The provision of health services in India by the public sector is the responsibility shared by the state, central and local governments although it is effectively a state responsibility in terms of service delivery. State and local governments incur about three-quarters and the center about one-quarter of public spending on health. The responsibility of health is at three levels. First, health is primarily a state responsibility. Second, the center is responsible for health services in Union Territories without legislature and is also responsible for developing and monitoring national standards and regulations, linking states with funding agencies and sponsoring numerous schemes for implementation by state governments. Third, both the center and the states have a joint responsibility for programmes listed under the concurrent list (regulation of medical and other professions, spread of diseases across states and drugs and poison). Goals and strategies for the public sector in health care are established through a consultative process involving all levels of the government through the Central Council for Health and Family Welfare.

In this chapter we present an overview of the organization of the health and family welfare department and health infrastructure in Tamil Nadu. This overview is essential in order to better understand the management of the Reproductive and Child Health Programme in the state.

4.1 ORGANIZATION OF THE DEPARTMENT OF HEALTH AND FAMILY WELFARE.

Figure 4.1 depicts the organization of the Health and Family Welfare Department in Tamil Nadu. As depicted in the figure, the department is headed by the Minister of Health and Family Welfare who is assisted by the Secretary, Health and Family Welfare, a senior IAS officer who is the chief administrator of the department. The following Directorates and Corporations are functioning under the control of Health and Family Welfare Department:
Figure 4.1
Organizational Structure of the Ministry of Health and Family Welfare

Minister for Health and Family Welfare

Secretary
Health and Family Welfare

Administration

Additional Secretary

Deputy Secretary

Under Secretary

Additional Secretary

Directorates

Directorate of Family Welfare

Directorate of Public Health & Preventive Medicine

Directorate of Medical and Rural Health Services

Tamil Nadu Medical Services Corporation

Tamil Nadu Health Transport Department

Directorate of Medical Education

Directorate of Indian Medicine and Homoeopathy

Directorate of Drugs Control

Tamil Nadu Blindness Control Society

Projects

RCH Project

DANIDA Project

Tamil Nadu AIDS Control Society
1. Directorate of Family Welfare
2. Directorate of Public Health and Preventive Medicine
3. Directorate of Medical and Rural Health Services
4. Tamil Nadu Medical Services Corporation
5. Reproductive Child Health Project and
6. DANIDA Health Care Project
7. Tamil Nadu State AIDS Control Society
8. Tamil Nadu State Health Transport Department
9. Directorate of Medical Education
10. Directorate of Indian Medicine and Homeopathy
11. Directorate of Drugs Control
12. Tamil Nadu State Blindness Control Society

We now describe the functions of each of the directorates.

4.1.1 Directorate of Family Welfare
The Directorate of Family Welfare is responsible for implementing the Family Welfare programme in the state. The following diagram depicts the organizational structure of the directorate. The Directorate provides health and family welfare services through a network of rural and urban family welfare centres, post partum centres and health posts. These centres operate under the control of the District Family Welfare Bureau headed by the Deputy Director of Medical and Family Welfare at the district level. An important aspect of the implementation of the family welfare programme is the spread of the small family norm and various contraceptive methods. This function is handled by the IEC division in the directorate headed by the Deputy Director (IEC) at the state level and District Media and Information Officers (MIEO) at the district level. The Demographer, Social Scientist and Statistical Officers also operate in the Family Welfare Directorate.
Figure 4.2
Organizational Structure- Director of Family Welfare

Director of Family Welfare

Joint Director (MTP)
- DD (I)
- Programme Section
- MTP Cell
- Demographer
  - Statistical Officer and Social Scientist
  - Demographic and Evaluation Cell

Joint Director (FW-Admn)
- Establishment Wings
- Stores Officer
- Stores and IEC Section

District Family Welfare Bureau
- Post Partum Section
- Health Posts
- Urban Family Welfare Centres
- Rural Family Welfare Centres

Deputy Director (IEC)
- MEIO
- I. E. C Wing
4.1.2 Department of Public Health and Preventive Medicine
The Department of Public Health and Preventive Medicine is responsible for the implementation of various National and State Health Programmes. This Department also plans and implements measures to prevent the occurrence of communicable diseases thereby reducing the burden of morbidity mortality and disability in the state.

The activities undertaken by the department of Public Health and Preventive Medicine are provisions of primary health care which includes Maternity and Child Health Services, Immunization of children against vaccine preventable diseases, control of communicable diseases, control of malaria, filaria, japanese encephalitis, elimination of leprosy, iodine deficiency disorder control programme, prevention of food adulteration, health checkup of school children, health education of the community and collection of vital statistics under birth and death registration system and environmental sanitation. This directorate is also responsible for the prevention and control of waterborne diseases like Acute Diarrheal Diseases, Typhoid, Dysentery prevention and control of sexually transmitted diseases including HIV / AIDS.

4.1.3 Directorate of Medical and Rural Health Services
The Directorate of Medical and Rural Health Services provides medical services, through the grid of 25 District Headquarters Hospitals, 162 Taluk Hospitals, 79 non-taluk Hospitals, 12 Dispensaries. The Directorate is implementing various Medical Services Programmes such as TB Control, Mental Health, HIV, Blood Banks. The non Taluk and Taluk Hospitals are the First Referral Units in the Chain of Medical Services in the State and the 25 District Headquarters Hospitals are the second referral units.

4.1.4 Tamil Nadu Medical Services Corporation Limited
Tamil Nadu Medical Services Corporation Limited, (TNMSC) was set up with the primary objective of ensuring ready availability of all essential drugs and medicines in the Government Medical Institutions throughout the State by adopting a streamlined procedure for their procurement, storage and distribution. It was incorporated under the Companies Act, 1956 and commenced its functions of purchase, storage and distribution of drugs and medicines from January 1995. The aim of the Corporation is to make available quality drugs and medicines at Government hospitals and medical institutions without any interruption. The Secretary to Government, Health and Family Welfare
Department is the Chairman of the Tamil Nadu Medical Services Corporation Limited. The day to day administration of the Corporation is looked after by the Managing Director.

The Corporation is also rendering other services like procurement of equipment and establishment of diagnostic centres. The drugs and medicines are distributed to the Government Medical Institutions through 23 drug Warehouses in Tamil Nadu. The Corporation has also established 29 CT Scan Centres in Government Hospitals and 2 MRI Scan Centres one each at Government General Hospital, Chennai and Government Rajaji Hospital, Madurai to provide scanning facility to the public on a nominal charge. 6 more CT Scanners are under installation. With the installation of the remaining CT Scanners, the Government will be providing CT Scan facility in all the Districts in the State.

4.1.5 Reproductive and Child Health Project
The Reproductive and Child Health Project Directorate is incharge of the implementation of the World Bank funded sub-project on RCH in Tamil Nadu. This sub-project is underway in twenty four districts across 17 states in India. In Tamil Nadu, this project is being implemented in 2 districts viz., Madurai and Theni. The project seeks to address the gaps in the delivery of Family Welfare and Health Care services by improving services to the disadvantaged groups in these areas so as to enable them to achieve an overall RCH status equivalent to the average of the state. In Tamil Nadu, the project’s key activities include the improving of infrastructure of health facilities including FRU’s, training of health personnel on RCH issues, improving the mobility of health workers by providing mopeds and conducting of mobility training.

The directorate also implements the statewide project on RCH in the remaining districts of Tamil Nadu with funding from the World Bank. Under this project, health infrastructure in health facilities is to be improved, operation theaters are to be constructed in PHC’s /FRU’s and making health facilities more functional through the appointment of contractual staff including anesthetists, establishing RTI clinics in select PHC’s and training staff on RCH. The project is headed by a director who coordinates with other health departments in the implementation of the project.
4.1.6 Danida Health Care Project

The DANIDA Tamil Nadu Area Health Care Project is a centrally sponsored externally aided project. The phase III currently in progress was implemented since December 1996, covers the districts of Dharmapuri, Thanjavur, Nagapattinam and Thiruvarur for most of the activities, extends some of the activities to the old districts of Salem, Namakkal, Cuddalore & Villupuram and supports some state level activities like training, drug supply logistics etc. The overall objective of this project is to improve the health and family welfare status of the rural population in the project area, especially of the weaker sections. With a view to improving and strengthening the facilities for the delivery of health and family welfare services in an integrated manner in accordance with the National Health Policy, DANIDA is one of the bilateral donors in the Health Sector in providing financial assistance to the Government of Tamil Nadu. The funding is on reimbursement basis with 85% share by DANIDA, 5% by Government of India and 10% by Government of Tamil Nadu.

The project is implemented through a Project Directorate set up at Chennai headed by the Project Director at state level. It coordinates with health and other departments such as Directorate of Public Health and Preventive Medicine, Directorate of Family Welfare, Tamil Nadu Medical Services Corporation etc. in the implementation after the proposals are approved by the State Project Coordination Committee / Empowered Committee. At district level, District Management Cells consisting of minimum supportive staff are created to assist the Deputy Directors of health services of the project districts in the implementation of project activities. The project activities are monitored by the State Project Monitoring Committee at State level and the District Project Monitoring Committee at District level.

4.1.7 The Tamil Nadu State Aids Control Society

The Tamil Nadu State Aids Control Society has been formed under the aegis of Government of Tamil Nadu to spread the awareness about the dreaded disease Acquired Immuno Deficiency syndrome (AIDS) and to take care of the affected persons without getting discriminated or being ill-treated by the society in general. It's aim is to popularize the prevention of the disease, promotion of healthy living, to curtail false notions about the disease at large.

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The State AIDS Project Cell was formed in January 1993 and was initially functioning under the Control of the Director of Medical Education, Chennai. The State AIDS Project Cell was re-constituted as the Tamil Nadu State Aids Control Society (TNSACS) registered under the the Tamil Nadu Societies Registration Act, with effect from 11.5.1994, with the Secretary, Health and Family Welfare Department, as the President of this Society and a senior I.A.S. Officer as the Member Secretary cum Project Director, to tackle the problem of AIDS in a more effective manner. After its registration in May 1994, the State AIDS Control Society, started its activities more vigorously in full swing with the guidance and support of its Executive Committee, Technical Advisory Committee and Ethical Scientific Committee constituted by the Government. TNSACS is tackling the problem on various fronts using different strategies to create awareness among different sub-population groups.

4.1.8 Tamil Nadu Health Transport Department
In the year 1959, the State Health Transport Organisation was started to look after the maintenance of Health Department Vehicles. The aim of the Department is to reduce the down time of the vehicles which are taken up for repairs, to keep high percentage of fleet utilization of vehicles and to provide more fleet for the successful implementation of health programmes.

4.1.9 Directorate of Medical Education
The role of this directorate is the development of medical and para-medical personnel to cater to the health needs of the State. The department is also responsible in establishing and maintaining the teaching institutions which are the premier referral centres with state of the art equipment and technology. Research is another area of activity for Medical Education Department.

4.1.10 Directorate of Indian Medicine and Homeopathy
The Directorate of Indian Medicine and Homoeopathy is established to look after the Medical Systems such as Siddha, Ayurveda, Unani, Yoga and Naturopathy and Homoeopathy. The Department is functioning with the objectives of providing health service to the public through Indian Systems of Medicine and Homoeopathy and providing and monitoring education and research activities in Indian systems of Medicine.
4.1.11 Directorate of Drugs Control

The Directorate of Drugs Control is responsible for the regulation of the manufacture and sale of drugs and cosmetics in the state. It is the licensing authority for the grant and renewal of sale licenses in the state. The Directorate also has a testing laboratory, intelligence and legal wing to check the sale of spurious drugs.

4.1.12 Tamil Nadu State Blindness Control Society

The Tamil Nadu State Blindness Control Society is responsible for the implementation of the National Blindness Control Programme. The Society is headed by Health Secretary who is the President of this Society. The Office of the Project Director and Deputy Director comes under in his control. For effective implementation and monitoring of the work at District level, a District Blindness Control Society has been formed in all the Districts. The District Collector is the Chairman of the Society and the operations are headed by the Deputy Director of Health Services. The District Blindness Control Society conducts eye camps with the help of Voluntary Organisations and District Mobile Ophthalmic Units, provides financial assistance to Voluntary Organisations for performing Cataract Operations, undertakes propaganda activities under health education programme in the District and monitors the implementation of the Blindness Control Programme in District level.

The above description of the directorates in the health and family welfare department has been provided for purposes of complete listing. For the present study, the functioning of the departments of family welfare, public health and preventive medicine, medical and rural health services, Tamil Nadu Medical Services Corporation, DANIDA Health Care Project and RCH Project are relevant. We visited these departments and interviewed the officials to collect relevant data on the functioning of the respective departments. Having described the organization of the Health and Family Welfare department at the state level, we now present the organization at the district level.
4.2 ORGANIZATION OF THE DISTRICT HEALTH AND FAMILY WELFARE DEPARTMENT

The health system in the district is headed by the Joint Directors of Health Services who is responsible for implementation of all the Medical and Health Programmes including Family Welfare. He also coordinates with the other departments to implement the programmes such as control of Blindness, AIDS, Hill Area Development Programme, Schemes for Adidravida and Tribal Welfare. The following diagram depicts the organization of the health department at the district level. Each district is divided into two divisions called – a Health Unit Division (HUD). Each HUD is headed by a Deputy Director of Health Services who reports to the Joint Director. The Deputy Director of Health Services is incharge of all public health activities including the PHC’s and the implementation of programmes in his health unit division. The Deputy Director of Medical, Rural Health Services and Family Welfare is responsible for the functioning of taluq and non-taluq hospitals and in charge of the family welfare programme in the district. There are two Deputy Directors of Medical Services responsible for the control of leprosy and tuberculosis in the district.

In the districts where the DANIDA Tamil Nadu Area Health Care Project is being implemented a DANIDA District Management Cell consisting of supportive staff is operational which assists the Deputy Director of Health Services of the project districts in the implementation of project activities. The project activities are monitored by the State Project Monitoring Committee at the state level and the District Project Monitoring Committee at the District Level. For the effective implementation and monitoring of blindness control activities at the district level, a district blindness control society has been formed in all districts. The society is administered by the district collector who is the Chairman of the society. One of the joint directors or deputy directors (depending on the availability of posts) of the district is made incharge of the blindness control programme. The district warehouses of TNMSC is headed by a manager who coordinates with other officials of the health department for the efficient distribution of medicines and other supplies to the different health facilities located in the district.
Having described the organization of the health and family welfare in the districts, we now proceed to discuss the health infrastructure where the actual implementation of health programmes is carried out.

4.3 HEALTH INFRASTRUCTURE

Health Infrastructure in India was developed during the colonial period. The concept of a primary health centre (PHC) in India was born when the Bhore Committee in 1946 visualized it as a basic health unit, to provide as close to the people as possible, an integrated curative and preventive health care to the rural population with an emphasis on the preventive and promotive aspects of health care. The Bhore committee aimed at having a health centre to serve a population of 10,000 to 20,000 with 6 medical officers, 6 public health centres and other supporting staff. But in view of the limited resources, the Bhore Committee's recommendations could not be fully implemented even after nearly 60 years of independence.
The programme of establishing Primary Health Centres in each Community Development Block having a population of 60,000 to 80,000 was launched as an integral part of the Community Development Programme on October 2, 1952. The PHC is the first contact point between the village community and the medical officer. The PHC's are established by the state government under the Minimum Needs Programme (MNP). These centres came under criticism as they were not able to provide adequate health coverage, partly because they were poorly staffed and equipped and partly because they had to cover a large population (Misra et al., 1982; Satia et al., 1991; Mavalankar, 1996). The Mudaliar Committee in 1962 recommended that the existing PHC's should be strengthened and the population to be served by them scaled down to 40,000.

The National Health Policy (1983) proposed a reorganization of the PHC's on the basis of one PHC for every 30,000 rural population and one PHC for every 20,000 population in hilly, tribal and backward areas for more effective coverage. This was done to gear up the health system to meet the challenges of reaching the goal of Health for All by 2000 as envisaged in the Alma Ata declaration signed by India in 1978.

The functions of the PHC in India cover all the 8 “essential” elements of the primary health care as outlined in the Alma-Ata declaration. They are:

1. Medical Care
2. Maternal and Child Health care including family planning.
3. Safe water supply and basic sanitation.
5. Collection and reporting of vital statistics
6. Education about health.
8. Referral services
9. Training of health guides, health workers, local dais and health assistants.
10. Basic laboratory services.

The norms laid down by the government for the staffing pattern of a PHC is shown in Table 4.1.
Table 4.1
Staffing Pattern of a PHC

<table>
<thead>
<tr>
<th>Designation</th>
<th>No. of posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Officer</td>
<td>1</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>1</td>
</tr>
<tr>
<td>Nurse Midwife (Staff Nurse)</td>
<td>1</td>
</tr>
<tr>
<td>Health Worker (Female) / ANM</td>
<td>1</td>
</tr>
<tr>
<td>Health Educator</td>
<td>1</td>
</tr>
<tr>
<td>Health Assistant (Male)</td>
<td>1</td>
</tr>
<tr>
<td>Health Assistant (Female) / LHV</td>
<td>1</td>
</tr>
<tr>
<td>Upper Division Clerk</td>
<td>1</td>
</tr>
<tr>
<td>Lower Division Clerk</td>
<td>1</td>
</tr>
<tr>
<td>Laboratory Technician</td>
<td>1</td>
</tr>
<tr>
<td>Driver (if vehicle is available)</td>
<td>1</td>
</tr>
<tr>
<td>Class IV</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

*Source: Bulletin of Rural Health Statistics, 1996*

The number of PHCs functioning in the country, by end-November 1999, is 23,266. The PHC in India on an average, caters to a population of 31932 persons spread over 26.83 villages and 136.48 sq. km. The average radial distance covered by a PHC, on an average, is 6.75 kms.

In Tamil Nadu, there are 1410 PHC’s operating and each PHC caters to an average rural population of 24730 persons which is among the most favorable ratios in the country. The ratio is almost the same with that of Kerala. The states which have lower ratios are the predominantly hilly and tribal states where the national norms are also lower. Each PHC in Tamil Nadu caters to an area of 92.24 sq. km. respectively which is again one of the most favorable ratios in the country. The average radial distance covered by a PHC in Tamil Nadu, on an average, is 5.41 kms.

The structure of the PHC in Tamil Nadu is a little different from the national pattern. At the block level, there is a block PHC which is a normal PHC and is in-charge of the administration of the other PHC in the block (known as additional PHC’s). A block PHC may have better facilities than an additional PHC like in-patient beds and operating theater but it is not necessary. Some PHC’s in Tamil Nadu have been upgraded in recent years and are known as upgraded PHC’s. These PHC’s have in-patient beds, operating theater with a anesthetist and surgeons with the facility of performing sterilization
operations and abortions and an ambulance in additional to one vehicle used for other family welfare work and X-ray machines. Some PHC's have also been made 24-hour PHC's that operate round the clock.

Another deviation from the national pattern is the staffing pattern of the health institutions in Tamil Nadu. A PHC in Tamil Nadu is manned by 2 medical officers. The government is also making efforts to ensure that one of the doctors is a lady doctor to ensure better utilization by women. Some PHC's are staffed by more than 2 doctors depending on the patient load and the services offered by the PHC. A health sub-centre in Tamil Nadu is manned by a Village Health Nurse (VHN) sometimes referred to as a female multi-purpose worker. In addition, a male multipurpose worker is attached to the PHC. Though a male multi-purpose worker's service area may fall in a sub-centre area, he is entrusted with different responsibilities (like malaria control, screening for leprosy, TB) and is not involved in the functioning of the sub-centre.

The block PHC's are in-charge of the administration of all the PHC's in the block. The position of clerks and other administrative staff is there only in the block PHC. The position of a block extension educator (BEE) and the block health statistician (BHS) are also only in the Block PHC's. However, these persons are in-charge of the whole block and interact with the additional PHC's on a regular basis. In addition, the block PHC's have a position of a Community Health Nurse (CHN) who supervises the work of the Sector Health Nurse (SHN).

The designations of some of the health personnel in Tamil Nadu also varies from that of other states. The female multi-purpose worker known as the auxiliary nurse mid-wife (ANM) is called as a Village Health Nurse in Tamil Nadu. She is supervised by the Sector Health Nurse (SHN) who is designated as the Lady Health Visitor (LHV) in other states. Typically, there are 6-7 sub-centres under a PHC and there is one SHN supervising the work of the VHN's in charge of these sub-centres. In some PHC's there are more sub-centres and in such cases there are two SHN's in place. The position of an ANM in Tamil Nadu refers one who assists the medical officers in attending patients in the PHC (dressing, injections etc). She is not involved in any outreach activities. The male multipurpose worker is known as a Health Inspector (HI).
For the purposes of the present study, we interviewed the staff of the PHC’s and conducted focus group discussions with the Village Health Nurses to study the management of the RCH programme in India. We also observed the working of the PHC and the outreach activities of health workers.

**Sub-centres (SCs):** It is the most peripheral contact point between the primary health care system and the community. The national norm is to have a sub-centre for every 5000 population in plain area and for every 3000 people in tribal and hilly areas. As per the 2001 census, each SC catered to a rural population of 5413 people on an average. The SCs have mainly promotive and educative functions relating to Maternal and Child Health, Family Welfare, Nutrition, Immunisation, Diarrhoeal Control and Control of Communicable Diseases Programmes. They are also provided with basic drugs for minor ailments that are needed for taking care of essential health needs of women and children. While nationally the sub-centres are staffed by one Multi-purpose Worker (Male) and one Multi-purpose Worker (Female)/ANM, in Tamil Nadu these are staffed by one female health worker called the Village Health Nurse. Out of a total number of the functioning 137027 SCs in end-November, 1999, 97757 SCs are funded by the Department of Family Welfare (MOHFW, 2001). The rest are funded under the State Minimum Needs/Basic Minimum Services (BMS) Programme.

In Tamil Nadu there are 8682 sub-centres which provide health services to the rural population of the state. Each sub-centre in Tamil Nadu covers a rural population of 4017 persons spread over an area of 14.98 sq. km. which is amongst the best averages in the country. The average radial distance covered by a sub-centre in Tamil Nadu, on an average, is 2.13 kms.

**Community Health Centres (CHCs):** These are established and maintained by the state government under Minimum Needs Programme. The national norm is to have one CHC for every 80,000 to 1,20,000 lakh population, serving as a referral institution for four PHC’s. It is manned by four medical specialists, i.e., surgeon, Physician, Gynecologist and pediatrician supported by 21 paramedical and other staff. It has 30 indoor beds with one X-ray, labour room laboratory facilities. It serves as a referral centre for four PHCs. The number of CHCs functioning is 2962, by the end of November 1999.
## Table 4.2
Staffing Pattern of a CHC

<table>
<thead>
<tr>
<th>Designation</th>
<th>No. of posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Officer</td>
<td>4</td>
</tr>
<tr>
<td>Nurse Midwives</td>
<td>7</td>
</tr>
<tr>
<td>Dresser</td>
<td>1</td>
</tr>
<tr>
<td>Pharmacist / Compounder</td>
<td>1</td>
</tr>
<tr>
<td>Laboratory Technician</td>
<td>1</td>
</tr>
<tr>
<td>Radiographer</td>
<td>1</td>
</tr>
<tr>
<td>Ward Boys</td>
<td>2</td>
</tr>
<tr>
<td>Dhobi</td>
<td>1</td>
</tr>
<tr>
<td>Sweepers</td>
<td>3</td>
</tr>
<tr>
<td>Mali</td>
<td>1</td>
</tr>
<tr>
<td>Chowkidar</td>
<td>1</td>
</tr>
<tr>
<td>Aya</td>
<td>1</td>
</tr>
<tr>
<td>Peon</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

*Source: Bulletin of Rural Health Statistics, 1996*

In Tamil Nadu, there are no Community Health Centres which are functioning but corresponding facilities are provided by upgraded PHC's and taluq and non-taluq hospitals. The upgraded PHC's may be block PHC's or additional PHC's. While an upgraded PHC can be under the administrative control of a block PHC, it is not so under the conventional CHC-PHC-SC structure in which the PHC's are under the administrative control of the CHC.

**Rural Family Welfare centre (RFWCs):** There are 5435 such Centres functioning in the country. These were established at all the block level PHC’s sanctioned up to 1st April, 1980. The States have integrated the RFWCs into their primary health care system. There is, therefore, no separate identity for these RFWCs today. The Government of India, however, continues to provide financial support for maintaining these Centres. An RFWC is manned by one assistant surgeon supported by 11 paramedical and other staff. In Tamil Nadu, one Rural Family Welfare Centre exists in every community block covering roughly one lakh population. There are 382 Rural Family Welfare Centres operating in the State.
Health Facilities in Urban Areas: In cities and towns, the health and family welfare services are provided through a network of government or municipal hospitals and dispensaries, and urban family welfare centres. Private hospitals, clinics and dispensaries also play a major role in providing these services in urban areas. In Tamil Nadu, there are 25 district headquarter hospitals, 162 taluq hospitals, 79 non-taluq hospitals, 12 government dispensaries which offer health services to rural population by acting as referral centres to the lower level health institutions. Besides these health facilities there are 35 government hospitals in the major cities offer specialty services in addition to basic services. 178 ESI hospitals and dispensaries offer services to the employees and their families who are covered under the Employee State Insurance Scheme.

Health services are provided to the rural population of Tamil Nadu through an extensive network of hospitals, PHC’s and sub-centres. The density of these facilities is among the best in the country. Though the health system is a little different from the national pattern, it follows more or less a similar structure. We now describe the health infrastructure in the districts selected for our study.

4.4 HEALTH INFRASTRUCTURE IN THE STUDY DISTRICTS

The table 4.3 shows the health facilities available in the districts of Kancheepuram and Dharmapuri. Both the districts have a district headquarter hospital. Of the 10 taluqs in Dharmapuri district, 9 taluqs have a taluq hospitals. Dharmapuri taluq has a district hospital instead of a taluq hospital. Thus, all taluqs in Dharmapuri district have a taluq or higher grade hospital. Kancheepuram district has 6 taluq hospitals in the 8 taluqs. As in the case of Dharmapuri district, the two taluqs which do not have taluq hospital are Kancheepuram - the district headquarter – which has a hospital of the status of a district hospital and Chengalpatu taluq which has a teaching hospital. Thus, all the taluqs in this district also have a taluq or higher grade hospital. The district also has one non-taluq hospital and 2 central government hospitals.

In the rural areas, Dharmapuri district has 69 PHC’s and 470 sub-centres providing health services in the rural areas. In Kancheepuram there are 47 PHC’s and 360 sub-centres catering to the rural population. The population served per PHC and SC is lower
in Kancheepuram district. Here each PHC and SC cater to a population of 28408 and 3709 compared with 34585 and 5077 in Dharmapuri district.

Of the 47 PHC's in Kancheepuram districts, 13 are block PHC's located in each of the 13 blocks of the district. Similarly, of the 69 PHC's in Dharmapuri district, 18 are blocks PHC's in each of its blocks. The remaining 34 and 51 PHC's in Kancheepuram and Dharmapuri district respectively are the additional PHC's. All the 13 block PHC's in Kancheepuram district are also rural family welfare centres. In Dharmapuri district, 16 of the 18 block level PHC's are rural family welfare centres. There are 4 post partum centres in operation in Kancheepuram while there are 6 in Dharmapuri district. Authorized MTP centres exist in 66 in Kancheepuram district while it is only 36 in Dharmapuri district. These also include those in the private sector. Similarly there are 47 approved nursing homes in Kancheepuram while it is only 30 in Dharmapuri district. The density of such private facilities is much higher in Kancheepuram. Though the district has lower population than Dharmapuri, the absolute number of facilities in the private sector are higher.

Table: 4.3

<table>
<thead>
<tr>
<th>Government Health Facilities in the Study Districts</th>
<th>District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kancheepuram</td>
</tr>
<tr>
<td>Teaching Hospitals</td>
<td>1</td>
</tr>
<tr>
<td>District Headquarters hospital</td>
<td>1</td>
</tr>
<tr>
<td>Taluk Hospitals</td>
<td>6</td>
</tr>
<tr>
<td>Non-Taluk Hospitals</td>
<td>1</td>
</tr>
<tr>
<td>Central Government Hospitals</td>
<td>2</td>
</tr>
<tr>
<td>Primary Health Centres</td>
<td>47</td>
</tr>
<tr>
<td>Block PHC</td>
<td>13</td>
</tr>
<tr>
<td>Additional PHC's</td>
<td>34</td>
</tr>
<tr>
<td>Rural Population per PHC</td>
<td>28408</td>
</tr>
<tr>
<td>Sub-Centres</td>
<td>360</td>
</tr>
<tr>
<td>Population per sub-centre</td>
<td>3709</td>
</tr>
<tr>
<td>Post-Partum Centres</td>
<td>4</td>
</tr>
<tr>
<td>Urban Family Welfare Centres</td>
<td>1</td>
</tr>
<tr>
<td>Urban Health Posts</td>
<td>12</td>
</tr>
<tr>
<td>Rural Family Welfare Centres</td>
<td>13</td>
</tr>
<tr>
<td>Approved Nursing Homes</td>
<td>47</td>
</tr>
<tr>
<td>Unapproved Nursing Homes</td>
<td></td>
</tr>
<tr>
<td>MTP Approved Centres</td>
<td>66</td>
</tr>
</tbody>
</table>
Figure 4.4

DHARMAPURI DISTRICT
LOCATION OF GOVERNMENT HEALTH FACILITIES

- District HQ Hospital
- Taluq Hospital
- Selected PHC
- PHC
Figure 4.5
KANCHEEPURAM DISTRICT
LOCATION OF GOVERNMENT HEALTH FACILITIES

- District / Teaching Hospital
- Taluka Hospital
- Selected PHC
- PHC
4.5 ACTIVITIES OF THE PHC's AND SUB-CENTRES

In this section we provide a description of the activities of the PHCs and SCs, so as to better understand the management problems affecting the delivery of health services discussed in the subsequent chapters.

As mentioned, a PHC in Tamil Nadu is staffed by two medical officers, an ANM, a pharmacist, hospital workers and other health workers (VHN and male health workers who are assigned field activities). PHC's are designated to provide – medical care, MCH services including family planning, prevention and control of endemic diseases, IEC services, referral services, safe water supply and basic sanitation and collection of vital statistics. A PHC provides out-patient services in the morning from 8:00 – 11:00 am and in the evening from 4:00 -5:00 p.m. Apart from providing out-patient clinics in the mornings and evenings, the health centres provide specific services on different days of the week. Mondays are reserved for antenatal clinics in the PHC's of Tamil Nadu. The VHNs also conduct antenatal clinics either in their sub-centres or in the villages in their service areas. Tuesdays are designated as Review meeting days where all the staff assemble in the PHC and discuss work related matters and plan activities for the coming week. Immunization services are provided on Wednesdays when the VHN's visit the PHC in the mornings, collect their vaccines and disperse to their respective service areas to immunize pregnant women and children. The health department runs a school health programme wherein the health workers and doctors visit schools in their service areas and screen children for illness, dispense medicines or refer them to higher level institutions. It is stipulated that a particular school be visited three times during a particular academic year. Thursdays are reserved for school health programmes in the health institutions of Tamil Nadu. Fridays are designated for IEC activities and Saturdays are reserved for miscellaneous activities like skin camps. Some PHC's also hold RTI clinics either on Tuesdays or Fridays. Similarly, sterilization operations are held every Tuesday or Friday in PHCs offering this service. Certain PHC's are designated as 24 hour PHC's in Tamil Nadu which have a resident ANM and a doctor on call to attend to emergencies round the clock. Some PHC's have upgraded facilities like operating theaters, X-ray machines, in-patient beds and specialists like anesthetist and surgeons. These PHC's are designated as upgraded PHC's.
A sub-centre, as discussed, caters to a population of 5000 persons and is staffed by a Village Health Nurse. Most of the sub-centres do not have buildings of their own and operate from rented premises. Because of the limited rental allowances given to the VHN to operate a sub-centre and limited facilities available in villages (discussed in detail in Chapter 6), most VHNs stay in nearby towns and commute to their service areas. Because they are not resident in the villages and their interaction with the village community is only for a few hours every week, the utility of the sub-centre is eroded considerably. For instance, she is unavailable during emergencies and at odd hours.

Due to the differing sizes of villages in Kancheepuram and Dharmapuri districts, a typical sub-centre in Dharmapuri district covering 10-12 villages and one in Kancheepuram district covers 3-4 villages. Though a VHN is supposed to make visits to villages in her service area 4-5 times a week, it was observed that VHNs make field visits only on Wednesdays (immunization days). As a shortcut to their work other services like providing antenatal services and counseling for family planning are provided on this day only. Better transport facilities and shorter distances between villages in Kancheepuram district results in a VHN being able to cover more villages in a day compared with a VHN in Dharmapuri district. As a result of the smaller number of villages to be covered by a VHN and the better transport facilities in Kancheepuram district, there is more frequency of contact between a VHN and a particular village in Kancheepuram district compared with Dharmapuri district. It was observed that the frequency of contact between a VHN and a village is about once a week in Kancheepuram district and about once a month in Dharmapuri district.

Most medical officers are involved in their private practice and run clinics in nearby towns. We observed that most medical officers leave for their private clinics after conducting the morning out-patient clinics. The evening out-patient clinics is rarely conducted because of non-availability of the doctor. Because of their preoccupation with their private practice, there is limited involvement in the activities of the PHC. Activities like supervision and field visits by a doctor are very limited.

The availability of residential quarters for medical officer and other staff facilitates the availability of services for longer duration and also during odd hours and emergencies. This assumes more significance in remote PHC's where a considerable amount of time...
and effort is spent by the staff in commuting to the PHC from their residences, usually in a nearby town. We observed that very few PHC's have the facilities for in-premise residence of doctors and other staff. Also, in certain instances, despite providing accommodation, doctors and other staff do not stay in the PHC because of limited facilities in villages and because it is not convenient for doctors to operate their private clinics. In some PHC's, the ANM stay in the PHC premises and is available to attend emergencies round the clock.

4.6 A COMMENT ON THE TAMIL NADU HEALTH SYSTEM

Tamil Nadu has often been cited in the literature for its management and effectiveness of its family welfare programme. (Antony, 1992; Bose, 1994; Srinivasan, 1995). A study of the factors underlying Tamil Nadu's fertility decline cites the efficient management of the family welfare services as the main factor (Padmanabah, 1995). Rajaretnam (1996) attributed the significant declines in fertility in Athoor block of Tamil Nadu despite low levels of socio-economic development to the intensive family welfare efforts have created a desire for smaller families and increased contraceptive usage. Some of the factors which have contributed to the effectiveness of the family welfare programme, as given in the literature, are infrastructure, improved logistics management, manpower, better intersectoral coordination, mobilization of funds, innovative programmes, better communication strategies, welfare schemes and political commitment to health and family welfare issues. We now briefly describe the role of these factors in the effectiveness of health programmes in Tamil Nadu. The order of these factors does not indicate the importance.

4.6.1 Infrastructure

The government of Tamil Nadu has been making a concerted effort to improve the infrastructure of the health care delivery system. There have been significant investments to construct sub-centre buildings which earlier operated from rented buildings and also in upgrading facilities by providing additional staff and providing the needed equipment. By the end of 1997, out of 8682 sub-centres in the state, 5572 functioned from their own buildings. The construction of the remaining sub-centres has been taken up in a phased manner under various schemes such as Hill Area Development Programme, Decentralised District Plan (Government of Tamil Nadu, 1998a).
Tamil Nadu also has good road network and ranked third among the major states in terms of road length per 100,000 population. The public transportation system consisting of a large number of buses run by several transport corporations of the Tamil Nadu government has linked all the villages to the urban centers. This has facilitated the access of health facilities among the dispersed rural population (Ramasundaram, 1995).

The government of Tamil Nadu has also improved the availability of health services by introducing 24 hour services in several PHC’s. At the end of 1997-98, there were 250 PHCs that functioned as 24 hour centres (Government of Tamil Nadu, 1998c). The problems of the staff are being tackled by hiring additional VHNs on a contractual basis and providing living accommodation to those who work night shifts. Most of the 24 hour PHCs have been provided with an ambulance to be available for emergency obstetric care.

4.6.2 Logistics Management
An important strength of the health system of Tamil Nadu is the setting up of the Tamil Nadu Medical Services Corporation (TNMSC) to strengthen the logistics management system of health care. The TNMSC was incorporated in 1994 and has greatly streamlined the availability of medicines and contraceptives in the government health institutions of Tamil Nadu. The incidence of shortages and stockouts have been minimized to a considerable extent (Visaria, 2000; Kaushik, 2002). As the procurement of medicines is centralized, the corporation is able to negotiate highly competitive prices and able to keep a check on quality through qualified professionals. To facilitate storage and distribution of medicines, 23 warehouses, with two pharmacists each, were established. The warehouses stock at least a minimum of three months requirement. Each item in the warehouse is monitored at the headquarters through a computer network on a day-to-day basis. A passbook system has been introduced for the withdrawal of medicines by government medical institutions, including the PHCs, from the district drug warehouses. Under this system, each institution is given a passbook with a specific number indicating the value of drugs which could be drawn pre-printed on the passbook (Government of Tamil Nadu, 1998a). Earlier, a uniform quota of medicines were sent to all the PHC’s, resulting in shortages of some medicines and wastage of others. The Government of India has recently recommended other states to adopt this system of providing medicines
and other supplies to the government medical institutions. Himachal Pradesh has also introduced a similar drug procurement system (Visaria, 2000).

4.6.3 Manpower
Tamil Nadu has been relatively more successful in recruiting and retaining doctors to work in rural areas. The strong state level political support to reservation policy in the provision of higher education has resulted in accessibility of professional education to middle classes in the district towns. 15 per cent of the seats in medical colleges are reserved for students from rural schools. Consequently, a cadre of doctors has been created in the state that has roots in small towns and is willing to work in PHC located in rural areas at commuting distance (Visaria, 2000). Many young doctors from small towns and rural areas prefer to be general practitioners in the government sector with assured incomes as they do not have the luxury of specialization in an advanced branch of medicine nor do they have the resources to set up their private practice. Posting as a medical officer in the government is much sought after by new medical graduates in Tamil Nadu: There is a waiting time of one year between selection and actual posting (Visaria, 2000). In 1991 Tamil Nadu had a ratio of one doctor per 1230 persons ranking third after Kerala (1:760) and Karnataka (1: 1020). The state’s per capita expenditure on health of Rs. 86.10 per annum is exceeded only by that in Punjab (Rs. 106.28) and Kerala (Rs. 95.79) (CMIE, 1994).

In Tamil Nadu nearly half of medical officers in the PHCs were women. The presence of women doctors has helped rural women in Tamil Nadu in accessing not only family planning services but general health care for themselves much more easily than was the case in the north Indian state of Rajasthan (Visaria and Visaria 1998). According to medical officers interviewed at the PHC in Tamil Nadu, many women patients visited the centres for reproductive health problems. Also, a large proportion of PHCs in Tamil Nadu have two medical officers unlike in many other parts of the country (Visaria, 2000).

The Tamil Nadu government has made employment as medical officers in the PHC very attractive. It allows private practice by medical officers under certain conditions. 50% of the postgraduate seats in all branches of medicine are reserved for those doctors who have completed a minimum three years of service in the PHCs or district hospitals. Doctors are recruited on a zonal basis. Tamil Nadu is divided into nine zones, with each zone comprising of two to three districts. Doctors are recruited through the Tamil Nadu
Public Service Commission to work in the zone in which their residence is located for a minimum period of 10 years. (Government of Tamil Nadu, 1998c).

4.6.4 Intersectoral Coordination
Unlike other states, health and family planning department in Tamil Nadu did not function on a vertical basis, but had strong intersectoral linkages with other departments. The contraceptive target achievement was considered the district administrator’s special function and responsibility. The advantage of this approach was that he could supplement the strength of the health department with the services and manpower of other departments such as rural development, municipal administration and even of regulatory departments. All the government functionaries in various departments including the Collector of the district, other officers at the district level, medical officers and the paramedical workers were all instructed to regard the propagation of small family norm as a high priority activity in their agenda. In most districts, particularly in the later half of the year, practically the entire district staff was turned to the achievement of “sterilization targets”. All facilities including vehicles, fuel and allowances were placed at the District Collector’s disposal particularly in February and March for family planning work. One Chief Secretary in the mid eighties accorded such high status and priority for the family welfare programme that even departments like agriculture and transport (though not directly connected to the programme) initiated vigorous steps in spreading the message of the small family. The family welfare programme has been monitored closely at the highest levels and good performance has always been rewarded. The government has also encouraged innovative strategies at the district level (Antony, 1992).

4.6.6 Funds
The Tamil Nadu government has also actively involved international donors in its quest for Health for All. The state has received assistance from several donors, chief among them being DANIDA. The DANIDA assisted area health care project is involved in construction of sub-centres, renovation of PHC’s and the revamping the training institutions in the state. DANIDA also funds the strengthening of the TNMSC and rationalizing the Health Management Information Systems in the state. It also provides easy loans to VHN’s to purchase mopeds to increase their mobility and improve the health care delivery services. In addition, under the RCH project, World Bank grant funds are being used, among other things, for providing laboratory facilities at several
PHCs for detection of reproductive tract infections and sexually transmitted infections (RTI/STI).

The Tamil Nadu government has taken certain proactive measures to involve the corporate sector in improving the health infrastructure and provide better services to the people. Thus, industrialists are encouraged to adopt and maintain PHCs and government hospitals in the state at their cost. Upto March 1998, 51 industrialists have come forward to maintain 24 Government Hospitals, 69 PHCs and 5 Health Sub centres (Government of Tamil Nadu, 1998b). The PHC's adopted by the industrial houses have been reported to have better infrastructural facilities and provide better facilities to patients (Visaria, 2000). Voluntary organizations like the Family Planning Association, the Gandhigram Trust had their own facilities which provided excellent health and contraceptive service. Other organizations such as Rotary, Lions, Guild of Service etc were actively roped in to improve the nature of facilities during special drives (Antony, 1996).

4.6.7 Innovative Programmes

Tamil Nadu has also been experimenting with novel methods of service delivery. An innovative programme to check morbidity among school going children is being implemented in Tamil Nadu from July 1999. The objective of this programme known as Vazhvoli Thittam (School Health Programme) is to examine all the school children for detection of ailments and treat them early as some diseases may turn out to be a big problem when they grow up. Special emphasis is laid on Rheumatic heart problem, eye disorders, dental problems, hearing deficiency, etc. Under the scheme all 'Thursdays' are observed as School Health days. The Medical Officer and the Para Medical Staff visit the schools in their jurisdictions, examine the students and provide them treatment. If necessary the students will be referred to Higher Medical Institutions for specialised and continued treatment. All Saturdays are observed as Referral Days at the Higher Medical Institutions. Two teachers from each school are being identified to coordinate and assist in the effective implementation of the scheme. These identified teachers will be given training at a cost of Rs.14.0 lakhs in identifying certain common ailments and interact with doctors. School Health Cards are printed and supplied (Government of Tamil Nadu, 2001).
The Tamil Nadu government had also experimented with health camps for screening and early detection of diseases in the Community by conducting free comprehensive health check up and treatment. The scheme was started in November, 1999 and in the first phase, this scheme has been introduced in December in Tiruvallur, Theni and Thiruvannamalai Districts on a pilot basis and subsequently extended to all Districts from January 2000 onwards. As of March 2001, over 8500 camps have been held all over Tamil Nadu and nearly 86 lakh persons have benefited from such camps (Government of Tamil Nadu, 2001). In addition to the direct benefits flowing out of the camps, Varumun Kapporn Thittam has also been generating detailed data on the health status of the people of Tamil Nadu as elaborate records are maintained on each and every person attending the camps. This data offers enormous scope for area-specific and age-specific morbidity analysis.

It has been argued by some administrators like T. V. Antony (2001) that though the patterns of Kerala and Sri Lanka are the ideal ones to follow where universal literacy leading to health awareness which in turn lowers mortality, and then the acceptance of the small family norm. Since many of the large northern states have very low literacy rates especially those for females. It would take decades for them to reach the levels of social development reached by Kerala by which time hundreds of millions of persons would have been added to India's population. Antony advocates the path taken by Tamil Nadu and Andhra Pradesh where with political and administrative will, coordinated efforts of all departments for the provision of services and dissemination of information, the goal of replacement level of fertility can be reached sooner.

4.6.8 IEC
Tamil Nadu is noted for its well developed mass media, especially cinema (for over three decades) and television (since the mid eighties). Among all the states of India, Tamil Nadu has the highest number of movie theatres per 100,000 population (Ramasundaram, 1995). Watching movies is more than a major form of entertainment for the people of Tamil Nadu — cinema is part of the average person's life, especially in the rural areas. The exposure to mass media may be an important factor in increasing the awareness about alternatives available to people and creating a demonstration effect. Sustained exposure to the make-believe world of cinema has probably contributed in the raising of the aspirations of the people who are able to see the good things in life through this
medium. When their income levels do not match these aspirations, then couples may decide to restrict their family size. This factor seems to explain the sharper fall in rural fertility compared to the fall in urban fertility over the past two decades (op cit). This has now come to be called the "Poverty" factor in the rapid fertility decline of Tamil Nadu. The increasing gap between income levels and aspirations of individual families due to increasing literacy and exposure to the mass media resulting in what one may call a culture of consumerism (Kishore 1994).

The state government has also been aggressively propagating the small family norm and family planning messages using a variety of media particularly the cinema. From the mid-eighties, public transport owners were persuaded to paint on the rear side of their vehicles a prominent red triangle and a relevant message about the "Small Family". These messages were not confined to contraception, but also included messages about the Age of Marriage, the need of spacing, and the ideal weight of the newborn child. Concepts such as that "land being limited, one family should have one heir", that if "one wanted to retire in peace, the last child should be born before 33" and morbidity and mortality would increase if children were born in quick succession, were displayed all over Tamil Nadu. These messages were often spread through VIP's at public meetings and specially through film stars (Antony, 1996).

The relatively large size of villages in Tamil Nadu makes provision of services such as cinemas, public bus transport and health care by private practitioners much more viable for the providers and accessible to the people. Compared to 67% of India's villages, only 31% of villages in Tamil Nadu had less than 1000 population according to the 1991 Census data (Visaria, 2000).

4.6.9 Welfare Schemes

The noon meal programme, launched in 1982, by the then Chief Minister, Mr. M. G. Ramachandran, is a landmark among welfare programmes in Tamil Nadu. This programme indirectly benefited the population stabilization efforts of the government. This programme endeavored to banish malnutrition among children and simultaneously encourage continuation of children in schools, by providing every child in Tamil Nadu up to school leaving age, a hot mid-day meal. The scheme presently caters to about nine million children, at some 80,000 centres spread all over the state. About 10 percent of the
state's budget is spent in the plan. It has improved the chances of child health and survival, encouraged continuation of children in the school and has prompted a perceptible shift away from the compulsions to have another 'extra child' as an insurance against death and disease, and altered the cost-benefit ratio of children to parents. Programmes such as these have greatly increased the people's faith in the government as one that cared for their welfare. When people have such strong faith in their government, the latter's messages advocating a small family are well received by the people (Ramasundaram, 1995). Further since about 200,000 women recruited in their own environment, operate the meal plan, the social status and sense of responsibility of a large group of women, particularly in the lowest socio-economic level in the slums and rural areas, have been enhanced. These women served as important communicators in the family planning programme through daily contact with just that section of the population sector which is most difficult to reach with the message of the planned family (Srinivasan, 1995).

4.6.10 Political Commitment
The seeds of improved status of women and fertility decline in Tamil Nadu can be traced back to the 1930's when a social reform movement was initiated by E.V. Ramasamy Naicker, affectionately called "Periyar" (great man). Though Periyar's campaign was mainly against the domination of the upper caste brahmins, his movement popularized concepts like equality of women and men, education and employment for women, higher female age at marriage, small family size and adoption of contraception to "liberate women from the wheel of child-bearing". The parties which have ruled Tamil Nadu since 1967 (the DMK and the AIADMK) have considered Periyar as their mentor and these concepts have been an integral part of political campaigns in Tamil Nadu for over thirty years. Further, leaders and prominent administrators often substitute for purohits in marriages and speeches during these functions revolved around Periyar's concepts about marriage and child bearing. These messages coming from VIP's were widely reported in the media and probably influenced nuptial and reproductive behavior in Tamil Nadu (Antony, 1996).

The strong political will for a small family expressed by parties which have ruled Tamil Nadu has played a significant role in the successful fertility transition in Tamil Nadu. For several years, the state health minister has reviewed the programme personally and
periodically, even at the district level. State level senior administrators have also played a considerable role by systematic monthly reviews, and coordinating the efforts of departments other than health to support this programme. Many of the welfare programme aimed at reducing social inequities like the mid-day meal programme also required strong political conviction and will for their successful execution. These programmes have created a conductive environment to pave the way for the demographic transition in Tamil Nadu.

The initial push given by Periyar for improving the status of women has been continued by successive governments in power in Tamil Nadu. Several studies have shown the status of women in Tamil Nadu to be much higher than in other states (Jejeebhoy et al., 2001; Ravindran, 1999). Research has shown that fertility is inversely related to the status of women (Sathar, 1996; Mason et al., 1999; Morgan et al., 2000). Although several cultural factors like the prevalence of consanguineous marriages (Kulkarni et al., 1996) have enhanced the autonomy of women, number of programmes and measures of the government have helped women further improve their status. These include:

1. Government land both for cultivation or for house site is issued only to women. As a result 21.9 lakh women have become owners of their house site and 55,000 women have become owners of their cultivable land.

2. The employment of teachers upto Class V for all schools in Tamil Nadu has been reserved for women. 30 per cent of all vacancies is to be filled up by direct recruitment, should be set aside for women candidates in the Tamil Nadu state and Sub-ordinate services.

3. Special schemes for women's employment is operating in five districts of Tamil Nadu with the objective of providing jobs to 62,500 women in land based activities.

4. The mid day meal programme employs about 200,000 female workers, most of whom are widows or destitute. This army of staff constitutes the largest number of people employed by the government for part time/full time work.

5. Old age pension schemes introduced by the Tamil Nadu government way back in 1962 has been progressively improved to cover physically handicapped, destitute widows, destitute agricultural labour and deserted wives. A large number of women are beneficiaries of this safety net. It is expected that this social security
scheme for destitutes has restricted the urge to have too many children (Antony, 1996).

6. Several schemes are in operation to improve the educational level of girls and increase the age at marriage. The Dr. Jayalalitha scheme for the Girl Child which provides a variety of benefits for poor families where there are only one or two girl children. Benefits include Rs. 800 on the birth of one or two girl children, Rs. 250 on the enrolment of the child in school, Rs. 500 when the child joins the sixth standard, Rs. 50 per month for 40 months for Xth and XIIth standard education, and Rs. 20,000 after completion of 20 years, for higher education. All this is subject to the condition that one of two parents is sterilized, and the girl completes 20 years before marriage. About 15,000 children have been enrolled under this scheme. There is also a marriage assistance of Rs. 5000 for about 10,000 women per annum and a grant of the same amount for widow remarriage.

7. Nutrition support for pregnant women at the rate of Rs. 75 per month for four months during pregnancy, plus free mid-day meal.

Some studies have argued that increased acceptance of contraception in Tamil Nadu and the state’s success in controlling population growth does not imply that all is well in the family welfare programme of Tamil Nadu (Ravindran, 1999). A study of the quality of care in 51 facilities performing sterilizations in Tiruchy district between 1990-91 and 1992-93, noted the high rate of mortality following tubectomies – 4.3 per 10,000 procedures, compared with 1.0 per 10,000 reported from other parts of India (GIRHFW, 1994). Abraham et al., (1994) arrived at similar figures (4.4 per 10,000 procedures) in their study of North Arcot district. One in five deaths were due to anemia. The staff of some of the hospitals were not aware of the guidelines regarding hemoglobin levels required for performing sterilization procedures. The study noted that screening of patients prior to sterilization was only cursory and many puerperal infections could have been missed. These studies observe that these deaths could have been prevented with adequate screening, adherence to asepsis, and appropriate postoperative care.

In Tiruchy district, adherence to sterilization procedures was absent and similar to those reported from other states in India (Ramachandar et al., 1999, Khan et al., 1999, and Mavalankar et al., 1999). Most of the women who had sought treatment from
government facilities for postoperative problems (84 per cent) said that they were not satisfied with the services received (GIRHFW, 1994).

Ravindran (1999) argues that women accept family planning because of poverty rather than of good quality services and desire for better standards of life. A comment of a women quoted in her study illustrates this:

_We do not have enough to make ends meet, not even a decent hut to sit in or a pair of oxen to work with. With a drunkard husband, low wages, and high prices, we can't give our children two decent meals a day and bring them up. Out of such dejection, we women come forward for family planning._

Studies have also reported that female infanticide and foeticide is prevalent in parts of Tamil Nadu. Athreya and Chunkat (1999) estimate that around 3000 instances of female infanticide took place every year during the period 1994-96. Further, infanticide accounts for 8 per cent of all infant deaths and 15 per cent of female infant deaths in Tamil Nadu. Data from a sample survey conducted in 1996 showed exceptionally high female IMR in three districts: Dharmapuri, Madurai and Salem, with the ratio of female to male IMR of 1.9, 1.4 and 1.1 respectively (Ravindran, 1999). Gurung (1999) reports indicate that 105 female infants had been killed every month in Dharmapuri district of Tamil Nadu in 1997. George (1997) reports that about 10% of newborn girls in 6 of 12 villages studied during the period 1986-90 were victims of infanticide, and over 90% of the deaths occurred among the dominant caste. The author found that the villages reporting this practice were remote, women were predominantly illiterate and rates of and consanguinity are higher. This phenomenon is attributed to the low status of women, decreasing fertility, dowry, the green revolution, and a shift to cash cropping. A 1995 study of 1320 newly delivered women in Salem district found that the number of girls who died in the early neo-natal period (25) was three times that of boys (9); a statistically significant difference. The risk was even more pronounced among girls born to multiparous women without living sons (Nielsen et al., 1997).

As discussed above, the health system in Tamil Nadu has certain inherent strengths which contribute to the better health status of its population. A key stimulating factor has been the strong political commitment to the health and welfare programmes. Senior administrators and often ministers take personal interest and review the functioning of the programmes which results in their effective implementation. The involvement of senior administrators has facilitated intersectoral collaboration and non-health
departments complement the efforts of the health department in their activities. International donor agencies and corporate houses have been successfully roped in to contribute monetarily as well as in terms of technical and managerial inputs. The state has been a pioneer in launching innovative programmes such as preventive health camps and school health programmes which provide health services to the door steps of the people. Tamil Nadu has better health infrastructure in comparison with other states. The upgradation and conversion of select PHC's to function round the clock has improved the accessibility of health services in rural areas. The incorporation of an autonomous body to manage the procurement and distribution of medicines and other supplies has improved the efficiency and eliminated the incidences of shortages in health facilities. The state has managed to recruit and retain medical officers in rural areas by providing attractive perquisites discussed in this chapter. This has eliminated the shortages of doctors in rural areas which is common in other states of India. The posting of female medical officers in most PHCs has increased the utilization of health services especially by female clients. The numerous welfare schemes such as the noon-meal scheme have not only contributed workers at the grassroots who complement the efforts of the health department but also increased the faith of the people in the government and their acceptance of government policies such as the small family norm. Other studies have argued that fertility declines in Tamil Nadu are not a reflection of the quality of services provided by the health sector. Rather, the poverty faced by women coupled with increased aspirations induced by the mass-media especially cinema induce women to adopt the small family norm.

In this chapter, we have described the organization of the health department, health infrastructure and a description of the health system of Tamil Nadu based on a scan of the literature. Having gained an insight into the overall functioning of the health department, we analyze in the next chapter the implementation of the recently introduced RCH programme in the rural health facilities of Tamil Nadu.