

**PROJECT INFORMATION DOCUMENT (PID)  
APPRAISAL STAGE**

Report No.: AB928

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| <b>Project Name</b>                    | Tamil Nadu Health Systems Project  |
| <b>Region</b>                          | SOUTH ASIA   |
| <b>Sector</b>                          | Health (70%);Other social services (15%);Sub-national government administration (15%)  |
| <b>Project ID</b>                      | P075058  |
| <b>Borrower(s)</b>                     | GOVERNMENT OF INDIA  |
| <b>Implementing Agency</b>             |  |
|  | Government of Tamil Nadu<br>Department of Health and Family Welfare<br>Fort St. George<br>Tamil Nadu<br>India<br>Tel: 91-44-25675459   |
| <b>Environment Category</b>            | <input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)  |
| <b>Safeguard Classification</b>        | <input type="checkbox"/> S <sub>1</sub> <input checked="" type="checkbox"/> S <sub>2</sub> <input type="checkbox"/> S <sub>3</sub> <input type="checkbox"/> S <sub>F</sub> <input type="checkbox"/> TBD (to be determined) |
| <b>Date PID Prepared</b>               | May 19, 2004   |
| <b>Date of Appraisal Authorization</b> | June 21, 2004  |
| <b>Date of Board Approval</b>          | September 28, 2004   |

## 1. Introduction

1. Tamil Nadu is the seventh largest Indian state in terms of population, at about 65 million and the eleventh largest in terms of land area. It ranks among the best states in India in terms of human development and health indicators. The economic growth has also been fairly steady with an average growth rate of more than 6 percent per year. The level of poverty has declined considerably in the state and has been estimated to be around 21 percent in 1999-00 by the Planning Commission. The population growth rate of Tamil Nadu has reached the second lowest level (at 1.43%) in the country.

2. Tamil Nadu has also made considerable progress over time in terms of improving its infant mortality rate (IMR) and under 5 mortality rate (U5MR). According to the National Family Health Surveys (NFHS) conducted in 1992 and 1999, IMR declined from 71 to 48 and U5MR has declined from 97 to 63 between the two surveys. More than half of the IMR is due to neo-natal deaths (deaths within the first 28 days of life). Part of the reason for declines in IMR and U5MR is the success the Government of Tamil Nadu (GOTN) has made in delivering preventive services such as immunization, where it has achieved the highest coverage rate in India (93% fully immunized according to the Reproductive and Child Health survey).

### Challenges facing the health sector in Tamil Nadu

3. Despite this progress the state faces certain issues which need to be addressed to further improve health outcomes:

(i) *Growing burden of Non-Communicable Diseases (NCDs)*: Tamil Nadu is facing a large and growing burden of disease from non-communicable diseases including traffic injuries. Data from other states at similar levels of development indicates that more than 40% of the burden of disease (disability adjusted life years lost) is accounted for by NCDs including accidents. This proportion is certain to grow as the population ages and may already seriously underestimate the importance of NCDs. Heart disease, diabetes, and cancers are already the leading cause of death in Tamil Nadu and smoking rates among the poorest income quintile are about 2.5 times higher than among the richest quintile. Tamil Nadu ranks among the highest states in India in traffic deaths with about 9,000 recorded fatalities per year due to road accidents. Many NCDs and injuries can be wholly prevented by decreasing exposure to risk factors such as smoking, poor diet, and lack of seat belt use; and where not preventable, the disabilities they cause can be mitigated through screening and early treatment.

(ii) *Unfinished Agenda*: There is still a large “unfinished agenda” related to women and children’s health, as well as control of communicable diseases. For example, the IMR in Tamil Nadu is 48 per 1000 live births, much higher than in Sri Lanka or Kerala which have IMRs of 12 and 16, respectively. Much of the difference is due to differences in neo-natal mortality which accounts for about 75% of IMR in Tamil Nadu. Since 79% of births are attended in health facilities, reducing neo-natal mortality rates will require improved quality of care during and after birth. This includes training and equipment necessary to prevent or take care of complicated births. Prevention of birth asphyxia, improved treatment of neonatal infections, and steroids given to women before the birth of premature babies would have a significant impact. Maternal mortality rates (MMR) continue to be high in Tamil Nadu and maternal death audits indicate that women are dying because facilities, particularly in disadvantaged areas, are unable to provide comprehensive emergency obstetric and neonatal care (CEMONC) including caesarian sections (C-section). Delays in referral occur and many women die during transfer to a distant facility that provides CEMONC. The WHO recommends one CEMONC per 250,000 people, yet in Tamil Nadu there are fewer than one per one million. Even many district hospitals do not have the resources to do an emergency C-section. Thus improving the referral network and upgrading first referral level facilities to improve access to CEMONC will be critical for Tamil Nadu to address preventable maternal and infant mortality.

(iii) *Poor Quality of Care*: The maternal mortality ratio is a good proxy indicator of the quality of care (QOC) because with modern comprehensive emergency obstetric care, almost no woman should die of maternal causes. The MMR in Tamil Nadu continues to be almost a 100 times higher than in developed countries, reflecting mostly, poor quality hospital services. Even in hospitals that provide CEMONC maternal and neonatal fatality rates are unacceptably high. The social assessment highlights the fact that the public sector providers have negative attitudes and treat their patients poorly. Even the poorest families are seeking care at private facilities. QOC is also a major issue in the private sector, with a large proportion of services being provided by unqualified practitioners, particularly in rural areas.

(iv) *Equity Issues*: Tamil Nadu has done very well in ensuring that all sectors of society have access to basic health services as witnessed by the very modest variation in immunization coverage by income quintile. There are, however, still a few areas in which equity needs to be improved, including: (i) gender where there are declining gender ratios and pockets of female

infanticide; (ii) limited access to services by scheduled castes and scheduled tribes (SC/ST), particularly the latter; (iii) regional imbalances, with certain districts and blocks within districts having significantly poorer health outcomes as compared to the rest of the state; and (iv) use of hospital services by the poor which is only 37% of the rate at which the wealthy are hospitalized. The low use of hospital services is perverse because the poor, if anything, require more such services. Even though the poor have relatively low hospitalization rates, catastrophic illness is a very important cause of indebtedness. Health-related expenditures are one of the top three reasons why the poorest get into debt<sup>1</sup>.

(v) *Low levels of Health Financing:* Overall expenditure on health in Tamil Nadu is low and due to the limited scope of health insurance much of what is spent comes out of pocket. Public expenditure on health services in absolute terms in Tamil Nadu is low (less than \$3 per capita per year) and has fallen from 7.5% of the state budget in the mid-1980's to 5.8% in 2001. Almost 75% of this budget is allocated to salaries, leaving very little for investment in equipment, infrastructure and materials required for the provision of care of even minimum quality. Most central government funding for health programs adds to the primary care budget, consequently the secondary care system has been systematically under-funded for several decades. These district and sub-district hospitals may be one form of health insurance for the poor. Failure to ensure adequate public financing will result in growing inequality and government impotence in being able to steward the sector.

## **GOTN Policy**

4. To respond to these issues, the GOTN has developed a Tamil Nadu Health Policy (2003) which lays out an ambitious road map for the next two decades, including reducing IMR to 15 per 1000 and MMR to 50 per 100,000 live births. The strategy focuses on improving the health status of the general population of Tamil Nadu, with special emphasis on the health of low-income communities and families. The strategy, taking into account the impressive levels of coverage for preventive and promotive services already achieved (see table 3), identifies strengthening first referral hospital services (i.e. district and sub-district hospitals) as a priority. GOTN also wants to start addressing key non-communicable diseases and injuries while sustaining its vigorous efforts towards the control of communicable diseases including HIV/AIDS. In the latter, Tamil Nadu has made better progress than any of the other states, with reported condom use among female sex workers and their clients at around 90%. While it is too early to be sure, HIV prevalence among women coming for prenatal care appears to have stabilized and may be declining.

## **Public-Private Partnerships**

5. GOTN recognizes and appreciates the important role the private, including the voluntary, sector can play in responding to the health needs of the poor. Many successful examples already exist in Tamil Nadu of government working with the private sector, such as contracts between the government's tuberculosis program and private doctors and laboratories and agreements between the Government and NGOs for AIDS prevention and treatment. While these public-private partnerships (PPPs) have been effective, they have generally been done on a small scale.

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<sup>1</sup> Tamil Nadu Women's Development Corporation. Top-line Survey of Self-Help Groups; 2003.

To deepen and broaden these engagements, the GOTN wants to articulate and test appropriate policies governing PPPs. While the GOTN provides more than 80% of immunizations, the private sector supplies a large proportion of the other health care services in the state. For example, about 77% of out-patient visits take place in the private sector as do 52% of institutional deliveries. Even among the poorest income quintile, 33% of institutional deliveries take place in private facilities.

### **Project development objectives**

6. The Project has been designed to address the existing constraints to access, utilization and quality of health services in Tamil Nadu, and thereby contribute to improving then health outcomes in the state. The Project Development Objective is “to significantly improve the effectiveness of the health system, both public and private, in Tamil Nadu through: (i) improved service delivery particularly for the poor, disadvantaged and tribal groups; (ii) development of effective interventions to address key health challenges including non-communicable diseases; (iii) improved oversight and management of the health care system (both public and private); and (iv) increased effectiveness and efficiency of public sector hospital services.”

### **Strategic Approach**

7. The Project will achieve its development objectives by: (i) extensive use of private-public partnerships (PPPs); (ii) pilot testing important innovations on a reasonably large scale using rigorous evaluation techniques to assess their effectiveness; and (iii) employing a phased approach in which worse off areas are targeted for support first, successful pilots can be further scaled up, and infrastructure improvements are used as an incentive to ensure effective implementation of system reforms. The Project will comprise the following four components:

8. **Component I: Increasing Access to and Utilization of Services** aims to improve access to critical services with an intensive package of interventions, including:

- (i) *Reducing Maternal and Neonatal Mortality* by establishing at least two comprehensive emergency obstetrical and neonatal care centers (CEMONCs) in each district that can provide definitive treatment for all types of obstetrical and neonatal emergencies, including Cesarean sections. CEMONCs will first be established in disadvantaged districts and will act as “hubs” to improve quality of obstetrical care in referring facilities. CEMONCs will have staff trained on standard treatment protocols and the equipment, supplies, and drugs needed to implement the protocols. In order to improve the timeliness of referral, a public-private partnership (PPP) with NGOs will be set up to provide emergency transport services.
- (ii) *Improving Tribal Health* by strengthening existing primary and secondary services in tribal areas through PPPs with experienced NGOs.
- (iii) *Facilitating Use of Hospitals* by the Poor and Disadvantaged by providing counseling and support through a PPP with NGOs and local self-help groups to poor and disadvantaged hospital patients so that they are aware of their rights, are referred to the correct people and services, are treated well by staff, and are not made to pay inappropriate charges.

9. **Component II: Developing Effective Models to Combat Non-Communicable Diseases and Accidents**

- (i) *Supporting Health Promotion* by undertaking population-based health promotion activities focused primarily on preventing non-communicable diseases (NCDs) by reducing exposure to risk factors through: (a) policy and advocacy, (b) behavior change communications (BCC) interventions through the mass media, (c) community-based interventions focusing on enabling environments and targeting specific groups such as women, (d) school-based health promotion; (e) workplace-based health promotion; and (f) life-style counseling centers aimed at controlling cardio-vascular risk factors in district hospitals based on PPPs with experienced NGOs.
- (ii) *Pilot Testing Clinic-Based NCD Control* by financing large scale operational research, via two pilots, for screening and treatment of specific NCDs and risk factors in primary and secondary care settings. Pilot 1 will include screening and treatment of smoking and hypertension using nicotine patches and anti-hypertensive medications. Pilot 2 will assess the costs and benefits of universal cervical cancer screening and treatment. Both pilots will be evaluated during the mid-term review and a decision will be taken whether and how to scale-up to the entire state.
- (iii) *Traffic Injury Prevention and Treatment* interventions will be implemented in close coordination with the Department of Transport. The Project will also provide training and equipment for paramedics in accident relief so as to take advantage of the “golden hour.” Emergency transport will be strengthened through partnerships with NGOs in which fully equipped ambulances will be stationed at identified accident-prone spots on all highways. Definitive trauma management will be strengthened for public and private facilities in accident-prone areas.

## 10. **Component III: Building Capacity for Oversight & Management of the Health System**

- (i) *Strengthening Monitoring and Evaluation* by (a) strengthening HMIS: The existing health management information system (HMIS) and the financial management information system will be strengthened and computerized; and (b) evaluating & assessing innovations including surveys on NCDs, patient satisfaction and quality of care.
- (ii) *Improving Quality of Care* through (a) protocol development for improved management of key problems (e.g. hypertension, smoking cessation, cervical cancer screening, management of hemorrhage, emergency neo-natal care, emergency obstetrical care, etc.); (b) regulation of public and private hospitals/facilities by building on the existing regulatory system, and helping GOTN implement a strengthened oversight system for both private and public facilities.
- (iii) *Strengthening Health Care Waste Management* through implementation of guidelines that call for proper segregation, color-coding, transportation, and appropriate disposal. PPPs with interested NGOs would be set up for waste transportation and treatment; as well for the development of training manuals, training of trainers and monitoring/supervision.
- (iv) *Building Capacity for Strategy Development and Implementation* by (a) establishing a Strategic Planning Cell to act as a think tank for the GOTN and to conduct studies on important health systems issues; (b) establishing a public-private partnership (PPP) wing within the GOTN in order to manage and monitor all the PPP contracts signed under the project; (c) conducting a Health Insurance Pilot to explore the feasibility of providing community-based health insurance on a reasonable scale, to be carried out by an NGO; and (d) strengthening Project Management with a small increment in resources will be required to

track progress and carry out procurement and financial management activities directly associated with project activities.

## 11. Component IV: Maximizing Efficiency of the Public Sector to Deliver Essential Services

(i) *Rationalization of Secondary Care Facilities* by supporting the refurbishment and upgrading of secondary care hospitals including the assurance of basic amenities such as water and electricity.

(ii) *Rationalizing of Equipment* by conducting one time repair followed by implementation of a proper maintenance system, much of it through TNSMC, equipment suppliers, and local hospital officials.

(iii) *Human Resource Planning and Development* by establishing and implementing staffing norms and conducting extensive training of government staff by reputable organizations, likely through a PPP. Activities aimed at improving staff morale and courtesy towards patients will be conducted.

(iv) *Enhancing Management of Public Facilities* by: (a) ensuring that hospital administrators can effectively use the funds collected from patients and visitors. Twinning arrangements with well known private hospitals will also be implemented and high performing hospital administrators will be provided with incentives; and (b) in areas where public facilities are facing difficulties and no private facilities are available, a number of options will be considered and tested, including: the administrator and hospital committees being given a limited budget to improve performance, NGOs on a PPP operate facilities with the same budget, recruitment of individual hospital managers or consultants on a contractual basis linked to performance.

## 12. Financing

|                                       |        |
|---------------------------------------|--------|
| Source:                               | (\$m.) |
| BORROWER/RECIPIENT                    | 25     |
| INTERNATIONAL DEVELOPMENT ASSOCIATION | 100    |
| Total                                 | 125    |

## 13. Phasing

A very important aspect of Project management is the phasing of activities so that health systems reforms are planned and implemented simultaneously with the envisaged infrastructure inputs. A series of reforms or actions aimed at strengthening management or quality of care has been identified for each phase and the subsequent phase of infrastructure development would be launched upon successful implementation of the software components. For example, during the first phase of the Project, infrastructural improvements will take place in 6 districts selected on the basis of poverty and poor service delivery. During the 18 months of Phase I work will also begin on PPP (e.g. signing PPP contracts with NGOs), health promotion (e.g. development of a health promotion strategy), NCDs (beginning the NCD pilot), training (e.g. on health care waste management), quality assurance (e.g. development of treatment protocols), and monitoring and evaluation (e.g. recruitment of an agency to carry out household surveys). The activities for all phases are described in more detail in Annex 6. Based on achievement of these activities, infrastructural and equipment inputs for another 12 districts will be provided during the 18 months of Phase II. The last 24 months of the Project will constitute Phase III, during which infrastructure and equipment inputs for the remaining districts will be provided based on successful implementation of the software activities for Phase II.

## Organizational Arrangements

14. The Project will be implemented within the Department of Health and the Project management arrangements will also be utilized for implementation of the second Reproductive and Child Health Project (RCH II) as well as health-related actions in the SAL. This will help ensure close coordination between the two projects, reduce duplication and save on costs. This joint project management unit (PMU) will be headed by an IAS officer who will report directly to the Secretary, Health and Family Welfare, GOTN. The PMU will be responsible for overall project co-ordination and implementation, develop and implement annual action plans, approve the innovative pilots and monitor implementation progress. A district project management cell will be established in each district and will assist the PMU in local procurement, monitoring, logistics, and training. Oversight for the Project will be provided by a State Empowered Committee (SEC) headed by the Chief Secretary whilst at the working level, a health sector Program Steering Committee will be headed by the Secretary, Health and Family Welfare.

### 2. Contact point

Contact: Preeti Kudesia

Title: Sr Public Health Spec.

Tel: 5785+101

Fax:

Email: [Pkudesia@worldbank.org](mailto:Pkudesia@worldbank.org)

Location: New Delhi, India (IBRD)

### 3. For more information contact:

The InfoShop

The World Bank

1818 H Street, NW

Washington, D.C. 20433

Telephone: (202) 458-5454

Fax: (202) 522-1500

Web: <http://www.worldbank.org/infoshop>

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