BRIDGING THE DIGITAL DIVIDE: INVENTORY OF INTERNET ACCESSIBILITY IN FISHERIES AND AQUACULTURE INSTITUTIONS IN AFRICA

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ABSTRACT: The industrialized countries, which represent only 15% of the world's population, constitute more than 88% of Internet users. They are host to almost all of the Internet servers, while Asia (except Japan), Africa (except South Africa) and Latin America together have relatively very few. Reports on the use of the Internet are unanimous on the existence of a digital divide between countries of the North and those of the South. This has become an important issue which governments and international organizations realise they must work to resolve. Use of the Internet in Africa, although still at an early stage of development, is starting to be considered as an indispensable tool, notably in the domains of education and scientific research.

In order to evaluate the current status of Internet access in African fisheries and aquaculture institutions, statistics are provided on the existence of electronic mail and Web sites by sub region and by country. Following a presentation of the fisheries information resources accessible via the Internet, a comparative survey of the Web sites by African sub-regions is made, in order to illustrate the digital divide in this sector.

KEYWORDS: Information centres ; Digital divide ; Internet ; Libraries ; Statistical analysis ; Africa ; Fishery institutions

Introduction

Many aspects of the digital divide should be considered:

NORTH-SOUTH
- ➢ WHO IS CONNECTED ?
  5-6% of world population : more than 75% in the North
- ➢ EXISTING IMBALANCE IN THE PRODUCTION AND FLOW OF INFORMATION.

NATIONAL INFRASTRUCTURES
- ➢ TELECOMMUNICATIONS

> GOVERNMENT POLICY
> RURAL - URBAN DIVIDE
> INSTITUTIONAL CAPACITY

SOCIAL
> CULTURAL EMPHASIS UPON THE ORAL RATHER THAN THE WRITTEN TRADITION
> AGE
> EDUCATION
> INCOME

The Digital Divide in Africa

While 51 of the 54 African countries have Internet access in the capital cities, there is an average of one Internet user per 5,000 people in the African continent, contrasted with one per six in North America and Europe.

There are marked differences between major urban areas and rural areas and in Africa between 70 to 80% of the population live in rural areas.

Many of the countries in the Sub-Saharan region suffer from a shortage of books and available information sources and a general poverty of information, evidenced in the very few numbers of book and research titles published annually in the region. The imbalance in the production and flow of information perpetuates the dependence on the countries in the developing world.

Libraries and local publishing are in decline in parts of Africa and international interests are building and influencing communications infrastructure. The dependence on information from the developed nations is likely to continue without the building of competencies relevant to an information society on the African continent.

Information dependence in developing countries may thus be perpetuated.

The Methodology Used

A detailed analysis of the baseline data collected for the publication of the Directory of Fisheries and Aquaculture Information Resources in Africa (FAO Fisheries Technical Paper No. 416), 2001 is presented here.

The analysis is based upon data from 294 fisheries and aquaculture organizations in 53 countries selected if:
> Located in Africa;
> Governmental or Inter-Governmental;
> Non-Governmental Organization specialized in fisheries

The purpose is not to give absolute figures but to highlight the status of Fisheries and Aquaculture information resources in Africa and Internet access by showing:
  - ➢ Trends and Developments;
  - ➢ Sub-Regional Differences;
  - ➢ THE NEED TO COLLECT BETTER DATA

Updated information has been extracted by a brief analysis of all 339 records in the Directory Database, 2002: http://www4.fao.org/fishdir/

Fisheries and Aquaculture Organizations in Africa

The analysis showed that the information resources available vary significantly depending upon the type of organization.
An analysis of their libraries showed that:
  - ➢ 51 used a variety of the ISIS (Unesco) library software, 6 used Inmagic, 4 MS Access and 7 used Procite;
  - ➢ A total of 34 libraries had access to the ASFA or ABAFR databases;
  - ➢ There were 24 IAMSLIC members in 16 countries

Internet Accessibility in Fisheries and Aquaculture Institutions in Africa

Graphs were presented showing the percentage of governmental institutions with identified libraries, e-mail connection and an Internet Homepage in 294 organizations in 53 countries. For the whole of Africa it was found that 61% of the organizations had E-mail whereas 37.4% had an Internet Home page.

When analysed by sub-region, the following figures were obtained:

  - ➢ NORTH AFRICA : With 5 Countries and 24 Organizations, 41% had a home page;
  - ➢ WEST AFRICA : With 16 Countries and 95 Organizations, 22% had a home page;
  - ➢ EAST AFRICA : With 8 Countries and 59 Organizations, 52% had a home page;
  - ➢ CENTRAL AFRICA : With 10 Countries and 35 Organizations, 11% had a home page;
  - ➢ SOUTHERN AFRICA : With 10 Countries and 65 Organizations, 51% had a home page;
  - ➢ INDIAN OCEAN ISLANDS:With 4 Countries and 16 Organizations, 69% had a home page.

Information Products from Fisheries and Aquaculture Institutions in Africa

An analysis of the Serial Publications, mainly grey literature, by country, found a total of approximately 100 current titles published in Africa.

Some of the Global Initiatives to Bridge the Digital Divide in Africa include:

- ➢ G8 AFRICA ACTION PLAN http://www.g8.gc.ca/kan_docs/afraction-e.asp
- ➢ UNITED NATIONS:
  AGORA: Access to Global Online Research in Agriculture. A global partnership to provide free or reduced-price journal access to developing countries. A collaborative programme of FAO (Food and Agriculture Organization of the United Nations), WHO (World Health Organization), HINARI (Health InterNetwork), CGIAR (Consultative Group on International Agricultural Research), Cornell University, TEEAL (The Essential Electronic Agricultural Library) in conjunction with the major scientific publishers;
  World Summit on the Information Society 2003 http://www.itu.int/wsis/
  Africa and the Information Society
  http://www.geneva2003.org/bamako2002/afrique-02.html
- ➢ THE DIGITAL OPPORTUNITY TASK FORCE (DOT FORCE) http://www.dotforce.org/
- ➢ GLOBAL DIGITAL DIVIDE INITIATIVE (World Economic Forum) http://www.weforum.org/digitaldivide

……. And many many more.

Finally the poster looked at

The Digital Divide and the Future for Fisheries Institutions in Africa

At present the percentage of people in Africa with access to the Internet is negligible. However, most governments now realise that it is an essential tool within education and scientific research. The Internet should provide a great opportunity for Africa and should help to remove barriers of language, geography and politics.

It would be an opportunity missed if we allow new information technologies to exacerbate existing inequalities. It is therefore essential that we measure the impact of the Internet, not only as a quantitative phenomenon, but also its impact on society and its qualitative impact on development.

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