CHAPTER 3

AN OVERVIEW OF THE WORKING OF PRIMARY HEALTH CARE SYSTEM: INDIA AND KERALA

In this chapter an attempt is made to have an understanding of the working of primary health care system in India and Kerala. First part of this section focuses in brief on the health planning in India. Infrastructure development in primary health care is discussed in the next part followed by a brief note on preventive and promotive measures in Kerala and India.

3.1. Health Planning in India

Health planning in India is an integral part of national socio economic planning. The Alma-Ata declaration on primary health care and the National Health Policy of the Government gave a new direction to health planning in India, making primary health care the central function and main focus of its national health system. India was one of the pioneers in health service planning with a focus on primary health care. The guidelines for national health planning were provided by a number of committees dating back to the Bhore Committee. A brief description of the reports of these committees are discussed below.

Bhore Committee, (1946) – A landmark

In 1946, the Health Survey and Development Committee, headed by Sir Joseph Bhore recommended establishment of a well structured and comprehensive health service with a sound primary health care infrastructure.
The committee visualized the development of primary health centers in two stages. (a) As a short-term measure, it was proposed that each primary health center in the rural areas should cater to a population of 40000 with a secondary health center to serve as a supervisory, coordinating and referral institution. For each primary health center, two medical officers, 4 public health nurses, one nurse, 4 midwives, 2 sanitary inspectors, 2 health assistants one pharmacist and 15 other class IV employees were recommended. (b) As a long term measure, it was recommended to set up primary health units with 75 bedded hospitals for each 10000 to 20000 population and secondary units with 650-bedded hospitals and district hospitals with 2500 beds.

*Mudaliar Committee (1962)*

In 1959, the Government of India appointed another committee known as ‘Health Survey and Planning Committee’. This committee found the quality of services provided by the primary health centers inadequate and advised strengthening of the existing primary health centers before new centers were established. It also advised strengthening of sub divisional and district hospitals so that they may effectively function as referral centers.

*Chadah Committee (1963)*

The Committee recommended that the ‘vigilance’ operation in respect of the National Malaria Eradication Programme should be the responsibility of the general health services. i.e. primary health centers. The Committee also recommended that the vigilance operation through monthly home visits should be implemented through basic health workers. One basic health worker per
10000 populations was recommended. These workers were envisaged as “multipurpose” workers to look after additional duties of collection of vital statistics and family planning.

**Mukherjee Committee (1965)**

A committee known as ‘Mukherjee Committee’ under the Chairmanship of Shri Mukherji, the then Secretary of Health to the Government of India, was appointed to review the strategy for the family planning programme. The committee recommended separate staff for the family planning programme. The family planning assistance were to undertake family planning duties only. The basic health workers were to be utilized for purposes other than family planning.

**Mukherjee Committee (1966)**

The Committee worked out the details of Basic Health Services which should be provided at the block level, and some consequential strengthening required at higher levels of administration.

**Jungalwalla Committee (1967)**

The Committee recommended integration from the highest to the lowest level in the services, organization and personnel. The main steps recommended towards integration were Common seniority, recognition of extra qualification equal pay for equal work, special pay for specialized work, no private practice and good service condition.
**Kartar Sing Committee (1973)**

Major recommendations of the committee were (a) for proper coverage, there should be one primary health center for a population of 50,000, (b) each primary health center should be divided into 16 sub-centers each having a population of about 3000 to 3500 depending upon topography and means of communications, (c) each sub-center should be staffed by a team of one male and one female health worker, (f) there should be a male health supervisor to supervise the work of 3 to 4 male health workers and a female health supervisor to supervise the work of 4 female health workers and (g) the doctor in charge of a primary health center should have the overall charge of all the supervisors and health workers in his area.

**Shrivastav Committee (1975)**

Committee recommended establishment of two cadres of health workers, namely multi purpose health workers and health assistants between the community level workers and doctors at the primary health centers, development of a 'Referral Service Complex' by establishing proper linkages between the primary health center and higher level referral and service centers. The committee felt that one male and one female health worker should be available for every 5000 population. Also, there should be one male and female health assistant for two male and female health workers respectively. The health assistants should be located at the sub center, and not at the primary health center.
Rural Health Scheme (1977)

In 1977, the Government launched a Rural Health Scheme, based on the principle of “placing people’s health in people’s hands”. It is a three tier system of health care delivery in rural areas based on the recommendation of the Shrivastav committee in 1975. Close on the heels of these recommendations an international conference at Alma-Ata in 1978, set the goal of an acceptable level of Health For All the people of the world by the year 2000 through primary health care approach. As a signatory to the Alma-Ata Declaration, the Government of India is committed to achieving the goal of Health For All through primary health care approach which seeks to provide universal comprehensive health care at a cost which is affordable.

National Health Policy (1983)

Keeping in view the WHO goal of Health For All by 2000 AD, the Government of India evolved a National Health policy based on primary health care approach. It was approved by parliament in 1983. The National Health Policy has laid down a plan of action for reorienting and shaping the existing rural health infrastructure with specific goals to be achieved within 1985, 1990 and 1995 within the frame work of sixth and seventh plan and new twenty point programme.

National Health Policy (2001 and 2002)

The National Health Policy 2001, the first since 1983, though announced health as State’s responsibility, pointed out that the growing
constraints in the State’s resources has resulted in shrinking health sector budget. National Health policy 2001 had identified availability of medicines at the primary care level as the reason for the relatively better utilization of public health centers in the southern States. The policy documents had envisaged the 'kick starting of the revival of the primary health care system by providing some essential drugs under central Government funding through the decentralized system.

The basic objective of National Health Policy 2002 is to achieve an acceptable standard of good health amongst the general population of the country. The State Health System Department projects are under implementation in the States of Karnataka, West Bengal, Punjab, Orissa, Maharashtra and Uttar Pradesh, with World Bank assistants. The focus of the programme is on strengthening the health care delivery system at secondary level and integrating with the primary health care delivery system for improving health care services.

Various steps have been undertaken to implement the National Health Policy. They are:

a. Village Level

One of the tenets of primary health care is universal coverage and equitable distribution of health resources. That is, health care must penetrate into the farthest reaches of rural areas and that every one should have access to it. To implement this policy at the village level, the following schemes are in operation.
(i) Village Health Guides

A village Health Guide is a person with an aptitude for social service and is not a full time Government functionary. The duties assigned to health guides include treatment of simple ailments and activities in first aid, mother and child health including family planning, health education and sanitation. They are expected to do community health work in their spare time of about 2 to 3 hours daily. The scheme was launched in all States except Kerala, Tamilnadu and Karnataka.

(ii) Local Dais

Most deliveries in rural areas are still handled by untrained dais who are often the only people immediately available to women during the perinatal period. An extensive programme has been undertaken, under the Rural Health Scheme, to train all categories of local dais in the country to improve their knowledge in the elementary concepts of maternal and child health and sterilization besides obstetric skills.

(iii) Anganawadi Worker:

'Angan' literally means a courtyard. Under the ICDS scheme, there is an anganwadi worker for a population of 1000. There are about 1000 such workers in each ICDS project. The anganwadi worker is selected from the community she is expected to serve. She undergoes training in various aspects of health, nutrition, and child development for four months. Along with health
guides, the anganwadi workers are the community’s primary link with the health services and all other services for young children.

b. Sub-center level

The sub-center is the peripheral out post of the existing health delivery system in rural areas. They are being established on the basis of one sub-center for every 5000 population in general and one for every 3000 population in hilly, tribal and backward areas. Each sub-center is manned by one male and one female multi purpose health worker. At present, the function of a sub-center are limited to maternal and child health, family planning and immunization. The work at sub-center is supervised by male and female health assistants. According to the revised norms, one female health assistants will supervise the work of 16 female health workers.

c. Primary health center level

The primary health care infrastructure provides the first level of contact between the population and health care providers up to including primary health care physicians and forms the common pathway for implementation of all the health and family welfare programmes in the country. It provides integrated promotive, preventive, curative and rehabilitative services to the population close to their hearth and home. Majority of the health care needs of the population is taken care of by the trained health personnel at the primary health care level. Those requiring specialized care are referred to secondary or tertiary care facilities with adequate referral linkages will provide essential health and family welfare services to the entire population.
d. Community health centers

The present primary health centers, while serving a population of 50000 to 60000 will also function as referral center. The suggestion of the Government of India is to convert all the block primary health centers into community health centers provided they have certain minimum facility. The community health centers should have a minimum of 30 beds, X-ray facilities, operation theatre, laboratory and some specialty services. The community health centers will function as a referral center for 4 to 5 primary health centers, in addition to being the direct action center for 50000 to 60000 populations.

3.2. Rural Primary Health Care Infrastructure

At the time of independence, health care services were mainly urban centered and hospital based. Realizing the importance of creating a functional primary health care infrastructure, national norms for the primary health care infrastructure were drawn up. These take into account the population, population density and terrain.

Earmarked funds were provided under the Minimum Needs Programme in the State plan allocations. The funds received from the Department of family Welfare and through the externally assisted projects were utilized to build up the Rural Health Infrastructure. In rural areas services are provided through a network of integrated health and family welfare delivery system. As on 31st March 2004 an extensive network of 3043 community health centers, 22842 primary health centers and 137311 sub-centers were in existence to provide primary health care at grass root level. Further, 8669 new sub-centers were
sanctioned during the year 2003-04. One sub-center manned by one female and a male multipurpose worker covers a population of 5000 in plain areas and 3000 in hilly, tribal and backward/difficult terrain areas. One lady Health Visitor supervises six sub-centers. One primary health center covers a population of 30000 in the plain areas and 20000 in tribal and difficult terrain areas. One community health center covers 80000 to 120000 populations. It has 30 indoor beds, well equipped laboratory and X-ray facility\(^1\) (Table 3.1).

### Table 3.1.

**Health Care Infrastructure**

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2. Rural Health Statistics, June 1996

3. Health Information.


\(^1\) India 2005: Ministry of information and Broadcasting Government of India. p.378
Unlike the sub-center and Primary health centers, the number of functioning community health centers, which form the First Referral unit, was reported in the ninth plan far below the projected requirements. Ninth plan intended to fill this gap quickly so that primary health centers and sub-centers do have a nearby referral hospital for the management of high-risk patients who are referred. In most of the State there are sub district and Taluk hospitals. With the restructuring of the primary health care institutions in the seventh plan, these institutions were to be re-designated as community health centers and suitably strengthened. The eighth plan had also reiterated this strategy. States that had implemented this suggestion report that these first referral units are well utilized, as they are located in towns that are well connected with villages by transport and are well known. During the ninth plan, all the States are directed to restructure the existing sub district, Taluk hospitals and block level primary health centers into functioning community health centers. It was expected that once this restructuring is completed, the current large gaps in functioning community health centers will be narrowed substantially. Similarly the existing rural hospital and dispensaries are restructured to meet the requirements in primary health centers. It was reported in the tenth plan that in spite of impressive rural primary health care infrastructure, public health care infrastructure is catering to only 20% of all health care needs of the population. National Common Minimum Programme envisaged raising public spending on health to at least 2-3 per cent of GDP with focus on primary health care. The Department of Family welfare is planning to improve access to primary health care in rural under served areas and urban slums, both through revamping of the public health care infrastructure and activation of public-

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2 India 2005: Ministry of Information and Broadcasting Government of India. p.378
private partnership during the phase II of the Reproductive and Child Health Programme (RCH) due to be launched in April 2005\(^3\).

### 3.3. Health Manpower in Rural Primary Health Care Institutions

As per the national norms, one male and female multi purpose worker should be available at the sub center catering to the health needs of 3000 to 5000 population. The number of sanctioned posts of male multi purpose worker is only half the number required (10\(^{th}\) plan documents). This has been cited as one of the major factors responsible for the sub-optimal performance in health sector programmes. There are large number of male workers employed in the malaria, leprosy and TB control programme. The plan recognized the need to be trained these and redeployed as male multipurpose workers and given the responsibility of looking after health and family welfare programme in their sub-center area. The availability of the female multipurpose worker in adequate number has been the major factor for the near universal coverage under the immunization programme and improvement in ante natal care, however, the quality of care provided needs improvement. The vaccines as well as the lack of sanctioned posts of radiographers, lab technicians and other para-professionals have adverse impact on ongoing health and family welfare programme.

During the ninth plan, several of the centrally sponsored schemes including Family Welfare Programme, Revised National Tuberculosis Control Programme, National Malaria Eradication Programme provided funds for recruitment of appropriate manpower funds provided under Act for Basic Minimum Services (BMS) may also be utilized to fill the critical gaps in health

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\(^3\) The RCH II aims at assessing success of the various interventions by way of performance outcomes for vulnerable population groups, for which specific performance indicators are being developed.
manpower. Every district is directed to undertake district level manpower surveys and planning, so that funds from all these sources are optimally utilized to fill the existing gaps in vital manpower and unnecessary duplication is avoided.

Previously, the national norms for manpower requirements have been computed on the basis of population. During the ninth plan, the requirement of personnel is computed not only on the basis of population, but also on the basis of work load, distance to be covered and difficulties in delivering of health services. A flexible approach to recruitment of staff, if necessary on part time basis is decided to adopt to ensure that programmes do not suffer due to lack of key personnel.

*Physicians in PHCs*

The PHC doctors at the national level exceed the requirement as per the norms (ninth plan). However, there is marked difference in their distributions. About 10% of Primary Health Centers are without doctors, while a similar number have three or more doctors. The primary health centers (PHC) with out doctors are mostly located in remote areas where health care facilities under voluntary or private sector are also limited. The State Governments are taking steps to re-deploy the PHC doctors so that needs of the population in under served areas are met on a priority basis. A substantial proportion of specialist posts even in the functioning Community Health Centers (CHC) are vacant. Hence, these community health centers are unable to function as FRU. In view of the serious implications of this lacuna in the establishment of referral system, as well as effective provision of health, maternal and child health, family
planning care, various measures have been implemented in the ninth and tenth plan. Improving the service condition and providing a conducive environment was considered essential to ensure that specialist in CHCs do stay and provide the needed services. At the moment, there is no post of public Health Specialist or Anesthetist in the CHCs. Services of Anesthetist are found to be vital for emergency/ routine surgery in CHCS. Under ninth plan efforts were made to provide this critical manpower. Plan also envisages posting specialist in CHCs who will be responsible for curative services.

The new primary health centers with a population of 20,000 to 30,000 will have to be provided with minimum facilities like

1. 10 inpatient beds
2. Well organized OP Department with facilities for accident treatment and laboratory
3. Adequate provision of food and drugs
4. Adequate supporting paramedical and office staff
5. Immunization facilities
6. Maternal and Child health services
7. Health education programmes and tools
8. Vehicles and
9. Office

The suggestion of the Government of India is to convert the entire block PHCs into Community Health Centers provided they have certain minimum facility. The CHCs should have a minimum of 30 beds, X-ray facilities, Operation Theater, laboratory and some specialty services. The CHC will
function as a referral center for 4 to 5 PHC, in addition to being the direct action for 50,000 to 60,000 populations.

From the point of view of the functional structure of a PHC, it should have the following minimum facilities.

a. At least three Medical Officers, including a Lady Medical Officer.
b. Adequate OP facilities including accident treatment and pediatric facilities.
c. Operation theatre and labor room
d. Laboratory room service.
e. Supportive paramedical staff
f. Adequate provision for food and medicine.
g. Minimum staff required for office work and supervision (IUD clerk, one clerk and one typist)
h. Vehicle
i. Health surveillance
j. Maternal and Child care facilities
k. Facilities for family welfare programme

The health team has no meaning as a mechanism for community welfare unless its members by working together reach the grass root levels of the local population directly.

**Job description of staff of a PHC**

1. Medical Officer: He is the captain of the health team at the primary health center. He devotes the morning hours attending to patients in the out door; in
the afternoon he supervises the field work. He visits each sub-center regularly on fixed days and hours and provides guidance, supervision and leadership to the health team. He spends one day in each month organizing staff meeting at the primary health center to discuss the problems and review the progress of health activities. He ensures that national health programmes are being implemented in his area properly. The success of a primary health center depends largely on the team leadership which the Medical Officer is able to provide. The Medical Officer must be the planner, the promoter, the director, the supervisor, the coordinator as well as the evaluator.

2. The Health Supervisor and Lady Health Supervisor: The jurisdiction of a health supervisor /lady health supervisor is the whole area of the PHC to which they are attached. They assist medical officer of PHC in organizing and implementing various health and family welfare programmes including mass campaign. They collect reports from all health inspectors and maintain a consolidated register and record all information regarding field activities and report to the charge medical officer.

3. Health Supervisor (Male): The important functions of Health Supervisor (M) are:
1. Be in charge of block level health and family welfare education activities
2. Give necessary guidance and assistance to health workers and lady health workers.
3. Organize special strategies for education purpose in respect of specific and special programmes.
4. Render necessary assistance to District level education officers for the various education programmes in respect of health and family welfare.
5. Investigate out break of communicable disease and furnish the report to the concerned Medical Officer.

6. Conduct monthly staff conference at PHC

7. Verify and supervise the periodicity of visit of lady health inspectors and lady health workers in the field.

4. Health Supervisor (FM):
   - Supervise and coordinate the work of lady health inspectors and lady health workers.
   - Render necessary administrative assistance to Medical Officers
   - Be in charge of organizing and implementing the immunization programme of school children as a part of school health and render necessary assistance for the same.

5. Health inspectors and lady health inspectors
   Jurisdiction of a health inspector/lady health inspector is over the area of a 4(3to5) health workers and supervisory control is over those health worker or lady health worker as the case may be.

6. Health inspector (M):
   - Carry out concurrent and consecutive supervisory house visit in the area of health worker
   - Keep vigilance to detect out break of communicable disease like cholera, gastroenteritis, malaria etc,
   - Give radical treatment for positive malaria cases
   - Supervise spraying of insecticides
   - Help community for activities for improving environmental sanitation.
- Conduct inspections of places of dangerous offensive traders including eating and drinking places where food items are prepared.
- Supervise chlorination of water sources.

7. Health Inspector (FM):
- Carry out concurrent and consecutive supervisory house visits and sub-center visits in the area of lady health workers
- Conduct MCH and family planning and carry out educational activities
- Visit each of the sub-center at least once in a week in fixed days.
- Responds to urgent calls from lady health workers and render necessary help.
- Motivate personally resistant care for family planning.
- Provide information on availability of services for medical termination of pregnancy
- Render assistance for medical examination of school children.
- Health worker Male and Female

Under the Multi purpose Worker Scheme, one health worker female and one health worker male are posted at each sub-center and are expected to cover a population of 5000 (3000 in tribal and hilly area). However, health worker female limits her activities among 350 to 500 families.

8. Health Worker Grade 1 & 11 (Male):
- Make one visit in a month to each family on the allotted area and maintain family and village records.
- Implementation of health programmes
- Implementation of family planning and MCH programmes
Control of communicable diseases
Health and family welfare education
Nutrition service
Immunization
Collection of details of vital events
School health programmes
Medical termination of pregnancy

9. Lady Health Worker Grade I and II

- Make at least one visit in a month to each family of the allotted area.
- Implement MCH and family planning: Major item included are: Immune pregnant women with tetanus toxoid
- provide at least three post delivery visit to each mother and render necessary advice,
- distribute conventional contraceptives,
- distribute iron and folic acid tablets, vitamin A drops.
- Immunisation: Administer DPT, DT, TT, Polio and Typhoid; educate the community about the importance and procedures of immunization.

Monitoring Mechanism

The status of primary health care infrastructure and manpower is being monitored by the department of family welfare. It is also being monitored as a part of the MNP / 20 point programme. The Central Bureau of Health Intelligence monitors the health care infrastructure, manpower and health status of the population. Planning Commission monitors the programme in PHC.
infrastructure/ manpower annually during the annual plan discussions. Number of doctors in modern system as on March 2004 was estimated to be 6,25,131⁴.

3.4. Kerala

Health is a State subject under the Indian constitution, and the responsibility for providing health services lies with the State’s Department of Health and Family Welfare. The Department is headed by a minister of Cabinet rank. At the District level, the health organization is under control of the District Medical Officer, assisted by District Deputy Officer and looking after special concerned programmes in the District. There is a District Immunization Officer in all the districts of Kerala to look after the immunization activities in the district. Kerala has district hospitals in all the districts of the State where curative services are provided. In all the district hospitals there are specialists care available like Pediatrics, ENT, Ophthalmology, Obstetrics, and Gynecology, general surgery and general medicine.

The Minimum Needs Programme of Health Service Department gives priority to the development of rural health services. The establishment of sub-centers, primary health centers, up gradation of primary health centers and construction of buildings for primary health centers /sub-centers and staff quarters are included in the programme. The Integrated Department of Health Services perform the chief function of delivery of primary healthcare in a whole some manner, and the attainment of preventive family welfare including maternal and child health and promotive health care in addition to the routine curative services and rehabilitative aspects of health care constitute the main

⁴ Medical Council of India: Planning Commission, Ministry of Health and Family Welfare
activities of the department. The activities include the establishment and maintenance of medical institutions with necessary infrastructure, control of communicable disease, rendering of family welfare service including MCH services, implementation of National Control/or eradication programme and administration of the directorate.

3.4.1. Health Infrastructure

The access to institutional care and health manpower development has largely contributed to the unique position. Kerala has a vast infrastructure which has remarkably contributed to the attainment of the present health standards. A trend analysis of the allopathic infrastructure under government sector would show that at the commencement of the first five year plan, the State had 230 institutions. This has increased to 963 in 1981, 1249 in 1994 and 1310 in 2003. An analysis of 2003 position further bring out that in 2003, there were 933 (72%) primary health centers, 115 (9%) community health centers, 130 (10 %) hospitals and 121 (9 %) dispensaries and other institutions including grants in aid institutions.

As regards accessibility of institutions, there is a sub center for every 5000 persons as against 4581 at the All India level. Primary health center on an average serves a population of more than 2500 and each community health center serves a population of about 2.25 lakh in Kerala. For every 6.16 sq.km, in the State, there is one primary health center. The accessibility to health infrastructure and services is higher as compared to other States and India. Average bed in primary health center is 5.4 at State level. Community health centers are rural based hospital above primary health center. National pattern of
community centers is 30 beds and 5 specialties. In Kerala, the average beds in Community Health Center is 40 and it varies from 29 in Kasargod to 51 beds in Palakkad. Eighty percentage beds are in urban areas and twenty percentage are in rural areas. Average hospital beds under Directorate of Health Service in Kerala are 174 and it varies from 91 beds in Pathanamthitta to 264 beds in Kozhikode District.5

Table 3.2.
Details of Rural Health Infrastructure in Kerala from 1986 to 2003

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<td>105</td>
<td>4415</td>
<td>5094</td>
</tr>
<tr>
<td>2003</td>
<td>933</td>
<td>5060</td>
<td>115</td>
<td>4726</td>
<td>5094</td>
</tr>
</tbody>
</table>


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3.4.2. Private Sector Plays a Vital Role

The discussion on the health infrastructure is only partial of mention is not made about the private health infrastructure which plays a vital role. A survey conducted by Department of Economics and Statistics revealed that there were 3565 private allopathic institutions with about 50,000 beds in the State. Number of beds in public sector increased from 36000 to 38000 in public sector from 1986 to 1996 showing an increase of 5 % whereas in private sector, number of beds increased from 49000 to 67000 – an increase of 40 %.

3.4.3. High bed Population Ratio

With the growth of health infrastructure, there has been tremendous expansion of beds in the government sector. The hospital beds increased from 6752 in 1951 to 31206 in 1981 and 46,800 in 2003. The number of beds per lakh population in Kerala in 2003 is estimated to be 160.

3.4.4. Decentralisation of Planning

The process of decentralized planning launched by the State Government during 1997-98 has meant a major change in the approach to planning and development. There are 1226 allopathic medical institutions transferred to local bodies out of which, 938 are primary health centers, 105 community health centers, 63 Government hospitals, 41 Taluk hospitals, and 11 district hospitals. Thus, a total of 2593 medical institutions including ayurvedic and homeopathic institutions have been transferred to local bodies as part of decentralisation. During 1997-98, the local self Government institutions have formulated 5363
projects and allocated Rs. 38.59 crore. Construction of buildings in backward areas received priority and during 1997-2000, 90021 sq.km. of building constructed.

3.5. Preventive measures

Primary health care functions include preventive, promotive and curative measures. An overview of the working of preventive and promotive measures in India and Kerala are discussed here. Working of curative measures is given in the fifth chapter ‘Morbidity transition in rural Kerala’.

3.5.1. Working of preventive measures

Preventive measures include methods of family planning and Maternal and child Care.

(a) Family Planning Programme

Family planning refers to the practices that help individuals or couples to attain such objectives as avoiding unwanted birth, bringing about wanted birth, regulating the intervals between pregnancies, controlling the time at which birth occurs in relation to the age of the parents and determining the number of children in the family (WHO 1980). An expert committee (1971) of WHO defined family planning as a “way of thinking and living that is adopted voluntarily upon the basis of knowledge attitudes and responsible decisions by individuals and couples in order to promote the health and welfare of the family groups and thus contribute effectively to the social development of a country WHO (1986).
Family planning is a scientific and planned approach to make the family happier and harmonious. The main appeal for the family planning is the realization of the need for family limitation on a wide scale on the basis of knowledge, attitudes and responsible decision by the individuals and couples in order to promote the health and family and there by contribute to the social development of the country.

(b) Evolution of the India’s Family Planning Programme

India launched a nation-wide family planning programme in 1952, making it the first country in the world to do so, though records show that birth control clinics have been functioning in the country since 1930s. The entire first decade of India’s family planning programme, which had began with the adoption of first five year plan (1951-56), was a period of very humble and cautious start. Although following the model used by Planned Parenthood organization in the west, the setting up of family planning clinics for those who needed such services (what is known as ‘clinic based approach’) was visualized, the chief emphasis during this period was on natural method (example: rhythm).

The pace of increase in voluntary contraceptive acceptance by the end of second plan was slow and the record of voluntary attendance in family planning clinics was poor. This expectation of people’s voluntary response to a clinic-based approach shows of course a sheer immaturity of official understanding and perception of the reality. This in turn led to a rethinking about the efficacy of clinic-oriented approach.
The Third Five-Year Plan (1961-66) document again expressed serious concern about an increasing growth rate of population, which had by then reached about 2% per annum. During the Third Five Year Plan, family planning was declared ‘as the very center of planned development’. The emphasis was shifted from purely ‘clinic-based’ approach to the more vigorous ‘extension education approach’ for motivating the people for acceptance of the ‘small family norms’. A full-fledged Department of Family Planning was created in the Ministry of Health. During the years 1966-69, the programme took firmer roots which was described as the ‘King pin’ of the plan was made time-bound and target oriented with vastly increased funds. The family planning infrastructure (Example, Primary health centers, sub-centers, urban family planning centers, District and State Bureau) was strengthened. During the fourth plan, (1969-74), the Government of India gave top priority to the programme. The programme was made an integral part of MCH activities of primary health centers and their sub-centers. In 1970, an All India Hospital Post Partum Programme and in 1972, the Medical Termination of Pregnancy (MTP) were introduced. It was only during the Fourth Five Year plan that the proportion of outlays on Family Planning programme reached the maximum (about 1.8%) ever recorded so far.

During the fifth plan, there was a shift from the clinical approach to control birth rate to a policy of an integrated health, family planning, nutrition and child care with a view to encouraging small family norms with healthy babies. The aim was to reduce birth from around 40 per thousand to about 25 per thousand. Apart from motivational programmes to be spread through publicity media, financial incentives were provided to induce the people for voluntary sterilization.
During the Fifth Five Year Plan (1975-80), there have been major changes. In April 1976, the country framed its “National population Policy”. The disastrous forcible sterilization campaign of 1976 led to the congress defeat in the 1977 election. In June 1977, the new (Janatha) Government that came into power formulated a new population policy, ruling out compulsion and coercion for all times to come. The Ministry of Family Planning was renamed “Family Welfare”.

Although the performance of the programme was low during 1977-78, it was a good year in as much as the programme moved into new healthier directions. The 42nd amendment of the constitution has made ‘population control and Family Planning’ a concurrent subject, effective from January 1977. The acceptance of the programme is now purely on voluntary basis. The launching of the Rural Health Scheme in 1977 and the involvement of the local people in the family welfare programme at the grass root level were aimed at accelerating the pace of progress of the programme. India was a signatory to the Alma-Ata declaration in 1978. The acceptance of the primary health care approach to the achievement of HFA/2000 AD led to the formulation of a National Health Policy in 1982. The National Health Policy was approved by parliament in 1983. It has laid down the long term demographic goal of NRR=1 by the year 2000 which implies a two child norm- through the attainment of a birth rate of 9 per thousand population and a couple protection rate of 60 per cent by the year 2000. The sixth and seventh Five Year Plan were accordingly set to achieve these goals.

The sixth Five Year Plan projected it as people’s programme, with the objectives of (i) reducing average size of the family from 4 children to two (2)
reducing birth rate from 36 per thousand to 21 per thousand. The seventh plan sought to achieve (1) a birth rate of 29 per thousand, (2) strengthening of maternal and childcare services and (3) expansion of facilities for care of pregnant women and nursing mother of the newborn babies. It assumed a crucial role for non-governmental agencies and voluntary services in propagating family planning and welfare services.

Eighth plan had revised the goals and eventually reconciled itself to a target period of 2011-16 for reaching net reproductive rate of unity. Controlling population growth was one of the six major objectives of the eighth plan. Recognizing the fact that reduction in infant and child mortality is an essential pre-requisite for acceptance of small family norm. Government of India has attempted to integrate MCH and family planning as part of family welfare services at all levels. National Development Committee approved Gadgil Mukherjee Formula which for the first time gave equal weightage to performance to MCH sector (IMR reduction) and family planning sector (crude birth rate reduction) as a part of basis for computing central assistance to non special category States.

In order to give a new thrust and dynamism to the ongoing family welfare programme the National Development Council set up a sub-committee on population to consider the problem of population stabilization and come up with recommendations to improve performance. The committee recommended that there should be (1) decentralized area specific planning based on the need assessment (2) emphasis on improved access and quality of services to women and children (3) providing special assistance to poorly performing States/districts to minimize the inter and intra state difference in performance
and (4) creation of district level data based on quality and coverage and impact indicators for monitoring the programme.

The Child Survival and Safe Motherhood programme (CSSM) was initiated in 1992. Under the programme, efforts were made to provide integrated ante natal, intra natal and post natal care to women; the child health care component included immunization, diarrhea and acute respiratory infection prevention and management programme. The pulse polio initiative aimed at eradication of polio by 2000 AD was initiated in 1996.

In response to the recommendation of the National Development Committee, there should be decentralized area specific need assessment and micro planning to meet the local needs. The Department abolished the centrally defined method specific targets for family planning in two States (Tamil Nadu and Kerala) and 18 districts in 1995-96. Encouraged by the response in these two States, department of family welfare has abolished the method specific centrally defined targets through out the country and changed over to primary health center based community need assessment, planning and implementation of family welfare programme. Efforts are made to improve access and quality of care to women and children.

International Conference on Population and Development (ICPD) was held in Cairo in 1994. It was strongly felt at the Cairo conference that population policies, which are dominated by macro demographic considerations, and acceptor target, driven programmes, are unnecessarily and unevenly burdening women with the task of regulating reproduction to meet the macro goals. It was argued that hence forth population policies should be guided primarily by the
considerations of reproductive health, reproductive rights and gender equality, rather than solely by the concern of fertility regulation as hither to practice. Following the Cairo conference deliberations and programme of action, the Government of India adopted the so called (RCH) approach to family planning and population stabilization and the method specific and acceptor based family planning targets were abolished in the country as a whole since April 1996.

The State Governments have been given the freedom to provide incentives to districts or lower level bodies or NGOs with the goal of improving the quality of services. In February 2000, the draft statement on National population policy of 1996 was finally modified and ratified by parliament announcing a new National Population Policy 2000.

There are several concerns however with the newly introduced reproductive and childcare approach. First, since this package of programme under RCH requires much enlarged budget, ‘the emphasis on contraceptive services will get diluted when budgets are not adequately increased to cover the wider goals of RCH programmes. Secondly, there is a substantial likelihood that the abolition of targets will adversely affect, at least initially the family planning performance. The critical question is whether the new approach and programme will successfully lead the grass roots workers to undertake a ‘real needs assessment’ in consultation with the communities, they are to serve with an eventual development of plans and operational strategies.

The tenth plan proposes to fully meet all the felt needs for family welfare services and enable families to achieve their reproductive goals with a paradigm shift from:
Demographic targets to focus on enabling the couples to achieve their reproductive goals.

Method specific targets to meeting all the unmet needs for contraception to reduce unwanted pregnancies.

Numerous vertical programmes for family planning and maternal and child health to integrated health care for women and children.

Centrally defined targets to community need assessment and decentralized area specific micro planning and implementation of RCH programme to reduce IMR and reduce high desired fertility.

Predominantly women entered programme to meeting the health care needs of the family with emphasis on involvement of men in planned parenthood.

(C) Achievement of family welfare programme in Kerala

For the effective and efficient implementation of family welfare programme, the State Family Welfare Bureau with the Director of Health Services (MCH) as the Controlling Officer, Additional Director of Health Services (FW) as the programme officer function at the Directorate besides a special cell formed at the secretariat exclusively for monitoring the programmes. At the State level, the programmes were organized by the family welfare Bureau and at District level, the District family Welfare Bureau. Family planning programme in Kerala is being implemented through a net work of primary health centers, community health centers and sub-centers. As on 2002 March 31st, 943 primary health centers, 105 community health centers and 5094 sub-centers are functioning in Kerala for the proper implementation of family welfare programme. Presently, family welfare programme are implemented on the basis of Community Need Assessment Approach.
Comparative statement of achievement of sterilization up to 3/2001 and 3/2002 is 151043 and 149803 respectively and the percentage of decrease in achievement was 0.8 compared to last year. Among all the districts, the performance of eight districts is satisfactory and Idukki stands first with 18.5% and Trivandrum stands last with 0.3 % of increase. The performance of Alappuzha, Kottayam, Thrissur, Malappuram, Kozhikode, and Kannur are very poor.

(D) Technique wise achievement

The total achievement under PPS up to March 2001 is 121832 and up to March 2002 is 122365 which shows an increase of 0.4% in achievement compared to the last year. The percentage of increase varies from 2.2 % of Ernakulam to 25.4% of Idukki. The districts of Trivandrum, Alappuzha, Kottayam, Thrissur, Malappuram, Kozikode, Kannur and Kasarkode are very poor. The achievement of Minilap up to the month of March 2001 is 27666 and that of March 2002 is 26301. It shows a decrease of 4.3% compared to last year. Kasarkode district has got 19.5% increase while the achievement of Kottayam district decreased to 43.3%. The total number of vasectomy reported up to March 2001 and March 2002 is 1545 and 1137 respectively. As a whole 26 % decrease shows in present year achievement from last year.

3.5.2. Spacing Method

The achievement of IUD insertion shows a decrease of 7.8 % of this year from last year. Better performance has been done by the districts of Ernakulam (19.5%) and Alappuzha (9.8%). But the performance of Trivandrum, Kottayam,
Idukki, Thrissur, Palakkad, Malappuram, Kozhikode, Kannur and Kasarkode are very poor. With regard to OP users, there is a decrease of 12.9% in this year achievement when compared to last year. Kottayam district has got poor achievement with 31.3% decrease from that of last year. The district of Pathanamthitta has got an achievement with 58.2% increase. Number of CC users showed a decrease of 13.2% in achievement during the year 2001-02. The district of Trivandrum, Kollam, Kottayam, Idukki, Thrissur, Palakkad, Malappuram, Kozhikode, Wynad and Kannur showed decrease in achievement while other district showed increase.

3.6. Promotive Measures

The health status of a population is governed by such factors as water supply and environmental sanitation. Lack of protected water supply and sanitary conditions are conducive to the prevalence of such diseases as air-borne diseases, water-borne diseases which dominate in the morbidity pattern in the less developed countries. The historical experience of the developed countries as well as the nature and causes of the dominant disease group in today’s developing countries have led to a general consensus that any improvement in general health standards would hinge more on promotive service such as environmental sanitation and water supply than on curative services.

Environmental degradation is considered to be the major cause of illness. Environment may be defined as an aggregate of all the external conditions and influences affecting the life and development of an organism. The provision of protected water supply and sanitation must, therefore, be the prime target of any programme to create a physical environment that is promotive of health.
particularly in rural areas. When environmental conditions are very poor, incidence of infectious diseases will be very high. Inadequate water supply and extremely poor sewage facilities are the close correlates of low levels of health. There is enough evidence in the history of sanitation that proper maintenance of the environment was an attitude developed in India by our forefathers from time immemorial. Innumerable references have been quoted in our epics; Ramayana and Mahabharata how our ancient saints and Men of wisdom made earnest attempts to preserve the purity of water and prevent the pollution of soil and air. At the time when Alexander the great invaded India, sanitation was at its highest peak. Koutilya’s Arthasasthra mentions how the rulers in those days were interested to plan cities, dispose of rubbish and garbage, cremate the mortal remains in a safe manner and lastly prevent nuisance. Again, in Buddhist literature, references regarding the selection of proper site for schools, construction of roads, soakage pits and sanitary conveniences, disposal of waste and sullage are seen in plenty. Though we can boast of this rich heritage in the past, the current sanitation practice is at its lowest level. Rivers, tanks, wells and soils are constantly polluted. Open grounds are used for defecation purposes, fumes and gases are released into the atmosphere. Mosquitoes and flies swarm all over. In the recent past, radio-active fallouts have made our life more dangerous. Protected water supply is denied to a very large section of the community. An equally large number of houses have no latrines. Diseases which ought to have been eliminated long ago as cholera, dysentery, endemic group of fevers, worms, malaria and filaria are appeared in this land. Analysis of promotive measures in this study is restricted to the provision of drinking water and sanitation only.
Safe drinking water and improved sanitation play a major role in the overall well being of the people, with a significant bearing on infant mortality rate, death rate, longevity and productivity. Much of the ill health which affects humanity, especially in the developing countries can be traced to lack of safe and wholesome water supply. There can be no state of positive health and well being with out safe water. Water is not only a vital environmental factor to all forms of life, but it has also a great role to play in the socio economic development of human population. In 1981, the 34th World Health Assembly in a resolution emphasized that ‘Primary health care’ which is the key to the attainment of ‘Health For All by the year 2000 AD’. Water is also integrated with other primary health care components because it is an essential part of health education, food and nutrition and also Maternal and Child Health.

The poor, both in rural and urban areas, bear a disproportionately higher burden on the non-availability of water, as well as its poor quality. Seasonal disruption of water supply is common, especially during summer months. Fetching of water for domestic use, sometimes from far flung sources, is a time consuming physical burden borne by women, particularly in the rural areas. Apart from repercussions on the health, this also affects their overall well being. Moreover, 70-80 % of illness is related to water contamination and poor sanitation. Women and children are particularly vulnerable to the effects of contamination. It is also a matter of concern that despite the progress achieved in provision of water supply, the level of water-related sickness continues to be high. While water supply and sanitation facilities are important components of the overall strategy for development, social issues such as primary health care, women’s welfare, child nutrition, are equally significant and inter-linked, thus
necessitating a convergence of approach in implementation of these programmes.

Improvement such as the environmental sanitation got the attention of planning authority from 1950 itself. In the first three five year plans, one third of the total sum allotted to health was earmarked for water supply and sanitation schemes. As a result, 11000 villages, primarily in areas where water born diseases were endemic, were provided with protected water supplies. Sewage and drainage facilities were not, however, provided simultaneously with fresh water supplies. As a result, sanitary conditions actually deteriorated. Inadequate maintenance of newly constructed water and sewage system also created further health hazards. In 1980, there were 2.31 lakh problem villages in India. The 6th plan target was to cover all problem villages with at least one source of water supply. By the end of 6th plan, except 39000 problem villages, all of them have been provided with water supply facilities. This would mean that a total of 299 million rural populations were covered under water supply. The objective in the 7th plan was to cover all these villages which do not have assured source of water supply within a distance of 0.5 Km. It has been targeted to cover 39000 problem villages to achieve the decaded target of 100 percentage coverage of the rural population.

The provision of potable drinking water to all villages has been identified as one of the priority tasks of Government. During the ninth plan, 72859 Not Covered (NC) and 3,52,43 Partially Covered (PC) habitations have been covered with water supply facilities. As of January 28, 2003, there are 12,95,504 Fully Covered (FC) habitations, 11,27,804 Partially Covered (PC) with a balance of 14,356 habitations as non-Covered (NC) ones. The tenth plan
envisages the provision of potable drinking water to every settlement in the country on a sustainable basis and the pursuit of all possible measures for the rapid expansion and improvement of sanitation facilities in rural and urban areas.

The department of drinking water supply under Ministry of Rural Development has been mandated to provide safe drinking water in all rural habitations, by April 2004. To achieve this objective, the programmes like the Accelerated Rural water Supply Programme (ARWSP), the Pradhan Manthri Gramodaya Yojana- Rural Drinking Water (PMGY-RDW) are being implemented. Considerable success has been achieved in meeting the drinking water needs of the rural population. With an investment of over 34000 crore, 91.06% of rural habitation have been fully covered (FC) with drinking water facilities and 7.93 % are partially covered (PC) (Economic survey, 2002-03).

The accelerated Rural Water Supply Programme (ARWSP), currently implemented through the Rajiv Gandhi National drinking Water mission in the Department of Drinking Water Supply has been in operation since 1972-73 to assist the States to accelerate the pace of coverage of drinking water supply facilities to the rural population. The programme focuses on the coverage of all rural habitations specially the un-reached ones, to ensure sustainability of the systems and sources to tackle the problems of water quality and institutionalize water quality monitoring and surveillance through a catchment area approach. Necessary reforms have been introduced in 1999 so as to gradually replace the government oriented, centralized and supply driven programmes by a people oriented decentralized demand driven and community based ones.
As per census of India, if a household had access to drinking water supplied from a tap or a hand pump/tube wells situated with in or out side the premises, it is considered as having access to safe drinking water. Millions of people in the country suffer from water borne diseases on account of lack of access to safe drinking water. It is the poor who suffer from higher prevalence of disease as compared to the rich. Studies undertaken in many metropolitan cities show a higher rate of diseases and longer duration per illness due to poor quality of drinking water supply in the slum areas. In 1991, census reported nearly 62 % of households in India as having access to safe drinking water as compared to about 38 % in 1981. Over 81 % of urban households and around 56 % of rural households had access to safe drinking water in 1991. The corresponding figures for 1981 were 75 % and 27 % respectively. The 54th Round of National Sample Survey (July 1999) on drinking water, sanitation and hygiene estimated that 50% of rural households were served by a tube well/hand pump, 26 % by a well, and 19 % by taps. There is widespread inter-state difference, though these differences have declined in the eighties, both in rural and urban areas. The rural urban gap has also declined by nearly half in 1991. Among major States, the situation is worst in Kerala, where less than one fifth of house holds had access to safe drinking water (Table 3.3). Much of Kerala’s drinking water requirements are met from wells, which is not considered a safe source of drinking water. Perhaps there is a case for looking at the high morbidity levels in Kerala in this context (Human Development: India 2002).

Kerala Scenario

Water supply and sanitation is a major area of development concern not only in the State plan but also in the development agenda of local self-
government institutions. With planned development effort, Kerala could provide protected drinking water to 62.67% of the population. Though the proportion of population in the State with access to protected water supply has been increasing, still a substantial portion remains to be covered. As on 10/2001 the rural population covered stood at 124 lakhs. In addition, 14 lakh rural population partially benefited by spot sources.

Table 3.3.
Status of Coverage of Habitations under Rural Water Supply

<table>
<thead>
<tr>
<th>States</th>
<th>Percentage distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NC</td>
</tr>
<tr>
<td>Andra Pradesh</td>
<td>0.00</td>
</tr>
<tr>
<td>Assam</td>
<td>0.62</td>
</tr>
<tr>
<td>Bihar</td>
<td>0.00</td>
</tr>
<tr>
<td>Gujarat</td>
<td>0.71</td>
</tr>
<tr>
<td>Haryana</td>
<td>0.00</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>1.81</td>
</tr>
<tr>
<td>Karnataka</td>
<td>0.00</td>
</tr>
<tr>
<td>Kerala</td>
<td>8.01</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>0.00</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>2.33</td>
</tr>
<tr>
<td>Orissa</td>
<td>0.00</td>
</tr>
<tr>
<td>Punjab</td>
<td>10.36</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>5.99</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>0.00</td>
</tr>
<tr>
<td>West Bengal</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Source: Economic Survey India: 2002-03 Government of India
NC: Not Covered; PC: Partially Covered; FC: Fully Covered.
### Table 3.4

Access to Safe Drinking Water in Households in India.

<table>
<thead>
<tr>
<th>States</th>
<th>1981</th>
<th>1991</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andra Pradesh</td>
<td>25.89</td>
<td>55.08</td>
</tr>
<tr>
<td>Assam</td>
<td>-</td>
<td>45.86</td>
</tr>
<tr>
<td>Bihar</td>
<td>37.77</td>
<td>56.76</td>
</tr>
<tr>
<td>Gujarat</td>
<td>52.41</td>
<td>69.78</td>
</tr>
<tr>
<td>Karnataka</td>
<td>33.87</td>
<td>71.68</td>
</tr>
<tr>
<td>Kerala</td>
<td>12.20</td>
<td>38.68</td>
</tr>
<tr>
<td>Madya Pradesh</td>
<td>20.17</td>
<td>79.45</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>42.29</td>
<td>90.50</td>
</tr>
<tr>
<td>Orissa</td>
<td>14.58</td>
<td>62.83</td>
</tr>
<tr>
<td>Punjab</td>
<td>84</td>
<td>92</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>27.14</td>
<td>58.16</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>43</td>
<td>74.11</td>
</tr>
<tr>
<td>West Bengal</td>
<td>69.6</td>
<td>81.9</td>
</tr>
</tbody>
</table>


As on 31-12 2001, 1609 problem villages were partially covered with protected water supply benefiting a population of 118.4 lakhs. During the period 1992-2002 the coverage increased by 43.1 percentage. The percentage of urban and rural population covered by piped water supply is around 78.5 % and 57 % respectively. In Thrissur District 247 villages were covered with a population of 14.56 lakhs, the largest coverage in Kerala. The relevant details are given below.
Table 3.5.
District-wise Details of Problem Villages Covered and Population Benefited as on 31-12-2001

<table>
<thead>
<tr>
<th>District</th>
<th>Partially Covered village</th>
<th>Population benefited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trivandrum</td>
<td>101</td>
<td>1282009</td>
</tr>
<tr>
<td>Kollam</td>
<td>100</td>
<td>993258</td>
</tr>
<tr>
<td>Pathanamthitta</td>
<td>70</td>
<td>587013</td>
</tr>
<tr>
<td>Alappuzha</td>
<td>83</td>
<td>802713</td>
</tr>
<tr>
<td>Kottayam</td>
<td>95</td>
<td>712432</td>
</tr>
<tr>
<td>Idukki</td>
<td>77</td>
<td>442283</td>
</tr>
<tr>
<td>Ernakulam</td>
<td>119</td>
<td>1203076</td>
</tr>
<tr>
<td>Thrissur</td>
<td>247</td>
<td>1456654</td>
</tr>
<tr>
<td>Palakkad</td>
<td>183</td>
<td>1022225</td>
</tr>
<tr>
<td>Malappuram</td>
<td>146</td>
<td>1360237</td>
</tr>
<tr>
<td>Kozhikode</td>
<td>99</td>
<td>516403</td>
</tr>
<tr>
<td>Wayanad</td>
<td>68</td>
<td>418205</td>
</tr>
<tr>
<td>Kannur</td>
<td>79</td>
<td>470881</td>
</tr>
<tr>
<td>Kasarkode</td>
<td>142</td>
<td>581039</td>
</tr>
</tbody>
</table>

Source: Kerala Economic Review, 2002

3.7. Sanitation: Access to Toilet Facilities

The Dictionary meaning of the word sanitation is “the science of safeguarding health”. One of the best definitions is that given by National Sanitation Foundation of the USA, which is as follows. “Sanitation is a way of life. It is the quality of living that is expressed in the clean home, clean farm, clean business, clean neighborhood, and the clean community.”
In the past, sanitation was centered on the sanitary disposal of human excreta. In actual fact, the term sanitation covers the whole field of controlling the environment with a view to prevent disease and promote health. ‘Sanitation’ in the present study is restricted to access to toilet facilities.

A majority of India’s population does not have access to toilet facilities in their dwellings and lacks sanitation facilities for the disposal of wastewater. Apart from the availability of safe drinking water, lack of sanitation, particularly sewage and disposal of solid waste has been observed as among the main reasons for prevailing ill health and morbidity levels in the country. As per the 1991 census, less than one fourth of the households in the country had toilet facility with in the premises of their residence; the proportion was less than 10 % for rural households and around 64 % for urban households.

There is significant variation in access to toilet facilities among States. Among the major States, at one end in Kerala, 51 % of the households had access to toilet facilities and at the other end; it was less than 10 % in case of Orissa. For the most populous States in the country including Bihar, UP, MP and Rajasthan the proportion was well below 20 %. Even in the relatively developed States like Gujarat and Maharashtra, the proportion of households with access to toilet facility was around 30 %. In all States, the proportion was significantly lower for households in rural areas in comparison to urban areas.

National Family Health Survey 2 also provides data on access to toilet facilities. As per the survey, 64 % of the households in the country had no access to toilet facilities in 1998-99 in comparison to 76 % in 1991 reported by
the census. Less than one-fifth of rural households and over four-fifth of urban households had access to such facilities. At the State level, the data indicates that the proportion of households having access to toilet facilities in larger, populated and poorer States was much lower than the national average. Incase of Kerala, the proportion of households with access to toilet facilities of 85% was much above the national average of 36%.

The problem of sanitation for the majority, at household level, is essentially of awareness and education and not really of resources. The resources, technology and management aspects of the problem are important, more in the context of urban sanitation and solid waste management. Many cities and small towns generate more solid waste than they can possibly collect or dispose under present institutional arrangements. A major problem in urban solid waste management relates to sewage disposal. With a large number of towns without sewage system and inadequate and often mal functioning system in some other, the threat to the availability of safe drinking water is quite serious in most urban areas in the country.

**Rural Sanitation**

The central government supplements the efforts of the States in the field of rural sanitation under the central Rural Sanitation Programme (CRSP). This programme was restructured in 1999 and Total Sanitation Campaign (TSC) introduced. The TSC envisages a synergised interaction between the government, people and active NGO participation. The revised tenth Five-year plan strategy envisages a shift from allocation-based programme to a demand based project mode. Out of the total out lay of Rs. 2,032 crore, the central
Government share is Rs. 1,225 crore, share of the State Government is Rs. 427 crore while the beneficiary share is Rs 380 crore. The coverage of rural population with sanitation facilities was estimated to be about 17% at the beginning of the ninth plan and has increased to 20% as on 1-4-2002 (Economic Survey, 2002-2003)

*Kerala Scenario*

Of late, there is a growing realization that the much talked about Kerala model of health carries a high morbidity load. It can be argued that when life expectancy increases there can be a corresponding increase in morbidity. However water and sanitation related diseases still feature prominently in the morbidity syndrome prevalent in the State. One of the factors that have contributed to this is Kerala’s high density of population. Lack of basic amenities compels people to resort to practices such as open-air defecation. The matter has been further aggravated by acute poverty, poor hygienic and inadequate garbage disposal and drainage.

The estimate of “The task Force on rural Sanitation in Kerala” is that new families without latrine grows at the rate of 1.5% per year which is slightly higher than the rate of 1.4% at which new sanitary latrines were constructed. The Development reports of the Grama Panchayats, which they prepared for the people’s campaign for the ninth plan, reveal that inadequacy of sanitation coverage is an acute problem for women in particular, especially for those living in the coastal areas where settlement is high and public space scarce and in colonies inhabited by the poor.
Kerala has the highest coverage of individual household latrines in India. In the ninth plan about 300 Grama Panchayats gave top priority to sanitation and achieved the goal of more than 95% coverage of the household sanitary latrines. During the ninth plan about 4.32 lakh sanitary latrines were constructed under decentralized plan campaign, which is much more than what was achieved in the past 15 years through different Government programmes.
References


