

DEVELOPMENT

Science makes Development Sweet

from our Special Correspondent

A CHEERFUL account of the ways in which scientific institutions are being set up in developing societies was provided at a symposium earlier this week at the British Association's annual meeting at Durham. One striking feature of the proceedings was the forthright rejection of the view that the technology of advanced societies might serve only to corrupt the developing nations by Professor T. Adisanya Ige Grillo, professor of anatomy at Ibadan, Nigeria. The button-wearing doomsdayers seemed for a time abashed to discover that a Nigerian could be as keen on technology as any go-ahead industrialist.

The symposium, organized by Professor John Ziman as part of the proceedings of Section X (for General), was conducted by Lord Blackett, president of the Royal Society and a distinguished recruiter of science in the cause of economic development. The difference between the two categories, he said, is most easily measured by per capita income—\$600 per head on the average for the developed nations and only about \$100 per head for the developing nations. But there has been progress. The developing nations have collectively increased their economic wealth by about 5 per cent a year in the past decade. Yet economic progress remains the goal, and so every scientist must be imbued with the notion that social progress in the developing world must be the goal only next in importance to the avoidance of a nuclear war.

The case for variations of the conventional pattern of science teaching in the developing countries was put by Professor D. G. Osborne of University College, Dar es Salaam. Science graduates, like members of the general population, must be "competent for change", he argued, and must be trained for making administrative decisions with a scientific content as much as for research or even teaching, which argues the need for mixed courses—economics and physics, for example. He asked that textbooks written for students in developing nations should be more fully provided with illustrations relevant to the societies concerned, that more graduates from universities in developing nations should be able to have postgraduate training in other countries and he pushed for innovations such as a scheme to induce developing universities to spawn from within themselves industries suited to regional needs. Among the impediments to scientific education in developing nations are the lack of the kind of general awareness of scientific matters that might be provided by newspapers or other non-professional journals, the linguistic background of the students (not usually English) and cultural restrictions such as the tendency to believe that a person should not dirty his hands.

Dr H. C. Pereira, director of the East Mallang Research Station, slew two paper tigers with his declaration that the unwillingness of farmers in the tropics quickly to change their methods has at least the advantage that new crops disastrously susceptible to new diseases are not introduced, and that the merchant banks which operate on the fringes of the cash economy do worthy service for tropical agriculture. Dr Pereira argued strongly for "science on the spot" if practical problems were to be dealt with efficiently.

Nigerians do not easily forget the civil war, only recently at an end, and Professor Grillo several times returned to his statement that the troubles had at least helped Nigeria to recognize its own internal strength. He was scornful in an amusing way about past attempts at aid for developing countries—"you cannot help people without knowing what they want" was one of his themes. He pleaded for "a certain amount of faith" in the capacity of African scientists, however trained, to know what they were about, and claimed that the development of educational institutions in Nigeria at least had now reached the point at which "we are no longer in a position to put the blame on the colonial past . . . if there are mistakes, they are our mistakes". But he thinks it unlikely that Nigeria will ever again establish classical universities—technical institutions are the pattern.

Professor Grillo welcomed the notion that there should be easy exchanges of people between developed countries and Nigeria, but had a sombre warning for the developed nations and especially for Britain about the quality of the people sent to the developing nations as university teachers. With all the links now extant with developed nations, these universities had become places where the developing peoples could make international comparisons and in which the third-rate people were conspicuous.

The development of health services in Nigeria is a centrepiece of the strategy of the National Science Council of Nigeria, and Professor Grillo promised that Nigeria would have a more carefully planned programme of medical research than any in the United States or Britain. He was scornful of the way in which the National Institutes of Health in the United States were persuaded to start a programme of congenital lung diseases in the newborn after the death of one of Mrs Jacqueline Kennedy's children, anxious to say that malnutrition and disease are often just as much consequences of ignorance as of poverty, and yet convinced that health engineering as he called it—the prophylactic management of the environment—is often more important than mere doctoring, nevertheless, Professor Grillo said, Nigeria would in the development of medical schools make sure that intending doctors received a good grounding in the medical sciences.

To many of his audience, Professor Grillo's most surprising declaration was that there is at present no reason why Nigerians should without further thought accept the advice of outsiders that the time has come urgently to reduce the rate of growth of the population. "Is there a population problem in Africa? We doubt it. And all this anxiety about family planning—is it genuine? That's what we have to decide." He went on to quote as evidence in favour of doubt the ease with which "you can get the money for an electron microscope from the aid organizations so long as you say it's for family planning".

The civil war apart, Nigeria (with oil) is luckier than most developing countries. What Professor Grillo had to say reflected also a sense of cheerfulness which seems—at least to judge from the inevitable questions of the students at the back—to be vanishing in the developed world. At one point he was almost on the point of saying that the women's lib would have nothing to ask for in Nigeria, but this statement eventually appeared as "the women of West Nigeria play a very important role".