Concern for the environment is increasing in Brazil, a country which until recently dismissed ecological preoccupations as detrimental to industrial development. But even though public consciousness about the environment in this vast nation of 110 million people has been raised, little has been achieved in practical terms, and the environmental battle is far from won

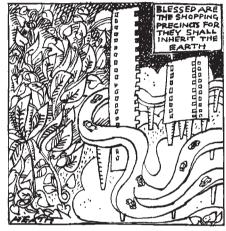
On the plus side, however, a new Presidential-level, environmental protection office-known as SEMA-has been authorised to veto state financing of industrial undertakings lacking adequate pollution safeguards. The head of SEMA, Paulo Nogueira Neto, regards this as a major victory for the environmental protection movement. And he does not believe it will be very hard to persuade Brazilian industry to fight pollution before producing it. "The inclusion of antipollution equipment in an industrial project usually adds only 2% to the project's total cost", Nogueira Neto declared recently. "On the other hand, if a factory is ordered to install antipollution equipment after it already has gone into operation, the cost of such equipment will be much higher." (There's a major catch to this, however: SEMA does not vet have adequate authority to shut down existing transgressors, and cannot force them to install antipollution gear.)

Also on the plus side, the Federal Government's much criticised and undermanned Forest Service scored some recent successes in catching clandestine hunters, and in preventing the export of hides of illegally slaughtered protected species such as deer, monkeys and alligators. The Forest Service plans to burn 100,000 recently apprehended pelts and skins, hoping to deter future unlicensed hunting. Most illegal hunting takes place in Mato Grosso State and the Amazon Jungle, which, because of their immense size and lack of roads and communications, are practically impossible to patrol.

The Forest Service has also won a victory of sorts by successfully fining the Brazilian subsidiary of Volkswagenwerk AG the equivalent of \$25,000. Volkswagen has gone into the cattle ranching business in the Amazon Jungle, taking advantage of liberal Brazilian tax incentives. The fine follows a technical violation concerning the clearing of trees on Volkswagen's property. The Forest Scrvice at first wanted to fine Volkswagen the equivalent of more than \$5 million for the alleged un-

authorised felling of some 9 million trees, but the plan was reportedly shot down at higher levels within the government, which wants to maintain a favourable climate for foreign investment.

On the minus side of the environmental picture, nearly 2,000 residents of a slum district in the north-eastern city of Salvador were hospitalised after breathing potentially deadly chlorine gas from a chemical plant. The plant is an indirect subsidiary of Petrobras, the state oil company, and will probably escape with only a fine.



Salvador is, in fact, apparently a major target of industrial polluters. The neighbouring Atlantic Ocean and several rivers in and near the city are becoming poisonous repositories of mercury, cadmium, sulphuric acid and ferrous sulphate. Jun Ui, a Japanese expert, has studied the situation in Salvador and concluded that the population is on the verge of mass poisoning, similar to the mercury poisoning that caused a scandal in Minamata, Japan, during the 1950s. Professor Ui has found traces of mercury in the hair of Salvador residents, and has said that cadmium in the region could cause bone disease.

People in several Brazilian cities have begun to band together to agitate for the preservation of urban green space; so far, however, none of these groups have been very effective. In Sao Leopoldo, a suburb of Porto Alegre, schoolchildren recently held a public demonstration against the felling of stately palm trees within the school grounds. The Forest Service fined the school administration and ordered it to stop, but not before 25 coconut palms had fallen to the chain saw. In Belo Horizonte, a growing city of 1.5 million people that is rapidly turning into a "concrete jungle", citizens meanwhile took to the streets to protest against the felling of a grove of trees on Church land.

But the Church obtained permission to continue the clearance, and now plans to build a shopping centre and office building on the newly stripped site.

- An antismoking lobby has emerged in Brazil. The Rio Grande do Sul State Medical Association has managed to scrape up the equivalent of \$40,000 for a three-month advertising campaign warning of the health hazards of smoking. It aims to persuade the Brazilian news media to carry antismoking propaganda to offset cigarette advertising. There is also pressure for government health warnings on cigarette packages and tobacco advertisements. The antismokers face powerful adversaries. Brazil's cigarette industry, dominated by a subsidiary of the giant British-American Tobacco Company, is one of the biggest advertisers in the Brazilian news media, and pays more than \$1,500 million in Brazilian taxes each year.
- Brazilian petroleum engineers have always believed that there is oil in Brazil's Amazon region, a belief not generally shared by the world's oil industries. Now, however, Petrobras has found oil off the coast of the far northern territory of Amapa, and along the continental shelf off Rio de Janeiro State. It is still too early to tell how much oil may be in the area of the test-well but the fact that Brazil has finally discovered Amazonian oil is important in itself. Brazil. whose principal domestic source of oil is the north-eastern state of Bahia, still imports 80% of its annual oil requirements, which causes serious balance-of-payments problems. Five international oil corporations plan limited prospecting operations in Brazil.
- A Brazilian obstetrician is encouraging his patients in the prosperous middle-class city of Curitiba, in the southern part of the country, to have their babies in the same way as the native Indians: squatting instead of lying down. Dr Moises Paciornik has studied primitive Indian tribes in Brazil and has concluded that squatting births lead to less pain and fewer postnatal complications. Once contractions have started, delivery is safer and quicker, if gravity is allowed to help, Dr Paciornik says. He has adapted one of the delivery rooms in his Curitiba clinic for squatting births, complete with an Indianstyle mat on the floor, and he says his urban patients show surprisingly little reluctance about giving birth the Indian way.

**Bruce Handler**