A Survey of Consumer Awareness and Acceptance of Farm-Raised Catfish

James G. Dillard
John E. Waldrop

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A SURVEY

Consumer Awareness & Acceptance of Farm-Raised Catfish

James G. Dillard, Professor & Agricultural Economist
John E. Waldrop, Professor & Agricultural Economist
Department of Agricultural Economics
A SURVEY OF CONSUMER AWARENESS AND
ACCEPTANCE OF FARM-RAISED CATFISH

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Mississippi Agricultural and Forestry Experiment Station
Mississippi State University
Mississippi State, Mississippi
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<td>13</td>
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<td>17</td>
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<td>13</td>
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</tbody>
</table>
ACKNOWLEDGMENTS

The authors wish to express appreciation to the Mississippi Farm Bureau Federation for permitting and, in fact, encouraging, this survey as a part of their exhibit at the American Farm Bureau Federation Annual Convention. Special appreciation is due Mr. E. H. "Hoop" Tucker of the Mississippi Farm Bureau Federation for assisting with the survey and for his overall coordination.

The authors thank Mr. Marty J. Fuller, Graduate Assistant, and Mary F. Dillard for assisting with the survey. Representatives of Humphries and Sunflower County Chapters of the Mississippi Farm Bureau, who prepared and served fish, and manned the exhibit, cooperated fully with the survey. This group consisted of Mr. and Mrs. Charles Estes, Mr. and Mrs. Wheeler Timbs, Mr. and Mrs. Shelby Pinkerton, Mr. and Mrs. Jimmy Grant, Mr. and Mrs. Bobby Wade, Milton Adams, John S. Parker, A. B. Thorp, Burch Davis, and Joe Evans. This group of catfish producers worked very hard throughout the convention and deserve thanks from the entire farm-raised catfish industry.
HIGHLIGHTS

The Mississippi Farm Bureau sponsored a booth and exhibit at the American Farm Bureau Federation Annual Convention in Dallas, Texas in January 1983. Fresh filleted portions of farm-raised catfish were deep fried in soybean oil and served to an estimated 10,000 visitors attending the three-day convention.

After having eaten the samples of catfish, individuals were randomly singled out and asked to participate in a survey. A total of 356 usable questionnaires were obtained, representing respondents from 46 states.

The purpose of the survey was to obtain information on consumer acceptance of farm-raised catfish, awareness of its availability, willingness to purchase, and other related information.

The results of the survey revealed a high level of acceptance of the product. Eight-eight percent of the respondents rated the product excellent on a four-point scale ranging from excellent to poor.

Most of the people surveyed (78 percent) were not aware of availability of farm-raised catfish. However, 94 percent indicated they would purchase the product regularly if it were available.

Although 43 percent of the respondents stated they had eaten farm-raised catfish before, many of these said they had eaten the product only once (usually during travel through the Deep South).

Except for awareness, there were only slight differences among responses of people from different major regions of the U.S. As expected, more people from the South-Central region (the traditional catfish-consuming area) were aware of the product's availability and had eaten the product before. However, even in the South-Central region, 58
percent of those surveyed said the product was not available in their area, or if it were available they were unaware of it.

The results of the survey have some limitations. Foremost is that delegates and visitors to the American Farm Bureau Federation convention were probably not representative of the U.S. population, so broad conclusions from the survey results are not possible.
Sales of farm-raised catfish have increased dramatically in recent years. According to USDA, 1982 sales of processed farm-raised catfish by processors increased by 65 percent, from 35 to 58 million pounds. Although the industry is growing rapidly, it is still relatively young. Outside the traditional catfish consuming areas of the Deep South, little is known about consumer's awareness and acceptance of the product.

Market testing and collection of data on consumer acceptance of farm-raised catfish is an expensive process, particularly when there is interest in developing new markets outside the traditional catfish consuming area. An opportunity exists for collecting observations on acceptance and availability for many parts of the country when people are gathered at one location such as regional and/or national conventions. Such an approach is believed to be particularly useful when conducted as part of promotional efforts.

The American Farm Bureau Federation National Convention was held in Dallas, Texas, in January 1983. The Mississippi Farm Bureau sponsored a booth and exhibit at the convention for the purpose of promoting Mississippi's Farm-Raised Catfish Industry. Visitor's to the exhibit were treated to bite-size portions of fresh, deep fried catfish, provided with recipes and other literature, and given the opportunity to view an audio-visual presentation on the farm-raised catfish industry.
Visitor's to the booth were also given the opportunity to complete a questionnaire provided by members of the Agricultural Economics Department at Mississippi State University. The purpose of the questionnaire was to obtain information on consumer acceptance of farm-raised catfish, awareness of its availability in different parts of the U.S., willingness and frequency of purchase, and other related information. The purpose of this report is to present a summary of the information obtained from the survey.

An estimated 10,000 people were served samples of farm-raised catfish during the three days the booth was open. After having eaten the catfish, individuals were randomly singled out and invited to participate in the survey. If they agreed they were given a pencil and a questionnaire attached to a clip board and asked to step aside and complete the form. A copy of the questionnaire used in the survey is shown in the Appendix. A "hard-sell" approach was never used in getting participation since the survey was of secondary importance to the primary promotional and educational objectives of the exhibit. In fact, a concerted effort was made to let visitors to the booth know that completion of the questionnaire was not a requirement for getting free samples of catfish. However, all persons asked to participate in the survey did so.

Results

A total of 356 usable questionnaires were obtained, although many respondents did not answer all questions. A questionnaire was deemed usable if the first two questions were answered, and at least three of the remaining seven. Forty-six states and the District of Columbia are represented in the sample; however, 12 states had only one questionnaire.
each. States represented, and questionnaires per state, are listed in Table 1.

Table 1. Number of questionnaires obtained, by state

<table>
<thead>
<tr>
<th>State</th>
<th>No. of Questionnaires</th>
<th>State</th>
<th>No. of Questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>0</td>
<td>Nebraska</td>
<td>2</td>
</tr>
<tr>
<td>Alaska</td>
<td>1</td>
<td>Nevada</td>
<td>1</td>
</tr>
<tr>
<td>Arizona</td>
<td>0</td>
<td>New Hampshire</td>
<td>1</td>
</tr>
<tr>
<td>Arkansas</td>
<td>8</td>
<td>New Jersey</td>
<td>8</td>
</tr>
<tr>
<td>California</td>
<td>5</td>
<td>New Mexico</td>
<td>1</td>
</tr>
<tr>
<td>Colorado</td>
<td>3</td>
<td>New York</td>
<td>5</td>
</tr>
<tr>
<td>Connecticut</td>
<td>4</td>
<td>North Carolina</td>
<td>12</td>
</tr>
<tr>
<td>Delaware</td>
<td>1</td>
<td>North Dakota</td>
<td>10</td>
</tr>
<tr>
<td>Florida</td>
<td>1</td>
<td>Ohio</td>
<td>5</td>
</tr>
<tr>
<td>Georgia</td>
<td>3</td>
<td>Oklahoma</td>
<td>12</td>
</tr>
<tr>
<td>Hawaii</td>
<td>1</td>
<td>Oregon</td>
<td>3</td>
</tr>
<tr>
<td>Idaho</td>
<td>7</td>
<td>Pennsylvania</td>
<td>5</td>
</tr>
<tr>
<td>Illinois</td>
<td>38</td>
<td>Rhode Island</td>
<td>0</td>
</tr>
<tr>
<td>Indiana</td>
<td>44</td>
<td>South Carolina</td>
<td>3</td>
</tr>
<tr>
<td>Iowa</td>
<td>16</td>
<td>South Dakota</td>
<td>1</td>
</tr>
<tr>
<td>Kansas</td>
<td>13</td>
<td>Tennessee</td>
<td>13</td>
</tr>
<tr>
<td>Kentucky</td>
<td>5</td>
<td>Texas</td>
<td>19</td>
</tr>
<tr>
<td>Louisiana</td>
<td>7</td>
<td>Utah</td>
<td>15</td>
</tr>
<tr>
<td>Maine</td>
<td>1</td>
<td>Vermont</td>
<td>3</td>
</tr>
<tr>
<td>Maryland</td>
<td>7</td>
<td>Virginia</td>
<td>14</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>3</td>
<td>Washington</td>
<td>1</td>
</tr>
<tr>
<td>Michigan</td>
<td>16</td>
<td>West Virginia</td>
<td>1</td>
</tr>
<tr>
<td>Minnesota</td>
<td>6</td>
<td>Wisconsin</td>
<td>10</td>
</tr>
<tr>
<td>Mississippi</td>
<td>6</td>
<td>Wyoming</td>
<td>0</td>
</tr>
<tr>
<td>Missouri</td>
<td>11</td>
<td>Washington D.C.</td>
<td>1</td>
</tr>
<tr>
<td>Montana</td>
<td>2</td>
<td>Total</td>
<td>356</td>
</tr>
</tbody>
</table>
The first question asked that respondents rate the product on a four-point scale ranging from excellent to poor. Responses are summarized in Table 2. There was a high level of acceptance of farm-raised catfish as evidenced by the 87.6 percent who rated it excellent. Only three persons out of the total of 356 rated the product less than good.

Table 2. Rating in terms of general taste and quality

<table>
<thead>
<tr>
<th>Rating Scale</th>
<th>Number Responding</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>312</td>
<td>87.6</td>
</tr>
<tr>
<td>Good</td>
<td>41</td>
<td>11.6</td>
</tr>
<tr>
<td>Fair</td>
<td>1</td>
<td>.3</td>
</tr>
<tr>
<td>Poor</td>
<td>2</td>
<td>.7</td>
</tr>
<tr>
<td>Total</td>
<td>356</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The second question asked for the respondent's home city and state. The responses were summarized in Table 1. Data in Table 3 show awareness of availability of the product. Over 78 percent stated that the product was not available, or if available, they were unaware of it.

Table 3. Awareness of the availability of farm-raised catfish

<table>
<thead>
<tr>
<th>Possible Responses</th>
<th>Number Responding</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>77</td>
<td>21.8</td>
</tr>
<tr>
<td>No</td>
<td>152</td>
<td>42.9</td>
</tr>
<tr>
<td>Don't know</td>
<td>125</td>
<td>35.4</td>
</tr>
<tr>
<td>Total</td>
<td>354</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Question 4 asked the respondents if they had eaten farm-raised catfish before and, if so, how often and where. Fewer than half the
respondents (Table 4) indicated they had eaten farm-raised catfish before. Average frequency of consumption by those who had eaten the product before was 14 times per year. More respondents had been served catfish while "eating out" than had eaten the product at home (Table 5).

Table 4. Summary of responses to question four, "Have you eaten farm-raised catfish before?"

<table>
<thead>
<tr>
<th>Possible Responses</th>
<th>Number Responding</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>152</td>
<td>42.9</td>
</tr>
<tr>
<td>No</td>
<td>202</td>
<td>57.1</td>
</tr>
<tr>
<td>Total</td>
<td>354</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 5. Summary of responses as to where catfish was consumed by those who had eaten farm-raised catfish before

<table>
<thead>
<tr>
<th>Where</th>
<th>Number Responding</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>At home</td>
<td>22</td>
<td>16.1</td>
</tr>
<tr>
<td>In restaurants</td>
<td>55</td>
<td>40.1</td>
</tr>
<tr>
<td>In cafeterias</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>4.4</td>
</tr>
<tr>
<td>More than one of above</td>
<td>52</td>
<td>38.0</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>100.0</td>
</tr>
</tbody>
</table>

If the respondent had not eaten farm-raised catfish before, the next question was, "Would you or someone in your family purchase the product if it were available?" If the answer was yes, the respondent was then to indicate how often and where. Approximately 94 percent stated they would purchase the product if it were available in their respective areas (Table 6). Frequency of likely purchases by those respondents averaged 26 times per year. Most people in this group
indicated they would prefer to eat the product both at home and in restaurants (Table 7).

Table 6. Summary of responses of those who had not eaten farm-raised catfish before as to whether they would if the product were available

<table>
<thead>
<tr>
<th>Possible Responses</th>
<th>Number Responding</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>255</td>
<td>93.8</td>
</tr>
<tr>
<td>No</td>
<td>17</td>
<td>6.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>272</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 7. Summary of responses by those who had not eaten farm-raised catfish before as to where they would prefer to consume the product if it were available

<table>
<thead>
<tr>
<th>Where</th>
<th>Number Responding</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>At home</td>
<td>78</td>
<td>35.6</td>
</tr>
<tr>
<td>In restaurants</td>
<td>33</td>
<td>15.1</td>
</tr>
<tr>
<td>In cafeterias</td>
<td>2</td>
<td>.9</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>1.8</td>
</tr>
<tr>
<td>More than one of above</td>
<td>102</td>
<td>46.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>219</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Some respondents had problems in answering questions 4 and 5. Respondents were supposed to answer either the second part of question 4, or question 5, but not both. A significant number responded to both questions. This was largely because some respondents had eaten catfish once (or infrequently), and answered question 4 "Yes", marked frequency of consumption as once per year, then proceeded to answer question 5, stating they would eat the product much more frequently if it were available. This partly explains the wide difference in average fre-
quency of consumption between those who had eaten catfish before and those who had not (14 times per year vs. 26 times per year). The wide difference may also be partly because respondents who had previously consumed farm-raised catfish estimated the actual number of times per year (or times per month), whereas those who had not may have over-reacted somewhat. A typical statement by many respondents was ..."If I could get fish this delicious, I would eat it frequently."

Responses on various forms and quantities of the product preferred for home use are summarized in Table 8. Most respondents preferred

Table 8. Summary of preferences for various forms and quantities of farm-raised catfish for home use

<table>
<thead>
<tr>
<th>Forms-Quantities</th>
<th>Number Responding</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Form</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh</td>
<td>111</td>
<td>43.2</td>
</tr>
<tr>
<td>Frozen</td>
<td>120</td>
<td>46.7</td>
</tr>
<tr>
<td>Both fresh &amp; frozen</td>
<td>26</td>
<td>10.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>257</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Processed Form</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole fish</td>
<td>26</td>
<td>9.4</td>
</tr>
<tr>
<td>Fillets</td>
<td>180</td>
<td>65.2</td>
</tr>
<tr>
<td>Steaks</td>
<td>10</td>
<td>3.6</td>
</tr>
<tr>
<td>Breaded</td>
<td>8</td>
<td>2.9</td>
</tr>
<tr>
<td>More than one of above</td>
<td>52</td>
<td>18.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>276</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Size of Pack</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One lb.</td>
<td>99</td>
<td>34.0</td>
</tr>
<tr>
<td>Two lbs.</td>
<td>111</td>
<td>38.1</td>
</tr>
<tr>
<td>Five lbs.</td>
<td>61</td>
<td>21.0</td>
</tr>
<tr>
<td>Other (lbs.)</td>
<td>7</td>
<td>2.4</td>
</tr>
<tr>
<td>More than one of above</td>
<td>13</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>291</td>
<td>100.0</td>
</tr>
</tbody>
</table>
filleted fish in either one- or two-pound packages (most respondents who checked more than one form checked fillets). There was a slight preference for frozen fish for home consumption.

Preferences for form and method of cooking of farm-raised catfish consumed in restaurants and/or cafeterias are summarized in Table 9. A majority of respondents indicated a preference for fried, filleted fish. However, it should be noted that the respondents had just tasted samples of superbly prepared, fried filleted catfish, and most had never tried the product prepared by other methods.

Table 9. Summary of preferences for form and method of cooking of farm-raised catfish consumed away from home

<table>
<thead>
<tr>
<th>Form</th>
<th>Number Responding</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole fish</td>
<td>33</td>
<td>14.7</td>
</tr>
<tr>
<td>Fillets</td>
<td>154</td>
<td>68.4</td>
</tr>
<tr>
<td>Steaks</td>
<td>16</td>
<td>7.1</td>
</tr>
<tr>
<td>Combination</td>
<td>22</td>
<td>9.8</td>
</tr>
<tr>
<td>Total</td>
<td>225</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Method of Cooking

<table>
<thead>
<tr>
<th>Method of Cooking</th>
<th>Number Responding</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baked</td>
<td>11</td>
<td>4.3</td>
</tr>
<tr>
<td>Broiled</td>
<td>37</td>
<td>14.6</td>
</tr>
<tr>
<td>Fried</td>
<td>160</td>
<td>63.2</td>
</tr>
<tr>
<td>Combination</td>
<td>45</td>
<td>17.8</td>
</tr>
<tr>
<td>Total</td>
<td>253</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Most respondents (81 percent) were heads of households that averaged 3.1 persons. Level of household income is summarized in Table 10.
Table 10. Annual household income of respondents

<table>
<thead>
<tr>
<th>Range</th>
<th>Number Responding</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $30,000</td>
<td>115</td>
<td>37.7</td>
</tr>
<tr>
<td>$30,000-$49,999</td>
<td>119</td>
<td>39.0</td>
</tr>
<tr>
<td>$50,000 or more</td>
<td>71</td>
<td>23.3</td>
</tr>
<tr>
<td>Total</td>
<td>305</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Regional Comparisons

The survey results were further summarized by three major regions of the U.S. (Figure 1). The South-Central region as delineated here is generally thought of as the traditional catfish consuming area of the country, where there is more familiarity with the product.

Data are presented so that interregional comparisons can be made on consumer acceptance, awareness (product availability), and preference for various product forms. Consumer acceptance is implied by how respondents rated the product and their willingness to purchase if it were available in their area. The numbers in Table 11 show only a slightly higher level of acceptance in the South-Central region.

Table 11. Measures of acceptance of farm-raised catfish, by region of the U.S.

<table>
<thead>
<tr>
<th>Region</th>
<th>Rating Number Responding</th>
<th>Percent Excellent</th>
<th>Willingness to Purchase Number Responding</th>
<th>Percent Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>South-Central</td>
<td>195</td>
<td>90</td>
<td>131</td>
<td>95</td>
</tr>
<tr>
<td>Northeast</td>
<td>80</td>
<td>81</td>
<td>69</td>
<td>91</td>
</tr>
<tr>
<td>West</td>
<td>80</td>
<td>87</td>
<td>72</td>
<td>93</td>
</tr>
</tbody>
</table>

\(a/\) Refers to those who had never eaten farm-raised catfish before.
Figure 1: Three Major Regions in the U.S.
A more pronounced difference among regions can be seen in the responses to the question: Are farm-raised catfish available in your area? These responses are summarized by region in Table 12. As expected, more people (32 percent) from the South-Central area were aware of the product's availability. However, even in the traditional catfish consuming area, 68 percent of the people stated the product was not available, or if so, they were unaware of it.

Table 12. Percentage of respondents having knowledge of the availability of farm-raised catfish, by regions of the U.S.

<table>
<thead>
<tr>
<th>Region</th>
<th>Yes</th>
<th>No</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>South-Central</td>
<td>32</td>
<td>31</td>
<td>37</td>
</tr>
<tr>
<td>Northeast</td>
<td>9</td>
<td>55</td>
<td>36</td>
</tr>
<tr>
<td>West</td>
<td>10</td>
<td>58</td>
<td>32</td>
</tr>
</tbody>
</table>

Another indication of awareness (and acceptability) are responses to the question: Have you eaten farm-raised catfish before? The responses are shown in Table 13. It should be noted that significant percentages of the respondents from the Northeast and West answered this question yes, but pointed out that they had eaten catfish only once.

Table 13. Percentage of respondents who had eaten farm-raised catfish before, by regions of the U.S.

<table>
<thead>
<tr>
<th>Region</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>South-Central</td>
<td>60</td>
</tr>
<tr>
<td>Northeast</td>
<td>25</td>
</tr>
<tr>
<td>West</td>
<td>20</td>
</tr>
</tbody>
</table>
Regional preference for various product forms is shown in Tables 14, 15, and 16. A majority of respondents indicated a preference for fresh fish for home use in the South-Central region, while a majority in the Northeast and West stated a preference for frozen fish (Table 14). Regardless of region, there was a definite preference for filleted fish, whether consumed at home or in restaurants. Only small percentages stated preferences for steaks and prebreaded fish (Tables 15 and 16). The preference for fried fish over other methods of cooking differed little between regions (Table 17).

Table 14. Percentage preferring fresh versus frozen fish for home use, by regions of the U.S.

<table>
<thead>
<tr>
<th>Region</th>
<th>Fresh</th>
<th>Frozen</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>South-Central</td>
<td>51</td>
<td>37</td>
<td>12</td>
</tr>
<tr>
<td>Northeast</td>
<td>37</td>
<td>55</td>
<td>8</td>
</tr>
<tr>
<td>West</td>
<td>31</td>
<td>62</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 15. Percentage preferring various product forms for home use, by regions of the U.S.

<table>
<thead>
<tr>
<th>Region</th>
<th>Whole Fish</th>
<th>Boneless Fillets</th>
<th>Steaks</th>
<th>Prebreaded</th>
<th>Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>South-Central</td>
<td>10</td>
<td>67</td>
<td>4</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>Northeast</td>
<td>5</td>
<td>64</td>
<td>3</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>West</td>
<td>12</td>
<td>61</td>
<td>4</td>
<td>4</td>
<td>19</td>
</tr>
</tbody>
</table>
Table 16. Percentage preferring various product forms in restaurants, by regions of U.S.

<table>
<thead>
<tr>
<th>Region</th>
<th>Whole Fish</th>
<th>Boneless Fillets</th>
<th>Steaks</th>
<th>Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>South-Central</td>
<td>18</td>
<td>63</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Northeast</td>
<td>9</td>
<td>77</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>West</td>
<td>13</td>
<td>74</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 17. Percentage preferring various methods of cooking in restaurants, by regions of U.S.

<table>
<thead>
<tr>
<th>Region</th>
<th>Baked</th>
<th>Broiled</th>
<th>Fried</th>
<th>Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>South-Central</td>
<td>3</td>
<td>12</td>
<td>69</td>
<td>16</td>
</tr>
<tr>
<td>Northeast</td>
<td>7</td>
<td>21</td>
<td>51</td>
<td>21</td>
</tr>
<tr>
<td>West</td>
<td>6</td>
<td>16</td>
<td>62</td>
<td>16</td>
</tr>
</tbody>
</table>

Limitations, Implications, and Conclusions

There are some critical limitations to the data contained in this report. The sample of people interviewed at the American Farm Bureau Federation's annual convention is probably not representative of the U.S. population, and results obtained cannot be imputed to all the consumers in the U.S. Excepting income, no socio-economic data were obtained in the survey. Observations during the survey, however, indicated the respondents were older, on the average, than the average age of all consumers in the U.S. Sixty-two percent of the respondents had annual household incomes of $30,000 or more, which is considerably...
higher than the U.S. average. Although data were not obtained on occupation, most respondents were undoubtedly farmers; the remainder being professional or business men with an interest in agriculture.

Given the characteristics of the people interviewed, it is possible the highly favorable reaction to farm-raised catfish is biased upward to some extent. It is reasonable to believe that farm people will likely compliment the products of fellow farmers. However, all those who helped man the booth were very impressed with the seemingly genuine and enthusiastic acceptance of the product by most of the estimated 10 thousand people who tasted it.

People manning the booth were swamped by questions concerning the product's availability in other parts of the country. The questions most often asked were: "Where can I buy farm-raised catfish in my area?" or, "Which grocery chains handle farm-raised catfish in my area?" It is strongly recommended that information on sources of farm-raised catfish, by states, both wholesale and retail, be prepared and made available as handout material at any future introductory and promotional efforts of this kind. When such interest is generated in a product, information on sources of supply should be available. At least, the major grocery chains who regularly stock the product should be listed by states and lists made available for handout. Preparation of such lists will require the cooperation of processors and distributors of farm-raised catfish.

It is believed that other conventions would provide excellent opportunities for introducing farm-raised catfish and obtaining data on consumer acceptance. Any large convention that permits promotional booths, or hospitality rooms, and has attendance from throughout the
country would provide an excellent opportunity for additional promotional efforts.

If surveys are undertaken during future promotional efforts of this kind, modifications should be made in the questionnaire used in Dallas. It should be shortened, reorganized, and made easier to read. The questions on head of household status and income level will probably be omitted.
APPENDIX
MISSISSIPPI STATE UNIVERSITY
QUESTIONNAIRE

1. You have just tasted fresh farm-raised catfish. How do you rate the product in terms of its general taste and quality? ___ Excellent ___ Good ___ Fair ___ Poor

2. Where is your home? ___________ city ___________ state

3. Are farm raised catfish available in your area? ___ Yes ___ No ___ Don't know

4. Have you eaten farm-raised catfish before? ___ Yes ___ No
   If yes, how often do you eat catfish? ___ Times per month ___ Times per year ___ At home ___ In restaurants ___ In cafeterias ___ Other

5. If you have not eaten farm raised catfish before, would you (or someone in your family) purchase the product if it were available? ___ Yes ___ No
   If yes, how frequently? ___ Times per month ___ Times per year ___ At home ___ In Restaurants ___ In cafeterias ___ Other

6. Check the form and quantities of farm raised catfish you would prefer to purchase for home use. ___ Fresh ___ Frozen ___ Whole dressed fish ___ Boneless fillets ___ Steaks ___ Prebreaded
   In quantities of: ___ One lb. ___ Two lbs. ___ Five lbs. ___ Other (lbs.)

7. What form and method of cooking of farm raised catfish do you prefer in restaurants and/or cafeterias?
   ___ Whole fish ___ Boneless fillets ___ Steaks
   ___ Baked ___ Broiled ___ Fried

8. Are you head of a household? ___ Yes ___ No. How many members are in your household? ______

9. (If you choose to answer this question it will be strictly anonymous because your name does not appear on this questionnaire). What is the range in your annual household income?
   Less than $30,000 ___
   $30,000-$49,999 ___
   $50,000 or more ___
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