

## GENERAL SCIENCE

# Program for Indonesia

Aggressive plans for getting rid of illiteracy, changing food habits, expanding medical services and doing fundamental research are projected by Indonesian scientists.

► **INDONESIAN SCIENTISTS** and educators are projecting an aggressive program aimed at obliterating their nation's illiteracy, changing the people's food habits, expanding health and medical services and, at the same time, conducting fundamental research.

This was brought out in a series of interviews with some of the young republic's top officials by Borge Michelsen, field scientific officer for the United Nations Educational, Scientific and Cultural Organization, stationed at Djakarta.

A primary education for all of the country's 11,000,000 school children by 1960 is the aim of Dr. Wongsongoro, Indonesian Minister of Education. This means the training of 250,000 school teachers. At present there are only 80,000.

The education minister also talked of plans for adult education and for calling in scientists from abroad to act as teachers for future Indonesian scientists and to help raise the standard of living.

Dr. Sutomo Tjokronegoro, professor of pathology at the University of Djakarta, pointed to the fact that there is only one physician for 70,000 persons in Indonesia—compared with about one for 1,000 in the United States. His country, he said, is planning an expansion in the training of "mantris"—a kind of health sergeant. They would be set up in polyclinics all over the country. Physicians would be in charge of several polyclinics.

Dr. Sutomo also stressed the need to bring in foreigners, both teachers and research workers. Every doctor, he said, ought to be a bit of a research worker.

Research is important to find the medicines the country needs, he pointed out. Indonesia cannot afford to pay for the new wonder drugs produced in the United States, many of which are patented.

Dr. Poorwo Soedarmo, head of the Nutrition Institute, Djakarta, must tackle the fact that the average Indonesian has a daily intake of only 43 grams of protein—a low record for the world. (One ounce is about 30 grams.) Fifty grams is considered the minimum for a human being. (The National Research Council in Washington, D. C., recommends 70 grams of protein per day for men, 60 grams for women.) In some parts of the country it is not uncommon to hear of a person dying of what is called "normal" starvation.

A program to change the patterns of food production so the people will eat more leafy vegetables, roots and meat is under way. The object is to raise not only the protein intake but also to provide needed vitamins.

In order to get the people to change their eating habits, a popularization of science is necessary so that the people understand why they should eat new foods, he said.

Brigades of Indonesian scientists and fundamental research in biology are goals of Dr. Kusnoto, director of the Botanical Garden, Bogor. He would like to see a fundamental research program in plant growth hormones, which might mean an increase in copra production.

For the next five to ten years Indonesians desperately need the help of the outside world—teachers and research workers—in the opinion of Prof. Sarwono Prawirohardjo, gynecologist and obstetrician. After that Indonesia can probably proceed on its own.

Admitting that there are still many areas of his country where belief in witchcraft is still widespread, Prof. Sarwono called for teaching science to the school children.

Science News Letter, January 26, 1952

## OPTICS

## Sunglasses by Day Improve Seeing by Night

► **GIRLS WHO** wear sunglasses during the day may have some justification besides fashion. If they are going to drive an automobile at night, they may be safer if they have protected their eyes from glare.

This is the suggestion from a report by Dr. Robert H. Peckham of Temple University School of Medicine, Philadelphia, to the Highway Research Board meeting in Washington. A large majority of drivers exposed to moderate sunlight during the day may not be able to see well enough for safe night driving, his studies on the effects of sunlight on eye sensitivity show.

Science News Letter, January 26, 1952

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