from abroad

MEXICO

Brain drain begins to hurt expanding economy

The flight of scientists to the United States, bothersome to industrial nations, is more serious to underdeveloped countries.

But it is most serious, and can be disastrous, to countries such as Mexico that are in the process of rapid economic expansion and need every brain.

The brain drain to the U.S. has come increasingly from the developing nations in the past decade (SN: 1/27, p. 87). And in Mexico, says Jose Gorostiza, president of the National Nuclear Energy Commission, this "intellectual bracero movement is creating problems in scientific research."

What makes the drain all the more hard to take is that the Government spends its scarce resources to train specialists, only to see them drift away.

"In our own field of nuclear research," Gorostiza says, "the government, through our commission, trains an average of 150 technicians a year with monthly scholarships of 3,000, 5,000 and 7,000 pesos (\$240, \$400 and \$560 dollars respectively). To date we have invested over 5 million pesos (\$400,000) in scholarships, but we have still a grave scarcity of qualified personnel for diverse research projects."

Incredibly low salaries contribute to the problem. Technicians at the Nuclear Energy Commission earn between 1,500 to 1,915 pesos (\$120 to \$153.20) monthly.

Scientists, technicians and medical men in general, sent abroad to perfect themselves in latest methods, quickly desert low-salaried Federal posts for more lucrative employment in private industry, particularly with American and other foreign firms operating subsidiaries in Mexico.

This internal drain, Gorostiza says, is understandable since private firms, and especially foreign companies, can pay much higher salaries.

"There are both poor and rich institutions even within the framework of the Government," Gorostiza said. "And naturally workers gravitate to those that pay the highest salaries."

The only way to avoid desertions in federal projects is to strike an average level of payments for all official institutions, Gorostiza says.

Because of the low pay in Mexico, trained professionals who need an average of 10,000 (\$800) or more pesos a month to live well moonlight in two or three jobs, and the work level in all suffers because of exhausting hours.

Apart from this internal situation, there is the emigration of professionally skilled personnel, which first began showing a notable increase in 1950. There are no valid figures available, but the swelling tide of migration of educated citizens is estimated as having cost between 100 million to 250 million pesos (\$8 million to \$20 million).

"This bleeding of our intellectual and skilled resources is a serious blow to each affected country," says Jose Cobos, president of the Mexican Pharmaceutical Association. "We in the pharmaceutical industry hope to blaze a trail by providing better salaries and research conditions to make exercise of the scientific professions in Mexico attractive."

The medical profession also shows a persistent north-of-the-border flow of doctors and medical researchers. In the last five years this exodus has averaged around 200 annually.

While efforts are now being made to stem the tide and keep talent at home, the basic factor is still economic.

A research report undertaken in 1965 by the Department of Industry and Commerce revealed the unrealistic fact

BRITAIN

In search of Camelot

Large-scale excavations at South Cadbury Castle, Somerset, England, the traditional Camelot of the Arthurian legends, are planned for July and August by the Camelot Research Committee. It will be the second season of a three-year excavation.

Sir Mortimer Wheeler, the committee's president, says the first full season of digging satisfactorily showed that somewhere about the time when Arthur may be supposed to have lived (about A.D. 500), the site's prehistoric defenses were reconditioned for military use.

The present excavations are aimed at equally important works of other times. Multiple ramparts of the Iron Age camp preceding the advent of the Romans have been found, and long after Arthur, at the beginning of the century which saw the Norman Conquest, the hilltop was again fortified with a sturdy, stonewalled rampart and was important enough to contain a Saxon mint.

The diggers hope to explore a possible Neolithic building, the main Iron Age ramparts and one of the gates.

F. C. Livingstone

that monthly earnings averaged by trained professionals equaled 5,300 pesos (\$424). Only approximately 12 percent of 103,685 professionals indicated earnings of 10,000 pesos (\$800) or more a month, with the figures going down to 1,000 (\$80) and some (mostly rural school teachers) indicating salaries as low as 300 pesos (\$24) a month.

Educational authorities are also concerned about the rising costs of education, per student, with these averaging between 1,750 (\$140) for the Law School at the National University of Mexico (which draws many students who aspire to political careers) to 5,222 pesos (\$417.76) per student in the School of Plastic Arts. Per student cost at the Dental School is \$408, and \$240 at the School of Medicine. Student training at the National Polytechnical Institute costs authorities 3,000 to 4,000 pesos (\$240 to \$320). And in the provinces these costs zoom astronomically. At the Institute of Higher Learning of Tlaxcala, the per student cost is 78,-594 pesos (\$6,317.52).

Emil Zubryn

NEW ZEALAND

Close eye on Ruapehu

Greater accuracy in predictions and danger warnings of the volcanic activity of Mt. Ruapehu in New Zealand will follow its April eruptions. For the first time, observers from Victoria University and the Department of Scientific and Industrial Research were able to record the eruptions.

Until the 1950's, active interest in the volcano was apparently nonexistent and there are no records of any of the previous eruptions—even the last in 1945. So until now the volcano's potential has been unknown.

R. R. Dibble, of Victoria University, says the recent activity could be a sign of bigger eruptions to come. "But I don't think Ruapehu's going to give an almighty bang and devastate a large area," he says. "It's not that sort of volcano. All the same it is dangerous."

The mountain proved this in 1953 when water in the crater lake—heated from below—melted an ice dam and released a huge volume of water which swept down the Whangehu stream on Christmas Eve and washed out the Tangiwai rail bridge.

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