

Grey-haired, soft-spoken, pipe-smoking and addicted to slightly rumpled tweeds—this was the college professor prototype of a couple of decades ago, before the beards and long hair. Elmer R. Kiehl, veteran dean of Mizzou's College of Agriculture, fits that mold even today.

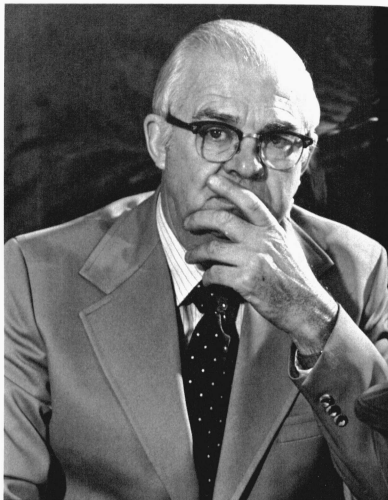
But scratch a little deeper and you discover a most uncommon academician: a Missouri farm boy having lunch with U.N. Ambassador Patrick Moynihan; a Mizzou alumnus in the Oval Room of the White House; an ag economist chairing a session of his peers in national Land Grant College meetings. And a landowner tending to the chores on his Boone County farm.

Modest Elmer Kiehl is playing a leadership role in developing this nation's food policies—policies that literally can mean life or death for millions of persons. And just about everybody is trying to get into the act—environmentalists, politicians, labor leaders, intellectuals and even the irrepressible Secretary of State.

Just as we say that education is too important to leave to the educators, it would appear the public now thinks food is too important to leave to the agriculturists.

The low-key dean's credentials to speak out on matters of food production are impressive. His first really big assignment came when he was appointed by President Lyndon Johnson to the nation's 15-member Food and Fiber Commission. Earlier President Kennedy had named him to the President's national Advisory Commission on Agricultural Policy.

In 1974 he served as an official United States representative to the World Food Congress in Rome. He presently is chairman of the Division of Agriculture of the National Association of Land Grant Colleges and State Universities. He is co-chairman of the international Science and Education Council, a newly formed



By Cordell Tindall **Ag Dean Elmer Kiehl
is Telling the Hungry World,**

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group working closely with Middle Eastern oil-producing nations.

Kiehl's most recent appointment was by President Gerald Ford to the 36-person advisory committee on World Trade and Negotiations. This group—representing government, labor, industry, agriculture, business, and consumer interests—will develop policy and strategy for U.S. trade negotiations.

In serious conversation with Dean Kiehl it soon becomes obvious he is a well informed scholar on world food problems and production. He has read—and understands—most of the current rash of books published on the subject.

A compelling, dramatic speaker he is not. More flamboyant personalities with fewer facts and far less knowledge of the situation are more likely to grab the headlines. Elmer Kiehl is at his best in a one-on-one situation, in informal dialogue after the organized sessions.

His quiet manner makes him a somewhat unlikely candidate to lead a spirited crusade for more funds for agricultural research, now being urged by vocal agricultural leaders in Missouri. His friends may sometimes yearn for a more vigorous approach, but his dedication and sincerity are never questioned.

He has quietly made moves in his long-range plan to reorganize the staff of Missouri's College of Agriculture. He likes to cut across traditional departmental lines to organize teams of scientists to tackle agricultural problems.

Avoiding dramatic actions that would have "rocked the boat," he has worked patiently to achieve many of his goals.

This is the man from Missouri who now finds himself in a key position to help shape this country's food policies. And just about everybody agrees it's high

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time we work out ways and means to cash in on America's tremendous capacity to produce food.

But growing grain in this country to sell abroad is not the long-range solution to the world's hunger problems, Kiehl warns. At the moment, grain sales, particularly soybeans and wheat, are chiefly responsible for a favorable balance of trade, despite rising costs for petroleum.

But over the long pull, excessive exports would require using up far too much of the unrenewable resources now used in our sophisticated system of farming—fuel (energy), phosphorus and other minerals. Thus far, the technological advances in agriculture invariably have called for more energy, more exhaustible resources. "Can the United States maintain access to the world's minerals?" the dean asks.

If something similar to this country's agricultural technology should be adopted around the globe, there simply would not be enough resources to go around. It's a sobering thought.

Kiehl, speaking in his role as an economist, also suggests that America's ever-expanding economic base has made democracy work in this country. Can we cope with the prospects of a static economic state? "Growth may no longer be in the cards," he says. How would we fare with a zero GNP with continued population growth? Kiehl indicates this could only mean a lower standard of living.

So this country must change its value system, the dean believes, from a high-consumption society to one with high investment—saving our capital for things that will ultimately save us.

But it's not an entirely pessimistic picture painted by Kiehl. He says that the United States and most of the Western World should have plenty of food until the end of the century. Short of war, that is, drastic climatic changes, or colossal bungling by governments. The possibility of a complete shutoff of energy resources by the "third world" also is frightening.

Something needs to be done about population control. That's basic and obvious.

But meanwhile, there are "some chores to do" in helping the underdeveloped countries do a better job of feeding themselves. Kiehl currently supports the Findley-Humphrey legislative proposal that would extend the "county agent" system to the third world. In the game of catch-up, they need our 1920's farm technology now.

(If you are concerned about sharing our science and technology with the "enemy," such as the Soviets or China, consider the more frightening alternatives of mass starvation and, possibly, war.)

More also could be done to encourage food production, to provide third-world farmers with greater incentives to produce. Too often, elitist groups in these countries hold down food prices so they can give handouts to the city's poor, but provide farmers with no reason to grow more food. Agricultural successes in Korea and Taiwan suggest that such incentives will work.

The urgency of such moves is underlined by Kiehl's estimate of some 800 million people now in trouble when it comes to food. As population growth gets closer and closer to the maximum food production line, every ripple—bad weather, mismanagement, distribution problems—causes a crisis. Governments can fall, and have in the cases of Chile and Ethiopia.

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In this country food concerns are more likely to be expressed in the supermarkets. Our society appears inclined to place restrictions on farm production by banning DDT, legislating new environmental regulation. The Army Corps of Engineers is flirting with regulations that would require permits for cutting or filling in small tributaries of streams reaching up to fields and barnlots. Farmers fear they soon will need a permit to plow their land.

Certainly, there are valid concerns for the environment, but, Kiehl says, they must be balanced with the need for survival.

To meet the situation, new approaches in ag research are required. Energy research should get top priority. But we need to know more about such things as proteins, particularly in oils (soybeans). We do not know enough about nutritional requirements of humans. Water is a key resource and may prove to be one of the first limiting factors in food production. Basic knowledge on plant growth and reproduction is needed. Soybean researchers, for example, have as yet been unable to break longtime yield barriers. We should know more about aquatic food sources and management of natural resources.

All these challenges are coming at a time of retrenchment in ag research. Ag experiment stations just have not been funded to get many of these new proposals moving.

Some progress is being made, of course. At Mizzou, better use of animal wastes has been developed. At a newly-organized test farm in Northeast Missouri (in Knox County) methane is being produced from ma-

nure. A large-scale research effort is tackling the soybean problem, for soybeans can provide much needed protein for a hungry world.

At the moment nitrogen, made chiefly from natural gas, is in short supply and is expensive. Legumes now are suggested for grass plantings, to gather nitrogen from the air. Developing cereal crops that have the legumes' ability to gather their own nitrogen offers a far-out answer to the fertilizer problem.

But who knows what ideas will be suggested by the students now enrolled in agriculture, soon to join the forces working to produce more? Only 10,000 agricultural scientists are to be found in this country, and Kiehl predicts that in another 10 years, 25 percent of today's aggies will be working in international agriculture.

It's a big assignment for future ag scientists. And if they are to enjoy some measure of success in averting worldwide turmoil and war prompted by starvation, they can give some of the credit to the gentle agricultural scholar from Missouri. His blend of farm boy "horse sense" and humanitarian awareness just might point the way to survival for mankind on the planet earth. □

The dean of ag editors and a longtime friend of Elmer Kiehl, Cordell Tindall is regarded as an agricultural expert in his own right. The editor of the Missouri Ruralist, who was graduated from the University in 1936 with a degree in agricultural journalism, also serves as editorial vice president of The Harvest Publishing Company and is a member of the Governor's Advisory Council on Agriculture.

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