Introduction

Consumer demand for organic food has risen quickly over the past decade, triggered in part by the development and success of USDA's organic regulatory program and label (Kiesel and Villas-Boas, 2007; Molyneaux, 2007; Batte et al., 2007). This rapid growth highlights challenges still to be overcome in the organic sector. As consumer demand for organic products has widened, organic retail sales have spread far beyond the "natural products" market niche in urban areas and college towns and into big-box stores across the country. While new producers have emerged to help meet demand, market participants report that a supply squeeze is constraining firm growth and limiting growth in the overall sector.

In 2008, organic policy at the Federal level moved in new directions. Congress mandated an increase in organic research and certification assistance and created new funding opportunities in conservation, credit, and trade programs. Citing the potential environmental benefits of organic farming, the 2008 Farm Act includes provisions for financial support to farmers converting to organic production through USDA's conservation program, EQIP (Environmental Quality Incentives Program).

Federal activity on organic agriculture began increasing at the beginning of the decade when USDA set national organic standards (see box, "National Organic Standards and Certification"). USDA's Economic Research Service and partner agencies have initiated a number of new organic surveys and studies during the last few years. This report examines recent economic research on organic farming systems, supply chains, price premiums, and market conditions to gain a better understanding of the emerging issues in this rapidly changing industry.

National Organic Standards and Certification

Private organizations, mostly nonprofit, began developing certification standards in the early 1970s as a way to support organic farming and prevent consumer fraud. Some States began offering organic certification services in the late 1980s for similar reasons. The resulting patchwork of standards in the various certification programs, however, caused a variety of market problems.

Congress passed the Organic Foods Production Act of 1990 to establish national standards for organically produced commodities, and USDA promulgated final rules for implementing this legislation in December 2000, with an 18-month transition period. As of October 2002, all agricultural products sold, labeled, or represented as organic need to be in compliance with the regulations. They require that organic growers and handlers (including food processors and distributors) be certified by State or private agencies/organizations under the uniform standards developed by USDA, unless the farmers and handlers sell less than \$5,000 a year in organic agricultural products. Retail food establishments that sell organically produced agricultural products, but do not process them, are also exempt from certification.

The national organic standards address the methods, practices, and substances used in producing and handling crops, livestock, and processed agricultural products. Although specific practices and materials used by organic operations may vary, the standards require every aspect of organic production and handling to comply with the provisions of the Organic Foods Production Act. Organically produced food cannot be produced using genetic engineering, sewage sludge, or ionizing radiation. These standards include a national list of approved synthetic, and prohibited nonsynthetic, substances for use in organic production and handling.

USDA organic standards for food handlers require that all nonagricultural ingredients, whether synthetic or nonsynthetic, be included on the national list. Handlers must prevent the commingling of organic with nonorganic products and protect organic products from contact with prohibited substances. In a processed product labeled as "organic," all agricultural ingredients must be organically produced unless the ingredient(s) is (are) not commercially available in organic form. National Organic Program regulation 7 CFR 205, Section 205.606, specifies which nonorganic agricultural products may be considered as commercially unavailable.

The labeling requirements under the national standards apply to raw, fresh, and processed products that contain organic ingredients and are based on the percentage of organic ingredients in a product. Agricultural products labeled "100-percent organic" must contain (excluding water and salt) only organically produced ingredients. Products labeled "organic" must consist of at least 95 percent organically produced ingredients. Products labeled "made with organic ingredients" must contain at least 70 percent organic ingredients. Products with less than 70 percent organic ingredients cannot use the term organic anywhere on the principal display panel but may identify the specific ingredients that are organically produced on the ingredients statement on the information panel. The USDA organic seal—the words "USDA organic" inside a circle—may be used on agricultural products that are "100-percent organic" or "organic." A civil penalty of up to \$11,000 per violation can be levied on any person who knowingly sells or labels a product as organic that is not produced and handled in accordance with the regulations.

For further information, visit USDA's Agricultural Marketing Service/National Organic Program website, at www.ams.usda.gov/nop/.