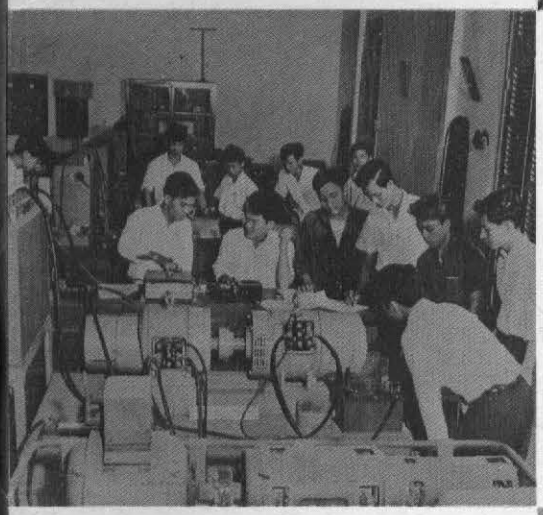
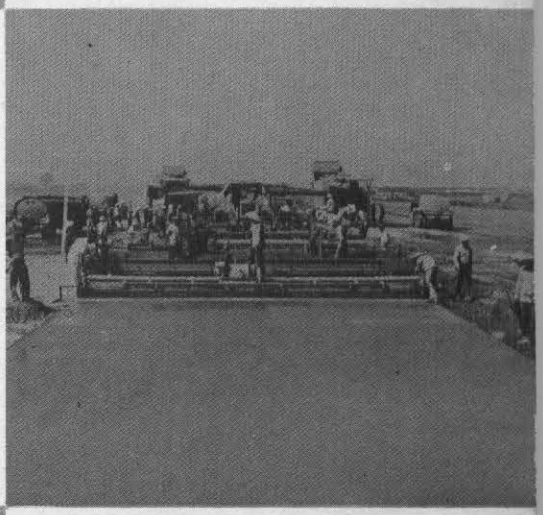
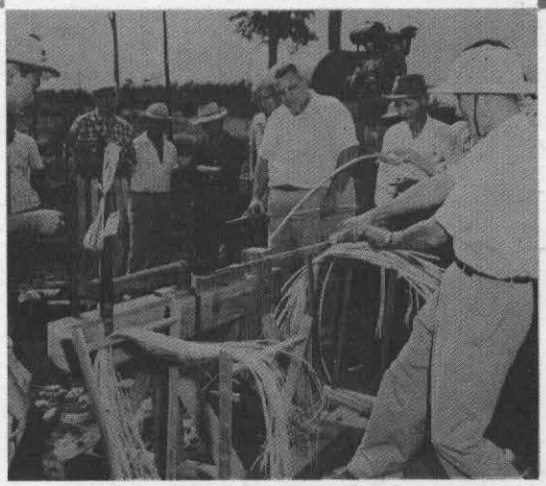


VIETNAM MEETS ITS CHALLENGE





USOM
Annual Report
FOR FISCAL YEAR 1961

UNITED STATES OPERATIONS MISSION TO VIETNAM

ANNUAL REPORT FOR FISCAL YEAR 1961

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FOREWORD

This booklet is the seventh in a series of annual reports published by the United States Operations Mission to Vietnam.

Introductions to prior annual reports have been optimistic in tone. They have uniformly reported substantial progress and expressed good hope for the future.

While the following pages reflect much accomplishment, it is a matter of regret to record that the past year has been marked by an upsurge of Communist inspired and directed subversion which has thwarted the progress for which Vietnam and her people are striving. Roving bands of bandits, many of whom have infiltrated into the country, all of them supplied with weapons by Free Vietnam's enemies abroad, have by acts of sabotage and terrorism made social and economic advance impossible in some areas and difficult in many others. Health activities sponsored by the Government and assisted by USOM cannot reach all the villagers intended. The program of malaria eradication is gravely threatened by terrorists who murder members of spray teams and burn and pillage their equipment as they go about their appointed rounds through countryside and village. Developments in public works and in large industry are also impeded and require protection by law enforcement groups far beyond what is normal.

With peace, Vietnam's future is bright, and the work her people have done for themselves, some of which this chronicle will reveal, can lead to a better life for millions. No one can prophesy when the threats and pressures of the Communists will cease, and until they do cease Vietnam's social and economic developments will be imperiled.

It is hoped that the accounts of USOM activities herein described will reflect the fact that it is to the Vietnamese that most credit is due for the successes of these programs. While USOM advisors and technicians are proud to have been associated with the Vietnamese allies, and have lent a helping hand often, their role has been that of assistants to Vietnamese principals.

USOM is confident that continuation of these joint efforts will result in resounding success and will confound Vietnam's enemies.

ARTHUR Z. GARDINER
Director
United States Operations Mission to Vietnam

Saigon, November 20, 1961

PROJECTS ACTIVE DURING FISCAL YEAR 1961

AGRICULTURE AND NATURAL RESOURCES :

- Development of Farm and Home Improvement Services
- Development of Agricultural Education and Improvement Services
- Development of Agricultural and Fisheries Resources
- Development of Agricultural Credit and Cooperative Organizations

INDUSTRY AND MINING :

- Nong-Son Coal Mine Development
- Telecommunications Development
- Development of Electric Power
- Expansion of Rural-Urban Water Supply
- Sugar Technician Training
- Industrial Development

TRANSPORTATION :

- Highway and Bridge Construction
- Repair and Rehabilitation of National Route 14
- Railway Administration Improvement
- Rehabilitation of Inland Waterways
- Dredging the Canals of Vietnam
- Development and Expansion of Aeronautical Ground Facilities

LABOR :

- Labor Leader Training

HEALTH AND SANITATION :

- Malaria Eradication
- Health Services Development
- Expansion of Medical Educational Facilities
- Improvement of Nursing and Allied Education

EDUCATION :

- Expansion and Improvement of Technical Vocational Education
- Expansion and Improvement of Elementary Education
- Expansion and Improvement of Secondary Education
- Expansion and Improvement of Teacher Training and Higher Education
- Scholarships for Leadership Training
- Instructional Materials Development

PUBLIC SAFETY AND PUBLIC ADMINISTRATION :

- Strengthening Public Safety Services
- Modernization of Accounting and Auditing Systems
- Improvement of Banking, Insurance and Taxation
- Development of the National Institute of Administration
- National Institute of Administration Building Construction
- Development of Provincial Training for Government Service
- Development of the National Institute of Statistics
- Improvement of the Public Service

GENERAL :

- Expansion of Government Information Facilities
- Development of National Radio Network
- Peaceful Uses of Atomic Energy

REGIONAL :

- Far East Agricultural Credit Workshop
- Marine Research in the South China Sea
- Improvement of English Language Training

Stripping and retting kenaf fiber in a Land Development resettlement village of Pleiku province.

AGRICULTURE

Because Vietnam is predominantly an agrarian nation, Vietnamese Government activities, and United States aid programs during the past ten years, have placed major emphasis on agricultural development. Especially since the Republic of Vietnam was established in 1955, a great deal of attention has been centered upon the restoration of agricultural production which was curtailed so severely during the war years. The task of resettling and assimilating almost a million refugees placed an added gigantic burden upon the young Republic's efforts to feed, clothe and shelter its people. Nevertheless, achievements in agricultural production during the past few years have clearly demonstrated the will and capacity of the Vietnamese farmers to meet the challenge.

Still, despite appreciable increases in agricultural output, Vietnam's potential has barely been tapped. With improved cultural practices, use of better seed and more fertilizer, greater attention to insect and disease control, and improved irrigation and water utilization, the production of rice and other crops can be doubled on the land presently under cultivation. If one also considers the many thousands of hectares (one hectare equals about 2.5 acres) of good available land not yet being farmed, Vietnam's vast agricultural potential can be readily appreciated. In order to tap this potential, continued technical and financial support are required so that procedures and organizational structures can be improved to efficiently utilize the teaching, training and demonstrations

essential to provide the necessary information and services to the farmers. It is toward these objectives that the Vietnamese agricultural agencies, aided by the technical staff of the USOM Agricultural Division and other friends from abroad, are directing their primary attention.

PLANTS AND ANIMALS

Extensive crop and livestock programs are helping to diversify Vietnam's traditional rice and rubber economy by developing new crops and improved crop varieties and by introducing more efficient farm practices. Crops in Vietnam can be divided roughly into those raised in the coastal and delta area and those raised in the upland area. In the paddy-rice area, research is attempting to discover crops which can be grown in rotation with rice to make better use of the land and to increase farm income. Land use in the upland area can be greatly expanded through increased cultivation of upland rice and utilization as livestock pasture and forage.

Rice

Vietnam's major agricultural commodity is rice. It is raised on 86 percent of the cultivated land it provides the income of about 70 percent of the country's populace, and it comprises more than half of the nation's total food consumption.

Although rice yields have increased during recent years, the average output is only two tons per hectare — about half that of Japan. A national average of three tons per hectare, the goal of the Vietnamese Rice Service, will be brought about through the use of high-quality seed, proper fertilization, effective pest and disease control, and optimum utilization of water available for irrigation.

Improved seed is being multiplied by contract farmers and sold to others in limited quantities. As distribution facilities for this seed are developed, increased emphasis is given to educating farmers in the value of good seed and thus creating a demand for it. This is accomplished through farmer demonstrations, rural youth projects and personal contacts. A new film entitled *How to Double Your Rice Yields* was recently completed and is now being shown to rice-producing communities.

Rice still is threshed by flailing it over a slat-topped box

A new research station acquired last year is now being developed. An irrigation system with a pumping station has been designed and construction is scheduled to begin soon. It will control the irrigation of all research plots, will provide information on water requirements for year-round cropping in the Mekong delta area, and will serve as a demonstration of a small irrigation project in an area where fresh water in now going to waste. On most of the delta land, only one or two crops are grown during the rainy season and the fields lie idle during the remaining six months of the year. Irrigation projects undoubtedly would result in substantial increases in crop production in this area.

Local ramie variety trial at the Ban-Me-Thuot Nursery.

Fibers

The long, vegetable fiber crops program in Vietnam was started as a joint Vietnamese American project in 1957. At that time only an estimated 150 hectares of fiber crops, jute and ramie, were grown in the country. These were used principally in a cottage industry for producing handmade twine, fish netting, and mattings. This was only a fraction of domestic requirements which, of necessity, were imported. The farmers did not have proper varieties of long fiber crops, nor did they possess suitable fiber processing equipment or adequate knowledge of fertilization requirements, planting techniques, and market possibilities.

Early activities included the introduction of kenaf and abaca, which were never grown previously in Vietnam, and improved varieties of jute and ramie. Extensive nursery trials were carried out at experimental stations to determine adaptability and fertility requirements. These were followed by selection, seed multiplication, and distribution to farmers. Other important contributions to the long fiber crops program have been the introduction of simple equipment for fertilizing, seeding, harvesting, and fiber processing; distribution of crop bulletins; training of local technical personnel; and U.S. and third-country participant training of selected technicians.

4-T agents receive training in abaca fiber preparation at the Hung-Loc Nursery.

In 1961, kenaf, jute, ramie, and abaca provided the major cash income for an estimated 41,000 farm families. Kenaf, a jute-type fiber, has found ready acceptance by farmers in most Land Development resettlement villages and in many coastal and southern provinces. It has developed into the most widely planted of all fiber crops. Production in 1961 on some 10,000 hectares already will supply practically all domestic requirements for sacking and twine and will provide approximately 3,000 metric tons of fiber for export.

Vice President Tho (right) and USOM Director Gardiner inspect an improved variety of ramie fiber.

Sugar

Over 60 varieties of sugar cane from all over the world are being tried at Binh-Trieu, Tuy-Hoa, and Quang-Ngai stations. Four highly trained sugar technicians from the Joint Commission for Rural Reconstruction (JCRR) of the Republic of China have kept records and put out demonstrations on individual farms. Fertilizer trials, rate and date of planting studies, and interplanting with legume crops have been started.

Ten Vietnamese technicians have just returned from one-year training courses in sugar cane culture in Taiwan. Five of them are presently working on the sugar experiment stations and five are working for the Hiep-Hoa sugar mill.

To counter an outbreak of leaf scorch disease which threatened the 5,500 hectares of sugar cane in Quang-Ngai and Quang-Nam provinces, a program of seed multiplication was started to supply a variety which is resistant to the disease. The entire affected area is expected to be replanted with this new variety by the end of 1962.

Cacao seedlings are grown at the Ea Tul Land Development Nursery for distribution to land resettlement villagers and to other farmers.

Cacao

Eight hundred thousand seeds of cacao were imported this year and distributed in 21 provinces. In a numbrer of areas, two-year-old plants have flowered and some have produced pods, indicating that the conditions in Vietnam are suitable for this crop. On one plantation where 10,000 cacao plants were planted last year, 17,000 more were planted this year and twice this number will be set out next year.

Plans are underway, in cooperation with local candy manufacturers, to start small-scale production of cacao products in the near future.

Oil Palm

Young oil palms from introduced hybrid seeds are growing very well. In Kien-Hoa province, some palms produced fruits after only two years in the field. Oil extracted from oil palm fruits grown in Nha-Trang was used in several food preparation trials which confirmed that the oil is acceptable to the Vietnamese taste. Imported margarine is gaining rapidly in popularity and two Vietnamese technicians will go to Indonesia to learn the techniques of margarine production from oil palms in preparation for the establishment of a local industry.

Tea

In Lam-Dong province, three plantations now are producing high grade black tea. Construction of two black tea factories has been completed and the machinery will be installed by November 1961.

Two farmers' associations for producing green tea for local use were organized in the Bao-Loc area. The small growers in this area presently are selling the unprocessed tea leaves to middlemen and are paid very low prices.

Lacquer

Lacquer planting this year was extended to Darlac province where resettled refugees from the North are familiar with this crop. In Bao-Loc, trees only one year in the field are being experimentally tapped.

Avocado

A few trees of the 1958 first planting of avocado already have produced fruits. Avocado should become an important addition to the diet of the Vietnamese people. When this program was started, there were only 50 or 60 producing avocado trees in the country. Now nearly 60,000 seeds have been planted, and about half of these are expected to become bearing trees Thirty-five thousand avocado seeds were brought in from the Philippines this year and were distributed throughout suitable areas of Vietnam.

Citrus Fruits

Development continues on seedling citrus planting of various species and varieties. These will be evaluated and the trees will furnish a source of seed for rootstock that ultimately may be used by the farmers. New citrus fruit varieties are being tried on the various rootstocks. As a result of the variety evaluation work now going on, the citrus expansion to be expected when Vietnam reaches a higher stage of development will be on a sound economic basis.

Vegetables

More significant and immediate progress has been made in vegetable production than with tree crops since they mature so much more quickly. Potato trials were so successful that the Vietnamese Government has adopted a system of acreage allotments to avoid possible overproduction. Some 500 farmers recently requested potato seed from the import quota, but, pending the firm establishment of commercial demand, supply was limited to 100 farmers who will plant a total of 100 hectares.

As a result of USOM introductions, several farmers were very successful in growing onions and expanded commercial production is planned for next year.

A Japanese variety of cabbage, which produces about three times as heavy a yield as the local variety, does not have good shipping quality but is being grown where possible for local use. American varieties of okra and eggplant have been grown on one of the stations and appreciable quantities of seed distributed to villagers as the beginning of a seed multiplication program for vegetables in Vietnam.

Although these crops have been the most successful, advances with other crops that are much more widely grown also are being sought. Such crops include « roasting ears », tomatoes, and sweet potatoes. Some experimental yields have been well above those of the villagers, but until new varieties and practices give more consistent results, they will not be promoted among the farmers.

A typical Land Development resettlement villager displays a portion of his kenaf and corn crops.

Not the least valuable result of the vegetable program has been the identification of certain nutrient deficiencies in the soils of the vegetable farms. Trials with forms of phosphate, borax, and magnesium show that relatively small, inexpensive quantities of these materials may profoundly affect both the quantity and quality of production.

Returns per hectare from fruits and vegetables range from 10 to 40 times as great as those from the principle crop, rice. This means that there are great rewards for those who have suitable conditions and, equally important, the know-how to take advantage of them. Those vegetables which show real promise of substantially increasing income are arousing avid interest among the Vietnamese farmers.

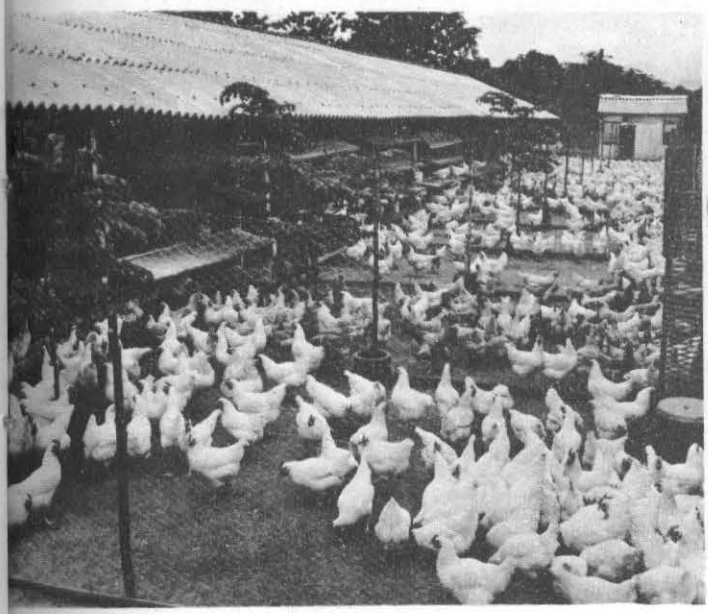
Livestock

In 1955, war had so decreased the buffalo herds that it was necessary to bring animals in from Thailand so that farmers could work their fields. To remedy this situation, the Vietnamese Directorate of Animal Husbandry began an intensive, five-year program to eradicate livestock diseases and import improved breeding stock. Today, diseases have been brought under control, livestock production has increased, the breeds have been improved, and experimental poultry and livestock stations have been established throughout the country. During the past year, Vietnam exported 70,000 hogs to Hong Kong, five times the number exported the year before. This increase — and the top prices these hogs brought — added about 1.5 million dollars to Vietnam's foreign exchange. Duck feathers and eggs continued as major export items, and, for the first time in history, Vietnam exported live buffaloes.

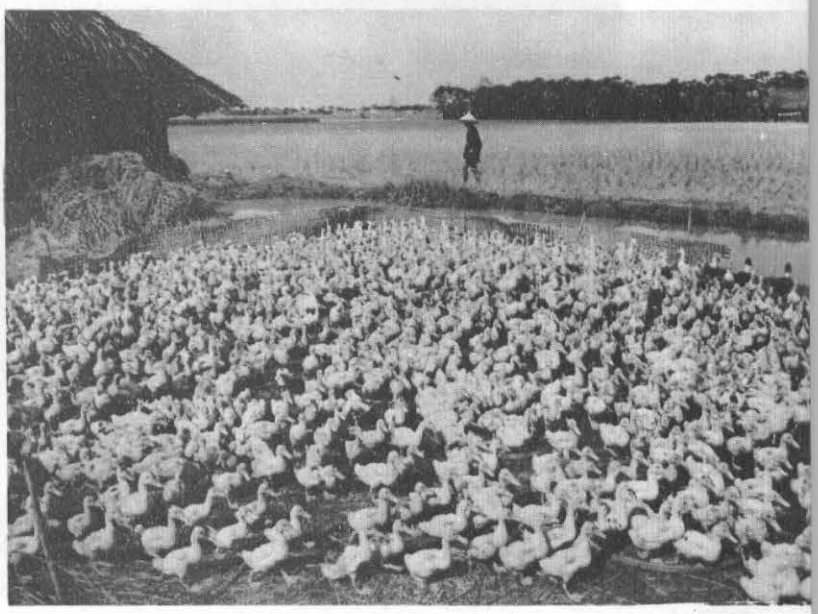
Work in beef production has naturally gone slower than work in increasing the pork supply. However, as the effort to improve breeding begins to take effect, cattle production will increase, and the quality of the meat will improve. In support of this effort, ten Santa Gertrudis bulls have been imported from Texas for use in upgrading native cattle.

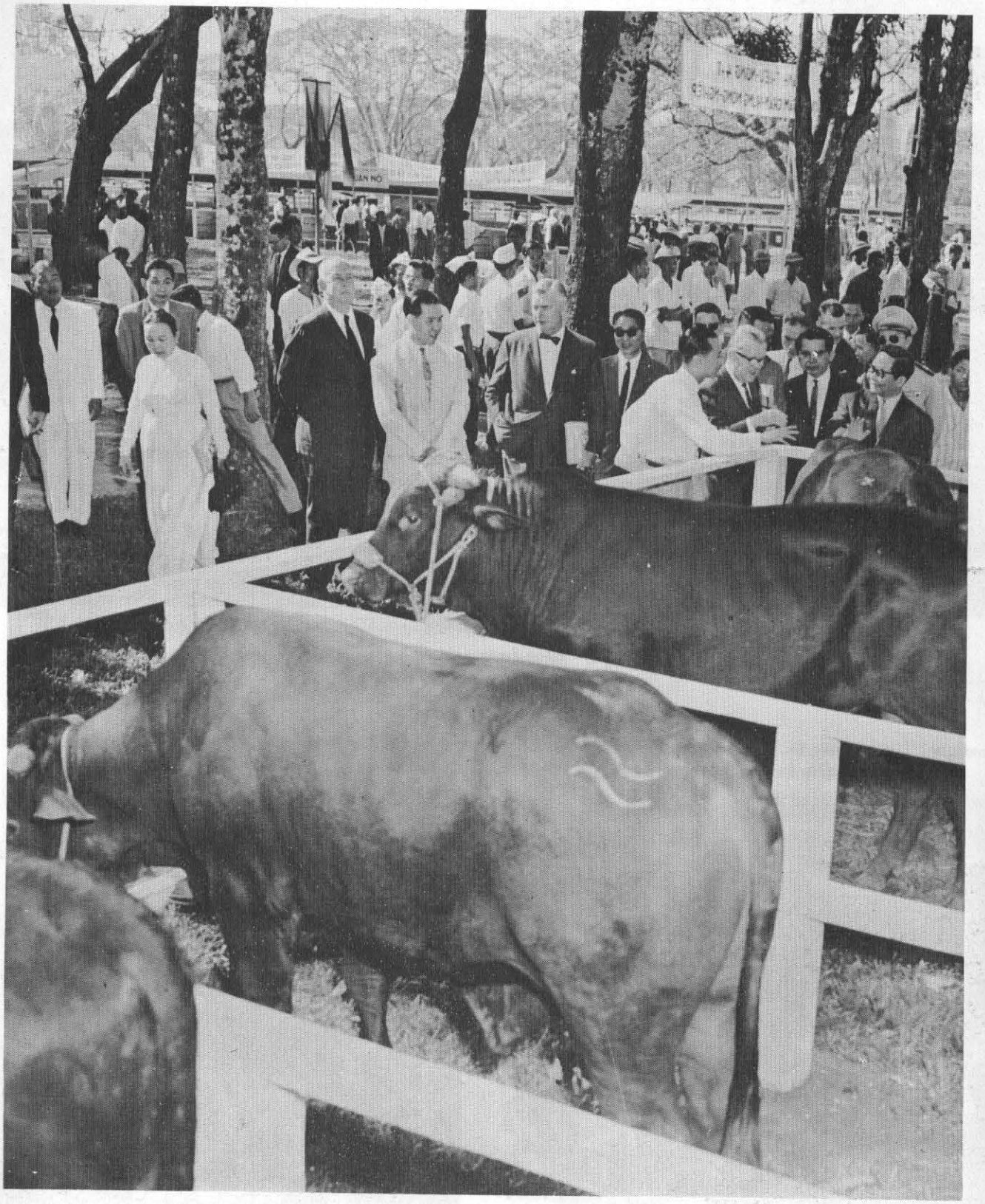
At the Hung Loc livestock experiment station, native cattle are crossed with other breeds to develop improved strains.

Common "U.S." varieties of chickens have proven adaptable to Vietnam.



Ducks, duck eggs and duck feathers are important Vietnamese Exports.





Santa Gertrudis bulls were a major attraction at the Tan Son Nhut Livestock Fair.

Crop Improvement Stations

A series of agricultural experiment stations have been established in the various climatic areas to provide information and planting material to local farmers.

The primary purpose of the experiment stations is the introduction of new crops and crop varieties and the testing of local varieties against each other and against foreign varieties. An outstanding example of the work done is the successful establishment of the Irish potato in the Dalat area. Although potatoes had been grown there, yields had been low. New varieties and improved cultural methods have made potatoes an important crop in the area.

After a new crop or an outstanding local variety has been found, the stations begin a program of plant multiplication and distribution to local farmers. At the Ea K'Mat station in Ban-Me-Thuot, over one million rubber plants are being budded with a superior variety of rubber for distribution to the resettlement villages in the highlands.

Improving methods of farming is also an important part of the crop improvement program. It is possible to get substantial increases in sugar cane production by increasing the distance between rows, so research is being conducted to find a crop that can be interplanted with the cane during early growth to provide an additional source of income.

Training is an important part of the stations' programs. Each year, students from the agricultural college spend a month at the stations for practical training and experimental work. Training courses also are held for agricultural agents and village leaders.

Plant Protection

Insect, disease, and rodent losses experienced by agricultural producers have been a major problem for centuries. Many examples of famine and upheaval can be directly traced to these causes. In Vietnam, cultural, biological, or chemical controls have not been employed except in small, isolated instances, and, as a result of lack of controls, it is estimated that Vietnam is losing between 30 and 35 percent of its total agricultural production. Plant protection as an agricultural science in Vietnam has been limited for the most part to an elementary and small laboratory

Farmers' association agents demonstrate insect control methods for a group of rice farmers.

effort. Only one trained entomologist and one trained plant pathologist have been in government service.

Establishment of an effective and efficient Plant Protection Service could be accomplished through the reorganization of existing technicians and facilities, the training of additional personnel, the provision of modern equipment, and the establishment of an education and demonstration program. This organization would also act as the main coordinating and planning group to combat severe and widespread pest outbreaks anywhere in Vietnam.

To date, considerable progress has been made in the form of increased governmental support and awareness of the problem, and the hiring and training of 24 new provincial plant protection agents and three new technicians. The scope and amount of field work has greatly increased, and a well-organized supporting field survey and applied-research activity is underway.

International Voluntary Services

Working for the past several years among local officials and agriculturists at various experiment stations throughout Vietnam, International Voluntary Services (IVS) team members are implementing agricultural improvements at the farmer level. These young U.S. agricultural college graduates with farm backgrounds are essentially « Peace Corps » prototypes. An understanding of local conditions and a moderate facility with the Vietnamese language establish common ground upon which the team member is able to build a good cooperative relationship with the Vietnamese farmer. On-station experiments, directed by USOM advisors and carried out under the supervision of IVS and Vietnamese station personnel, convey valuable information through demonstrations at local farms.

Short-day-length onions have been introduced to the vegetable-growing districts of Dalat, and cacao

An IVS team member and his Vietnamese counterpart are pleased with the success of onion growing in the Dalat area.

and avocado seedlings are being distributed to farmers in the highlands. In the Hue area, farmers are being helped to start small, commercial poultry enterprises using sound feeding and management practices. Considerable damage to some vegetable crops in Dalat was stopped when team members cooperated with local officials to demonstrate the use of new insecticides against slugs and cutworms.

By living in the community where they work, IVS members also have been able to express themselves in other ways. Team members near Phan-Rang devised a wheelchair in response to the need of a small village child who had lost the use of his legs. At this same village six children are now attending school because team members contributed the small tuition fee that the parents were not able to afford.

At each of the eight locations where the twenty IVS personnel are located, they have responded to the heavy demand for English instruction by organizing and teaching both beginning and advanced classes.

Agricultural Statistics

The purpose of this activity is to set up within the Vietnamese Government an office that can provide a modern system of agricultural reporting. Emphasis has been on the training of Vietnamese technicians both in the United States and on-the-job in the development of adequate statistical standards and procedures and in the establishment of sound statistical series.

During the past year a Sample Census of Agriculture was begun with the help of the Food and Agriculture Organization statistics expert and the USOM statistical technicians. A companion program, the general Census of Plantations, also was undertaken recently. Statistical programs planned for next year include a survey of major crops, a Sample Survey of Truck Farms, and studies and planning preliminary to the establishment of a crop-reporting system.

FARM IMPROVEMENT

In an effort to help rural families to raise their standard of living, assistance has been given to the Vietnamese Government to establish an agricultural education service. This program entails the training of national and local leaders in general farm extension, home improvement, and rural youth activities, so that technical information may be disseminated to rural families in the most useful form possible. Methods demonstrations of improved practices, the distribution of publications, and the organization of community groups all play important roles in meeting the program's objective.

Agricultural Extension

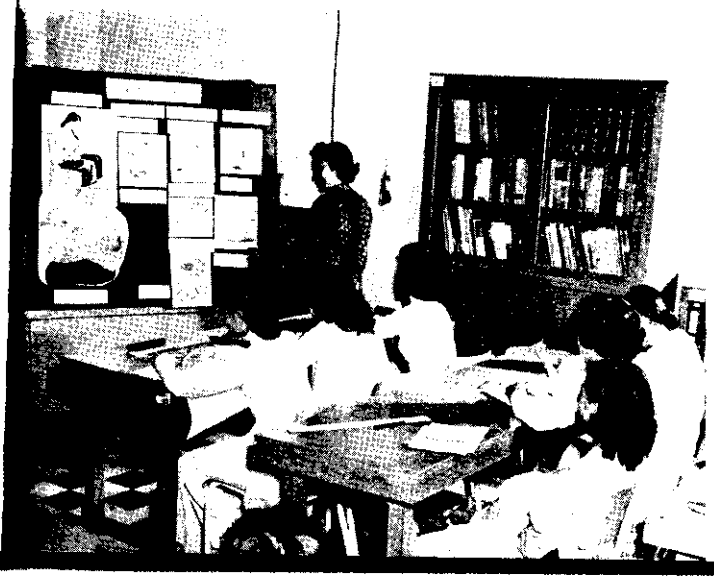
Extension agents demonstrate improved practices that will raise the income and better the standard of living for farm families, thus enabling these rural people to help themselves.

Today, 80 extension agents, three times as many as last year, are working with farmers in 32 provinces. New agents have been trained and, in turn, have trained others. USOM supports the extension program with technical assistance supplies, vehicles, and equipment.

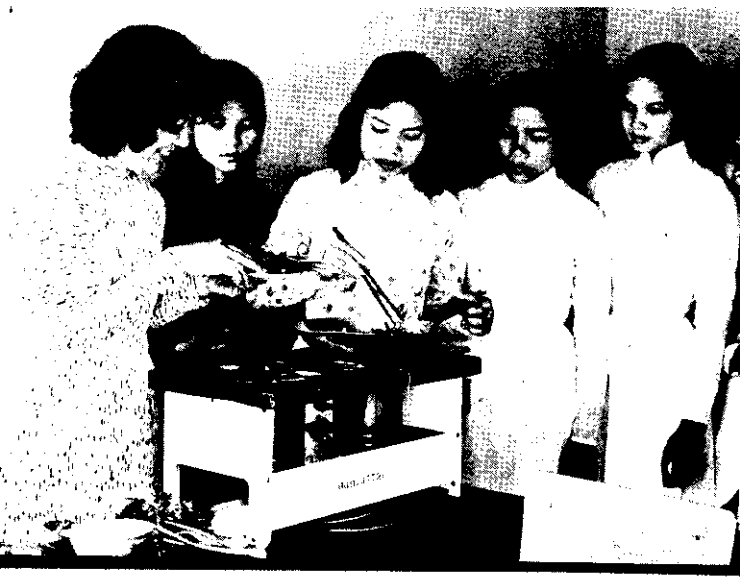
Home Improvement

Home improvement work has gradually expanded since 1956 when five agents and 24 local leaders

Rural home improvement agents learn how to give a good illustrated talk on the feeding of infants. When passed on to rural mothers, the information may prove valuable in reducing infant mortality.



A rural demonstration agent shows a group of housewives in Nha Trang how to prepare chicken in palm oil.

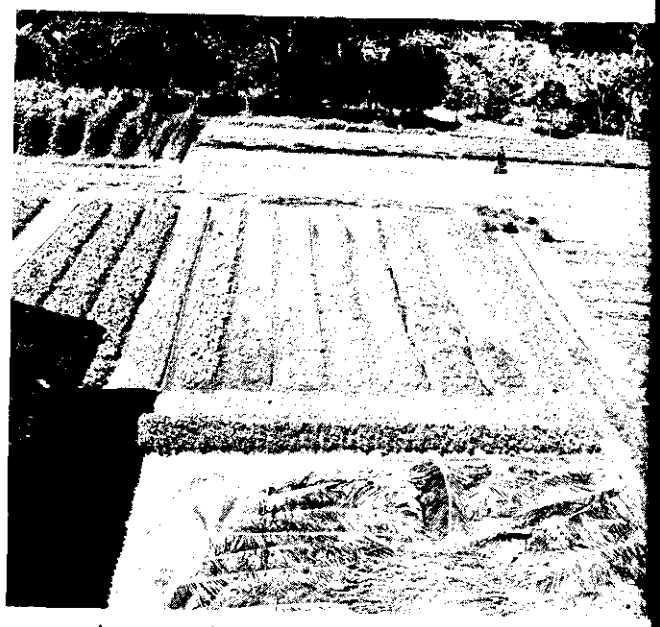


worked in four provinces. Today, 25 home improvement agents and 700 local leaders are working in 21 provinces. More than 90,000 families have received the benefits of demonstrations in improved methods of food preparation, housing, clothing, and sanitation.

This rapid expansion has required an almost continuous training program. Courses ranging from one-week schools for local leaders to six weeks for district agents teach them how to use available resources most effectively for the welfare of the family. Agents distribute seeds, chickens, ducks, pigs, and fish, and show the families how to raise and best utilize their food products.

Rural Youth

Rural youth work — the 4-T program — reaches nearly 30,000 members in 574 clubs. These boys and girls raise pigs or poultry, or cultivate vegetable gardens. Some clubs conduct group projects in rice, corn, or fiber crops. The 4-T programs now are directed by 1,337 local leaders, 155 more than were in the program last year. In 1960, nineteen training schools for 4-T local leaders were held, one in each province having 4-T clubs. The leaders learned how to control insect damage to crops and were taught demonstration methods which they could use in instructing their clubs. Training sessions were devoted to feeding and care of livestock, as well as to the planning of crop demonstration plots.



An extensive 4 T vegetable growing project.

A 4 T member assists with a group vegetable garden project.

A 4 T member takes care of the sow he received from the Pig Project Bank. Two of her brood were given to the Project Bank in repayment for the sow. These, in turn, are distributed to other eligible 4 T members.

4-T PROGRAM IN VIETNAM
AS OF JUNE 30-1961

PROVINCES	NUMBER OF VILLAGES	AGENTS	LOCAL LEADERS	YEAR ORGANIZED	CLUBS	MEMBERSHIP		
						BOYS	GIRLS	TOTAL
AN GIANG	96	2	47	1956	20	864	123	987
BA XUYÊN	73	1	42	1956	21	787	247	1034
BẠC LIÊU		1	90	1956	16	1086	644	1530
BIÊN HÒA	85	1	65	1957	12	919	286	1205
BÌNH DƯƠNG	63	1	39	1955	19	412	190	602
BÌNH THUẬN	54	1	31	1955	15	533	103	636
DARLAC	444	2	33	1956	22	583	186	769
ĐỊNH TƯỜNG	123	2	60	1955	73	1964	644	2608
GIA ĐỊNH	61	2	38	1956	20	575	123	698
KHÁNH HÒA	84	2	124	1956	62	595	603	1198
KIÊN GIANG	58	2	46	1958	26	857	133	1000
KIÊN HÒA	115	2	49	1956	24	3431	401	3832
LÂM ĐỒNG	592	3	51	1957	26	546	234	780
LONG AN	101	1	60	1955	42	1389	97	1486
PHONG DINH	60	2	100	1956	24	662	262	924
PHƯỚC TUY	41	1	24	1956	15	728	237	965
QUẢNG TRỊ	84	1	92	1958	46	1411	1187	2598
THỪA THIÊN	79	1	26	1960	7	449	0	449
VĨNH BÌNH	75	2	235	1956	62	4032	657	4689
VĨNH LONG	81	1	94	1956	22	1232	459	1691
	2,339	32	**1,337**		574	**23,055**	6,626	**29,681**

Agricultural Information

The agricultural information section of the Extension Service is a publications production unit. During the past year it has published more than 600,000 copies of 84 leaflets, bulletins, newsletters, flip charts, posters, and maps. Contract work by commercial printers supplements the production of the section's multilith press, silk-screen printer, and mimeograph machines. Publications prepared for distribution by the Ministry of Rural Affairs include such varied titles as *Potato Blight*, *Duck Raising*, and *4-T'ers Grow Vegetables*.

Agricultural Education

To help develop the agrarian economy of Vietnam, the National Agricultural College at Bao-Loc (Blao) is providing education and training for 434 technicians in agriculture, animal husbandry, and forestry. In 1961, 91 students were graduated from the secondary level, which is equivalent to junior high school in the United States. One hundred and sixty new students were selected this year from 1800 applicants. One hundred of these were enrolled in the secondary level and 60 in the superior level. The first class of 61 students from the superior level, equivalent to two

An IVS team member explains the workings of a farm tractor to Blao Agricultural College students as a part of their general education.

These young ladies from Blao Agricultural College a learning that it pays to protect crops from insect a disease attacks.

or three years of U.S. college, will be graduated next year with a degree comparable to Bachelor of Science. They will go to various positions in the Ministry of Rural Affairs.

To improve the facilities of the school, which opened in 1955, construction began this year on five additional faculty houses, a dormitory, a dining hall, and an abattoir. Future construction will include at least one classroom building, storage facilities, and numerous livestock structures.

A contract signed with the University of Georgia's College of Agriculture has provided a team of two full-time university professors to help in the development of adequate curricula, teaching methods, and facilities. To augment the present faculty of 26 full-time and fourteen part-time instructors, six students have been sent to the United States to study for their Masters degrees.

LAND AND WATER RESOURCES

Expansion and improvement of irrigation and water control projects are contributing substantially to the growth of the agricultural economy. The Government of Vietnam's Land Development Agency is opening new lands for colonization and establishing resettlement villages in areas conducive to agricultural prosperity. Land clearing and reclamation operations are conducted by the Agency's Agricultural Machinery Directorate.

Land Clearing And Resettlement

Five years ago, the Government of Vietnam selected and cleared sites for sixteen new villages to accommodate families resettled from over-populated areas offering inadequate socio-economic opportunities. Each family was allotted five hectares of land, of which one hectare was cleared or reclaimed mechanically. The remaining four hectares were to be cleared by hand after the family was established in its new environment. Houses, schools, dispensaries, and administration buildings were constructed and the villagers planted subsistence gardens and crops to provide for their own needs.

By 1961, the program had expanded to 143 established villages in which 41,370 families consisting of 206,851 people have been settled. More than 23,000 hectares of virgin land were cleared and 50,000 hectares of historically cultivated land were reclaimed. Over the five-year period, 77,000 hectares have been plowed and 72,000 hectares disked for seedbed preparation.

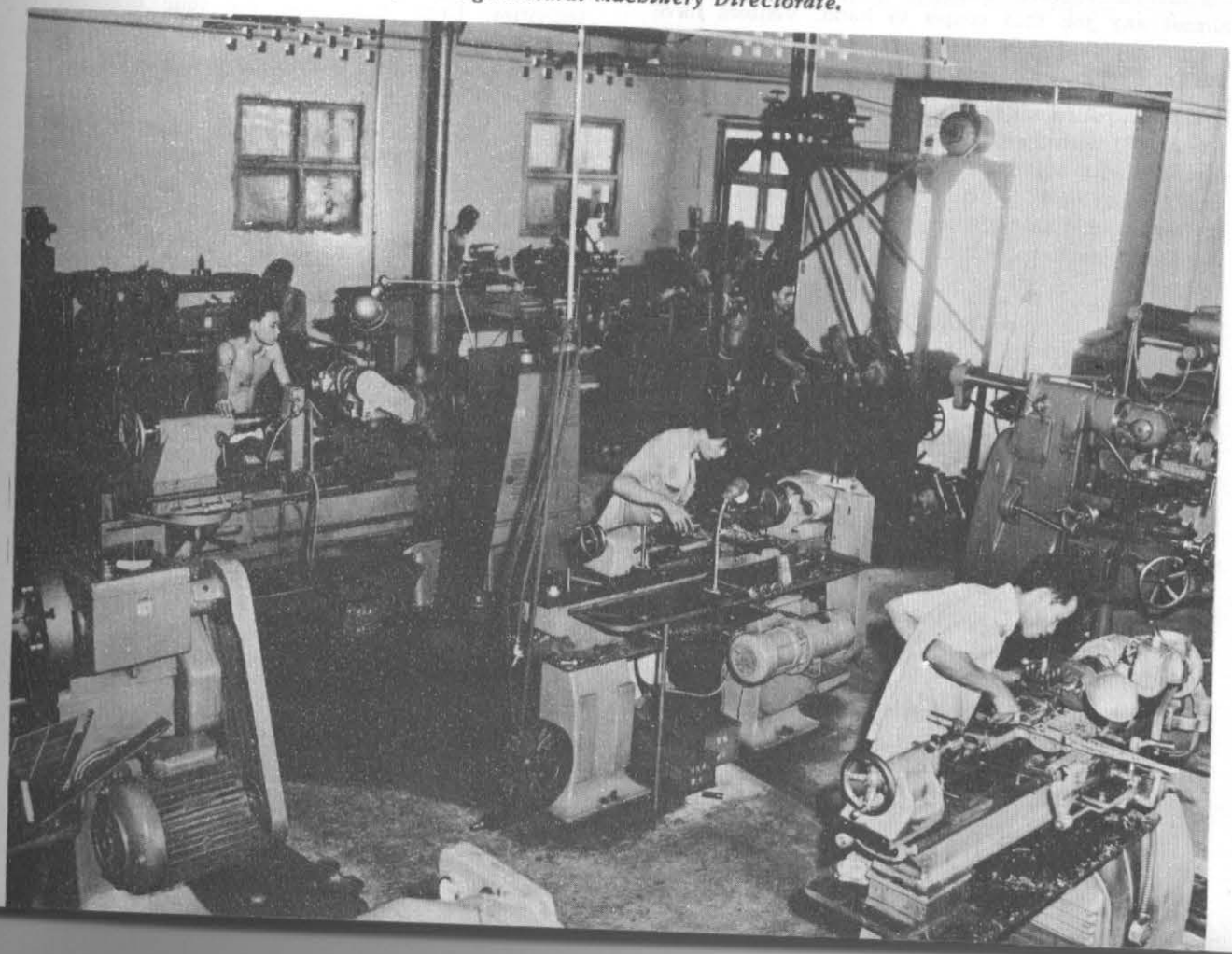
Crops being produced by the land resettlement families consist of green vegetables, corn, sweet potatoes, peanuts, kenaf, jute and ramie. Peanuts and the long fiber crops provide income for the farmers and eliminate the country's necessity for importing these items.

Machinery Maintenance

In order to carry out its plowing, land clearing and reclamation activities with maximum efficiency, the Agricultural Machinery Directorate established a principal repair and supply center in Saigon, and supporting field shops were set up at Pleiku, Ban-Me-Thuot, and Hoa-Khanh. Eight mobile units service the outlying, less densely populated areas.

President Diem and Ambassador Nolting inspect a Land Development village at Thuan-Kiem, Phuoc-Long province.

Worn parts are rebuilt or remade in this machine shop, one of several operated by the Agricultural Machinery Directorate.



Facilities are now manned and in operation to keep field and transportation equipment, consisting of 400 tractors with equipment and 350 other vehicles, in a good state of repair. All worn parts are locally rebuilt or remanufactured whenever feasible. For example, track rails and other circular parts are rebuilt by automatic electric welding machines, miscellaneous shafts are built up by welding and then machined to original sizes, crankshafts are reground and new bearings are made, and cylinder blocks are rebored and oversize pistons and rings installed. These and other operations restore old parts to approximately their original condition, thus effecting savings in foreign exchange expenditures and helping to keep the inventory level of spare parts as low as reasonably possible.

Serious breakdowns of equipment while in the field are reduced to an absolute minimum by a rigid program of preventive maintenance. Wheel tractors are completely torn down and inspected after 1500 to 2000 hours of operation and track tractors after 2500 to 3000 hours.

Worn parts that cannot be restored are salvaged and used to manufacture other parts. All electrical components, diesel engine fuel pumps, injector systems, and vehicle and tractor engines are serviced and rebuilt by trained technicians. The mechanics, machinists, welders, and other technicians can do almost any job that comes to hand. Visitors have commented that these shops are among the finest in the Far East in equipment, management and operation.

The central repair facilities in Saigon doubled their size in 1961 with the purchase of an adjoining property complete with buildings. The vehicle maintenance and repair department is being developed in this area to the extent that all vehicles, no matter how severely damaged, can be repaired.

Irrigation

As a result of extensive damage and neglect during the war years, Vietnam's irrigation control structures, conduits, and sea dikes were in deplorable condition. There was an urgent need to aid agricultural communities in restoring their water control and protective structures, but governmental agencies entrusted with the solution of this problem were understaffed. To help meet these demands, Vietnamese engineers were trained in the United States and have returned to assume key positions in the Engineering Service, and USOM specialists have provided technical assistance and advice.

Surveys gave the data needed to proceed with local irrigation projects that benefited about 450,000 people on 250,000 hectares of land in 23 provinces. Pilot demonstrations using small irrigation pumps were so successful that local business interests began the commercial importation of these pumps. Several hundred village water systems now have been built, and many more are planned.

CREDIT AND COOPERATIVES

Before 1954, the cooperative movement in Vietnam had a history of various attempts, many failures, and a few successes. However, events leading to the establishment of the Republic practically eliminated any semblance of planning for the organization and operation of cooperatives. During the last few years much progress has been made in the organization of cooperatives and farmers' associations and in the establishment of a sound agricultural credit institution.

Farm Credit

The farm credit program was reorganized and placed on a sound footing in 1957 with the creation of the National Agricultural Credit Office (NACO) to coordinate and handle all agricultural credit activities. Until this time, the four branches of previous farm credit operations had accommodated 105,237 farm families with loans totalling 228 million piasters.

Beginning with sixteen branch agencies in 1957, NACO now has 37 branches and, by the end of 1960, had already served 957,090 farm families with total loans of 2,653 million piasters. In spite of the difficult security conditions in many rural areas, during 1960 alone loans totalling 909 million piasters were made for productive purposes.

Cooperatives

The « new » cooperative movement began in 1954 with an effort to enact legislation, create agencies and provide facilities for the efficient implementation of an agricultural credit and cooperative program. During the past seven years the cooperative movement has expanded steadily to provide a network serving most sectors of the national economy.

The following table reflects the number of cooperatives of the various types, their membership and paid-in capital in piasters (73 piasters equal one U.S. dollar) as of July 31, 1961 :

Type of Cooperative	*No.*	*Mshp.*	*Paid-in Capital*
Rice	41	37,582	VN $ 12,972,513
Agriculture (Other than Rice)	89	31,475	9,742,394
Forestry	3	353	120,600
Stock Raising ...	2	327	539,600
Fishery	73	16,116	4,441,925
Handicraft	61	7,580	8,783,175
Consumers	7	17,875	7,706,955
Other	4	549	6,114,525
TOTAL	280	111,857	VN $ 50,421,687

Since 1956, assistance in the development of a Cooperative Research and Training Center has been rendered by the Cooperative League of the USA and the USOM. During 1960, a total of 1,110 students completed training courses and, by the end of calendar 1961, it is estimated that an aggregate of 5,000 students will have been graduated. For 1962, the Center has set a goal of teaching 71 courses and graduating 3,500 students.

The principal activities of the Center are to train directors and employees of cooperatives, to provide refresher in-service training, to make available education to members of cooperatives, and to disseminate information to the general public.

Farmers' Associations

Farmers' associations in Vietnam, the first of which was organized in 1959, are patterned after those organized and operating in the Republic of China. They are multi-purpose and serve both the social and economic needs of the farmers in the area.

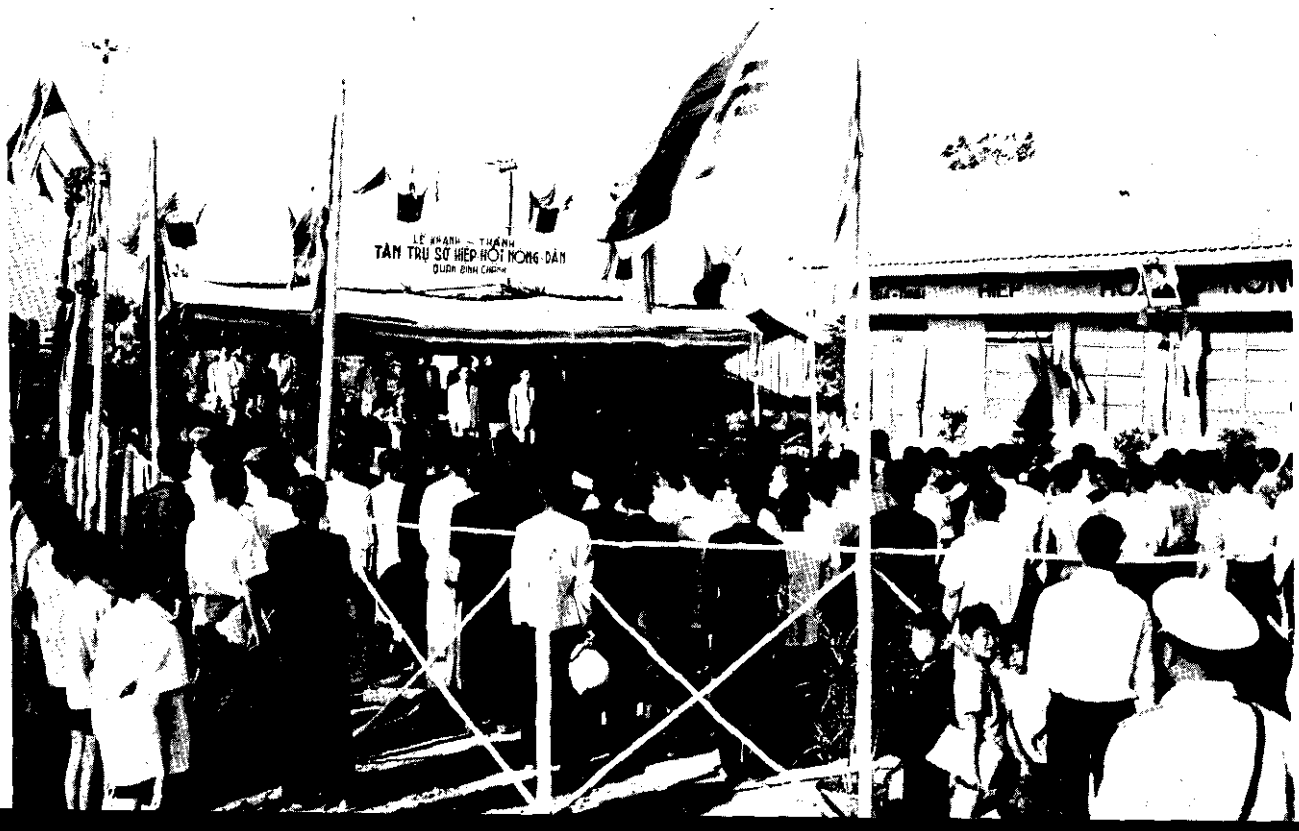
Under USOM sponsorship, the Government of Vietnam contracted with the Joint Commission on Rural Reconstruction of the Republic of China for a team of technicians experienced with farmers' associations. In 1961 alone, thirty district and four provincial farmers' associations were organized. Ninety-seven district farmers' associations now serve 778 villages.

Association activities include purchasing rice, fertilizer, seeds, livestock, palm leaves, and other agricultural products for their members. Lack of capital and trained personnel, as well as unsatisfactory security conditions, have limited the growth of these associations. However, progress in overcoming these difficulties is being made from month to month.

Agricultural Credit Workshop

The Third Far East Agricultural Credit Workshop, co-sponsored by the Government of Vietnam and the ICA, was held in Autumn 1960 in Saigon with 41 representatives from seven countries of Southeast

A new farmers' association facility is dedicated at Binh Chanh.



USOM Director Gardiner addresses the Far East Agricultural Credit Workshop.

Asia participating. The Workshop directed its activities toward finding ways of improving and expanding agricultural credit in the participating countries in order to increase agricultural production, raise the level of living of rural people, and strengthen the national economies.

As at the First Far East Agricultural Credit Workshop in Manila in 1956, and at the second in Tokyo two years later, the delegates were divided into five work groups, with at least one delegate from each country in each group, for the study of subjects that were of general interest and importance in the region.

FISHERIES

Since the establishment of the Vietnamese Fisheries Directorate under USOM sponsorship in 1957, a comprehensive fisheries program has been implemented in Vietnam. The specific objectives of this project are to establish an integrated fishing industry for Vietnam, to expand and improve efficiency in largely unexploited coastal areas, to improve production techniques of both inland and marine fisheries, to expand marketing and distribution by constructing modern fish landing facilities, to encourage private Vietnamese capital to participate in the growth of the fish industry, and to assist local and refugee

fishermen to increase their catches through junk motorization and the introduction of more effective fishing methods.

Reinforced concrete fish landing facilities have been constructed at the important coastal fishing ports of Da-Nang, Cu-Lao, Ham-Tan, Ben-Da, Vam-Lang and Phan-Thiet. Three additional facilities are presently under construction at Phu-Hoi, Saigon, and Duong-Dong on Phu-Quoc Island, and two similar structures will be built at Qui-Nhon and Phan-Ri.

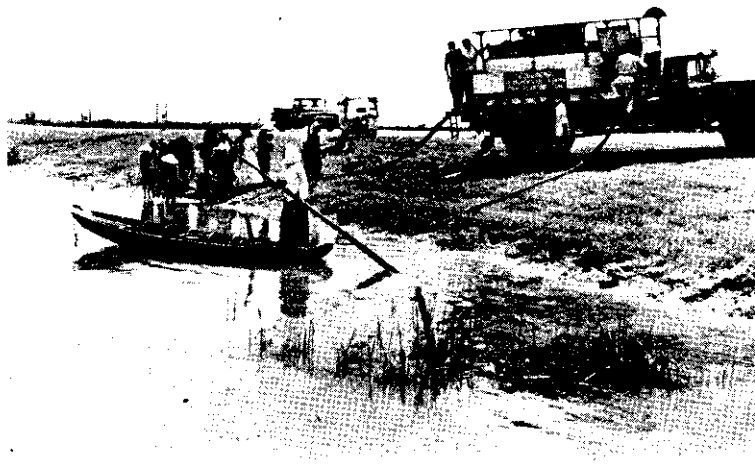
Motorization of Vietnamese fishing junks, which increases the average catch per vessel by 300 percent, is continuing at a rapid pace. The utilization of coastal fishing areas also is being expanded through the use of USOM-procured « Fish Finders » which are locating bottom fish concentration heretofore not known to exist.

One of the largest pisciculture stations in Southeast Asia has been constructed near Pleiku. This strategically located facility increases to twelve the number of such stations now operated by the Inland Fish Culture Service. A recently procured truck with a 1,000 gallon fish-hauling tank has successfully demonstrated that 10,000 fish fry can be transported with a minimum of mortality to any area of Vietnam for distribution to fish farmers and agroville settlements for pond rearing.

In the field of food technology, research has been undertaken to improve the quality of salted, dried, boiled, and pickled fish products. In addition, *nuoc mam*, the national fish sauce, has been produced in bouillon and powder form. Pilot-plant canning of several species of fish now shows commercial promise. Sharp freezing of packaged filet fish and shrimp is being tested. Export contracts for mackerel, pompano, and threadfin have been signed with commercial distribution firms in Singapore and Thailand. Commercial production of fish in Vietnam has increased fourfold from 52,000 tons in 1955 to 212,000 tons in 1960.

Development of this project serves to improve the people's diet by reducing the consumer price of high protein fisheries products, and thus making them available to a substantial portion of the urban population. Of equal importance is the fact that this project directly improves the welfare of the ten percent of Vietnam's population which earns it living by fishing.

Local officials inspect specimens at the laboratory of the Thu Duc Pisciculture Station.



The first mechanized fish planting and transporting truck ever brought to the Far East plants fish fry in a pond near Bien Hoa.

A portion of the fleet of motorized fish packing junks lands the day's catch, collected from the fishing fleet itself, at Rach Gia for market.

President Diem cuts the ribbon to open the Saigon--Bien-Hoa Highway to traffic. It has already become the most heavily traveled section of highway in Vietnam.

PUBLIC WORKS

The transportation and communications system of South Vietnam were almost totally destroyed during the thirteen years of war that preceded independence. The extensive, unrepaired damage which existed in 1954 rendered travel and communications impossible in many areas and, at best, extremely difficult in others. Development and maintenance of these facilities were at a complete standstill and their restoration was paramount to the political, economic and military survival of the new nation.

After the Geneva Accords of 1954 and the withdrawal of French forces in 1955, the Vietnamese Government requested USOM assistance in the rehabilitation of the country's infrastructure. The Public Works Division was contrived to help to provide the most urgent and immediate needs of the country in the reconstruction of highways and bridges ; railroads — trackage, rolling stock, electronic switching devices ; communications — radio, telephone, telegraph ; canals and other inland waterways ; rural and urban water supply system ; aeronautical ground facilities — landing fields, terminal buildings, electronic control devices ; and electric power — generators, distribution facilities, transmission lines.

HIGHWAYS

The completion of three principal roadways during the past one and one-half years marks the high point of major USOM participation in Vietnam's highway reconstruction program. The first major step in the rehabilitation of Vietnam's highways was realized in May 1960 with the complete renovation of National Route 21, a 151-kilometer artery linking the interior city of Ban-Me-Thuot with Ninh-Hoa on the coast. The trip between these two cities, which in 1957 took a full day in good weather over a one-lane trail that became impassable during the rainy season, was reduced to two hours duration. The exchange of goods between the coastal and highland areas has been greatly increased by the resulting lower transportation costs. This highway also opens to settlement vast and fertile mountain regions where extensive agricultural development is anticipated.

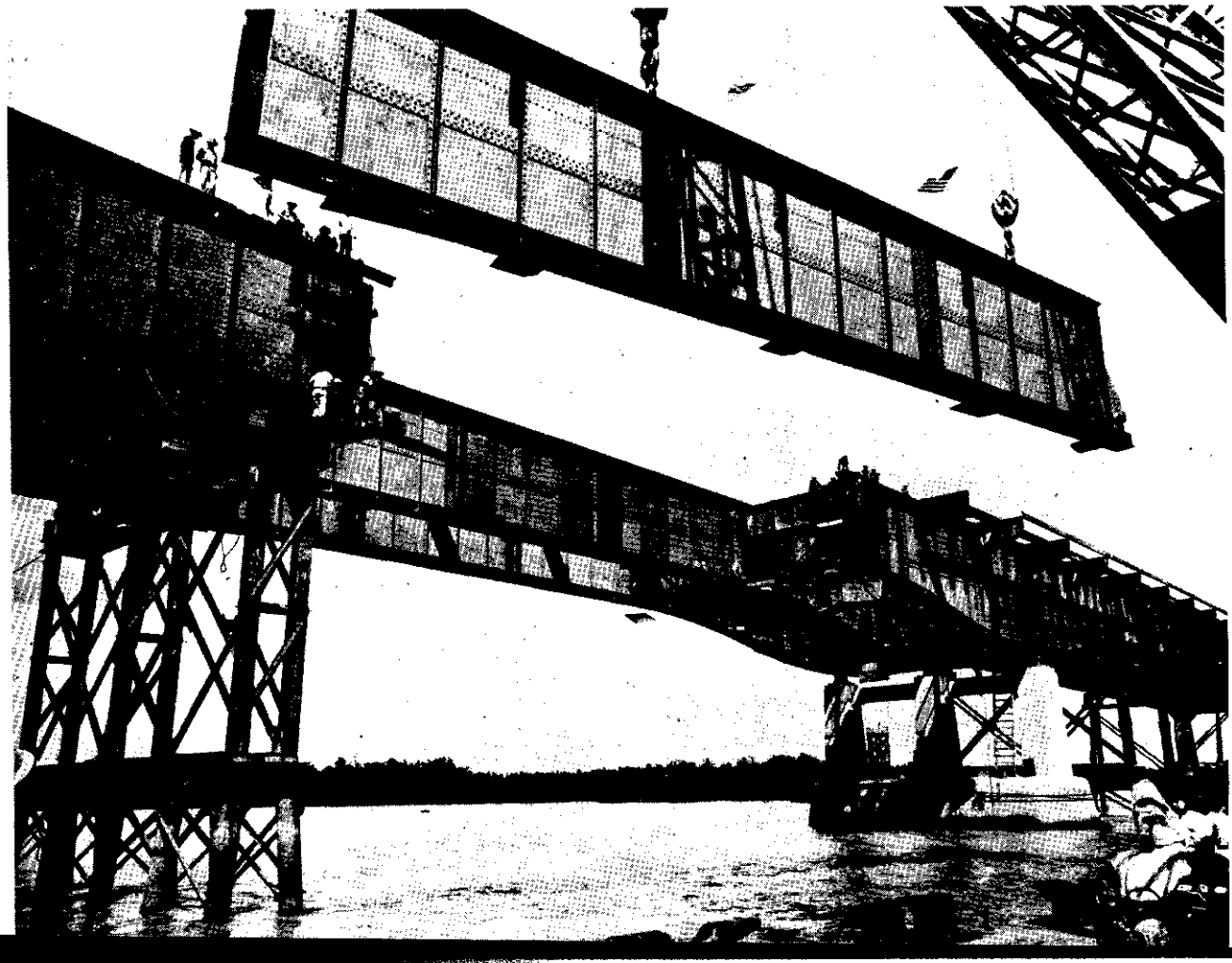
The highway program, cooperatively implemented by the Vietnamese Ministry of Public Works and the USOM, has extensively employed the contract services of the Capitol Engineering Corporation (CEC) of Pennsylvania for design engineering and Johnson, Drake and Piper (JDP) of Vietnam for construction.

Saigon — Bien-Hoa Highway

This 32-kilometer roadway, completed and opened to traffic in April 1961, is already the most heavily traveled section of highway in Vietnam and is one of the finest and most modern in the Far East. This road, all virgin construction, now constitutes the major artery funneling all through traffic between Saigon and the population centers of the north and east. It is a vital link in the backbone of Vietnam's highway transport, and it is being used intensively despite the fact that security conditions are inhibiting the free flow of traffic everywhere in Vietnam in 1961.It includes eight bridges, among them the two longest ever built in Vietnam — the 986-meter Saigon River Bridge and the 454-meter Dong-Nai River Bridge.

The entire length of the road is surfaced with asphaltic concrete and is 16 meters wide in its urban section and 7.5 meters wide with three-meter stabilized shoulders in the rural area. About 12.5 kilometers traversing a swampy area near sea level required a heavy sand blanket to support the road.

Final steel work on the Saigon River Bridge of the Saigon---Bien-Hoa Highway. This is the longest bridge in Vietnam.

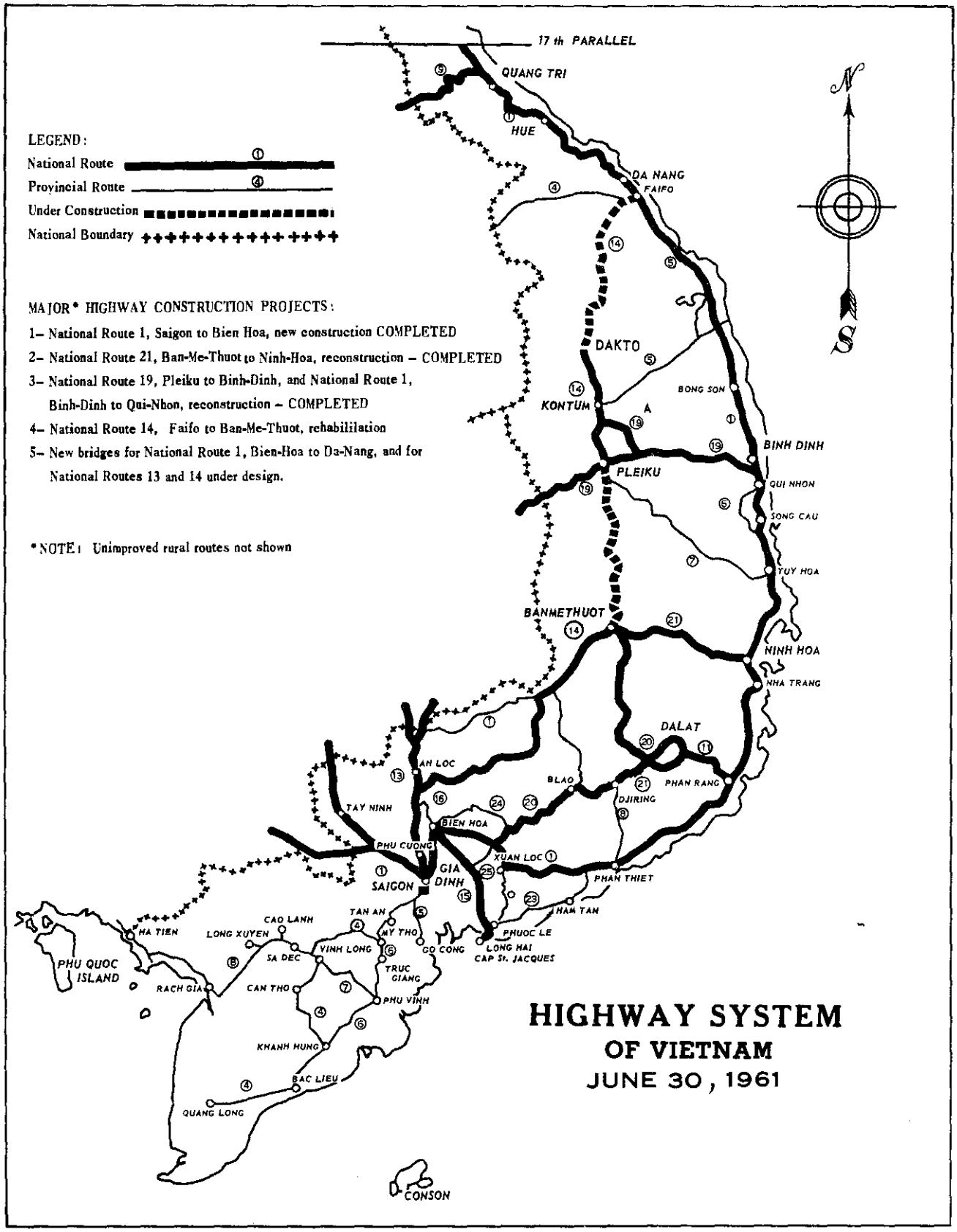


Approach to the completed Saigon River Bridge.

A two-lane rural section of the Saigon---Bien-Hoa Highway.

The Dong-Nai River Bridge, second longest in Vietnam, on the Saigon---Bien-Hoa Highway.

The new Saigon---Bien-Hoa Highway at the Hung-Vuong intersection.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LEGEND:
National Route
Provincial Route
Under Construction
National Boundary
MAJOR* HIGHWAY CONSTRUCTION PROJECTS:
1– National Route 1, Saigon to Bien Hoa, new construction COMPLETED
2– National Route 21, Ban-Me-Thuot to Ninh-Hoa, reconstruction – COMPLETED
3– National Route 19, Pleiku to Binh-Dinh, and National Route 1, Binh-Dinh to Qui-Nhon, reconstruction – COMPLETED
4– National Route 14, Faifo to Ban-Me-Thuot, rehabililation
5– New bridges for National Route 1, Bien-Hoa to Da-Nang, and for National Routes 13 and 14 under design.
*NOTE: Unimproved rural routes not shown
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HIGHWAY SYSTEM
OF VIETNAM
JUNE 30, 1961

National Route 19, Pleiku to Qui-Nhon

The completion in June 1961 of National Route 19 provides direct access between the coastal town of Qui-Nhon and the important highland city of Pleiku. In addition to clearing the right of way, grading, construction of 35 bridges, and select material surfacing on the 156 kilometers of Route 19, the project entailed the application of a crushed stone base and double bituminous surface treatment and the construction of five bridges on 22 kilometers of National Route 1.

National Route 14, Ban-Me-Thuot to Pleiku

Reconstruction of this substandard 183-kilometer highway, which forms the backbone of the highland area, will play an important part in the further development of the area. Secondary roads branch off of National Route 14 into the fertile, undeveloped farmlands of the region.

National Route 14 is the first project of its type, since it is entirely mechanized and is manned solely by Vietnamese personnel, both in regard to engineering and construction. The USOM has aided this activity through releases of counterpart funds and the provision of equipment.

The first phase of construction, largely finished early this year despite unfavorable security conditions, included the completion of 100 kilometers of road and approximately 110 drainage structures, including one major bridge. A second major bridge is nearing completion and will mark the end of the first phase. Meanwhile, the project is entering its second phase which entails the widening of 36 kilometers of existing roadway, the construction of 37 kilometers of new road and five smaller bridges, and the completion of drainage structures along the remainder of the route. By the end of June, rough grading had been completed along 24 kilometers and half of the drainage structures had been built. Design of the bridges is largely completed and their construction is scheduled during the coming dry season.

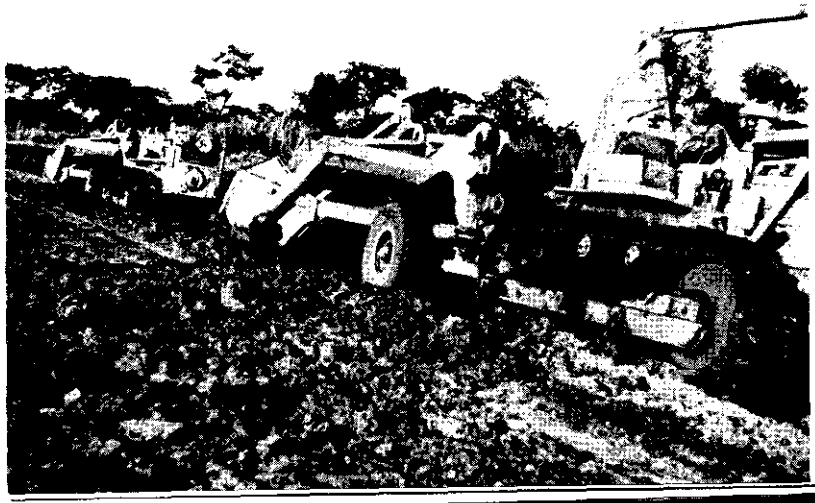
It is expected that the roadway will be completed and surfaced by the end of 1962. Materials required for a double bituminous surface treatment will be financed by the USOM but all other costs will be borne by the Government of Vietnam.

Equipment

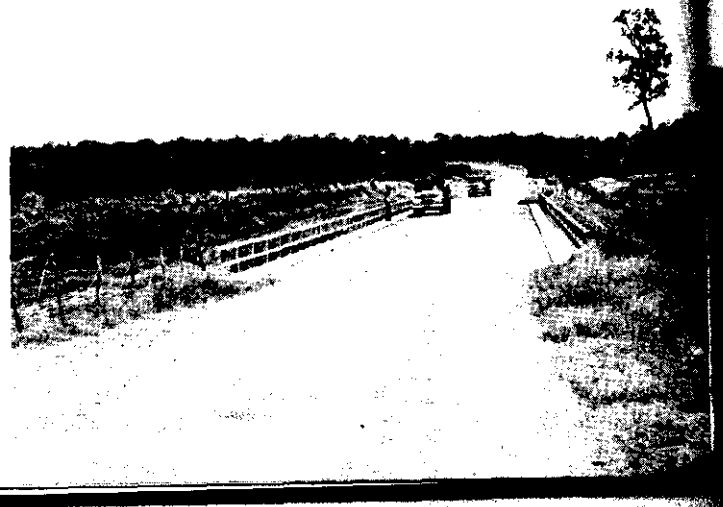
More than eighteen million dollars worth of equipment purchased by the USOM for the overall highway program has been turned over to the Vietnamese Highway Department. Besides standard road-building machines, this equipment, which consists of 1,997 major and 940 minor units, includes rock-crushing plants, concrete pipe and pre-stressed concrete manufactories, and completely outfitted equipment shops, all of which will be utilized by Vietnamese personnel in the continued modernization and expansion of the nation's highway network and in other public works projects such as airport construction.

To keep this equipment operative, procurement of 1.7 million dollars worth of repair parts, accessories and light maintenance equipment has been initiated. A similar amount of such parts already has been transferred to the Highway Department from surplus U.S. Army stocks. Equipment also has been ordered and now is beginning to arrive to equip modern soil and materials testing laboratories in Saigon and five other geographical divisions of the country.

Rough grading operation on National Route 14.



The rehabilitated Ea-Hleo Bridge on National Route 14.



Part of the road building equipment transferred to the Government of Vietnam.

Training

In addition to actual road-building, USOM contractors have conducted a comprehensive training program designed to develop Vietnamese cadres capable of administering and conducting all phases of highway construction. An advanced training course was completed by 100 supervisory personnel, 700 received training in administrative functions, and 100 persons were instructed in field and office engineering operations. In addition, more than 3,000 were given on-the-job training as equipment operators, craftsmen, and operative technicians.

Since November 1960 an additional 120 Highway Department field personnel have been trained at the Highway Training School, the operation of which has now been taken over by the Capitol Engineers Advisory Group. Manuals on equipment repair, and operation and maintenance instructions, have been translated into Vietnamese for use by trainees and other Department personnel. A set of general and technical specifications regulating highway and bridge construction techniques applicable to Vietnam is also being prepared.

Training for higher echelon officials of the Department is being conducted abroad, principally in the United States, and consists of both university studies and on-the-job training with state highway departments and their associated installations.

Highway Department field personnel learn about the operation of a frontend loader at the Highway Training School.

Future bulldozer operators receive instructions at the Capitol Engineers' Training School.

WATERWAYS

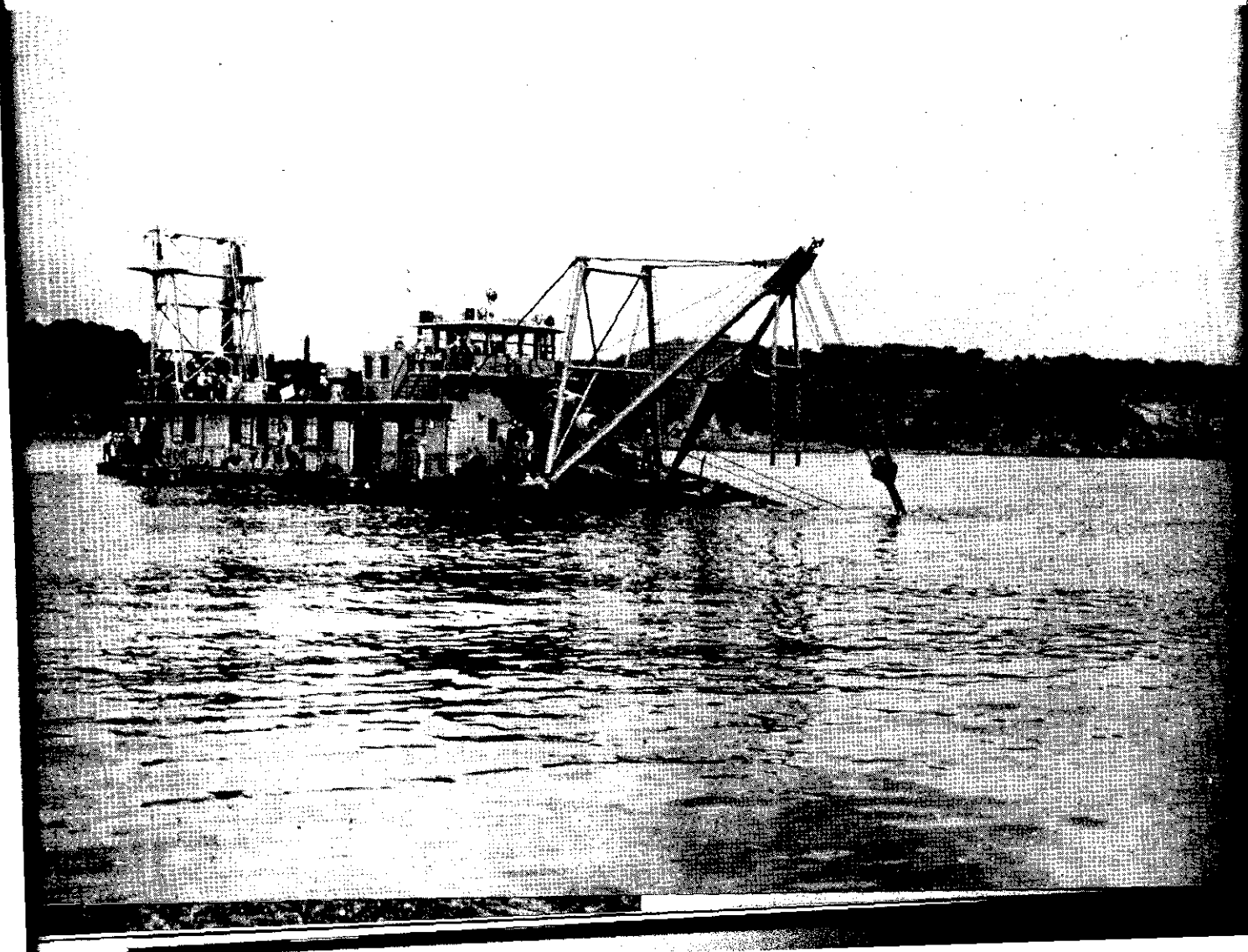
A large portion of Vietnam's canal system — which totals 2,500 miles of primary, secondary and tertiary waterways — had suffered gravely during the war years due to lack of necessary maintenance.

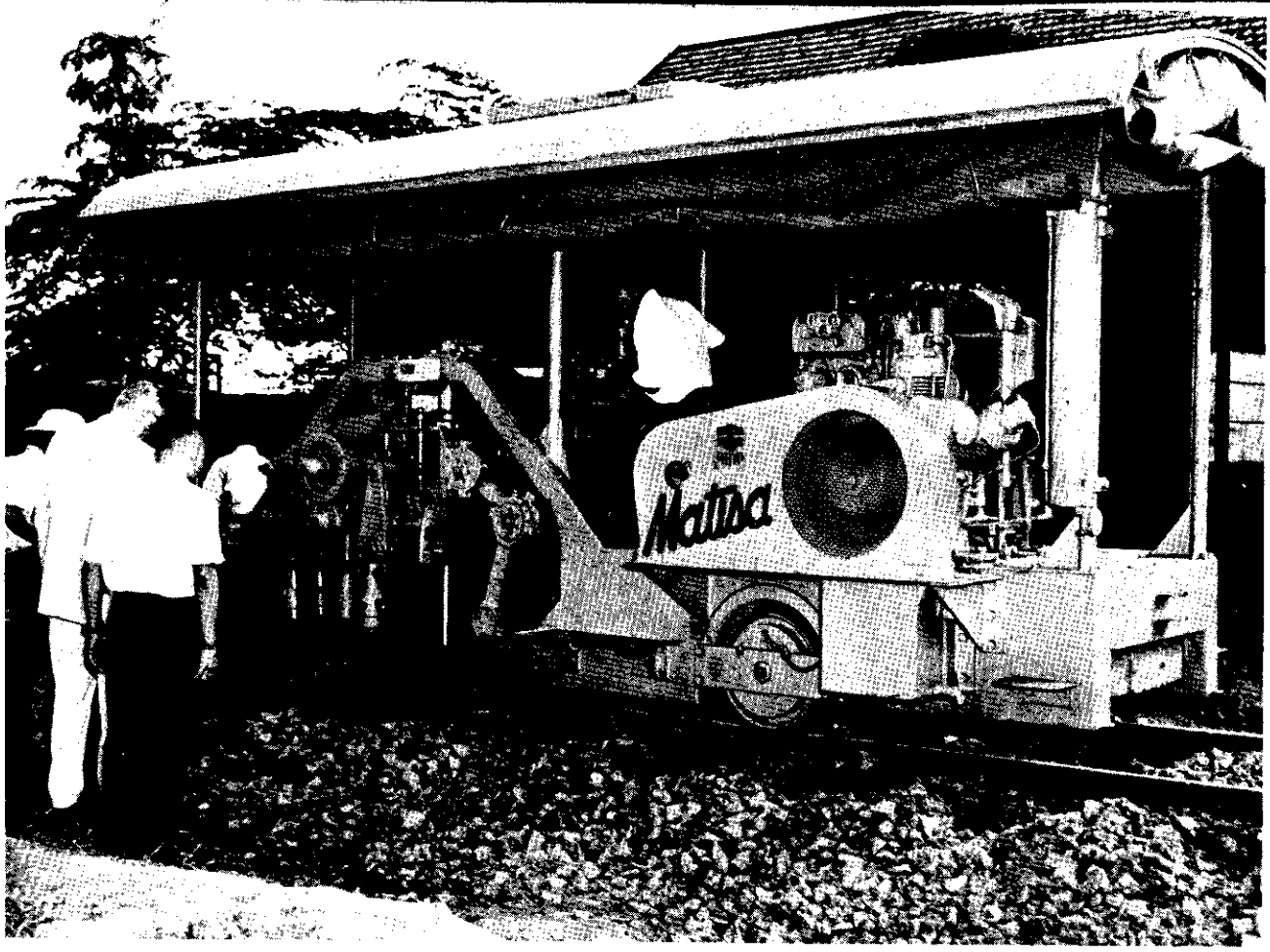
In 1955, the USOM furnished two eight-inch and two twelve-inch hydraulic dredges, which represented the beginning of a comprehensive dredging program. A hydrographic survey conducted under a USOM contract by an engineering team from Daniel, Mann, Johnson and Mendenhall Inc. of Los Angeles determined quantitative dredging requirements and equipment needs. This group also helped to equip the Hydrographic Section of the Vietnamese Ministry of Public Works and to train its personnel.

The dredging fleet has now grown to a total of eight units of various types and sizes, two of which were purchased by the Vietnamese Government. One large sixteen-inch dredge, recently delivered by the USOM, is capable of digging forty feet below the surface and pumping the dredged material to a site more than a mile away. Since its beginning, the dredging fleet has removed 14.5 million cubic meters of infill from the canal system and proportional operating costs have been decreased to less than 10 % of the original level as the unskilled Vietnamese operators have become highly trained and competent dredgemen. A central repair yard has been equipped with modern machine tools and is capable of providing complete repair service to the dredging fleet.

The coastal lighthouse system serving international shipping and navigation had been almost completely destroyed during the war period. USOM assistance has enabled the Vietnamese Lighthouse Service to repair the five most essential major lighthouses, and installation of USOM-furnished equipment, including optics and generators, is now in progress.

The new sixteen inch dredge is being employed in harbor improvement work.





An automatic tie tamper packs ballast under the ties. Tie tampers and ballast cleaning machines represent the basis for improved, mechanized maintenance of the railroads.

RAILROADS

Almost 500 kilometers of major rail lines were destroyed during the war years. In addition to the destruction of trackage, a large portion of the railroad's bridges, service buildings, locomotives and rolling stock also were demolished.

In 1955, the USOM instituted a financial aid program which provided for the purchase of materials and equipment for reconstruction and maintenance of the railroads and for the Vietnamese labor required to accomplish the vast rehabilitation project. The following year two locomotives, twenty gondolas and thirty flat cars also were furnished.

By August 1958 the rail line from Tuy-Hoa to Phong-Nien was restored and through-service between Saigon and Qui-Nhon was reestablished. One year later the reconstruction of 111 kilometers of main track and bridges from Dieu-Tri to Ky-Lam opened through passenger and freight service from Saigon to Dong-Ha for the first time in twelve years. By March 1961, twenty kilometers of the Nong-Son Coal Mine branch line had been constructed and the mine was enabled to make transshipments of coal by barge. The contemplated completion of this branch line in 1962 will provide direct rail shipment of coal from the mine to the industrial consumption centers.

In addition to United States aid in railroad rehabilitation, France has contributed six diesel electric locomotives and the Colombo Plan has furnished ten buses to provide feeder service to the rail lines.

A 9.7 million dollar loan from the United States Development Loan Fund will permit the gradual replacement of antiquated steam locomotives and rolling stock. During the coming year, 23 diesel locomotives and 64 units of rolling stock will be procured. The loan also provides for the purchase of modern shop machinery which will be used for the maintenance of the new equipment.

A prestressed concrete tie manufacturing plant financed by the Vietnamese Railroad System was recently completed at Thap-Cham and will begin production in the near future. A program of improved track maintenance, utilizing the automatic tie tampers and ballast cleaning machines supplied by the USOM during 1961, is also planned.

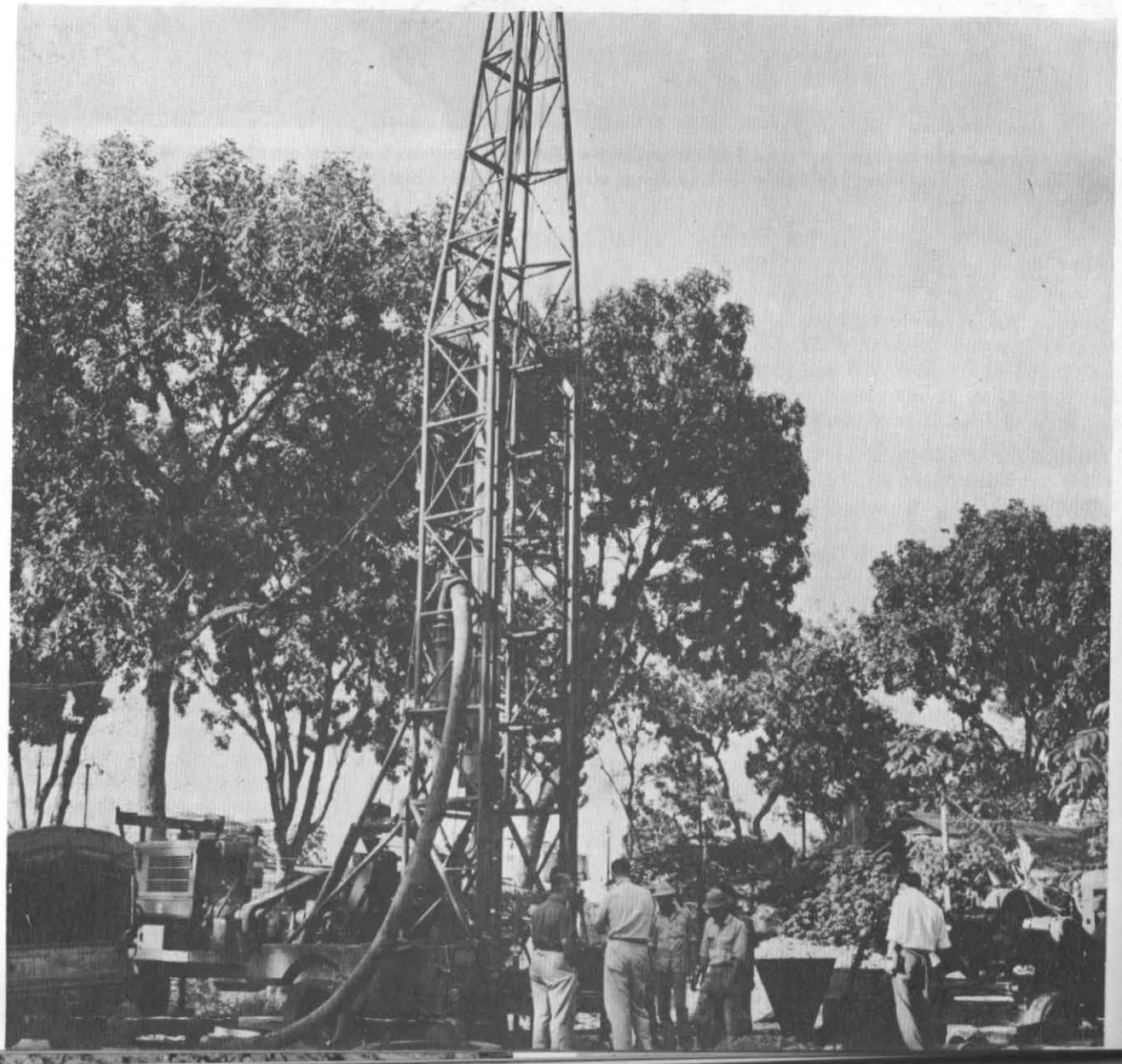
WATER SUPPLY

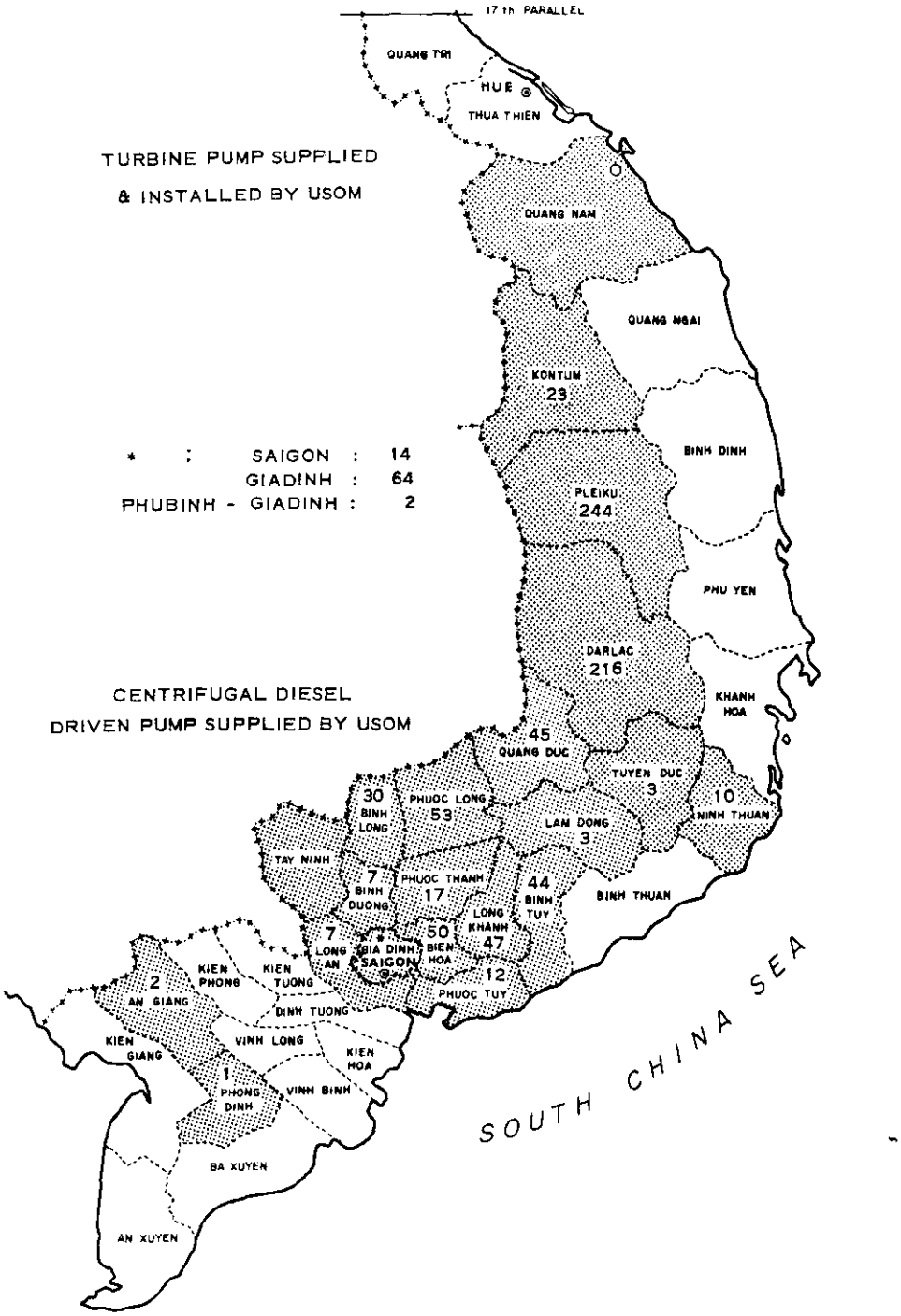
Despite Vietnam's abundant rainfall, most of the population suffers from water shortages and nearly all drinking water must be boiled to render it safe for human consumption. The Vietnamese Government's awareness of the need for better rural and urban water supplies manifested itself in January 1961 in the creation of a separate National Water Supply Agency and the organization of the Saigon Water Office as instruments to more effectively implement a water supply program.

The project administered by the National Water Supply Agency aims at the improvement of existing municipal water supply systems and the drilling of wells in rural areas in order to provide potable water of a quality and quantity adequate to satisfy basic human needs.

Well drilling operations are providing safe water for villages, resettlement areas, military installations, government housing projects, educational facilities, hospitals, agricultural experimental stations, and non-profit charitable institutions. During the past year 305 new wells have been completed, 77 large ones by the Vietnamese Public Works Ministry and 228 smaller wells by the Vietnamese Land Development Program, both of which receive financial and technical assistance from the USOM. This brings to

USOM technicians inspect a well drilling operation of the Vietnamese Ministry of Public Works. This large rig drills wells to a depth of 50 to 80 meters with water capacity ranging from 700 to 1000 gallons per minute.





WELL DRILLING PROGRAM IN VIETNAM MAY 1957 THROUGH JUNE 1961 TOTAL 894 WELLS

894 the total number of wells completed since the inception of the program. Records of underground formations encountered during the well drilling process are compiled as an aid to future well drilling activities and to provide valuable geological data to other governmental departments. Training of well drilling personnel continues to improve performance and techniques and will provide for the gradual expansion of drilling operations.

Preliminary surveys of fifty municipal water systems, conducted under USOM contract by the Hydrotechnic Corporation of New York, were completed and submitted to the Government of Vietnam. Steps are now being taken to engage a firm to prepare the final specifications required to institute the recommended improvements. Although the USOM will provide certain assistance, it will be necessary to establish the municipal systems on a sound financial basis that will provide for repayment from water revenues. It is hoped that four of these municipal systems will be improved during the coming year, and the rate should increase to ten annually with subsequent assistance from United States contract personnel.

Final plans for the overall rehabilitation, improvement and expansion of the Saigon-Cholon Water System were begun in May 1961 by the Hydrotechnic Corporation, working under contract with the Vietnamese Government. The project's estimated foreign exchange requirements of 17.5 million dollars will be financed through the Development Loan Fund and repaid from water sales revenues. Local currency expenses equal to 8.5 million dollars will be borne by the Government of Vietnam. The basic features of this project had been envisaged by Vietnamese engineers for many years, and it has now been brought to the implementation stage following a preliminary engineering survey, conducted by the Hydrotechnic Corporation under contract with the ICA, and subsequent approval of the findings by engineers employed by the Development Loan Fund.

ELECTRIC POWER

Just as the new Republic of Vietnam was largely devoid of industrial development in 1955, so its total electric-power generating capacity was less than 100,000 kilowatts and its annual per capita consumption of energy was only seventeen kilowatts, a trifling figure. The growing demand for electric power generation, transmission and distribution facilities engendered by industrial growth and by the desire of the populace for improved living conditions is being met.

Decentralization of electric generating capacity was of immediate and continuing importance since about 80% of the country's meager capacity was located in the Saigon-Cholon area. To aid in the alleviation of this situation, USOM has obtained for Vietnam a number of small diesel electric generating units to provide electrification to outlying areas and 49 additional units now are being procured for this purpose. Three larger units totalling 6,250 kilowatts also have been installed — two to supplement the growing demands of the Saigon area, and one to provide additional capacity to Dalat, 200 kilometers northeast of the capital.

Major electric power installations to be constructed include a 33,000 kilowatt thermal plant, which is being financed through the Development Loan Fund, to service the Saigon-Cholon area. This project includes a high tension transmission ring around the Saigon-Cholon area and will also entail improvements in the area's power distribution system. Under a reparations agreement with Vietnam, Japan has begun the construction of the first part of the Da-Nhim hydro-electric project which also will provide 80,000 kilowatts of additional capacity for the Saigon area. Engineering and design work are scheduled to begin shortly on the Drayling hydro-electric project to provide an additional capacity of 4,000 kilowatts to the Ban-Me-Thuot area 350 kilometers northeast of Saigon.

Assistance in the administration of Vietnam's electric power complex is being provided under contract with Howell and Co. of Washington, D.C., which is providing guidance in the formulation of accounting procedures and in the establishment of a central electric power authority. USOM negotiations are also underway to enlist the services of two French-speaking electrical engineers to train Vietnamese personnel in electric utility operations and to assist the Office of National Distribution of Electric Energy in setting up its overall operations.

In addition to providing assistance in all phases of electric power development and improvement, USOM is sending seven Vietnamese engineering school graduates to the United States for a year or more of supplementary training in order to prepare them for participation in the projects now underway. More local graduates will follow in the future in order to render Vietnam self-sufficient in the operation of its electric utilities.

TELECOMMUNICATIONS

Lack of an efficient telecommunications network is a major deterrent to the economic prosperity and cohesion of the various provinces of Vietnam. Recognizing the significance of this deficiency, the Government of Vietnam entered into an agreement with the USOM to implement the planning and budgeting for an extensive telecommunications system.

In 1959, under contract with the USOM, Television Associates of Indiana, Inc., working closely with the Vietnamese Post Telephone and Telegraph, began the detailed planning to establish a microwave and VHF (very high frequency) radio toll system, and to rehabilitate and greatly expand the country's inadequate local telephone system.

Nationwide microwave and VHF sites were tentatively chosen by the contractor engineers through the use of a unique aerial radar terrain-profiling system. These sites were later verified by ground inspections and radio propagation checks. Design and specifications for these toll system sites will soon be completed and the equipment will be ordered in the near future.

The present local telephone system for South Vietnam consists of less than 9,000 telephone lines, of which approximately 7,000 main lines are located in Saigon and Cholon and 1,500 in twenty provincial locations. Provincial equipment consists largely of obsolete manual switchboards and poor quality associated plants which greatly limit the reliability of their communications with each other and with Saigon.

Twenty-one towns have now been surveyed, their requirements established and estimates of the subscriber demands completed. Rehabilitation of the existing outside plants, consisting of the cables and telephone conduits and manhole facilities, and replacement of the open-wire lines with rural distribution wire or aerial cables, is now underway. Subscribers benefitting from this work have already remarked about the improved quality of voice transmission.

The proposed twenty-one provincial dial central offices have been engineered, procurement of the automatic equipment has been initiated, and preliminary building drawings have been completed. Approximately one million dollars worth of outside plant construction materials, which have already been ordered and are now being received, includes five heavy line construction trucks, ten installation trucks, 5,000 new telephones, telephone cable and various tools, equipment and supplies. Fifty new gasoline-driven water pumps, a contribution from United States Government surplus materials, will facilitate the construction, rehabilitation, and maintenance of the underground conduit and manhole systems.

To provide the personnel necessary for the operation and maintenance of the completed system, a modern school building, equipped with electronic training laboratories, is being designed and constructed. Sixty students already have completed classroom training under American instructors who are now providing them, with special on-the-job training in the latest telephony construction and maintenance

Heavy line construction trucks for the installation and maintenance of a modern telecommunications network.

Students pay close attention as an American instructor shows them how to "wipe" solder to make a waterproof covering for a spliced cable.

A line construction class learns to lash telephone cables together with a "spinner".

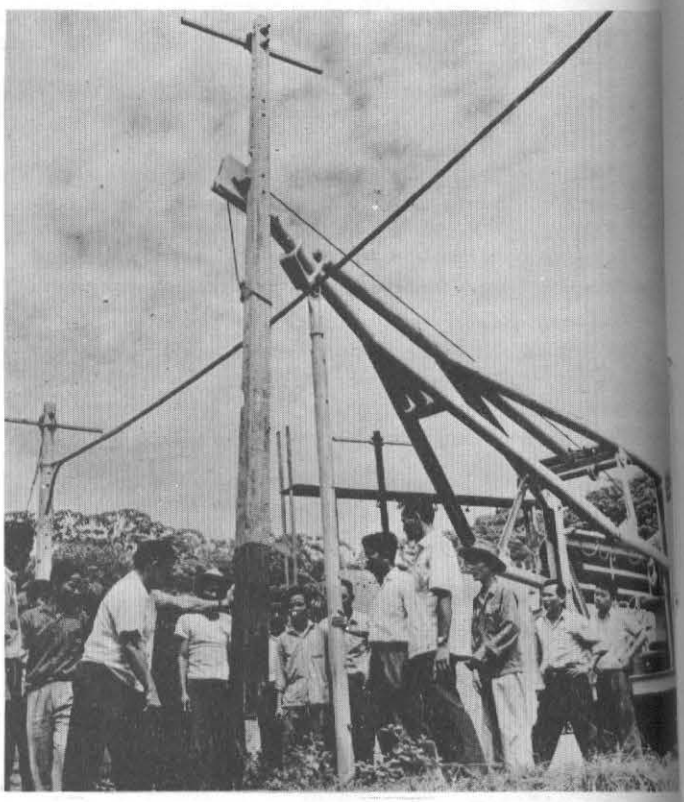
procedures. This group is now working on the rehabilitation and expansion of outside plant facilities in Hue. Since 1959, each year six participants also have been sent to the United States for a wide range of telecommunications training.

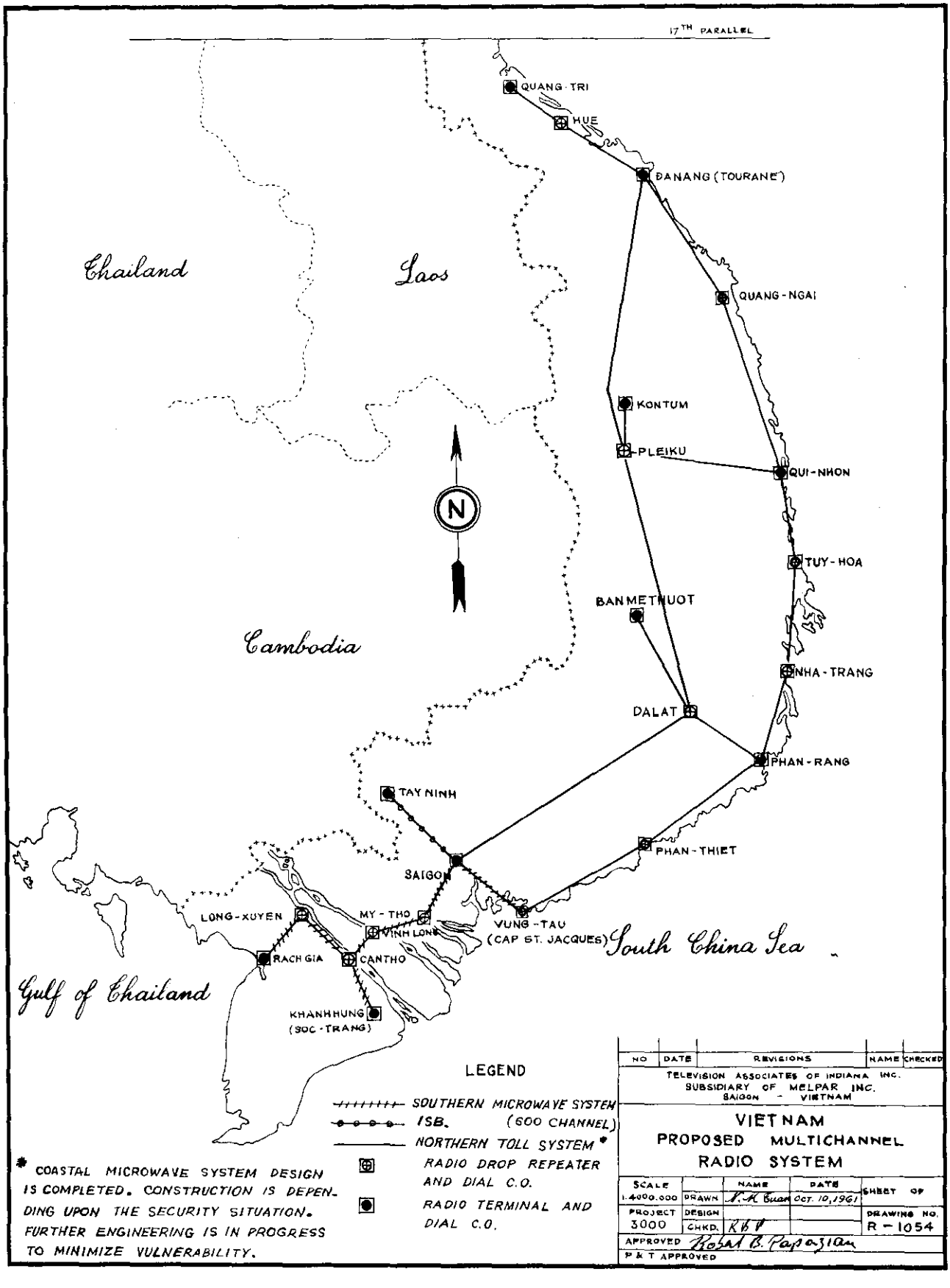
In addition to the development of the country's internal communications system, which will provide for the increased subscriber demand that will accompany commercial growth, engineering studies are underway to provide for more reliable international telephone and telegraph facilities. Specifications have been completed and a contract is about to be negotiated for the installation of new communication circuits between Saigon and Bangkok.

When completed, the overall telecommunications system will effectively link the capital with every section of the country and with the entire world.

Cable forming and lacing techniques are learned in classrooms prior to on the job training throughout Vietnam.

A practical demonstration shows how easily telephone poles may be pulled or planted by using the hydraulic derrick of a new line construction truck.




17TH PARALLEL
QUANG-TRI
HUE
DANANG (TOURANE)
QUANG-NGAI
KONTUM
PLEIKU
QUI-NHON
TUY-HOA
BANMETHUOT
NHA-TRANG
DALAT
PHAN-RANG
PHAN-THIET
TAY NINH
SAIGON
VUNG-TAU
(CAP ST. JACQUES)
MY-THO
VINH LONG
LONG-XUYEN
RACH GIA
CANTHO
KHANHHUNG
(SOC-TRANG)
Thailand
Laos
Cambodia
South China Sea
Gulf of Thailand
N
LEGEND
SOUTHERN MICROWAVE SYSTEM
ISB. (600 CHANNEL)
NORTHERN TOLL SYSTEM *
RADIO DROP REPEATER AND DIAL C.O.
RADIO TERMINAL AND DIAL C.O.
* COASTAL MICROWAVE SYSTEM DESIGN IS COMPLETED. CONSTRUCTION IS DEPENDING UPON THE SECURITY SITUATION. FURTHER ENGINEERING IS IN PROGRESS TO MINIMIZE VULNERABILITY.
NO | DATE | REVISIONS | NAME CHECKED
TELEVISION ASSOCIATES OF INDIANA INC.
SUBSIDIARY OF MELPAR INC.
SAIGON - VIETNAM
VIETNAM
PROPOSED MULTICHANNEL
RADIO SYSTEM
SCALE 1:4000.000
DRAWN T.A. Euan OCT. 10, 1961
PROJECT 3000
DESIGN
CHKD. K.B.V
APPROVED Robert B. Papazian
P & T APPROVED
SHEET OF
DRAWING NO. R-1054

A district health worker in Binh-Thuan province instructs village children in proper dental care.

HEALTH AND SANITATION

An extensive effort to raise the health standards of the people of Vietnam is receiving USOM support in the form of four projects devised to help fill the nation's basic need for adequate prophylactic and therapeutic services. Two of these projects are long-range efforts aimed at the improvement of basic education for professional personnel. Another is meeting immediate requirements through the up-grading of existing personnel and the development of an extensive program to serve the rural population. The fourth is an all-out attack on malaria, Vietnam's worst communicable disease. Education of the public in proper sanitation is one of the highest priority functions of the United States aid program since diseases spread by inadequate sanitation are so very prevalent.

Unfortunately, the highly beneficial work of all projects operating outside of Saigon is being greatly hindered by terrorist activities of the Communist Viet-Cong. During the past year, hundreds of village health stations have been burned or pillaged, more than a dozen malaria eradication workers have been killed, and many health workers have been kidnapped, harassed and brainwashed.

MEDICAL EDUCATION

A great many more doctors are needed to meet Vietnam's requirements in the field of preventive medicine. Before the partition of Vietnam in 1954, only fifteen physicians were graduated annually from the medical school in Hanoi to serve the

25,000,000 people throughout the Associated States of Indochina. In 1956, the new Republic of Vietnam had only 500 physicians to meet the medical needs of its 13,000,000 people and over half of these were in the armed forces while most of the remaining ones were located in urban centers.

The medical education project is helping to alleviate this situation by contributing to the construction of a medical school and a teaching hospital, by improvement of the medical teaching staff, and by aiding in the development of a Department of Preventive Medicine.

In March 1961, a team from Smith, Hinchman and Grylls Associates Inc. of Detroit arrived in Vietnam and collaborated with a Vietnamese architectural firm and USOM medical and architectural advisors to prepare the schematic design for a 500-bed hospital and to make preliminary drawings of a basic science building for the medical center. The final drawings and specifications for the medical school are being prepared in Detroit and should be completed early next year. Construction will begin shortly thereafter and the center is scheduled for completion in time for the 1964 school year. The plans include laboratories for all of the basic medical sciences, a dental clinic, four large classrooms, an extensive library, and a cafeteria. The laboratories and classrooms are designed to accommodate 200 medical and 50 dental students per class. The 500-bed teaching

Laboratory class at the National School of Medical Biology.

Model of the proposed medical school (right) and teaching hospital (left).

hospital is an integral part of the goal to provide Vietnam with 200 qualified medical graduates every year. Students entering the new basic science facilities in 1964 will advance to the clinical facilities in 1966.

To improve the medical teaching staff, ten instructors from the Saigon Faculty of Medicine were sent to the United States for further study in 1960 and eight more are going during 1961.

Education within the medical school has been expanded by the USOM medical education advisor's development of a new curriculum in Public Health and Preventive Medicine which he has taught during the past year. Plans have also been formulated to develop a permanent preventive medicine section, complete with laboratory facilities, within the medical school.

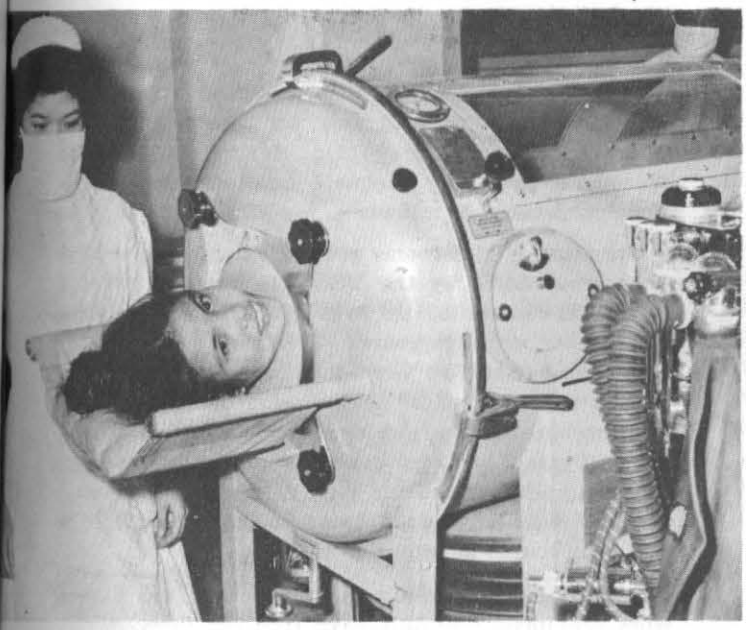
HEALTH SERVICES DEVELOPMENT

The health services development project was organized in 1957 to consolidate a number of smaller projects into a single program with the overall objective of gradually developing a permanent and comprehensive public health program in Vietnam. Its major activity consists in assisting the countrywide Rural Health Program, a separate administrative unit within the Department of Health, to meet the need for health services to reduce the incidence of preventable disease outside the urban population centers. This program is augmenting other health improvement activities by providing a trained corps of subprofessional personnel who, with effective supervision, can fill the immediate and pressing requirements for health workers in outlying districts.

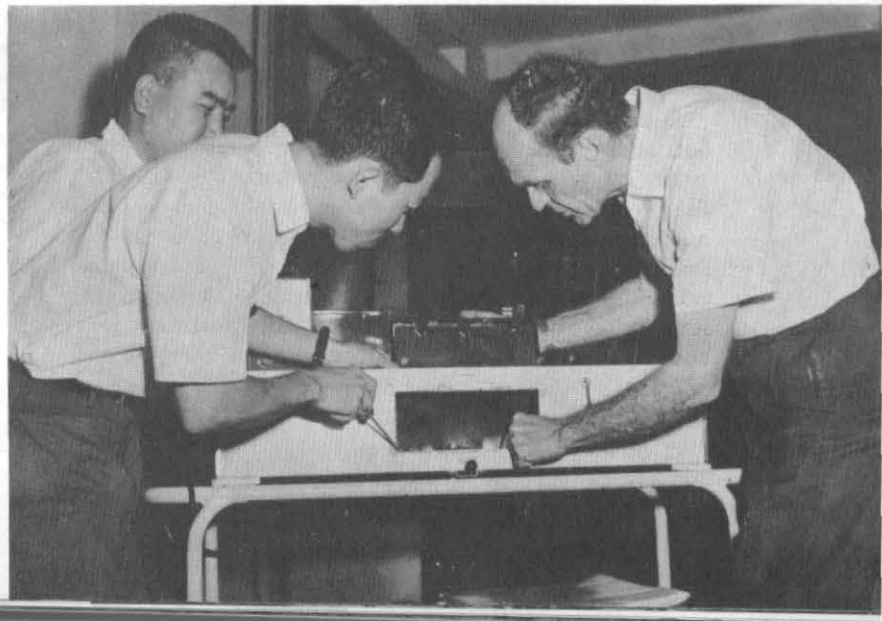
A district health worker acquaints an elementary class with good sanitary practices.

Sanitary agent informs clinic patients about how to prevent disease.

A complete operating room setup being assigned to the Quang-Long Provincial Hospital in An-Xuyen.



This iron lung at Saigon's Hospital Populaire is the first one to be placed in operation in Vietnam.



USOM bospital equipment maintenance advisor gives instruction for the repair of an incubator.

Health services at the district level traditionally have been provided by one or two nurses and one or two midwives. To each of these existing teams, the Rural Health Program is adding three district health workers and a sanitary agent. District health workers usually are male nurses who have received six months of nursing training and an additional two-month course in public health. These technicians supervise the activities of village health workers, educate the people in the prevention of disease, give immunizations, and arrange for medical or nursing care when required. Sanitary agents receive six months of special training and then go to work in the districts to improve sanitation of village markets, restaurants, schools, health centers, privies, and public and private water supplies. During 1961, training of sixty district health workers brought the total in field service to 472 and the education of eighteen sanitary agents raised to 118 the number now engaged in district health programs. Forty additional sanitary agents are now undergoing training. This year also saw the completion of the first of twenty-two district health centers to be built throughout the country.

The education of the public is being augmented by six mobile audio-visual units which were purchased and assigned to work in rural areas. The projectionist-driver is trained in the operation and maintenance of the equipment and in the repair of the vehicle itself. More than fifty different posters and pamphlets also have been published and are being distributed.

The Rural Health Program has been supported by the USOM's annual purchase of $ 500,000 worth of medicines and supplies for distribution to the people through 3,300 village health stations. In 1961, the Vietnamese Government began contributing to these purchases and will assume an increasing proportion of the expense in each ensuing year.

Since the idea of public health technicians was new to Vietnam, the USOM undertook to pay the salaries of district health workers, sanitary agents and health educators until their value could be demonstrated. By 1961, all of these salaries had been assumed by either the national or provincial government.

A large amount of medical equipment, generators and audio-visual units have been procured over the years by the Vietnamese Government, the USOM, the World Health Organization and other groups, but many of these machines have remained inoperative for long periods of time due to the lack of a repair capability. To fill this need, two trainees have been sent to the United States to study the maintenance and repair of hospital equipment and the services of an American mechanical expert have been procured to train hospital personnel throughout the country in the care and maintenance of their equipment.

During the past year, the extensive overseas training phase of this project has sent eighteen participants to the United States for study in medical specialties, nursing, hospital administration, pharmacology and statistical operations. Extensions for continued study abroad were also granted to a physician, a dentist and six nurses.

NURSING EDUCATION

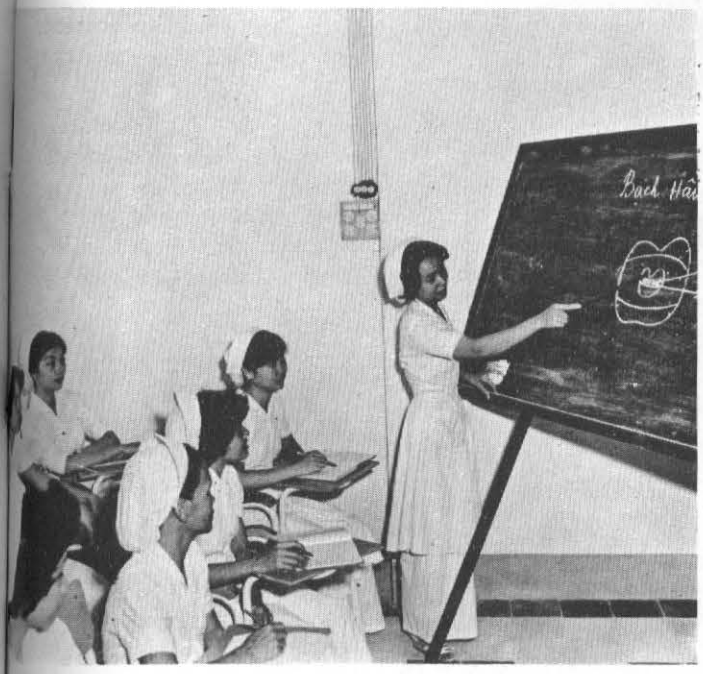
A project to improve nursing and allied education was inaugurated in 1951 with the arrival of one advisor under the American Aid Program. Today, five USOM nursing advisors are contributing toward the accelerated development of a trained corps of professional and auxiliary nursing personnel.

The program's emphasis is being directed principally toward improving the inadequate and poorly organized training programs for professional and practical nurses. The World Health Organization already is providing adequate assistance to a well-developed corps of midwives.

Dormitories, classrooms and patient care units have been constructed by the USOM in the two nursing education centers located in Hue and Saigon. In 1957, the basic nursing course of these schools was lengthened from two years to three and the first 120 fully qualified professional nurses from this revised and strengthened curriculum were graduated during the past year. The assistant or practical nurse program, which graduates about eighty persons annually, recently was lengthened from an eight-month to a full year course of intensive training.

During the past few years more than 450 nurses from provincial hospitals have received three-month refresher courses in Hue, Saigon and Can-Tho. Since most of the eligible area nurses have completed this training, in early 1961 the course was discontinued in the first two locations. USOM nursing advisors, accompanied by their Vietnamese counterparts, are beginning a series of hospital tours to provide nursing staffs with classroom training, ward demonstrations and individual assistance. Fourteen hospitals have been chosen for the installation of demonstration wards, and seminars conducted in Saigon and Da-Nang have prepared nurses for the safe and effective utilization of the equipment to be installed.

The participant training phase of the nursing project has been expanded to provide for sending ten young women to the United States for the complete col-



In-service training class at Thu-Dau-Mot Hospital in Binh-Duong province.

Nursing students at work in the Pediatric Service at the Hue School of Nursing.

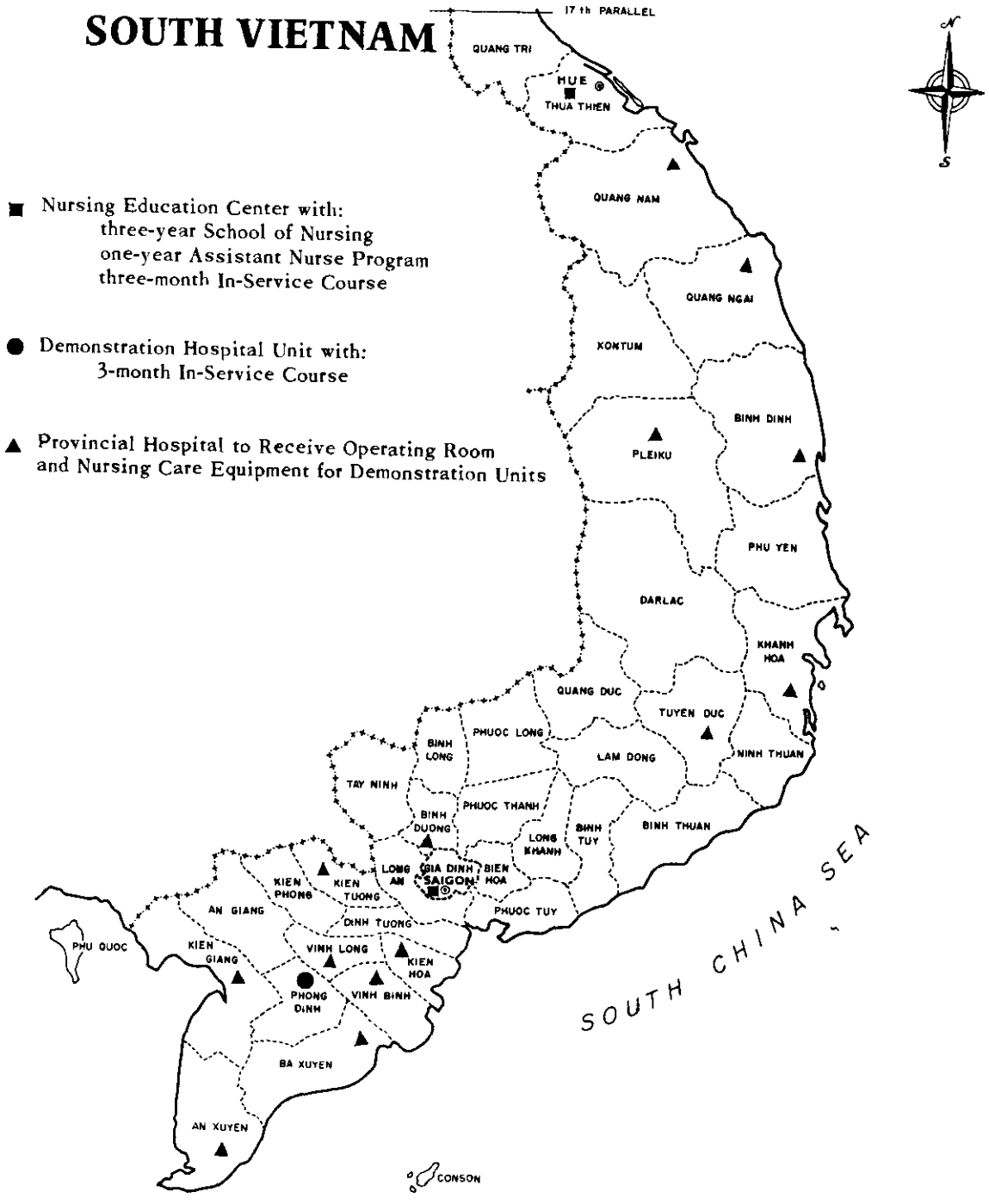
legiate nursing program during each of the next five years. Upon their return, it is hoped that this group will provide the basis for the development of nursing as a mature and honored profession.

A total of eighteen nurses and six doctors recently completed observation tours in such countries as Taiwan, Japan, Thailand, India, Iran and Lebanon where, in the company of a nursing advisor and an interpreter, they observed nursing education, services and organization. Since their return, this group has offered many excellent suggestions for improvement of the program within Vietnam.

Nursing education advisor discusses the curriculum with the staff of the Saigon School of Nursing.

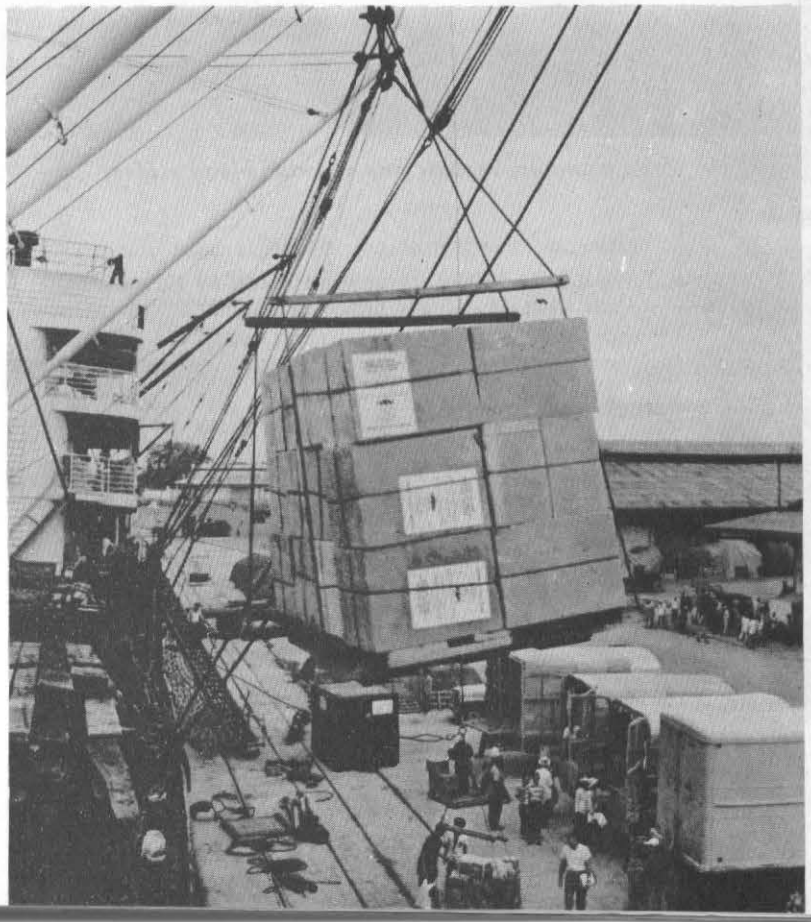
A class of student nurse assistants practice bandaging at the Hue School of Nursing.

LOCATION OF NURSING PROJECT ACTIVITIES



Rural householder greets a malaria eradication spray team.

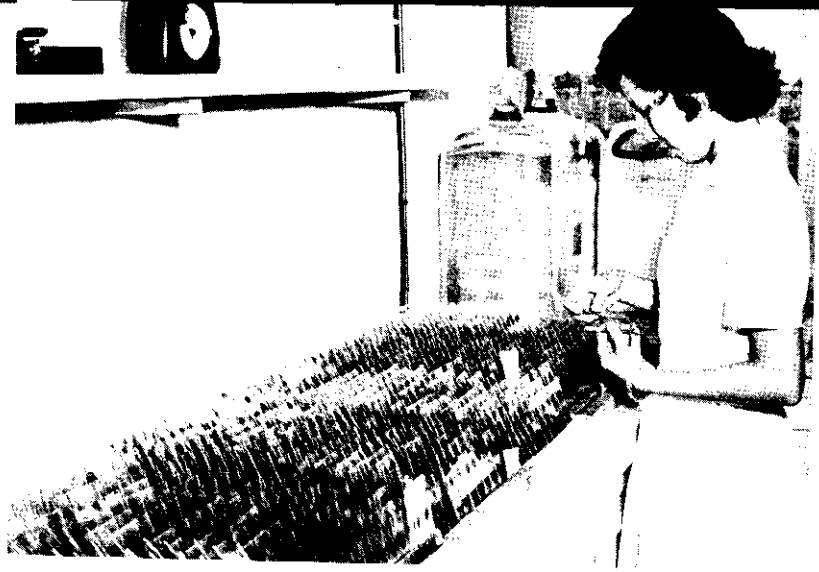
DDT powder for use in the malaria eradication program is unloaded at the port of Saigon.



MALARIA ERADICATION

The objective of the malaria eradication program is to eliminate malaria from Vietnam by 1965 as part of a world-wide effort to free mankind from the ravages of this disease. Toward this end, the USOM has provided seven advisors in such fields as epidemiology, parasitology and hematology, who are contributing to the efficient and effective operation of the program.

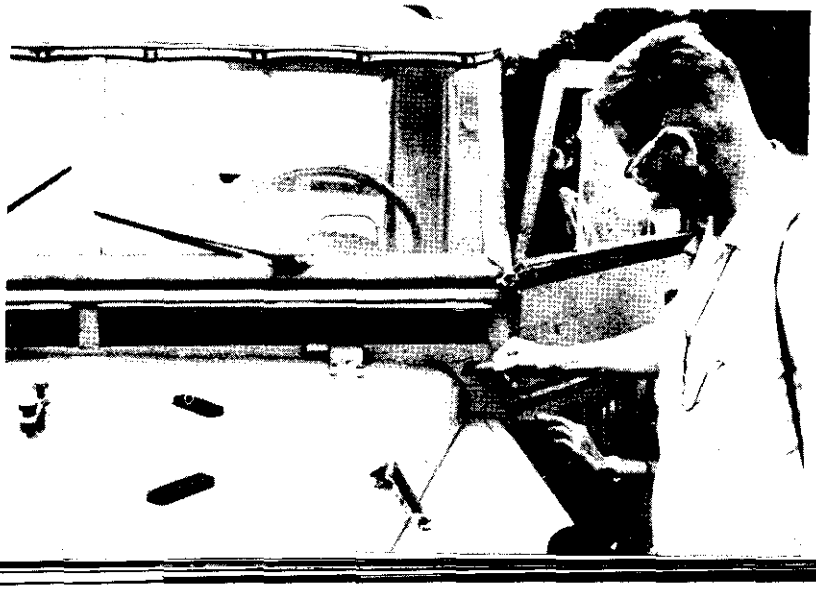
Training of Vietnamese personnel to staff the program has been one of the USOM's most important contributions. Public Health Division technicians have organized and taught thirteen different training courses for hundreds of supervisors, health educators, laboratory technicians, blood and mosquito collectors, mechanics and drivers. Beginning in 1958, the project has grown to include more than 2,500 skilled Vietnamese workers and over 1,000 vehicles for mobile land and water operations. Training of malaria workers is a continuing process and, during the past year, 194 technicians were trained in field operations, health education and epidemiology.



Blood slides are stained preparatory to microscopic examination for malaria parasites.

Laboratory technicians examine blood slides.

Malaria advisor inspects vehicle raked by Communist Viet Cong machine gun fire.

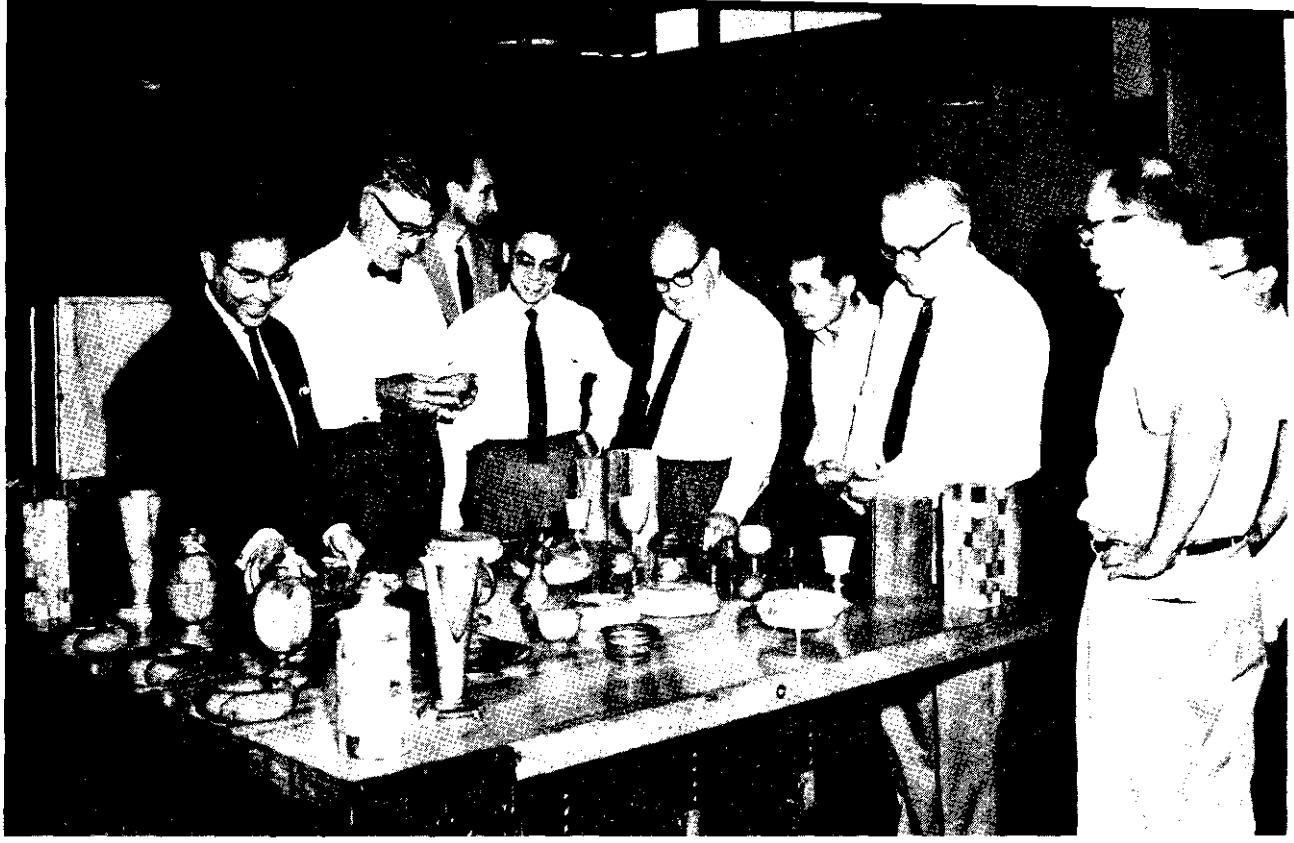


The countrywide eradication program is divided into six operational zones, each staffed with the required specialists and equipped with a small laboratory for examining blood slides. Spray operations launched in 1959 have provided almost total DDT applications throughout the six zones. To date, more than 1,300,000 dwellings have received over 5,000,000 sprayings which have provided protection from the ravages of malaria to nearly 6,000,000 persons.

Epidemiological activities designed to determine the effectiveness of DDT sprayings in halting the transmission of malaria from mosquitoes to man have been accelerated substantially during the past year. During the first six months of 1961, approximately 355,000 blood slides were taken and examined to obtain an accurate picture of the effectiveness of DDT application. Mosquito collectors capture mosquitoes and gather larvae to study their role in the transmission of malaria. Knowledge of the types of mosquitoes responsible for spreading malaria, where they rest and breed, and when they feed is essential to planning the operational phases of the program.

Although DDT-resistant mosquitoes have not been encountered, some resistance to spray operations has been found among the uninformed rural people themselves. To meet this problem, a health education program was launched in January 1961 with the training by USOM advisors of seven Vietnamese technicians in the techniques of health education. Equipped with mobile audio-visual units, these health educators now are carrying the story of malaria eradication to the furthest corners of Vietnam.

The effect of the program on the incidence of malaria already has been dramatic. In some areas the rate has dropped from 100 % infection to less than 10 % while in other areas the rate has been reduced to zero. As the rate drops, treatment of existing cases with anti-malaria drugs becomes increasingly important and the project receives cooperation from basic health facilities throughout the country to insure the prompt detection and treatment of all remaining cases of malaria. It is far too soon, however, to claim complete success for this program. Some years will elapse before it can be stated that malaria in South Vietnam has been completely eradicated — and these will be years of hard, intensive work.



Vietnamese and United States governmental officials inspect student projects at the woodworking shop of Phu-Tho Trade School.

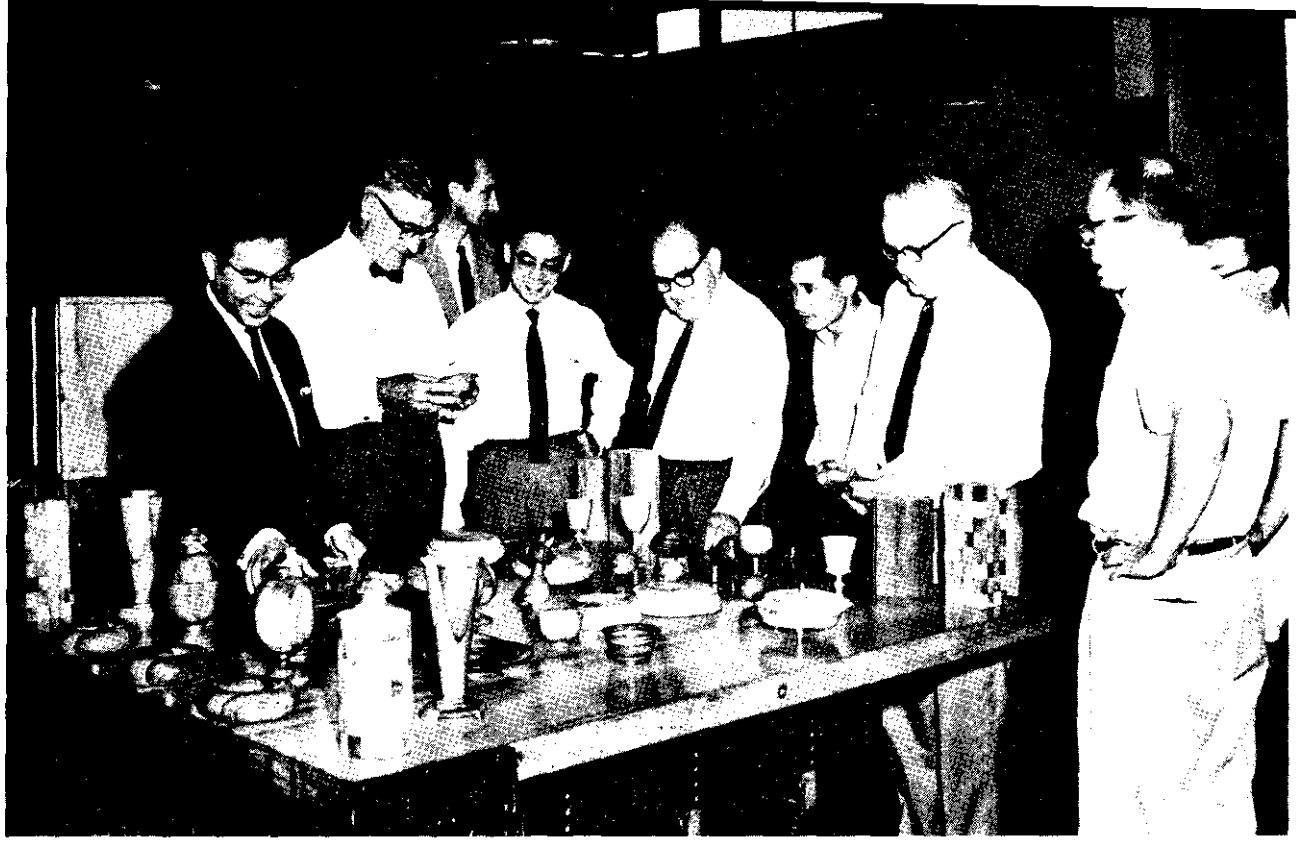
EDUCATION

In 1955, Vietnam's deficiency of trained personnel in all fields of public and private endeavor was so acute that responsible observers predicted that the war-ravaged Republic could neither survive Communist encroachment nor achieve political and economic stability. Realizing that a nation develops and prospers only as the majority of its people become educated, the Government of Vietnam enlisted the full-scale assistance of the USOM for a comprehensive program of educational improvement and expansion.

Although American Aid had provided some assistance to smaller, very specific educational projects since 1951, it was not until Vietnam's 1955 request that a broad program of advisory services and financial assistance was inaugurated.

The results of the intensive educational expansion activities conducted by the Government of Vietnam during the past five years can readily be seen in the following statistical comparison :

Students	*1955-56*	*1960-61*
Elementary (public and private)	602,000	1,300,000
Secondary (public and private	53,000	170,000
Normal	500	1,300
Technical Vocational	2,900	4,900
University	2,900	11,500



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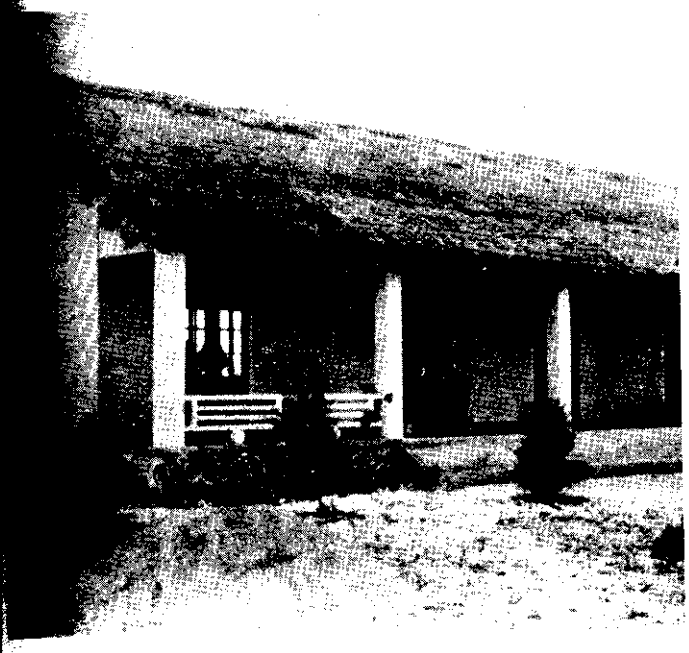
Teachers		
Elementary (public and private)	12,000	24,000
Secondary (public and private)	2,100	5,500
Classrooms		
Elementary (public and private)	13,000	28,000
Secondary (public and private)	1,100	3,300

The USOM is proud to have had some association with this great effort.

ELEMENTARY EDUCATION

Vietnam is assuming an ever larger portion of the costs of elementary school construction. Whereas the USOM paid all the costs for 1,045 elementary classrooms constructed from the program's 1952 inception

Beginning the study of hygiene with the newly published health series.



New schools are needed so badly that they must be occupied prior to completion. The thatch roof will be replaced by fibrous concrete.

through 1956, under the self-help concept initiated in 1957 the villages are furnishing half of the construction costs in most cases. Villages in depressed areas and those established under the Government of Vietnam's Land Development Program are still receiving greater assistance dependent upon their individual needs.

By June 30, a total of 3,896 additional classrooms had been planned and 3,176 were completed and in use. During fiscal year 1961, work was completed on 494 classrooms and an additional 506 were under construction.

According to records compiled by the Vietnamese Department of National Education, there are approximately 1,800,000 children of elementary school age in Vietnam, of whom about 1,300,000 are now attending school. Therefore, there are still 500,000 children who are not in school, an appreciable reduction from the former level due primarily to the elementary school construction program, but still an unfortunately large portion of the school age population. About 5,000 additional classrooms will be required to accommodate them. It is hoped that these classrooms soon can be built in order to achieve the target of a seat in school for every child of school age.

SECONDARY EDUCATION

The USOM's participation in the betterment of Vietnam's system of secondary education began in fiscal year 1956 with the construction of 104 classrooms. The following year the program was expanded to include local and overseas teacher training in order to upgrade the quality of instruction, the construction and equipping of adequate science laboratories, and the introduction of new and improved teaching materials.

Public secondary school facilities have been increased from 29 schools, 429 classrooms and 20,999 students during the 1954-55 school year to 82 schools, 1,314 classrooms and 73,701 pupils during the 1960-61 school year. Despite this appreciable growth, present facilities will only accommodate about 20 % of those who desire a public secondary education and the existing classroom enrollment is so heavy that many schools have been forced to establish shifts in order to service their inordinately large student bodies.

To date, 151 of 250 proposed classrooms to be constructed with USOM assistance have been completed. Of a projected total of 38 physics, chemistry and biology laboratories, 25 have been completed and equipped. As a result, science courses which were formerly taught through blackboard illustrations and a limited number of teacher demonstrations now include facilities for individual pupil experimentation.

Modern secondary school science laboratories improve the learning process.

SECONDARY SCHOOL SCIENCE LABORATORY CONSTRUCTION PROGRAM 1954 THROUGH 1961

GRAND TOTAL 25 SCIENCE LABORATORIES

A class in electricity receives a demonstration of new science laboratory equipment.

In addition to the problem of inadequate classroom facilities, Vietnam has been faced with an equally serious lack of a qualified teaching staff. This problem is being met in large part by an extensive program of overseas teacher training, by observation tours for school supervisors and administrators, and by locally conducted in-service workshops. Since the inception of this system of workshops in 1957, more than 3,000 student weeks of training have been provided in the fields of Science, English, and Vietnamese Language and Social Studies.

INSTRUCTIONAL MATERIALS

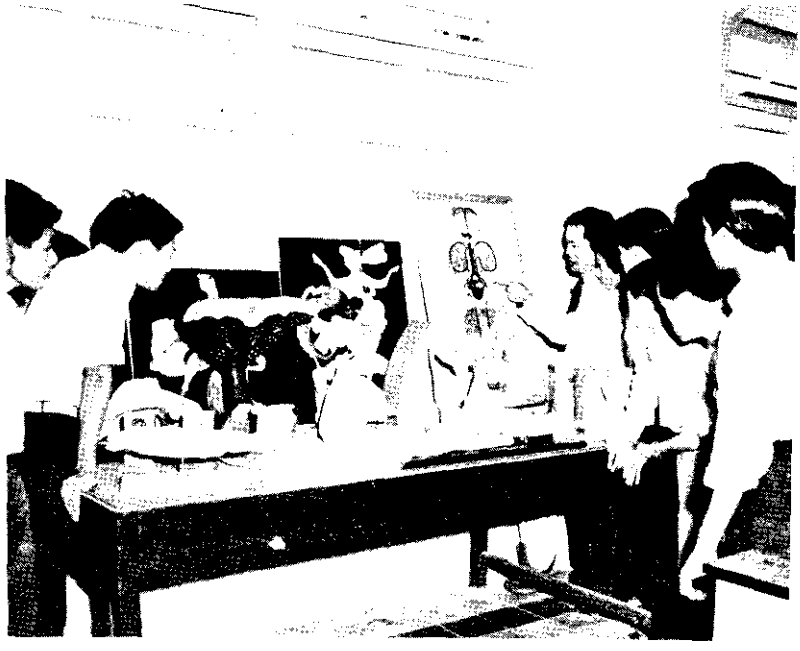
The effectiveness of the Vietnamese public school system has been greatly hampered by the overwhelming inadequacy of instructional materials. USOM's instructional material development project was inaugurated to aid in filling this tremendous gap.

The Textbook and Publication Service was established with USOM assistance within Vietnam's Department of National Education in 1957. During its four years of operation it has printed almost 2.5 million textbooks for elementary, secondary and university use. This represents 118 titles including the *Koho-Vietnamese Dictionary*, *National History of Vietnam*, *Plants of South Vietnam*, *Oceanography*, and the *Elementary School Journal*. Present emphasis is upon the publication of two five-book elementary series on Health and Civics, of which more than 370,000 copies have already been printed. The first book of an English Language series also is on the press and elementary textbooks on arithmetic, handicrafts and child care now are being written. In order to meet the increasing workload, the Service's staff is being increased and there are plans for the expansion of its physical plant.

Curriculum libraries have been set up in the Textbook and Publication Service and in the USOM Education Division. These libraries have been extensively furnished with American books and materials. Additional American textbooks and reference matter — maps, globes, films, encyclopedia and dictionaries — have been furnished to the country's secondary schools.

The recent arrival of an American specialist in audio-visual education marked the beginning of an extensive effort to initiate a country-wide audio-visual educational program. This program envisions the construction and equipping of audio-visual centers in Saigon and five regional locations. These centers will be staffed with specialists developed through overseas training and local in-service workshops.

Three-dimensional instructional materials developed for teaching science.



TECHNICAL-VOCATIONAL EDUCATION

Vietnam, like all developing nations, has an ever increasing need for skilled technicians, office workers, and almost every type of vocationally trained personnel. Economic development plans for industrial expansion, agricultural modernization, and commercial growth, as well as for the maintenance and effective use of equipment and facilities already on hand, call for a steadily increasing supply of skilled labor.

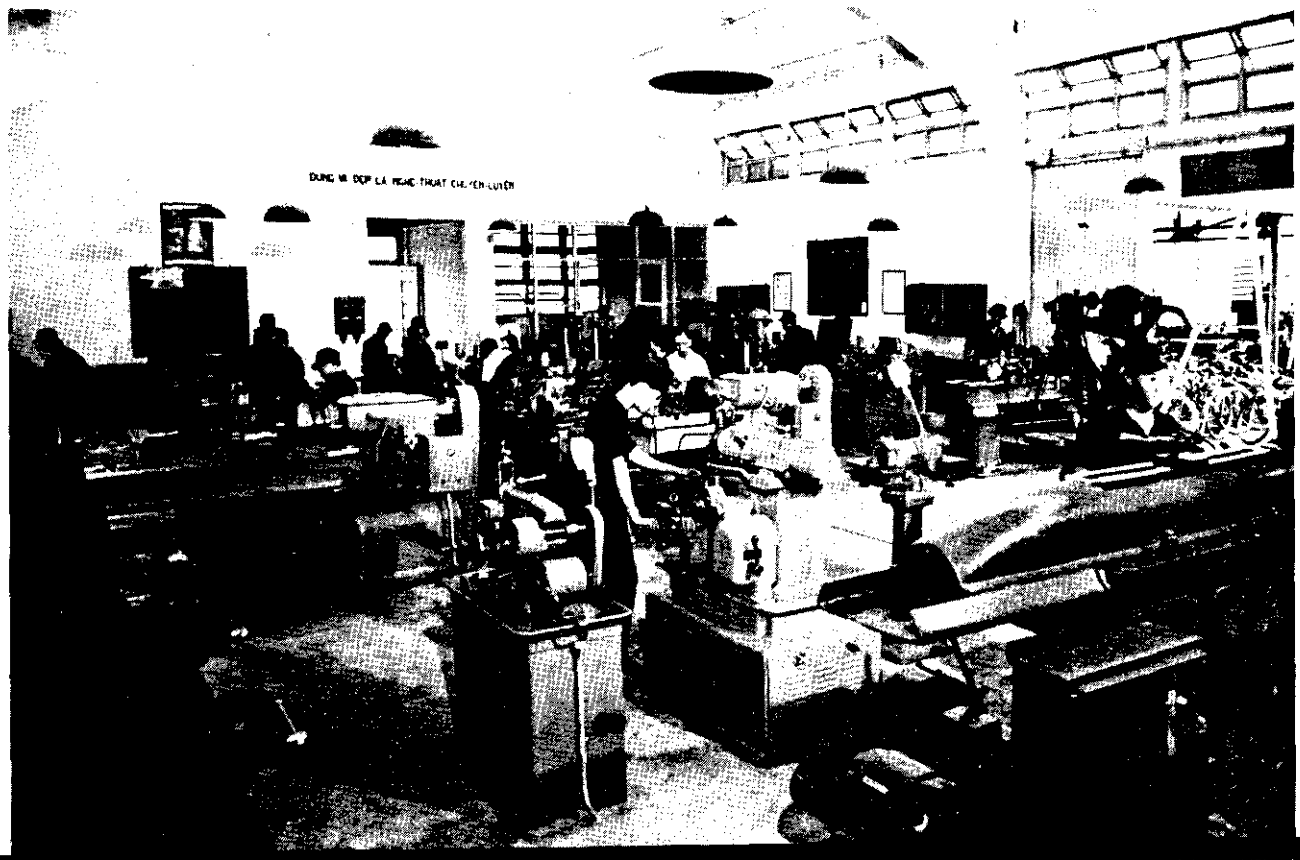
In 1952, the United States aid program began to provide some assistance to the technical-vocational schools of Vietnam. Items such as hand tools and shop machinery were financed by the United States and were procured and distributed by the French. General commodity assistance was continued after Vietnam attained independence and by 1956 practically all of the existing institutions had received some limited form of material assistance from the United States.

Assistance to technical-vocational education became more highly organized in 1957 with the arrival of a USOM specialist to coordinate this phase of the program. To meet Vietnam's expanding needs in the area of technical-vocational education, the USOM agreed to aid the Vietnamese Directorate of Technical Education in the establishment of four new schools, each with a capacity of 800 students, to provide training in trade and industrial education, home economics, and business and commercial education. By June 1961, a total of 67 participants had been sent to the United States for training in these fields to become the teachers and administrators of the new polytechnic schools upon their return. An additional 22 participant candidates are now engaged in processing preparatory to their departure to the United States.

During the past year, considerable attention was given to developing the instructional program of the Phu-Tho Polytechnic School in Saigon which is now in operation. With the aid of the USOM trade and industrial education advisor, the twelve participants already returned from the United States, who comprise the school's faculty, proceeded with the organization of courses, the preparation of instructional materials, and the inauguration of training activities. Special attention was given to the development of high level skills in the shop courses and gratifying results in the form of numerous worthwhile projects have been obtained. A team of trade training specialists from Southern Illinois University will arrive soon to aid further in the school's effective development and to establish a teacher training department so that vocational teachers can be trained in Vietnam.

Construction of the Vinh-Long Polytechnic School also was completed in April 1961. Much of the machinery and equipment has already been installed

The machine shop at Phu-Tho Trade School.



First class of the new Electrical Engineering College of the National Technical Center at Phu-Tho.

and classes will begin shortly. Construction of the other two schools at Qui-Nhon and Tourane is well underway and both should be completed by December. During the coming year, additional construction at the Phu-Tho school will provide sufficient space so that the home economics and business education departments can be brought into operation.

Expansion of facilities and the installation of simple tools and machines in the near future will enable the existing Ban-Me-Thuot Trade School to provide improved instruction to a larger enrollment from the highland tribes. Upon completion of the four new polytechnic schools, the Vietnamese Directorate of Technical Education and the USOM will direct their joint effort toward the reorganization, expansion and improvement of other existing trade schools.

TEACHER TRAINING AND HIGHER EDUCATION

Elementary school teachers are educated at the National Normal School in Saigon, constructed with American Aid in 1955, and in eight provincial centers. A new ICA-financed rural normal school, which will be capable of graduating 200 teachers per year when in full operation, will open at Vinh-Long this fall. A similar institution is under construction at Qui-Nhon and a new elementary demonstration school has been completed at the National Normal School. A team of consultants from Southern Illinois University, working under contract with the USOM, is furnishing guidance to the pre-service and in-service elementary teacher education programs.

Secondary teachers are prepared in the Faculties of Pedagogy of the University of Saigon and the University of Hue. Present facilities of these two faculties are seriously strained since their combined enrollment has increased from 101 in 1955 to 855 at the present time. To aid in relieving this overcrowding, plans are now being drawn up for a new Saigon Faculty of Pedagogy and a secondary demonstration school which will be financed by the USOM. These new facilities also will provide for the development of improved programs in industrial arts, home economics and commercial education.

Significant amounts of equipment, materials, modern textbooks and reference works have been provided for the Faculties of Science, Letters, and Pedagogy at the Universities of Saigon and Hue. Although some construction and supply of materials is still being undertaken, the major emphasis has shifted to advisory services to provide better-trained teachers,

Prospective English teachers undergo intensive training at the Faculty of Pedagogy at the University of Saigon.

supervisors and administrative personnel; institutional development to establish curricula which will reflect both the academic and practical needs of the populace; and the preparation of adequate quantities of modern instructional materials.

In addition to the workshops for secondary teachers which were already mentioned, separate workshops have been conducted in Saigon and key provincial cities during the past five summer vacations for elementary teachers of home economics, agricultural education, and physical education. Workshops also have been held for principals and supervisors, for normal school and demonstration school teachers and administrators, and for provincial education officers. USOM education advisors from Vietnam and neighboring countries have contributed extensively to the success of these workshops.

At the elementary school workshops the stress has been on modern methods and philosophy, the development of instructional pamphlets, and the introduction of inexpensive classroom aids which can be made from locally available materials. Demonstration and normal school workshops have concentrated on the upgrading of practice teaching and the improvement of methods classes.

The excellent results accruing from these summer workshops will be further enhanced by the establishment in the near future of a year-round, in-service teacher training center to develop leaders who, in turn, can teach others.

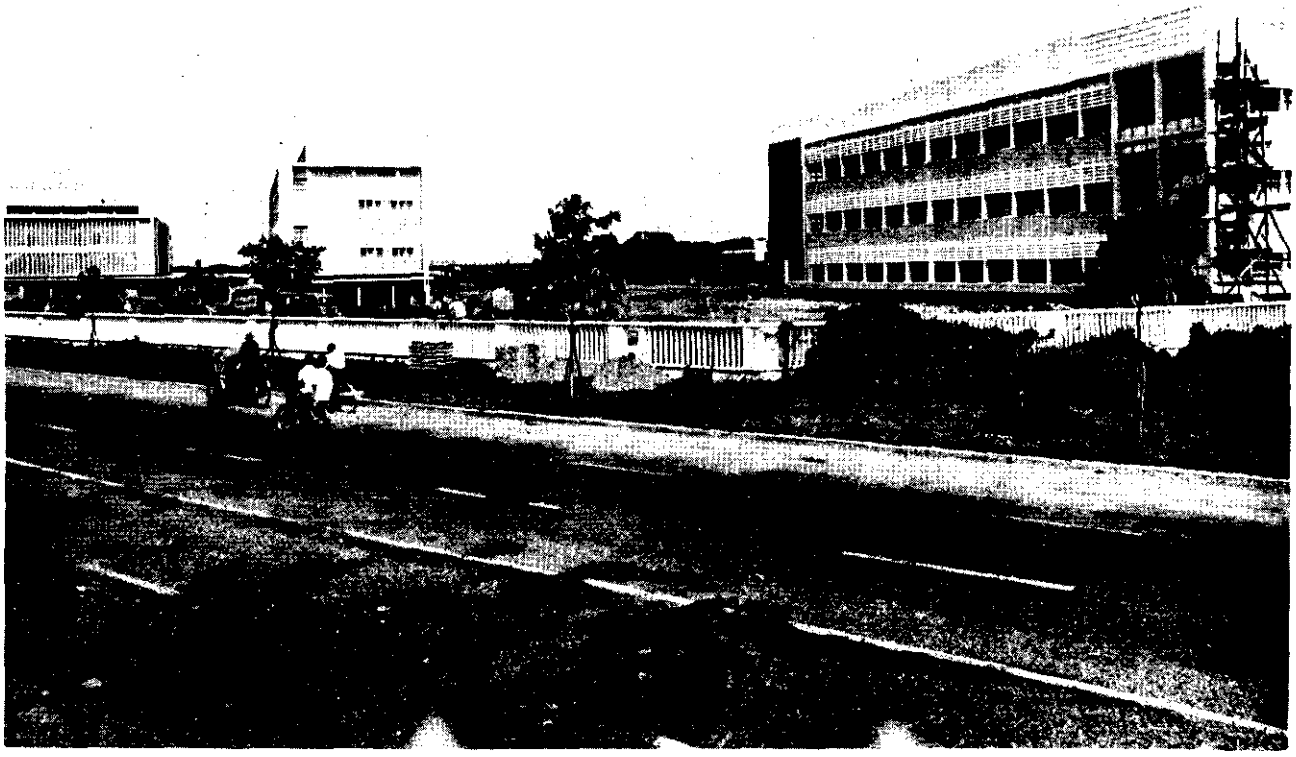
With the aid of the Southern Illinois University contract group, the elementary teacher preparation program in Vietnam's normal schools will be extended from one year to two or three years as the beginning of an effort to raise them from secondary schools to collegiate level institutions. During the coming year, the USOM will provide assistance in the remodeling of buildings on the old Imperial Palace site at Hue which will subsequently house higher institutions of music and art. The expansion of physical facilities for the education of teachers of the mountain tribes also is scheduled for increased emphasis.

ENGLISH LANGUAGE TRAINING

Improvement in courses of English Language training is the objective of a Southeast Asian regional project being conducted under a USOM contract by the University of Michigan. In Vietnam, the group is working toward the establishment of adequate academic courses in the English section of existing teacher training institutions. Materials are being prepared for teacher training and an extensive research project in comparative Vietnamese and English pitch contrasts is providing the basis for improvements in teaching English intonation.

The project staff, along with the USOM advisors, Colombo Plan and British Council experts, and locally recruited Americans, conducts English courses at the Faculty of Pedagogy in the University of Saigon and also conducts extensive language testing of candidates for training abroad. All of the aforementioned served as advisors and instructors to the English Teachers' Workshop held in Saigon in June 1961.

The English language laboratory in operation.



New National Institute of Administration facilities for the in-service training of civil service personnel.

PUBLIC ADMINISTRATION

A diverse program to improve techniques for conducting the nation's administrative operations has been developed jointly by the Government of Vietnam and the USOM. Projects have been implemented to provide expert consulting services in various fields — banking, insurance, taxation, organization and management, statistical operations, budgeting, accounting and auditing — and to establish the in-service training necessary to develop an adequate and competent civil service.

Some of the projects have already been completed and others are curtailing their activities as desired results are largely achieved. For example, the project to develop a government supply system has recently ended as its mission of creating a reliable and efficient procurement agency has been accomplished. Likewise, the staff of the contract group providing guidance in the training of government employees has been reduced from a high point of 53 in 1957 to 7 in 1961 as many of its objectives have been achieved.

While these activities have decreased, other projects have been expanded to meet developing needs.

NATIONAL INSTITUTE OF ADMINISTRATION

The Vietnamese Government's administration is being improved continually through the cooperative efforts of the National Institute of Administration and the Michigan State University Group operating under contract with the USOM. During the past year, in-

service training for civil servants was expanded to include Basic Training Officer courses designed to develop personnel skilled in the organization and management of training activities. Concurrently, a Provincial Training Center Program has been initiated calling for the construction of fifteen new provincial training centers to supplement the six which have already been established. In addition, the NIA continues to engage actively in a wide variety of in-service training projects which include classroom instruction, advice and consultation, and development and publication of training materials.

Staff members of the MSU Group completed a comprehensive survey of NIA's organizational structure, management, administrative procedures, program activities and personnel. The NIA faculty has accepted most of the recommendations set forth in this study and has established priorities for their implementation.

The NIA is continuing its program of providing grants for participants studying toward their doctorate who subsequently become members of the NIA faculty. Eleven participants are now studying for their Ph. D.'s in the fields of economics, public administration and political science.

In the field of research, the NIA has been highly productive during the past year. Research was performed and publication was made of numerous informative articles, pamphlets and textbooks in the areas of public administration and economics. A study in depth of a Vietnamese village was completed by the MSU staff with the publication of the last of three volumes. The MSU members also have contributed a number of essays on economic development. The NIA faculty has completed an empirical study of provincial administration throughout Vietnam and the results have been released. Numerous articles on a variety of subjects have been published in scholarly journals.

As Research Documentation and Diffusion Center of the Eastern Regional Organization for Public Administration, the NIA prepared material for and participated in the annual regional conference held in December 1960. Preparation of material for the next conference, to be held in October, is now underway.

Construction of buildings on a new NIA campus is fast nearing completion. In addition to providing needed office and classroom space, the new facilities include a large library, an auditorium, and dormitories for the students.

IMPROVEMENT OF THE PUBLIC SERVICE

The primary goal of this project is to help develop the administrative and personnel management capabilities of the Vietnamese Government. The administrative management activity is authorized to be performed by several agencies, but it has yet to be adequately staffed, trained and institutionalized. In spite of such shortcomings, progress has been achieved in making key Vietnamese officials more keenly aware of the importance of the management analysis function. Organization and management training courses and a filing and records management course have been organized and given at the National Institute of Administration to middle-management and clerical-level employees, respectively.

Progress has also been made in the participant training area. Much greater use has been made of the facilities available in the Philippines, and now plans are being made to send participants to India and Australia to undertake combined academic and on-the-job training programs.

In the personnel management area, technical assistance has been provided to government civil service officials in planning and carrying out studies of existing civil service statutes and operations; in drafting new legislation and regulations designed to provide a basis for modernizing the Civil Service System; in improving operating methods and procedures; and in sending participants abroad for training in the personnel management field.

NATIONAL INSTITUTE OF STATISTICS

The establishment of a modern statistical service capable of furnishing timely, complete and accurate information on Vietnam's economic and social development is the goal of the National Institute of Statistics which, since 1956, has been receiving USOM assistance in the attainment of this objective.

The Vietnamese Government, with some aid from the USOM, built a new building for the NIS in 1960 and it was furnished with IBM tabulating equipment financed by American Aid. An American specialist also provided training in the operation of tabulating systems, in addition to consultation provided by the regular USOM statistical advisor. A four-month course for clerk-enumerators was completed in October 1960.

Plans for a Census of Commerce and Industry were drawn up and actual enumeration began in March 1961. By June the enumeration of Saigon was almost completed and the procedures for processing had been designed. This Census will be completed in the near future and the information compiled will form the basis for such useful statistical series as an index of Wholesale Prices, Index of Salaries and Wages, Index of Industrial Production, and possibly an Index

Modern tabulating equipment improves the operation of the National Institute of Statistics.

of Commercial Turnover and an Annual Survey of Commerce and Industry.

In January, the NIS began a year-long survey designed to furnish preliminary demographic data to serve as a basis for economic and social planning until such time as a General Population Census can be accomplished. The principal field operations being planned for the coming year include a Survey of Family Budgets and detailed studies of personal consumption and standards of living.

FISCAL ADMINISTRATION

With increasing economic development and its associated commercial activities, the young nation of Vietnam is faced with a growing need to establish numerous fiscal services which previously were largely nonexistent. Filling this gap requires the expansion and improvement of various instruments of central government and the origination of a vast amount of regulatory legislation.

The principal objective of activities in the field of banking is to establish a competent bank examination department. As a first step in this direction, the USOM banking advisor assisted in drafting commercial banking legislation which is now awaiting enactment. To prepare personnel for the implementation of this law, a manual of operations was prepared and classroom and on-the-job training program were initiated. Several bank examinations already have been

satisfactorily completed by these personnel and it is expected that, if the necessary legislation is promptly enacted, all banks operating in South Vietnam will have been examined by the end of 1962.

Studies of Vietnam's system of taxation have been conducted and a number of proposals for its reform have been advanced. In June 1961, a tax advisor joined the USOM staff and progress in tax reforms is expected to gain in momentum.

Insurance legislation has been drawn up with the aid of the USOM insurance advisor. Advice in various phases of insurance activities also has been provided to leading figures in the Government of Vietnam's Insurance Department. Partly under the stimulus of these activities, a new insurance company has been chartered by the Government.

The Vietnamese General Office of Budget and Foreign Aid is being helped by the USOM in a project aimed at improving governmental accounting, auditing and budgeting procedures. The utilization of modern and effective methodology, including mechanical data processing, has been gradually extended to service an ever increasing portion of the Government's obligations, receipts and expenditures. License tax rolls have been updated, plans were made for taking a census of civil servants, and accounting courses are being given in appropriate agencies.

CENTRAL PURCHASING AUTHORITY

Although no centralized governmental supply organization existed in Vietnam when it gained its freedom, the USOM anticipated such a need and was fully prepared to implement a project for training Vietnamese Government personnel in supply management techniques when the host country expressed its interest in early 1956. The goal of this project, successfully completed during the past fiscal year, was to establish an autonomous governmental procurement agency for the receipt, warehousing and distribution of project-type non-military aid items.

The Government of Vietnam purchased the warehouse property and furnished a large portion of the equipment and supplies. The USOM supply advisor provided policy counsel and guidance in organization and methods, but adaptation of operations to meet local requirements was accomplished entirely by the agency itself. Within one year after its inauguration the Central Purchasing Authority had become totally self-supporting.

When the project began, the only contracting handled by the CPA was for commodities financed under the United States aid program. As the benefits of purchasing through the CPA became more and more apparent to the Government, its services were increasingly employed for the procurement of commodities to be utilized in Government administration, Vietnam's foreign exchange being used to finance the contract costs.

Beginning without any trained Government employees, the project has created an agency with know-how, energy and initiative which has demonstrated its ability to cope independently with all of the important problems of supply management. Since the inception of the project, the CPA has successfully conducted procurement in excess of 43 million dollars and its warehousing service already has handled more than 325,000 metric tons of commodities. The CPA is capable of independent growth commensurate with the needs of Vietnam's developing economy.

GOVERNMENT INFORMATION FACILITIES

The Vietnamese Government's efforts to inform and integrate the country's vast rural populace is aided by the USOM Communications Media Division through its assistance to the Vietnamese Department of Information and the national radio broadcasting network.

Considerable progress was made during the past year in the improvement of the national radio network. The one-kilowatt transmitter of Radio Soc-Trang, 150 kilometers southwest of Saigon, now is serving the delta region on a regular broadcast schedule and will soon be replaced with a ten-kilowatt unit. A new ten-kilowatt transmitter at Ban-Me-Thuot, 350 kilometers northeast of Saigon, is operational and a regular program schedule is underway on an eight-hour-a-day basis with 60 % local language broadcasts. Excellent reception of Ban-Me-Thuot's transmissions is being encountered in Cambodia, Saigon, and even in the delta region of southern Vietnam. About 25 villages in the Ban-Me-Thuot area soon will be supplied with combination radio receivers and public address systems which will bring scheduled radio broadcasts to the Montagnard people for the first time. Plans call for the eventual installation in mountain villages of more than 100 listening centers of this type.

The installation of the Hue radio station in the north of Vietnam is well underway with a twenty-kilowatt medium and shortwave transmitter on hand. The antennae for this site now are being erected. A fifty-kilowatt transmitter for Saigon also has arrived and should soon be installed to supplement Vietnam's facilities at the capital.

Expansion of the National Motion Picture Film Production Center has been completed except for the

Mobile units such as this disseminate information throughout the less accessible areas of Vietnam.

installation of air conditioning equipment which will be accomplished shortly. At present, thirty-two sixteen millimeter films are in some stage of production or distribution. With the arrival in the near future of additional equipment purchased by the Government of Vietnam to be installed in the expanded facilities, the Film Center will be able to produce about forty-five short subjects during the coming year on 35 millimeter film.

The National Printing Plant continues to produce at an average rate of six to seven million units of printed matter monthly. Preparations are being made for the installation of two linotype machines specifically designed for use with the Vietnamese language.

Each day Vietnam Press receives about 100,000 words of international news which is made available to the local press and official Vietnamese, United States and foreign agencies. Five teletype printers were recently received and installed and soon will be ready to provide additional copy to those interested in incoming news.

Poor security conditions have handicapped the presentation of films and radio programs by mobile units but fixed community listening centers remain a potent force for the dissemination of information in Vietnam.

Motion picture presentations by mobile teams draw large, attentive crowds in the rural areas.

PUBLIC SAFETY

The existence of adequate public safety services is inherent in the social progress of a country, and the establishment and maintenance of law and order are basic to the development of a sound economic program. USOM's Public Safety Division was created in 1959 in order to provide effective assistance in the solution of the special problems confronting Vietnam. At its inception, the Public Safety Division was appointed the tasks of strengthening the Civil Guard — at that time a 54,000 man paramilitary force established for purposes of rural security — and of improving the operations of the Sûreté, the country's investigative organization, and the uniformed police of the various municipalities.

Physical accomplishments contributing toward the improvement of public safety services include the construction of a modern crime laboratory, an interrogation center and a communications building, as well as the renovation of the criminal records center. Communications and transportation equipment delivered by USOM has greatly increased the efficiency of the Vietnamese public safety forces.

Fiscal year 1961 witnessed considerable progress in the development of the National Civil Police Telecommunication Service. Radio teletype stations have

Public safety advisor demonstrates a hold in a police judo class.

been installed and are now in operation at three of five proposed regional centers. Provincial radio stations are operating at 38 sites and about 80% of the subordinate district stations are presently in service. This Civil Police radio network is being utilized effectively.

Prior to the Presidential election in April 1961, at the request of the Vietnamese Department of Defense, the Public Safety Division developed and presented an intensive course in the control of riots and civil disturbances to 200 selected Vietnamese instructors from the Army, Marines, Municipal Police, Civil Guard, Gendarmerie, Civil Police and Presidential Guard.

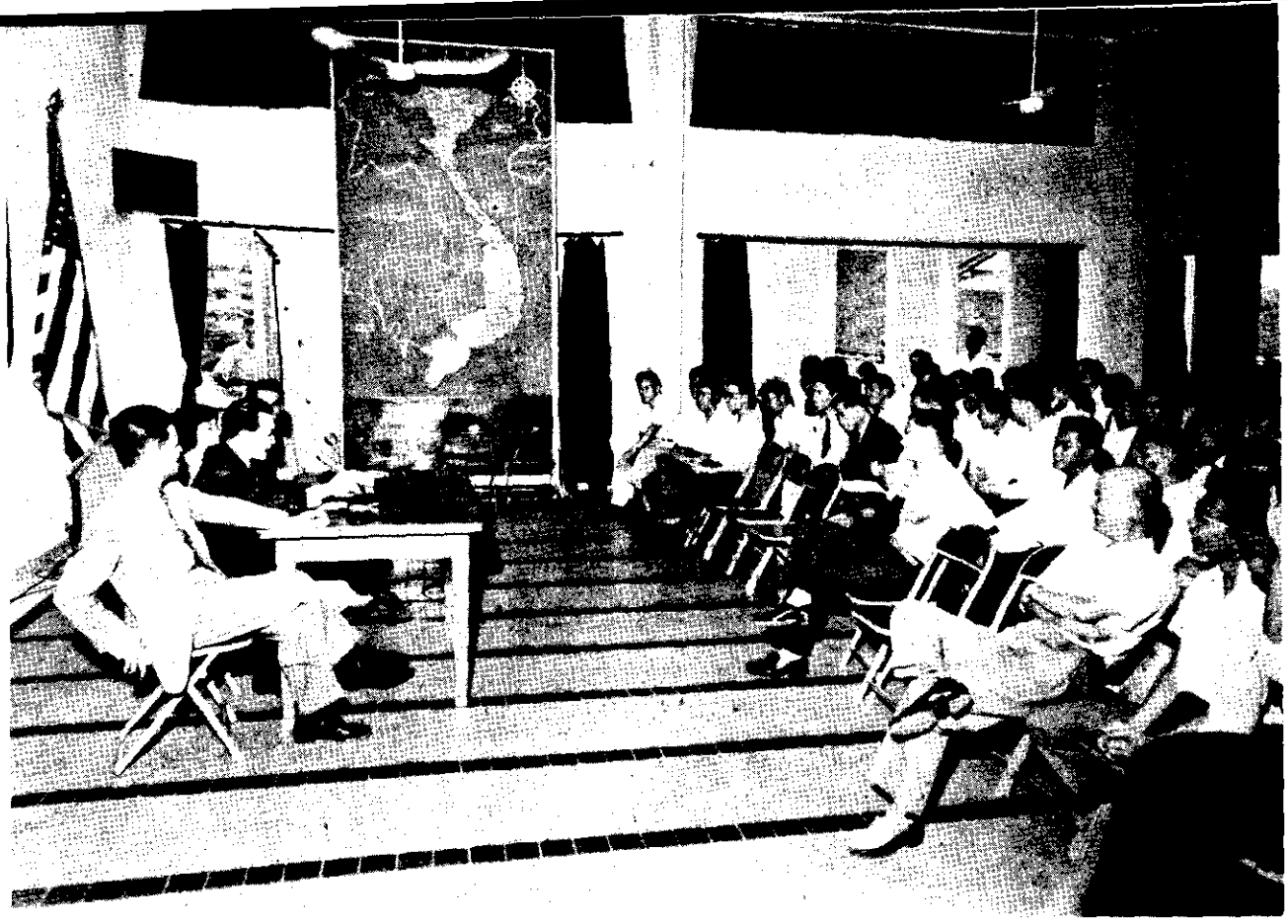
The Public Safety Division has been active at training centers serving Civil Guard and Self Defense Corps personnel. In addition to local training of this type, 218 participants have been sent abroad for intensive training in effective police procedures.

It is expected that the coming year will see more progress in a number of activities now underway: revision of the criminal records system; organization and development of a Highway Patrol Service and a Harbor Police Service; construction of additional training centers and modernization of existing facilities; equipping of rehabilitation centers; and progress with the National ID Card Program which will provide a foundation for internal security by furnishing rapid, positive identification.

All of these activities by the USOM Public Safety Division are directed toward the establishment of required facilities and agencies; the revision of existing administrative organizations and regulations in order to provide precise delineation of authority and responsibility; and the development of sound administrative practices, effective planning and reporting, and improved inspection and audit services. In turn, these accomplishments will provide the people of Vietnam with a foundation upon which other social and economic improvements may be based.

Code operators take their training at the combined telecommunications school.

Students of the Civil Guard's judicial police school receive instruction in riot control formations from USOM public safety advisors.



A panel composed of returnees from study in the United States calls upon personnel experiences to answer the questions of candidates preparing for departure.

TRAINING ABROAD

Upon its emergence as an autonomous nation, Vietnam was faced with a critical need for trained personnel in every conceivable field which contributes to a country's social and economic growth. Although an extensive mutual effort to improve and expand educational facilities was early inaugurated by Vietnam and the United States, many years will be required before it can furnish adequate training in most academic fields.

As a result of this situation, in 1954 the USOM initiated a broad and varied long-range program of overseas « participant » training in order to help meet Vietnam's immediate and continuing needs for qualified personnel. Under the limited American aid program to Indochina which had existed from 1950 until this time, 66 Vietnamese had been sent abroad for training. With independence this activity gained vitally in impetus. The new program consists of an extensive academic endeavor — centered principally in the United States — supplemented by on-the-job training and observation tours conducted in the United States and selected third countries. On the whole, the program is now effectively filling a serious void in Vietnam's technical, professional and governmental skills and will very likely continue for many more years in order to provide the new techniques and modern industry necessary to greater social and economic well-being for the entire citizenry.

The unwavering cooperation of a great many individuals and organizations, both Vietnamese and American, is required for the effective selection, orientation, placement and training of participants. The need for a specific program of participant training is usually brought to the attention of the USOM by technicians working on related projects. Upon recommendation of the Vietnamese Government, the required number of candidates are selected. The USOM completes the preliminary review of the candidate's qualifications and upon selection, forwards his biographical data to the applicable training location, either ICA Washington or a third country USOM, for further review and placement.

Prior to his departure, the prospective trainee receives intensive English language instruction to prepare him for his overseas studies. This training is generally provided by wives of U.S. personnel under the auspices of the Vietnamese American Association, a bi-national cultural organization. The

Group of participants departs from Saigon for four years of undergraduate study in the United States.

American Women's Association, an unofficial organization, also helps to pave the way for the participant's smooth transition to a new cultural experience by organizing question-and-answer seminars, giving « typically American » dinners, and providing other information of particular use to the uninitiated voyager.

During the past fiscal year, the USOM, in cooperation with the Vietnamese American Association and the Cultural Affairs Office of the U.S. Information Service, inaugurated the first two specially-designed, semi-annual Pre-Departure Orientation Programs. These programs, which last for three days, attempt to anticipate and explain the major perplexities — cultural, geographic, and administrative — which the participant is likely to encounter. The presentation includes talks on life in the United States given by American officials and their wives, motion pictures about the United States, and panel discussions led by groups of U.S.-trained returnees.

Upon his arrival in the country of training, the participant is met and guided through the initial stages of his overseas orientation and training. Shortly after completing this initial phase he makes contact with the institution — university, business or industrial firm, or federal or state governmental agency which is making its facilities available to inspection and observation — that has been selected to provide the required training.

The overseas training period varies in length from a few weeks in a nearby third country to several months or years in the United States, depending upon the requirements of the individual case. The longer training periods in the United States generally provide some time for such extra-curricular activities as visits to points of historic and scenic interest and the opportunity for social relations with the American people. Upon completion of his training, the participant returns home to put his newly acquired knowledge to immediate use in the social or economic development of Vietnam.

The program of participant training has accelerated significantly during the past two years as a direct result of additional needs arising from Vietnam's increasing internal development. Whereas 789 participants were sent abroad during the five-year period from 1954 until July 1959, there were 413 trainees sent overseas in 1960 and 503 in 1961. Those who departed prior to 1960 have, for the most part, returned and are now utilizing their learning to improve the operation of their respective services.

Teacher trainees are beginning to return in increasing numbers to staff the schools and universities of Vietnam, technicians trained abroad are sharing their newly acquired skills with those who remained behind, and directors of services are implementing improvements as a result of information acquired during observation tours abroad.

SCHOLARSHIPS FOR LEADERSHIP

The lack of adequate opportunities for higher education in newly developing Vietnam meant that the most promising young minds in the nation had to limit their training to one of the few fields offered at the local universities or compete for one of a limited number of overseas scholarships offered by foreign governments or private organizations. A USOM project begun in 1958 attempts to aid in satisfying this general need for advanced education by providing under-graduate training in those areas which will be of maximum benefit to Vietnam — engineering, science, banking and economics.

The scholarships are primarily designed to provide a full university program leading to a bachelor's degree. A total of 60 students are now studying in the United States under this program. In addition, one has received his degree and returned to work in Vietnam and six others have advanced to graduate studies in the United States under the auspices of specific areas of the USOM participant training program. Two of these are continuing their education in the field of nuclear physics while the other four are working toward advanced degrees in economics, chemistry, botany, and veterinary medicine. The academic records of all of these students have been impressive. Several have made almost straight « A » grades and appear regularly on the deans' lists, and two of them have been admitted to membership in Phi Beta Kappa.

Of 2,293 secondary school graduates during the past year, 360 applied for the 30 scholarships offered this year. After comprehensive screening and testing, 30 students were selected to leave in the fall of 1961.

Special arrangements have been made with the Vietnamese Directorate of Plans to help each graduate, upon his return to Vietnam, to find profitable and challenging employment contributing toward the betterment of the nation.

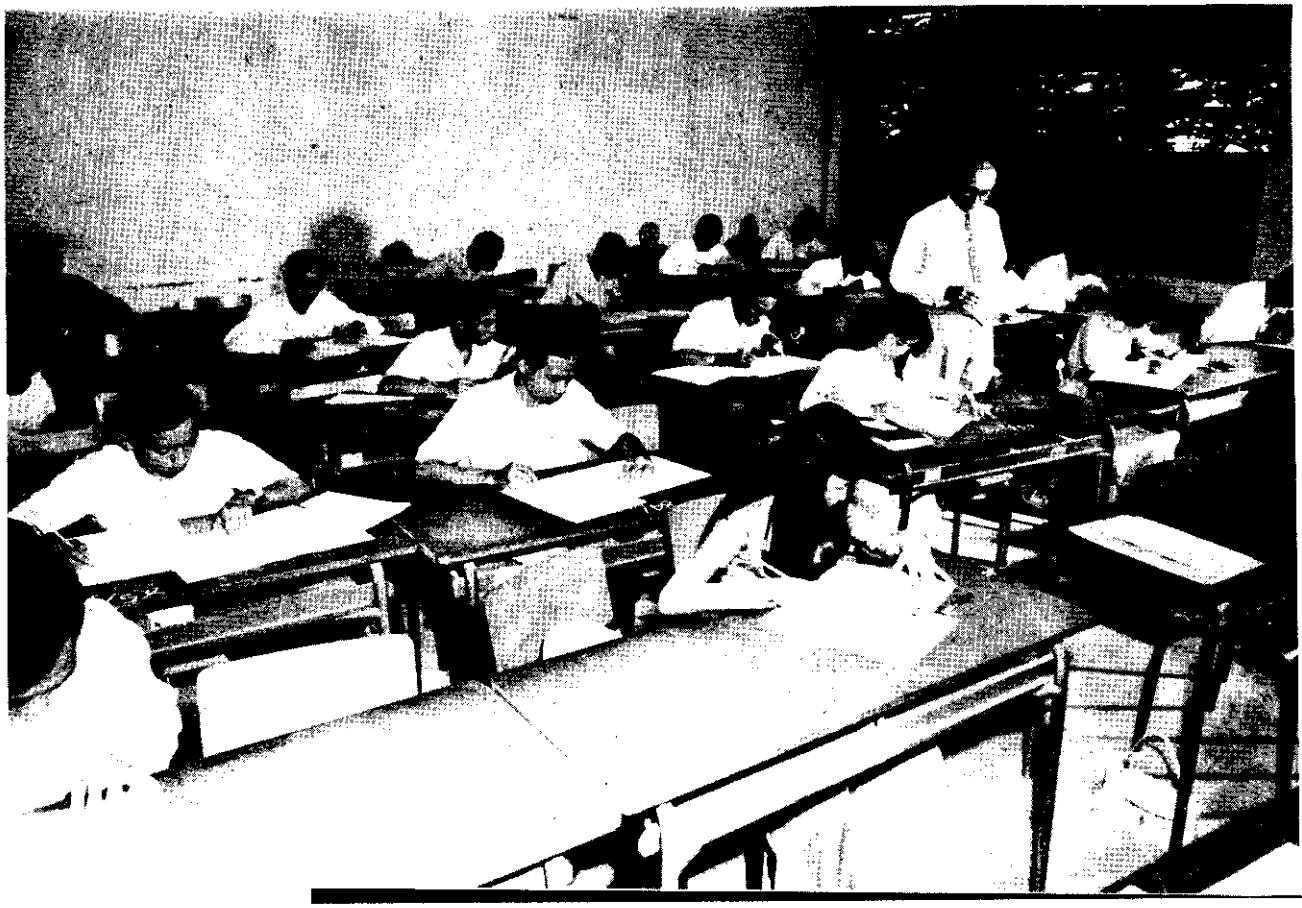
PARTICIPANT TRAINING

Number of Vietnamese Participants Sent Abroad for Training
from July 1954 through June 1961

Technical Sponsorship	To United States				To 3rd Countries				Total
	1954-59	*1960*	*1961*	*Total*	*1954-59*	*1960*	*1961*	*Total*	*US & 3rd*
Agriculture	23	32	40	95	145	35	71	251	346
Industry	4	3	3	10	4	30	34	68	78
Public Works	40	36	48	124	50	6	6	62	186
Labor	0	1	0	1	0	1	0	1	2
Public Health	36	38	31	105	83	20	57	160	265
Education	133	89	104	326	28	11	5	44	370
Public Safety	0	60	57	117	0	0	10	10	127
Public Adm.	102	12	10	124	13	8	11	32	156
Communications	24	15	2	41	4	2	0	6	47
MSU Contract (1)	67	13	2	82	33	0	1	34	116
Community Dvlpmt	0	1	0	1	0	0	0	0	1
Atomic Energy	0	0	11	11	0	0	0	0	11
TOTALS	429	300	308	1037	360	113	195	668	1705

(1) Includes police administration and various governmental activities.

USOM education advisor tests applicanrs for training under the Scholarships for Leadership Program.



Secretary of State Vu Van Mau and former Ambassador Durbrow signing a treaty of friendship and economic relations on April 3, 1961.

COMMERCE AND INDUSTRY

Vietnam has required foreign assistance since the Republic was founded in order to maintain the living standards of its people and to accumulate once more the capital required to render the nation viable. To this end, the USOM has assisted with a program of commercial imports, to provide consumer goods to tide Vietnam over its crisis, and producer goods and capital equipment to help Vietnam to regain economic independence to match her political independence.

COMMERCIAL IMPORT PROGRAM

The Commercial Import Program was inaugurated in 1955 and began its operation by providing urgently needed food, clothing, and other consumer goods to the people of Vietnam. This activity served a double purpose inasmuch as the piasters which the Vietnamese people paid for these items were siphoned into the national treasury to meet budgetary needs, thereby enabling the Government to keep afloat financially until measures could be taken to obtain funds from taxes and other usual sources of revenue. The program also brought in raw materials and equipment to assist in getting industrial activities underway so that the nation could satisfy more of its consumer goods requirements through internal production. By utilizing private businesses for the importation and distribution of commodities, the commercial aid program served as a means to enlarge and improve the functioning of private trade channels in Vietnam.

COMMERCIAL IMPORT PROGRAM
CALENDAR YEARS 1957 THROUGH 1960
(Value in thousands of dollars)

IMPORTS OF INDUSTRIAL EQUIPMENT AND MACHINERY

Items	1957	1958	1959	1960
1. Transportation vehicles	11,506	6,104	4,089	4,492
2. Industrial electrical apparatus and parts	5,241	1,884	3,169	3,439
3. Metal products and tools	4,752	1,750	1,554	1,942
4. Engines and turbines	3,668	2,996	2,345	2,036
5. Engines, chassis and parts	3,301	2,634	2,209	2,497
6. Signal, communication and distribution equipment	3,023	1,715	1,595	1,385
7. Acc'tg and bookkeeping machines	2,662	845	406	302
8. Machines and parts for textile industry	2,160	916	2,514	1,939
9. Tractors and parts	2,054	2,466	1,598	2,004
10. Construction, mining and conveying equipment	2,049	1,572	1,313	1,109
11. Scientific instruments	1,903	1,460	1,452	1,329
12. Aircraft and parts	1,714	540	0	0
13. Generators and motors	1,382	833	1,362	2,140
14. Machine tools	819	342	288	626
15. Spare parts for industry machinery	782	494	614	1,487
16. Ball and roller bearing equipment	691	231	263	627
17. Metal working machinery	689	175	220	376
18. Industrial air-conditioning and refrigerating equipment	646	238	272	227
19. Air compressors and pumps	547	113	325	766
20. Machinery for paper leather, and other industries	527	799	317	251
21. Printing machinery	356	168	134	176
22. Industrial machinery	264	385	223	309
23. Machinery for chemical industry	252	186	228	451
24. Photographic and movie equip. for comm. and indust. use	252	104	131	178
25. Belts and belting	246	129	125	289
26. Scales	246	139	53	542
27. Vessels, parts and equipment	199	820	1,293	1,102
28. Wood-working machinery	158	52	26	76
29. Railroad equipment and parts	62	199	48	89
TOTALS	52,259	30,289	28,166	32,186

IMPORTS OF RAW MATERIALS, FUELS, AND OTHER ESSENTIALS

Items	1957	1958	1959	1960
1. Structural steel and other construction material	17,145	11,012	12,271	11,417
2. Yarns for textile industry	11,015	9,898	10,981	16,585
3. Coal and fuels	10,678	9,765	9,951	7,824
4. Chemicals	10,144	4,044	4,803	4,896
5. Paper and newsprint	9,603	5,028	5,215	5,323
6. Cement and other building material	6,552	6,709	7,545	7,433
7. Pharmaceutical raw materials	5,527	2,869	8,589	10,097
8. Tobacco	4,275	2,751	3,167	2,843
9. Fertilizers and pesticides	4,264	5,015	6,085	6,472
10. Metals	4,009	2,345	2,704	2,279
11. Non-metallic minerals	2,961	1,941	1,515	1,490
12. Hides and leather	1,397	820	164	74
13. Impregnated fabrics	1,221	1,431	749	877
14. Raw jute, sacks and cord	1,248	83	54	18
15. Fats and oils	1,212	788	458	593
16. Plywood and lumber	1,071	1,375	963	840
17. Raw silk	1,105	0	0	0
18. Other textile raw materials	335	51	52	231
19. Miscellaneous	7,453	5,467	2,198	2,069
TOTALS	101,185	71,390	77,464	81,361

IMPORTS OF ALL OTHER COMMODITIES

Items	1957	1958	1959	1960
1. Textile products	42,157	34,303	23,995	8,374
2. Food products (flour, sugar, milk)	23,115	15,473	17,965	15,019
3. Pharmaceuticals	11,054	7,854	2,975	2,698
4. Tires	8,026	5,845	3,582	4,993
5. Petroleum products	6,842	6,934	8,306	8,454
6. Metal products	6,311	3,993	4,194	4,898
7. Transportation vehicles	5,793	7,840	2,935	2,694
8. Chemical products	3,382	1,250	1,919	1,455
9. Non-metallic mineral products	2,307	1,062	875	1,098
10. Electrical equipment	1,433	916	727	989
11. Books (technical, scientific, educational and religious)	1,384	1,065	1,205	1,594
12. Watch parts	1,284	0	0	0
13. Paper products	994	390	574	257
14. Office supplies	643	0	0	0
15. Miscellaneous products	1,733	1,942	795	837
TOTALS	116,498	88,867	70,047	53,360

As economic conditions improved and agricultural production was restored, limited exports were resumed and some light manufacturing was started. In response to these developments the commodity composition of the Commercial Import Program has changed so that more emphasis is given to importing industrial raw materials and capital goods. The importation of industrial equipment has increased markedly during the past year. As a result of this trend, the only significant consumer goods which were still financed under the Commercial Import Program during fiscal year 1961 were pharmaceuticals and dairy products, the latter deriving from United States agricultural abundance. Imports of these consumer commodities also are expected to decline significantly with the establishment in Vietnam of two sizeable plants for processing milk products, and of others for local processing and production of pharmaceuticals.

The Commercial Import Program is an excellent illustration of how governments can harness private enterprise to assist major political ends. Regulations of both the Vietnamese and United States Governments have enabled the very significant total of commercial aid — over one billion dollars since the program began — to serve purposes intended under

The Handicraft Sales Center in Saigon furnishes a marketing outlet for many artisans and small industrialists.

conditions that have led to a minimum of error and confusion, and with great effectiveness. This program has enabled Vietnam to stride forward with industrial development conducted by private enterprise.

PRIVATE ENTERPRISE

The few small industries which did exist in the almost exclusively agricultural economy of newly independent South Vietnam were largely confined to bottled beverages, cigarettes, home textiles, handicrafts, and rice milling. However, policies underlying the aid program have resulted in greatly accelerated industrial development and expansion, particularly during the past three years.

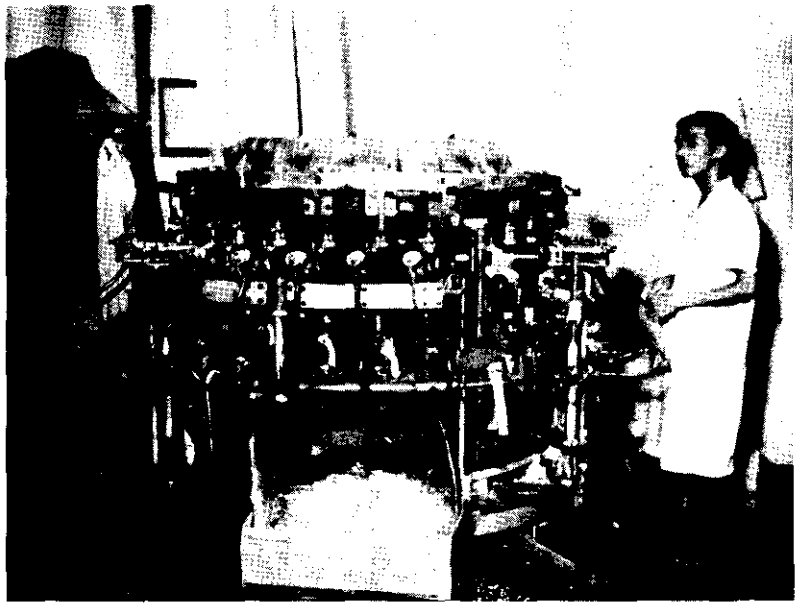
The Industrial Development Center was established in 1958 to furnish technical assistance and to provide an initial loan fund to industry. Through the commercial banks, it has made available loans totalling 300 million piasters to 28 manufacturers. These loans have resulted in the employment of 4,886 factory workers, and the annual production capacity of goods worth 1,634 million piasters, to which the value added by manufacture in Vietnam is 416 million piasters. Other industrial enterprises, not financed by the Industrial Development Center, also have benefitted from the program of commercial aid. These have the potential of producing a further 3,024 million piasters worth of goods annually as a result of U.S. assistance.

Aid to Vietnamese artisans in the various fields of handicraft production began with the establishment of the Handicraft Development Center in 1958 and the inauguration of its associated Handicraft Sales Center in August, 1959. Technical assistance to artisans and small industrialists was provided by ICA-contracted Japanese technicians and American engineers. An American design specialist from Russell Wright Associates of New York also furnished guidance in product design and quality improvement and in local and export marketing techniques.

The handicraft development program has greatly expanded both the domestic and foreign handicraft market. The Handicraft Sales Center alone has marketed 25 million piasters worth of handicraft products during its first two years of operation.

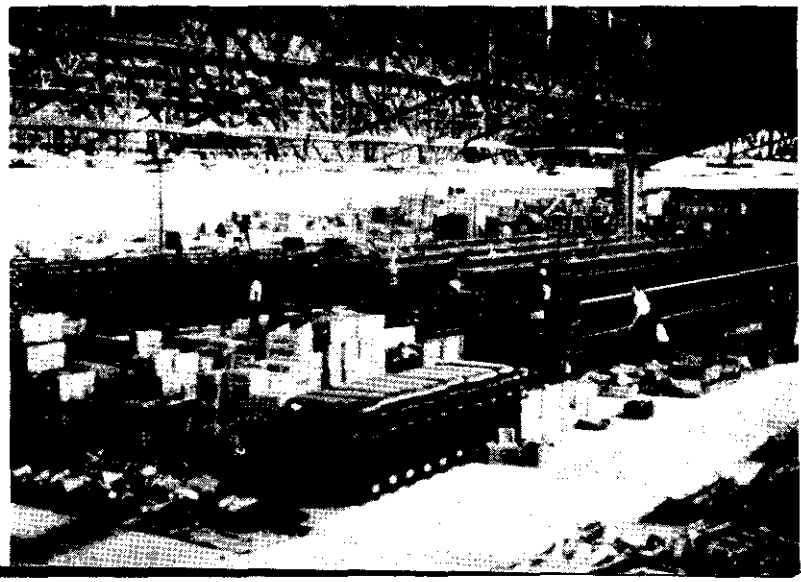
The principal industries established in Vietnam since its independence, with investments ranging from four million to 240 million piasters, are shown in the table on page 76 Dollar requirements for the purchase of machinery have been made available through pro-

Preparing leather.

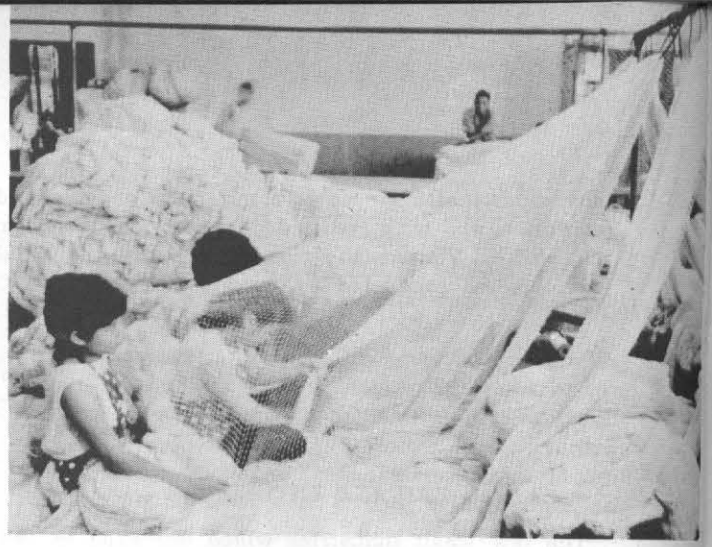


Pharmaceutical packaging.

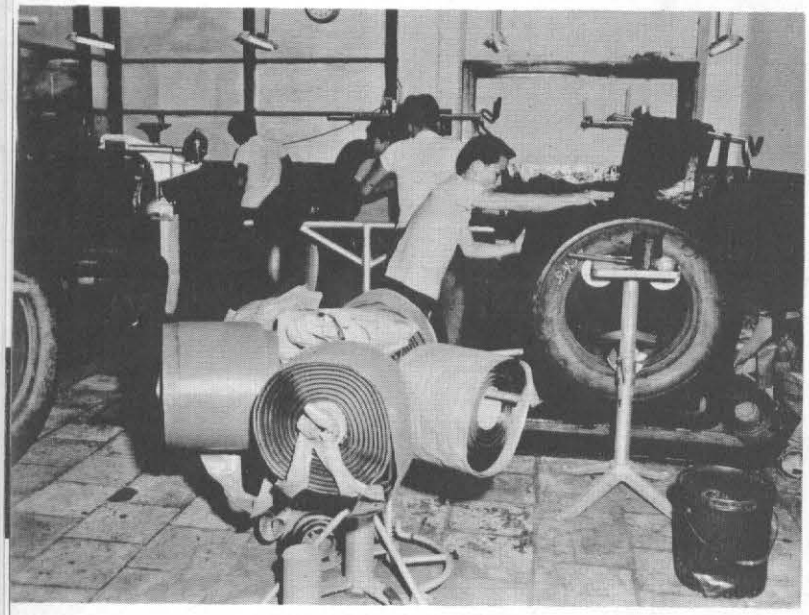
A textile factory.



The Thuy-Tinh glassplant, first major ICA-financed industry, has a manufacturing capability of 70,000 bottles per day.



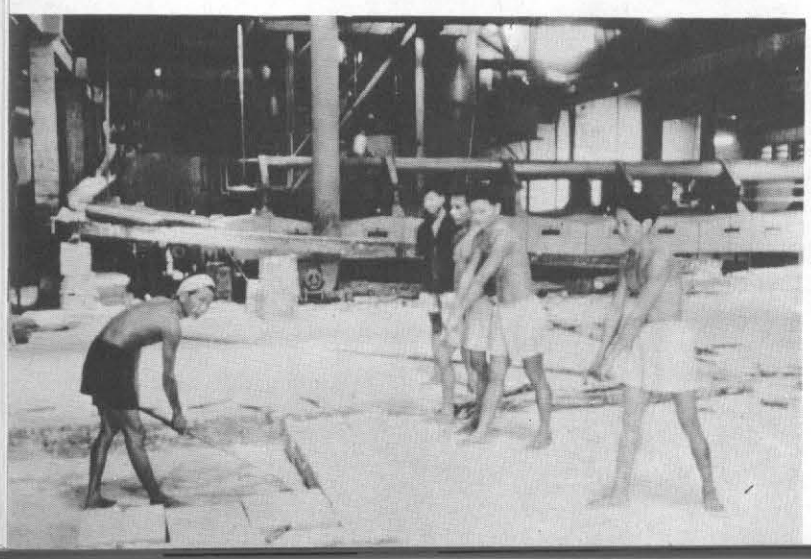
A fish net factory.



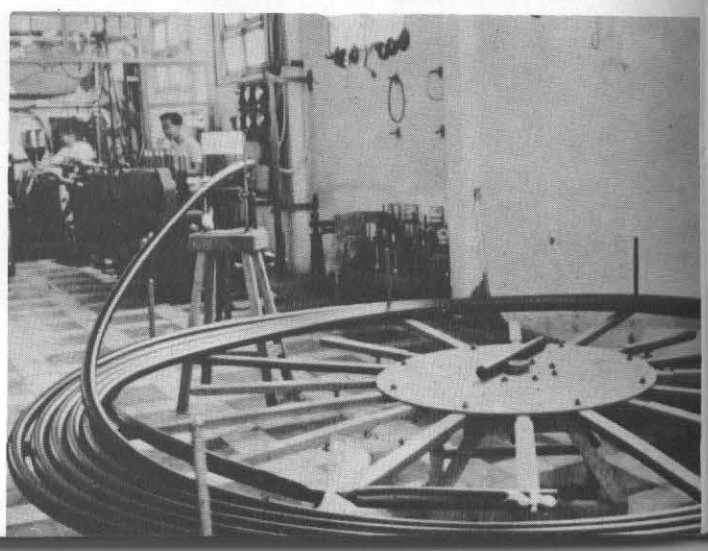
Camelback manufacturing and tire recapping plant.

Producing printed circuits for transistor radios.

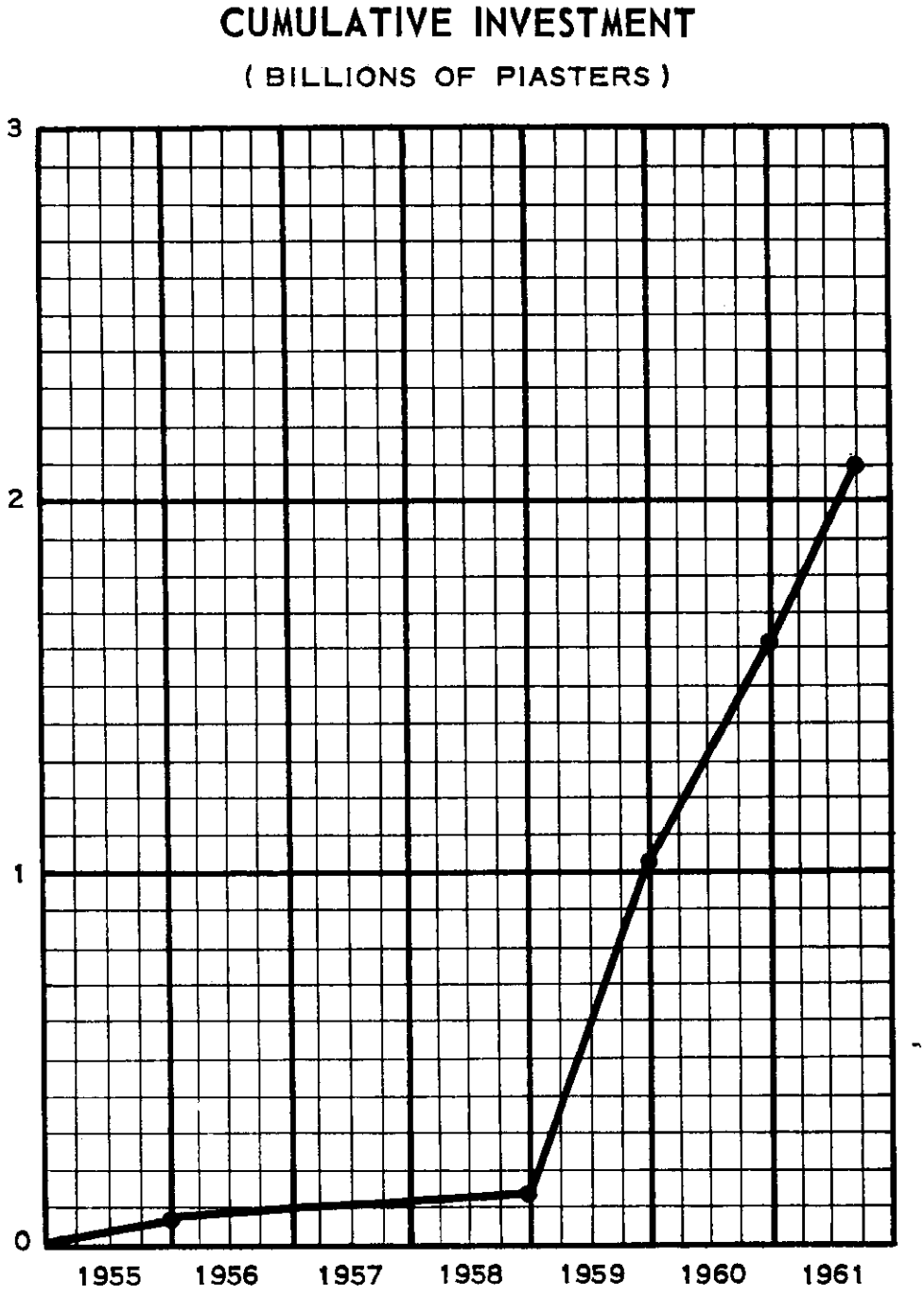
A soap factory.

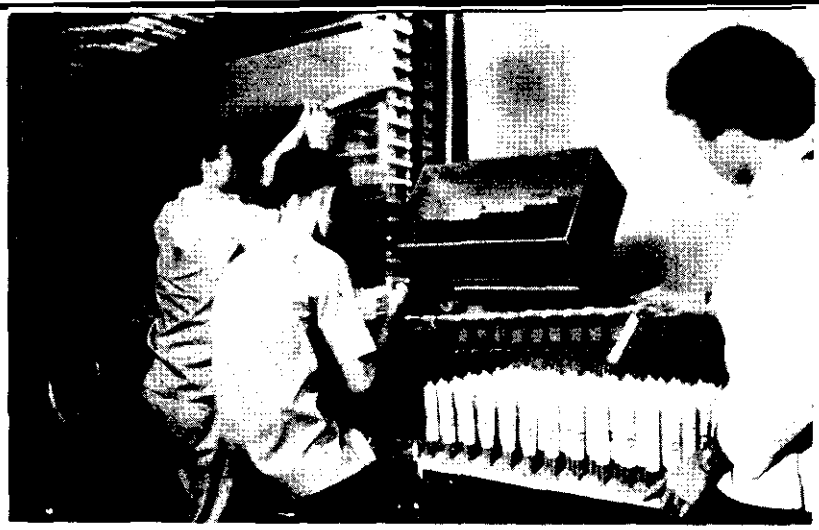


Plastics manufacturing.



cedures established under the Commercial Import Program. The cumulative industrial investment represented by these major enterprises is indicated by the following graph :





The manufacture of dental paste tubes.

Pouring castings in an iron foundry.

The total annual foreign exchange savings to Vietnam resulting from this industrial development is estimated to be equivalent to 35.5 million dollars. Of this amount, approximately 15.2 million dollars of annual savings is attributable to the textile industry alone, which comprises the largest group.

Nong-Son Coal Mine

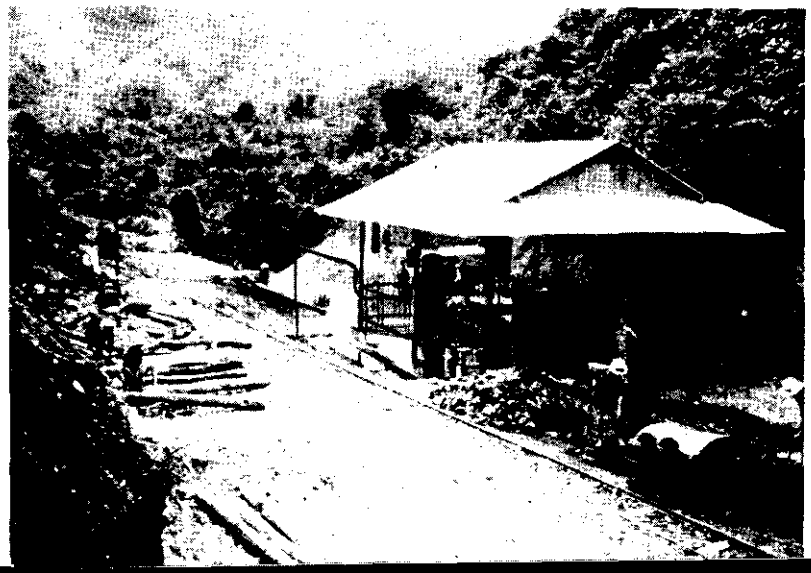
The largest single proposed industrial investment, 240 million piasters, will aid in the development and exploitation of the Nong-Son coal reserves. The Government of Vietnam will assemble the capital required from many sources, including aid from France and from West Germany.

A preliminary survey of the Nong-Son coal area, which was conducted under a USOM contract in 1956, found every indication of commercially exploitable coal reserves and recommended further investigation. Since the development of such a coal field would decrease Vietnam's excessive dependence on imported fuels and thereby also cut down the heavy drain on foreign exchange represented by such imports, the USOM acquired the services of a team of mining engineers from the Paul Weir Company of Chicago who, in 1958, made a thorough study of the coal deposits and mining possibilities in the area.

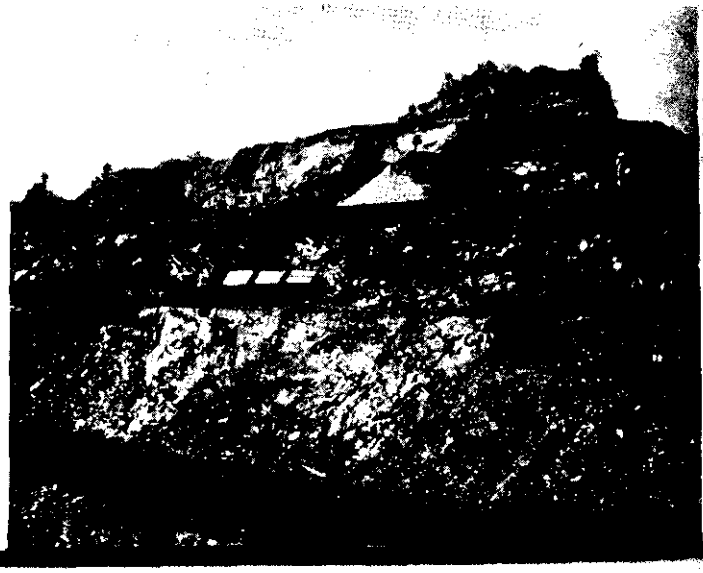
As a result of the team's favorable findings, in 1959 the USOM and the Government of Vietnam entered into an agreement whereby the United States would furnish equipment, technical services and training necessary to develop the mine to an annual production of 150,000 tons of marketable coal per year compared to the 1959 production of 25,000 tons. This development now is well underway and mine production in 1961 is expected to be in excess of 80,000 tons.

Equipment which has been ordered and, for the most part, delivered to the mine includes dump trucks, tractor shovels, a bulldozer, scraper hoists, mine cars, coal drills, ventilating fans, coal loaders, hopper cars, core drill rigs, an electric generating plant, high voltage transformers, communications system, and a water pump. The French have also contributed a considerable amount of equipment including a coal washing plant and an electric generating and compressed air plant.

Compressor and powerhouse for underground mining operation.



Strip mining at Nong-Son.

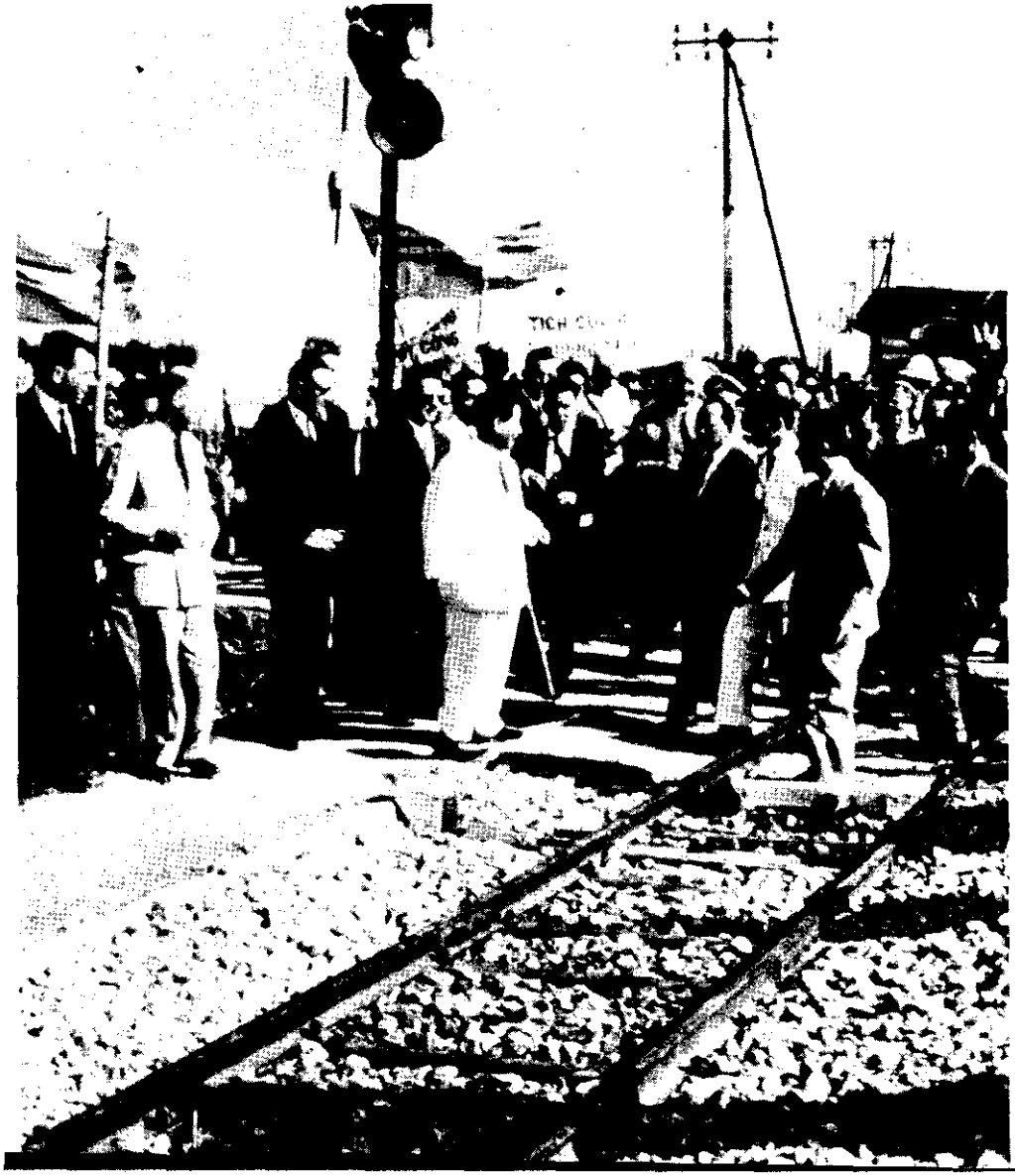


In order to help the mine to overcome its initial lack of adequate technical capability, ICA procured once again the services of a comprehensively qualified team of operating specialists from the Paul Weir Company. This group, which arrived in March 1961, consists of a mining engineer, transportation expert, core drill operator, geologist and a coal handling and marketing specialist.

In addition to the on-the-job training which will be furnished by this group in conjunction with its work, overseas training is being provided for key Vietnamese personnel. Under this portion of the program, the Director of the mine has travelled to the United States to observe our coal mining operations and training abroad is scheduled during the coming year for six mine supervisors, the mine's construction engineer and two mining engineers.

The numerous accomplishments during the short time in which the project has been in its operational phase include the extension of a rail spur to permit transshipment of coal by barge, considerable progress in the construction of an improved road network in the mine area, construction of a two-mile-long internal railroad for hauling coal to the washer, core drill operations to more precisely determine the location and disposition of the proved coal reserves, establishment of maintenance and repair facilities, construction of necessary warehouses and living quarters, and improvement of the administrative organization of the company. Geological explorations begun in June 1961 have already discovered coal deposits in an entirely new area and there are promising indications that these explorations will prove the existence of much more extensive coal reserves than formerly anticipated.

President Diem attends the dedication of the Nong-Son railroad.



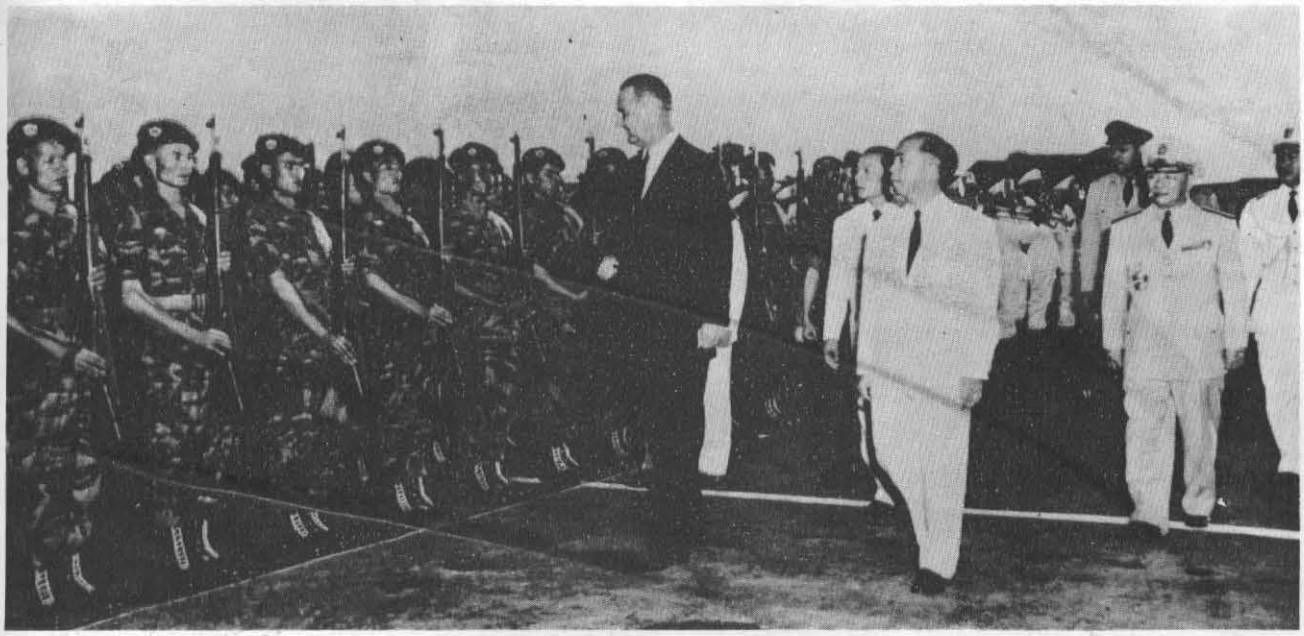
MAJOR INDUSTRIAL DEVELOPMENT IN VIETNAM

1955 through June 1961

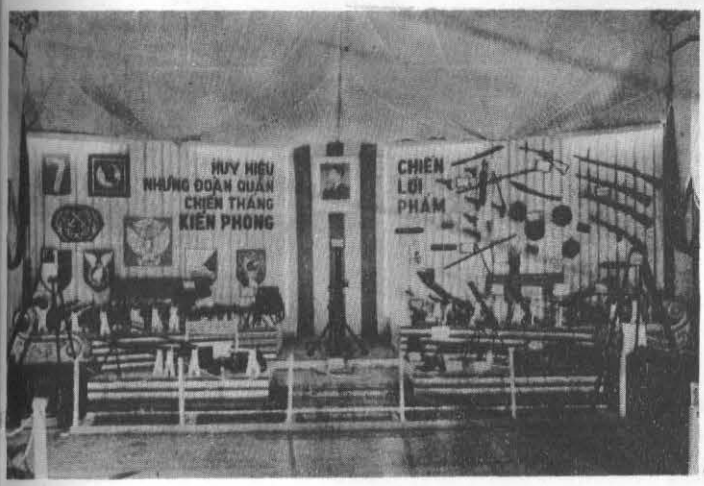
COMPANY	PRODUCT	ANNUAL PRODUCTION
1955		
Société Vietnamienne du Jute	Jute bags	3,000,000 units
Viet-Nam Ky-Nghe To-Soi	Rayon cloth	1,200,000 meters
1957		
Vinada	Tanned leather	128,000 sq. meters
Cophavina	Pharmaceuticals	3,096,000 ampoules
		728,000 bottles
		43,000 tubes
1958		
Phuong Toan	Soft drinks	25,000,000 bottles
Tran Van Tanh	Pharmaceuticals	6,780,000 ampoules
		1,372,000 bottles
		18,000,000 tablets
		5,364,000 other
1959		
Long-Vit Viet-Nam	Duck feathers	1,800 tons
	Egg powder	2,000 tons
Vinatexco	Cotton yarn	3,000 tons
	Cotton fabric	8,780,000 meters
Thuy Tinh Viet-Nam	Glass bottles	15,000 tons
Viet-Nam Cong-Thuong	Rubber camelback	400 tons
Lam Chau	Aluminum tubes	9,600,000 units
Truong-Van-Ben	Soap	4,800 tons
	Glycerine	60 tons
Pharmaceutique du Viet-Nam	Pharmaceuticals	40,320,000 tablets
		8,136,000 bottles
		11,256,000 ampoules
Chan-A	Cotton fabric	600,000 meters
Viet-Nam Development Corp.	Plastics	360 tons
Dong-Nai Ky-Nghe	Unbleached cotton cloth	1,800,000 meters
Khai-Vinh	Fish nets	7,500,000 sq. meters
Viet-Nam Development Co.	Dry-cell batteries	6,000,000 units
Vinh-Du Tinware	Metal containers	700 tons
Tan-Mai	Wood panels (16mm thick)	385,000 sq. meters
Nong-Son	Coal	150,000 tons
Vimytex	Cotton yarn	2,580 tons
	Cotton fabric	6,580,000 meters
Sin-Sung	Fish nets	8,000,000 sq. meters
Mai-thi-Diep	Unbleached cotton cloth	1,200,000 meters
Vinaspecia	Pharmaceuticals	9,400,000 ampoules
		10,600,000 bottles
		2,440,000 tubes

COMPANY	PRODUCT	ANNUAL PRODUCTION
1960		
Dong-A	Textiles	4,390,000 meters
Viet-Nam Silo	Bagging of cement	80,000 tons
Quach-Tich-Ky	Paper	450 tons
Saigon Blanket & Wool	Blankets	180,000 units
Vinatefinco	Textile finishing	24,219,000 meters
Viet-Nam Jute	Jute bags	3,000,000 units
Parsons & Whitemore	Pulp	6,000 tons
	Paper	9,000 tons
Nguyen-Van-Thinh	Buttons	69,120,000 units
Viet-Nam Chlorine & Alkali	Canstic soda	1,050 tons
	Hydrochloric acid	1,600 tons
	Bleaching power	560 tons
Viet-Nam Synthetic	Synthetic fabrics	1,000,000 sq. meters
Dai-Nam Ky-Nghe	Bicycle tires	500,000 units
	Bicycle tubes	1,000,000 units
Foremost Dairies	Canned milk	12,000,000 units
Michelin Tire	Bicycle tires	1,500,000 units
	Bicycle tubes	1,500,000 units
Sicovina Tourane	Cotton yarn	3,000 tons
	Cotton fabric	8,780,000 meters
Chan-Viet	Zippers	600,000 meters
	Elastic Braids	2,700,000 meters
Bui-Duy-Can	Paint	67,000 gallons
	Synthetic resin	142,000 gallons
	Copra oil	117,000 gallons
	Toilet soap	240 tons
FIRST HALF 1961		
Intertexco	Cotton fabric	2,800,000 meters
Chan Viet Cong Ky-Nghe	Non-ferrous metals (Rolling mill)	590 tons
Nguyen-Van-Diep	Iron pipe (foundry)	2,000 tons
Vimytex (Expansion)	Cotton yarn	+2,000 tons
	Cotton fabric	+15,000,000 meters
Nam-Viet Fibrocement	Asbestos cement sheets	7,000 tons
Viet-Nam Automotive Battery	Storage batteries	30,000 units
Dong Phuong Ky-Nghe	Starch	2,100 tons
	Glucose	1,500 tons
Dong-Nai Ky-Nghe	Cotton fabric	1,300,000 meters
Viet-Nam Ky-Nghe To-soi	Silk-screen printing	1,650,000 meters
Khai-Vinh (Expansion)	Fish nets	+7,500,000 sq. meters
Thanh-My	Electrical wire	400 tons
Duc-Lap	Coconut fiber products	1,500 tons
Vinatexco (Expansion)	Cotton yarn	+2,000 tons
Steel rolling mill	Bars, rods, angles	18,000 tons
Hang Viet-Phat	Table oils	1,550 tons
	Industrial oils	700 tons
	Defatted rice bran	12,500 tons
Thanh Hoa	Rayon fabric	1,200,000 meters

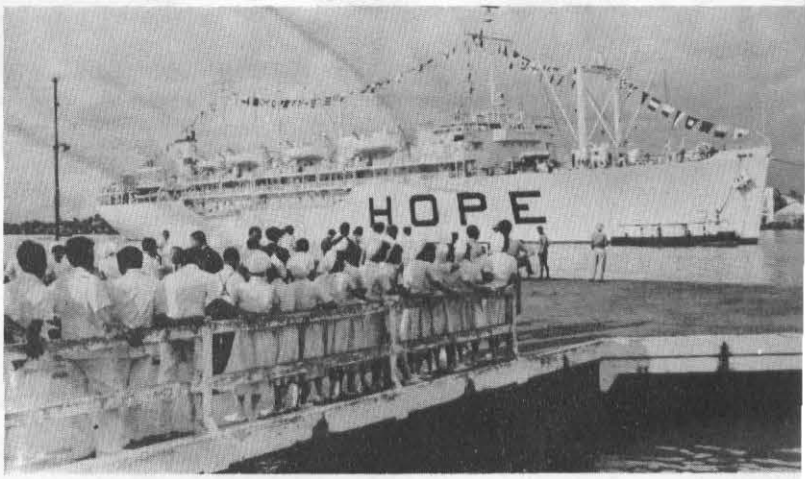
OF GENERAL INTEREST



Vice Presidents Johnson and Tho inspect paratroopers.

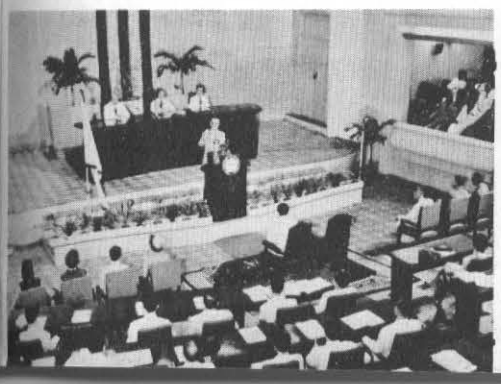


Captured Viet Cong equipment exhibited for the public at Saigon's City Hall.



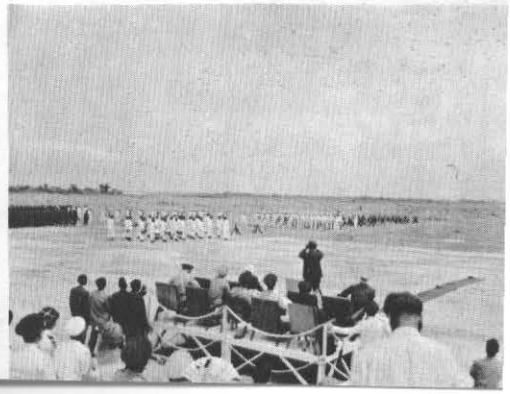
The hospital ship USS Hope arrives at Saigon.

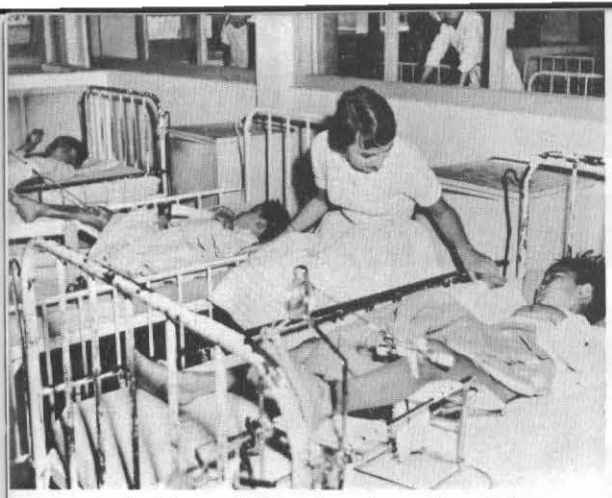
Vice President Johnson addresses the National Assembly.



President Diem (left) visits a young patient aboard the USS Hope.

Paratroop drop at the Tan-Son-Nhut Air Show.





Activities of the American Women's Association include visits to children's hospitals.

Distribution of toys sent by USAF children as presents for Vietnamese Air Force children.

The American Jazz Band of Saigon performs at the Vietnamese-American Association.

Watching television at the United States Information Service building.

Children receive awards for their entries in the International Children's Drawing Exhibit held in Tokyo.

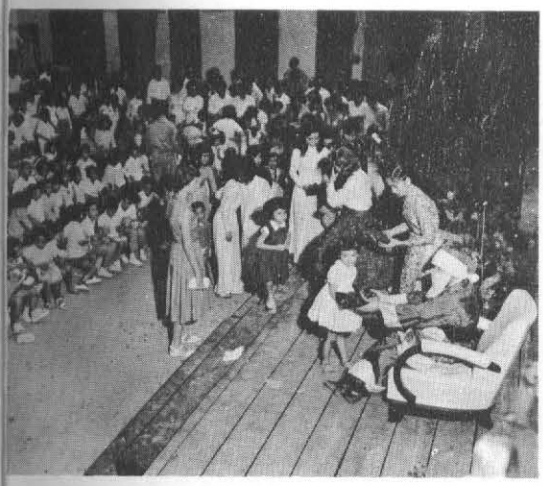
Portrait of an artist.

Orphans visit the USS St. Paul in Saigon harbor.

Preparing decorations for Tet Trung Thu, the mid-autumn festival.

Fashion show.

Variety show at the Vietnamese-American Association.



Vietnamese-American Association Christmas party.

A refreshing dip in the river.

USOM employee gives a talk on chamber music in Vietnamese.

Dolls made by this group of girls are displayed with pride.


AMERICAN-VIETNAMESE COOPERATION