

LETTERS

Preventing Famine

Jean Mayer (Editorial, 15 Feb., p. 707) says the world now has "the scientific basis and the technology to predict, mitigate, and eventually prevent famines." This is nothing new. A famine has always been a real probability in any population that has grown beyond the safe carrying capacity of its environment.

It is only prudent to define the safe carrying capacity as being well below any momentary maximum attainable in a good year. Bad years recur; we don't need to be able to predict precisely the time of their recurrence. Prudent management includes the storage of food in good years.

To avoid disasters, keep supply greater than demand. When demand outruns supply, two alternatives are available: reduce demand (by keeping birth rate below death rate), or increase supply (of food, energy, and so forth).

In a balanced discussion one might expect equal attention to be devoted to these two possibilities. Mayer's essay is not balanced. By my count, he lists 23 possible ways of increasing the supply, while mentioning birth control only once, in two words. His recommendations for preventing famine remind one of the classic recipe for 50 Percent Rabbit Pie: "One horse to one rabbit."

The tragic fact is that, unless demand is reduced through population control, all successes in increasing supply will prove useless. So long as African populations continue to increase, no plausible gain in supplies will cure supply "shortages." Is it not time to devote more attention to population "longages"?

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Hardin is right in emphasizing the importance of population control if one wants to accelerate self-sufficiency for the world-at-large and for Africa in particular, although his criticism that I gave 23 times more importance to food production than to birth control is a bit simplistic. As someone who, before becoming an academic administrator, was both a professor of nutrition and a member of Harvard's Center for Population Studies and as one who has lectured on the need for population limitation for more than 20 years, I am unlikely to forget the other necessary emphasis of the effort to prevent famine.

The fact is, however, that my editorial was designed first of all to mobilize American scientists to push our government to be much more vigorous in the pursuit of agricultural development for the Third World. Assistance toward population limitation requires more subtlety. While the basic technology exists and is improving (a 5-year "shot" and progress toward male contraception) and we ought to help to make it available when requested, visible foreign intervention in birth control programs is often regarded as racism and bitterly opposed—by African nations in particular. Help to indigenous family planning movements has to be discrete. Success requires not only the paraphernalia of birth control but also, and more important, a social transformation, including a widespread consciousness that most children are now going to live and a change in the status and ambitions of women, for themselves, their sons, and particularly for their daughters.

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Gordon Research Conferences

The following program was not available in time to be included in the announcement of the 1985 Gordon Research Conferences (1 Mar., p. 1067).

Chemistry and Physics of Solids

Plymouth State College (N)
Andrew Kaldor, chairman.

Chemistry and Physics of Clusters

12–16 August. The conference will focus on the chemistry and physics of clusters and cluster compounds with special emphasis on materials consisting of three to 100 atoms. Topics will include both experimental and theoretical work on the electronic, magnetic, optical, and chemical properties of these materials and techniques for their preparation in the gas phase, the condensed phase, in matrices and on supports. Techniques to study the properties of these materials and of materials prepared for clusters, as well as chemistries which show specific cluster size and structure dependence, will also be emphasized. The conference will have plenary lectures and three to four poster sessions for contributed papers. Please write to Andrew Kaldor at Exxon Research and Engineering Company, Clinton Township, Route 22 East, Annandale, New Jersey 08801 for more

information or to send titles and 100-word abstracts of possible contributions to the poster session by 10 July 1985.

In addition, the program for the final session of the Conference on Cell Contact and Adhesion has been revised as follows.

5 July. Mechanisms of malignant invasion and metastasis. (Garth Nicolson, chairperson): Ed Roos, "Mechanisms of liver invasion and metastasis"; Lance Liotta, "Tumor cell adhesion to basement membranes: Role in invasion and metastasis"; Lennart Olsson, "Identification of genes required for metastasis."

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Cosmic Billboards?

In reading the Briefing about plans to launch human ashes into orbit (News and Comment, 8 Feb., p. 615), I was struck by the sponsors' idea that the vehicle should be visible from the ground, so that relatives of the deceased could see it more easily. Is this the beginning of a new visual form of pollution, the cosmic equivalent of billboards on highways?

Imagine a 50-foot-square array of highly reflecting, thin panels unfolding in space. Even at 500 miles above the earth, specular reflections from the array could be designed to be highly visible, making the object appear like a very bright star. A resourceful advertiser might eject 50 of these packages, causing them to separate in a programmed manner to form the letters of a client's name. Twenty years from now, will we walk out at night to see the word "Coke" emblazoned in the sky? One hundred years from now, will our descendants be tied to civilization everywhere on Earth, no matter how far they travel into wild and remote regions, because the night sky will be filled with moving "stars" vying for attention?

Congress should extend the authority it has given the Department of Transportation to regulate private launches and allow it to limit the brightness of private space payloads—a "Space Beautification" addition to the Commercial Space Transportation Act. Low, not high, visibility should be the rule.

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