

Farming Success in India

Your review of *The World Food Problem*, published by the President's Science Advisory Committee (News and Comment, 23 June, p. 1578), emphasizes the growing gap between world population and food supply. In India we have a family planning expert as our Health Minister, and the goal of family planning seems to be in sight. Our position regarding food production is a less happy one. Yet some facts related to increased food production in India and Pakistan are worth consideration: (i) crops can be grown all year round, compared with 6 months or less in developed countries; (ii) crops grow more quickly due to higher temperatures and more intense sunlight; (iii) during dry seasons, sufficient water is available for irrigation (if properly conserved) from local monsoon rains or Himalayan snow; and (iv) manpower is unlimited.

By taking advantage of these factors, we have proved on the small experimental farm attached to this institute (Davis Institute of Neuropsychiatry) that it is possible to grow at least ten times more food per acre than the average for this area on land which was considered so poor when we bought it that nobody wanted to cultivate it. Our techniques during the last 5 years have included:

- 1) Digging wide diameter wells and installing electric pumps of 1 to 2 horsepower (we have six pumps for 17 acres). At one point we pump water from a stream. As the stream serves to irrigate 4 acres, we require one well for about 2 acres. In this rocky area, tube wells are impossible and there are no canals, nor is there enough land to construct dams and reservoirs.

- 2) Use of high-yield seed.

- 3) Mixed farming so as to produce manure and utilize waste plant products for animal feed. Chemical fertilizers, correctly used, are added.

- 4) Hand digging. We should like to have a small tractor, a luxury which we cannot yet afford.

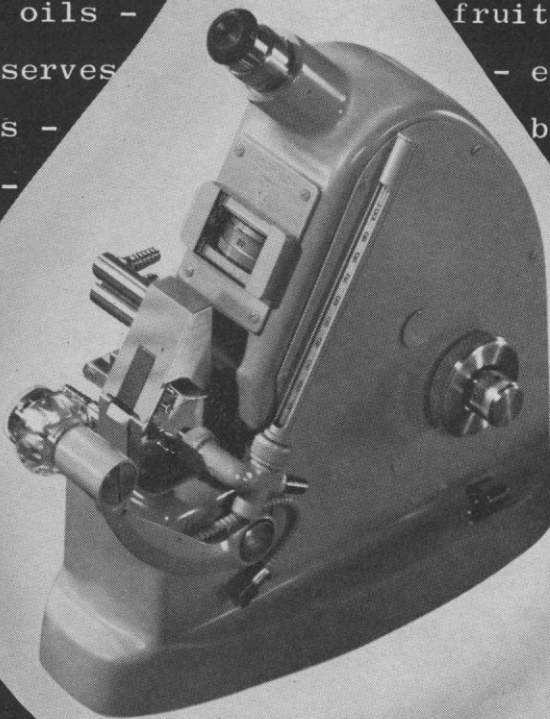
If most of the land in India now under cultivation were cultivated only half as effectively as we have proved it possible, we Indians should be able to close the world food gap for many years to come, and banish the specter of famine. All we need is a vision of this goal, good leadership from within, and some outside help with fertilizers.

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12 JANUARY 1968

petroleum derivatives - chlorinated solvents -
peroxide solutions - ethylantracene - salt
solutions - polymers - fruit butters - maple
syrup - acetic acid hydrogenated fats
oil contaminants - hydraulic fluids
essential oils - fruit preserves
berry preserves - egg solids -
aliphatics - biologicals
solvents - alcohols -
flours - jellies
pentane coffee
solids honey
- oils jams
waxes cocoa
nylon fruit
juices maple
syrup - plastic
soybeans flaxseed
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tomato products - fluorinated hydrocarbons - ext
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