

# Environotes from TVA

By John E. Culp

**DURING** the next 10 years, Tennessee Valley Authority (TVA) and the land grant universities in the Tennessee Valley will establish more than 100 demonstrations with farmers. Purpose of these projects is to develop and demonstrate profitable and sustainable agriculture for the 21st century. The emphasis is being placed on seeking sustainable, efficient, profitable, and environmentally and socially acceptable agricultural technology.

## New Farm Demonstrations

Several demonstrations in the seven Tennessee Valley states are up and running. Called AGRI 21 Farming Systems, these farms are showing farmers and professional agricultural workers how to cope with rapidly changing economic and environmental conditions that impact farm sustainability. In effect, these demonstration farms are serving as local applied research stations where innovative techniques are tested, evaluated and introduced to others. New cost-effective sustainable agricultural practices and alternative enterprises are being developed to help farmers remain competitive, productive and environmentally acceptable.

Strategy driving work in the AGRI 21 program is to focus on the quality of life on farms as well as in the rural community impacted by agriculture. Major areas of program emphasis include environmental improvement, increased profitability, leadership development, education and improved family finances.

Because environmental concerns have significant potential impact on agricultural sustainability, various pollution prevention practices are being introduced. These include best management practices (BMPs) for conservation compliance, integrated pest management, nutrient management (including prescription fertilization), use of biotechnology and genetic engineering advances, wetlands management, environmental assessments,

agrichemical handling and storage systems, waste management, groundwater quality, and other related technologies.

Financial planning techniques for sustainable agriculture are also being used in the AGRI 21 program. Comprehensive financial and business plans using the latest FINPACK computer analysis program are a key part of the process. Other financial aspects include improving agribusiness and service institutions in concert with sustainable goals, economical uses for farm wastes and introduction of alternative enterprises that will complement sustainability goals.

Another component of the AGRI 21 process is environmental education. TVA, the land grant universities, farmers and other partners are conducting field days to show a wide range of advances essential in sustaining a competitive agricultural system. Workshops, short courses, and educational materials are also included in this phase of the program.

The AGRI 21 program is directed by an Executive Management Committee which is made up of officials from TVA, the Extension Service leaders of the land grant universities, an official of the 1890 land grant institutions, and a state department of agriculture official. USDA is also participating. The key contact person in TVA is Dr. Larry Johnson, phone 205-386-2887. He is located at TVA in Muscle Shoals, AL.

## TVA Center Renamed

TVA has renamed its National Fertilizer and Environmental Research Center to recognize the shift that has been made in the Center's work. The new name is TVA Environmental Research Center. The work of the Center has been totally redirected to solving environmental and waste problems.

Future 'Environotes from TVA' will detail the new directions the organization is taking. ■