

March 31, 1975 are shown in Table 1.

### Special Drawing Account

In the first quarter of 1975, one participant in the Special Drawing Account used a total of SDR 3.0 million to obtain currencies from one other participant designated by the Fund.

During the quarter the Fund's General Account received a total of SDR 6.5 million from five participants that used SDRs in repurchases in the General Account and SDR 46.3 million from 50 participants that paid charges relating to their use of the Fund's resources. The Fund transferred a total of SDR 19.5 million to 14 participants in transactions to

promote the reconstitution of their SDR holdings and SDR 0.1 million to one other participant in payment of interest for the borrowings made to finance transactions under the oil facility.

Holdings of SDRs in the General Account at March 31, 1975 were SDR 490.3 million

Ian S. McDonald



## Equating health with wealth

Poverty continues to be a major cause of ill health around the world according to a study by the World Bank on health issues.

The 83-page *Health: Sector Policy Paper*, released recently notes that health conditions in developing countries have improved considerably in recent decades. Nevertheless, it states that "international differences in health levels remain substantial: within nations, differences in the health of the rich and the poor are no less wide."

The study adds that from available evidence it appears that health conditions among the poor in different countries are basically similar.

"The poor suffer from a core of fecally-related and air-borne diseases. Malnutrition increases the susceptibility to many of these diseases and compounds their severity," according to the study.

The Bank policy paper notes that health policies are inefficient and inequitable in many developing countries, and concludes that governments need to curtail their expenditures on hospitals and highly trained personnel, and devote more resources to the staffing of low-level health services in areas with little or no facilities.

The paper advises that "reforms in the service offered to the poorer people should concentrate on improving health at the community level. The objectives should include changes in living habits and attitudes, as well as household and community activities to improve water supply and sanitation."

The World Bank has, in the past, initiated project lending in a number of areas that directly affect health, such as water and sewerage, population planning, education, rural development, irrigation and drainage, and urbanization.

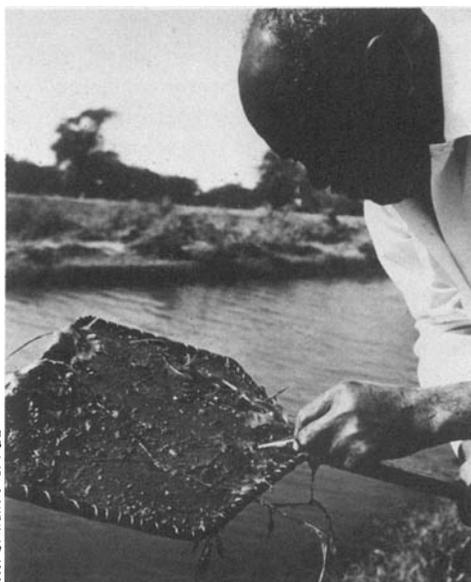
For the future, the Bank has decided that it will continue "to strengthen its awareness of the health consequences of the projects it supports, and of opportunities for improving health that are available under present patterns of lending."

In other words, while the health benefits of projects are expected to increase, the patterns of lending will remain basically unchanged.

### Battling Bilharzia in the Sudan

*"The effects of bilharzia are not unknown. The kinds of sanitary regulation needed to lessen the risks of infection are at least as important, in terms of human welfare, as the stresses of concrete in the dam or the safe transmission of high voltages of electricity. It is just as inconvenient to be killed by a sanitary failure as to be drowned by an engineering one. The only clear advantage is that the drowning may be quicker."*

*Only One Earth*, by Barbara Ward and René Dubos, page 161.



Expert sifts through snails scooped from canal in Gezira region of the Sudan for species that spread schistosomiasis.

Dr. El Sunni Amin, senior public health inspector in charge of bilharzia control, was in his office at Wad Medani, the Sudan, looking through the microscope at the schistosomes. "It's probably the most prevalent occupational disease in the world," he said.

Among the schistosomes he was examining were the species *Schistosoma haematobium*, and *Schistosoma mansoni*. Both infect a quarter of a billion people around the world with a chronic disease called bilharzia, or schistosomiasis. Though most people do not die of the

### Bank Group projects with schistosomiasis control components

Country	Nature of project	Date
Brazil	Hydroelectricity	1974
Cameroon	Irrigation	1972
Egypt	Water drainage	1973
Indonesia	Irrigation	1970
Malawi	Rural development	1972
Mali	Irrigation	1971
Morocco	Irrigation	1974
Philippines	Rural development	1975
Sudan	Irrigation	1973
Syria	Irrigation	1974

disease, the productive lives of a great majority are greatly reduced.

Schistosome cercariae (larvae at tadpole stage) are picked up by humans who wash or bathe in infected waters. The cercariae penetrate the skin, mature into adult worms, and lay eggs in small veins associated with the bladder or intestine. Most of the eggs then exit from the body in either the urine or feces. Some worms lodge in the liver and other organs, causing tissue damage; still others remain on the bladder and intestine walls and give rise to calcification and cancer.

When the eggs are excreted into the water, they change into larvae, and are harbored by host snails, where the life cycle of the schistosome is repeated. Without the snail—*Bulinus truncatus* and *Biomphalaria glabrata* are the two most common varieties in Africa—there would be no schistosomiasis.

Wad Medani is located in the middle of the Gezira, a large, flat plain lying between the Blue and White Nile rivers south of the coun-

### World Bank loans approved during third quarter of fiscal 1975

(ended March 31, 1975)

Country	Purpose	Amount (\$ millions)
Brazil (2)	Highways, railways	285.0
Colombia (3)	DFC, water supply, telecommunications	47.5
Egypt (2)	Industry, railways	77.0
Honduras	Power	35.0
Indonesia	Industry	115.0
India	Industry	109.0
Ivory Coast (3)	Cotton, sewerage, education supplement	42.2
Kenya*	Agriculture	7.5
Korea	Urbanization, DFCs, education	197.5
Romania (2)	Agricultural credit, irrigation	100.0
Sierra Leone	Highways supplement	2.3
Tunisia	Sewerage	28.0
Turkey	DFC	65.0
Zaire	Industry	100.0
Total loans during third quarter of fiscal 1975		1,211.0
Total loans during first three quarters of fiscal 1975		2,420.85

\*With a \$7.5 million IDA credit

### IDA credits during third quarter of fiscal 1975

(ended March 31, 1975)

Country	Purpose	Amount (\$ millions)
Bangladesh (3)	Industry, population, imports	73.0
Ghana	Oil palm	13.6
India (3)	Industrial imports (2), agriculture	245.0
Jordan	Education	6.0
Kenya*	Agriculture	7.5
Malawi	Rural development	8.5
Mali (2)	Livestock, rice irrigation supplement	15.9
Senegal	Education	15.0
Western Samoa	Highways	4.4
Yemen, P. D. R.	Fisheries supplement	1.6
Zaire	Highways	26.0
Total credits during the third quarter of fiscal 1975		416.5
Total credits during first three quarters of fiscal 1975		971.55

\*With a \$7.5 million Bank loan

try's capital of Khartoum. On this plain is the world's largest farm, the Gezira Scheme: more than 2 million acres, tended by about 100,000 tenant farmers and their families. Six thousand acres of cotton are cultivated each year, on the Gezira, and the cotton is picked by a half

million migrant workers who come from all parts of Africa to earn a cash income.

Cotton, the source of wealth of the Gezira Scheme, can be raised because of the Scheme's extensive irrigation network. Children swim in the canals; women wash the family clothes in

the canals; men work in fields by the canals, and bathe and cool off in its waters. The same snail-infested waters account for the fact that the men, women, and children of the Gezira Scheme—in some villages as many as 80 per cent of them—are infected with bilharzia.

Most of the Gezira villages are within 300 meters of the irrigation canals. Dr. M.H. Satti, who works at the National Health Laboratory in Khartoum, says that villages should be located at least a kilometer from the water.

"It might not be much of an advantage for the men who have to work in the fields," he says, "but it would help the small children who stay at home."

Little was known about schistosomiasis when the Gezira Scheme was first begun in 1911.

Later irrigation projects in the Sudan—in Managil (adjacent to Gezira and for which a \$19.5 million Bank loan was approved in 1961), and in nearby Rahad (for which IDA extended a \$42 million credit in 1973)—have included protective health services in the blueprints from the beginning. Villages are furnished with safe, assured supplies of water for drinking, bathing, and laundering while the villages themselves have been located away from canals. Schools have been built so children may not spend their idle time at snail-infested canal banks, where schistosomiasis lurks. Workers in the fields, however, must be protected in other ways.

Until five years ago, the only method of controlling the snail population in the developing world was to apply copper sulphate to the water. The chemical had a kill radius of only 100 meters. Moreover, it had a relatively low poisonous effect on snails, and was not "host specific"—meaning that it proved toxic for other, possibly useful organisms in the water, as well as the snails, which carried schistosomiasis.

Today, petroleum-based chemicals are proving their worth—but at a great cost. Before the dramatic increases in prices for petroleum products, the Sudan had begun a snail eradication campaign in the Gezira using a molluscicide developed by the Shell Oil Company. The cost for controlling snails in the Gezira is \$1.50 an acre yearly (for a minimum of from three to five years) or about \$9 million to \$15 million.

In spite of the new molluscicides, however, public health officials in the Sudan realize that schistosomiasis will never be eradicated in the country. "If we reduce the incidence of the disease to 15 per cent of the population living in irrigated areas, we will have done a good job," said one official.

Until that can be done, the Sudan and other countries throughout the developing world will experience productivity losses from workers infected with the schistosome worms.

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