

# Mississippi Sweet Potato 2012 Industry Evaluation

Since the early 2000s, the US sweet potato industry has experienced steady growth in national demand, an encouraging trend that is expected to continue. Several market growth opportunities exist: (1) Continued nationwide industry efforts to provide unique varieties preferred by growing ethnic markets; (2) Availability of convenience-wrapped single potatoes year-round in retail markets; (3) Presence of value-added product forms, such as frozen and ready-to-eat mashed, fried, and whole sweet potatoes; and (4) Demand for sweet potatoes by intermediary markets, such as institutions and restaurants.

This report presents an overall sweet potato industry market situation and outlook, and the statewide economic impact of Mississippi's sweet potato industry.

## Market Situation and Outlook

US sweet potato production is largely concentrated in the Western, Eastern and Southeastern regions, with characteristics that can be considered unique to each area. North Carolina production is conducted on relatively large acreage farms and is centered on a select few primary varieties. California growers produce numerous higher-value varieties to meet the diverse cultural and ethnic preferences of consumers residing in the Western states. Mississippi and Louisiana produce varieties similar to North Carolina, on relatively smaller scale farms, in soils that produce relatively larger percentages of US No. 1 grade sweet potatoes.

Mississippi harvested 3.6 million pounds in 2010 and is positioned as the third-largest US producer

of sweet potatoes (**Figure 1**), following North Carolina (9.7 million pounds) and California (6.4 million pounds), and trailed by Louisiana (2.5 million pounds). Mississippi average grower prices received for US No. 1 sweet potatoes ranged from \$22.25 to \$23.83 per 40-pound carton between July 2011 and July 2012, placing it ahead of North Carolina (\$19.65 to \$21.31) and Louisiana (\$21.40 to \$22.62), and behind California (\$29.11 to \$31.37).

Growers nationwide and within each state have developed successful value-added practices, such as single-serve, individually wrapped, microwave-ready potatoes; frozen mashed potatoes; and restaurant offerings of both baked and fried sweet potatoes. Overall, these practices have contributed to the year-round presence and availability of multiple product forms for both at-home and away-from-home venues, moving sweet potato consumption toward a healthy weekly vegetable choice rather than a holiday-specific occasional side dish. This upward trend in consumption levels became evident around 2000, when annual per capita consumption amounts began to reverse the decades-long drop-off (**Figure 2**).

With respect to marketing activities, the states of North Carolina (1961) and Louisiana formed marketing commissions, while Mississippi (1964) and California (1977) operate under the guidance of councils. Each state uses numerous market channels and product forms to attract and retain new and existing customers.

The non-profit North Carolina Sweet Potato Commission includes 400 growers, packers, processors, and

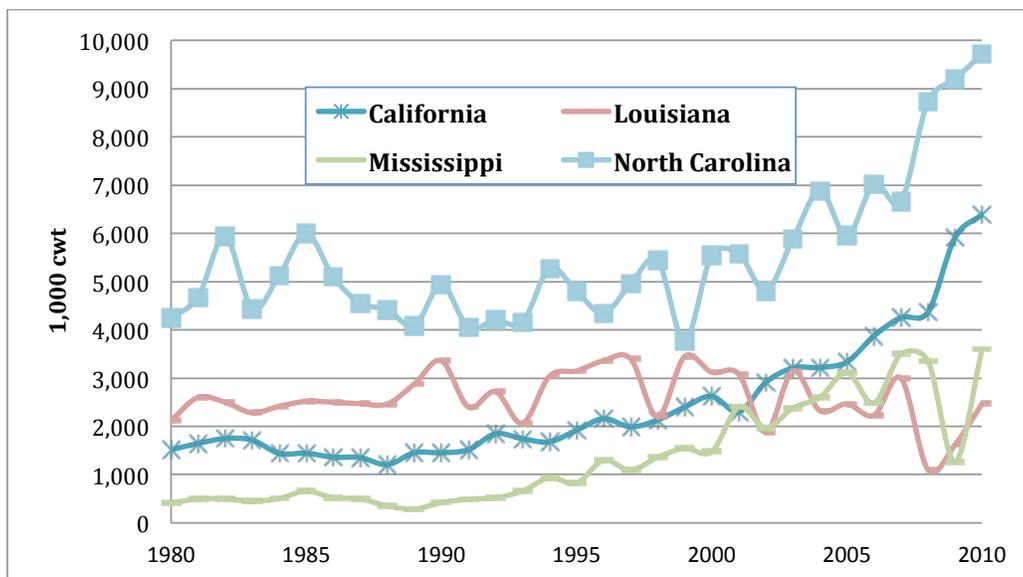


Figure 1: US sweet potato production, by top four producing states, 1980 to 2010, in hundredweight (cwt). Source: Fruit and Vegetable Market News, USDA-AMS, 2012.

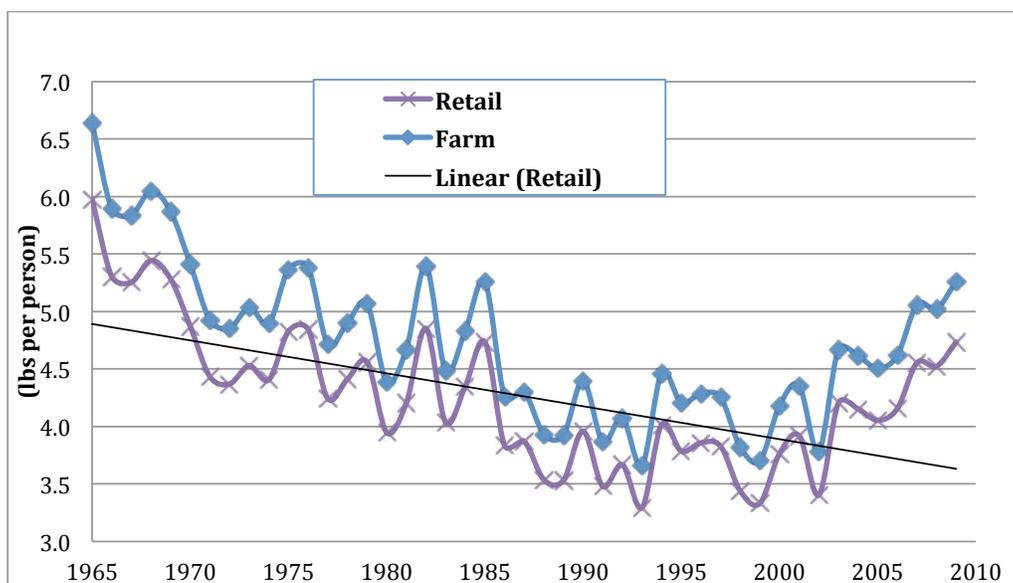


Figure 2: US sweet potato, retail and farm uses, per capita availability, 1965 to 2010, in pounds per person. Source: US per capita food availability, USDA-ERS, 2012.

supporting business associates whose purpose is to “increase sweet potato consumption through education, promotional activities, research, and honorable horticultural practices.”

The California Sweet Potato Council is a voluntary organization whose main objective is “to put together policies and programs that enhance the sweet potato industry in California.”

The Louisiana Sweet Potato Advertising and Marketing Commission has 11 members appointed by the state commissioner of agriculture and forestry. Its mission is “to promote the consumption of sweet potatoes, in particular Louisiana sweet potatoes, by educating consumers on the yam’s many nutritional attributes and its amazing versatility in popular, delicious recipes.”

The Mississippi Sweet Potato Council has 150 members and represents 105 farms and 26 packing facilities. Its goal is “to promote Mississippi sweet potatoes and to educate growers on the latest practices to improve their product and their livelihood.”

The US Sweet Potato Council acts as an advocate for the economic well-being of US sweet potato growers. Dues paid by state organizations, associate membership dues, and individual sponsorships financially support this voluntary organization.

## Economic Impact of the Sweet Potato Industry in Mississippi, 2011

The following information is the result of the economic impact study developed for the Mississippi Sweet Potato Industry. There were 109 sweet potato growers in Mississippi growing sweet potatoes on approximately 23,000 acres. This acreage produced a farm value output of approximately \$66,473,000 in 2011.

This \$66.4 million is considered the direct output associated with the potatoes produced (Table 1). There were approximately 446 direct full-time equivalent jobs associated with this direct output and more than \$5.8 million paid for employee compensation. More than \$22 million value-added dollars were generated. Value-added dollars are dollars after all production inputs have been paid. Value-added include the following: labor compensation, owner income, taxes, other income, and profits.

The spillover effect of the direct output is all the indirect and induced effects of the direct dollars flowing through the economy. This is the total economic impact flowing from the direct output to other sectors within the economy. This spillover effect created another 612 full-time equivalent jobs in Mississippi, which produced more than \$16 million in additional employee

**Table 1. Economic Impact of the sweet potato industry in Mississippi, 2011.**

Impact Effect	Employment	Employee Compensation	Total Value Added	Output
Direct	446	\$5,830,450	\$22,718,214	\$66,473,004
Spillover	612	16,914,107	36,121,761	65,629,759
Total Effect	1,059	\$22,744,557	\$58,839,974	\$132,102,763

**Table 2. Economic impact of the sweet potato industry on local, state, and federal finances in Mississippi, 2011.**

Tax Level and Type	Amount
<b>Local and State</b>	
Sales	\$3,067,311
Property	1,778,416
Personal income	768,831
Social security (employee & employer)	96,315
Corporate profits tax (credit)	(30,023)
Dividends (credit)	(1,828)
Other taxes and fines	1,029,276
Sub-total	\$6,708,298
<b>Federal</b>	
Personal income	2,459,874
Social security (employee & employer)	4,317,558
Corporate profits tax	-150,402
Other taxes	651,312
Subtotal	\$7,278,342
Total (all taxes)	\$13,986,640

compensation and more than \$36 million extra value-added dollars (**Table 2**).

From the value-added dollars generated by the Mississippi sweet potato industry, state and local government will receive more than \$6.7 million in associated tax revenues.

In summary, the sweet potato industry in Mississippi creates a total economic impact in excess of \$132 million and creates more than 1,059 full-time equivalent jobs.

When considering the multiplier effect, the Output Multiplier is approximately 1.99. This means for every dollar of output generated through the production of sweet potatoes, another \$0.99 is generated to flow through the economy. The Employment Multiplier is approximately 2.37; this means for every job created by the sweet potato industry in Mississippi, another 2.37 jobs are created in the state (**Table 3**).

### Sweet Potato Planning Budgets

The Department of Agricultural Economics at Mississippi State University prepared detailed planning budgets for sweet potatoes in 2011, based largely on sweet potato grower interview responses. This publication included a breakeven price and yield analysis for varying percentages and yields of marketable sweet potatoes (culls and storage losses were not included; see **Table 4**). Mississippi sweet potato growers may use this table to assess per-acre net return scenarios based on different price structures and yield outcomes. It is important to note that these breakeven price/yield combinations were calculated before taxes, insurance, and returns to land and management are paid under the prescribed best management and production practices.

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**Table 3. Economic impact multipliers for the sweet potato industry in Mississippi, 2011.**

Multiplier Effect	Employment	Employee Compensation	Total Value Added	Output
Total	2.37	3.90	2.59	1.99

**Table 4. Breakeven price above total expenses and net returns for price/yield combinations, per acre, sweet potatoes, Mississippi, 2011<sup>a</sup>.**

SWEET POTATOES		BREAKEVEN PRICES										
		8.41	9.84	9.34	9.92	10.61	11.44	12.45	13.71	15.33	17.49	20.52
PERCENT	YIELD <sup>b</sup>	NET RETURNS PER ACRE (\$/ACRE) <sup>c</sup>										
50	150	-1655	-1590	-1516	-1428	-1325	-1201	-1080	-860	-617	-293	160
		-1816	-1751	-1676	-1589	-1486	-13692	-1211	-1021	-778	454	0
60	180	-1474	-1396	-1306	-1201	-1077	-929	-747	-520	228	160	705
		-1635	-1557	-1467	-1362	-1238	-1090	-908	-681	-389	0	545
70	210	-1292	-1201	-1096	-974	-829	-656	-444	-179	160	615	1250
		-1453	-1362	-1257	-1135	-990	-817	-605	-340	0	454	1090
80	240	-1110	-1006	-887	-747	582	-384	-141	160	550	1069	1795
		-1271	-1167	-1048	-908	-743	-545	-302	0	389	908	1635
90	270	-929	-812	-677	-250	-334	-111	160	501	939	1523	2340
		-1090	-973	-838	-681	-495	-272	0	340	778	1362	2180
100	300	-747	-617	-467	-293	-86	160	463	842	1328	1977	2885
		-908	-778	-628	-454	-247	0	302	681	1167	1816	2725
110	330	-565	-422	-258	-66	160	433	766	1182	1718	2431	3430
		-726	-583	-419	-227	0	272	605	1021	1557	2270	3270
120	360	-384	-228	-48	160	408	705	1069	1523	2107	2885	3975
		-545	-389	-209	0	247	545	908	1362	1946	2725	3815
130	390	-202	-33	160	388	656	978	1372	1864	2496	3340	4520
		-363	-194	0	227	495	817	1211	1703	2335	3179	4360
140	420	-20	160	370	615	907	1250	1674	2204	2885	3794	5065
		-181	0	209	454	743	1090	1513	2043	2725	3633	4905
150	450	160	355	508	42	1151	1523	1977	2545	3275	4248	5611
		0	194	419	681	990	1362	1816	2384	3114	4087	5450

<sup>a</sup> Adapted from Table 17D, p. 76. From Traditional Vegetables 2012 Planning Budgets, Mississippi State University, Department of Agricultural Economics Budget Report 2011-08, December 2011.

<sup>b</sup> Yield reported as number of 40-pound boxes

<sup>c</sup> The top number in each cell is Returns Above Direct Expenses. The bottom number in each cell is Returns Above Total Specified Expenses. Only the product listed has been varied to calculate net returns. NOTE: Cost of production estimates based on 2010 input prices.

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