

PHOTOGRAPHIC DATABASE DEVELOPMENT OF NIGERIAN FISHERIES: A COMPLEMENTARY SOURCE OF INFORMATION DOCUMENTATION

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ABSTRACT

The paper traces the different media of documentation for the purpose of information dissemination. Such early media discussed are clay tablet, papyrus, and vellum or parchment codex. The invention of printing however revolutionized the information industry, enabling the production of books in multiple copies. Photography came into documentation mainly to preserve rare materials and those that easily deteriorate. This paper reports the efforts of National Institute for Freshwater Fisheries Research (NIFFR) and Kainji Lake Fisheries Promotion Project (KLFP) at developing an Object Oriented Database (OOD), using the medium of photographs. The photographs are stored in digitized form on commercial computers, using the program ACDSsee 32 for classification, description and retrieval. Specifically the paper focuses on photographs in fisheries as visual communication and expression. Presently, the database contains photo documents about the following aspects of Kainji lake fisheries: fishing gears and crafts, fish preservation methods.

INTRODUCTION

Information has been communicated through different media through civilization. One common feature with these media is that they carry messages. Thus these media of information dissemination have reflected different levels of civilization. The papyrus is a kind of paper made from the stem pith of a tall aquatic plant used by the ancient Egyptians, Greeks and Romans for writing.

The medieval civilization witnessed the vellum or parchment codex, which superceded the papyrus, roll by AD 400. Vellum was a fine parchment prepared from the skin of a calf, kid or lamb, which was used for documenting information. This was a revolutionary change in the form of a book. The parchment codex brought several advantages such as series of pages could be opened to any point in the text; both sides of the leaf could also carry messages.

By the 15th century paper scripts became common. Monasteries had libraries and scriptoria places in which the scribes could copy scripts of pages. The spread of printing was very rapid in the second half of the 16th century and the printed books of that age were known as incunabula. The invention of the printing press in the 16th century revolutionized the book industry when multiple copies were produced.

The concept of micrography came into the library to reproduce unique or rare items or materials, which could deteriorate easily such as newspaper. A microform therefore can be regarded as documents in reduced format such that the text cannot be read with the naked eye. In this category, are the microcards, and the microfiche. these have been a good source of information storage and dissemination.

The development of the information technology (IT) has transformed the means of information documentation and delivery, bringing into the line light non-book materials as information storage, retrieval and dissemination. The development of computer has made possible information dissemination through teleconference and telematics. These signify the importance of techniques involving the marriage of telecommunications and computing. The E-mail and Internet have made downloading of information possible.

Photography is not a popular medium of storing information in Africa. The use for many years has been restricted to the creation of album mainly as home or family collection. Photography is an act of making picture of an object or events. Photographs can be regarded as visual communication and expression based on the production of permanent record of an image. The advantage of photographs is that it presents the real situation or object/action. It can be used to preserve

artifact of a cultural system for posterity.

EFFORTS OF NIFFR AT DEVELOPING PHOTOGRAPHIC DATABASE.

Database is a collection of rapidly accessible structured data. A database could be used to provide information about a particular subject/object. Such information may be publicly available and searchable ONLINE or accessed through the Internet.

The library of NIFFR had made some efforts in the past at developing a computer-based bibliographic database on Nigerian Fisheries which is the Nigerian Fisheries and Aquatic Sciences Abstract, which is now in its 9th volume, as the product of the database.

Having viewed the significance of photographs in information dissemination generally and its possible application to fisheries, effort is now being made to develop a photographic Fisheries Database in the Institute. The present effort is directed to fishing gear, crafts and fish preservation methods, other facets of fisheries will follow as the need arises.

The methodology for the documentation is scanning photographs into the computer where a file represents a subject (e.g Fishing gear, Preservation methods and fishing craft) each representing a file as well as a subject. All types of fishing gear will be in the file on fishing gear and so with other different files. This is done to bring like terms together. The objective of this is that on the long run the database will be able to have the different types

of fishing gear/craft, and different preservation methods, in use in the country. Each of the photographs scanned has a caption reflecting the name, usage, place of origin if known and areas mostly in use etc. Also such documentation will serve as a complementary source of information on Nigerian fisheries in relation to the different subject files. The photographs attached is sample of the product of the database.

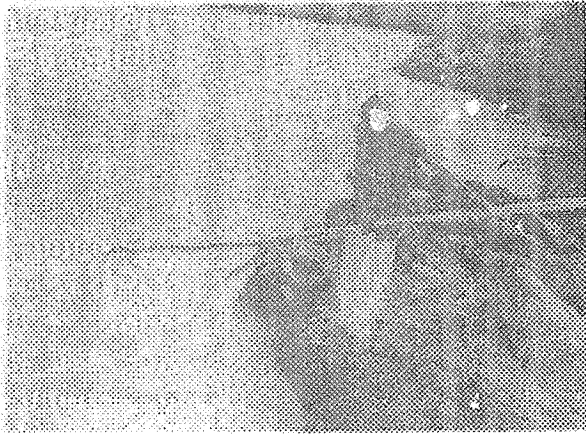
The Role of GTZ in the Development of the Database.

This concept was sold to the Institute by the Project Adviser of the Nigerian-German Kainji Lake Fisheries Promotion Project. The project provided the computer and the software. The software used for the development of the database is known as ADCSee 32. It is acclaimed as the fastest and easiest-to-use image viewer for windows 95, windows 98 and windows NT. The software has many several tools which allows a lot of photographic manipulation functions for example the image viewing tool has the ability of browsing of images in the file system. The image manipulation tool allows the saving of a selected region of an image. You can also use this tool to copy to clipboard i.e. you copy images from ACDSee into other applications. The software requires a high capacity computer. The one presently in use has high capacity which allows the loading of other software on the computer to allow the performance of other functions such as desktop publishing.

REFERENCES

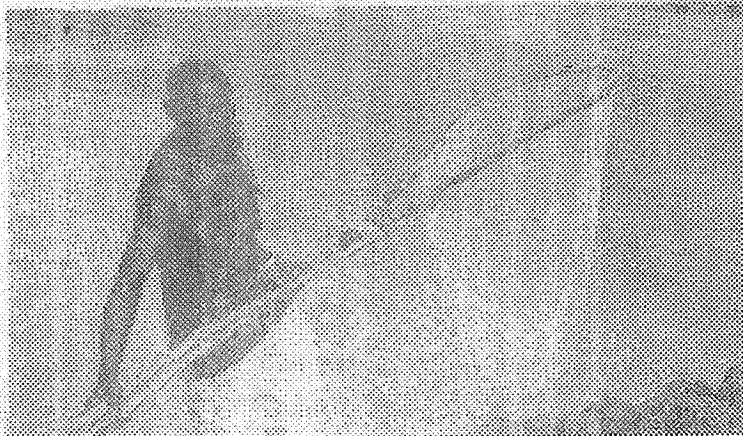
Publishing, history of. In: *The New Encyclopaedia Britannica 15th ed. Vol. 15. Chicago, William Benton.* P. 221-257

Hand net (Atakora)



- Operation of Atakora
- It is operated at the shore

Hand net



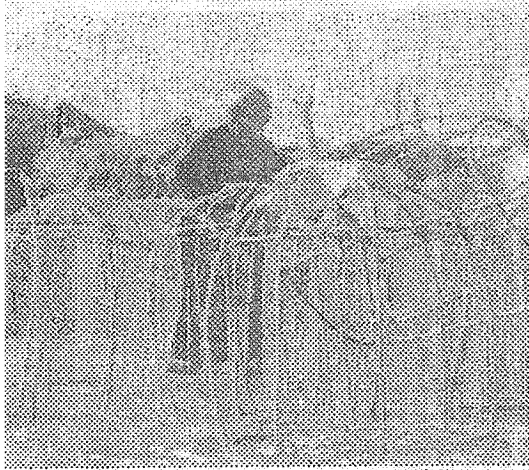
- Another type of lift net called Atakora
- It is said to originate from Ghana
- Atakora is a name of a town from Ghana

Atala lift net



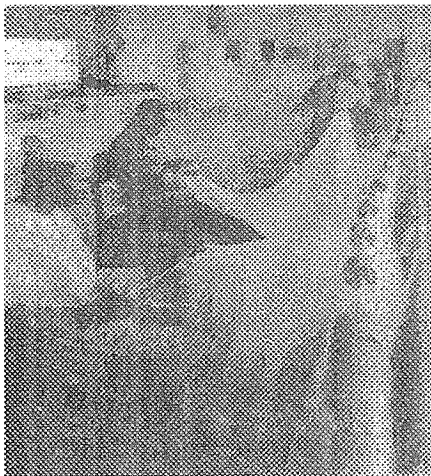
- Atala lift net
- Commonly used by the Urobos & Ijaws below Kainji dam
- Its primary target is clupeids
- Used on open water

Trap (Milian gura)



- Construction of a trap called Milian gura
- It originated from Mali
- Targets chrysichthys & bagrus
- It is a locally made gear

Purse seine net



- Construction of purse seine net at the FCFFT
- Alternative to beach seine which also target Clupeids with less by-catch

Beach seine



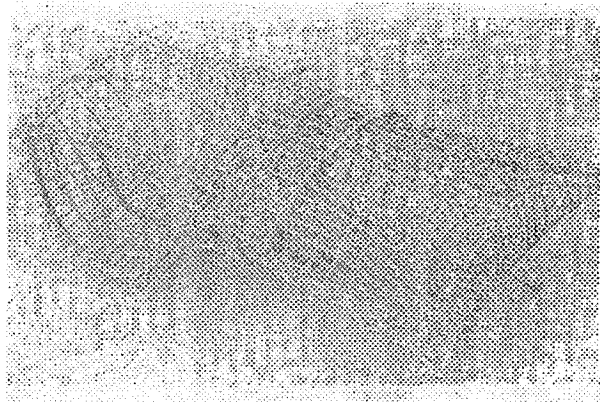
- Operation of Dalla
- It is also operated at the shore by 8-10 fishermen where fish spawns

Spear



It target big fish like
Lates, Tiger Fish Etc

Trap (Ndurutu)



- Another type of trap called
- Targets: Clarias, tilapia and Labco
- Usually set at low water area

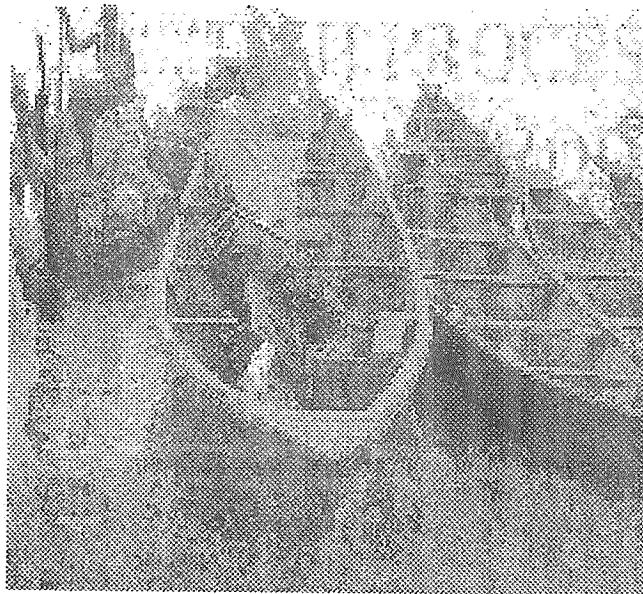
Long line



- Operated both in the mid water and shore
- It targets all fish from table size up depending on the size of the hook
- Non selective gear
- Targets Lates & Cat fishes

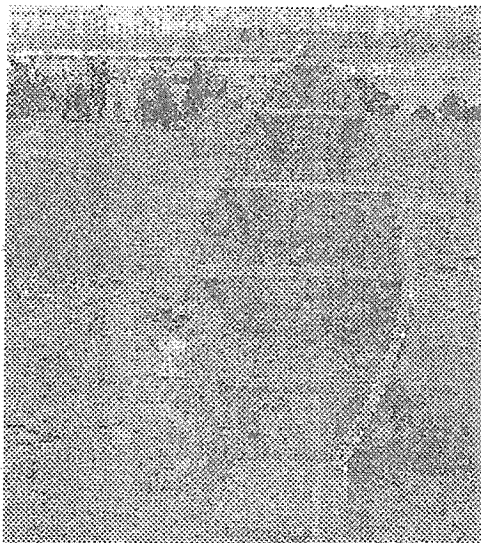
FISHING CRAFTS

Motorized fishing boat



- Operated by an outboard engine

Fishing boat



- Newly constructed fishing boat
- It is operated manually by puddling

FISH PROCESSING METHODS

Sun drying fish



This is another method of drying fish

Material:

Polythene leather

Usage:

Spreading of fish on the leather

Disadvantage:

Easily contaminated

Solar tent fish dryer



- A female fish processor drying fish
- **Advantages:**
Environmental protection
Hygienic product

Solar tent dryer



Method of processing fish using tent

Materials:

Wooden poles

Polythene sheet cover

Black painted -----

Wire mesh &

Mosquitoes net

Usage:

Cutting & Salting fish

Arrange fish on the

wire mesh rack

Improved Banda



- Difference between the local type. Introduction of the damper which regulate fuel wood consumption

Construction of improved Banda



- **Materials:**

Clay, wire mesh, metal sheet, angle bars & hollow pipes

- **Usage:**

Gutting of fish
Dry fish under shade to remove water

- **Advantages:**

Consumes less fuel wood.
Capacity carriage is high.
Helps in a forestation promotion.

Traditional smoking kills (Banda)



- **Locally made Banda**

- **Materials:**

Clay & wire mesh

- **Usage:**

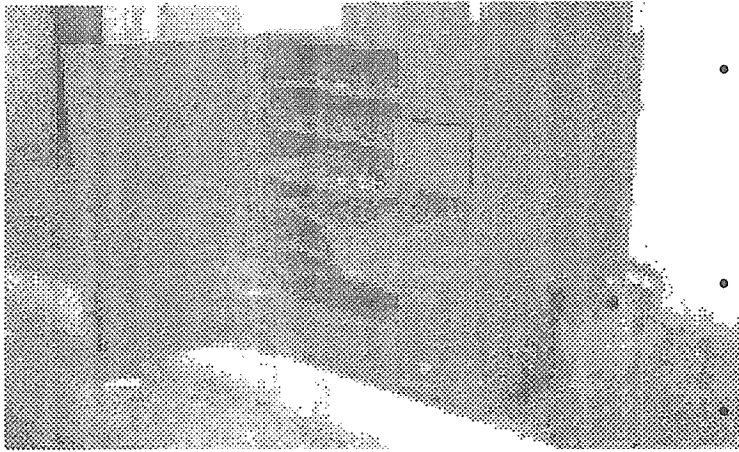
Spreads gutted fish on the wire mesh

- **Disadvantages:**

Capacity carriage is less.

It consumes more fuel wood.

Kainji gas smoking kiln



- **Materials:**
Chimney, fish may, door lock, receptacle, roller, furnace, heat regulator, hearth, gas cylinder.
- **Advantages:**
Neat Product
No fuel wood
- **Disadvantages:**
Cost to require
Non availability of gas in local area.