times when circles and squares were preferred as simple one colour pattern. The pieces have been credited to Mexico, Guatemala, Peru, Bolivia and others. The techniques employed by different peoples throughout the centuries vary and yet have many similarities. In every culture the techniques are basically the same. The cloth is tied, knotted, bound, folded or stitched.

Tying in objects

Fascinating patterns can be achieved in tie-dyed fabric by tying in objects from very tiny corn kernels and rice to large finishing float and orange juice, cans. Unique motifs

result from tying marbles, popcorn, stones, drapery rings, corks, chunks of woods in free form and definite shapes and many other things you can think of that will create a shape.

Often a piece of wood used for several dyeing will absorb colour and then discharge it into fabric on subsequent dippings. You can rub crayolas over the fabric before dyeing then tie in the object, and crayon colour will discharge their own oxidized coloration into the fabric for additional dye tones.

Pattern interest depends on the shapes of the object, how it is tied and arranged. The fabric with the object tied should be wet out before immersing the dye. Dona (1973) See page 58 sample (v).

Tritik Technique

Tritik or stitched patterns, is a most effective method of patterning and is still widely practiced in West Africa and parts of South and South-East Asia.

A strong thread such as cotton thread is sewn into the fabric with a running stitch (knotted at the loose end) is then drawn up tightly and fastened off firmly with two or three over-stitches to keep the fabric drawn up securely. It is essential to fasten on and off securely, if the thread gives off during the dyeing, the pattern will be spoiled. There are many different ways of using this method to give spirals animals, flower, bird, butterfly and other realistic shapes, as well as design form. See page 59, sample (vi).

Pleating:

This is another technique that is used in tie-dye. It is a variation of gathering. The fabric is carefully folded and tied with a continuous cord up and down for muted stripes. For definite form and shapes make individual ties at desired distances apart on the folded fabric. Resulting lines will be clean-out stripes. The difference between overall muted horizontal with connecting lines and carefully controlled, separated are only the difference in placing and tying the cords. The fabric was folded in half and then pleated to result in double reverse image. See page 59, sample (vii)

Folding Ideas:

There are, literally, hundreds of ways to fold fabrics to achieve exciting results with dyes. Once you attempt a few folds, hold them together, or tie them up and dye them, you will have a better understanding of how the other colours penetrate the fabrics and spread out for design. Lighter fabrics are suggested when multiple folding is planned. It is a good idea to practice on paper for folding techniques because it is stiffer than fabric and less expensive. Paper and fabric can be folded and not tied for brilliant effects: the dyes can be applied directly to the folds and the paper or fabric squeezed in the same manner. Practicing folds on paper will help you visualize how to work them out in fabrics, it helps to iron the pleats and use pins if necessary, so they

will hold as you continue to fold and then tie. See page 59, sample (viii).

Marbleizing method of Tie-Dye

Marbleizing, is a method where by the fabric is scrunched up, tie tightly in random fashion with cords or rubber band. Dye the fabric, rinse, dry and iron.

Marbleizing and spotting: Bunch the cloth and twist it, and place inside first one plastic bag, and the another, twisting the necks so that dye cannot enter. Tie around with cord or rubber bands. Then poke pin hole through both bags to let the dye seep in. Another method is by placing the fabric inside a nylon stocking or a mesh and then tying, it will also result in an overall pattern. Patterns created can be retied in other areas and re-dyed as a second colour. Dona (1973). See page 59, sample (iv)

Stitching Method

According to Dona (Ibid), the stitching consists of drawing up a thread sewn into the fabric so the puckers or folds that result resist the dye. Very intricate and controlled design can be developed by this method. The principle is simple. Any pattern, whether a straight line, curve spiral, diamond, square, or combination can be drawn and then outlined by stitching with string or thread. When stitching is pulled tight, the fabric puckers create folds. A number of rows can be stitched, design can cross over one and

other and they can be regular or irregular. The fabric can be used in single layers or double layers.

The main rule to follow is always to knot the thread at each end, leave extra length for grabbing it and pulling it from both sides. When pulling, you can gradually slide the cloth along the thread until it is bunched. After pulling, tie the two ends of the thread together securely so that the gathered fabric does not come apart while it is in the dye bath. See page 59, sample (ix).

The most popular stitches used are the running stitch and whipping stitch. For the running stitch, simply place the needle in and out. The whipping stitch is done over a hem or over a fold of the fabric.

You can sew several rows of stitches, pull up some to resist the first dyeing and then tighten others to resist subsequent dye-bath. Variations occur if some of the first roles are released to receive later colour.

2.23 TRADITIONAL AND CONTEMPORARY RESIST TECHNIQUES COMPARED

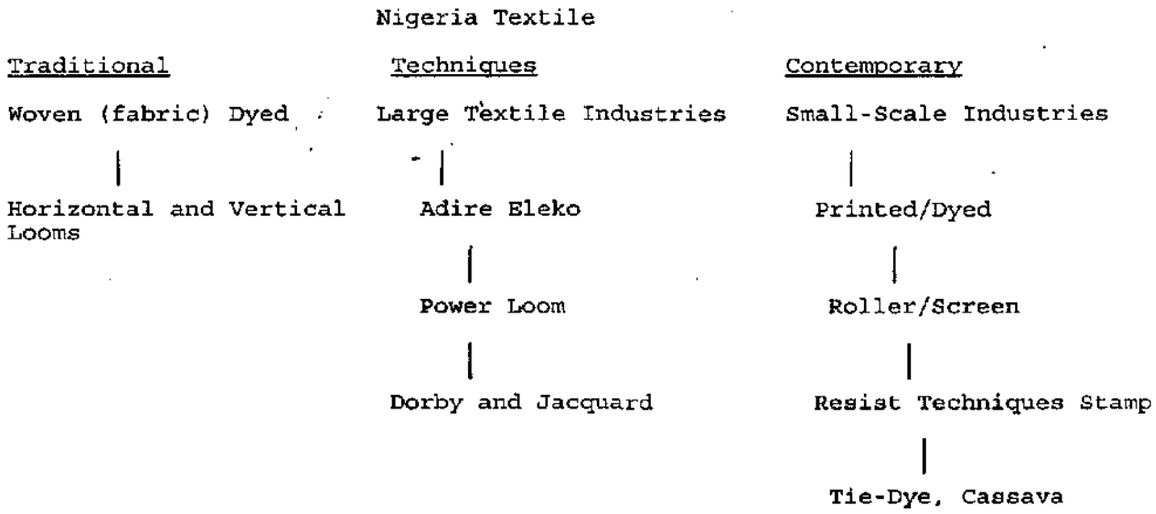
As stated earlier there is no clear distinction between traditional textile resist dyeing techniques and contemporary textile resist dyeing techniques. It has been observed that in the two techniques manual-labour is involved. There is hope, in the very near future that the contemporary textile resist techniques would be on machine for production as a result of continuous researches for the improved quality

production and as well as the great demand for the products.

The Nigerian textiles can be classified under two major categories:

Traditional and Contemporary techniques:

Oguntona (1987) based on the methods of production said that modern textile industries have undoubted influenced traditional industries in Nigeria for better and consequently improved their contribution to the nation economy. See the diagram below:



Even though manual process is involved in the two processes, yet the traditional technique process is slower in the sense that simple tools like feathers and brushes are involved in the application of wax.

One thing is that none of these two techniques has gone into large scale industry. They are all on small-scale. In

the two techniques, the demands for the finished products are the same . Of course, with the new innovation in the contemporary resist techniques for wall hanging, the future for the demands looks brighter than the traditional one. It must be realized here that all the large-scale industries we have today in the world started the same way as small-scale industries and gradually grow up to the level they are today.

The contemporary textile techniques use synthetic dye and chemicals to dye and print white fabrics as against the use of only indigo (blue) by the traditional resist techniques. In modern techniques, dyeing takes place not in communal dye-pits or pots but in portable plastic containers. Production process in modern techniques is faster than that of the traditional one whereby dye takes five to seven days to ferment.

CHAPTER THREE

3.1 METHODOLOGY

(A) Procedure for Data Collection:

Before the commencement of the field work, the following arrangements were required.

(i) The researcher commenced his journey for data collection after consultation with his supervisor, and an authority letter signed by the Head of the Department of Industrial Design obtained.

(ii) A research assistant was enlisted for interpretation during the investigation.

iii) The researcher needs to equip himself with gadgets such as:-

(a) Camera: The camera would be used to snap major activities, important equipment and working materials in practitioners' workshops.

(b) Tape-recorder: This would be used to tape record all discussions during the interviews between the researcher and dyers of small-scale textile industry, the buyers of the finished products, the sellers and as well as the consumers.

(c) Note book: Jotter would be used by the research to jot down words from the respondents during the interview.

(iv) Finance: This is another important tool for the researcher. He needs to equip himself with money in case

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the respondents may request for money before giving him audience.

(v) Personal data: personal interview which would include questions about position and rank, sex, age, educational qualification and years of experience would form the initial investigation.

(b) Research Design:

Kerlinger (1977) describes research design as a plan structure and strategy of investigation, conceived in order to obtain answers to research questions as well as to control variance. The plan according to Adetoro (1985) is the over-all scheme or programme of the research which includes how the research objectives are met and how problems encountered were tackled. Therefore, in connection with above, the researcher will hold discussion with the practitioners of small-scale industry in Kaduna State. Such discussion and study on research methodology will reveal information to the researcher about the small-scale industry in the state.

The researcher will use two instruments in data collection: that is interview and non-participant observational methods for this study. The methods are commonly used for data collection through direct observation or extraction of relevant information available. The information could be obtained individually, written-records and telephone. These methods have been strongly recommended by Spradely (1979) and Adetoro (1975) as being reliable

research methods. Also, Spradely (Ibid) re-affirmed that non-participant observation and personal interview represent powerful tools for revealing other people's ways of life. They are effective in making inferences.

In non-participant observation strategy, the observer is only an ordinary outside observer who is not involved in the behaviour being observed and so it can not be called participant observation. Here both the direct and inferential methods will be employed. For instance, in the direct method, the researcher will be involved in first hand experience, while in inferential he will draw inferences on basis of the observational report supplied by other people.

The non-participant observation strategy is a strong instrument through which reliable information can be recorded because one sees, perceives and has understanding of information. Facts are retained in memory for a longer period of time. The extent of relationships between the various sections of the practitioners of the small-scale industry under the study can easily be perceived, understood and assessed. The technique is flexible and enable the researcher to be free to pursue unforeseen leads. Also the instrument has greater reliability and highly effective in gaining understanding of social system.

There is on the spot assessment of the various activities of individuals in the industry. The flexibility of the instrument easily allows the researcher to switch or device

new methodologies in the mid-stream on the basis of opportunities which present themselves contextually. Another important thing about this instrument is that when the object is deaf or could neither read nor write and his respond is nil, his works could be observed and inferences made. Therefore, it could be concluded that non-participant observation strategy has greater advantage over the remaining instruments.

According to Kerlinger (1973), survey is classified by the following methods of obtaining information: Personal interviews, face to face contact, mail, questionnaire, panel, telephone, and control observation. Out of these methods of obtaining information personal interview has proved to be more effective and powerful tool of social survey-research. That is why throughout this study the researcher mades use of personal interview for the small scale dyeing industry in Kaduna State. This is in order to discover the extent of respondents knowledge about their works.

(c) Interview Method: Interview is a technique used for data collection from respondents in a face to face contact or telephone. Adetoro (Ibid) stated that interviews are sometimes used when responses are needed to be ascertained or if respondents can not read or write. On the other hand, the researcher can study their works and record what he has seen, takes pictures of things available. In cases where there are problems of reading

and writing the researcher can request for somebody else in interpreting the questions in vernacular to the respondents.

(d) **Non-participant Observation**: There are two basic modes of observation according to Kerlinger (Ibid), we can watch people do or say things and also we can ask people about their own actions and the behaviour of others. In each case the aim is to obtain information by either experiencing directly or by having some one to tell us what happened. The latter will however be considered for the purpose of this study. During observation, the researcher watches the respondents at work for better understanding of their works. This has an advantage of getting some information that the respondents would not be willing or able to give in response to the questionnaire, that will help the researcher in his findings, because some of the respondents may think that giving information about their work will mean exposing their business and production techniques.

Non-participant observation strategy is a very strong instrument through which reliable information can be obtained. By using instrument, facts can be retained in memory for a long period of time. The instrument is a flexible method which enables the observer to be free to pursue unforeseen leads. It also has the ability of making the observer to be reliable and effective in gaining understanding of social system.

3.2 PHOTOGRAPH

The researcher went along with a photographer to the practitioners' studios during his field study. Photography is an instrument in data collection. For a thorough investigation a camera would be used to snap major activities, such as peoples at work, working materials and equipment. The pictures snapped would enable the researcher refresh his memory and analyse his data collected during his field study. In Mrs Teru's workshop for instance as the researcher was led round the studio section by section and listening to the explanation about her works in the studio, a photographer was also following them and snapping the major things when and where necessary.

3.3 PRIMARY AND SECONDARY SOURCES OF DATA COLLECTION:

1. Primary Source: According to Oguntona (1981) a lot of behind the scene activities take place and field work calls for good planning, adequate preparation and some foresight. To this end effort must nt be spared in seeking information from various sources in anticipation of the study.

To facilitate the field work, the researcher made use of the already established contacts with resource persons and locations relevant to the issue under investigation. Armed with all the necessary working tools the researcher then moved from Zaria A.B.U. main Campus to Kaduna which was chosen as

the base for field study.

Secondary Source: The researcher made use of Library facilities within the Ahmadu Bello main Campus Zaria (which included the Kashim Ibrahim Library and those in the Department of Industrial Design as well as Faculty of Education). Other Library contacted was Federal College of Education, library, Kontagora, Niger State in collecting relevant information.

In addition to the above, related texts theses, journals, magazines, dalies conferences and seminar papers were consulted and synthesized to broaden the researcher's horizon in the area under investigation. Contribution and reports from renounced scholars were all welcomed and considered in order to provide the theoretical framework for the study.

(e) Population: In order to find areas of improvement in traditional textile dyeing in Kaduna State and how to find means to transform it to a modern small-scale textile industries, four groups of people will form the population of this study. They are:

(i) The producers of textile dyeing materials;

(ii) The buyers. These are the middle-men that buy from the producers.

iii) The sellers. These represent the seller of these materials to the consumers and

(iv) The consumers, that is the public who buy the materials either because of their aesthetic values or because of their qualities.

CHAPTER FOUR

4.1 PRESENTATION, DISCUSSION AND FINDINGS.

INTRODUCTION

This chapter deals with presentation, discussions and findings collected during the field study. Respondents were organized in three groups viz.

(a) The traditional/modern small-scale textile entrepreneurs.

(b) The middlemen, that is those who buy the finished products in bulk from the producers and to the users.

(c) The consumers, these are the third group who represents the public who buy the materials either because of their aesthetic values or because of their qualities.

4.2 Presentation and Discussions:

The findings are based on small-scale textile industry in Kaduna State. They also include discussions on the data collected and the summary of the findings. The data collected were based on personal interview and controlled non-Participation observation.

Three main practitioners of small-scale industry were visited in Kaduna State. Two of them are in Kaduna town while the third one in Zaria city, Zaria. One of those first visited in Kaduna town was Mrs Teru. Mrs. Teru has her workshop and showroom at Barnawa Road with a big signboard in front of her work-shop. See Plate number 1.

In order to do a good job the researcher equiped himself with camera to snap some important items in the workshops of the practitioners and tape recorder to tape-record various discussions. However, on the first day of visit to Mrs. Teru, in company of one Mrs. Afolabi, a Lecturer in Kaduna polytechnic, the host received them warmly but told the researcher to repeat his visit.

The second time the researcher called on Mrs. Teru, she was absent. He was told that the practitioner travelled to Lagos, may be to buy her dyeing materials. The researcher repeated his visit again the third time after two weeks and this time around she was met in her place of work, and he was warmly received again.

The practitioner, Mrs. A. Teru a Yoruba by tribe and 60 years of age married with children. She has secondary school education. According to her she started this trade as far back as 1963.

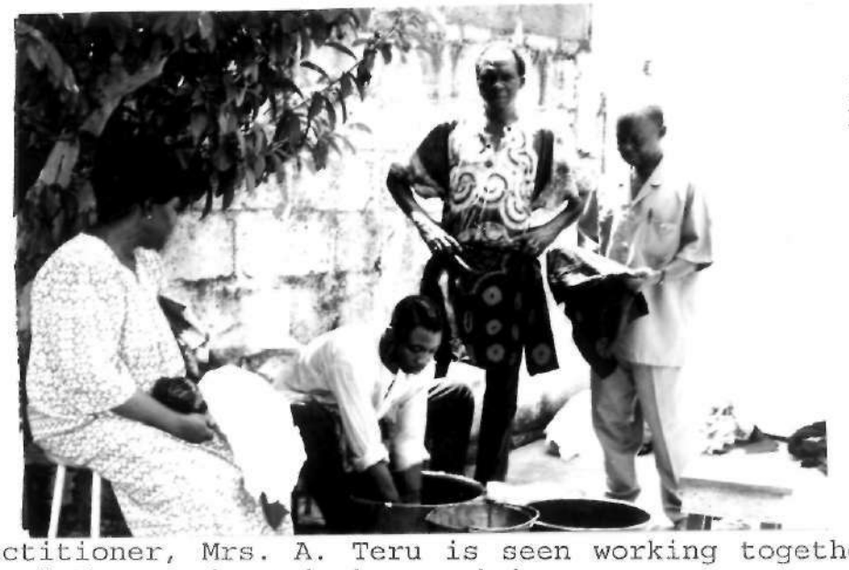
Answering a question about her work whether she learnt this work or inherited it, she said she inherited it because she grew up to meet her mother doing traditional dyeing in company of other housewives. She, the practitioner was very young but used to help her mother in most aspects of dyeing. She was actually initiated into the work and later became perfect in it. In her secondary school days she was always ahead of her mates in the class as far as textile production was concerned. This was because of the early foundation she built at home.

Plate
No.I



Signboard of Mrs. A. Teru

Plate
No.II



The practitioner, Mrs. A. Teru is seen working together in company of 'her workers in her workshop.

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Regarding her trade whether she was doing it as a full-time or a part-time business, the practitioner said that it is a full-time business. It was from the trade she sponsored all her children to schools even up to University level. Not only that the house she is living now and using a part of it for workshop and showroom, she built it herself and it was from the trade. She has many people working for her, some on permanent basis while some on part-time. This is a business that one person cannot do alone. Even according to her she applied division of labour system so that the work could go smoothly.



Plate No.III

The researcher and one of the workers are seen in practitioner's show-room observing the finished fabrics put up for sale.



Plate No.IV

One of the Dyers is dyeing a piece of fabric in Mrs A. Teru"s studio



Plate No V

Workers are seen busy loosing the stitch and dyed fabric.

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Organization Structure

The administrative structure of Mrs. Teru's workshop is as follows: She is the entrepreneur, that is, the overall managing director of her mini-industry. She employs workers and dismisses those who misbehave. Next to her are the Assistant Director and Technical Director. The Assistant Director does the general supervision of the workers, seeing that things are in order, supplying the needs for the smooth running of the workshop and making arrangement for the payment of workers salaries and also interviewing applicants for employment. The Technical Director on the other hand travels out in purchase of dyeing materials and other studio equipment. He also visits the customers within and outside the environment and supplied the finished materials to them.

The next group of workers in Mrs. Teru's workshop are the artisans. They are five in number. This group of workers do the main job in the studio. They do the waxing, stitching and dyeing of fabrics. They also maintain the tidiness of the workshop. These groups of people are always seen busy in one kind of assignment or the other throughout the day. Another set of workers in the studio are those in charge of finishing. They are two in number in this group. Their main duties are dewaxing,, loosing the stitched fabrics, see page 92 plate (vi), washing and ironing. There is also a studio girl. The girl is always met in the showroom attending to customers.

She and the Assistant Director join hands in arranging and mounting up the finished materials in the showroom. Some of the cloths are mounted in yards while some are made into dresses by tailors in accordance with the Director's prescription. See Plate (No.v). Finally there is an elderly man, a retired soldier. He is employed as a security-man. The Administrative organization structure below gives full details.

Administrative Organization Structure:

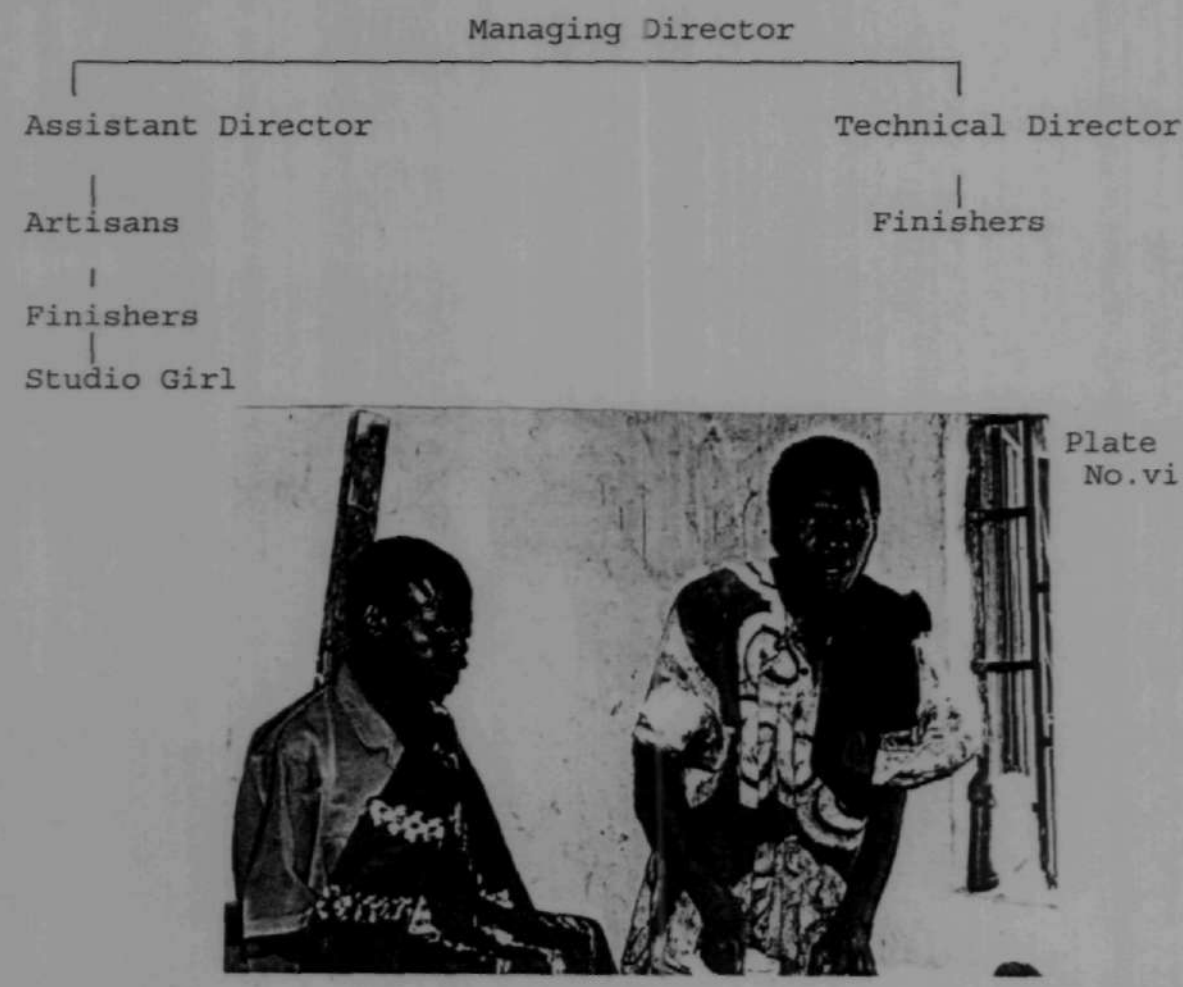


Plate No.vi

One of the workers standing by the right hand is seen ironing the already dyed fabrics in Mrs. A. Teru studio.

4.3 SOURCES OF RAW MATERIALS

Another question on how the practitioner gets her dyeing raw materials. She said that dyeing raw materials were not easily got. The Indigofera (Elu) is no more grown as before. This might be because there is no more market for the local dyed fabrics. Also, many of the local dyers of the fabrics have shifted to another trades that are more gainful.

Answer to another question on raw materials, she said that she used to buy her raw material from either Lagos, Kano or outside countries such as Togo, Niger Republic and Zambia. She then threw a question back to the researcher that what were the students and lecturers of Universities doing about dyeing raw materials? When shall we reach the level that the consumers of textile dyed materials would stop importing dyes? The users of these essential dyeing materials are eagerly looking up to the scholars of Universities for the miracle to happened and there by arrest the acute shortage of dyes in the country, the practitioner added.

In response to the above statement regarding the continuous importation of dyeing materials, the researcher said that it was one of the reasons of his coming out for investigations. Firstly, to know the problems facing the practitioners, Secondly to find ways of solving them and thirdly to assure the dyers of textile materials that there is a bright future awaiting them.

4.4 SOURCE OF CAPITAL:

What about your initial capital, how did you get it? The practitioner said that she got her initial capital from her sweat. She went on to say that she started this trade from the little savings she had. Getting money from somebody is not easy, even though the person has the money he would not give out. This is the general habit of Nigerians. No one wants the progress of his neighbour and also the fear of not able to pay it back, she asserted. Again, to get loan from banks is also a problem, for there must be a surety and secondly the bank's interest is too much. This is why many people are running away from the bank loan.

Distribution of Finished Products:

According to Mrs. A. Teru, there were many ways she was using in distributing her goods. Some of them were by sending them in bulk to her main customers. People also used to come individually or in groups, mostly the housewives. Also, tourist used to come and buy the materials. People also used to come from far and near like Abuja, Kano and Ilorin because of these goods. Iam not at all regretting to find myself in this trade she said.

Do you receive patronage from people for your business? This was another question for the practitioner. According to Mrs. A. Teru, she said that her customers both within and outside Kaduna and even abroad have actually made her business

successful. For instance, whenever she received a new face in her showroom she asked the question, how did you get to know this place? The answer she received normally was that I saw the material through a friend. This usually makes me proud, she said. There is no doubt about this that people are helping me to patronize my business. I thank God for this, she said.

4.5 PROBLEMS ENCOUNTERED:

There is no doubt you have some problems in your business, if so what are they? In answering this question she said that actually the main problem she was having right now was that there was no market as it used to be. The reason is that money is not much in circulation. The former regime finished the money in the country. She finally said that we have to pray earnestly for our present Head of States, President Olusegun Obasanjo for success in his administration so that money can be released to the workers in the civil service. As regards the fastness of the dyes used on the fabrics, she made a categorical statement of assurance that her dyes are fast to washing and that is why she continued to maintain her customers.

4.6 SUGGESTION FOR IMPROVEMENT:

Do you have any suggestions for the improvement of your business?. Her answer was that the federal Government should allow these tourists to visit Nigeria. These were the people that used to promote the real business and that once this was

done, things would move accordingly and she would smile. The practitioner also said that market was not so bad when she started her business in 1963. At this period things were good because there was much money in circulation in the country. Everybody then was living in a semi-paradise.

The researcher was conducted round the workshop and showed many things including different types of dyeing materials she was using to dye her material. She said that the dyeing materials that she was using are: The white fabrics which must be cotton materials that take in dyes, such as shirting, Funtua made and sherda white materials. The chemicals are sodium hydro-sulphite and sodium hydroxide. The dyes she has been using are the vat dyes-like adefasto and Indetheriuene and that he has been using them because they are fast to cotton materials.

Other materials she is using are plastic basins for dyeing the fabrics, rubber stamp, rubber hand-gloves which must be worn when dyeing, stove and boiling rings for heating water to be used in dissolving the chemicals and dyes and de-waxing the fabrics. There are also tables, some are used for waxing the fabrics and others for ironing. There are also blankets which must be spread on table before waxing takes place. All these materials are necessary to carry out a good job of dyeing.

Mrs. A. Teru did not charge the researcher any amount of money for giving him an audience throughout his visits. At

any rate the researcher used to give some money as a token to the workers ranging from (₦100.00 to ₦150.00) each of the three times he visited the practitioner's studio.

The researcher visited another practitioner of textile dyeing materials at Faskari Street, Tudun Wada, Kaduna. His name is Alhaji Umaru Kabir, a Senegalese by nationality. He is about 80 years old. He is married to three wives and has many children.

The practitioner, according to him, was educated in Quranic School and that he learned this trade of Batik and Tie-dye from somebody else. He later established his own.

4.7 ADMINISTRATIVE SET UP.

At present according to the respondent, he, Alhaji Kabir is the sole proprietor of the small scale textile dyeing industry, and that he has twenty-two workers working with him. Out of these workers, four of them who are really perfect in dyeing are appointed as their supervisors. The workers are grouped into four with a supervisor for each group. These supervisors are assisting the Directors. He also has Foreman. His duty has no connection with dyeing. The Foreman travels out in purchase of dyeing materials, such as fabrics, dyes and chemicals. Two other workers are responsible for waxing, tying and dewaxing. After washing they are hung on the line to dry. Plate (No. vii); also another person in the work-shop does the ironing while the rest twelve are grouped into four, three person in a group, these are doing the work of dyeing

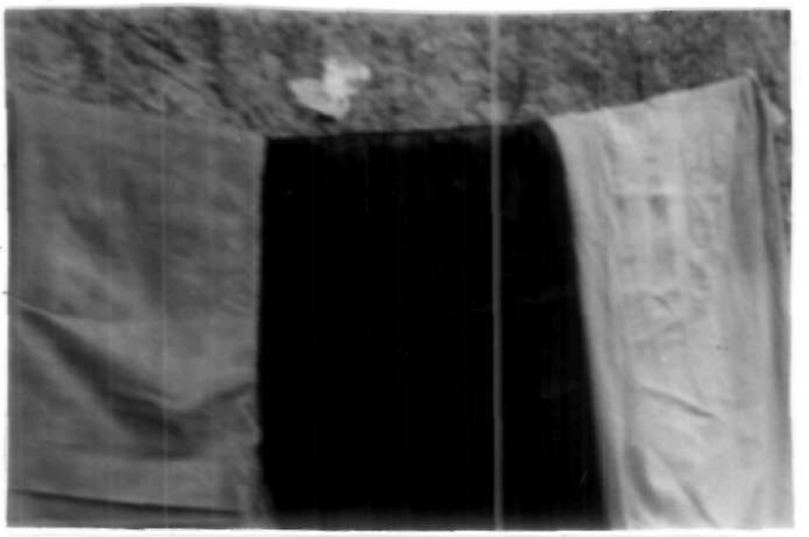
only. See the Chart showing Administrative Structure below.

Plate No VII



Dyers at work in the studio of Alh. Musa Kabiru, Faskari Street, Tudun Wada, Kaduna and the Research is seen watching.

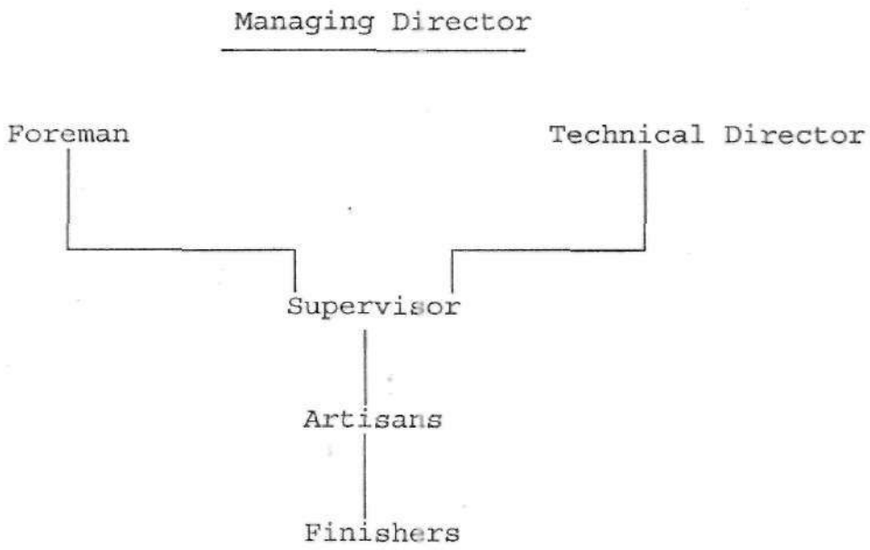
Plate No. VIII



Dyed and rinsed fabrics hung on the line to dry

Dyed and rinsed fabrics hung on the line to dry

CHART SHOWING ADMINISTRATIVE STRUCTURE



The dyeing materials that the respondent is using according to him are: white fabrics of either Funtua made or white shirting. The dyeing chemical; are sodium hydro-sulphite and sodium hydroxide, and dyes are Indethrien and Adefasto. His dyeing equipment are drums. A drum is cut into two and they are making use of them as plastic basin. Other dyeing equipment are rubber hand gloves. Firewoods are used in making fire for boiling of water to dewax the waxed fabrics.

They dye old and new textile materials. Also they used to create new motifs based on cultural motifs, such as snale shells, swords and many others. According to him, this was an

area where many textile designers have neglected and it is very important most especially it enables our coming generations to see and know about the past cultures and what they could do for the improvement. See plate No. (vii).

Answering another question about how the practitioner acquired his raw materials, he said he used to buy the raw materials from Kano and Niger Republic. The question on how he got his initial capital, the entrepreneur said that he got his initial capital from his personal savings and his close relations. He also said that he thought of going for bank loan but he again thought of the interest. The banks' interest were too high and also to go into such a risk was not easy, because it was dangerous, he concluded.

In disposing the finished products the practitioner said that his finished products were bought by his local customers. Also bulk of the materials was sent abroad to his foreign customers. He said that he thanked God and thanked the individuals that were constantly buying his materials. The major problem facing his business according to the practitioner was how to get enough capital and that if he could get enough fund, his plan was to expand his semi-mini small-scale textile industry to a full integrated industry and employ more workers. This would no doubt earn me more money and also reduce unemployment at least in this environment, he said.

In giving answer to another question from the researcher,

Alhaji Musa said that to improve or upgrade his business, as we all know that money was the root of all good and bad things. Fund, he said was the bottle-neck of the growth of a business. If there was fund today the practitioner said, a lot would be done to improve my work. He also said that in the past the Federal Government used to Commission this company to teach Batik and Tie-dye art to women in various sectors of the country, but nothing of such nowadays because the economy of the country has gone down beyond expectation.

Finally, he said he has every course to thank God that his business which he started about 25 years ago has not let him down instead it has been growing the more and solving most of his economic problems.

Just as the former practitioner of small scale textile dyeing industry was kind and accommodating so also Alhaji Umaru Kabir was kind to the researcher. He did not charge the researcher any amount of money. Nevertheless, the researcher would not leave the practitioner's studio without giving the workers some money ranging from (₦100.00 to ₦150.00) as a sign of gratitude.

In continuation of researcher's field study in Kaduna State, the researcher went to Zaria City in Zaria town of Kaduna State. He was directed to one Goldsmith who had his workshop in the city, a Yoruba by tribe. He, the Gold-Smith ordered one of his boys to lead him to the traditional dyer. Thank God he had no problem of language barrier. The little

Hausa he could speak made it possible for him to communicate freely with the practitioner concerning his trade. The practitioner received him warmly and he put the request before him. He promised to help him but with a condition that he would pay a total sum of (₦1,500.00). One thousand and five hundred naira only. with this condition the researcher told the man that he would repeat his visit again. Two months later the researcher went back to the city and luckily he met the practitioner again on duty. He was warmly received as before. He repeated his request again and the practitioner repeated the same condition to him again. At last after much pleading he accepted a total sum of (₦400.00). Four hundred naira only from the researcher and the interview began.

The traditional textile dyers name is Umaru Idris. He is about 67 years old and an Hausa by tribe. He said that he was the only traditional dyer in the whole of Kaduna State and that he was of course very proud of it because he has not seen anyone who has come out with the same profession to compete with him in the whole state. See page 94, plate (No. ix).

Mal. Umar said he was not opportuned to have Western Education but that he received Quaranic Education. He was married with two wives and many children. On the question whether the practitioner inherited this trade or learnt from somebody, he said that this was a trade handed over by his grand father to his father and his father in turn handed over the trade again to him so there was no question of whether I

learn it from somebody. He could not even remember how he acquired the knowledge. In regards to execution of his work, the entrepreneur said that he used to employ workers casually whenever there was much work for him to execute and his children normally were his main workers. He has trained them in all aspects of the work and they handle the work even when he was not around, the practitioner said. He said that he dyed fabrics usually plain with indigo colour and some times dyed using traditional motifs to produce designs, See page 58, (Samples i and ii).

Plate No.IX



Mal. Umar Idrisu, the practitioner of local dyeing textile in Zaria City of Zaria in Kaduna State.

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Plate No.10

Dyeing pit of Mal. Umar Idrisu in Zaria City in Zaria Town of Kaduna State.

4.7 ORGANIZATION STRUCTURE

Administratively, according to Mal. Umar, he is the sole administrator of his local industry, and of course he is all in all in his mini traditional textile dyeing industry. His children and other workers jointly do any work which he assignes to them generally. See the Administrative Chart below.

Managing Director

|

Artisans and Finishers

How do you get your raw materials was another question to the practitioner. His answer was that he used to buy these

materials mainly from Kano. Again that he himself used to manufacture some and that most of these raw materials could be got locally from herbs. some of the names of these raw materials used in (Hausa Language) are Katsi-tuka, Baba and Shuni, See page 96, plate (xi) These materials are mixed with indigo which I used to import from the neighbouring countries and sometimes from Lagos. The Indigo is in powder form. some of the raw materials used for dyeing are seen displayed while the practitioner and his children sit by the side. See plate No (xi). Appendix.



Plate No.XI

Dyeing materials and equipment are seen spread on the ground by the practitioner of traditional dyeing techniques in Zaria city, Zaria.

4.8 DYEING PROCESS

According to the practitioner the ingredients named above were mixed properly inside a basin. Already, dyeing pits had

been dug about 6 feet or 8 feet or even 12 feet in depth and well cemented. The pit to be used would be filled with water up to the top. See page 94, plate (10). Then the mixture of the dyeing ingredients would be poured into the pit of water and is left to ferment for one to two weeks as the case may be. After the fermentation the dyeing work would start. According to the practitioner, one can continue using one pit after fermentation for three to four years stirring the solution occasionally. After four years or so the pit is emptied and a new one is prepared. The use of one dyeing pit for 3 to 4 years is subject of debate, because it is doubtful for a fermented dye to stay for 3 - 4 years and still be in good condition. I suppose it should have gone bad, this is the researcher's own view, See page 94 plate No (x).

Then, finally, the practitioner was asked if there was any suggestion for the improvement of his trade?. In his reply to this question he said that he needed financial help from the government to improve. This will definitely boost his business. He also wanted his work to be patronised and he did not know how it could be done. If this could be done for him there would be progress and innovations would even come in.

4.9 SPECIFIC FINDINGS

a) That majority of small scale textile industries in Kano, Kaduna State were badly-located. Most of them were

located in the ancient cities, where drainage, water supply, space for expansion are either not adequate or none existing.

b) The level of formal education for the small scale textile enterpreneurs is very low. Very few enterpreneurs have attained primary and secondary education, majority of them are illiterates. The low level of western education, or lack of it, has adversely affected the progress of the enterpreneurs in terms of using modern chemicals, dyes and managerial skills.

c) The initial source of capital of the small scale textile industries is largely obtained through personal savings. This indicates that the government/financial institutions hardly give or in other words, hardly support potential enterpreneurs with capital for the take off of the proposed industries.

d) Raw materials for the small scale textile industries especially (cotton/white fabric) dyes are obtained locally.

e) People in Kaduna State hardly patronise the products of traditional dyeing industries. The causes for the lack of patronage are mainly lack of variety in design, monotony of colour, and poor colour fastness.

f) The traditional dyers take longer time in the process of dyeing fabrics than modern dyers. Duration for dyeing is a set back to the traditional dyers in terms of

production.

g) The usage of vat dyes by the modern dyers gives them upper hand in production, and patronage than traditional dyers. The traditional dyers are willing to accept the introduction of vat dyes.

h) The government (both State and Federal) gives little assistance to the small scale industrialist in procurement of land, provision of soft loan for expansion, organising workshop/training, and patronising products.

i) Availability of imported textiles, poor management, lack of capital for expansion are some of the causes attributed to the decline of traditional dyeing in Kaduna State. However, government negligence took the greater blame.

4.8 POSSIBLE FACTORS MILITATING AGAINST TRADITIONAL DYEING IN KADUNA STATE

4.8.1 Possible factors militating against small-scale dyeing industries in Kaduna State are numerous. Some of the problems have been enumerated earlier in the proceeding sub-heading "problems of small scale industries". However. some of the peculiar problems related to traditional dyeing in Kaduna State are reviewed as follows:

i) Capital/Financiers

ii) The establishment of large scale textile industries

iii) Smuggling.

iv) Patronage.

v) Raw materials.

vi) Skilled man-power.

vii) Water supply

viii Power supply.

4.8.2 CAPITAL AND FINANCIERS

One of the major constraints to the small-scale industries dyers in Kaduna State is poverty. In other words, lack of substantial capital for the sustenance of the dye pit industries. Inadequate capital for the operation and purchase of raw materials is a common problem with the SSI. The researcher observed that the government and other financial institutions are operating at different frequencies with the traditional dyers. While the government is advocating that it gives incentives to small scale industrialists (the dyers inclusive) on the other hand, the traditional dyers are complaining that the government has neglected them and is giving them no financial or moral support. It is evidently clear that lack of adequate working capital is seriously restraining the productive activities of the dyers.

"In the 18th and 19th centuries when the traditional dyeing was booming, the dyers were supported by financiers and textile brokers". (Tshoho 1994). Usman (1974) has affirmed the aforementioned when he said:

> Dyeing involved considerable investment in the making and maintenance of the dye-pits, the purchase and preparation of the dye-stuff and the textile to be dyed". He further said, "in general the organisation of cloth manufacturing and dyeing involved brokers, merchants and financiers at all levels and the products were highly diversified. There were specialized groups of merchants and financiers known as (yam kolodo) who financed weavers. Other specialized in financing tailors and dyers. The considerable involvement of merchants financiers and brokers in the textile industry made it highly sensitive to the ebb and flow of trade.

The situation now in Kaduna is a different one. The financiers and broker of traditional dyeing have withdrawn their services leaving the dyers to shoulder the sole responsibilities of production. Little wonder why the traditional dyeing is not progressing.

4.8.3 THE ESTABLISHMENT OF INDIGENOUS LARGE SCALE TEXTILE INDUSTRIES

In the development of most of newly industrializing countries, the textile industry is usually the first to be established in what, conventional, is called the "modern sector of the economy". In the majority of cases, the purpose has been to make available an import substituting alternative source of textiles for the people, thereby saving some of the scarce foreign exchange. Rognsvag (1980).

The above assertion is true, but why were samll scale dyeing industries neglected? If the motive behind the establishment of indigenous textile was to make an import, substituting alternative, no doubt, the aim was defeated. It is very clear that we are loosing "the home and away matches"

in the sense that the indigenous textile industries are neither meeting the demand nor the quality of the textiles needed by the Nigerians. It would have been better to develop the traditional textile industries, rather than the so-called transfer of technology, where industries were established in our soil, but owned by foreigners.

According to the Economic Research Centre, Obafemi Awolowo University, Ile-Ife (1972) 95% of the existing large and medium sized industries in Nigeria are established by foreign entrepreneurs either single handedly or with partnership with local private entrepreneurs or public authority, while almost 100% of the small scale industries are fully owned and financed by Nigerians. The Nigerian Enterprises promotion Decree (1972), is emphasizing the indigenisation of the industrial sector and the role which SSI can play in such indigenisation. Up to the time of writing this research, the 100% indigenisation of large industries have not been implemented.

Little wonder, why the traditional or cottage small scale industries are not receiving the deserved attention by both the state and the federal government. "Big giants" like the United Textile Limited (UNTL) and Arewa Textile Company in Kaduna are owned 60% by foreigners and 40% by indigenous investors respectively. Such textile companies never sponsor University or private research for the development and upliftment of our traditional or cottage textile industries.

Ugbolue (1980) supported the above assertion when he said:

> "An examination of the policy of the textile industries in Nigeria would reveal that most of the mills are largely foreign owned and are at present interested in satisfying demands at minimum cost. Research and development support are provided by the parent companies in their home countries, thus securing employment opportunities for their indigenes for which the Nigerian section has to pay handsomely by way of research and development contributions/charges in the cost of equipment. Multi-nationals by their nature of their set up, do not care about how much scientific and technological development the innovative content of research and development activities could contribute to the overall well being of the host country. Most of the technology required for the production of the textile, except the handcrafted textiles is obtained already packaged and proven from abroad".

The obvious result is the crumbling of traditional textile industries. The large industries flood the market with cheaper and superior quality products. Their capital base is large and superior to the small scale textile industries. Cotton which is the basic raw materials for the SSI became difficult to obtained because of inflation. Whereas the "big giants" large textile industries could sustain such inflationary trend which they hatched because of competition to get the lion share of the annual cotton harvest.

The large and small-scale textile industries are supposed to complement one another. However, the large scale industries are not even aware of the existence of possible complementary small industries. The experience in Japan and India, where conscious efforts have been made to develop the

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small industries shows that only public authorities can most effectively develop to choose forward and backward linkage between the small and large industries. The growth of the large industries should and do stimulate the growth of the small ones which in turn serves as an example for artisans and entrepreneurs engaged in the traditional industries.

From the foregoing facts, it is evidently clear that the traditional textile industries are relegated to the background in Nigeria in general and Kaduna State in particular because of the "so called modern large textile industries". Adetoro (1980) shared the same view as above when he said: "what one finds nowadays is a tremendous influx of foreign ideas used completely without any alterations to fit our mode of life.

The weaving, embroidery and dyeing have all been relegated to the background. What one now gets are imitation java print or real wax prints, brocade, lace and so on". He further said: "no quarrels with cross pollination of ideas but any dynamic foreign idea should only be used to help develop the cultural roots and sensibilities of our people", of the craft in the state. Brown (1978) observed that the indigo used by the Hausa dyers is not fast, he further said, "real indigo rubs off from cotton, and the skin of these people usually has a bluish cast to it".

The researcher observed that there is a clear indication that the fastness of the traditional indigo to washing, rubbing and possibly sunshine was very low, judging from the

product changing colour, in other words fading away within a short period of time. Thus, the traditional fabric dyed with indigo can no longer compete with a superior synthetic dyed fibre or fabric in terms of colour fastness which every customer look for in textile products.

4.8.4 SMUGGLING

Smuggling is a two-way traffic, that is taking goods secretly out of the country and bringing in goods without paying duty. The traditional textile industries are the worst affected by illegal business. A financier Time survey (1980) revealed that "much of Nigeria's ground-nut and cotton crops disappears across the border into Niger Republic in exchange for (CFA franc or goods". They said further, "The lace market has undermined the domestic textile industry. The same is true of the traditional textile industry, which admits it cannot compete for quality with the imports from England and Holland but adds that Nigeria's high domestic production costs make imports far more competitive.

Many sectors, especially the textile sector, suffer from the wide availability of smuggled imports or periodic changes in the government's protective terrifs. The government acknowledges that smuggling is a problem, although Sha'abu (1980) former Minister of Commerce during the Shagari's administration, said; in an interview with the Financier Times survey, that "I think most report about smuggling are

exaggerated". However, officials point out that Nigeria has a long border that is difficult to patrol and is surrounded by Francophone countries that allow a lot of imported goods. They also argue rather cynically that less foreign exchange is lost on smuggled imports than on officially sanctioned purchase of imports.

In the recent development, the Punch Newspaper (May 1994) independent investigation revealed that customers increasing preference for second hand cloths smuggled in from neighbouring Benin and Niger Republics is seriously threatening the local textile market. Customers prefer the second hand clothes because of their relative cheapness when compared to new made in Nigeria fabrics. Major streets and bus stops in Lagos and other parts of the country are often lined with second hand suits, cottons, wrappers and children clothing. The business is said to be worth million of Naira annually in sale.

4.8.5 PATRONAGE TO THE SMALL-SCALE DYEING INDUSTRIES IN KADUNA STATE

The Oxford Advanced Learners' Dictionary defined patronage as: support, encouragement, moral or financial help given to a person by a patron". To my understanding every business or businessman needs patronage in order to sell out the items or products he or she is producing. If the business man or woman looses patronage, it means that the business would come to standstill.

In the proceeding sub-heading "The Establishment of Indigenous Large Scale Textile Industries", the researcher has explained how the traditional textile industries were relegated to the background because of the emergence of mechanized large industries. The patronage that was given to the traditional industries also shifted to the products of modern large scale textile industries. Tsoho (1994) said in an interview with the researcher that "to the traditional dyers, loosing patronage was like pinching balloon in the air".

It was observed by the researcher that urban dwellers in Kaduna State hardly patronise the products of traditional dyers. Madauci (1968) made the same observation, when he said, "people who live in cities and large town have little contact with dyers, because all the clothes they wear are never dyed in the traditional Hausa dye pits". He further said, "the chief trading partners of the dyers in Hausaland are the Tuarregs and the Asbinawa, because these two people have not stopped wearing black dyed clothes.." By implication, it means all other people have stopped patronizing the traditional dyed clothes with the exception of the two groups of people mentioned above. The Asbinawa and Tuaregs are foreigners from North Africa who often come to Nigeria to trade with the Hausas.

The researcher further observed that the only people that still patronised the traditional dyed clothes in our cities

are close to the ruling houses, who often wear the black or navy blue turban. Again some elderly people have stopped wearing the traditional apparel. Women in the villages still dye their clothes in indigo. However, majority of youngmen and women hardly patronise the products of traditional dyers, a trend that indicates a decline in the ancient craft.

4.8.6 RAW MATERIALS:

Lack of raw materials is another constraint facing small-scale dyeing industry in Kaduna State. The practitioners of this industry depend on the imported dyeing materials. It has not been possible for the researchers in the country to do something positive in getting the dyeing materials locally. As a result of importation of dyeing raw materials the prizes of the finished products become very high.

4.8.7 SKILLED-MAN POWER:

Another constraint that small-scale dyeing industry is facing is skilled man-power. Most of the workers did not go through formal training in the trade before they are employed into the trade. This has made it impossible to satisfy the consumers because of inefficient and poor production.

4.8.8 POWER SUPPLY:

Electricity supply constitutes another constraint to small-scale dyeing industry in Kaduna State. Electricity supply which is not reliable in the state as in most parts of the country is causing a draw back to the progress of the industry.

4.8.9 WATER SUPPLY:

Another factor that is militating against small scale dyeing industry in Kaduna State is Water Supply. Water supply in Kaduna State is very irregular. As such small-scale dyeing industries in the state are not moving well as supposed. The well-water can not be used for dyeing because it has some alkaline which neutralize the dyeing chemicals in the prepared dye.

In order that the small-scale dyeing industries in Kaduna State can boost their ;products to meet the great demands of the consumers, the above facilities which are lacking in the state must be met.

4.10 PROSPECTS OF SMALL-SCALE DYE INDUSTRY IN KADUNA STATE

(1) Job Opportunity

(i) Small-scale industry has provided job opportunities for many people in Kaduna State. For instance: Mrs. A. Teru and Alhaji Kabir Musa employ many people into their studios. As time goes on and with the expansion of their industries surely many more people will be employed.

(ii) The study will enable the researchers and entrepreneurs to mount on serious findings in getting local raw materials to substitute the imported ones.

(iii) The study will help in building of skilled man-

power in textile dyeing industries in the state.

(iv) Educationally, the study will help to document both the past and present knowledge on small-scale dyeing industry, and will in turn be up dated for the new generation of textile designers.

(v) Culturally, the study will help to promote and meet the cultural demands of the people of Kaduna State, such as in areas of dancing, colours, dressing and many others.

(vi) In economic aspect, the study will help to reveal the ingenuity of local craft-man in Kaduna State. It will also enable researcher to do some investigations on how the material resources and skilled man-power can be tapped and resources used for the advantage of the industries in the state and the nation as a whole.

(vii) Aesthetically, the study will be used to promote the art of textile dyeing in Kaduna State because the products of resist techniques will be used for wall hanging, table cover, head rest and many others.

CHAPTER FIVE

5.0 IMPLICATION, RECOMMENDATION AND CONCLUSION

5.1 (i) IMPLICATION

The study has socio-economic, educational and cultural significance. It will set the blueprint for the industrial development of Kaduna State. It will also encourage self reliance through the provision of self employment, preservation of cultural heritage, indigenous skills and investment, utilisation of local resources, and contribute to the literature in this subject.

The implication of this research are viewed from three angles: namely -

i) Economical

ii) Educational; and

iii) Cultural

(ii) Economically:-

Many of the developing nations such as South Korea, Idonesia, Taiwan and India realised that the only way to develop industrially is to give maximum support and attention to the indigenous small scale industries. Therefore, the development of small scale textile industries in Kaduna State is very crucial for the state growth.

The improvement of the ancient traditional dyeing in Kaduna State will attract more tourist, thus more revenue. The revival of the traditional dyeing will bring back the past

glory of Kaduna which was attained during the famous trans-Saharan trade with North Africa. The State and the federal Government stand the chance of earning foreign exchange through exportation of the products of traditional dyeing. The findings of the study shall be very valuable to the Ministry of commerce and industries in planning for SSI in the state.

If small scale dyeing industries are improved, they shall provide job opportunities thereby reducing unemployment in the state in particular and the nation in general.

ii) Educationally:

Kaduna State cannot be counted as among the educated state in Nigeria. The study will be very valuable in higher institutions such as Kaduna Polytechnic, A.B.U Zaria, College of Education, Zaria, State Polytechnic, Zaria and many others. It will be a good record of reference for further researches in this field.

The state educational resource centre will gain alot through the findings of this research. Arts, stands a better chance of improvement because dyeing is one of the major courses of Arts.

iii) Culturally:

The three basic necessities of life are food, shelter and clothing. Since the dawn of history textile has been an integral part of man and his civilization. A man has been using fabrics for the sole purpose of dress. This dresses are

worn to cover privacy and prevent man from the harsh whether of the environment.

In Kaduna state in particular and Nigeria in general, dresses are worn sometimes for certain rituals, or festival like Sallah, Christmas and so on. Sometimes dresses are connected with titles like chiefs or Emirs, others are connected with ceremonies as mentioned earlier.

The culture of a people can mean the sum total of the people's way of life. Dyeing as a craft is embedded in the culture of the people of Kaduna State in particular and Nigeria in general. Thus, traditional dyeing if improved will contribute in preservation of cultural heritage.

The findings of the study have revealed that small-scale textile industry is a means of contributing to the economic development of a nation. Also that most of the practitioners complained non-patronage and financial aids from governments. There is need for individuals and governments to appreciate the locally produced fabrics. The only way this can be achieved is that Nigeria should close their eyes from those foreign textile products and be proud of their own made products. Based on this, the federal government should see that domestic investments are protected through banning the importation of foreign textile products.

5.2 PROBLEMS ENCOUNTERED DURING DATA COLLECTION

The researcher was faced with some problems during his field study. Some of them are:

1. Disappointment

The researcher travelled to Kaduna on several occasions without meeting some of the practitioners at home. For instance, his second visit to Mrs. Teru Workshop, the researcher did not meet her at home and he waited until her arrival for good two weeks and some days.

2. In Zaria City

The researcher did not find it easy with the local practitioner of textile dyer. He had to pay for photograph snapping for the two occasions the researcher went there for photograph snapping of the researcher's products.

3. Accommodation Problem

The second time the researcher went to Kaduna in order to have an audience with one of the practitioners, Mrs. Teru, he did not meet her at home. He was told that she travelled to Lagos. The researcher had to ;put up with a relation living in just a room together with his wife and two kids. The researcher was for two weeks and some days in Kaduna waiting for the arrival of Mrs. Teru and sleeping on a three-seater cushion chair. This was not easy for him and was a great inconvenience to the other family friend.

4. Unpredictable Weather (Rainfall)

At the period of this field study there was torrential rainfall in Kaduna. The researcher had no alternative than to put his head in the rain in order to achieve his objectives.

5.3 RECOMMENDATIONS

An attempt will be made to formulate certain recommendations to the entrepreneurs of small scale textile industries and the government (both local, state and the federal). If the recommendations are properly implemented, they will improve the condition of traditional textile industries in Kaduna State in particular and the nation in general. Consequently, it will bring about their rapid development, thus enabling them to make a meaningful contribution to the industrialization of Nigeria.

5.3.1 RECOMMENDATIONS TO THE ENTREPRENEURS

(a) The industrialists should make sure that water, and other basic infrastructure are available or within short range from the location of their industry.

(b) In an attempt to improve the managerial skills of small scale textile industries in Kaduna State, there is need for entrepreneurs to maintain record of transaction, purchase, output, sales and all dealings.

(c) In order to enhance greater productivity and patronage, the traditional dyers as a matter of urgency should start using vat dyes side by side with the traditional indigo. Vat dyes with its multiple colours of yellow, red, green etc., couple with its fastness to washing, rubbing and sunlight, in addition to its advantage of short duration of dyeing, will assist in transforming the traditional

dyeing to a modern small scale textile industry.

(d) The traditional dyers should employ the services of a trained textile designer, who will be responsible for various resist designs.

(e) The small scale textile entrepreneurs should use the media available in Kaduna State (particularly the television and radio stations) for advertising their products to the public. Publicity, the traditional dyers should endeavour to learn at least the three 'Rs' i.e reading, writing, and arithmetic.

5.3.2 RECOMMENDATIONS TO THE GOVERNMENT/FINANCIAL INSTITUTIONS

(a) First and foremost, the government (both state federal) should provide free land to any potential small scale textile industrialists in Kaduna State. The land should be at the industrial lay out, with basic infrastructure available (light, water, good roads, communication network).

(b) The government should earmark specific percentage of its annual budget for financing of small scale industries. Interest free loans should be provided for take off and expansion of SSI. Where necessary, machineries, chemical etc, should also be provided as loans in addition to cash.

(c) The government (both state and federal) should provide consultancy services to the small scale entrepreneurs through its agencies like Industrial Development Centre

(IDC) in Kaduna State, the National Directorate for Employment (N.D.E.) the State Small Scale Industries Credit Scheme (SSICS), under the umbrella of Ministry of Commerce and Industries.

(d) Education is the backbone of any industrial development. Therefore, the government should provide evening adult classes for traditional dyers. The attainment of formal education by the entrepreneurs will facilitate faster growth of small scale industries in the State in particular and the nation in general.

(e) The government and large scale industries should patronise small scale textile industries by exportation of their finished products. This will motivate entrepreneurs as well as help them to develop their industries. Specific contracts should be reserved for small scale industries.

(f) The government agencies/financial institution (Banks) should simplify administrative procedures that constituted bottlenecks in the ministries and other financial institutions. This will enable entrepreneurs easy access when seeking financial assistance.

(g) The government should create depots for finished products of Small Scale Industry, they could be distributed far and wide, e.g. South Korea, India's free of charge depots for the manufacturers.

(h) As a matter of urgency, the government should complete

construction of the two workshops for Industrial development Centre (IDC) in Kaduna. The workshops should be well equipped with the necessary tools and machineries for the training of small scale entrepreneurs.

(j) Traditional textiles dyers should be employed by the tertiary institutions to teach students the techniques involved in production of the traditional dyeing fabrics so as to be able to marry both the contemporary and traditional dyeing techniques from improved products.

(k) State and federal Government should give recognition to the textile artists in terms of prices and national honours for their roles in social, educational, economic, and cultural promotion.

(l) It is necessary to turn to the cultural and traditional motifs in making textile designs. The public wants to know what we were in the past what we are now and the way we are now.

(m) In view of the limitation of the study, the results presented in chapter IV warrant the following conclusion: that majority of the traditional dyers have very low level of formal education. Many small scale entrepreneurs find it difficult to obtain loan from government/financial institutions for take off and expand their industries. Kaduna State lacks raw materials for the small scale textile industries. The usage of vat dyes by the traditional dyers will facilitate patronage

and faster production.

The local dyers are ready to accept the introduction of vat dyes.

The government of Kaduna state gives little or no assistance to the small scale entrepreneurs in procurement of soft, loan, patronage and training.

Lack of capital for expansion, imported textiles, poor management are some of the major factors militating against traditional dyeing in Kaduna State.

Traditional dyeing if properly improved in the areas of design techniques, variety of colours, method of production and management will be a potential small scale textile industry.

5.4 CONCLUSION

Based on the findings in this study, the following conclusions have however, been made:-

(a) The practitioners of small-scale industry have contributed immensely to the work of resist techniques in Kaduna State.

(b) The products from textile dyeing industries can generate revenue for the state and nation as a whole.

(c) Practitioners do not get financial aids from either banks or governments.

(d) There is need to improve the methods of productions in order to meet the high demands by the customers.

(e) Effort is needed for the promotion of indigenous crafts in the State.

(f) Our art obviously cannot stand still under the social and economic changing of the nation. Its existence and survival depend greatly on the respect, admiration and support of every individual Nigerian particularly the intellectuals and private entrepreneurs.

(g) The practitioners of small-scale industry have contributed immensely to the work resist techniques in Kaduna State.

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APPENDICES

QUESTIONNAIRE FOR THE PRODUCER OF RESIST TECHNIQUE MATERIALS.

1. Please may I know your name?
2. Please how old are you now?
3. Please what tribe are you?
4. Please what is your nationality?
5. Please are you married or single?
6. Please what is your level of education
7. Please did you learn this work or you inherit it from your parent?
8. Are you a full-time or part-time practitioner?
9. Do you employ others or you work alone?
10. Where is the source of getting your dyeing materials e.g. Dyes and Chemicals.
11. Please how did you get your initial capital?
12. What method's do you use in distribution of your finished goods?
13. Does the government patronise you?
14. What problems do you encounter?
15. How fast to washing is the dye used on the fabrics?
16. What suggestions do you have for the improvement of this work.

QUESTIONNAIRES FOR THE CONSUMERS OF RESIST

TECHNIQUE MATERIALS

1. Please may I know your name?
2. What tribe are you?
3. What is your nationality
4. What is your occupation?
5. What actually impressed you that has led you to buy this materials
6. Did you buy it because of its cheapness?
7. What did you notice in the fastness of of the colours compared with the printed ones?
8. Can you still go in for another material in addition with the one you are now buying?
9. |Can you recommend this materials for your friends.
10. What suggestion's would you give to the producers of these materials if you are in position?

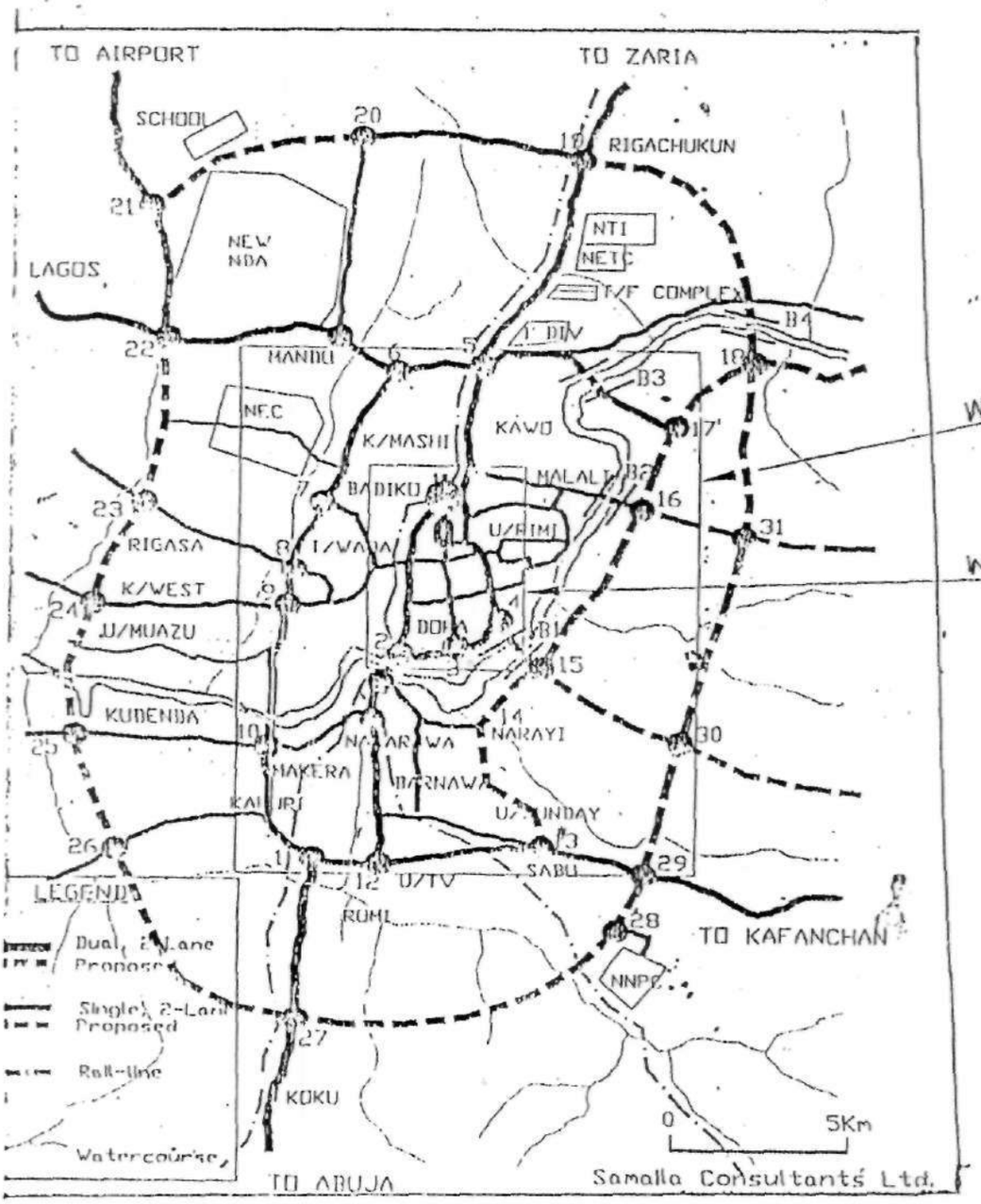
QUESTIONNAIRE FOR THE BUYERS OF RESIST TECHNIQUES MATERIALS.

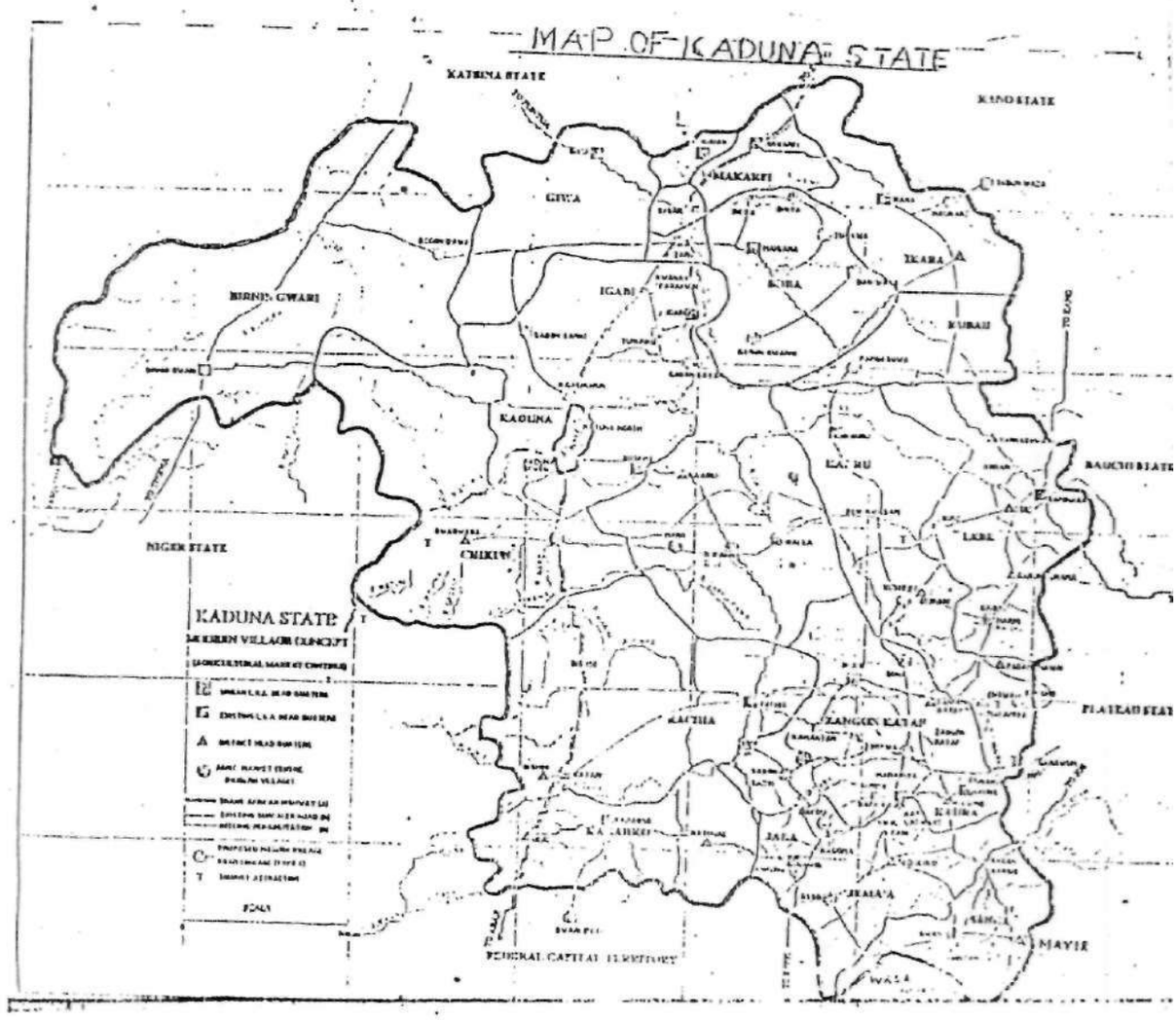
1. Please what is your name?
2. Please what is your tribe.
3. Please what is your nationality?
4. Please what is your occupation?
5. Please are you married or single?
6. Please what is the level of your education?
7. Please do you purchase in bulk or bit by bit.
8. Do these materials sell fast in the market?
9. What problems do you encounter in the sale of these materials?
10. What complaints do your customers give concerning the materials you sell to them?
11. Do your materials compete favourably with the foreign materials?

APPENDIX (ii)

Fig.1(a) KADUNA

PERSPECTIVE STRUCTURE PLAN




MAP OF KADUNA STATE
KATSINA STATE
KANO STATE
NIGER STATE
PLATEAU STATE
NASSARAWA STATE
FCT
GIWA
MAKARFI
IKARA
KUBAU
IGABI
KUDA
KADUNA
KACHIA
ZANGON KATAF
KAURA
JABA
JEMA'A
SANGA
KAGARKO
KAJURU
LERE
CHIKUN
BIRNIN GWARI
KADUNA STATE
FCT

APPENDIX (iii)

Plat No. (xii)



L -R. Prof. Toyin Oguntona, the Supervisor, Mr B.A. Sanusi, HOD Industrial Design Department, Mr. Ojomoh Joseph, The Autor and Dr. K.A. Bello, The Second Supervisor. Photograph taken during the researcher's seminar presentation.

Plate (xii)



The Researcher is seen pointing to Photographs of some works done by him during the researcher's seminar.

KASHIM



Plate No. (xiv)

L- R. Mr Jeri, the Dean, Faculty of Environmental Design, Mr. Gwari Bako, a lecturer from the same Deapartment. All came to witness the researcher's seminar.



Plate No (xv)

The Researcher is seen answering some questions posted to him by the audience during his seminar.