

pharmaceutical properties, extracted from a native plant species, may be lost when the material falls into the hands of a foreign concern which modifies it, patents it and then markets the new compound”.

Several ambitious attempts have been made to grapple with this problem, within the framework of a move towards decentralisation. In Tonanzincla a church in the style of Indian baroque, open fields and eucalyptus trees provide an idyllic setting for the ‘Instituto Nacional del Astrophysica, Optica y Electronica’. Known in the village as the ‘observatory’, this once prestigious centre of astrophysical research is now a base for investigation into optics and electronics. Basic research is undertaken by the fifteen or so staff and by the fifty-odd students who are studying for higher degrees.

Alongside the laboratories a pilot factory has been constructed for the manufacture of microscope lenses. Grants are awarded to enable young people from the village to work on the production line.

At the University of Puebla technical expertise in the construction of micro-circuitry is also being developed for research and teaching purposes, in addition to its contribution to the nation’s needs. As at Tonanzincla much of the equipment is manufactured at source.

In the State of Durango, the government has set aside a large tract of land representative of the eco-system of the region. This ‘biosphere’ is designed not only to preserve the genetic diversity of plant and animal species in the region but to provide a laboratory in which experimentation into more rational forms of land use can be made. This project is being conducted in collaboration with the local farmers of the area.

None of these achievements have been gained easily. The constitutional policy of a six year non-renewable presidency brings with it administrative re-shuffling and consequent re-formulation of plans. The scientist, like anyone else, has little guarantee of continuity in his work. Time must be invested in convincing each new administration of the validity of his ideas, either through the cultivation of friends in power or through the publication of his work in a form amenable to the layman. Good though this may be for the purposes of public debate it consumes much of the energy of the successful man.

The scientist must also face the problems of the nation as a whole. He must be able to cope not only with present-day realities but with the contingencies which emerge as the population increases in numbers, literacy, and as more than ever move towards the city. Can the ‘Universidad Nacional Autonoma de Mexico’, for example, with 150,000 students already, accommodate the increasing demand for higher education without sacrificing teaching standards? Many see it as the race against time.

The scientist, it is hoped, will be

All at sea

THE muscular American was ahead of me at the cashier’s desk in the hotel at Delhi on 3 June. He was arguing forcefully about charges on his bill for more than the actual number of local telephone calls that he said he had made. This auditing impressed me as being unusually precise, but perhaps, I thought, he is a professional accountant. The hotel won a computerized victory, because the local calls were metered to each room.

A few minutes later, I stood beside him in the front entrance to leave for the airport, and I noticed that his luggage was tagged “Agency for International Development”. Spontaneously, I spoke to him; I said that I was interested in the public health work of AID, especially in malaria. He said that his was a different field, that of disaster relief. He invited me to ride to the airport, in his officially-provided car, where we would take the same flight, I to Bangalore, but he to an earlier stop, Hyderabad. He had to organize relief for victims of the 11 May cyclone that had devastated a large area in Andhra Pradesh.

I asked him what he had done lately, and he said he had recently been to Yugoslavia to help the survivors of an earthquake. He then launched a discussion of rehabilitation, how, for example, it was better that an Indian farmer receive a live replacement for a dead bullock rather than a gift of food. A variant, I thought, of the old adage about helping a starving man to catch fish.

George Beauchamp was my companion’s name, and obviously he was used to taking charge. He deftly piloted me through the churning crowds that pack Indian airports and through the check-points to the departure area. We boarded the air-bus and went to our separate seat assignments after bidding each other goodbye.

As I sat in the plane, I suddenly realized what George Beauchamp must really be like. The surface that he had shown to me was that of a brisk, efficient and business-like public employee, arguing about his bill, and carefully attending to other details of the day. Impulsively, I got out of my seat, and went to find him. “George”, I said, “I wish you all future success in your great work for humanity”.

He thanked me, and then poured out his indignation at the current treatment

instrumental in finding alternatives to mitigate the flood of people reaching the city, people who, each in their vague search for opportunities, constitute a major flight from reality when considered within the nation as a whole. The heroes of Mexican folklore are not Cortes and his men but



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of Vietnamese refugees, adrift on a hopeless sea, rejected at all attempts to land. He said that a few years ago he had assured people in Vietnam, in answer to their doubts, that the President of the United States would not let them down. “And now,” I replied, “the Americans have forgotten the poem by Emma Lazarus”. In answer, he passed me the book he was reading: It was the historical account of the ship that carried doomed and despairing refugees from Hitler from port to port, and finally back to extermination in the gas-chambers of Germany. George pointed to a verse on the front page; there were the wellknown lines I had just quoted to him:

*“Give me your tired, your poor,
Your huddled masses, yearning to
breathe free,
The wretched refuse of your teeming
shore
Send these, the homeless,
tempest-tossed to me.”*

But who will light, once again, the lamp beside the golden door for the despairing waifs from Vietnam? It has been predicted that one of each two will die by drowning. There is a ray of practical idealism in the darkness: a Hong Kong official has pointed out that it may be possible to turn the Vietnamese refugees “into productive labour to support our economic growth. But we must obtain a commitment from other nations to absorb the human wave...”.

Will America respond? Numerous among those who make decisions for her to-day are the upwardly-mobile descendants of the “huddled masses” whom Emma Lazarus apostrophized. Have they forgotten the obligations of their heritage? □

Quauhtemoc, Father Hidalgo and Emiliano Zapata, men who dared confront the established order against impossible odds. The resourcefulness of the Mexican scientist in achieving what he has in the last ten years shows that such a spirit is still alive. Will it suffice for the coming era? □