

INTERNATIONAL SOURCES OF FISHERIES INFORMATION TO ENHANCE FISH PRODUCTION, POVERTY ALLEVIATION AND FOOD SECURITY IN NIGERIA AND DEVELOPING NIGERIAN FISHERIES AND AQUATIC SCIENCES DATABASE

By

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ABSTRACT

The paper viewed the decline in information provision in Nigeria to poor library development, which could be attributed to poor funding. The consequence is that current journals and books are not available in Nigerian fisheries Libraries. Information which can be regarded as the first factor of production on which other factors like land, labour and capital depend, can only be provided at the right time when Libraries are better founded. For now if there must be increase in fish production, poverty alleviation and food security in Nigeria, our fisheries scientists and policy makers will have to rely on international sources of information using the advantage of internet connectivity. Some of such sources discussed in this paper are: ASFA, AGORA, FAO, DOAJ, FISHBASE, IAMSLIC, INASP, INASP-PERI, INASP-AJOL, ODINAFRICA, SIFAR, WAS, and ABASFR. However, reliance on international sources must not be at the total neglect of harnessing Nigerian fisheries information. For the Nigerian Fisheries and Aquatic Sciences Database being developed by NIFFR to attain an international status like those enumerated above, scientists and publishers are requested to take the pain of depositing copies of their publications with NIFFR for inclusion in the Database.

INTRODUCTION

In the 80s Nigerian had a network of libraries (Universities, Research Institutes, Polytechnic, Public etc.), which effectively supported the basic functions of their parent bodies in terms of provision of information. This was so, because they subscribed to a large number of journals both nationally and internationally. As resources became dwindling, priorities of government changed and sadly things were no longer the same. Many institutions if not all could no longer make financial provision to support the development of their libraries. To the librarians, it is unexplainable that the libraries should be the first to feel the effect of budgetary cut when you consider the prime role of information. It is pertinent to emphasize that information is the fourth factor of production, which used to be land, labour and capital, which are now land, labour, capital and information. Research has shown how information has revolutionized the society, moving the world from the industrial age to the information age and completely changing the way the economy functions. We now live in a knowledge economy. This is strongly put by Stewart quoted in Vernen (2001) "Information and Knowledge is more valuable and more powerful than natural resources, big factories or fat bankrolls. Success comes to the companies that have the best information or wield it most effectively not necessarily to the companies with the most muscle".

The above quotation has under scored the importance of information as the first factor of production in terms of importance followed by land, labour and capital. Of what use are other factors when you do not have information about what to do with them? What is most worrisome to the librarian is that, despite the importance of information, libraries do not receive the sympathy of some chief executives who are considered as academicians. This is worrisome because we

believe that such Chief Executives no longer needed conversion as to the importance of information. This situation presents a bleak future for the development of the library and provision of information in Nigeria. The aim of this paper is to highlight the inadequacies of our libraries as a result of poor funding to meet your information needs and to equally highlight alternative sources of information to enhance your efforts at increase fish production, poverty alleviation and food security in Nigeria. It is in line with this that, I want to share with you some international sources of fisheries information taking advantage of internet facilities

Some international sources of Fisheries Information

(a) Aquatic Sciences and Fisheries Abstract (ASFA) (www.fao.org/fi/asfa.asp)

The ASFA database was set up in 1970 by FAO with the co-operation of a commercial publisher and several National Centres in order to provide an information system facilitating access to world literature on aquatic sciences and fisheries. The aims of ASFA are:

- (i) To develop and maintain a service for the collection and dissemination of information on the science, technology and management of Marine, brackish water and freshwater environments, organisms and resources, including economic, sociological and legal aspects, in a form easily accessible to the user community.
- (ii) To enhance the participation of developing countries in international schemes under the aegis of the UN system for collection, analysis and use of data and information, equitable and affordable access to relevant information services and products, and strengthening of national capacities in information handling and communication.

The above aims are achieved by having national centers responsible for inputting bibliographic data on fisheries and related disciplines emanating from the country into the main ASFA Database. Table 1, below shows record of input from 1991 – January 2004 country by country

NIFFR as ASFA Input Center

It is my joy to inform members of this great society that NIFFR made a representation to ASFA Board in Rome in 2003 to be considered as a national Input Center. This was granted with the required training in ASFA methodology. It is this effort that registered Nigeria on the list for the first time in 2004. Another batch of entries have been sent which I am sure has upgraded the number of records against Nigeria.

It is sad to note that Nigeria is just joining this important project in year 2004. The inherent advantages of being an Input Center are that Nigerian based journals and other grey literature and their authors will be international known. For effective participation, NIFFR needs to have access to journals publishing articles on Fisheries and other aquatic Sciences. The only major problem that will hinder the effective participation of the Nigerian Input Center is access to the relevant journals. Access will be a problem because of lack of fund to subscribe to them. I am using this opportunity to appeal to publishers of these journals to consider NIFFR library for complimentary copies. This will enhance the appearance of your journal/articles in international markets and the advantages above will accrue to your journal and authors subscribing articles. Letters have been sent to some publishers in this regard. Table II shows list of journals and grey literature presently covered. Another problem is that some journals cannot be reached. Such journals are - *J. of West African Fisheries*, *Water Resources*, *Journal of Nigerian Association of Hydro-ecologists*, *Tropical Freshwater biology* and *Biologia Africana*. Members of this society should please give me addresses of editors of these journals and if any of the editors is here he/she should see me for discussion. I want all of us to see the ASFA Input Project as our project and not as NIFFR project. This understanding will enhance a better coverage of your works.

Table: 2 Nigerian Journals presently covered by ASFA

1	Journal of Aquatic Sciences
2	Global Journal of Environmental Sciences
3	Global Journal of Pure and Applied Science
4	Journal of Applied Sciences and Environmental Management
5	Bioscience Research Communication
6	Journal of Arid Zone Fisheries
7	Journal of Fisheries Technology
8	Journal of Sustainable Tropical Agricultural Research
9	Journal of Tropical Biosciences
10	Tropical Freshwater Biology
11	Nigerian Journal of Fisheries
Other Grey Literature	
12	NIFFR Annual Report
13	NIOMR Annual Report
14	NIFFR Newsletter
15	NIOMR Newsletter
16	NIFFR Technical Report
17	NIOMR Technical Report
18	NIFFR Occasional paper
19	NIOMR Occasional Paper
20	Fish (FISON Newsletter)
21	FISON Proceedings
22	Technical Report of Nigerian-German Kainji Lake Fisheries Promotion Project

AGORA: Access to Global Online Research in Aquaculture

[agora@fao.org]; [www.aginternetwork.org]

The goal of the AGORA programme is to increase the quality and effectiveness of agricultural research and training in low income countries and in turn to improve food security. AGORA provides access through the world-wide-web to a research level collection of about five hundred journals in agriculture and related biological, environmental and social sciences to the poorest countries of the world. AGORA offers researchers, policy-makers, educators, students, all workers and extension specialist, a collection of literature comparable to that available to their counterparts in the developed world.

Out of 500 journals currently covered by AGORA, over 50 are core fisheries and aquatic sciences titles which include: *Aquacultural Engineering*, *Aquaculture*, *Aquaculture International*, *Aquaculture Nutrition*, *Aquaculture Research*, *Fish and Shellfish Immunology*, *Fish physiology and Biochemistry*, *J. of Fish Diseases*. These journals and host of others can be viewed at <http://www.aginternetwork.org/>

How to participate in AGORA

Interested users are required to register with FAO, access to AGORA will be password controlled. The AGORA publisher partners open access free to relevant institutions in eligible countries. The list of the countries can be viewed at <http://www.aginternetwork.org/en/about.Php>. For any institution to register, visit the web-site = agora@fao.org. Click on Register and the required form will be presented for completion. As soon as this is done, submit. Approval will be communicated to you later given you your user ID and password. This will allow you access to

the table of content and abstracts of about 500 journals listed. Also you will have access to the full-text of some of the journals.

(c) **FAO, Fisheries Branch Library** (www.fao.org/fi/library/jou.free.htm)

The FAO library collection includes almost 1000 current fisheries journals, many of which are not available commercially. Most of these publications are indexed for inclusion in ASFA. Thus in addition to the journals provided via AGORA, the Fisheries library maintaining a directory of fisheries related online journals available full-text free of charge at www.fao.org/fi/library/jou.free.htm

International sources of information

DOAJ	Directory of Open Access Journals Contains information about 350 journals	www.doaj.org/
FishBase	The Fishbase Programme is an information database of textual and graphical information covering about 25,000 fish species world-wide.	www.fishbase.org
IAMSLIC	The International Association of Aquatic and Marine Science Libraries and Information Centers.	www.iamslc.org
INASP	International Network for the availability of Scientific Publications. It was established in 1992 with a mission to enhance the flow of information within and between countries, especially those with less developed systems of publication and dissemination	www.inasp.info.org
INASP-PERI	Programme for the enhancement of Research information. It is a programme to support research and capacity building in developing and transitional countries.	www.inasp.org.uk/ajol
INASP-AJOL	African Journals on-line The project is aimed at promoting the awareness and use of journals published in Africa. It provides access to tables of content, backed by a document delivery service.	www.inasp.org.uk/ajol www.ajol.info/
ODINAFRICA	Ocean Data and Information Network for Africa. The project is co-ordinated by the Intergovernmental Oceanographic commission. It is a project aimed at improving information, data supply, dissemination and resource sharing.	www.ioc.unesco.org.odinafrica
SIFAR	Support Unit for International Fisheries and Aquatic Research. The project has the mandate to improve information sharing.	www.Sifar.org
WAS	World Aquaculture Society Programme Distributes back issues of its publications	www.worldfishcenter.org

ABAFR	to libraries through members of the society. www.WAS.org [World Fish Center formerly ICLARM] Aquatic Biology, Aquaculture and Fisheries Resources. The database is an exclusive combination of the world's premier databases. ABAFR combines all relevant portions of ASFA, FISHLIT, CABI, AGRIS Aquaculture subsets, Fisheries Review, Fish and Wildlife reference services etc. This major collection which has over a million references are on CD-ROM providing unparalleled access to information on the science and management of aquatic organisms and environments. This service is provided by the National Inquiry Services Centre of South Africa.	Nisc@ru.ac.za
ASFA	Database on aquatic sciences and Fisheries literature which started as far back as 1971	www.fao.org/fi/asfa/asfa.asp
AGORA	Global access to over 500 journals in agriculture and related biological environmental and social sciences to poor countries of the world.	www.ag.internetwork.org
FAO	FAO collections	www.fao.org/fi/library/jou.free.htm

Developing Nigerian Fisheries and Aquatic Sciences Database

In 1986 the Library, Information and Documentation Division of the National Institute for Freshwater Fisheries Research (NIFFR) New Bussa, embarked on a special collection of literature on 'Nigerian Fisheries and Aquatic Sciences'. It is hoped that the special collection will enhance purposive collection and documentation of all published works on Nigerian Fisheries and Aquatic Sciences. Thus in specific terms, the unit performs the following functions:

1. Acquire both current and retrospective literature on Nigerian Fisheries and other freshwater related disciplines and index them for ease of retrieval
2. Produced Nigerian Fisheries and Aquatic Sciences Abstracts to create awareness for collections in to database.
3. Compile specialized bibliographies
4. Carry out reference services.

Achievements

1. Over 2000 articles on Nigerian Fisheries and Aquatic Sciences have been entered into the database
2. Nine volumes of Nigerian Fisheries and Aquatic Sciences Abstracts carrying the bibliographic details and short abstracts of about 1600 have been produced and circulated. Volumes 10 is inpress while volume 11 is camera ready.

3. The special collection is the most used source of information in the Library. There is yearly increase in the number of visiting scientists using the collection.

Problems

1. Problem in tracking down both current and retrospective literature.
2. Problem of enlarging participation in building up the database by all stake holders. (NIOMR, NIFFR, ARAC, Colleges and Scientists)

CONCLUSION

Each of the above web-sites can be visited and useful information obtained to enhance our efforts in developing the fisheries sector of Nigerian economy. The development of Nigerian Fisheries and Aquatic Sciences database, should be seen as a step in the right direction. For us to catch up with the international sources enumerated above, all stake holders in fisheries development should participate in developing the database. Scientists and publishers should show their good will and support depositing copies of their work/journals to NIFFR Library for index coverage in the indigenous Fisheries Information Service. It is by so doing that we can reach the standard of those international sources enumerated above

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Table 1: Country Input to ASFA 1991 January, 2004

Year		2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991
ADRIAMED	AA	34	136	171	133	60									
Argentina	AR	53	62	53	39	85	68	60	74						
Australia	AU	63	221	125	349	297	261	70	0	0	896				
Belgium	BE	280	97	77											
Brazil	BR	12													
Bulgaria	BG			0											
Canada	CA	121	590	806	881	737	951	1052	1095	846	1233	1096	1034	919	927
Chile	CI			0	0	0	0	39							
China	CH	1930	2312	2320	2409	1198	1163	1205	1181	1078	1191	1060	1042	705	1022
Cote d'Ivoire	CI			0	63	20									
Cuba	HV	14	78	21	0	16	33	17	35						
Estonia	EE	21	61	22	42	38	48	46	63	33					
FAO	FA	291	1053	1731	1188	1851	1968	1628	1414	1203	2195	2895	2205	3801	2682
France	FF	477	1254	1232	1151	1651	1769	1591	1406	1375	1296	1121	1111	1308	1100
Germany	BF	408	1164	1187	1876	1917	2105	2294	1990	2008	2000	1738	2000	2000	1904
Greece	GR	200	253	250	180	160	56	24	20						
ICCAT	TU			0	91	16									
ICES	CE	55	593	1013	96	65	86	61	46						
ICLARM	IC	27	67	251	0	0	42	125	239	514	10				
India	DP	347	991	1073	1050	798	743	967	807	870	710	866	841	795	854

Years	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991
IOC		113	77	109	87	44	96	637	19					
IOC-HA			0	0	0	312								
Italy		402	102	168										
IUCN		44	58	0	0	38	39	55	41	28	25			
Japan	974	1391	971	362	808	805	712	639	596	644	706	691	662	656
Kenya	167	124	133	715	606	70	126	38	30					
KORDI			250	150	50	0	0	0	0					
Lithuania			0	0	0	119	71	127	15	122	101	112	43	
Mexico	72	357	552	495	629	334	699	34	440	702	720	604	522	770
Morocco			0	0										
Nigeria	25													
Norway	241	412	255	269	570	286	303	476	254	95	0	0	154	134
Peru	104													
PIMRIS		88	11	30										
Poland	123	188	116	87	113	116	61	62	48					
Portugal	38	0	0	0	83	56	0	107	120	170	63	49	61	70
Russia	145	162	307	371	300	326	239	877	581	476	628	852	676	368
SIPAM		16	16	18	30									
Spain			0	138	106	96								
Sweden	45	61	85	28	27	79	44	49	37					

Years		2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991
Tunisia	TN	42		28											
UK	MB	373	1212	1288	1473	1215	1639	1264	1030	785	1079	994	1300	610	1400
Ukraine	AU	66	236	290	289	100	180	140	150	316	634				
UN	UN	44	231	172	195	195	199	184	199	197	160	113	117	161	139
UNEP	EP		100	0	0	0	0	0	0	0	0	82	136	80	
Uruguay	UY	40	40	0	0	0	0	0	0	0	0	0	0	0	
USA	NO	606	1918	1803	2358	1931	2399	2810	3195	3784	3913	3019	3258	1800	2213
Viet Nam	VI		81												
CSA	CS	13247	23793	24875	24799	21873	25211	25826	23486	23705	26274	22866	21168	20531	19870
Trust Fund		6216													