## Poor Nations Need Crop Increase To End Dependence on Surpluses

world food problem is for poor countries to quickly increase the production of crops and animals—and incomes—on millions of small farms, thus stimulating economic activity," says Sterling Wortman, vice president of Rockefeller Foundation and an Oklahoma State University graduate.

The statement is not new but it is significant because it appears in the summary article of the September issue of Scientific American magazine, which features a dozen major articles on the world food problem. Stress is on producing more food; not on the much-publicized idea of dividing up present supplies.

The writers, all recognized authorities in their respective fields, are generally optimistic that the solution summarized by Wortman is workable, but they agree that action now is urgent. Populations are growing, and time is short.

Among "non-solutions" to the world food problem, Wortman mentions first larger harvests in the few remaining surplus production countries, notably the United States, Canada and Australia. Other "non-solutions" are introduction into developing countries of Western-style, large-scale mechanized farming and synthetic foods, such as single-cell proteins.

Hopeful signs listed include the greater acceptance of expanded food production as the primary solution, along with establishment of international research centers to adapt improved sorts of crops and livestock to various localities.

Wortman says the potential for raising yield levels is great "when

fertilization is combined with highyielding varieties and improved cropping practices." A new element is availability of chemical fertilizers in sufficient quantities for widespread basic food-crop production in developing countries.

Wortman says governments can take effective action if the will exists, and that many farmers (in developing countries) will adopt new technology given reasonable opportunities to do so.

"A functioning network of financial institutions" and "an impressive (but still inadequate) array of institutions to assist with technical and managerial development of national programs" also are cited as hopeful signs of success.

In the same issue, W. David Hopper, president of the International Development Research Centre in Ottawa, writes that it is hard to impress on most developing country governments that "development in the first instance should be agricultural."

Hopper says they tend to prefer such attributes of modernity as national airlines and smoking industrial plants to farm-to-market roads, bags of high-yielding wheat seed, rural credit cooperatives and other levers of agricultural transformation.

But as Wortman points out, there are only three acceptable ways (excluding theft and violence) that people can get food. They may receive it as a gift, they may buy it if they have the money or they may grow it, at least some of it.

Eventually, every country must come to understand that if it is to grow more people, it also must produce more food.