Constraints to fish farming among women in Nigeria

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ABSTRACT

Fish farming can provide employment for women thus helping to alleviate poverty among women and improve the standard of living. Proceeds from fish sales can provide funds for women and contribute to the development of the society. Fish farmers are known to be confronted with difficulties when establishing commercial fish ponds. This research is intended to cover both Northern and Southern Nigeria. One hundred and thirty questionnaires were distributed randomly in Ilorin, North Central Nigeria to ascertain the constraints to fish farming among women in Nigeria. Ninety questionnaires were retrieved and answered by women. Analysis of results indicated that female respondents were interested in fish farming but they lacked financial capacity to establish fish farms. Education was also identified as another constraint. About 56% of the respondents had basic education therefore were uniformed about fish culture in ponds. Fish farming was identified as a means of providing employment for the women folk and enhancing development among women.

Introduction

Fish culture is the rearing of fish in ponds, cages and other enclosures in water and the practice is alien to Nigeria. (Charkroff, 1978; Bryant et al, 1980). Fish culture is gradually displacing the hunting and catching of fish from the wild. Fish supply in Nigeria has been through artisanal fisheries involving numerous fishermen and canoes. Commercial fishing using trawlers and importation through association of fish importers of Nigeria have contributed to frozen fish supply in the country. Also some fish ponds established within the country have contributed to the supply of fish in Nigeria.

However with the increase in the demand of animal protein due to the increase in population and the high cost of beef, there is the need to increase the supply of fish which is relatively cheaper than beef. The need to establish more fish farms is largely due to over fishing of natural water bodies and pollution which are contributing to dwindling of this natural resource. Nigeria has extensive inland water estimated at about 12.5 million hectares which include rivers and streams while natural reservoirs lay underutilized (Ita, 1980).

Gender is particularly important when considering the socio-economic and marketing aspects of fisheries. In many artisanal fisheries, women customarily are involved in fish trade while men are involved in the actual fishing. Women should take a lead in fish farming because it will improve the women’s means of livelihood and contribute to development of the society. Small-scale investment in fish farming can make a significant difference to the position of such women in the society. It will lead to increased income and provide better status for the women folks.

It is therefore imperative to substitute capture fisheries with a more modern husbandry:

Fish farming. Among the cultured fish species in Nigeria are catfish examples: Clarias sp and Heterobranchus sp; Common carp and the Tilapias. Achionye-Nzeh and Ajayi (2003) identified

The prospects of fish farming to include: creation of employment, generation of income and provision of animal protein. The study of Achionye-Nzeh and Ajayi (2003) further showed that the commercial Farms were owned by males, women did not own fish farms. The objective of the study is to elucidate the constraints to fish farming among women in Nigeria.

Materials and methods

Data were collected using questionnaires from Ilorin town located between latitude 8° 30' N and longitude 4° 35' E. The questionnaire consisted of two sections. General information and choice of Investment.

The questionnaires were administered randomly on the field. Where the respondents were not literate their response were recorded through the assistance of a literate person. A total of 135 questionnaires were distributed to women only and 90 were retrieved and answered by women.

Some of the questions asked were: are you interested in fish farming, Do you prefer fish farming to poultry or any other form of animal husbandry.

Do you have funds to invest in fish farming? If you have personal saving or cooperative loan would you invest in fish farming or poultry, are you aware that fish farming is cheaper than poultry. Do you know the feed used in fish farming. Are you aware that fish farming can generate income? The information obtained from the questionnaires was analyzed using descriptive statistical methods and simple percentage methods.

Results

The results of age distribution of the female respondents are shown in table 1. 21 representing 23% were in age group 21 - 30years while 47 females which contributed about 53%were in age group 31-40years,The age group contributed the highest percentage of respondents Fig. 1 Age group 41-50 years were 12 forming14% and about 5% were in age group 51 and above.
The occupational distribution of the respondents (fig.2) showed that traders formed the highest Percentage 34 (38%) while civil servants and businesswomen contributed 26 (29%) and 15 (17%) respectively. The unemployed formed 14 (16%) (Table 2).

Finding on interest in fish farming showed that the number of females that were interested in fish farming were 66 (74%) while 24 (26%) showed no interest in fish farming. Above 70% of the female respondents had no funds to invest in fish farming while 24 (27%) had funds to invest in animal husbandry. On the preferred area of animal husbandry among the respondents as shown on table 3 and fig.3, fish farming had the highest percentage 51 (56%) while integrated animal husbandry had 13 (15%). 19% were interested in animal husbandry alone.

The educational status of the respondents is shown in fig.4. The first school leaving certificate holders contributed the highest number of respondents 48 (54%). The diploma holders formed about 25 (28%). Respondents that were degree holders were 14 (16%). Respondents with no formal education formed about 2%.

**Discussion**

Fish farming generates income for the owner and it provides fish, a source of animal protein but the women in Ilorin are yet to embrace commercial fish farming and invest in it. The women in Ilorin have shown willingness to participate in fish farming but only 26% have funds while over 70% lack funds. A similar result was obtained in Osun state, Nigeria Achionye-Nzeh and Adegboye (2005). Lack of funds is an important factor hindering women from participating in fish farming. Funds are used to procure land for construction, purchase of fry from hatcheries to stock the ponds procurement of fish feed. The major constraint to fish farming among women in Ilorin is lack of funds.

The women folk preferred fish farming to animal husbandry and poultry keeping. This can be attributed to the fact that fish farming is less laborious once the initial ponds have been constructed; routine management like feeding is not laborious.

It is being recommended that women should pull their resources together by forming co-operative groups and traders association and construct few ponds, and with increase in profit they can establish more fish ponds, the fund realized from sales of fish will be used to improve their standard of living together with their dependents thereby contributing to development. Government at all levels should assist these women folk by granting them soft loans to establish fish Farms. Alternatively fisheries department in Ministry of Agriculture can construct fish ponds and through extension workers engage the women in fish culture. This will provide employment for the women folk thereby leading to financial empowerment and will increase animal protein supply in the country. Eventually it will all lead to poverty alleviation and development among women in Ilorin.

Government should fund for research in fish fry production and growth- promoting fish feed because fry are needed to stock new fish ponds and quality feeds that will enhance growth will be needed to feed the fishes. Conclusively this research has shown that women in Ilorin are not participating in fish farming. Although they showed interest but lack of funds was the major constraint.
constraint. Women folk should embrace and invest in fish farming because it will lead to financial empowerment and enhance their position in the society. Fish farming when practiced under good management provides employment, good source of animal protein and generate income which will lead to the development of female gender and alleviate poverty.

References
Charkoff M. Freshwater fish pond culture and management (Druben L. ed) Vital Fish pond culture 1815 North Lynn Street, Suite200 Arlington, Virginia 22209 U.S.A. 1978
Clucas, IJ. Ward AR Post –harvest fisheries Development: A guide to handling, processing and quality .Natural Resource Institute, Central Avenue, Chatham, Kent 4TB, United Kingdom. 1996

QUESTIONNAIRE ON FISH FARMING
The questionnaire has been administered for research project titled Problems and prospects of fish farming in Kwara state capital. All information supplied will be treated confidentially please.

Section A (General information)
(1) Name of Respondent...............................................................
(2) Address of Respondent.....................................................
(3) Occupation of Respondent................................................
(4) Sex..............................................................................
(5) Marital Status................................................................
(6) Age Range : 10-20 () 21-30 () 31-40 () 41-50 () 51-60 () 61 and above() 
(7) Educational Qualification..............................................
(8) Family size.....................................................................

Section B (Choice of Area of Investment)
1) Have you ever heard about fish farming Yes ( ) No ( ) 
2) If your answer to question 1 is yes, is it on a commercial level or subsistence level
3) Do you have any interest in fish farming Yes ( ) No ( ) 
4) Do you have money to invest in animal husbandry yes ( ) No ( ) 
5) If your answer to question 4 is yes, is it on a large scale or small scale
6) If you have money, will you invest in animal husbandry or fish farming?
7) Which of the options do you think is more expensive Poultry or fish farming?
8) If you have personal saving or cooperative loan or agricultural loan would you prefer fish farming to poultry Yes ( ) No ( ) 
9) Are you aware that fish is the cheapest source of protein?
10) Are you aware that fish farming is cheaper than poultry Yes ( ) No ( ) 
11) Do you have land that you can use for fish farming Yes ( ) No ( ) 
12) Are there suitable sources of water supply in the area of your choice for fish farming Yes ( ) No ( ) 
13) Do you know of any feed or fish meal used in fish farming Yes ( ) No ( ) 
14) Are you aware that fish farming can bring you income or profit Yes ( ) No ( ) 

Table 1: Age distribution of female respondents in Ilorin Kwara State, Nigeria

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-20</td>
<td>6</td>
<td>6.74</td>
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<tr>
<td>21-30</td>
<td>21</td>
<td>22.47</td>
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<tr>
<td>31-40</td>
<td>47</td>
<td>52.81</td>
</tr>
<tr>
<td>41-50</td>
<td>12</td>
<td>13.48</td>
</tr>
<tr>
<td>51 and above</td>
<td>4</td>
<td>4.49</td>
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Table 2: Occupational Distribution of Female folk Interviewed

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traders</td>
<td>35</td>
<td>38</td>
</tr>
<tr>
<td>Business Women</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Civil servants</td>
<td>26</td>
<td>29</td>
</tr>
<tr>
<td>Others</td>
<td>14</td>
<td>16</td>
</tr>
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</table>

Table 3: Preferred Area of Investment of Females in Ilorin, Kwara State, Nigeria

<table>
<thead>
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<th>Choice</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Husbandry</td>
<td>17</td>
<td>19.0</td>
</tr>
<tr>
<td>Fish Farming</td>
<td>51</td>
<td>56.18</td>
</tr>
<tr>
<td>Integrated animal farming</td>
<td>13</td>
<td>14.61</td>
</tr>
<tr>
<td>None</td>
<td>9</td>
<td>10.11</td>
</tr>
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