

project has since been integrated into the planning of a larger project, based on the ministry of agriculture's forestry department. Also within the university, an appropriate technology unit has been set up, working on problems such as methods of grain storage, food preservation and water purification, especially relevant to the rural areas. In the ministry of agriculture, soil studies have begun as have studies of local foodstuffs and their usefulness for poultry rearing.

Sometimes, useful research results come unexpectedly. A recent study on the extent of migrant labour from Mozambique showed that returning labourers have technical skills which are in short supply. Another example is the national vaccination campaign, which is almost complete, having begun in 1976. Mobilisation has been extremely good and WHO estimate that already 92-96% of the population has been vaccinated against smallpox, tuberculosis, DPT (Diphtheria, pertussis, tetanus) or measles, depending on age. The 1970 census figure of 8.3 million has already been exceeded and estimates expect final totals to be in the region of 11 million. The vaccination campaign also gives demographic information on the age distribution and density of the population. In the past four years, Mozambique has been able to restructure its educational system placing the main emphasis on basic skills. Its higher scientific manpower, small in number, has been actively involved in this restructuring in teaching, planning as well as research. Teaching has become more practical, planning has had to take into account national priorities and research has thus been research with a small 'r', requiring only restricted laboratory and library facilities and using students as well as teachers.

This year, one of the priorities of the university and government research institutes has been to plan for research in the medium term that is for the next planning period beginning 1980, not as until now, on a short term basis. Stricter planning is required and the lessons learnt from the last few years, are being analysed in detail so that improvements can be made ensuring that research tasks are put more, not less, into line with national priorities.

The Mozambican government continues to recruit scientists able to work in various fields. Those who feel that they may have relevant skills and could be useful in the Mozambican context, should write to:— The Mozambique Information Centre, 34, Percy St., London W1P 9FG, Telephone No. 01-636 7108 who coordinate recruitment in Britain and would be happy to receive enquiries. □

## 'By nature not nurture' they sang . . .

AT THE recent International Conference on the Unity of the Sciences in Boston in the United States of America, the life sciences committee, of which I was chairman, had a useful, calm and objective discussion on genetics and society, when the importance of inheritance and environment in man was considered. One of those present was Professor Arthur Jensen from the Institute of Human Learning of the University of California. At the end of the meeting he said that he had been very favourably impressed by the behaviour of the discussants and of the audience; all shades of opinion had been expressed without fear of interruption. He compared this experience to that obtained before audiences in universities in America and Europe, where certain left-wing groups have disrupted the meetings, saying that these topics should not be investigated or publicly debated.

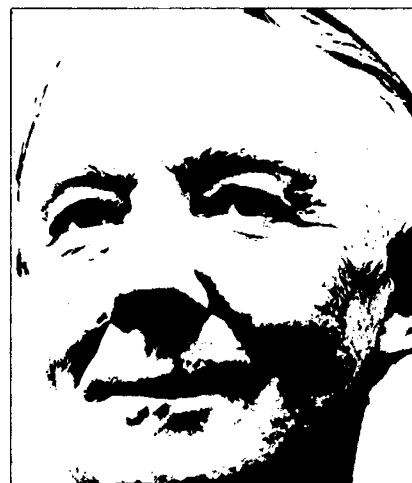
It is interesting to note the changes which have occurred in the attitudes of the politically motivated in this field. In the 1920s there were many Socialist Sunday Schools in Glasgow, Scotland, where young people were nourished in what was then considered to be pure Marxist doctrine. Techniques of instruction familiar to the audience, many of whom had previously attended Church Sunday schools, were used. They listened to "sermons" and sang secular "hymns". One favourite hymn included the lines:

"By nature not nurture we'll rise to the skies

The means of production we'll nationalise."

Although nationalisation may still remain within socialist political programmes, views on nature and nurture appear to have changed. Fifty years ago those running the Sunday schools took the view that those of their pupils with innate, inherited ability would triumph over the effects of their unfavourable environment. In fact they believed that the effects of heredity could be even more important than those of the environment, if the individual then received the appropriate type of education. Professor Jensen and others have, in recent years, been vilified for suggesting that this may still apply.

There has also been a change in attitude to the use of Intelligence Quotients (IQs). Left wing opinion



KENNETH MELLANBY

condemns these as instruments in promoting racism. However, at one time these were considered the fairest method by which bright children from poor educational backgrounds, who found conventional examinations difficult, might be admitted to grammar schools. The intention was not to show that the underprivileged were stupid, but to give them a better chance to develop their potentialities.

I found IQ tests to have some value when selecting students to admit to the first university courses we started at Ibadan in Nigeria in 1948. Our infant university could only admit a very small proportion of those who applied. Nigerian schools at that time were very variable, ranging from the government colleges which compared with grammar schools in Britain, to those run privately with few trained staff. We set what were then considered conventional written papers in arts and science subjects, and I also gave each candidate an IQ test. Most entrants were selected on the results of the written papers, and none whose marks were above an arbitrary minimum was excluded, but I also admitted a few who did badly in written work but who had high IQ scores.

I am glad to say that members of this latter group almost all did well in their later university courses. In fact I found that, for all students, their results in their degree examinations correlated better with their IQ figures than with their marks in the entrance examination. Incidentally the IQ scores of our successful Nigerian students were in the same range as those found with white undergraduates I tested in Britain, so these findings should not be offensive to those who, for political reasons, oppose this type of investigation. □