given to the provision of UNICEF assistance in the form of supplies and equipment for eight rural health demonstration areas, three of which are related to declared community development districts. Since 1956 the Government of Indonesia has, each year, scheduled sixteen rural districts to be community development areas.

In Thailand, consultations have been held with the local authorities on the further development of rural health services, particularly in relation to areas intended for community development.

Community development is considerably advanced in India. Rural health programmes in connection with community development areas have continued to receive assistance from WHO and UNICEF.

WHO public health teams were in position in six Indian States at the end of the year and recruitment was in train to provide teams in four further states.

Plans have been drafted for three of eighteen demonstration districts scheduled to be developed. A technical circular issued by the Regional Office, "General Guidelines for Establishment of Demonstration Districts", together with a questionnaire, was prepared to assist State Governments in drafting plans. The policy envisages the creation of a demonstration district project in each state during the current plan period.

Progress in growth of rural health services has not been entirely smooth. Experience has shown that evolution of basic health services may be retarded by shortage of trained staff and funds. Adequately trained and orientated staff is necessary to secure integration of health services at all levels. Coupled with this it is essential to provide appropriate supervision and guidance. Only when these requisites are fulfilled is due use being made of referral hospitals and laboratories.

The factor of staff shortage and lack of facilities delayed upgrading of referral hospitals and laboratories. Sufficient hostel accommodation, particularly for female staff, was not always available. Though there was evidence that staff training programmes were gathering momentum, yet some were still handicapped by staff difficulties and, occasionally, shortage of female candidates.

5. SPECIAL PUBLIC HEALTH SERVICES

5.1 Maternal and Child Health

The trend to render maternal and child health services on the field level through all-purpose health centres rather than in special maternal and child health centres continued in all countries of the Region. It is felt that while the concept of integration of services is sound, and reorientation courses for personnel are the only possible way of bringing about at least a limited degree of improvement, the future of the services will depend on better training during the undergraduate period.
The changes required in undergraduate training are mainly in the field of child health. Not only is it essential that more time be devoted to this subject, but the content of the teaching needs considerable revision. The student must learn techniques of the promotion of health and prevention of disease in addition to diagnosis and treatment of already established morbid conditions. He must realize that the treatment of children is in itself a preventive activity for the future adult. In addition, the student must learn how to teach parents to provide the best care for their children within the limitations of their income and degree of development of life in their community.

Based on these considerations, considerable efforts have been made to assist medical schools in the development of paediatric teaching departments. At the same time, efforts to provide service units attached to such departments appeared to be the first and most important step. Thus, the concept of the "peripheral child health clinic" was developed. There is no division between promotional-preventive and curative care, and the child receives both guidance (through the parent) and treatment. Nearest, perhaps, to the ideal type of such a clinic are those developed during this year in Madras.

The teaching of pediatrics to both medical and nursing students has reached near-satisfactory levels in a few institutions, notably in Hyderabad. The national counterparts of a WHO team withdrawn over three years ago have continued to expand and improve teaching and service activities with gratifying results. Based on the experience of Hyderabad, the State Government is now introducing similar improvements in other schools.

During the year a pediatrics manual for medical students in South-East Asia was compiled and edited by the Regional Office and has recently been published.

5.2 Nursing

The need to attract more students of high calibre to undertake nursing training remains. It is acknowledged that auxiliary personnel are an integral and permanent part of a modern nursing service. Throughout the Region diverse training programmes for auxiliary nurses have been established. A WHO conference on the training and use of nursing auxiliaries in November 1958 underlined the need for understanding the use and improved training of such staff. The conference, with representatives of all countries in the Region and some delegates from the Western Pacific and Eastern Mediterranean Regions, recommended the adoption of certain basic principles regarding the function, training and administration of auxiliary nursing personnel. The report of this conference has been issued and widely circulated.

The number of refresher courses for different categories of nurses was increased. Regular refresher courses have become an established pattern in many countries, and WHO has sponsored or assisted courses for matrons and nursing superintendents, nurse and midwifery tutors, ward sisters and paediatric nurses.

Along with progressive thought on basic training, increasing concern with post-basic education is evident throughout the Region. Courses for training nurse tutors have been established in four countries, and the length and content of these training programmes are being reviewed with a realization of their deficiencies in some directions. Experience has shown that courses for tutors need to include what to teach as well as how to teach.
Experience has proved the value of having a national nursing adviser to assist in promoting overall nursing policy and coordinating nursing services and education programmes. Five countries have established, or are in the process of developing, a division of nursing within the health directorate.

WHO assistance in nursing during the year was given chiefly in four directions. International nurses helped with basic nurse training programmes, assisting national nurse tutors to revise curricula in order to include an understanding of the social aspects of disease. Assistance was given to the firm establishment of post-basic education courses, including one programme for training in psychiatric nursing. Support was given at directorate level to national nursing advisers, who have co-ordinated nursing programmes, formulated policies and prepared draft legislation relating to nurse training and practice. Finally, nurse members of international public health teams helped national counterparts to introduce and expand services and to train personnel for rural health programmes.

5.3 Environmental Sanitation

In the context of a document submitted by the Regional Director and after consideration of the resolution of the Eleventh World Health Assembly, the Regional Committee at its eleventh session made a detailed study of environmental sanitation problems and trends in South-East Asia. The Committee agreed that further development in various fields of activity in environmental sanitation was an outstanding and urgent need and requested the Regional Director to explore all possible ways and resources for assisting governments to bring about such a development. It was agreed that priority should be given to provision of safe water supplies and sanitary disposal of human excreta.

During the period under review, WHO-assisted environmental sanitation projects have been going on in most of the countries of the Region. Assistance emphasized the importance of environmental sanitation aspects of community development projects. Pilot environmental sanitation projects continued to operate satisfactorily. A laudable development was the trend to expand the work initiated in such projects beyond the confines of the original project area.

Scarcity of trained staff is one of the factors which have retarded the furtherance of environmental sanitation activities. In an effort to meet the need, WHO assisted in training programmes for public health engineers and sanitarians in Afghanistan, Ceylon and India. Stress was laid on the importance of a major environmental sanitation content in the training programmes of health assistants and other auxiliary personnel. It is increasingly recognized that public acceptance and demand are essential for a worthwhile advance in environmental sanitation. Due attention was given to these factors in health education programmes, and instruction in methods of health education of the public constituted an important part of training programmes for workers in the field of public health.

1 Resolution WHA11.27
2 Resolution SEA/RC11/RL13
Many professions and departments are concerned in the development and advance of environmental sanitation. Co-ordination and direction of activities are necessary. The trend towards creation or strengthening of environmental sanitation divisions at directorate level, notably in Ceylon and Burma, represented a significant evolution.

The provision of adequate water supplies and an efficient means of sewage disposal in Greater Calcutta represented a problem of great and growing complexity and of global import. To assist the Government to arrive at a solution, initial planning to provide an advisory consultant commission was undertaken. The programme is being planned in co-operation with the ICA.

5.4 Health Education of the Public

During the past year increased efforts have been made in the Region to provide effective health education of the public by means of personnel functioning in the national and state (or provincial) health services.

In Ceylon, in addition to a Sub-Division of Health Education at the national level, a decentralized service has been developed with one full-time trained person assisting with health education and training in each of the fifteen areas of Superintendents of Health Services. Health education personnel are also attached to specialized campaigns, demonstration and training centres and special health projects. The establishment of state bureaus in India was further encouraged through a resolution passed by the Central Council of Health in January 1959. Both WHO and ICA are assisting the Government, and it is expected that by the end of the Second Five-Year Plan in 1961, such bureaus will be set up in ten states. In Burma, Ceylon, Indonesia, Thailand and in some States in India, rural training and demonstration centres include a health educator as a member of the staff.

WHO is also giving assistance at the national level to the Governments of Afghanistan, Burma, India and Indonesia by providing advisers in health education. ICA is giving similar help to Ceylon, India, Indonesia (in a rural demonstration area), Nepal and Thailand.

In all the WHO-assisted health education projects in the Region the staff continue to devote a large portion of their time to training activities in health education for various categories of health workers, educators and other community workers. WHO assisted with a one-month national training course in Indonesia, which was attended by twenty-four health workers, half of whom were "kontrolir kesehatans" (sanitary inspectors) working at the provincial level. Special emphasis was given to planning for health education in the provincial services. In Burma, WHO assisted with a four and a half weeks' training course for sixteen health workers, most of whom are working in the districts.

Health education in schools has received special attention in two countries during the past two years. In Ceylon, an ICA health education adviser is assisting the Government in this phase of the programme. In India, a WHO health educator has started a project, with the co-operation of the Ministry of Health and the Ministry of Education, to strengthen the health education aspects of school programmes, giving attention to teacher training in selected teachers' institutions.
The fourth meeting of the Research-cum-Action Projects in Environmental Sanitation, located at Poonamallee, Najafgarh, and Singur, was sponsored by the Government of India, with assistance from the Ford Foundation, in April 1959. WHO was represented. At the same time, the first meeting of health educators working in Indian States was called. A set of recommendations was formulated at the final meeting, and a report has been issued.

Beginning in June 1959 a ten-month post-graduate certificate course in health education, open to university graduates in arts, science and medicine, is being offered at the All-India Institute of Hygiene and Public Health, Calcutta. For the time being the course is divided into two parts, persons having a medical background being exempt from the first part. This course will help to meet the estimated needs for health educators in the Region.

In preparation for the technical discussions on health education of the public which were held during the Twelfth World Health Assembly in May 1959, almost all countries in the Region prepared papers on health education, summarizing discussions with respect to national planning, organization and administration of health education services, training of personnel, and studies in health education.

5.5 Nutrition

In broad outline the factors responsible for the major problem of malnutrition in the Region have been identified. Solutions to the problem are largely social and economic and will only follow rising standards of living. To the extent that ignorance and traditional customs take part in perpetuating conditions of malnutrition WHO assistance to health education can play a useful role.

A report on investigations into protein malnutrition in India, undertaken by the Indian Council for Medical Research through the medium of the Nutrition Research Laboratories, with the assistance of WHO, was completed, and publication in the WHO Bulletin of those sections of the report with the widest global interest was arranged. Assistance was also given to this research programme by the National Research Council of the USA. Research on the problem of nutritional anaemia, undertaken by the Indian Council of Medical Research, also continued to receive WHO assistance.

Technical approval was given for UNICEF assistance to projects for controlling goitre by the iodization of salt and for the manufacture and distribution of shark liver oil capsules.

WHO assistance to a project surveying the nutritional situation and investigating beriberi and endemic goitre in Thailand was completed.

The Medical Officer of the Nutrition Section, from WHO Headquarters, spent over two months in the Region to examine possibilities of further assistance in this field.
5.6 Mental Health

Assistance to the All-India Institute of Mental Health at Bangalore was continued. The training courses available at the Institute compare favourably with the standard in other parts of the world.

A short-term consultant was assigned to Thailand to study the pattern of mental health services and to examine mental health problems. His observations covered a wide field, including organization of services, hospital facilities and procedures, training of staff, influence of social patterns, and such problems as drug addiction and alcoholism.

Five participants from South-East Asia attended a Seminar on Mental Health and Family Life held in the Western Pacific Region in December.

5.7 Social and Occupational Health

The WHO/ILO-sponsored Conference on Industrial and Occupational Health was held in Calcutta from 24 November to 5 December 1958. The Conference focussed attention on the need for the organization of occupational health services and for the education and training of all categories of staff devoted to occupational health work. Its report was widely circulated.

A short-term consultant in physical medicine and rehabilitation was assigned to advise on further development of the Medical Rehabilitation Centre in Bombay. A WHO tutor in physiotherapy was provided to Ceylon to assist the improvement of the training of physiotherapists in Colombo.

5.8 Dental Health

WHO assistance in dental health continued to be expressed in the form of fellowships, mainly for the study of the public health aspects of dentistry. Six fellows participated in a Seminar on Dental Health, held in Adelaide, Australia, which was organized jointly by the Western Pacific Regional Office of WHO and the Australian Government, in conjunction with the Fifteenth Australian Dental Congress.

5.9 Public Health Laboratories and Vaccine Production

WHO continues to assist with the development of public health laboratories by providing international personnel and training facilities. Progress, so far, is very slow.
In Afghanistan assistance to the public health laboratory in Kabul has continued through 1959 with the provision of a laboratory technician to teach in the national technicians' and assistants' training courses, and a fellowship for the national director of the laboratory, who is at present studying overseas.

To Ceylon WHO assigned a laboratory technician in April 1959 to help with the national training school for laboratory technicians.

The development of health services, and particularly the control of communicable diseases, depend on adequate public health laboratory services, and the Organization is eager to stimulate and to help in establishing such services at both directorate and district levels.

As for vaccine production WHO has continued its assistance to the countries of the Region with the provision of expert advice, equipment for existing centres (UNICEF) and supplies of vaccine when local production has been insufficient.

The Vaccine Institute in Kabul is still receiving direct assistance from both WHO and UNICEF, and steps are being taken to augment the production of smallpox vaccine in particular.

During the year WHO supplied a consultant to India and Indonesia to advise on plans for the production of the thermo-stable freeze-dried smallpox vaccine "P". A second consultant was also sent to Indonesia to advise on the production of anti-scar.

In Thailand, WHO and UNICEF are providing assistance by means of consultant advice, training and equipment for the local production of freeze-dried smallpox vaccine "P", to commence at the end of 1959.

Many fellowships, both regional and international, have been awarded to national doctors and technicians for special training in production methods.