

swasth hind

279



Our
Urban
Environments

september 1971



Swasth hind

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Bhadra-Asvina

September 1971

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Vol. XV No. 9

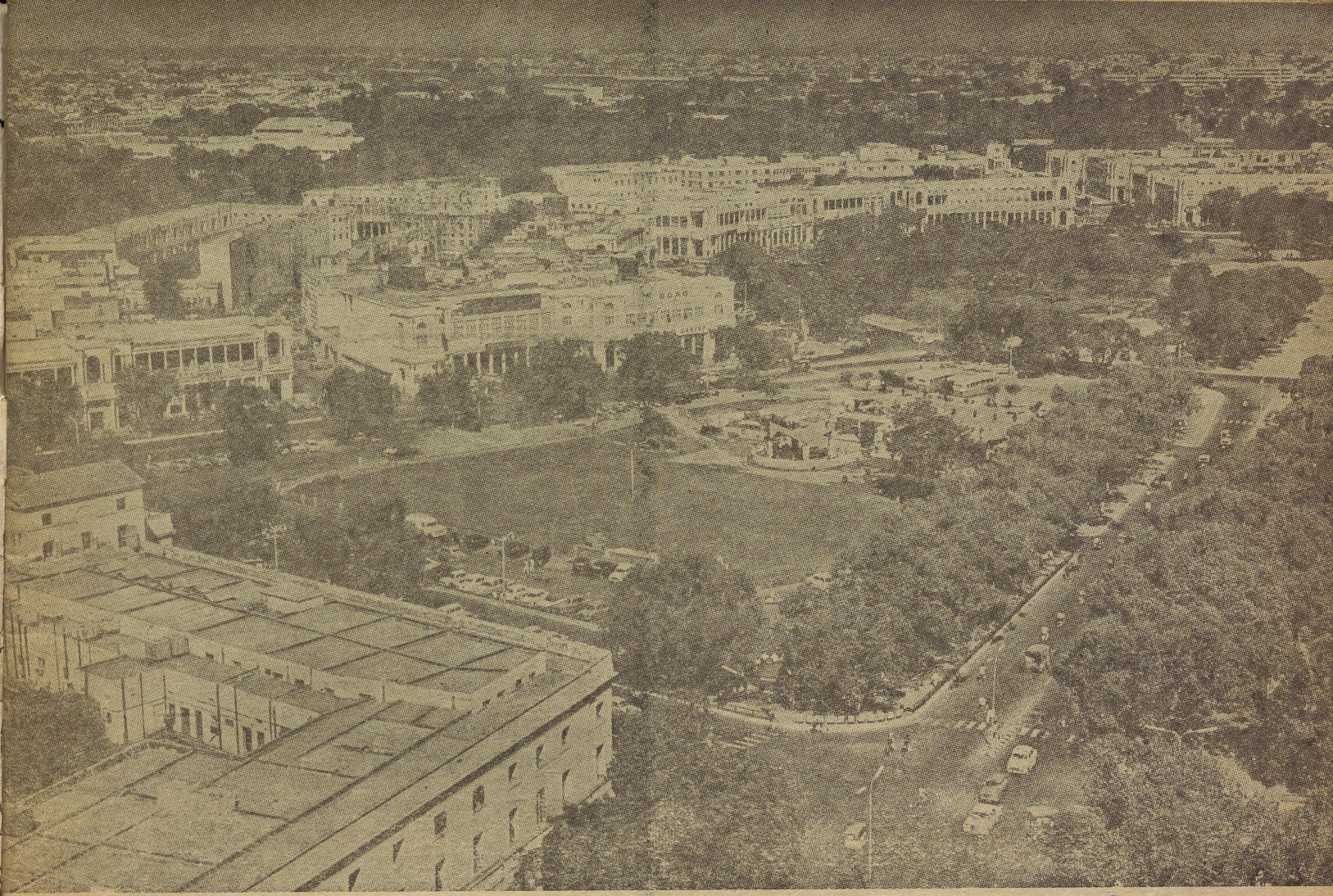
Changing Urban Environments

“The visible pattern of our cities has power to shape the society which inhabits them.....whoever determines the form of our cities determines also the temper of our lives”.—Dean Hudnut

Our cover shows new residential constructions in Calcutta.

Single copy : 25 Paisa

Annual Subscription : Rs 3.00



Our urban environments are changing rapidly. The pace of urbanization has been quite fast during the last few decades. The glamour of city life, industrial growth in and around the cities and prospects of better employment attract people from villages and small towns to the cities.

The larger cities have been growing rather fast and have a larger share in the total urban population. One of the major problems in India, thus, is the rising number of population and its congregation in the bigger cities. This has led to the over-crowding, congestion, slum emergence and haphazard growth of traffic and city expansion.

Apart from poor housing conditions, there is lack of adequate basic amenities, supply of protected water and proper sanitation. Most cities are lacking in medical and educational facilities. These have cumulative effect on the community health and well-being.

The age-long social institutions are also under stress and are posing many psychological and social problems.

Planning our urban environments as a part of overall national development with a network of health and community services thus becomes essential in the changing urban environment.

Most of the problems of our urban areas require economic solutions. To improve urban environments, we require immense resources and looking at the present state of economy in our country, it does not appear possible to provide even the minimal civic amenities in any foreseeable future. To provide proper housing, water supply and sanitation systems, adequate health and educational facilities, we require resources. The fast rising numbers retard the pace of economic development, aggravate the unemployment problem, and might even constitute a potential threat to the country's political stability. To find jobs for our millions of educated unemployed, the country requires intensification of industrial activity.

URBAN ENVIRONMENTS IN INDIA

Problems and Perspectives

A. B. MALIK

WHEN we talk about environment these days, we mostly speak in ecological terms. Most thinkers seem to be going under the belief that time has come when man must quickly reorient his attitude towards nature if he is to survive. This belief is based on the assumption that hitherto man has applied science and technology rather injudiciously with the result that the ecological balance has been disturbed, and that if a prudent choice of values is not made soon, the entire bio-sphere may get irretrievably damaged. Inherent in this belief is the doubt in the competence of science to supply answers for the ecological problems which it has created or may create in future and a fear that if quick steps are not taken to repair the damage or to stop further damage, human race would gra-

dually get extinct from this planet. If the assumptions are granted, the conclusion about the extinction of human race may be correct but the assumptions are such that they cannot be taken for granted. Similarly, the developed nations are showing equal concern about the effects on their social fabric of modern technology. In short, the developed countries have now started viewing technology with a certain degree of caution and suspicion.

The purpose in referring to this line of thinking current in the developed nations is not to comment upon it one way or the other, not that it cannot be commented upon either way, but to emphasize that environmental problems in developing countries, particularly in India, are vastly different. Problems of environment

in India are more economic in nature than ecological or sociological. Technology is the only known answer to economic problems. The developed countries could afford to consider seriously the conservation of environment even at the cost of economy or to deploy substantial parts of their resources to the study of their sociological problems and for their eradication. They might think of modifying or even eschewing certain types of technological activity but the developing nations have to, of necessity, give the highest priority to their economic betterment and to rely, for this purpose, on the existing modes of technology.

Scale and Pace of Urbanization

A few months ago India's population was 547 million out



Rapid urbanization leads to acute housing problem and overcrowding in the cities. In the seven metropolitan cities of over one million population, 66.6 per cent households were estimated to occupy one-roomed house. Slum dwelling and squatting is another malady which afflicts the urban areas.

of which 109 million live in urban areas. Although the percentage of urban population (which comes to about 20 per cent) is relatively small, yet in numbers it is more than the population of most countries in the world. In about next 15 years it is expected to rise by about 50 to 60 million with a share of 22 per cent in the total population.

The pace of urbanization has been quite rapid since 1910. During 1911-1921, a rate of 8.3 per cent increase was registered whereas during the preceding decade it was only 0.35 per cent. During 1921-31, the population increased by 19.11 per cent and

the corresponding figure during 1931-41 was 32. The rate of increase touched its highest level of 41.4 per cent during 1941-51 and during the next decade there was a decline to 26.4 per cent. In the last decade it has again gone up to 37.8 per cent. For the last 60 years the urban population has increased by 83 million and has more than quadrupled itself. Its percentage to total population during this period has gone up from 12.3 to 19.9. The present pace of urbanization is expected to continue and might even increase in the coming years because of the expected faster rate of industrial and economic development.

An analysis made of the urban growth pattern has revealed a distinctive feature worth mentioning here. There has been a disproportionate distribution of urban population in cities and towns of various sizes. The larger cities have been growing fast and claiming a larger share in the total urban population. There is a tendency towards larger agglomeration and urban dispersal in space has been very little. In 1961, the 12 larger cities having a population of more than five lakhs each constituted 22.17 per cent of the total urban population and the seven larger cities with a population of one million each accounted for nearly

18 per cent. Class 1 towns, *i.e.*, those having a population of more than one lakh, have claimed a larger share of the increase in urban population. In the last decade, they accounted for an increase of nearly two-thirds of the total urban population whereas since 1931 their share has been more than half.

It is thus, evident that one of the major problems is the rising numbers in the country and particularly in the bigger urban centres.

Indian Cities and Their People

Indian cities and towns vary so much in their sites, situations and the degree of foreign influence in their development that it is difficult to make many generalizations about them. Notwithstanding these diversities, certain common characteristics can be abstracted. A large majority of the Indian cities and towns have had haphazard growth and lack the basic unity of the layout and function. The bigger port cities like Calcutta, Bombay and Madras, which developed mainly under the British rule as centres of commerce and trade, exhibit a blending of indigenous and European urban traditions. Some new cities like Chandigarh and Jamshedpur have been planned and patterned on purely European lines. But if you visit a typical Indian city or town, you would find that it is generally composed of two segments—one segment representing the 'old city' and the other representing the 'new city' developed either under the British influence or in more recent times. The old city is the

business centre, highly congested, with a main bazaar and numerous streets, lanes and alleys which are both narrow and insanitary. This area is densely populated and is often segregated into small *mohallas* on the basis of various factors such as caste, religion, common language, community of professional interests, etc. The old city does not have any definite demarcated residential areas, commercial areas or recreational areas. All these are mixed. In the same street, for example, there may be a school, a college, residential houses, shops, etc. The new city is relatively clean, sparsely populated and better planned. Due to these old and new segments, most cities and towns in India share the distinctive feature of high density in small areas and low density in large areas.

Traffic

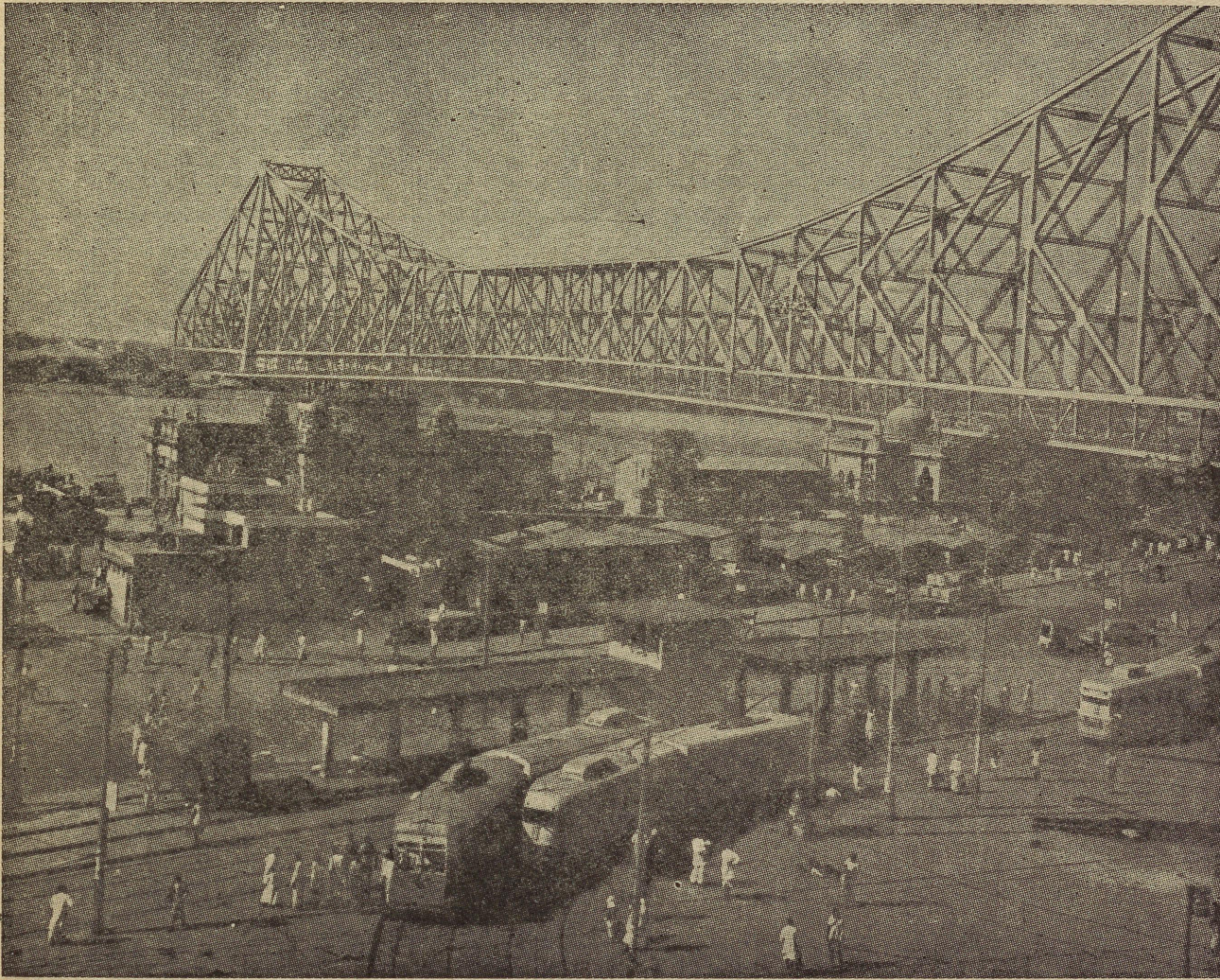
Traffic in Indian cities is not only curious but also capricious. From street walkers to the hand-driven carts of hawkers, from horse-driven carriages to modern limousines, from cycles to cycle-rickshaws and auto-rickshaws, all of them move about on the roads and in the streets with little care or consideration for others. Children play in the streets and on the road-side and stray dogs and other cattle roam about freely hazarding their lives and those of others.

A study of 103 cities and towns conducted by the Town and Country Planning Organization of the Government of India has revealed that during 1951-61, the areas of these cities taken together increased by 27.3 per cent as against a population increase of

30 per cent. The additional population increase seems to have accommodated itself within the same physical area thus leading to an increase in the densities in the majority of urban areas. Another significant aspect brought out is the wide range of variations in the densities, from minimum spot densities of 2.3 persons per acre and maximum spot densities of 300 to 600 persons per acre in the cities of less than two lakh population and from 15 to over 5,000 persons per acre in metropolitan cities. Although these lower and higher points of the range are "spot densities", yet they highlight the fact of the polarization of urban population into high and low density areas.

Housing

One of the main problems of urban areas is the housing problem. Not only there is acute shortage of the housing stock, the quality of the existing stock is very poor and the living conditions are characterized by over-crowding. The housing shortage in 1969 was estimated at 11.9 million dwelling units. Another estimate was that 46.8 per cent of the population in urban areas of more than 50,000 population live in one-roomed house and the average number of persons occupying such a house was 4.35. Over-crowding in metropolitan cities is even worse. In the seven metropolitan cities of over one million population, 66.6 per cent households were estimated to occupy one-roomed house. Slum dwelling and squatting is another malady which afflicts the urban areas. Although no precise data



are available, but on the basis of a few surveys conducted by the Planning Commission in India, it has been estimated that about one-fourth of the total population of major urban areas consists of slum dwellers. Similarly, the precise number of squatters is not known but their number is estimated to be huge.

Water Supply and Sanitation

Apart from the poor housing conditions, there is an utter lack in the provision of basic civic services, and where such services

Traffic and transportation are no less acute. The number of vehicles on roads has been fast increasing without a corresponding increase in the total street capacity.

exist, they are hopelessly inadequate. In 1969, only 1,153 cities and towns had protected water supply system. Underground sewerage facilities existed only in 170 cities and towns. In the same year only 57 per cent population was served by protected water supply system and only 24 per cent population enjoyed sewerage facilities. Even where proper water supply sys-

tems exist, the average supply *per capita* per day is very inadequate. In the matter of electric supply, the situation is however better. About 88.5 per cent population was estimated to be enjoying this facility in March 1967.

Most cities are lacking in proper educational and medical facilities. There was one dispensary for 76,900 number of people

and there was only one hospital bed for 800 persons. Recreational facilities like parks and playgrounds are practically absent and a study of 231 towns revealed that 42 of these towns covering a population of 18.18 per cent do not maintain any park and 37 with a population of 16.02 per cent maintain only one park. It is also believed that 38 per cent of these towns were maintaining public libraries or reading rooms.

The problem of traffic and transportation is as acute as the other problems. The number of vehicles on roads has been fast increasing without a corresponding increase in the total street capacity. This fact, coupled with the facts of bad roads, varied types of traffic, has rendered the traffic and transportation system highly unsatisfactory.

Industries

Industries in India are concentrated in larger cities as they happen to be centres of relatively high economic activity and provide the basic infrastructure. It was estimated that in 1963, 46 per cent of the industrial estates were located in the cities having a population of one lakh or above which accounted for about 69 per cent of the employment. Thirty-five per cent of the area under the functioning industrial estates has gone to these cities. A report of 1969 shows that out of 1,25,000 registered small scale industrial units, more than 80,000 were located in five States of Delhi, Maharashtra, West Bengal, Tamil Nadu and Punjab and that even in these States, the units clustered around the metropolitan centres.

A sizeable section of the urban population represents the migrants from rural areas. The rate of migration to larger cities is higher as compared with the medium size and smaller cities. A survey conducted by the Planning Commission showed that on the basis of a residence period of 20 years, 30 to 60 per cent of the population in cities having a population of less than 3 lakhs is composed of the migrant component whereas the percentage is over 50 in cities having a population of one million or more. Many factors, both economic and social, account for this process of migration. The major factor seems to be our agriculture-based rural economy. About 72 per cent of the working population in India is directly dependent on agriculture and the fast increase in population without any corresponding increase in the cultivable land compels many of the rural people to move to the urban areas in search for livelihood. Moreover, agricultural employment in rural areas is seasonal in nature and many of the rural people keep on moving in urban areas looking for regular employment not to speak of those who float between urban and rural areas. There are others who move to the city because of its physical and other lure. Most of these migrants join the labour class in the city which might explain the fact why migration to larger cities is of a higher rate.

In 1961, 38.9 per cent of the urban population was in the age group of 14 years and below and only 4.7 per cent in the age group of 60 years and above. The sex ratio was

845 females for 1,000 males. The average size of the urban household was 4.97 and the ratio of economically active population was about 44 per cent. Only 27.3 per cent population was literate. About one-third of the working population in the urban areas is employed in mining and manufacturing; 35 per cent in trade, transport and services; and about 10 per cent in agriculture.

In short, most of our urban centres present a dismal picture. They have grown haphazardly, with some parts highly congested and others sparsely populated. The people who live there are poor and illiterate and are deprived of even the bare necessary civic services.

Problems of Urban People

Most of the problems of our urban areas require economic solutions. To improve urban environments, we require immense resources and looking at the present state of economy in our country, it does not appear possible to provide even the minimal civic amenities in any foreseeable future. To provide proper housing, water supply and sanitation systems, adequate health and educational facilities, we require resources. The fast rising numbers retard the pace of economic development, aggravate the unemployment problem, and might even constitute a potential threat to the country's political stability. To find jobs for our millions of educated unemployed requires intensification of industrial activity. These are some of the most urgent and pressing problems for the Indian Government.

It is not that there are no social problems like mental disorders delinquency, crime, immoral traffic but these are comparatively minor problems compared to the main problem of rising population and poverty. The increasing concern being shown by the governments of developed countries for the social problems of their people cannot get a similar priority in the developing countries. In America and other advanced countries, people may be getting worried about such social problems as of family disorganization through divorce, separation or the fast breaking family bonds or of class relations and social conflicts but in our country such things need not worry us as much because we have more serious problems to reckon with and also because social problems have not reached any stage of concern in India. As we all know, social problems often are functionally related with the social institutions and the values of a given society. The nature of social institutions and of social values in India has been such that the typical social problems of a modern society do not plague us. The application of technology does not seem to have brought about major changes in the social life of our country like it has done in some other countries.

Social Institutions

Two typical social institutions in the country, namely, the joint family system and the caste system will illustrate the point. The system of joint family was widely prevalent in the country a few years back. Due to



A large number of Indian cities and towns have had haphazard growth without any definite demarcated residential areas, commercial areas or recreational areas. Traffic in these cities is not only curious but also capricious. From hand driven carts to modern cars, all of them move on the roads side by side. Children play in the streets, stray dogs and other cattle roam about freely leading to traffic hazards.

economic and other changes, this system has undergone vast changes in the urban areas. Many people thought and even now do think that this system would break down under the influence of modern technology. Their inference is generally based on their observation of other countries where, as a result of modern technology, family institutions have undergone radical change. But I think this expectation has gone wrong. Some changes may have occurred in the system of joint family but not of the system. The distinctive features of the system are living together of the members of a family under a common patriarch, sharing of one another's joys and woes, a definite hierarchical pattern within the family and the supremacy of the patriarch. Although in the changed physical and economic context of our urban living, all adult children of a father may not be living under one roof but the main features have not been altered. The bonds of affection and association between the members of a family still continue, the hierarchical pattern has not materially altered and a great deal of economic and social participation continues to be maintained within the family. If anything, the bonds between the members may have become more rational with education and better economic conditions.

Similar is the case with the caste system in the country. The essential features of this system are : (i) hierarchy amongst the caste-groups, (ii) separation of these groups in matters of marriage and contact, and (iii) professional distinctness. With the

increasing modernization of our urban society, the only feature which has undergone major transformation is that tradition alone does not now determine the profession of any particular group. That is because many jobs and vocations have come up which are neutral in character. Also, because in our political system freedom has been given to carry on any trade or profession of one's choice. But the other peculiarities of the system continue. The various caste groups maintain their separate identities and generally restrict their marriage and other contacts within themselves. The hierarchies between the various caste groups have also not been broken.

Social Problem

There is yet another reason why social problems do not take roots in our country. The basic acts involved in any social evil in a given society have the sanction of that society. Take, for example, the evil of alcoholism. Alcoholism is regarded an evil because it represents marked deviation from the generally accepted norms of drinking, but drinking as such is not only acceptable but even encouraged in the societies where this evil exists. Similarly about sex crimes. In societies where sex is treated more liberally, sex crime is likely to be a more serious problem. The prescriptions and norms laid by our traditional culture permit little scope for the social evils to develop. With reference to the specific illustrations taken above, our tradition strongly disapproves intoxication in any form. Similarly tradition prescribes a high place

for women. They are even regarded as object of worship. I am not trying to conclude that women are, in actual fact, worshipped or that there are no sex crimes, or that the evils of drinking do not exist in our country but all that I am trying to emphasize is that since the basic norms of behaviour involved in these evils do not have the liberal sanction, of the society, the possibilities of such evils taking roots in our society are remote. As said earlier, social problems have a functional relationship with the values of a society. The most basic value in our tradition is tolerance—live and let others live. It is this value which prevents most social problems to take roots in our country. The history of India is the strongest evidence of how Indian society has assimilated within itself numberless 'foreign' persons and their cultures and has still preserved its distinctive character. Even today, the vast influence of Western culture and civilization has not altered the basic mores and values of our society.

As a result of the increasing industrialization and rapid urbanization, a steady deterioration of air, water and land has been reported. The water sources are being polluted by the discharge of industrial and other wastes. Air is being polluted by industrial emissions, automobiles exhausts and other human activities. The problems of soil erosion, water logging have also taken prominence. The current thinking in our country is to take note of these problems and adopt a cautious approach with a judicious

(Contd. on page 274)

While one speaks so frequently of air pollution and water pollution, the damage done to the environment by the improper handling of solid waste in a community has not been adequately recognized.

SOLID WASTE AND ENVIRONMENTAL SANITATION

N. MAJUMDER

MAN cannot be isolated from his physical environment. His well-being is dependent on his contact with air, water and food. While he uses the air, water and food, he also produces a waste in each case. The exhaled air, the spent water or the waste food are unavoidable. Even industries change the character of the air, water and the raw material and these appear as wastes of the industries. Thus one is faced with the problem of handling and disposing of these wastes without causing any hazard to the community. The present article deals with solid wastes with reference to household wastes only.

Although the proper handling of solid waste has been a recognized area of sanitation, yet it has not received its due attention from the sanitation authorities in the country. It has not yet been established as to which of the two divisions of health—medical or engineering—should take charge of this important community service. In some of the cities, the engineering department has been vested with this responsibility. The reason for doing so is stated to be that the engineering division is better equipped with the technicalities of mechanical handling of the job. In smaller sized urban communities, however, conservancy has remained with the medical section of health. In the rural areas, no one really seems to be concerned about this service. Enlightened villagers take care of the solid wastes of their households in a manner best known to them. Irrespective of who is in charge of how well the service is discharged in the community, the fact remains

that this is a very vital programme which needs proper management in the interest of health and well-being of the community. The service, if not cared for properly, is sure to pollute the environment and cause serious damage to the health of the people.

Colossal Problem

The character and quantity of solid wastes produced in a community is dependent on several factors. The climatic condition, food habits and the socio-economic status of a community primarily determine these in respect of household garbage. The nature and maintenance of roads, extent of industries and several other factors contribute to the character and volume of the mixed solid wastes in a community. Although this has been a problem with all the civic authorities ever since these came into existence, yet there is hardly any data to tell us the variable character and quantity of solid wastes in an urban community in this country. Certain studies carried out by the Central Public Health Engineering Research Institute, Nagpur indicate that there is a good deal of seasonal variation in the character and quantity of refuse in a city. Similar studies were carried out by the All India Institute of Hygiene and Public Health, Calcutta in the rural and urban areas. Wide seasonal variations in the quantity and quality of solid wastes in both the communities were also observed by these Institutes. It was, however, observed that the *per capita* contribution of household solid waste in a rural community was larger than that in an urban community.

In urban communities the problem assumes a large dimension because of the congregation of a large number of people in a comparatively small area. It is estimated that on a day as much as 2,500 tons of solid wastes is produced in Calcutta. The quantity of solid wastes in the other cities is no small. The solid waste in the rural community differs both in composition and quantity from that of the urban community. The *per capita* contribution in the rural areas is no less than in urban areas—sometimes even more because of comparatively larger animal population, poor road services and abundance of trees and shrubs. Yet the problem presented by the waste in the rural areas is apparently not a serious one primarily because of the low density of population in those areas.

The household refuse is highly organic in nature and it has a high moisture content. These factors are ideally suited to bacterial activity. The climate in most parts of India also favours such bacterial activity. The organic matter decomposes and becomes an ideal breeding ground for flies. The liberation of dark liquor and offensive gases is inevitable. Thus the entire area surrounding a refuse heap is vitiated.

Prompt Removal of Wastes

The solid waste, therefore, needs to be removed as early as it is produced. An efficient collection and transportation of the wastes primarily vests with the civic authorities. It is, however, not possible to obtain an efficient clearance without the active participation of the people. Amongst the various systems of collection, the use of community bin seems to be the most common in our municipalities. People are expected to put the household refuse into the bins located at convenient points. This, however, seldom happens and refuse is usually found littered on the pavements from where the sweepers once again collect and transfer them to the public bins. Someone quite rightly named this system of collection as "no can system". This, however, is not a satisfactory system of refuse collection. There are several other methods. The

One would like to live in an optimum environment to give one's best to the community, yet such is not the case in many instances. Often human beings create conditions which vitiate the physical environment to a stage whereby the community is exposed to great health hazards.

more sanitary a method of collection is, the greater is the extent of participation by the people in the programme. In more advanced countries the garbage is not to be seen on the roads. The entire garbage of a household is crushed and discharged along with the waste water to the sewers. The collection is very much simplified and garbage cans have almost disappeared from the streets. With the cooperation of the families, the cities, therefore, wear a decent look.

In the rural areas the cost of collection and transportation of accumulated refuse by any public body is usually prohibitive. More often it is left to the individual households to determine the method of collection and disposal of the solid waste. Manure pit has often been recommended and if properly built and used offers a satisfactory solution to this problem.

It is not proper to consider the collection and the transportation of the human excreta along with garbage although quite often the two are dumped together. The combination of these two wastes make collection and transportation more difficult, although the disposal of these two jointly is possible with advantage. Collection, transportation and disposal of human excreta need very careful consideration and this should receive a very high priority in the sanitation programme.

Since man cannot do away with the physical environment, it is important that it is not polluted to an extent whereby his very existence in the world is jeopardized. □

Life is so beautiful—stay alive, don't smoke cigarette

—Caption from a poster designed by Peter Max

RESEARCH IN ENVIRONMENTAL POLLUTION

DR M. N. GUPTA

The National Institute of Occupational Health, Ahmedabad, established by the Indian Council of Medical Research (ICMR) is vitally concerned with the problems of environmental pollution and hygiene. Apart from research and service in regard to the hygiene of working environments, or in other words occupational hygiene, the Institute is a participant in the national efforts towards combating community pollution problems, especially those arising out of the industrial activity. The various divisions and units of the Institute have both direct or indirect bearing on such pollution problems of the biosphere. In due course, the investigative endeavour of the scientists on problems of atmospheric pollution, water pollution, noise pollution, radio-active pollution, thermal pollution, pesticide pollution may cumulate to such an extent that it is conceivable that a full-fledged National Institute of Ecology would have to be set up.

OCCUPATIONAL and environmental hygiene are concerned with the recognition, evaluation and control of environmental factors which might adversely affect the health, well-being, efficiency and productivity of people at work or in the community.

In this article, a brief account of the objectives and activities of three teams working on environmental problems, namely the Occupational Hygiene Division, Air Pollution Unit and Medical Toxicology Research Unit, are presented.

Occupational Hygiene Division

Industry will keep introducing new and hazardous materials and processes leading to pollution of the environment, which can make serious inroads into the welfare of human beings, upkeep of machines and materials, and economic resources of industry. An occupational hygienist is required to solve the problems of evaluation, measurement and control of health hazards in industry, which effect the health,

well-being and productivity of industrial workers or the large masses of people in the community. Thus occupational hygiene is an essential component of occupational health programme.

The Occupational Hygiene Division has been established in the Institute with the purpose of improving health and productivity of the workers. The functions of the Division are :

- (i) Routine or periodical environmental hygiene investigations for dusts, fumes, gases and vapours for control of unhygienic work conditions.
- (ii) Analysis of dangerous chemicals used in factories.
- (iii) Planning and advice on healthy working environment. Such services would be available to industries, labour, factory inspectorates and other agencies alike.

(iv) Research on environmental health problems
—basic and applied aspects.

Fundamental and applied research studies programmed in Division include : (i) health hazards in formulation of dye-intermediates in the small-scale industries in Gujarat, (ii) hazards in the lead and zinc concentration plants in Rajasthan, (iii) hazards of fluoride poisoning in flour spar mining and processing in Panch Mahal District, (iv) health hazards in copper mining and smelting plant in Udaipur, and (v) occupational hazards peculiar to industries in and around Ahmedabad and Gujarat, *e.g.*, the petro-chemical complex and cotton textile mills.

The physical agents like temperature, humidity, noise, vibration, lighting and radiant energy are the main factors which produce health hazards in work environments. The chemical and biological materials produced during processing or manufacturing also create hazards in the working atmosphere. The division would study the problems of man-machine and its environment, and evaluate the exposure risk of the workers in industries. The Division would advise on design, installation and evaluation of control equipment such as ventilation, exhaust system, noise control, etc. in the industry and would suggest corrective control procedures.

In India, very few persons are trained in this field. Those few who are available are self-taught or have been trained in the developed countries. In the recent symposium on "Academic Education and Training in Occupational Health and Hygiene" organized by the Regional Headquarters of the World Health Organization in November 1970 at this Institute, the W.H.O. Consultants and Indian delegates emphasized the important role of the hygienist in taking care of the environmental hygiene problems in industries and they gave top priority to the education and training of occupational hygienists. This Division is currently geared to offer with WHO support the first course on the "Evaluation and Control of the Industrial Environment". In future, this Institute would be developing degree and diploma courses in this field for medical men, chemists, physicists, engineers, etc. A short training course would also be arranged by the Institute for occupational hygiene personnel drawn from the Employees State Insurance

Corporation, factory inspectorates and private and public sector industries.

This Division would keep close contact with industries through personnel managers, safety engineers, industrial physicians, factory inspectors, etc. and try to help and advise them in their day-to-day problems of hygiene.

Air Pollution Unit

A number of short-term air pollution surveys in half-a-dozen big cities of India has given useful information on levels of various air pollutants. These levels are convincing enough that there is a serious air pollution problem worthy of further investigations in detail and that there is a need of institution of air pollution control measures. Government and State legislation on air quality standards are being drafted. Such air quality standards are intimately linked with the toxicological effects of the pollutants on man, animal and vegetation. The existing knowledge on the toxic effects of many of the pollutants is inadequate. Keeping this in view, the Indian Council of Medical Research has set up a separate research unit of Air Pollution at the National Institute of Occupational Health, Ahmedabad.

The Unit will mainly be concerned with the effects of air pollutants upon different physiological functions of man, animal and vegetation and effects on enzyme systems, cell cultures, tissues, eye and respiratory irritation and development of cancer.

The Unit will also study the changes in the function of lungs in normal healthy man and patients with cardio-respiratory disease, of different age groups, exposed to air pollutants. An important study already programmed at this Unit is an epidemiological study of air pollution in Ahmedabad city covering both environmental and medical aspects. This study will statistically justify the observed effects on community health due to air pollution. Work on the first phase of the study, which has started, includes data collection on existing pollutants, meteorological variations and number of cases of respiratory diseases in different wards of Ahmedabad city. The Unit will advise public bodies, industries and municipal corporation on control measures and safe air quality standards.

Medical Toxicology Research Unit

The Medical Toxicology Research Unit of the Institute was established by the ICMR on the recommendations of the Pesticide Committee of the Government of India to investigate all facets of the problem of health hazards arising due to environmental pollution by pesticides.

The problem will assume greater significance in the years ahead, since the country envisages a marked increase in the consumption of pesticidal chemicals in its agricultural and public health development programmes.

The research activities of the Unit comprise the evaluation of the toxicity and health hazards resulting from these chemicals under local conditions and the development of means to prevent and minimize these hazards as far as possible. This is being done by undertaking both long-term and short-term surveillance studies and monitoring the environment for residues of pesticides and their metabolites. The monitoring studies involve the estimation of pesticide residues in the internal environment, *i.e.*, body tissues and body fluids of human beings and domestic animals. In order to monitor the general environment these residue studies are being extended to food substances, air and water.

As a corollary to human surveillance studies, the Unit is also undertaking animal experimental studies to evaluate the toxicity of various chemical pesticides. These experimental studies are designed to assess the effect of these chemicals on mortality, body growth and organ function.

The Unit is already undertaking collaborative studies with other organizations concerned with the use of these toxic chemicals to assess the feasibility of their use from health and safety points of view. One such study which the Unit has completed is the toxicological evaluation of aerial u.l.v. spray of phosphomidon¹⁰⁰—a highly toxic organophosphorus compound used to control paddy pests in Tamil Nadu. Similarly in collaboration with the National Malaria Eradication Programme, the Unit conducted a survey to assess hazards in the use of BHC.

In view of the importance of the problem, the Council has proposed to expand the activities of this Unit to undertake more elaborate studies on the fate, metabolism and toxicity of these agro-industrial chemicals by the use of recently advanced methods and techniques such as the use of Gas Liquid Chromatography and radio-active tracer techniques.

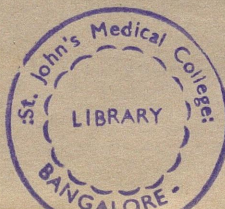
Besides research activities, the Unit is providing expert assistance and guidance to various organizations and agencies on related matters. □

COMMUNITY DEVELOPMENT WEEK

(2—8 October 1971)

Celebrations of the Week have been sponsored by the Department of Community Development to mark the birth anniversary of Mahatma Gandhi. Health authorities can contribute towards the success of the Week by initiating programmes on sanitation, cleanliness, health education, leprosy relief, prevention of blindness, etc. in collaboration with the community leaders at various levels of administration and especially in rural areas. Special campaigns may be launched for promotion of national health programmes, control and eradication of communicable diseases, sanitation and publicity of available health facilities.

Swasth Hind has published in its various issues a number of articles on Health and Community Development. For these back issues, send your order along with cost (25 Paise per copy) to the Director, Central Health Education Bureau, Kotla Marg, New Delhi-1.



XXIV WORLD HEALTH ASSEMBLY

THE Twenty-fourth World Health Assembly composed of delegates from 123 of WHO's 130 Member States concluded its session in Geneva on 20 May, 1971. Two Associate Members of WHO were also represented as well as the United Nations and numerous other international organizations.

The Assembly elected Sir William Refshauge, Director-General of Health, Australia, as its President. The Sultanate of Oman was admitted to membership of WHO as the Organization's 130th Member State.

An effective working budget of \$ 82,023,000 was adopted to finance the work of the World Health Organization in 1972. This figure represents an increase of 9.05 per cent over the 1971 budget as revised during the 24th Assembly.

Opening Address

The Assembly was opened by the President of the Twenty-third World Health Assembly, Professor Hippolyte Aye, Minister of Health of the Ivory Coast. Professor Aye told the meeting that in the past year new evidence had been forthcoming that improvement in health required close collaboration between all peoples and all countries of the world.

Mentioning some successes he pointed out that thanks to action by WHO, the alarm sounded against DDT had been reduced to its proper proportions, and spraying could continue. Among set-backs experienced by the world community he noted the spread of *El Tor* cholera to countries long free of the disease and the deterioration of the environment through man-made pollution.

Concluding his remarks, Professor Aye said: "The medical world still has a great deal to do to convince politicians and technocrats that health

is not just a matter of consumption but a basic factor in development..... health is still considered as an expenditure, both at the national and international level. A radical change is necessary if even the modest objectives of the Second Development Decade are to be achieved. Investment in health should be recognized as a basic component of the development process, for only a person free from disease can rid himself of the scourge of poverty which still afflicts the greater part of the world. Indeed does not the very survival of mankind depend on the abolition of poverty?"

Human Health and the Environment

The Assembly endorsed a long-term WHO programme on the human environment

- to improve basic environmental health and sanitation in all countries, and notably developing countries;
- to promote international agreement on criteria, guides, and codes of practice with respect to known environmental influences on health;
- to stimulate the development and co-ordination of epidemiological health surveillance by methods including environmental monitoring systems;
- to extend the knowledge of effects of environmental factors on human health by collection and dissemination of information, by stimulation of research, and assisting in the training of personnel.

Radiation

"A rise in the radiation exposure of the population results in a higher probability of deleterious

biological effects for both the present and future generations", notes another resolution. Exposure is growing chiefly because radiation is increasingly used for medical diagnosis and treatment; increase in the industrial use of atomic energy is also adding to the load.

To improve this situation, the World Health Assembly invited Member countries to set up radiation protection services to supervise and inspect all sources of radiation. At the same time WHO was asked to draw up a programme of activities to rationalize and improve the medical use of radiation.

The Cholera Pandemic

There is no justification for banning the importation of foodstuffs from countries that report cholera cases; the Assembly called on the Member States and Associate Members of WHO not to embargo food products.

Cholera is a long-term socio-economic problem in addition to being a public health problem. There is clear evidence that present cholera vaccine is of little use in preventing the spread of the disease. The only lasting solution is to make countries "cholera-proof" by means of improved water supplies, environmental sanitation and personal hygiene.

WHO was asked to continue its search for more effective vaccines and treatment methods, and to help countries in the production of rehydration fluids, antibiotics and vaccines.

Water Supply

WHO will step up its efforts to ensure safe and abundant water in the developing nations. The target for 1980 is to ensure clean and abundant water in the developing countries for all city dwellers and for 20 per cent of people in rural areas. This would involve an estimated expenditure of \$7,500 million on urban water-supply construction and \$1,600 million for rural water-supply construction. These plans, which presuppose financing from many sources in addition to WHO, will be developed in the context of the Second UN Development Decade, 1971-1980.

Smallpox Eradication

If the present progress in the various eradication programmes can be sustained, it is expected that

only a few countries will experience endemic smallpox by the end of this year.

The Assembly requested "all countries to give priority attention to the further improvement of case reporting and the immediate investigation and effective containment of all outbreaks of smallpox", and urged Member Governments to provide additional assistance to countries where the disease is still endemic.

Occupational Health

Countries undergoing industrialization are in great need of personnel trained in occupational health. There is a shortage of criteria that can be used by health authorities in promoting occupational health services within the framework of public health programmes. Accordingly, the Assembly requested a study of the measures WHO can take to assist national health services in establishing and promoting occupational health programmes, including the acceleration of training.

Drug Abuse and Dependence

"The phenomenon of abuse and addiction to narcotic and non-narcotic dependence—producing drugs is rapidly becoming a major world health problem, adversely affecting the social, cultural, political, economic and educational fabric of the world community", the Assembly declared. It recommended that WHO begin an expanded programme on the collection and exchange of data, and the analysis of all medical, social, cultural and economic factors contributing to drug dependence. The Assembly also affirmed that because of the serious public health implications of drug dependence, WHO has an important role to play in any concerted international action against drug abuse.

Tobacco

Since smoking contributes significantly to lung and heart diseases, the Assembly endorsed a number of recommendations including the elimination of advertising of cigarettes and increased taxation on cigarettes; a ban on smoking in hospitals, other health institutions, public places and public conveyances, education of medical students in the hazards of smoking; doctors and health workers to set an example by not smoking and to discourage patients

from smoking. Young people and pregnant women were singled out as particularly vulnerable groups.

Fifth General Programme of Work

The Assembly adopted the fifth General Programme of Work for the Organization, covering the period 1973-77 inclusive, which took into account the changes of priorities in national and international health problems, and new trends in WHO's work that had emerged in recent years. It was decided that WHO would focus its attention on: (a) the strengthening of health services, the single most important factor for the attainment of the highest possible level of health in any country; (b) the development of health manpower, considered to be the most complicated element in health programmes and the most essential; (c) disease prevention and control, taking into account the multiple, complex determinants of disease, extending far beyond simple cause-and-effect relationships between disease agents and their victims; and (d) promotion of environmental health, in which WHO will be called upon to deal with new problems.

PUBLIC CONSENT IN HEALTH AND DEVELOPMENT PROGRAMMES

In his presidential address, delivered at the opening of the second plenary meeting of the World Health Assembly, Sir William Refshauge, Director-General of Health of Australia emphasized the need to enlist the co-operation of the community in programmes where health and social development were linked in a common aim.

"I see a need both for the training of all members of the health team in the arts of communication and for the development of common languages", Sir William said. "Obviously this can only be tackled as a long-range project but I believe it could be worthwhile for a study of this subject to be undertaken so that professional health workers, of whatever discipline, are trained in effective communication."

Public Consent

Developing this theme Sir William continued: "I think we must regard the problems of public consent and understanding as being of critical importance to the health and welfare programmes of the future. There are, for instance, some

immediate public health problems posed by traffic accidents, cigarette smoking and by drug abuse in general. Concerning communicable diseases, which are still with us in many parts of the world, there are accepted, established procedures which bring demonstrable, even dramatic results, if we have the determination and the resources. But there are as yet no universally accepted preventive procedures for dealing with health problems which stem from human behaviour rather than from biological accidents. Perhaps we should look to history for guidance. Acceptance of the concepts of personal and public hygiene has, I think, been the greatest single factor in our ability to control communicable diseases. Of course, these concepts took some time to achieve acceptance since they involved human and social habits and economic adjustments.

"If we are to deal successfully with such problems as traffic accidents and drug abuse it seems we must look to the creation of positive attitudes of public opinion about behavioural based health dangers. The same applies to the question of preserving and improving our living environment."

Sir William said that in recent years there had been an encouraging awakening of public awareness throughout the world of the dangers of pollution of the environment. "Attitudes are emerging which should help at least in the alleviation of pollution. Indeed, if the right methods can be found, this public awareness and concern may enable us to do more than just alleviate.

Hazards to the Environments

"Technology has been seen as the villain of the story in some quarters. Springing from this feeling there are suggestions that a retreat from technology should be considered. I would hope that mankind in any true appraisal, would not choose retreat from technology as a deliberate social policy," he said. "The fall-outs and contaminants from technological processes may be the main hazards to the environment but it is not the processes themselves nor even their physical manifestation which are the main danger. The real danger surely comes from the attitudes of groups and of individuals who are intent on pursuing a course of activity without regard to the effect of that course on the community."

Sir William found that the real task was to obtain a balance of interest between individual convenience and community responsibility. "This cannot be achieved by unilateral action by health administrations. Health administrations and officers, in their interest in the environment, will be seeking to protect people from factors which can cause biological injury or psychological threat. They cannot hope to do this by relying on traditional public health measures and instead will have to pursue their objectives by playing a leading part in co-ordinated activities involving many other civic authorities."

The way forward is basically one of new techniques of social and health planning backed by material resources, he concluded. "The desire for international co-operation in health affairs is certainly present to an encouraging degree around the world but, in so many areas, we still lack effective methods and the means to pay for their application when they are known. Moreover, the social and political conditions within which health programmes must find a place are all too often the subject of misunderstandings and suspicions between nations."

Momentum of Progress

"It would be naive to think that the differences between nations and the different social conditions which exist will somehow magically disappear and that all the health projects which need to be undertaken can somehow be launched."

"But at least the history of the endeavours of WHO does stand as an indication that great progress can be made. The attack on communicable diseases, the dividends being provided by health manpower training programmes, the international sharing of technical information and the sense of co-operative purpose stimulated by WHO activities have already built a momentum of progress that must continue to grow."

ROLE OF THE ENVIRONMENT IN CAUSING DISEASE

Dr M.G. Candau, Director-General of the World Health Organization, presenting his Annual Report for the year 1970 to the Health Assembly on 5 May, 1971 said:

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"We are all conscious of 1970 as having been marked by an appreciable and some what unexpected extension of the current cholera pandemic" "This is a most serious development, and would have been more so if governments were not notifying the cholera situation in their countries with increasing faithfulness. There have been few instances of irrational restrictive measures being imposed on cholera-affected countries. The initial quite natural alarm and emotion have been replaced by a proper understanding of the problem and by a practical approach to it. Governments seem to have gained confidence in handling the cholera situation as they have acquired the essential knowledge to fight the disease and, with WHO's assistance, more have started producing cholera vaccine and rehydration fluid. Hopeful though these developments are, there is of course no room for complacency."

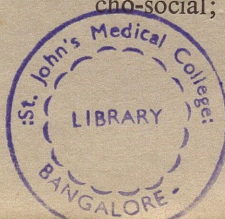
"Cholera is a striking example of a disease linked to poor human environment. There is a tendency now-a-days to associate environmental problems with modern technology, with industrial pollution, the excessive use of pesticides, and so on; but if we ask ourselves where are people ill and dying today because of defects in the environment, the answer must comprise not only the conurbation with its traffic hazards, its smog, noise and over-crowding, but also those cities, villages or rural areas where safe drinking water is scarce."

Environmental Problems

"As you know, WHO has been concerned with environmental questions since its very inception. We are taking part in the preparations for the United Nations Conference on the Human Environment to be held in Stockholm in 1972, but that Conference will be neither the beginning nor the end of WHO's work in environmental problems."

"Our long-term responsibilities here seem to me to be clear and go far beyond sanitation in its narrow sense. They are :

- to improve basic environmental health in all countries, and especially in developing countries;
- to enlarge our knowledge of adverse effects on health of various environmental components—physical, chemical, biological and psycho-social;



- to determine permissible levels for man of pollutants and other adverse environmental influences, and to develop relevant guides and standards; and
- to provide Member countries with an early warning system of deterioration in community health or well-being caused by environmental influences.

“Our responsibility with respect to these aims is inescapable. A fundamental decision facing this Assembly, however, is the pace to be adopted in these matters, and this will largely depend upon financial possibilities.

Importance of Pesticides

“An environmental question that has generated a great deal of emotion is the use of pesticides. Objective investigations of the hazards have, however, been pursued, notably by WHO. For example, we have completed an analysis of the use of DDT in public health programmes, and it is now clear that indoor spraying with DDT in anti-malaria operations does not present a significant risk to man or to wildlife, and that the withdrawal of DDT from the malaria programmes would be quite unjustifiable in the light of present knowledge. At the same time it is recognized that the *outdoor* use of DDT in public health programmes should be avoided as far as possible.

“Increasing attention has been given to the safety to man of newly-developed pesticides and much original work on this subject has been carried out by the WHO research units in Nigeria, Kenya and Thailand. WHO thus hopes to be able to advise governments with some degree of confidence on any hazard that might arise from the extensive use of chemicals in public health programmes.

“Pesticides are of course important in agriculture also. The current FAO programmes for increased food production in many parts of the world are dependent to a large extent on the use of pesticides. Collaboration between FAO and WHO is helping to ensure that this will result in no hazard to man or his domestic animals, and the association between the two organizations should be further enhanced as the ‘green revolution’ develops....”

Drug Abuse

“Another subject of wide-spread concern is drug abuse. In spite of all efforts, it has taken on increasingly dangerous proportions over the past years in many parts of the world. This has created significant public health and social problems and the use of drugs by young people is the cause of acute anxiety in many countries.

“Epidemiology of drug abuse is not yet well-known and the lack of comparable data from countries makes it difficult to evaluate the effectiveness of measures taken so far. Of course, control measures laid down in international conventions were essential to limit the availability of drugs, although the supply of traditional drugs still comes largely from the uncontrolled production of narcotic raw material and from the illicit traffic. International co-operation is not less essential to diminish demand by planning preventive, curative and rehabilitation programmes, by promoting information facilities and educational activities and by co-ordinating research aiming at the elucidation of the underlying causes of drug abuse. The problems involved in drug abuse are of such varied kinds that knowledge and skills of many disciplines must be enlisted: pharmacology, psychology, sociology, economics, to name but a few....

Health of the Family

“The tasks of health services evolve with the social environment and call for constant readjustment. In WHO, for instance, we have recently felt the necessity to focus attention on the needs of the basic social unit—the family—and to achieve a broad approach with emphasis on the quality of life. Infant and child death rates have long served as valuable indices of health conditions; but the time has now come to consider the quality of life of the survivors. For example, out of 380 million children under five years of age in developing countries, probably a quarter show definite signs of protein-calorie malnutrition. WHO accordingly increased its activities in nutrition during the year and, in co-operation with other international bodies, provided assistance to many countries. It continued to test the new processed protein-rich foods: several mixtures have shown very satisfactory results.

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"Important responsibilities also lie in the health aspects of family planning. There is accumulating evidence that repeated pregnancies place a heavy burden on mothers and relate to both maternal and infant mortality. Optimal child spacing will give the mother better opportunity to nurture each child, which in turn, should lead to better growth and development.

"The number of countries requesting assistance for their national family planning programmes increased considerably: 23 countries in 1969, and 40 in 1970. The availability of additional funds, principally those of the United Nations Fund for Population Activities, was most helpful in this connection. In all WHO-assisted programmes and in the many appraisals of national programmes undertaken last year, the rationale of integrating family planning as part of the general health services was stressed."

HEALTH PROGRESS IN INDIA

SHRI K.K. DASS, Secretary, Ministry of Health and Family Planning, Government of India in his speech to the World Health Assembly said: "In most fields of human endeavour, the rapid progress that follows action is easily discernible. But not so in the province of health. The pace here is relatively slow. Intangible and hardly apparent at first, the results take shape after some length of time. Large-scale programmes launched on a nationwide basis for control and eradication of diseases—what are termed in India as National Health Programmes—with their social and economic ramifications, do yield rich dividends in the long run. Looking at India from this frame of reference, it can be said that she has made considerable progress in the prevention and control of diseases and promotion of the health of her people.

"What is the index of a nation's health? It is usually measured in terms of certain vital statistics and expectation of life. A child born today in India can expect to live for 52.6 years as compared to 32 years during 1941-50. Improvement in public health has brought down the death rate from 27.4 per 1,000 during 1941-50 to 14 now. Infant mortality rate, which is a sensitive index of the general standards of health and environmental conditions, has registered a fall from 182.5 per 1,000 live births during 1941-50 to 113 today. Some of the principal diseases,

which used to take a heavy toll of life, have either been wiped out or brought under control. More mothers and children are surviving child-birth. People are becoming less and less disease prone as standards of nutrition and environmental hygiene improve. These are unmistakable trends of improvement in the health and well-being of the people. The results may not appear spectacular, but they are there all the same.

"The basic strategy for the development of health, medical care and family planning services is to develop an integrated and comprehensive approach. Our plan is to provide in the rural areas an infrastructure of at least one primary health centre manned by two doctors (one of whom would preferably be a woman doctor) together with supporting paramedical and auxiliary health staff for each unit of about 80,000 to 100,000 population and a sub-centre for every unit of 10,000 persons. The latter is in the charge of one auxiliary nurse midwife and a male basic health worker.

"Since 1953, 5,055 primary health centres and 26,400 sub-centres have actually been established in 5,234 development blocks. About 52 per cent primary health centres have been assisted by UNICEF.

"During the Fourth Five Year Plan, primary health centres will be established in the remaining 344 development blocks which are without them. In addition, primary health centres which are located in areas where malaria is in the maintenance phase will be strengthened with additional staff to man the basic health services.

Combating Communicable Diseases

"The results of the struggle to combat communicable diseases in India as reflected in the reduction of mortality and morbidity are quite encouraging. Significant progress has been made in the eradication of malaria in spite of certain local reverses which have to be expected in such a large-scale biological operation. There is progress also in the field of smallpox eradication.

"Cholera cases which continue to be predominantly due to *El Tor* biotype cholera vibrio, have not shown any substantial increase; but, ever since the introduction of *El Tor* disease, a wider area of the country has been affected every year. Towards its control and ultimate eradication, the emphasis is on the

improvement of environmental sanitation under the National Water Supply Sanitation Programme. However, to reduce mortality and morbidity therefrom in the foreseeable future, a National Cholera Control Programme has been undertaken during the Fourth Five Year Plan in the highly endemic areas.

"It is heartening to state that for nearly five years now, not a single case of human plague has been reported in the country. A well-organized epidemiological surveillance unit against plague is in operation.

"Though needing augmentation, yet with the improvement of environmental sanitation and provision of potable water supply in many parts of India, urban as well as rural, the enteric group of diseases has shown a decline. However, consequences of unplanned urbanization are increase of filariogenic conditions and infective hepatitis. Measures are being taken to eliminate such conditions. With regard to filariasis control, an important recent development, holding out hopes of efficient filariasis control in the near future, is the establishment at New Delhi of the WHO-USPHS-Government of India Project on the "genetic manipulation of mosquitoes". Active association is being maintained with the WHO for the surveillance of haemorrhagic fever.

"Progress has been made also in various other programmes like control of tuberculosis, leprosy filaria, trachoma, venereal diseases, etc. But the nation does not rest on its laurels. The battle against disease is a relentless one. But all these gains face the risk of being nullified by India's galloping population growth, which is the greatest single obstacle to the country's progress. The solution to this menacing problem is population stabilization.

Family Planning

"Since the inception of planning in India, the importance of holding the balance between the population growth and material resources has been realized and at present family planning is a top priority programme. Our object has been to reduce the birth rate from 39 per thousand in 1968 to 25 per thousand as early as possible. During the Fourth Five Year Plan we are committed to reducing the birth rate to 32 per thousand population by 1973-74.

"A vast organization for mass communication has been set up throughout the country. Wide awareness of the desirability of a small family has been created in the remotest corners of the country. A large-scale adoption of methods for limiting the family has taken place. Since the inception of the programme, 8.5 million sterilizations have been performed and 3.7 million IUCDs have been inserted. There has been a massive increase in the number of users of conventional contraceptives. The demand for them has increased so much that the capacity of production of condoms has to be doubled in the near future. 1.9 million couples are currently using conventional contraceptives.

"Social measures like medical termination of pregnancy are under active consideration of our Parliament. As a result of all the measures already adopted, it is expected that about 7.4 million births have been prevented, and by 1991-92 about 22 million births will be prevented.

"The initial results of the Census of 1971 in India have recently come out. The provisional figure given by the Registrar General is 547 million as against the estimated population of 561 million. This indicates the impact that the family planning programme has made on the growth of population. The actual geometric growth of population for the period 1960-71 has been 2.22 per cent per annum, the arithmetic growth being 24.45 per cent in the decennial period 1961-70.

Mobile Hospital Scheme

"Another major movement afoot is the Mobile Hospital Scheme. This is intended to reorient the medical profession and the services so as to serve the needs of the people, particularly in the rural areas. It is a multipurpose scheme whose main objectives are: to give adequate training to our medical and nursing students and interns in curative, preventive and promotive aspects of rural community medicine, to render health and medical care including specialist and family planning services to the rural population which forms 80 per cent of the total and to give a boost to all our national health programmes including our family planning programme. The Government of India decided last year to allot, as a pilot project, a well-equipped tented hospital with 50 beds to each of the 22 selected medical colleges

in various States in our country. A rota of teachers from each of the departments of medicine, surgery, obstetrics and gynaecology, preventive and social medicine of the concerned medical college will stay in the mobile hospital with ten to fifteen final year medical and ten to twelve nursing students for a month. Interns will remain for three months. The twelve mobile hospitals which have already been set up are so popular that we are proposing to expand this scheme."

Turning to the subject of quality control of drugs, he said that the Indian regulations on quality control of drugs incorporate substantially the requirements of the WHO code and the Government of India was contemplating to make the observance of the code mandatory on the part of the drug manufacturers.

"The misuse of psychotropic drugs is a matter about which India and all the countries in the world should be concerned." The Government hoped that the new convention which had been considered by the United Nations in Vienna in February, 1971 would be brought into force quickly so that a tight check was kept on the manufacture, distribution and use of psychotropic substances.

PROFESSOR EUGENE AUJALEU AWARDED LEON BERNARD PRIZE

The World Health Assembly awarded the Leon Bernard Medal and Prize to Professor Eugene Aujaleu for his outstanding services to the development of social medicine and international public health. The presentation was made by Sir William Refshauge, President of the Assembly.

Professor Aujaleu was Director-General of Public Health in France from 1956 onwards and for five years, from 1964 to 1969, he was the distinguished Director of the National Institute of Health and Medical Research.

Professor Aujaleu is a member of many learned societies including the French Tuberculosis Society, the Paris Hospitals Medical Society, the International Society of Blood Transfusion, and the American Public Health Association. He is also a Fellow of the Royal College of Physicians, and President of the French Mental Health League. His written works comprise over 300 titles dealing with many subjects from tuberculosis, neurology and skin diseases to road accidents and environmental pollution.

September 1971

Institute of Child Health in Kabul

India has gifted an Institute of Child Health, complete with a 100-bed hospital, to Afghanistan as part of Technical and Cooperation Programme. The Institute for the children of this mountain locked kingdom is expected to cost 10 million rupees (Rupees one crore).

Dr P. Diesh, Additional Director General of Health Services, under whose technical supervision the project is being implemented, said that the construction of the Institute is likely to be completed in October, 1971. Dr Diesh has visited the Afghan Capital a number of times to expedite the completion of the project.

The architects of the Directorate General of Health Services have designed the building and the construction is being done by the Central Public Works Department.

Dr Diesh said that Dr S.S. Manchanda, Professor and Head of the Department of Paediatrics, Medical College, Amritsar will be the first Director of the Institute. There will be eight departmental heads under the Director—Paediatrician, Paediatric Surgeon, Paediatric Orthopaedic Surgeon, Anaesthesiologist, Radiologist, ENT Specialist Pathologist and Statistician-cum-Medical Record Librarian. In addition, the Government of India will provide a Matron, Sister-Tutor, Ward Sisters and other staff members.

Dr Diesh said that a complement of paramedical and administrative staff would also be sent from India. They would be posted with the Institute for a period of two years to assist in running the hospital and train Afghan nationals. The Institute will be provided with India-made equipment and medicines.

Towards Vigorous Implementation of Family Planning Programme

A THREE-DAY Conference of the State Health Secretaries, Administrative Officers, State Family Planning Officers and Mass Education and Media Officers was held in New Delhi from 28 to 30 April, 1971. The objectives of the Conference were: (i) to go over the progress of the programme in all respects; (ii) to consider suggestions received from the States; and (iii) to take decision both immediate and long range for the successful implementation of the programme. This was a crucial meeting of the programme and administrators as it was held so soon after the provisional figures of Census, 1971 became available. The question whether the programme has succeeded or failed loomed large over the deliberations.

The Conference formally opened with an address by Shri R.N. Madhok, Joint Secretary, Family Planning. He cautioned the delegates at the outset that they were meeting at a "particularly crucial time" and that the Conference had to take into account the "tall order" of discussing a long list of subjects.

He reviewed the progress of the family planning programme in the country during 1970-71 and was happy to note that a definite upward trend was discernible in IUD insertions after touching the lowest ebb in 1969-70. He also lauded the achievements in the distribution of conventional contraceptives.

He announced that the Government was thinking of setting up another unit of the Hindustan Latex Limited. Possibility of the production of diaphragms indigenously was also being currently studied, he said.

Dr (Miss) L.V. Phatak, Commissioner (FP) presided over the Conference.

The Conference made important recommendations on all facets of Family Planning Programme whether these were services, training, education and motivation, transport evaluation, infra-structure of special schemes under family planning. In all these discussions, the central figure was the family planning worker at the periphery. The endeavour was to strengthen his image and credibility in such a way as to make him a friend, philosopher and guide of the people in all matters concerning health, whether the approach was curative or preventive.

Dr J.B. Shrivastav, Director General of Health Services, who also addressed the gathering, made a strong and fervent appeal in favour of making family planning programme an integral part of the health services in India.

RECOMMENDATIONS

During the course of two-and-a-half-days discussions on vital issues facing the family planning programme, the Conference made a strong plea to link family planning with the immediate environment of the people. The programme, they averred, would involve sustained efforts and a long-term planning. The consensus was to develop family planning centres as "foci of community welfare activity and comprehensive health care for mothers and the children".

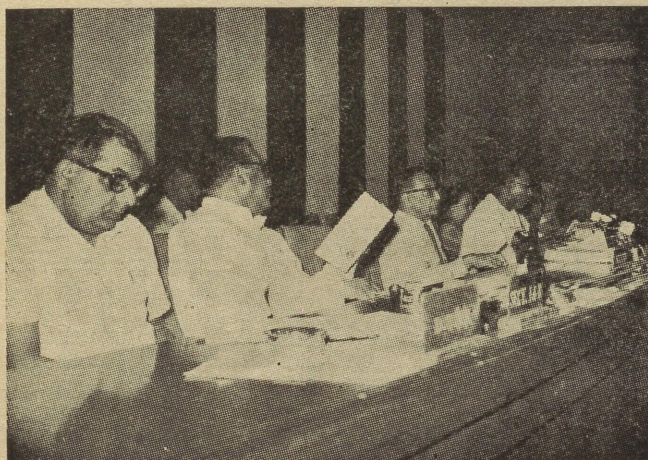
The Conference also reiterated the necessity for involving the youth clubs; farmers' clubs, Mahila Samajs, adult education centres and sports organizations and their welfare organizations to achieve better results.

IUCD

Terming Intra Uterine Contraceptive Device as an effective, safe and simple method, the Conference recommended that all efforts be made to promote this method by: (i) proper selection of cases; (ii) following proper technique of insertion; (iii) imparting proper training in insertion technique; (iv) appointing post-graduate personnel as IUCD officers; and (v) setting up technical committees at State levels to sort out technical problems and conducting research on new devices.

Sterilization

To boost the sterilization programme, the Conference recommended: (i) introduction of steri-



Prof. A.K. Kisku (extreme right) addressing the Conference of State Health Secretaries, Administrative Medical Officers, State Family Planning Officers and Mass Education and Media Officers. The Conference was held at New Delhi from 28 to 30 April, 1971.

lization facilities at PHC and urban family planning centre levels ; (ii) continuing the practice of organizing large sterilization camps to cover larger number of cases ; (iii) properly training the medical officers before allowing them to undertake the operation; and (iv) making efforts to popularize vasectomy in view of its being a more simple operation. The Conference noted that in some States tubectomy cases were discharged within 24 to 48 hours which was not desirable from technical point of view. It recommended hospitalization and observation of tubectomized cases for a period of at least four days or longer. Due emphasis was laid on improving the quality of services and follow-up work.

Nirodh

Appreciating the overwhelming popularity of Nirodh among conventional contraceptives, the delegates recommended that the Government should consider supply of lubricated condom in order to increase its acceptability all the more. It also called for the introduction of case and follow-up cards for Nirodh, particularly in rural areas. To ensure an uninterrupted supply of Nirodh to acceptors, a reserve stock would be maintained at State, Division, District and Primary Health Centre levels.

Intensive Districts' and Selected Areas' Scheme

The Conference recommended that infra-structure as per our programme should be sanctioned and

also due importance should be given to quality of personnel appointed for the work in intensive districts and selected areas. Key personnel should be selected from amongst the younger generation who would be motivated to the work and would be honest in the discharge of their duties for some time at least. The districts included in the first phase of the intensive districts programme should now undertake evaluation of their performance.

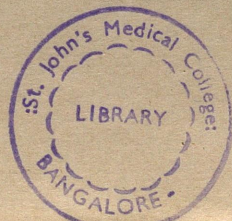
Crash programmes for their training of ANMs by the States was recommended. Due emphasis was laid on ensuring that the ANMs would work in rural areas after their training. It was suggested that as far as possible candidates with rural background should be selected and trained in schools near their homes.

Mass and Extension Education

The Conference recognized the need for a new dimension for the entire programme of mass and extension education. Due emphasis was laid for narrowing the gap between widespread awareness and low acceptance of the programme.

Spacing of Children

The consensus was that additional slogans be devised to emphasize the concept of spacing of children in the interest of the mother and the child health especially in view of the fact that the present



slogans were weighted heavily in favour of the terminal methods. Attempt should be made to build a permanent attitude in the public mind in favour of the small family norm. Related to this was the need to raise the level of education and secure acceptance of certain permanent values with higher age of marriage for women. Another similar value could be the spacing of children in a manner that would be conducive both to better child care and of better mother health.

It was further recommended that proper attention should be paid to remove misconceptions and doubts among people by spreading scientific knowledge. Such material could also include various aspects of family life such as sex hygiene and contraception. Special literature for newly married couples with useful hints about happy married life and information about family planning should be produced.

Population Education

Country's youth should be fully motivated to the small family norms as FP programme attempts a revolution in permanent attitudes. They need proper orientation even of the adolescent age especially at the secondary and higher secondary levels of education. The State Family Planning Organization should take up with the respective education authorities the question of including population dynamics in their own curricula specially in subjects like languages, social studies and sciences, etc. Seminars and workshops for teachers should also be organized. Non-student youth should be brought into the scope of population education through the activities of youth organizations.

Research and Evaluation

The Conference was of the considered view that the demographic and evaluation cells may be established immediately in all States with the full complement of staff. For undertaking field surveys and for processing of data of various levels additional staff should be sanctioned. The primary registers of population and couples should be completed and analyzed to bring out the areas needing attention for the purposes of motivating couples.

A monthly review of the performance of primary health centres, urban centres, mobile units, sterilization beds, static sterilization units, post-partum units should be undertaken at the district level.

National Awards

Maharashtra bagged the Karve Award, *i.e.*, first prize for overall performance in the field of family planning in the country. The award was in the form of a trophy.

Second and third prizes for overall best States were given to the States of Andhra Pradesh and Kerala respectively. Both these States received a shield each.

These awards are given to the States which have shown best overall performance in terms of equivalent sterilizations. For the States which did not achieve 50 per cent of the National targets either in IUCD or in sterilization, the performance in that activity was excluded for the purpose of calculating the overall performance. The combined performance was worked out in terms of equivalent sterilizations per 1000 population by taking 3 IUCD insertions and 12 users of conventional contraceptives as equal to one sterilization.

These awards, announced recently by the Department of Family Planning on the recommendations of the National Awards Committee on Family Planning, were presented by the Union Deputy Minister of Health and Family Planning Prof. A.K. Kisku at the concluding day of the conference.

Prof. Kisku, presenting the awards emphasized the need for giving a new look to the programme. This was imperative, he added, as no single pattern was valid for all times.

The Minister observed that if the gap between awareness of family planning and its adoption was to be bridged, a new strategy had to be evolved to study people's motivation in depth. The family planning slogans, thus had to be intimately related to this motivation, he added.

Prof. Kisku said that the programme could be regarded as a vehicle of social change as it had succeeded in attacking the "citadel of tradition and orthodoxy". He hoped that the family planning centres would become focal points of the welfare activities in the rural areas, and would forge effective links with the people. Satisfied acceptors, he added, could also be profitably utilized in propagating the programme.

Pondicherry, received a trophy for overall best performance among Union Territories. Pondicherry won another honour, in the form of a trophy for

securing first position in IUCD, among all the States and Union Territories.

For the best overall performance among the railway zones, a shield was awarded to the Western Railway and for the Commands under the Ministry of Defence, the award went to the Eastern Command.

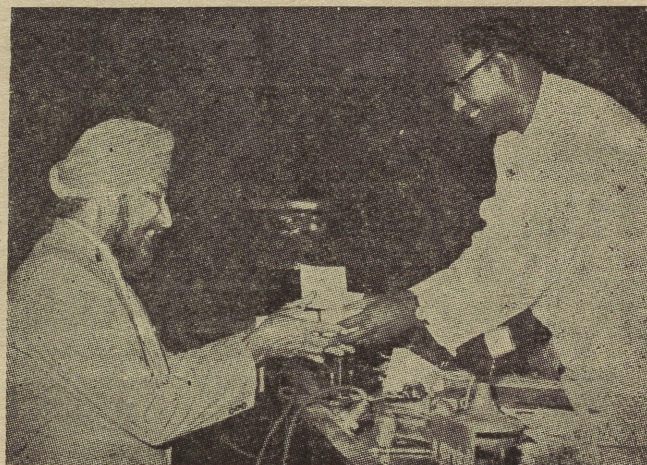
Among voluntary organizations, Maharashtra Arogya Mandal, Hadapsar, Poona, were awarded the best overall performance and secured a trophy.

Dr Harmel Singh, Director of Health Services, Punjab, had been declared the best doctor for having performed the largest number of sterilization operations in the country who got fee on per case basis. He won a cash award of Rs 5,000. Among the doctors in employment but not getting any fee on per case basis, Dr K. Parandham of Andhra Pradesh, got a similar cash award. This award had been announced for the largest number of sterilizations and IUCD insertions after converting IUCDs into sterilizations on the scale of three IUCDs being equivalent to one sterilization.

A cash award of Rs 1,000 was won by Dr (Smt.) Sudharani Jena of Orissa for topping in IUCD performance among doctors.

The honour for being the best district for overall best performance in the country has gone to Bastar District of Madhya Pradesh. Bijapur Primary Health Centre of this very District secured first position among primary health centres in the country. Both got a cash award of Rs 5,000 each.

Regional Family Planning Training Centre, Calcutta, was declared the best institution among Family Planning Training Centres for demonstrating maximum utilization of training capacity and improvement in the performance of workers as a result of training. The centre got a shield.



Dr Harmel Singh, Director, Health Services, Punjab receiving the award for having performed the largest number of sterilization operations among doctors getting fee on per case basis.

To encourage research work in the field of Biomedicine, the cash award of Rs 5,000 was given to Dr A.B. Kar of the Central Drug Research Institute, Lucknow, for conducting the best research work in this field.

Earlier in his address to the secretaries, the Health Secretary, Shri K.K. Dass, said that the programme should go hand in hand with the maternity and child health, general welfare and nutrition programmes.

The most essential aspect was the aftercare of those who had accepted IUCD, vasectomy or tubectomy, as this would lead to a larger acceptance. Any form of coercion, he said, had to be avoided. The work had to be done with the utmost care, he said.

—PNK

SWASTH HIND

Special Number

October 1971

on

Armed Forces Medical Services

Single copy : 25 P.

Write to : The Director,
Central Health Education Bureau,
Kotla Marg, New Delhi-1.

Before you have another child

think

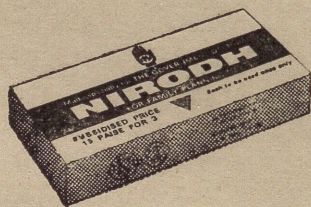
wouldn't you first
like to give this child
all the care she needs?



Life-giving milk. Nourishing food. The clothes, the toys, the books...the little things you want to make sure she gets. But if another child should come along too soon, this may not be easy. Wouldn't you prefer to avoid this?

Millions of couples all over the world are doing just that. They put off having another child till they are ready for it. You too can do this with NIRODH. It's the world's most popular rubber contraceptive for men. Remember, NIRODH is the safest, simplest method of family planning and has been used successfully for generations. So why don't you too use NIRODH.

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Until you want another child, use

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the rubber contraceptive millions choose

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Provision Stores, Pan Shops, Etc.

dayp 71/111

WORKSHOP ON HEALTH EDUCATION PLANNING

THE National Institute of Health Administration and Education (NIHAE), New Delhi prepares a corps of physicians for key managerial positions in the field of health administration in the country. The Institute conducts two types of training programmes for this purpose: (i) an academic training programme leading to the degree of M.D. (Community Health) affiliated to the Delhi University and of two years duration, and (ii) short training programmes like staff college courses, hospital administration seminars, etc. Central and State Governments, public sector undertakings, voluntary organizations, etc., sponsor the candidates.

The Institute recognized the need for training in health education planning in view of the problems faced by health administrators. Briefly stated, the problem is that while on the one hand there are several health programmes requiring a well-planned health education while on the other there is the accumulated 'know-how' of the health education planning. Yet the principles and methodology of planning have not been applied in the field of health education.

The Institute conducted a 'Workshop on Health Education Planning from 17 to 22 May 1971'. The Workshop provided a forum for health administrators, health educators and family planning and MCH personnel to discuss the aspects of the subject. Twenty-one participants, most of them drawn from the States, and representatives from several national institutes dealing with the training and research were present.

The general objective of the Workshop was the strengthening of planning, implementation and evaluation of health education. The objectives included :

- (a) Appraisal of the principles and methodology of health education planning.
- (b) Consideration of health education aspects of a specific programme (specially family

planning from the administrative and planning point of view).

- (c) Developing of health education plans for the programme (Maternal and Child Health and Family Planning).
- (d) Suggesting measures for implementation of Workshop recommendations.

The subjects discussed included : (i) an appraisal of the concept, philosophy and methodology of planning and their application to health education, and (ii) consideration of the guidelines for health education planning developed by the W.H.O. There was an exercise on planning the educational aspects of family planning and maternal and child health programmes, and suggesting measures for implementation.

The methodology followed at the Workshop facilitated work in small groups to thrash out the problem and develop the health educational plans for family planning and maternal and child health programme. The group work was supported by presentation of working papers on subjects like health education planning, problems in health education planning, etc. In addition, background and reference documents on other subjects were supplied.

The Workshop participants developed broad plans for educational aspects of the family planning and maternal child health programme. It helped the administrators to take stock of the recent developments in family planning and maternal child health programme, goals, objectives, targets, problems encountered in the field and the scope for educational work in maternal and child health and family planning. Population education also received attention.

The Workshop recognized that the aim of the family planning and maternal and child health was to raise the living standards of the people and family welfare. This was to be achieved by the



Dr M. C. Varma
(U.P.)

Dr A. A. Farooqui
(Maharashtra)

Shri J.S. Chauhan
(AIH&PH, Calcutta)

Dr S. K. Sharma
(Haryana)

Dr B. L. Mali
(M.P.)

Dr P.K. Punjani
(Gujarat)

Dr S. Subbiah
(Tamil Nadu)

acceptance of small family norm by all the eligible couples in the country in course of time.

The Workshop emphasized the importance of the educational approach to create awareness about the small family norm, and ensure proper utilization of the services, and adoption by the eligible couples of one or the other method of family planning.

Dr (Miss) L.V. Phatak, Commissioner, Family Planning and Maternal Child Health appealed to

the participants to play their role effectively. Dr T.R. Tewari former Director of NIHAЕ, who chaired the concluding session observed that health education component of the maternal and child health and family planning programme was receiving the much deserved attention. Dr A. Timmappaya, Director, NIHAЕ, pointed out that the Institute has stepped into the newer field of health planning and cited this Workshop as an example.

TEN-YEAR PERSPECTIVE PLAN FOR HEALTH EDUCATION

The Officers Incharge of Health Education Bureau in States, attended a meeting at the Central Health Education Bureau on 24-25 May, 1971. They settled down to translate into action the practice-exercise in health education planning underwent at the NIHAЕ in a Workshop held from 17-22 May, and recommended that a ten-year perspective plan and annual plans for the Five-Year Plan period may be drawn by each State Bureau. These plans would be incorporating the training needs of various categories of personnel in health, family planning and allied fields.

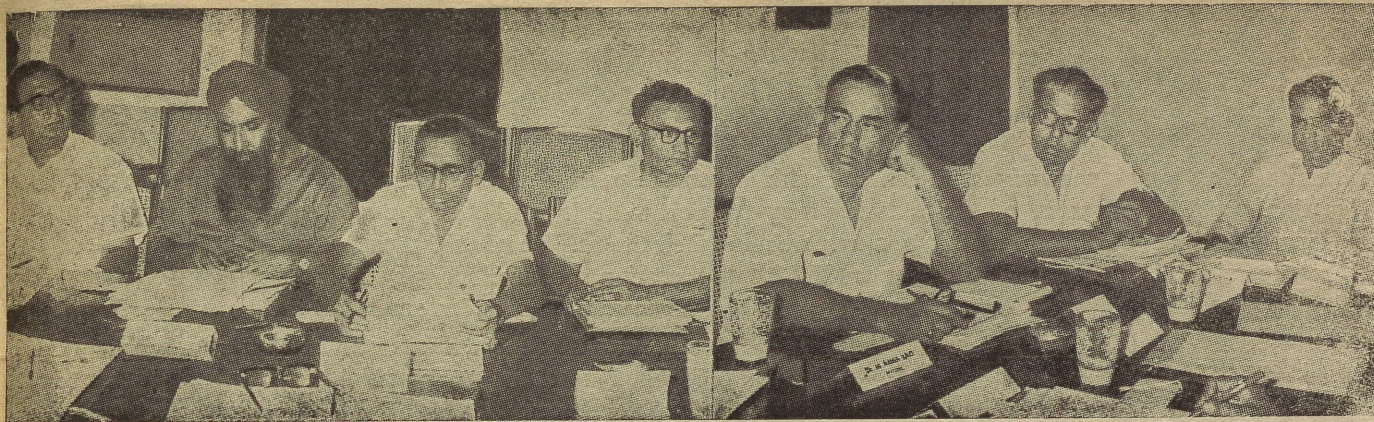
Representatives from the States of Bihar, Gujarat, Haryana, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal and the three training institutions, viz., NIHAЕ, All-India Institute of Hygiene and Public Health (Calcutta) and the Institute of Rural Health and Family Planning (Gandhigram) attended the meeting. Dr V. Ramakrishna, Adviser and Shri C.H. Piyaratna, Health Education Specialist from the South-East Asia Regional Office of the World Health Organization and Shri H.K. Kuloy, Chief of the Health Section of the UNICEF addressed the

meeting. They explained the nature of assistance available from their organizations for strengthening Health Education Bureaux and District Health Education Units.

The meeting reviewed the present stage of development (SHEBs) and took note of the fact that while the three States of Bihar, Nagaland and Rajasthan had no Bureau, the Bureaux in other States, except a few, did not have all the technical units as envisaged in the pattern suggested by the Central Government. The meeting recommended a revision of the pattern in conformity with the gradual growth and present day needs of SHEBs.

The participants also assessed the action taken by the States on the resolution passed by the 16th Meeting of the Central Council of Health pertaining to integration and/or coordination of health education resources of SHEBs, State Family Planning Bureaux and the Regional Family Planning Training Centres. Only Maharashtra had integrated the resources. The meeting recommended that health education resources including personnel available for health education in different national health programmes in the States may be pooled together

Swasth Hind



Dr D.K. Jagdev (Rajasthan) Dr Jagjit Singh (Punjab) Dr B.P. Jamuar (Bihar) Shri R.C. Bora (Rajastha.a) Dr G.C. Dey (W. Bengal) Dr J.B. Chatterjee (W. Bengal) Shri M.K. Selvaraj (Gandhigram)

to achieve optimum utilization of such resources and SHEBs should take up the responsibility for developing health education plan for all national health programmes including family planning.

Training

The meeting emphasized the need for optimum utilization of available training facilities and also their expansion. It was the responsibility of the SHEBs to impress on the chiefs of the national health programmes in the States to send their workers for training to the CHEB or the SHEB or to the Central Training Institutions.

The meeting realized the special circumstances of certain States where health educators were not graduates and recommended that CHEB may organize special training programmes for them.

The meeting laid stress on assessment of training needs and their fulfilment through augmentation of manpower resources and functional coordination between the SHEB and the Mass Education and Media Section of the State Family Planning Bureau.

Realizing that medical personnel were not coming forward to man health education posts, it was suggested that training institutes conducting health education diploma programmes should demonstrate teaching and service component of health education in the undergraduate medical curriculum in selected medical colleges and teaching hospitals. To promote understanding about health education among health administrators seminars should be organized by the NIHAЕ. SHEBs should also organize at least one seminar in a year at the State level.

The health education chiefs from the States felt a need for building professional leadership in

health education in the country. They suggested that doctoral level courses in health education may be started by suitable institutions and universities.

School Health Education

SHEBs had a vital role in developing school health education programmes and population education programmes. Establishment of Student Health Education Units in SHEBs, and School Health Committees in the States was considered important.

The meeting reviewed the recommendations made by the Inter-country Workshop on Health Education in Schools held in Bangkok (November, 1970), meeting of the State Health Secretaries and the Administrative Medical Officers (April, 1971) and the 10th National Seminar on Primary Education and Work-Oriented Education (November, 1970). It decided that SHEBs should take steps to implement these recommendations. With a view to strengthening the school health education component of the school health education programme, the meeting recommended that each State should take up in a district, a pilot project during the year 1971-72.

Field Study and Demonstration Centre

The FSDC provided opportunity for imparting field training and testing health education skills and media. Since most of the SHEBs had not established this unit, the meeting recommended that all SHEBs should establish the FSDC by the year 1972-73.

Research and Evaluation

The importance of behavioural research for building ideas, identifying problems, testing and developing educational methodology was considered and it was felt that each State Bureau should take

up annually at least one study on selected health education problem. Reports of these studies may be consolidated at CHEB to build up a research reference service. The SHEBs should draw on CHEB and other training institutes for assistance and in designing research projects and should approach ICMR for research grants. They should demonstrate the impact and usefulness of health education efforts by taking up action-research projects on some key health problems. To start with, it was suggested that some Bureaux may study why health education and publicity materials did not reach the people.

Dr P. Diesh, Additional Director-General of Health Services, addressed the meeting. He appealed

to the participants to lend full health education support to health and family planning programmes in their States. He advised them to identify the health education personnel working in different programmes and to put them under one banner.

Dr B.S. Sehgal, Director, Central Health Education Bureau, proposing the vote of thanks, said that the meeting had helped in identifying the areas of mutual assistance between the CHEB and the SHEBs. Dr J.B. Chatterjee, Assistant Director of Health Services (Health Education & School Health), West Bengal, proposed the vote of thanks on behalf of the participants.

—NST

URBAN ENVIRONMENTS IN INDIA—(Contd. from page 252)

management of eco-systems so that the process of industrialization and intensified agriculture do not receive set back. The main question that faces us is whether we should go for industrialization and accept its attendant evils or we should detest some types of industrial activity to conserve our environment and retard the process of economic growth. The later course is not acceptable. Another alternative could be to evolve superior technology so that we could have its benefits and avoid its evils. But this alternative is not feasible for us who are at a relatively low level of technological advancement. It is for the developed nations, for their concern of the problem is more serious, to evolve superior technology and make it available liberally to the developing countries. There is another reason why I feel that developed nations should take this responsibility. Environmental pollution as an international problem is

being created by the more developed countries through nuclear and other such experimentation. If any gains accrue out of such experimentation, they would be consumed by the developed nations, whereas they are leaving the undeveloped countries to share the burden of radio-active fall-outs. The area of international co-operation in environmental conservation should be so conceived as to distribute the benefits which accrue from the processes causing environmental degradation. Suitable reciprocal arrangements should be evolved so that the developing nations get their economic share and the developed nations could somewhat avoid polluting their environments further. Some developed countries which are anxious to conserve their environment are importing iron ore from India. The initial processing of iron ore causes pollution of air. Such countries could possibly import this material in its initially processed form like pellets, etc.

They would be spared of a part of the hazard of pollution on our undertaking to do the pre-processing. The advanced countries may so review their import policy as to escape some of the problems of pollution thereby affording some economic gain to the developing countries. So far the process by and large has been that the developing countries having been importing finished goods from the developed countries. The developed countries have made the economic gains but the enormous industrial activity that has been going on in these countries has polluted their physical environments. The immediate solution to the problem is to reverse the process now, not wholly though as it would be impracticable, but to the extent feasible. This alone can arrest the pace of pollution in the developed lands and solve the economic problems of the developing nations. □

Around the states

DELHI

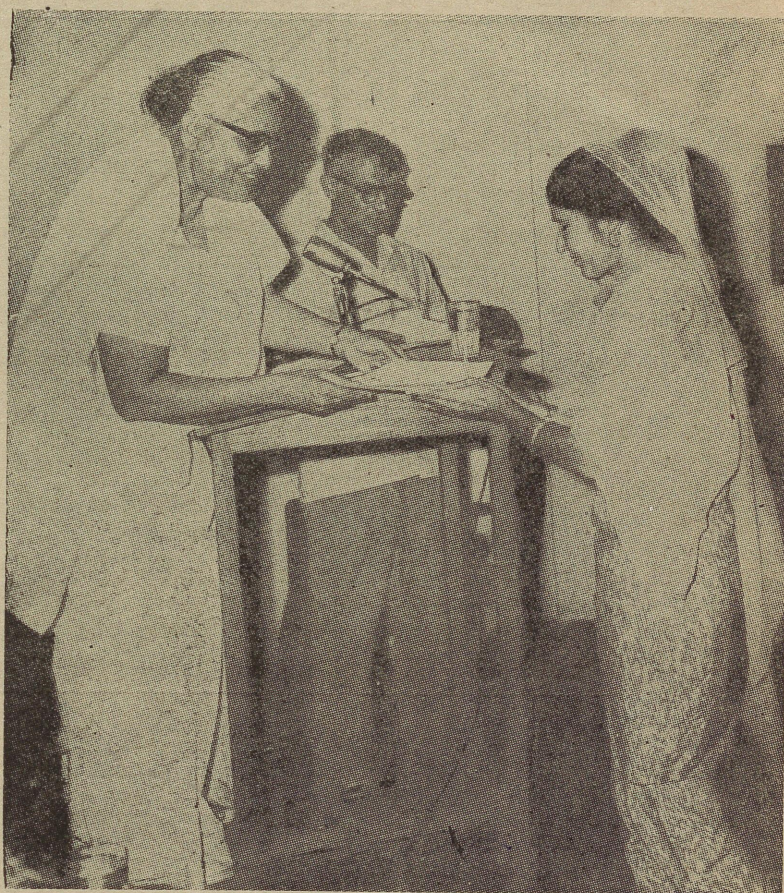
New Dimension to Family Planning Education Urged

“A uniform approach to bridge the gap between people’s knowledge and attitude towards family planning is not possible in India where it is the will of the family, the community and the relations which influenced individual decisions”, observed Dr (Miss) L.V. Phatak, Commissioner, Family Planning. She was delivering the valedictory address to the trainees of the Fifth District Mass Education and Information Officers Course conducted by the Central Health Education Bureau. Twenty-six trainees from Gujarat, Haryana, Mysore and Punjab attended the course from 2—19 June, 1971.

We have failed to appreciate, she said, “that knowledge can be effectively spread by the community.” Besides providing better services and facilities, it was necessary that knowledge was imparted in such a way that people were persuaded to adopt and practise family planning. No amount of “minted” appeals or ‘proto-type’ publicity could produce the desired impact on the masses unless a new dimension was added to our educational system in the country.

She said that family life education should be started at an early age and more emphasis should be laid on personal conversation rather than on ‘artificial means’ of mass media alone. She cited the instance of the Vedas being transmitted from one generation to another and from father to son as an example of the stupendous power of the spoken word. And yet, she cautioned, that mere word of mouth was not sufficient to educate in the modern age and hence specialized techniques of communication suitable to the local conditions had to be used.

She did not consider that a handful of government officials charged with the responsibility of mass education and information could educate the entire masses and as such she advised them to direct their extension education efforts to the community who, in turn, could educate the target groups.



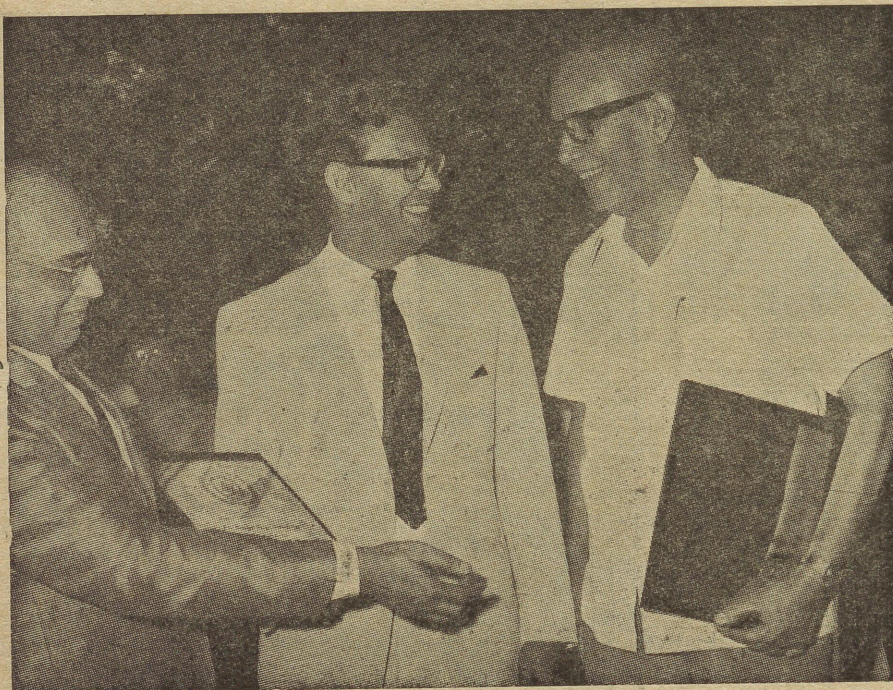
Dr (Miss) L.V. Phatak, Commissioner, Family Planning awarding certificate to a trainee.

Earlier Dr B.S. Sehgal, Director, Central Health Education Bureau, welcomed the Family Planning Commissioner who awarded certificates to the trainees.

Shri T.K. Parthasarathy, Editor, who coordinated the course explained the course content and the training methodology. The participants, besides working on a year’s mass media plan for a district had developed different types of media including two radio spots, an exhibition and some poster designs.

President Giri Presents Research Awards

SHRI V.V. GIRI, President of India, presented Amrut Mody Research Foundation Awards for 1970 to Dr Ranjit Roy Chaudhury, Head of the Department of Pharmacology, Postgraduate Institute of Medical Education and Research, Chandigarh



The recipients of the award Dr Ranjit Roy Chaudhury (Centre) and Dr Sachimohan Mukerjee (right), with Shri Amrut Modi.

and Dr Sachimohan Mukerjee, Director of Cholera Research, Calcutta at a function held in New Delhi on 15 May, 1971.

Dr Ranjit Roy Chaudhury (41) in the past few years has concentrated on reproductive endocrinology which may result in the development of a new type of contraceptive.

Dr Sachimohan Mukerjee (62) has worked on problems relating to typhoid, malaria and cholera since 1936. His work has led to the solution of a number of epidemiological problems important to public health, especially the containment of cholera epidemics.

The awards, given for the first time this year are for outstanding research work in basic medical

sciences. The award consists of Rs 10,000 and a citation.

Speaking on the occasion, Shri Giri said that though the facilities for scientists in India in the shape of funds and equipment were satisfactory, what was more important was to give recognition to work being done by Indian scientists. "The future of medical research is greatly dependent on the extent to which we develop in the fields of biochemistry, immuno-chemistry, and pharmacology", he added.

Referring to the role of medical relief, the President said that he was fascinated by the idea of 'Total Health'. It was not merely absence of disease but positive well-being. We would achieve this by treating the whole man—his physical, mental and emotional sides together, he said.

OUR CONTRIBUTORS

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Ahmedabad.

Shri N. Majumder
Acting Director
All India Institute of Hygiene and
Public Health
Calcutta-12.

JOINT COMMITTEE TO CONSIDER MEMORANDA ON WATER POLLUTION

All individuals and organizations are invited to submit their suggestions on the Prevention of Water Pollution Bill to the Rajya Sabha Secretariat, Parliament House, New Delhi by 30 September, 1971.

This is the latest decision of the Joint Committee of Parliament under the chairmanship of Shri Krishna Kant, M.P.

The Bill seeks to establish Water Pollution Boards at the Centre and in the States. They will be armed with necessary powers to deal with the problem effectively. Penalties will be provided for contravening the provision of the Act. Water testing laboratories will be established to assess the extent of pollution, lay down standards and establish guilt by default.

EMBLEM ADOPTED FOR HUMAN ENVIRONMENT CONFERENCE

A design showing man as part master/part creature of his environment has been selected as the official emblem of the United Nations Conference on the Human Environment.

“Only One Earth” has been selected as the official Conference slogan.

The Conference—to be held in Stockholm, 5–16 June, 1972—is the first world meeting of Member Governments convened to take action on the complex environmental problems faced by mankind.

Some 1,200 senior Government officials and their advisers are expected to attend the Conference.

SPECIAL NUMBER ON ENVIRONMENTAL POLLUTION

Swasth
hind

AUGUST 1971

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