

advantage of Stansted over the other sites, excluding Maplin, is only marginal. But it recommends that if Stansted is chosen, local residents should be compensated either in the form of noise insulation or by grants to enable them to move house. It further adds that Stansted could be justified on environmental grounds only if it reduced the total environmental impact of London's airports, especially Heathrow, where about one and a half million people live within the contour of noise annoyance. Hitherto, the case for a third airport has been to absorb increases in demand for air travel rather than to take pressure off existing airports.

The airports authority's proposal for Stansted is for a one-runway airport capable of handling 15 million passengers a year — considerably smaller than a previous proposal thrown out in 1965–66 to build an airport for 100 million passengers a year. One of the additional attractions of the Stansted site is that the existing airport could be enlarged gradually to meet changes in demand.

Judy Redfearn

Polish water

Much and little

Last month's floods, which produced emergency conditions in 22 out of the 49 provinces of Poland and caused a massive loss of crops, especially hay, potatoes and sugar beet, have focused attention once again on the paradox of Poland's water supply. Ranking only twenty-second in Europe in *per capita* water index (1,700 m³ a year compared with the European average of 4,800 m³ a year), Poland is nevertheless subject to periodic inundations after which the water runs off uselessly into the Baltic. At best, Poland can store only 5 per cent of the water it receives from natural precipitation and incoming rivers. (Bulgaria, Czechoslovakia and the Soviet Union, by contrast, store 12–15 per cent.) Along Poland's largest river, the Vistula, there is no storage capacity whatsoever.

To remedy this, the Central Committee of the Polish United Workers' Party adopted on 16 June 1978 a resolution calling for a multi-disciplinary development and management programme for the Vistula. "Program-Wisla", as it is called, got off the ground very rapidly, at least on the theoretical and planning side. Polish geographers, hydrographers, economists, agriculturalists and ecologists produced imaginative plans which include hydroelectric stations, irrigation works, the improvement of navigation channels, the construction of retaining walls and some 34 or 35 dams along the navigable course of the river between Oswiecim (Auschwitz) and Gdansk. The whole scheme, which is intended to raise Poland's water storage capacity to 20 per cent, as well as benefiting agriculture, industry and

the human environment, is scheduled for completion by the end of the century.

So vast an enterprise, say the planners, is nevertheless beyond the capacity of Poland alone, and there will be major scope for international cooperation. But before the Vistula is confined by the engineers into what will be, in effect, a series of basins, the water must be of acceptable purity, since once the natural scour is eliminated, the ecologists agree that the river would not regenerate itself. The Vistula (like Poland's other major river, the Odra) has no water of class I or II purity anywhere in its course, while one-third of its total length is polluted beyond the limit of toleration. Purification and regeneration of the river is the first priority of Program-Wisla.

The problem, however, is far from simple. The headwaters of the Vistula are subject to natural "pollution" by mineral salts leached out of the soil of Silesia. The river flows through the Silesian industrial belt and the Cracow-Nowa Huta conurbation, with its vast steel mills, and past the open-cast sulphur mines at Tarnobrzeg. It picks up its largest tributary, the Bug, already heavily polluted by the Soviet pulp and paper industry, passes through Warsaw, whose sewerage arrangements are, to say the least, antiquated, through Plock with its mushrooming petrochemical plant and finally arrives in the Bay of Gdansk where pollution is so heavy that water-sports are prohibited.

There are nevertheless some bright spots in this picture. The Tarnobrzeg mines, in

particular, are managed on strict ecological principles, with recultivation of the land section by section as soon as the sulphur is stripped. Water control there, say the mine engineers, has to prevent seepage from the river to the mine rather than the reverse. The Bug, the one part of the Vistula basin not entirely under Polish control, has just been made the subject of a special Polish-Soviet cooperation agreement. And week after week, the Polish media stress the emphasis being given to anti-pollution measures, effluent treatment and the introduction of closed cycle technology under the aegis of Program-Wisla.

Such technology or the exchange of know-how could well be a fruitful field for international cooperation, both within and outside the Comecon bloc. But Polish experts have hitherto been cool at the prospect of Western cooperation, feeling that their prospective partners have been more interested in selling existing standard equipment than providing know-how specifically tailored to Polish circumstances. Since the Polish economy suffers from a chronic lack of hard currency, this is a major problem. The latest negotiations, between Poland and the United Kingdom, seem to be taking a different and — from the Polish point of view — a more promising course. It is understood that before any concrete proposals are put forward from the British side, a small investigative team will visit Poland in the autumn to make an on-the-spot assessment.

Vera Rich

