

5 per cent. The spectacular performance of the new dwarf cereal strains in Indian and Pakistan is probably the biggest single factor behind this achievement.

At any rate, the UN has ordained that a Second Development Decade should follow on the heels of the first, and a new offshoot of the UN—the United Nations Advisory Committee on Application of Science and Technology to Development (UNACAST)—is already planning the contribution it intends to make to this second ten year effort. UNACAST intends to create a World Plan of Action for the Application of Science and Technology to Development, and the outlines of this plan were discussed at a meeting of UNACAST in Vienna at the end of November.

So far the plan seems to be somewhat nebulous, limiting itself to a plea for research on issues like the social analysis of family planning programmes and the interrelation of technology and industrialization. The most definite statement that UNACAST came out with was that it was up to the developing countries themselves to persuade their talented young scientists to stay at home and avoid the enticements of happier research abroad. They are apparently to do this by setting up research centres of international quality in selected fields. UNACAST also recommended that the richer countries should include more scientists from the developing territories in their marine science programmes, and that the application of irradiation techniques in developing high-protein strains of plants should be pursued more vigorously.

All this is valuable work, but it is to be hoped that UNACAST does not follow the example of some other UN bodies by relapsing into a meek and premature dotage. Nobody expects a UN organization to endorse radical political solutions to the problems of the poor countries, but there are plenty of less incendiary issues around. Many people in the developing countries look at the proliferating space programmes of the advanced nations with some bitterness: what better platform than UNACAST, a group of scientists devoted to the cause of global development, to articulate this feeling and perhaps to devise politically realistic alternatives to the present ritualized contest of ideologies in space?

DISEASE

Measles in Biafra

UNLESS immediate preventive action is taken, an epidemic of measles will almost certainly break out among the already sick and undernourished people of Biafra. So far, reports which have been filtering through to the International Red Cross in Geneva have described isolated cases only, but because measles is endemic in West Africa, and because of the weak and susceptible condition of the population, this is hardly likely to remain the case for long.

A spokesman in Geneva said this week that the International Red Cross, with the full agreement of the Biafran Government, is launching an operation to provide up to one million doses of vaccine of the Schwartz type for the immunization of children in Biafra. The vaccine is a further attenuated one; that is, one which has been passaged through a larger number of eggs than is usual for attenuated vaccines. Although it produces minimal side-effects and is thus particularly suitable for use in developing countries, slight fever and a rash do sometimes accompany

vaccination. One hundred thousand doses provided by the Pitmore Division of Dow Chemical Company in Indiana have already arrived in Amsterdam and will be forwarded on December 21 to Santa Isabel and thence to Biafra. To start with, medical staff from the International Red Cross will undertake the vaccination, but an attempt is being made to muster eight teams of Biafran doctors to assist in the operation.

If the operation fails and an epidemic does break out, the result will probably be disastrous. Under normal circumstances the number of deaths caused by measles is far from negligible, but in undernourished West Africans the disease is particularly severe and takes an even greater toll of life. Children about one year old are the most susceptible (compared with a median age of 4.5 years in English children); the rash is usually very dark, desquamation is more extensive, and laryngitis, bronchopneumonia, diarrhoea, conjunctivitis and encephalitis frequently complicate the situation. Measles is responsible for a greater loss of weight in African children than any other common acute infection, and, as Dr D. C. Mosley has pointed out (*Modern Trends in Medical Virology*), it is also the most frequent infection to precipitate children into the protein-calorie syndrome of kwashiorkor.

FUEL

Bargain Gas

THE Gas Council has done well to agree on low prices for North Sea Gas with the Shell and Esso companies. The price finally agreed is both much less than the two companies wanted and much less than the price of gas from the Groningen Field in Holland. The agreement covers two gas fields—the Leman Bank and the Indefatigable fields—and the prices are shown in the table. Gas supplied in excess of the contract requirement will be paid for at the rate of 2.025 pence per therm. The contracts run for 25 years, and the sum of money involved is (at present value) very nearly £2,000 million. Sir Henry Jones suggests that the contracts may be “the largest single settlement ever made—it’s an awful lot of gas”.

The question now is whether there is an awful lot more at the bottom of the North Sea. If there is—and the Ministry of Power says that it would be contrary to all experience in other parts of the world if there were not—then the price agreed makes it a little more likely to stay there. The oil companies have been talking gloomily for some months about the decreasing rate of exploration, and Shell freely concedes that the price agreed “is not an incentive price”. Remarks made by Sir Henry last week in announcing the contracts are likely further to depress the market. He agreed that small additional finds would probably be priced at the Shell/Esso level, but added that a very

Table 1

Field	Quantity of gas	Price (d/therm)	
		First 15 y	Remainder
Leman Bank	First 600 mcfd	2.87	2.87
	Next 600 mcfd	2.85	2.80
	Remainder	2.83	2.75
Indefatigable	First 600 mcfd	2.9	2.9
	Next 600 mcfd	2.9	2.83
	Remainder	2.9	2.78