PUBLIC HEALTH, LAW AND URBANIZATION

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The city life had attractions for the rural people even in the past. The town represented commercial, cultural, educational and political centre and the villagers, even in olden days, went to the city in search of education, fortune or employment as a soldier, craftsman, poet or man of letters. It was in the city that the people looked for the recognition of their merit or redress of their grievances in the court of law or the treatment of serious and chronic ailments. But this did not represent the general trend and by and large the majority of rural population was contented with the rural life and happy in agriculture pursuits.

The Industrial Revolution of 17th and 18th century in European countries resulted in accelerated flow of population to the cities and towns. England was pioneer in the development of industries, beginning with the harnessing of steam for running railways and industries. Raw products and workers were transported to and from the factories. Machines run by steam in factories produced cotton and woollen goods as well as finished agricultural products much more quickly and efficiently than was possible before. The finished products were exported at considerable profit enabling the management to pay better wages to the labourers than they were able to earn in pastoral economy.

Men, women and children left their villages in large numbers and settled round cities engaged in industries. They all got easy appointment in factories with attractive wages. They generally lived in thickly crowded localities which were dirty and lacked safe water supply, drains, latrines. They became victims of bowel and lungs diseases which brought inhuman suffering and sometimes deaths. Their suffering caught the attention of one Edwin Chadwick, a lawyer who was also the Secretary of the Poor Law Commission of England. In 1842, he published a report on the miserable condition in which the labourers working in the factories lived. This so much agitated the public and the Members of Parliament that in 1843, a Royal Commission was appointed to go into the working conditions of the labourers in the factories. As a result of the report of the Royal Commission, the Public Health Act creating a General Board of Health was established in England in 1848. For the first time in history the care of the health of the people was recognized as an important administrative

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function of the Government. The era of modern public health dates from this event. The public health as we understand it now, is thus of recent origin only about a little over 100 years old.

Prior to this health laws were codified in ancient times by Manu in India and Mosses in the West. They stressed on personal hygiene, sanctity of rivers, cleanliness of kitchens, safe disposal of excreta and human waste, segragation of sick (leprosy cases) and disposal of dead by cremation or burying. These laws had religious and social sanction behind them and as such were obeyed by people. They were enforced sometimes rather ruthlessly. We have read in ancient books that people suffering from pestilence and leprosy were thrown outside the city gate. The rivers were regarded as holy as is evident from the veneration shown to the rivers like Ganga, Jamuna, Narmada and Godavari. Pollution of river was considered a sacrilege. Pox cases were not allowed to move about and thus isolation was enforced.

Modern "Public Health" has been defined by Professor C.E.A. Winslo of Yale University as "the science and the art of preventing disease, prolonging life and promoting physical health and efficiency through organized community efforts for the sanitation of environment, the control of community infection, the education of the individual in personal hygiene, the organisation of medical and nursing services for the early diagnosis and preventive treatment of disease, and the development of the social machinery which will ensure to every individual a standard of living adequate for maintenance of health, organising their benefits in such a fashion as to enable every citizen to realise his birth right of health and longevity.

Health means wholeness and now comprises efficient and harmonious working of body, mind, and personality. Health is a precious asset of the people and according to Justice Thompson of U.S.A. "Among all the objects sought to be secured by Governmental laws none is more important than the preservation of the public health."

It has been observed that health legislation to be effective must be supported by intensive health education campaign. The Public Health Act of 1848 in England remained ineffective due to the powerful opposition of the factory owner who did not like the Government to come in-between the employer and employees. It was left to the genius and tact of Sir John Simon, who became the chief Medical Officer of the Board of Health, to convince the owners of the factories that sickness and death of trained workers were affecting adversely the production of the factory and were serious economic loss to the factory owners. The factory owners were thus persuaded in their own interest to spend a certain amount of profit for providing better living conditions for their labour with better ventilated house, safe water and adequate drainage. This resulted in considerable reduction in illness and death. Better health and happiness among workers

resulted in better production in the factory to the mutual benefit of the employer and employees. This paved the way for the establishment of new Public Health Act of 1875 which forms the basis of the present Public Health Act of Great Britain. The health laws were uniformally applied throughout the country and it was made imperative on all local bodies to employ a health officer. The environmental sanitation was improved and personal services were rendered through dispensary, hospital and maternity services. Subsequently it developed into compulsory health insurance of individuals residing in Great Britain where the States took up the complete responsibility of the health of every person residing in the country.

The British introduced public health measures in India soon after it started giving good result in England. The reason for its application was different from what was in England. It was found that there was a very high rate of morbidity and mortality in English army, particularly among the British soldiers who were not used to tropical ailments like malaria, dysentery and other bowel disorders. A Commission was appointed by the British in 1859, soon after India was taken away from the East India Company and merged into British Empire, to go into these matters. The Commission was to enquire the cause of illness and deaths in the army and to make recommendations for their elimination. The Commission soon found that the soldiers stationed in India could not be protected from the high sickness and death-rates unless the surroundings in which they lived were improved. Sanitary Commissions were appointed in presidency states with a medical man, an Engineer and an Administrator to improve the water supply, drainage and conservancy service in cities. Subsequently sanitary commissions were replaced by Sanitary Commissioners in States. Sanitary Commissioners were medical men and they were entrusted the duty of providing safe water supply, drainage, etc. in big cities. For this they got aid from the Centre as well as from the States. In 1886 Local Self-Government Act was also passed enjoining duties of local bodies in different States. With Reforms Act of 1919 Health became a transferred subject, being the responsibility of the State Governments. Consequently the development of health laws and health services vary considerably from State to State and in no State of the country it has reached the objective as in England. The States are also more or less a silent spectator in Health administration as the actual enforcement of health laws has been further transferred from the States to the local bodies under the elected local representatives. There is provision in the law of practically all the States that it can interfere and force local bodies to carry out certain health requirements but it has been found in practice that States rarely interfere in the matter of local administration.

The result is the grossly patchy development of health laws in different States. Still worse is the enforcement part of the little laws that lies with the local bodies. Many a local bodies are without health officer and

municipal engineers, and where they do exist they do not have independent *locus standii*. The powers are delegated to the health officers by the local bodies and these powers can be withdrawn or health officers technical order and advice can be over-ruled by the members or councillors of the local bodies. In fact the health officers can be removed from the local bodies, if they are found strict and not emenable to the wishes of important groups in the municipal set up. It is no wonder that most of the health officers follow the path of the least resistance and do not like to interfere and try to enforce health laws lest they annoy some influential members or groups of the local body.

Almost all the cities and towns in India have undergone considerable expansion after the last World War and subsequently due to influx of displaced persons as a result of the formation of Pakistan. During all these 25 to 30 years there was no expansion of municipal services in respect of water supply, sewerage and drainage. As such more than half the population of the city and towns are having shortage of water supply and overflow of sewerage considerably endangering the health of people residing there. A large number of workers engaged in construction work or in industries set up during the Second War for the production of utility goods, like clothes, food products or for manufacturing machine parts generally settled down at the outskirt of city where municipal water supply and sewerage system was absent or extremly inadequate. To these were added displaced persons. Many of them got settled in the existing *basties* and *katra* and some even tried to build new colonies in vacant plots available. They generally depended upon subsoil water supply which on examination was found unfit for human consumption. The latrine facilities provided to this locality are either absent or extremely inadequate. Most of the residents here foul the surrounding area causing soil pollution and pollution of subsoil water which is the main source of water supply in the colony. Absence of storm water drains poses a constant threat of flooding during the rainy season. The shallow wells often are directly pollutted by the flooding from the surface washing and the danger of epidemics of water borne diseases like Cholera, Gastro-enteritis, Typhoid become imminent. These epidemics are not confined to the concerned localities but become a threat to whole city and to check their spread, the local bodies have to spend good deal of money from their limited fund every year. Apart from the threat of seasonal epidemics, these shanties are responsible for fly nuisance due to garbage, cow dungs not being properly disposed of. The fly nuisance resulting from the colonies affect the surrounding area for about a mile round it. In the same may mosquito breed in stagnating water in this colony causing malaria and filaria. The problem of filaria is very much increasing in the urban area due to stagnation of dirty water in ill developed colonies in and round the city. The mosquitoes transmitting filaria, a disease associated with elephantitis, find dirty water as a very favourable media for breeding; and the uncontrolled urbanization is

considerably increasing the danger of filariasis which is perhaps more difficult to control than even malaria.

These *busties* have semi-*pucca* houses of various types. They are unauthorised, sub-standard and very much congested. Most of the houses have no proper kitchens. Cooking is done in living rooms or verandah leading to smoke nuisance. Most of the families live in a single room. Over-crowding, congestion, smoke nuisance and malnutrition result in tuberculosis, which spread easily in such surroundings. The people being ignorant do not co-operate with the health authorities in early diagnosis and treatment of tuberculosis cases.

Unfortunately in these congested *busties* the birth-rate is highest and the people are least amenable to adopting family planning for limiting their family. The high birth-rate is accompained here with high infant mortality rate causing a more distressing condition.

Venereal diseases, neurotic disorders leading to delinquency and social evils are more frequent in these *busties* than in normally developed areas.

Sale of cooked food in these *busties* is a great health hazard. Such food is manufactured, stored and exposed for sale in a very unhygienic conditions. Such establishments are common, rather too many and the prosecution under the Prevenion of Food Adulteration Act is often done but has not been found effective to control this nuisance, because the legal procedure is lengthy. The existing provision of punishment under the Act for a period of six months and a fine of Rs. 1000/- is seldom imposed by the court on the indigent and ignorant dwellers of *busties*. There is also lack of appreciation by court regarding the health hazard caused by these unhygienic and insanitary food establishments run by these slum dwellers and this danger is mainly to the poor *bustee* dwellers.

Similarly starting trades injurious to public health like the one which cause smoke nuisance or noise or some dyeing or tanning industry in the vicinity of some slum area considerably aggravate the insanitary conditions and health problems there. The provision for controlling such offensive trades in most of the local bodies is ineffective.

The cattle population such as cows, buffalows, goats, pigs, dogs, horses, kept by the slum dwellers helps to considerably aggravate the insanitation and congestion already created by human factors and these animals also compete with human population in respect of limited supply of food, water and air available in their overcrowded *abadis*. The result is that both men and animals suffer from diseases and add to the sufferings of each other. The existing provisions regarding control on keeping of cattle and animals under Municipal Act are extremely meagre and ineffective. We know that the water supply, sewerage and drains in most cities have failed to keep pace with rapid urbanization taking place during the last 25-30 years.

The following factors resulting in uncontrolled urbanization are rapidly increasing the health problem of the cities :—

(*i*) Haphazard development of plots by colonisers who sell the plots to individuals without making proper roads, stormwater drains, water supply, arrangements regarding disposal of sullage water from the houses proposed to be built. They do not leave open plots for essential amenities like parks, schools, M.C.W. centres, dispensaries or hospitals, police station, fire station, post office etc. As soon as the plots are sold to individuals the colonisers wash off their hands and the plot holders and their progeny are condemned to suffer due to the defects of unplanned development colonisers.

(*ii*) A group of persons coming from rural areas, sometimes from different States come to city in search of jobs. They often settle down in existing slums or start a new colony. They construct small inexpensive built hut. Even if these are demolished under Municipal laws, which is not usually done, they can be rebuilt.

(*iii*) Labours imported by the contractors of Engineering Department, C.P.W.D., Railways etc. are allowed to construct huts where they work. They are even allowed to have some *bania* shop or tea shops. The food establishments being of temporary nature, do not abide by the rules framed under the Prevention of Food Adulteration Act and remain unlicensed. The worse is that such food establishments in spite of strict supervision by the health staff fail to comply with routine cleanliness and precautions against exposure of food to dirt and flies. Such huts and establishments are allowed to continue even after the contractors work is over which might sometimes take a few years. They look for job under some other contractor and the *jhuggis* continue. Political pressure make it difficult to remove them even with alternative accommodation as the site allotted is a few miles away from their present place of work.

(*iv*) Beggars attracted to the cities for begging purpose also create such problems by constructing unauthorised huts on any vacant plots. They do not worry since their demolition by the Municipal Squads of those huts do not cost them anything.

(*v*) Sometimes villages are brought within the ambit of urban municipal limits. Here the rural population is forced to be urbanized or to shift from their ancestral homes. The acquisition proceedings take years. Political pressure, even public sympathy is in favour of the villagers who were engulfed by expanding urbanization. Shifting in such cases becomes difficult and the surrounding urban areas suffer the cattle nuisance and health hazard due to fly and

mosquito nuisance from these villages. The residents of the villages insist on using well water and field latrines. They suffer from the epidemics of cholera, gastro-entritis and typhoid and become a source of danger spreading these epidemics to surrounding localities.

(*vi*) Some of the colonies built for displaced persons or for the rehabilitation of displaced persons from Pakistan or slum dwellers lack safe water supply and proper disposal of excreta and waste water. The water supplied through hand pumps are grossly polluted due to subsoil pollution and the excreta is often found floating in open drains. There can hardly be called an improvement on their past condition from the health point of view, although a good deal of money is spent over the construction work.

To control the present serious health hazard created in the country due to uncontrolled urbanization, some effective steps have to be taken throughout the country and the Centre cannot be unconcerned about it. The Constitution of India has laid down that the State shall regard the raising of the level of its people and improvement of public health as among its primary duties.[1]

A Model Public Health Act on the lines enforced in England for application throughout the country is a necessity. This Act can be applied to States as Prevention of Food Adultration Act has been applied in the country.

The punishment for the violation of health Acts should be by summary trials no the spot by stipandary Ist Class Magistrates attached to local bodies.

There should be also an authority consisting of an Administrator, an Engineer and a medical man in each State to go round and inspect the local bodies regarding enforcement of health laws in respect of trades, building bye-laws, etc. Compounding cases with the party without the approval of the magistrate should not be allowed.

The recommendaitons of the Medical Officers of Health in respect of licensing of trades, operation of building bye laws and development plans should be made obligatory by some statute which can be overrided only by reference to the State Health Directorate and not by the local body, who cannot have adequate technical skill to judge the medical and public health implications of recommendations of the health department.

Similary cases of unauthorised construction and violation of building bye-laws affecting plan should be made non-compoundable. It has been

1. Art. 47, Constitution of India.

observed that the flagrant breach of building bye-laws have been compounded due to extranuous influences.

Delhi has got a Development Authority which is a high powered body with Lt. Governor as the Chairman. Some cities like Calcutta, Bombay, Madras may also have such development authorities to be made responsible for the development of plots and making green belts, commercial areas, residential areas, with the help of town planners, engineers and a medical man. At present no health member is associated with the Delhi Development Authority. The association of a health member with the Development Authority is necessary to safeguard the health aspects of the plan. Hurried development of rehabilitation colonies in Delhi without consulting the health authorities and ignoring their protest resulted in discharge of sewage and sullage through Najafgarh Nullah to the river Jamuna resulting in serious epidemics of jaundice in 1956 and that Nullah is even now posing a threat to Delhi in spite of condsiderable expenditure and efforts on the part of the Engineering Department during the past several years. The Development Authority should prepare development plan in and around the city making out different sizes of plots for different groups of people and also for clearing the existing slums with possible alternative sites for the rehabilitation.

The industrial areas should be marked out separate from residential areas to protect the cattle from the effect of sound, smoke, dust etc. Wherever the industries are located, a plot should be reserved near it for the provision of residential accommodation of the workers and their family. A detailed list of type of trades which are to be licensed by a local body should be prepared under the Public Health Act and the Development Authority should make out the zones where particular type of offensive trades are to be licensed. This is necessary in the larger interest of public health of people even if it involves restriction of individual freedom.

The Development Authority should also not permit development and sale of plot by colonisers unless it is assured that the necessary facilities regarding roads, drains, water supply and sewage, if possible, are available. Latrines if not connected with the sewage should be of septic tank type or aqua privy type and not of dry type. Wherever electricity is available it should be extended to the colony, Bacteriological safety of water for drinking and domestic purpose must be assured.

The best arrangement will be if the Development Authority themselves are able to develop the colonies to avoid the risk of negligence by private parties.

Any offence regarding sale of plots without sanction of the Development Authority should be treated and dealt with as a serious offence (liable to 10 years imprisonment or forfeiture of property).

Central Government should have under the Ministry of Health a strong cell having public health and engineering staff and townplanners to assist the State in Development Plans. Even the help of foreign experts at Central level would be welcome.

It is not possible to effectively control the rate of urbaniaztion in a developing country like India but if some development plan and building bye-laws enforcing minimum health requirements like a kitchen with smoke flu, drain leading to kitchen garden, community borehole latrines (if individual latrines are not availabe) Safewells and community bath rooms with drains discharging in field used for cultivation would help in providing better living conditions in villages. Apart from controlling diseases and epidemics in villages, it will encourage people to stay and work in villages particularly agriculturists and unskilled labour who run to city where they find it difficult to get a job. Development plans and building bye-laws should be rigorously enforced in villages by Block Panchayats where the medical officer of the primary health centre will be the health adviser.