# Mississippi MarketMaker Newsletter



# **Economic Impacts of Mississippi Shrimp Industry in 2015**

Posadas, B.C. Mississippi MarketMaker Newsletter, Vol. 6, Issue 20, Dec. 13, 2016.

Estimates of the economic impacts of the Mississippi commercial shrimp industry were broken down by sector - harvesting, processing and distribution. Economic impacts were estimated by using IMPLAN (Impacts for Planning) Version 3.1 software and the 2013 Mississippi inputoutput data.

### **Shrimp Harvesting**

The commercial shrimp industry consisted of the harvesting, processing, and distribution of shrimp products. Commercial harvesting included commercial fishermen using various gears on board vessels (>5 tons) and boats (<5 tons). It was represented by sector 17 of the 2013 IMPLAN input-output data, the commercial fishing sector. The annual landings and ex-vessel values were retrieved from the National Marine Fisheries Service website (Table 1).1 More than 500 commercial licenses were issued by the Mississippi Department of Marine Resources to both resident and nonresident shrimp fishermen in 2015.

Table 1. Mississippi commercial shrimp harvesting and processing production in 2015				
Sector	Million pounds	Million dollars		
Shrimp Harvesting <sup>1</sup>	10.1	11.5		
Shrimp Processing <sup>2</sup>	30.0	100.0		
Total	40.1	111.5		

#### Sources of raw data:

- 1 NOAA Fisheries, Office of Science and Technology, Fisheries Statistics Division. <a href="http://www.st.nmfs.noaa.gov/pls/webpls/MF\_ANNUAL\_LANDINGS.RESULTS">http://www.st.nmfs.noaa.gov/pls/webpls/MF\_ANNUAL\_LANDINGS.RESULTS</a>. Last accessed: Dec. 12, 2016.
- 2 American Shrimp Processors Association, Biloxi, MS. Personal communication. Dec. 10, 2016.

## **Shrimp Processing**

The shrimp processing industry involved plants engaged in primary wholesale and processing. It was represented by IMPLAN sector 61 or seafood product preparation and packaging sector. The annual volumes and plant-gate values of shrimp processing in 2015 were provided by the American Shrimp Processors Association (Table 1). Over time, the processing capacity

of local plants continued to exceed the local harvest of seafood products. Local shrimp processing plants remained heavily dependent on imports of shrimp products from other producing states and foreign suppliers. In 2015, the local purchases coefficient as measured by the ratio between local shrimp landings and total quantity of processed products was about 34%. This ratio implies that 66% of total shrimp processed were imported from other producing states and foreign suppliers.

## **Shrimp Distribution**

Shrimp distribution included seafood wholesalers, seafood and fish markets and seafood restaurants handling various shrimp products. Shrimp wholesaling included secondary wholesale and processing activities dealing with shrimp products. Shrimp retailing referred to seafood and fish markets handling shrimp products. Shrimp restaurants dealt with retail trade from food service handling shrimp products. Shrimp distribution was not included in the present analysis due to lack of appropriate data in the year 2015

## Shrimp Businesses Registered in MarketMaker

More than 800 seafood businesses registered in MarketMaker harvest, process, sell or serve shrimp products. When the search was limited to Mississippi only, the number of seafood establishments was at least 22. Click this <u>LINK</u> to view the search results online. You can sort the results alphabetically, by relevance, or by distance to your current location.

## **Economic Impacts of Shrimp Harvesting**

The base IMPLAN model estimated the economic impacts of shrimp harvesting with the assumption that the local purchases coefficient was 100%. The total economic impacts of commercial shrimp harvesting in 2015 reached \$17.4 million (Table 2). Shrimp harvesting created 283 jobs and generated labor income amounting to \$7 million.

Table 2. Base estimates of the economic impacts of Mississippi commercial shrimp harvesting in 2015				
	Employment	Income impact	Value added	Output impact
Impact type	impact	(Million	impact	(Million
	(Jobs)	dollars)	(Million dollars)	dollars)
Direct Effect	243	5.4	6.4	11.7
Indirect Effect	10	0.5	0.8	2.0
Induced Effect	30	1.2	2.2	3.7
Total Effect	283	7.0	9.4	17.4

<sup>1 -</sup> Economic impact includes direct, indirect and induced effects estimated by using Table 1 values and 2013 IMPLAN data. Local purchases percentage was set to 100%.

# **Economic Impacts of Shrimp Processing**

The base IMPLAN model estimated the economic impacts of shrimp processing based on the default assumption that the local purchases coefficient set by the model was 65%. In

<sup>2 – 2013</sup> IMPLAN sector 17 or commercial fishing sector.

other words, imports processed by local processing plants consisted of 35% of the total quantity of shrimp products processed. The results showed that the total economic impacts of commercial shrimp processing in 2015 amounted to \$105.1 million (Table 3). Shrimp processing produced 546 jobs and labor income reaching \$16.8 million.

Table 3. Base es		mic impacts of Mi	ssissippi commercial s	Shrimp
Impact type	Employment impact (Jobs)	Income impact (Million dollars)	Value added impact (Million dollars)	Output impact (Million dollars)
Direct Effect	175	6.4	6.9	66.4
Indirect Effect	298	7.6	15.7	29.8
Induced Effect	73	2.8	5.4	9.0
Total Effect	546	16.8	28.0	105.1

<sup>1 -</sup> Economic impact includes direct, indirect and induced effects estimated by using Table 1 values and 2013 IMPLAN data. Local purchases percentage set by the IMPLAN model at 65%.

However, when the local purchases coefficient was adjusted to the ratio between local shrimp landings and total quantity of processed products at about 34% or that imports consisted 66% of the total quantity of shrimp processed, the IMPLAN model generated lower estimates of the economic impacts of shrimp processing. The total economic impacts of commercial shrimp processing in 2015 amounted to \$54.9 million (Table 4). Shrimp processing created 285 jobs and labor income was \$8.8 million.

Table 4. Adjusted estimates of the economic impacts of Mississippi commercial shrimp						
processing in 2015						
	Employment	Income impact	Value added	Output impact		
Impact type	impact	(Million	impact	(Million		
	(Jobs)	dollars)	(Million dollars)	dollars)		
Direct Effect	91	3.3	3.6	34.7		
Indirect Effect	156	4.0	8.2	15.6		
Induced Effect	38	1.5	2.8	4.7		
Total Effect	285	8.8	14.6	54.9		

<sup>1 -</sup> Economic impact includes direct, indirect and induced effects estimated by using Table 1 values and 2013 IMPLAN data. Using shrimp landings and processing volumes, the local purchases percentage was set at 34%. 2 - 2013 IMPLAN sector 61 or seafood product preparation and packaging sector.

<sup>2 - 2013</sup> IMPLAN sector 61 or seafood product preparation and packaging sector.

## FREQUENTLY ASKED QUESTIONS

#### What is MarketMaker?

<u>MarketMaker</u> is the largest and most in-depth database of its kind featuring a diverse community of food-related businesses: buyers, farmers/ranchers, fisheries, farmers markets, processors/packers, wineries, restaurants and more. <u>MarketMaker</u> provides simple yet powerful search tools to connect with others across the production and distribution chain (<u>http://ms.foodmarketmaker.com/</u>).

## Where can you find Mississippi MarketMaker?

MarketMaker is located at <a href="http://ms.foodmarketmaker.com/">http://ms.foodmarketmaker.com/</a>.

Ask Siri or Cortana to search for "Mississippi MarketMaker" on your smart phone.

## How do you register your food business in Mississippi MarketMaker?

Click <u>Register</u> and type your email address and a password in the spaces under **Register**. Be prepared to enter information (and pictures) about your business.

# What are the benefits in registering your food business in Mississippi MarketMaker?

Producers register their businesses in <u>MarketMaker</u> because food buyers of all types access our database to find products and services to meet their specific needs. Through <u>MarketMaker</u>, producers can reach more buyers and more efficiently form profitable business alliances.

# How do you search for your business profile in Mississippi MarketMaker?

Click **Search** and type the name of your business in the space under **Search MarketMaker**.

# How do you update your business profile in Mississippi MarketMaker?

Click <u>Register</u> and then click <u>UPDATE YOUR PROFILE</u>. Type your email address and password in the spaces under <u>Account Login</u>. Be prepared to enter updated information (and pictures) about your business.

# MarketMaker Training Workshops

This training workshop is available upon request by a group of 6-12 producers, extension agents, state regulatory agencies staff and teachers. Each workshop will best fit the needs of the participants. Email Dr. Ben Posadas for details at <u>ben.posadas@msstate.edu</u>.

# How do you search for local food businesses in Mississippi MarketMaker?

Click **Search** and type a keyword in the space under **Search MarketMaker**.

#### What is the Market Research tool of MarketMaker?

The MarketMaker research tool is an interactive mapping resource for identifying target markets, developing customized census profiles and mapping food related businesses over demographic maps.

### Where do you find the Market Research tool in MarketMaker?

Look for the **Market Research** section in MarketMaker and click **Research your market now** or **Use previous version**.