

MICHIGAN'S VALUED ASSETS: MSU AgBioResearch and MSU Extension

- » The MSU Product Center for Agriculture and Natural Resources has assisted in launching 145 new businesses that **created 711 jobs while preserving another 351 jobs** since starting operations in 2004. Increased sales attributable to the Product Center are valued at **\$278.5 million**, and the value of increased investment because of its work is another **\$204.6 million**.
- » MSUE staff members assisted in the launch, expansion or evaluation of 13 farmers' markets in the metro Detroit area last year. An economic analysis of one of these markets in 2007 revealed **annual gross sales of \$600,000**.
- » Nearly 37 percent of Michigan's 18-to-24-year olds were enrolled in college in 2007. In comparison, 66 percent of Michigan 18-to-24-year olds who were alumni of a Michigan 4-H pre-college program were enrolled in college in 2007. Nearly 53 percent of 18-24-year olds who were in 4-H during their senior year of high school were enrolled in college. **About 90 percent of Michigan 4-H alumni who attend college do so at a Michigan institution** and nearly three quarters say 4-H influenced their decision to attend college.
- » Despite the recent economic downturn, progress in advancing the bioeconomy is being made with support from MSU AgBioResearch and MSU Extension. **Michigan has more than 100 companies operating in the bioeconomy**, with dozens more supporting it – ranging from entrepreneurial startups to billion-dollar corporations.
- » Micro distilleries are an emerging industry in Michigan. The state has **11 licensed artisan distilleries** – second only to California – and many of them can trace their beginnings back to the research of AgBioResearch scientist Kris Berglund. Micro distilleries **are expected to add more than \$400 million to Michigan's economy and create about 1,400 new jobs**.
- » **Michigan forests support more than 150,000 jobs and add \$12 billion to the state's economy.** With 19.3 million acres, Michigan ranks seventh nationally in timberland acres. MSU Extension helps commercial and private foresters manage their lands for sustainable production through the Sustainable Forestry Education initiative.
- » MSU's leadership in **specialty crop research has yielded three significant USDA grant awards in as many years, totaling \$23.8 million** – a \$5.4 million grant to improve the quality, yield, drought tolerance and diseases resistance of **potatoes and tomatoes**; a \$14.4 million grant to improve the quality of **apples, peaches, cherries and strawberries**; and a \$4 million grant to enhance the economic and nutritional value of the **common bean**. Having the necessary state dollars to leverage these types of funding opportunities is critical to Michigan's economic future.
- » **Michigan leads the nation in black bean production and is the No. 2 dry bean producer, adding \$115 million to Michigan's economy annually.** Led by AgBioResearch scientist James Kelly, the MSU bean breeding program has provided growers with more than 30 new dry bean varieties, including a black bean called Zorro that is expected to be planted on 50 percent of the black bean acreage in Michigan in 2011.
- » Michigan **sugar beet production is up 80+ percent** over the past 15 years, thanks to AgBioResearch scientists, MSU Extension educators, Michigan Sugar Company researchers and the Sugar Beet Advancement Program (SBA). Through education and applied research, SBA helped growers fine-tune nutrient management practices, improve sugar content and reduce disease problems. **Michigan is the country's No. 4 sugar beet producer, and generated \$444 million in total revenues from the crop in FY 2010.**

- » MSUE will increase the viability of Michigan agriculture by continuing to **create sustainable food, agriculture and bioeconomy industries** that preserve farmland, increase employment in and economic impact of agriculture, and revitalize distressed urban areas by taking advantage of existing infrastructure to process food products and encourage entrepreneurship.
- » Nearly 85,000 youth and adults learned to eat healthier and improved their food-budgeting skills through the SNAP-Ed program. Nearly **650,000 individuals receive information on nutrition and food budgeting** through the SNAP-Ed program. About 80 percent of MSUE's nutrition education program participants improved in at least one food resource management practice.
- » AgBioResearch scientists Steve Bolin and Dan Grooms, and MSU Extension educator Ben Bartlett, are heading up the **Michigan Upper Peninsula Bovine Viral Diarrhea Virus (BVDV) Eradication Project** – the first of its kind in the nation. BVDV costs about \$2 billion per year. **Research efforts to date have resulted in 20,000 verified BVDV-free animals** in the Upper Peninsula, and other states are already showing interest in this approach.
- » Nearly 207,000 Project FRESH coupons were distributed at 140 locations, including farmers' markets and roadside stands. These coupons had a value of more than **\$413,000 and increased consumption of local foods** sold by Michigan farmers.
- » More than 30 million acres of cropland worldwide are covered annually with non-degradable plastic mulch to suppress weeds and optimize conditions for a variety of crops. The use of this plastic represents a huge expense for growers and adds nearly 2 million pounds of waste plastic to landfills. AgBioResearch scientists have developed a **promising plastic film** that degrades and integrates into the soil. **If commercialized, its use could eliminate removal and disposal costs – about \$100 per acre – reduce excess waste, and reduce pesticide and herbicide use.**
- » By increasing productivity and profitability of farms of all sizes, MSU will improve the economic viability of Michigan, **spur job creation by offering a diverse selection of food products locally, nationally and internationally**, and position Michigan as a model for producing and delivering a safe, affordable, and nutritious food.
- » MSUE is helping **address the critical shortfalls in U.S. K-12 science education** through 4-H Youth Development. Nationally, 4-H is committed to engaging one million youth in science programming by 2013. At MSUE, Michigan 4-H has added two new annual science events for youth and 4-H is highlighting science learning objectives in every project area, for all 213,000 Michigan 4-H youth.
- » AgBioResearch scientists may have found an effective, environmentally friendly way to **control the enormously destructive sea lamprey** – a breakthrough critical to **protecting the \$7 billion Great Lakes fishing industry**. A pheromone that male lampreys use to lure females for mating has been synthesized and is being tested as a control method. If the data are solid enough after more trials, scientists will ask the U.S. Environmental Protection Agency to certify the hormone as the first ever to control populations of animals other than insects.

For More Information

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