

## **Status of Aquacultural Production in Nasarawa State**

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### **ABSTRACT**

The Status of Aquacultural Production in Nasarawa State was investigated covering all the thirteen Local Government Areas of the State from 1<sup>st</sup> October, 1998 to 31<sup>st</sup> December, 2012. Sources of data from the studies was from personal contact and use of questionnaires. The contact groups (respondents) carefully selected to include private fish farms and government own fish farms. The study revealed that the state has 110 privately owned fish farms with only 5 government fish farms, estimated surface area of 26.2 hectares. Total fish production from both cultured and captured fisheries is estimated at 7000 metric tones in 2012. Out of this, the contribution of culture fisheries is 81 metric tones in 2012 indicating a geometric rise in fish production over the years.

### **INTRODUCTION**

Nasarawa State was created from Plateau State on 1<sup>st</sup> October, 1996. The state is located within the trough of River Benue, hence it is richly endowed with several wetland resources such as lakes, dams, rivers, streams and floodplains. These and the typical tropical climate that prevails as well as abundance of local feedstuffs, create enabling environment for both fisheries and aquaculture development (Ita and Balogun, 1984).

Despite the abundance of rich natural water bodies and conducive prevailing conditions of Nasarawa State, the environment had remained under developed in fisheries and aquaculture, at least before the state was created. Until late 70's and early 80's during the advent of the pilot Lafia Agricultural Development Programme (LADP) (Ita, 1999) that transformed to Plateau Agricultural Development Programme (PADP) and Nasarawa Agricultural Development Programme (NADP), the present location of Nasarawa State never witnessed the practice of fish farming (Ita and Balogun, 1984).

On creation, the state inherited only eleven (11) fish farms (table 1) totaling 32.0ha (including 26.2ha government owned farms). Today, there is tremendous aquaculture participation, especially by private entrepreneurs, virtually in all the nooks and crannies of the state. This is as the result of technical support from the Ministry of Agriculture and Natural Resources and the State Chapter of FISON, and more importantly, the public awareness created from Abuja NEPAD Fish for all Summit of 2005.

As a mandate, this paper wish to report the present status of aquaculture participation in Nasarawa State, Local Government by Local Government visa-viz its contributions to sustainable fish production in the state, as illustrated in the (Tables 1 and 2).

**Table 1: Shows the relative abundance of fish farms form inception**

S/NO	NAME OF FISH FARM	LOCATION	SIZE	OWNERSHIP
1	Kantsakuwa Fish Farm	Mai Akuya	7.2ha	MANR
2	Lafia Fish Farm	Lafia	2.0ha	MANR
3	Rutu Fish Farm	Rutu	2.0ha	MANR
4	Awuma Fish Farm	Keffin Wambai	15.0ha	MANR
5	Ruwayo Fish Farm	Ruwayo	-	FDF
6	Tatama Fish Farm	Ningo	1.5ah	Community
7	Micro Fish Farm	Akwanga	0.9ha	Private
8	Majidadi Fish Farm	Uke	1.5ha	Private
9	Na Allah Fish Farm	Shabu	0.3ha	Private
10	Esu Karu Fish Farm	karu	1ha	Private
11	Alh. Zammu Fish Farm	Gara-Keffi	0.6ha	Private

**Table 2: Status of Aquaculture Participation in Nasarawa State****I. AKWANGA LOCAL GOVERNMENT AREA**

S/No	Name of Fish Farm	Location	Ownership	Size	Production (2008)
1	Jika Homestead Ponds	Keffi Bye Pass Akw	Private		430kg
2	Polzel Fish Farm	GRA, Akw	Private	0.003ha	700kg
3	Mbangzee Fish Farm	A/Zaria Rd, Akwe	Private	0.5ha	3600kg
4	Tatama Fish Farm	Ningo	Community	1.5ha	-
5	Mico Fish Farm	Akwanga	Private	0.002ha	410kg
6	Mapo Fish Farm	Alushi, Akwanga	Private	0.002ha	410kg
7	John Viko Homestead Pond	Youth Centre Akw	Private	0.001ha	150mg
8	Alheri Fish Farm	G/Buba, Akwanga	Private	0.002ha	200kg
10	Nallo Fish Farm	Anjida Sarki	Private	0.03ha	650kg
11	Benco Fish Farm	Anjida	Private	0.5ha	1,500kg

**II. Awe Local Government Area**

S/No	Name of Fish Farm	Location	Ownership	Size	Production (2008)
1	Sarki Azra Fish Farm	Azra	Private	0.002ha	-
2	Dr. Musa Ibrahim Fish Farm	Azara	Private	0.006ha	170kg

## III. Doma Local Government Area

S/No	Name of Fish Farm	Location	Ownership	Size	Production (2008)
1	Bomboyi Homestead Pons	Doma	Private	0.001ha	45kg
2	Rabo ES Fish Farm	Doma	Private	0.002ha	300kg
3	Aliyu Angulu Fish farm	Doma	Private	0.012ha	600kg
4	Usman Oga Ari Fish Farm	Doma	Private	0.02ha	1000kg
5	MAFCO Fish Farm	Ana, Doma	Private	0.03ha	-
6	Eselema Fish Farm	Doma	Private	0.002ha	-
7	Daniel Alebura Fish Farm	A/Father, Doma	Private	0.001ha	90kg
8	Rutu Fish Farm	Rute	MANR	2.0ha	-

## IV. Karu Local Government Area

S/No	Name of Fish Farm	Location	Ownership	Size	Production (2008)
1	Philip Iyakwari Fish	Ado	Private	0.003ha	650kg
2	Fubro Farms	Uke	Private	0.003ha	300kg
3	Gunduma Farm	Gunduma	Private	0.05ha	800kg
4	Egrasuf Farms	Auta Balefi	Private	0.002ha	-
5	Agasuf Farms	Auta Balefi	Private	0.002ha	-
6	Kwankwaso Fish Farm	Kuchikau	Private	0.5ha	6000kg
7	FAF Nig. Ltd	Kuchikau	Private	0.04ha	1500kg
8	Davila Farms	Uke	Private	0.005ha	800kg
9	Ziyachal Nig. Ltd	Uke	Private	0.002ha	-
10	Sadama Farms	Uke	Private	0.003ha	150kg
11	Galadima Farms	Uke	Private	0.001ha	100kg
12	Ifayo Fish Farm Nig. Ltd	Uke	Private	0.001ha	-
13	Christ Y. Kachallah Fish Farm	Cari-Cari River	Private	0.02ha	560kg
14	Karu Farms	Cari-Cari River	Private	0.001ha	-
15	Maikasawa Fish Farm	G/Gambo	Private	0.001ha	-
16	Christ Amadi Home stead Ponds	N/Karu	Private	0.002ha	300kg
17	Ladyom Fish Farm	Daura	Private	0.005ha	-
18	Sakura Fish Farm	Zimbabwe	Private	0.001ha	-
19	Umsna Aliyu Fish Farm	Karu	Private	0.001ha	220kg
20	Al-Gulam Integrated Farm	Uke	Private	0.003ha	600kg
21	Bagudu Fish Farm	Masaka	Private	0.002ha	130kg
22	Karshi Emir Fish Farm	Karshi	Private	0.05ha	740kg
23	Akawu Fish Farm	Karshi	Private	0.001ha	-
24	George Fish Farm	T/Wada	Private	0.001ha	180kg
25	Maikauni Memorial Ventures	Gunki, Karu	Private	0.015ha	200kg
26	Zalau Fish Farm	Zumbabwe	Private	0.001ha	-
27	Bamaiye Fish Farm	Auta Balefi	Private	0.002ha	-
28	Ibr/Garkuwa Fish Farm	Uke	Private	0.001ha	250kg
29	IGN Multipurpose Fish Farm	Uke	Private	0.003ha	500kg
30	Godden Fish Farm	Masaka	Private	0.001ha	410kg
31	Alh. Kwenu Fish Farm	A/Tofu	Private	0.001ha	90kg
32	Alh. Okonko Fish Farm	River kwara	Private	0.001ha	-
33	Mainfashi Fish Farm	Uke	Private	0.001ha	130kg
34	Gumma and Debby Farm	Uke	Private	0.05ha	400kg
35	My land fish Farm	Uke	Private	0.001ha	-
36	Mohammed Fish Farm	A/Kwayi, Uke	Private	0.001ha	-
37	Evergreen fish farm	One Man V/Maraba	Private	0.003ha	605kg
38	Inono Farm	Panda	Private	0.03ha	-

## V. Keana Local Government Area

S/No	Name of Fish Farm	Location	Ownership	Size	Production (2008)
1	Aboki Fish Farm	Keana	Private	0.001ha	310kg

## VI. Keffi Local Government Area

S/No	Name of Fish Farm	Location	Ownership	Size	Production (2008)
1	Alhiru Fish Farm	Keffi	Private	0.002ha	100kg
2	Day Spring Aquaculture	Keffi	Private	0.001ha	250kg
3	Adah Home Stead Ponds	Keffi	Private	0.001ha	-
4	Arua Fish Farm	Salanke	Private	0.004ha	-

5	Wiria Fish Farm	A/Napper	Private	0.005ha	40kg
6	Arziki Fish farm	Keffi	Private	0.002ha	300kg

## VII. Kokona Local Government Area

S/No	Name of Fish Farm	Location	Ownership	Size	Production (2008)
1	Waje Farms	Dari	Private	0.2ha	-
2	Samuel Cashier Fish Farm	Garaku	Private	0.001ha	300kg

## VIII. Lafia Local Government Area

S/No	Name of Fish Farm	Location	Ownership	Size	Production (2008)
1	Unique Fish Farm	Opp. VIP, Lafia	Private	0.7ha	9,950ka
2	Justice Alaku Fish Farm	Shendam Rd Lafia	Private	0.03ha	7,500ka
3	Samuel Meshi Home stead ponds	Opp. Mosmera, Lafia	Private	0.024ha	-
4	Joseph Agu home stead ponds	Shabu	Private	0.002ha	540kg
5	Waje Fish Farm	Shabu	Private	0.001ha	1,350kg
6	Edamaku Home stead ponds	Bukan Sidi	Private	0.003ha	1,050kg
7	Ahmed Aruwa Home Stead Ponds	National Supply	Private	0.005ha	500kg
8	DIG (RTD) Sidi Bage Fish Farm	Makurdi Rd	Private	0.005ha	1,500kg
9	Evulanza Fish Farm	Shabu	Private	0.001ha	300kg
10	Na Allah Fish Farm	Shabu	Private	0.02ha	560kg
11	Omaki Fish Farm	Opp. Nasara Estate	Private	0.0032ha	-
12	COAL Fish Farm	COAL	Private	0.03ha	-
13	Ihuman Fish Farm	T/Kauri	Private	0.03ha	700kg
14	Nyam Fish Farm	Akurba	Private	0.001ha	480kg
15	Ismala Ahmed Fish Farm	Akurba	Private	0.013ha	1,030kg
16	Lafia Fish Farm	Lafia	MANR	2.0ha	2,060kg
17	Awuma Fish Farm	Keffi Wambai	MANR	15ha	-
18	Kantsakuwa Fish Farm	Mai Akuya	MANR	7.2ha	-
19	Ruwayo Fish Farm	Ruwayo	FDf	-	-
20	K/Kaura Fish Farm	T/Abu	Private	0.10ha	490kg
21	John Okey Fish Farm	Lafia	Private	0.003ha	-
22	Ahmed Kuruku Fish Farm	Shabu	Private	0.001ha	65kg
23	Rimba Fish Farm	T/Kauri	Private	0.03ha	7800kg
24	Zanwa Fish Farm	Rice Mill Road	Private	0.001ha	-
25	Yunana Ben Alice Farms	Kwandare Road	Private	0.001ha	-
26	Ombugadu Integrated farm	T/Amba	Private	0.2ha	9000kg
27	Andona Fish Garden	Mili Uku	Private	0.2ha	-
28	Haladu Fish Farm	Shau	Private	0.001ha	-
29	Hon. Abdullahi Awe Fish Farm	Lafia East	Private	0.004ha	-

## IX. Nasarawa Local Government Area

S/No	Name of Fish Farm	Location	Ownership	Size	Production (2008)
1	Malauni Fish Farm	Gunki	Private	0.003ha	700kg
2	Usman Mohammed Fish Farm	Oversea	Private	0.002ha	-
3	Kijish Foundation Enterprise	Oversea	Private	0.001ha	210kg
4	Layuza Integrated Farms	Oversea	Private	1.5ha	4553kg
5	Ahmed Aruwa Fish Ponds	Onda Road	Private	0.005ha	180kg
6	Marhabal Halal Fish Farm	Tama'a	Private	0.3ha	600kg
7	Juguda Integrated Farms	Behind GSS	Private	0.2ha	300kg
8	Mohammed Abubakar Fish Farm	Toto Road	Private	0.01ha	-

9	Baba Mohammed Fish Farm	Shagari Road	Private	0.001ha	495kg
10	Mohammed Guto Fish Farm	A/Kwado	Private	0.001ha	200kg
11	Mohammed Sani Home Stead Pond	Oversea	Private	0.075ha	1100kg

## X. Nasarawa Eggon Local Government Area

S/No	Name of Fish Farm	Location	Ownership	Size	Production (2008)
1	Labaran Maku Fish Farm	Ola	Private	0.3ha	-

## XI. Obi Local Government Area

S/No	Name of Fish Farm	Location	Ownership	Size	Production (2008)
1	Zhi Migili Homestead Fish Ponds	G/Ausa	Private	0.002ha	-
2	Appi Fish Farm	G/Ausa	Private	0.0004	-
3	Alhaji Fish Farm	Atabila Rd Obi	Private	0.001ha	250
4	Amince Yunuza Fish Farm	Atabila Rd Obi	Private	0.005ha	-

## XII. Toto Local Government Area

S/No	Name of Fish Farm	Location	Ownership	Size	Production (2008)
1	Aliyu Homestead Fish Pond	Toto	Private	0.001ha	-

## XIII. Wamba Local Government Area

S/No	Name of Fish Farm	Location	Ownership	Size	Production (2008)
1	Shuabu Kore Fish Farm	Wamba	Private	0.03ha	780kg

## Methodology

The status of aquacultural production in Nasarawa State was investigated covering all the thirteen local government areas of the state from 1<sup>st</sup> October, 1998 to December, 2012. Data were obtained through personal contact and administration of questionnaires to private fish farmers in the state. Data on aquacultural production by government farms was obtained from catch assessment survey records from Nasarawa State Ministry of Agriculture, the Federal department of Fisheries and from report of feasibility report on water bodies in the state by the National Institute for Freshwater Fisheries Research (NIFFR). Data so obtained was collated and presented in tabular form for effective interpretation.

## Results and Discussions

The above list of fish farms in the state is by no means not exhaustive. There could be more farms yet unregistered. Enumeration in this respect is on-going. However, it is observed from tables 1 and 2 that there is active participation in aquaculture, by private entrepreneurs in Nasarawa State. In nineteen years of creation, the state witnessed over 115 fish farms, from only 11 at inception, giving rise to about 1046% increase with corresponding fish production from the

subsector at over 81 metric tones in 2012. Thus aquaculture contributed 1.16% to the total fish production of 7000 metric tones in 2012 in the state. This appreciable result was due to increased awareness on aquaculture management (Ita 1986; Ita *et al.*, 1982).

### **Boom in Aquaculture Participation-Beneficial Effects to Nasarawa State**

The resultant effects on active participation in aquaculture to Nasarawa State include the following:

- There is increase production of table size fish by 80 metric tones in the state.
- Injection of not less than N40,000,000.00 profits to fish farmers in the state
- Improving the per caput fish intake of the citizenry from 2.31 to 2.33, based on the state 3 million population.
- Direct employment of 250 – 300 jobless youths in the state.

### **Notable Problems Militating against Commercial Aquaculture Set ups in Nasarawa State**

It has been observed that the act of fish farming in Nasarawa State is quite recent compared to neighbouring Plateau and Benue States which have recorded between 40-45 years experience in the sub sector. However, because of its strategic geographical and political Location, the state has made great strides in aquaculture development, though not without some teething problems which explains the predominant practice of homesteads rather than large scale fish farm steps in the state. These problems include.

- High cost of improved fish seeds
- High cost of feeds
- Prevalence of spontaneous outbreaks of fish diseases and mortalities
- Reported cases of lack of ready markets.

### **Recommendations/Conclusion**

There is no doubt that Nasarawa State has great potentials in Fisheries and Aquaculture resources due to its conducive climatic condition and its commercial proximity to the Federal Capital. This is evident from the growth in aquaculture participation especially within nineteen years of its creation.

While the paper applauds the successes recorded in active fish farming by private entrepreneurs in the state, it notes some inherent problems, which entrepreneurs in the state, it notes some inherent problems, which explains fewer numbers of large scale fish farms in the state.

However, the fact is established that the present status of aquaculture participation in Nasarawa State is already having positive impact on the socio-economic well being of the citizenry. To consolidate this ground, stakeholders in the industry (particularly in Nasarawa State) should work hard towards achieving the following:

- Reducing the high cost of feeds through incorporation of local formula into the daily regime, especially after the critical early stages.
- On-farm production of fish seeds

- Evolving the best management practices of optimal pond carrying capacities-bearing in mind the limiting factors of availability of feeds and water.
- Pro-active in value addition to avoid losses through spoilage during glut.

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