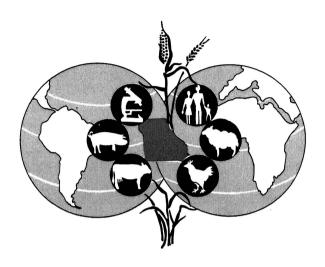
### Technology for International Agriculture



### Livestock and Management Systems

International Research,
Education and Training - a Task Force
of the Colleges of Agriculture
and Veterinary Medicine
University of Missouri-Columbia
SR/260 1981

# Interdisciplinary Team with Expertise For:

- Developing and conducting interdisciplinary training of U.S. and foreign students.
- Identifying problems and seeking solutions in animal production in the humid tropics and arid subtropics.
- Developing international research and collaborative training programs for developing countries.

### **Target Areas**

Interdisciplinary International Agricultural and Animal Management Systems in Developing Nations:

- Environmental and Climatic Stressor Assessment
- Forage-Livestock Management Systems
- Forage-Livestock Breeding and Genetics
- Management of Animal Health, Feeding, Growth, Lactation, Reproduction and the Processing of Meat and Milk Products
- Economics of Production Systems and Marketing
- Mixed Farming Systems Development
- Food Processing, Human Nutrition and Environmental Sanitation
- Sociological Analysis of Production and Marketing Systems
- Project Analysis and Evaluation
- Communications

#### **UMC Task Force**

The UMC Task Force was formed to stimulate and assist University departments, faculty, and students in developing International Research and Training Programs, and serve as a coordinating body. The ultimate goal is to develop a cadre of faculty and students (U.S. and foreign) with broad international and interdisciplinary perspectives along with the necessary scientific and technical skills needed to deal with worldwide agricultural and livestock problems.

The Task Force and collaborators will address livestock management and mixed farming systems in the humid tropics and arid subtropic zones of the developing world. Their collective expertise brings together unique skills for:

- Performing environmental profile analyses and environmental stress evaluations to determine the appropriate livestock breeds or crosses and the necessary forage and feeding programs for successful livestock and mixed farming systems.
- Improving livestock feeding, pasture, breeding, management systems appropriate for small farm and mixed farming systems.
- Studying disease and parasites constraints and evaluate cost-benefit ratio related to control methods.
- Improving food preservation techniques and environmental sanitation.
- Assessing the socio-economic and policy aspects that must be considered in the design of appropriate technology for developing farming/ pastoral and mixed farming systems.

## Perspective of International Program Involvement

UMC faculty participate in teaching, research and extension functions. Research facilities, the dissemination of information, and the demonstration of practices are well established. These functions are performed primarily to contribute significantly to Forage-Livestock Environmental Management Systems and the improvement of food and

nutrition in Missouri, the United States and worldwide. It is with this objective in mind that the UMC Task Force on International Forage-Livestock-Management Systems has been established.

Research, like teaching and extension, is a responsibility and function of the respective departments. Research of an international nature is integrated into the total research efforts of the respective departments. Opportunities are provided for staff scientists to conduct research on international problems, often in collaboration with overseas scientists. Foreign graduate students may develop thesis research on problems relevant to their home countries and probable future work. Opportunities are sought for interested U.S. graduate students to conduct thesis research in foreign countries, in cooperation with professionals in those countries. Extension specialists on campus and throughout the state also are involved. They have been members of technical assistance teams and program development and evaluation groups.

The Missouri Small Farm Program incorporates educational assistants who help families living on small farms to improve their economic and social well being by increasing their knowledge and skills in agricultural technology and management, management of family resources and home gardening. This program delivery method is adaptable to working with developing countries.

The UMC Agricultural Guide system of delivery of technical information to farmers is a communication system which principles can be applied in most developing countries.

UMC hosts international visitors for training in agricultural production and information dissemination. Many staff have been or are members of technical assistance teams and program development and evaluation groups. Extension staff members have had a long association with the International Farm Youth Exchange program, a two-way exchange program.

### **Support Programs and Facilities**

**Experiment Station Chemical Laboratories** 

Nuclear Reactor

Computer Center

Low Level Whole Body Counter (for human and animal)

Environmental Stress Research Laboratories

Veterinary Diagnostic Laboratory

Whole Animal Metabolism Unit

Animal Science Research Center

Dairy, Beef, Sheep, Swine, Poultry, Turkey, Equine, Agricultural Engineering and Veterinary Teaching, Research and Management Farms

State Wide System of Extension Specialists in All Speciality Areas of Task Force

Comparative Agriculture Reference Center

Research Data Banks on Small Farms (Domestic and International)

Field Research Centers for Forage and Livestock Research and Management Systems

#### Language Training at UMC

Intensive English Program—Provides English language skills necessary to successfully pursue a degree at a college or university in the U.S.

Intensive Beginning French and Spanish Programs
—Language proficiency in listening, speaking, reading, and writing with emphasis on conversational skills. Includes background cultural studies, regional, ethnic and social characteristics.

## Current Program Activities of Staff on This Task Force and Others Include:

- Mexico—U.S. scientific bilateral programs. Approval of planning funds to establish three (3) projects with UMC and various agricultural and scientific organizations in Mexico.
- U.S. AID-Title XII-Small Ruminants Collaborative Research Support Program, "Sociological Analysis of Small Ruminant Production Systems". This project is located in four countries—Peru, Brazil, Kenya and Indonesia.
- U.S. AID-Title XII-Small Farm Family Improvement Program (world-wide effort to assist small farms in developing nations).
- IICA-Missouri Farm Production Systems Research in Jamaica and Costa Rica.
- Individual staff are active in research, training and development projects in Libya, Egypt and Israel.
- Tunisia-Agricultural Research and Training Program. UMC is lead institution for a 5 year AID/MIAC contract with the government of Tunisia.
- Philippines-Farm Management/Farming Systems. Short course is being developed by UMC and the Farm Systems Development Corporation of the Philippines

#### Where To Write/Call

International Agriculture Programs Office of the Dean College of Agriculture University of Missouri-Columbia Columbia, MO 65201 Phone 314-882-7667