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**SOCIAL AND ECONOMIC
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**Public Health and Panchayati Raj
Institutions in Karnataka**

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Bangalore
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Foreword

Preventive non-clinical public health services are generally assumed to be the responsibilities of the government. Basic things like clean and safe drinking water, disposal of waste, sanitation and control of mosquitoes that spread diseases are services every citizen should expect to get in order to enjoy a healthy life. However, in developing countries, these services are generally not easy to access. Modern systems of service delivery are expensive and consumers of service generally do not pay enough to finance the operational costs, leave alone paying for the capital expenditures. However, it is necessary that we find ways of providing these services to all citizens in cost-effective ways. The challenge is greater in rural areas because of the wide geographical spread of habitations and lower incomes of the rural population, in general.

Reaching such basic public health services to all the citizens is an objective that has found expressions in many policy documents at national, international and sub-national levels. Achieving these objectives has financial implications; but more importantly, it requires institutional innovations that ensure participation of communities in improving the reach of the services across population groups.

This study reports an analysis of the various efforts to achieve greater coverage of the preventive population-based public health services in rural India. The study has a focus on Karnataka state and is based on a project carried out by ISEC at the request of the Government of Karnataka and funded by the World Bank. The authors have attempted to put together restructured institutional mechanisms for rural local bodies to achieve better coverage of the public health services.

Though there are many studies on various dimensions of decentralisation in Karnataka, I believe, this is the first attempt to examine its relevance and implications for a particular sector such as public health delivery. It is hoped that the study will be of much relevance towards operationalising a full coverage of habitations under the programmes of safe drinking water supply, sanitation and other basic public health services. Towards this goal, this study also provides a plan of action.

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Gopal K Kadekodi
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Abbreviations and Acronyms

ANM	Auxiliary Nurse-Midwife
BDO	Block Development Officer
BPL	Below Poverty Line
CEO	Chief Executive Officer
CHC	Community Health Centre
CRSP	Central Rural Sanitation Programme
DDC	District Development Council
DHFWO	District Health and Family Welfare Office
DHO	District Health Officer
DPC	District Planning Committee
GOI	Government of India
GOK	Government of Karnataka
GP	Gram Panchayat
ICMR	Indian Council of Medical Research
ICSSR	Indian Council of Social Science Research
IEC	Information, Education, Communication
ISEC	Institute for Social and Economic Change
KDP	Karnataka Development Programme
KPRA	Karnataka Panchayati Raj Act
MPW	Multi Purpose Worker
MWS	Mini Water Supply
NFHS	National Family Health Survey
NGO	Non-Governmental Organisation
NGY	Nirmala Grama Yojana
NHP	National Health Policy
NPP	National Population Policy
NSSO	National Sample Survey Organisation
PHC	Primary Health Centre
PHED	Public Health Engineering Department
PHU	Primary Health Unit
PPPHS	Population-based Preventive Public Health Services
PRI	Panchayati Raj Institutions
PWS	Piped Water Supply
TDB	Taluk Development Board
THO	Taluk Health Officer
TP	Taluk Panchayat
TSC	Total Sanitation Campaign
UNICEF	United Nations Children's Fund
ULB	Urban Local Bodies
VWSC	Village Water Supply and Sanitation Committee
WHO	World Health Organisation
ZP	Zilla Panchayat

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CHAPTER I

INTRODUCTION

Decentralised governance is expected to facilitate people's participation, enhance the degree of transparency and ensure greater accountability to provide more effective and competitive delivery of services at the grassroots level. Being closer to the people, a decentralised institution is assumed to meet their needs and preferences (Braun and Grote 2002; Breton 2002; Bardhan and Mookherjee 2000). The services provided by decentralised local bodies are considered to be cost-effective besides helping in the mobilisation of local resources in the form of labour and material. However, some scholars have reservations about the efficacy of decentralised governance (Prud'homme 1995; Tanzi 1995). Prud'homme argues that decentralised governance promotes inefficiency and scope for corruption due to the influence of interest groups and discretion of local officials. The long tenure of officials at the same place makes it easier to establish unethical relationships with the local people. Tanzi (2001) also argues that decentralisation promotes personalism and reduces professionalism. Personalism breeds corruption as officials pay greater attention to individual citizen's needs and disregard public interest, thereby defeating the philosophy of decentralised governance.

The whole idea of decentralised governance is based on some key factors like people's participation, accountability, transparency, and fiscal transfers (Braun and Grote 2002; Romeo 1999; Crook and Manor 1998; Litvack et al 1998). These are interlinked and their effects on development cannot simply be measured. The poor performance of decentralised governance may be more visible in those regions where these key factors are lacking.

It is evident from studies in India that decentralised institutions (Panchayati Raj Institutions - PRIs) can ensure effectiveness in the delivery of services like promotion of education, healthcare, and poverty elimination programmes etc. (Aziz et al 2000; Crook and Manor 1998; Slater and Watson 1993). The case studies from various developing countries provide mixed results (**Table 1**). In some cases, there is an improvement in people's participation and the programmes are more responsive to the needs of the poor, whereas in some countries it is felt that it resulted in lack of developmental orientation and poor accountability (Crook and Sverrisson 1999).

Table 1: The Outcomes of Decentralisation in Some Developing Countries

Case	Outcomes	
	Participation by/ Responsiveness to the poor	Impact on social and economic poverty
West Bengal, India	Good: improved participation and representation, improved responsiveness	Good: positive on growth, equity, HD, evidence lacking on spatial equity
Karnataka, India	Fairly good: improved representation, participation of poor less effective and responsiveness low	Neutral: did little to directly help pro-poor growth, or equity, HD and spatial equity indirectly benefited from funding allocations and development programmes
Colombia	Fairly good: participation/representation ambiguous, responsiveness improved	Fairly good: little evidence on growth or equity, but good results on HD, spatial equity
Brazil	Little evidence, but thought to be poor as spoils/patronage system run by powerful Mayors and Governors still dominant	Good on equity, HD in exceptional areas where state or federal programmes combined with decentralisation, poor generally on spatial equity
Bangladesh	Poor: participation and representation low, responsiveness very low	Very poor on all criteria, undermined by corruption and political patronage
Ghana	Fairly poor: participation by poor and community groups improves, limited improvement in representation, but responsiveness low	Limited evidence shows that resources involved are too insignificant to have made much impact, spatial equity may have improved through government allocations
Kenya	Very poor: politically run deconcentration scheme	Some impact on spatial equity through political motivated redistribution
Nigeria	Very poor: low participation and representation, very bad record of responsiveness and lack of accountability	Poor: very bad record on equity, HD, spatial equity subject to political manipulation and urban bias

Note: HD - Human Development including public health services
Source: Crook and Sverrisson 1999

1.1. Experiences of Health Services Decentralisation

How far decentralisation of services helps in improving the quality and coverage of healthcare delivery? Experiences from all over the world indicate that a precondition for enhancing the effectiveness in delivery of public health services is community participation (in both decision-making and implementation of the programmes). This is because public health is a combination of services, skills and beliefs that are directed to the maintenance and improvement of the health of all the people through collective or social action. Public health services may be categorised into three main groups, viz., (a) personal curative services, (b) personal clinical preventive services, such as immunisation, antenatal care, family planning, which are delivered to individuals by clinical providers, and (c) population-based public health services such as water quality surveillance, sanitation, garbage disposal, drainage, vector control, food sanitation, mass drug treatments, effective enforcement of public health regulations etc. All these services are important in their own right and can have serious public health implications. The population-based public health services remain relatively neglected for various reasons in developing countries, including India, compared to the personal curative and clinical preventive services.

Most of the discussions in the delivery of health services remain centred around health facilities such as sub-centres and primary health centres (PHCs) which are mainly equipped to deliver personal curative and preventive health services only. It is anticipated that involvement of decentralised local bodies will help improve both curative (personal curative services and personal clinical preventive) and preventive services or community-based public health services by reflecting local priorities leading to equal, if not higher, emphasis on population-based public health services. Community-based public health services inherently require involvement of community members, decision-makers, researchers and other specialists, apart from the stakeholders. Decentralised governance is an ideal process that will help bring these groups on a single platform. It can also give an opportunity for establishing equity measures among various socio-economic groups. For example, prevention of communicable diseases like cholera, typhoid and malaria requires personal hygiene, increase in water quantity, improvement in water quality, food hygiene, and provision of drainage and sanitation facilities. Without people's involvement in preventive measures, the improvement of people's health may not be possible. Therefore, decentralised institutions become an important instrument in the provision and monitoring of public health delivery system.

The governments of some developing countries have adopted decentralisation for bringing social justice and efficiency in the delivery of health services (Mills et al 1993). It is apparent from the experience in India that PRIs have succeeded in carving out a role for themselves in improving the quality of healthcare services by monitoring regular attendance of healthcare functionaries, as well as by exerting moral pressure on the staff not to shirk regular duties. A review conducted by the Government of Karnataka observes that the functioning of school and health facilities improved considerably under the PRIs set up in the 1980s. There has been significant improvement in the area of medical and health facilities and the supply of drugs (Government of Karnataka 1989). Another study found that the attendance of doctors and paramedical staff improved considerably under the constant monitoring of local leaders in many PHCs and hospitals of Karnataka (Sekher 2001). However, a study conducted by CINI (2003) in five states in India notes that the current functions of the PRIs vis-a-vis healthcare are not in place as yet. The PRIs have not been fully entrusted with health functions, although this is an area of responsibility that has been outlined in the formation of the sub-committees of the PRIs across the states. The institutional dimension and coordinating mechanism between the line departments and decentralised bodies still remain unclear and ambiguous, based on the experiences from various states of India (Gupta and Gumber 1999; Sekher 2005). The conflict between health professionals and political leadership at the local level continue to adversely affect the process of democratisation of health services (Nayar 2001).

Based on both theory and experience, Mills et al (1993) have stated that decentralised health system could perform certain functions that might result in the effective delivery of healthcare services. The functions, which have been identified by them, have been presented in **Table 2**. The number of stars indicates the extent of responsibilities of the administration for a particular function and a dash (-) indicates no responsibilities. However, it needs to be mentioned here that in many cases an ideal model of decentralised system may not necessarily be an effective one in real practice.

In recent years, the importance of decentralisation of public health services has considerably increased owing to the need for improvement in sanitation, drinking water and hygiene that affect the health of many people. According to the World Bank (2003), about 5 out of every 10 persons in the developing world are without adequate sanitation, 9 out of 10 live without drainage facilities and 2 out of 10 live without access to safe drinking water. The Global Water Supply and Sanitation Assessment Report (WHO/UNICEF 2000) states that due to inadequate sanitation and water supply,

about 4 million cases of diarrhoea are reported every year causing 2.2 million deaths in the world. Millions die from Malaria and other diseases and their exact figure remains unknown. The governments of developing countries have failed to reduce the frequent incidence of these diseases. The root cause of these epidemics and sufferings of millions of people is the poor environmental hygiene prevailing in most parts of the developing world. It has become impossible to improve the environment and water supply without involving the community with its inherent social, cultural and economic concerns. In India, the public health systems have focused largely on (a) providing individual healthcare services; (b) responding to outbreaks of some key contagious diseases such as cholera; and (c) organising some specific disease-control programmes, largely working through the health agencies themselves. Though many of these services have been run with some success even in remote and inaccessible areas under the most difficult circumstances, much more needs to be achieved.

With this backdrop, we have attempted to study the role of the Panchayati Raj Institutions (PRIs) in the provision and monitoring of public health and sanitation services in Karnataka state. It is generally perceived that public health and sanitation currently have low priority for local governments. This situation must change for better if we are to bring about better health status for the people at large. Mobilising local resources, involving communities and better co-ordination between government departments and private and voluntary agencies can achieve this.

1.2. Analytical Framework

The delivery of population-based health services (sanitation, vector control, drainage, garbage disposal, disease surveillance, water quality and availability, enforcement of public health and food regulations etc.) remains poor in Karnataka, particularly in rural areas, due to lack of infrastructure and personnel, financial constraints, lack of awareness, poor accountability and transparency. Though the networks of the departments like health and water supply have spread to almost every village in the state, the availability and utilisation of the services continue to be low and grossly inadequate. Apart from this, it is also a well-known fact that the curative services are given importance both by the public and the service providers, resulting in total neglect of environmental health amenities. In this context, can the PRIs make a difference in the delivery of these services? The philosophy behind bringing the line departments, responsible for providing essential services, under the supervision of local elected bodies is to achieve an overall improvement in the delivery of services at the grassroots level. This can be

Table 2: Decentralisation of Functions in Different Types of Decentralised Systems

Function	Description	Deconcentration to ministry field office	Devolution to local government	Delegation	Privatisation
Legislating	Making laws on health matters	–	**	–	–
Revenue raising	Determining and implementing the mechanisms for raising money to finance health facilities	*	**	**	***
Policy making	Determining the broad and detailed policies that the health system should follow	–	**	**	**
Regulation	Indirectly controlling the operation of non-governmental health services and providers by administrative mechanisms such as licensing	–	**	*	–
Planning and resource allocation	Formulation of long and short term plans for the development of the health system	**	**	***	***
Management	Personnel	*	**	***	***
	Budgeting and expenditure	**	**	***	***
	Procurement of supplies	*	**	***	***
	Maintenance	*	**	***	***
Intersectional collaboration	Communicating with other sectors and undertaking joint activities	*	***	***	***
Interagency coordination	Coordinating the policies and activities of various health agencies and providers	*	**	***	***
Training	Determining and implementing the training programmes for various categories of staff	*	**	***	***

Note: *** - executive responsibilities, ** - some responsibilities, * limited responsibilities, – - no responsibilities

Source: Mills *et al* 1993

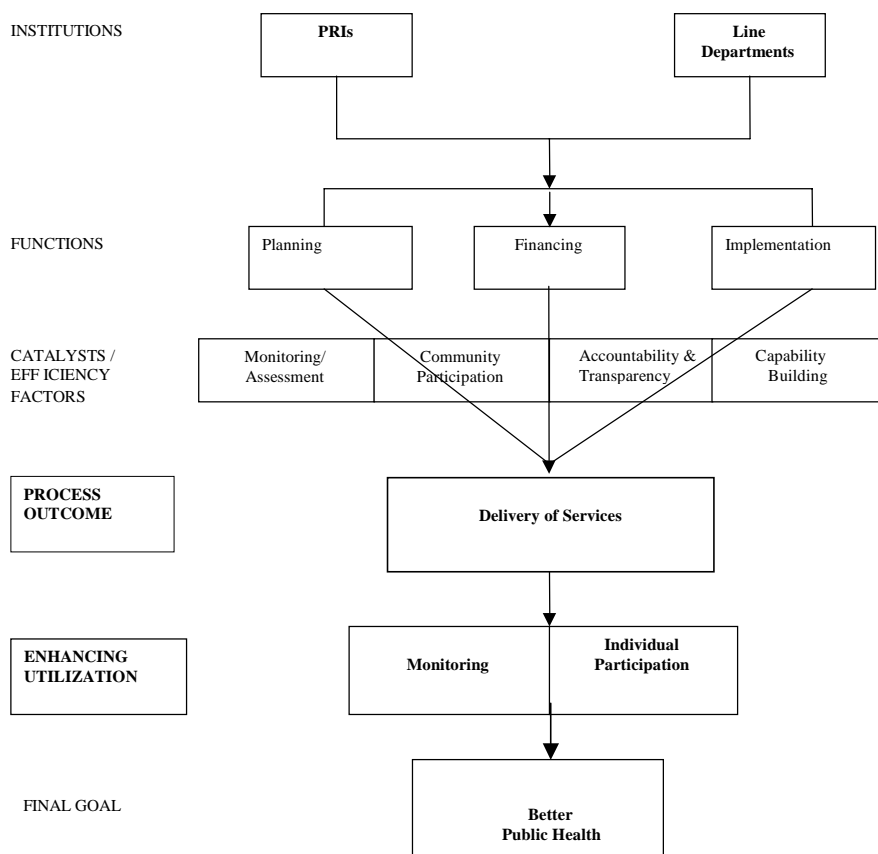
facilitated through the intervention of the PRIs by making health services responsive to local needs, more accountable to the local population, focusing on local problems, prioritising the requirements, generating public demand for the services and efficient use of available resources. However, in practice, the PRIs do not have the knowledge of various options available to them, either in terms of technology or procedures, and under such conditions, they exercise their powers only with respect to the things they understand: allocation of funds or favours that may benefit their own political constituency.

The following Chart depicts the linkages with PRIs and line departments for service delivery at the local level. However, it must be noted that there are several alternative models through which the services are delivered even today not just within the country but also within the state. For example, in the externally aided projects, there are different institutions that aim to develop infrastructure and deliver the services. At the state level, there is a specialised agency called Karnataka Water Supply and Sanitation Agency that acts as a nodal agency for the externally aided projects in this area and provides overall guidance for their implementation. The NGOs get far greater role to play in the implementation of these projects than in the past. There are also attempts to spread better sanitation practices through exposing school children to these practices.

The analytical frame is based on the ultimate goals fixed for the empowered institutions, viz., the PRIs and the line departments. The goals clearly are achieving the most optimal health outcomes in the present context. The Constitution, the Karnataka Panchayati Raj Act and so on specify these obligations and the goals. To achieve these goals, these lead institutions should formulate strategies, prepare plans and provide financial solutions to implement the plans. The overall direction has to come from a higher-level authority, in the present context, from the state-level policies.

The main functions translate the policies or strategies into services through infrastructure, programmes and schemes. However, the effectiveness of the service delivery depends on a number of factors. In any efficient system of delivery of services, there have to be well-laid-out mechanisms that ensure provision of necessary inputs infrastructure, personnel, resources a monitoring mechanism that provides information on a systematic basis for corrective actions, forums for interaction with stakeholders, clear accountability mechanisms, to name a few of the components. These components would improve the outcome of the efforts in terms of planning, finance and implementation.

Chart 1. Analytical Framework: Delivery and Monitoring of Public Health Services at the Local Level



The delivery of services is still only an intermediate step towards realising the goal of public health. Even when the services are available, the utilisation depends on how the individual users make use of the services provided. For instance, even if individual household toilets are built, they need to be used by the households to derive the positive benefits of these amenities. If the toilet space is used for something else, then all the work done by the service providers comes to nothing.

The PRIs need to manage the available systems to obtain the best results for the community. As agents, who are empowered to manage the system of service provision and at the same time, as representatives of the

community, they have the best opportunity to provide the optimal services. How do they in fact manage this system? What are the mechanisms they use to plan, finance and implement the mandate? This study focuses on the scenario in Karnataka. It is an attempt to understand the strategies and procedures available to the PRIs for the delivery of basic public health services in rural Karnataka.

1.3. Review of the Key Issues for the Study

The study proceeds on the premise that to control communicable diseases, certain types of services need to be provided by different levels of the health authority hierarchy. One of the instruments for effecting change for betterment of service delivery is strong incentive to the local authorities to shift priorities in this direction. This includes (1) incentives internal to the system, and (2) mechanisms of social and public accountability which depend, in turn, on (3) strong efforts to build public awareness and electoral pressure regarding public health issues. It is also necessary that various disease-control services are efficiently co-ordinated to achieve better health outcomes.

The three levels of rural local government - Zilla Panchayats (ZP), Taluk Panchayats (TP), and Gram Panchayats (GP) - need to have greater focus on their respective roles. One set of roles would be:

- The ZP level needs to sharpen its focus on assuring inter-sectoral co-ordination from a public health viewpoint on a routine basis, and not primarily in response to emergencies.
- The TP level needs to focus on the management of sanitary inspections (for example, drains, toilets, markets, food, water, etc.) and issues of regulatory enforcement. This also requires linking up with the health authorities and GPs.
- The GP level needs to involve in public health and sanitation issues, by mobilising additional financial requirements, better implementation and creating awareness among the public.

In this context, the study addresses the following questions-

1. The existing organisational arrangements of PRIs and the Health Department in the state and suggested organisational changes for achieving better health outcomes.
2. What are the provisions in the Panchayati Raj Act relating to public health, vector control and sanitation? What additional mandates are required?
3. How PRIs can supervise and monitor public health activities?

4. Reviewing the existing inter-sectoral co-ordination mechanisms and suggesting measures to strengthen the linkages.
5. Identifying the tasks and functions the PRIs can undertake to improve health and sanitation in rural areas.
6. Identifying the responsibilities of PRIs - which local elected bodies can play a crucial role in ensuring successful implementation of various health programmes through community participation.

For this purpose, information was collected from both healthcare institutions and PRIs. Two districts, viz., Raichur and Tumkur in Karnataka, were selected for data collection and field visits. The ISEC study team visited the districts during August-September 2003 to examine the various functions and programmes on public health undertaken by the panchayats and other organisations (See Annexure A).

The ISEC team also visited Ahmednagar District of Maharashtra in January 2004 to learn from the Total Sanitation Campaign launched on a pilot basis in the district by the Government of Maharashtra. During the visit, the study team discussed the Rural Water Supply and Sanitation Programmes in the district with the executive and elected officials of the Zilla Panchayat, Taluk Panchayat and Gram Panchayat of the district. Interaction with officials at the state, district, taluk and village levels in Karnataka provided information on the existing situation and suggestions for improving service delivery and community participation. Similarly, discussions with elected members at the three tiers of the local self-government also provided valuable insights into understanding the problems of poor environmental hygiene and sanitation. The experiences from other states as well as the outcomes of the various programmes implemented by the government and other agencies provided a comparison with Karnataka's programmes. The study attempted to highlight the good lessons learnt in the field of public health and sanitation that could be replicated in Karnataka. The views and suggestions from all the stakeholders were considered for suggesting measures for the improvement of the system.

This monograph comprises five chapters. It begins with a brief introduction and the approaches adopted for the study. Chapter II presents a discussion on the status and functions of PRIs in India. The evolution of the PRIs in Karnataka and their structures, and their linkages with health services have been dealt with in detail in Chapter III. This is followed by a discussion on specific population-based preventive health services in rural Karnataka in Chapter IV. Finally, Chapter V provides a concise assessment of the current scenario and specific recommendations for greater and effective involvement of PRIs for the betterment of public health services in Karnataka.

CHAPTER 2

PRI_s IN INDIA: STATUS AND FUNCTIONS

Panchayats in India have been in existence for centuries. During the British rule, Lord Rippon took the initiative of establishing elected local bodies in 1882. However, for the first time in the 20th century, it was Gandhiji who wished to revive the panchayats with democratic bases of their own and invest them with adequate powers, so that the villagers could have a real sense of 'Swaraj'. Mahatma Gandhi was inspired by the idyllic view of the village life and the village organisation and formulated his ideas as a process for alternative polity of a free India. He observed that India lived in its villages and its development process should start with the village and the villagers. Gandhiji emphasised the supremacy of the people and insisted on people's involvement at the grassroots planning and implementation process, which was for him the 'panchayat'. He believed that such an institutional arrangement provided an opportunity for the villagers to get involved in planning, programme implementation and learning to play a catalytic role in achieving faster development of the village India. Due to Gandhiji's insistence, Article 40 was included in the Indian Constitution, that too in the Directive Principles of the State Policy, leaving the establishment of Panchayats to the discretion of the states.

2.1. Panchayats and HealthCare

Inadequate emphasis on tackling the problems of ill-health, particularly relating to nutrition, water supply and sanitation, environmental hygiene, housing, literacy and poverty alleviation, which were crucial to public health, was identified as early as 1946 in the Bhore Committee blueprint and that was accepted by independent India as a framework for health service development. The Bhore Committee (GOI 1946) recommended health education and community involvement in public health. But, with the compartmentalisation of the ongoing efforts in these directions by different departments and ministries, the intersectorality of all these with basic health has been lost. Over the years, both the central and state governments initiated various measures to involve communities and stakeholders in the provision of basic healthcare services. But in reality, the community participation of grassroots level bodies was practically absent.

The ICSSR and ICMR report in 1981 states that the overall improvement in health conditions is only possible under the PRI_s - a people-based health system. It can provide effective services even at a low cost with greater accountability and equity. In 1994, the expert committee of the

National Population Policy, headed by M S Swaminathan, suggested a paradigm shift and conceptualised population and health policies within the context of overall social and economic development agenda with greater devolution of authority and responsibilities to the panchayats. The committee pointed out that the people must have a central role in deciding how they live. The development strategies must address the totality of the way the people live, think and work. The committee also suggested that it was necessary to adopt the principle of 'think, plan and act locally and support nationally'. The new National Population Policy (2000) reiterates the crucial role of panchayats in planning and implementation of health and family welfare programmes. The planning tool recommended by the expert group for grassroots level social development is a socio-demographic charter. To be used at the village, town or city level, this tool helps the elected members of local bodies to prioritise their basic minimum needs and develop feasible strategies for fulfilling such needs within a stipulated time. The grassroots level socio-demographic charter is to be based on a 'pro-nature, pro-poor, pro-women and pro-democratic choice' orientation to developmental planning. The major aim of the socio-demographic charter is to assist the local communities to develop an action plan that will help in achieving and continuously improving the quality of life. The National Health Policy (2002) also highlights the need for devolving programmes and funds in the health sector through different levels of the PRIs (See Annexure B).

It was felt that particular attention should be given to the basic minimum needs in the areas of primary healthcare, environmental hygiene, safe drinking water, households' nutrition security, sanitation, and primary education. Despite the existence of an extensive rural health infrastructure network (See Annexure C), a vast majority of the rural population in India has no access to basic healthcare facilities. This, to a great extent, can be ensured through active involvement of elected representatives in health programmes. The involvement of the PRIs in the implementation and management of health services would facilitate focused attention on vulnerable social groups, more emphasis on preventive measures, and the programmes can be reoriented to the specific local needs (Sekher 2003).

Apart from poverty and low levels of education among masses, poor management of public health system is responsible for the deteriorating health conditions. It is argued that by the re-assessment of priorities and with better management practices, India's health outcomes could be substantially improved (Das Gupta and Rani 2004). The primary healthcare systems need to be strengthened to reduce the burden of disease through appropriate preventive, promotive and curative services. Poor health of rural

masses is essentially a failure of the public health delivery system. Whenever there is an outbreak of epidemic killing a large number of people, the public healthcare system comes under severe criticism (like the Plague outbreak in Surat). However, what is happening every day but is not noticed by the public is the death and sufferings of thousands of women, children and poor due to diseases, which are entirely preventable and easily curable. The poor utilisation of public health services underlines the fact that mere expansion of health infrastructure will not yield the desired results. Appropriate administrative measures and a monitoring mechanism can solve this problem to a great extent; it is here that the rural local bodies can play an important role.

Decentralisation is expected to bridge the existing gap between service providers and clients to a great extent. Clients can help tailor the service to their needs and monitor the functioning of health services since they are present at the point of service (Antia and Bhatia 1993; Rayappa and Sekher 1998). However, for the PRIs to be effective in health service delivery, more responsibilities need to be given in the sector-specific budget allocations, revenue-raising powers and improved human capital through access to qualified personnel and training.

The broad framework for the PRIs has been laid down in India under the 73rd Constitution Amendment Act. This has ushered in a greater degree of uniformity in the structure (three-tier), reservation (for SC, ST and women), and powers and functions (financial and planning) of these institutions with the objective of achieving faster social and economic development. The three-tier structures of the PRIs are Zilla Panchayat at the district level, Taluk Panchayat at the intermediary/taluk level and Gram Panchayat at the village level. The 73rd Amendment Act has given an impetus to the Panchayats for promoting development, including the provision of essential health services.

2.2. Elected Representatives of PRIs

After the constitutional amendments and the emergence of three-tier decentralised bodies, we have nearly three million elected representatives in about 2,20,000 Panchayati Raj Institutions in India. As can be seen from **Table 3**, the average population covered by a Gram Panchayat is 3,194. However, there is considerable variation among the states, but the only two obvious outliers with regard to the coverage of Gram Panchayat are Kerala and West Bengal. Populations per taluk Panchayats (block councils) are considerably larger, with an average of 1,20,000. Populations per Zilla Panchayat, the highest rural level, are quite large, with an average of 1.43

million in 2001. In Karnataka, the population per GP is about 6,000. At the Gram Panchayat (GP) level, approximately one member is elected for every 400 population and one member for every 10, 000 population at the taluk level. Similarly, for every 40,000 population, one member is elected to the Zilla Panchayat (Karnataka Panchayati Raj Act, 1993).

Table 3: State-wise Number of PRIs and Population per PRI -2001

States	No. of GPs	Population per GP	No. of TPs	Population per TP	No. of ZPs	Population per ZP	Total no. of PRIs
Andhra Pradesh	21944	2517	1095	50433	22	2510179	23061
Arunachal Pradesh	2013	431	79	10993	12	72369	2104
Assam	2489	9341	203	114527	21	1107095	2713
Bihar	12181	6091	725	102344	55	1349084	12961
Goa	188	3591	-	-	2	337564	190
Gujarat	13316	2380	184	172270	19	1668296	13519
Haryana	6059	2471	114	131306	19	787834	6192
Himachal Pradesh	3037	1805	75	73098	12	456864	3124
Karnataka	5659	6152	175	198938	27	1289411	5861
Kerala	991	23786	152	155076	14	1683677	1157
Madhya Pradesh	22029	2010	313	141478	45	984056	22387
Maharashtra	28711	1941	320	174164	33	1688864	29064
Manipur	166	10953	-	-	4	454556	170
Orissa	5254	5940	314	99397	30	1040353	5598
Punjab	12369	1297	138	116259	17	943749	12524
Rajasthan	9188	4709	237	182564	22	1966713	9447
Sikkim	159	3022	-	-	4	120122	163
Tamil Nadu	12607	2766	384	90805	28	1245332	13019
Tripura	540	4904	23	115134	4	662018	567
Uttar Pradesh	52029	2528	809	162596	70	1879146	52908
West Bengal	3360	17183	341	169310	17	3396158	3718
India	214289	3194	5681	120468	477	1434756	220447

Source: Calculated by the authors based on the information on PRIs (www.indiastat.com) and the rural population figures from Census of India 2001.

The 73rd Amendment Act has brought out a significant change in rural India. About one-third of the elected representatives is reserved for women. Nearly one-third is reserved for backward and marginalised communities. The working group on decentralised planning and PRIs states that "one of the significant achievements of the provisions of the 73rd Amendment Act concerning reservation of seats to political offices in favour of women and the disadvantaged sections of the rural community is that it has improved their awareness and perception levels and has created an urge in them to assert their rightful share in the decision-making process at the local level" (Government of India 2001). **Table 4** presents the state-wise number of elected members at three levels of PRIs in 2003. Interestingly and significantly, in Karnataka, nearly 44 per cent of the GP members are women though the reservation for women is only to the extent of 33.3 per

cent. This clearly indicates that many women members get elected from general seats. However, similar extent of women representation is not seen at the TP and ZP levels, though their number slightly exceeds the reserved quota.

Table 4: State-wise Number of Elected Representatives in PRIs - 2003

State	Gram Panchayat		Taluk Panchayat		Zilla Panchayat		Total No.
	Members	Women	Members	Women	Members	Women	
Andhra Pradesh	277, 027	68, 736	19, 536	4, 919	1, 459	364	298, 022
Assam	23, 471	7, 851	2, 148	746	390	117	26, 009
Bihar	156, 582	40, 553	15, 676	4, 065	1, 572	410	173, 830
Chhattisgarh	166, 214	41, 913	3, 545	906	389	95	170, 148
Goa	1439	457	@	@	50	17	1, 489
Gujarat	152, 303	1, 312	5, 263	1, 180	1, 004	274	158, 570
Haryana	73,002	18, 356	3, 272	842	423	109	76, 697
Himachal Pradesh	25, 371	6, 822	2, 220	562	338	87	27, 929
Karnataka	89, 343	35, 922	3, 537	1, 375	930	339	93, 810
Kerala	13, 259	4, 801	1, 638	629	307	105	15, 204
Madhya Pradesh	314, 847	106, 491	6, 456	2, 159	734	248	322, 037
Maharashtra	255, 194	77, 548	4, 284	1, 407	2, 081	658	261, 559
Manipur	1, 722	611	@	@	61	22	1783
Orissa	118, 961	31, 414	8, 415	2, 188	1, 150	296	128, 526
Punjab	75, 968	27, 108	2, 480	813	279	89	78, 727
Rajasthan	153, 732	39, 450	7, 165	1, 908	1, 372	364	162, 269
Sikkim	1, 195	322	@	@	121	29	1, 316
Tamil Nadu	97, 458	26, 181	6, 570	1, 770	656	173	104, 684
Tripura	5, 685	1, 895	299	106	82	28	6, 066
Uttar Pradesh	683, 383	230, 865	51, 870	18, 580	2, 126	788	737,379
Uttaranchal	261, 915	18, 041	3, 225	1, 133	345	119	265, 485
West Bengal	51, 200	11, 497	8, 579	1, 923	723	156	60, 502
India*	2,999,271	798, 146	156, 178	47, 211	16, 592	4, 887	3,172,041

Note: Data have not been recorded for all the states

@ - Taluk panchayat does not exist.

Source: Panchayati Raj Update 2003

2.3. Functions and Powers of PRIs

The objective behind the 73rd Amendment Act was to make the panchayats provide good governance and be an effective mechanism for economic development and social justice at the grassroots level. This Act brought forth an opportunity for democratic decentralisation in the country. The Act ushered in changes by providing wide-ranging powers and functions

to the local-level constitutional bodies for ensuring participation in planning and implementation. According to the Schedule Eleven, the PRIs are responsible for 29 functions, including health and sanitation, hospitals, primary health centres and dispensaries, and drinking water supply (See Annexure D).

Table 5: State-wise Status of Devolution of Departments/Subjects to PRIs

States/Union Territories	No of department/subjects transferred to panchayats with		
	Functions	Funds	Functionaries
Andhra Pradesh	13	05	02
Arunachal Pradesh	-	-	-
Assam	-	-	-
Bihar	-	-	-
Jharkhand	-	-	-
Goa	-	-	-
Gujarat	-	-	-
Haryana	16	-	-
Himachal Pradesh	23	02	07
Karnataka	29	29	29
Kerala	29	15	15
Madhya Pradesh	23	10	09
Chhattisgarh	23	10	09
Maharashtra	18	18	18
Manipur	22	-	04
Orissa	25	05	03
Punjab	07	-	-
Rajasthan	29	-	-
Sikkim	29	29	29
Tamil Nadu	29	-	-
Tripura	12	-	-
Uttar Pradesh	13	12	09
Uttaranchal	13	12	09
West Bengal	29	12	12
A and N Islands	-	-	-
Chandigarh	-	-	-
D and N Haveli	03	-	03
Daman and Diu	29	-	-
Lakshadweep	06	-	-
Pondicherry	-	-	-

Note: In Delhi, the Panchayati Raj System is yet to be revived.

Source: Pal 2004

However, the functions and powers devolved to the panchayats vary considerably across the states. The reality is that many states are

ways ahead of others in bringing administrative and political changes by amending the state-level Panchayati Raj Act and providing the power and resources to make decentralised planning and governance meaningful. The state governments were supposed to transfer to panchayats the functions pertaining to 29 subjects listed in the Eleventh Schedule to the Constitution. As can be seen from **Table 5**, the states of Karnataka and Sikkim have transferred funds, functions and functionaries with regard to all the 29 subjects to the PRIs. Kerala, West Bengal, Rajasthan and Tamil Nadu have transferred the 29 functions to the PRIs but not the funds and functionaries (Pal 2004).

In most of the states, the experience of functioning of the panchayats reveals that while elections have been held regularly, the states have been slow in devolving power to the panchayat bodies (see **Table 6**). In some states, the line departments still exercise the powers of supervision and control over the schemes of subjects transferred to the panchayats (Govt. of India 2001). The Karnataka Panchayati Raj Act provides a grant of Rs 2 lakh per GP to be given by the state government (Section 206).

In general, the existing situation with regard to functions, finances and functionaries of panchayats shows that, with some exceptions, the status of panchayats in terms of making them autonomous in the areas of their operation is not very encouraging. The constitutional amendment alone cannot be effective if the demand for decentralisation does not arise from the grassroots. A strategy comprising constitutional amendment and social mobilisation is essential for strengthening the panchayats in the light of the experiences of the last one decade.

Table 6: State-wise Source of Finance in Respect of Gram Panchayats in India

States	Taxes and rates	Fees, cess and duties	Grants	Others
Maharashtra	Taxes on street lights, land, buildings, pilgrims fairs, festivals, entertainment, vehicles, cart stand, sanitary tax	Weekly market fee, grazing fees, share of stamp duty, land revenue and land revenue cess	Government grants	-
Madhya Pradesh	Tax on property, latrines, lights, professions and entry tax	Market fee, registration fee, licence fee	Government grants	Some optional taxes
Tamil Nadu	House tax, professional tax, vehicle tax, pilgrim tax, etc.	Building, trade and tourist bus fees, local cess, surcharge on stamp duty	Government grants	-
West Bengal	Tax on land and building	Nil	Government grants	-
Karnataka	Tax on buildings, water rate, tax on fairs, pilgrims, non-motor vehicles	Licence fee	Government grants	Income from property
Punjab	Tax on land and building	Fee for registration of vehicles, stamp duty	Government grants	People's contribution and property income
Andhra Pradesh	Tax on house, sales, lighting, profession, entertainment, share in land revenue, water rate	Share in stamp duty, and land revenue cess	Government grants	Income from property

Source: www.indiastat.com

CHAPTER 3

PRI AND PUBLIC HEALTH IN KARNATAKA: STRUCTURES AND LINKAGES

In consonance with the 73rd Amendment Act (1992), the state governments have passed new Acts on decentralisation. Like other states, Karnataka also gave effect to the new Panchayati Raj Act in 1993. Even before this Act, Karnataka's decentralised planning system had attracted a good deal of attention throughout the country for its success in giving power to the people and in promoting development at the grassroots level. Many consider the Panchayati Raj system in Karnataka as much superior in terms of devolution of powers and finances (Aziz 1993). The process of governance and their functions under three different Panchayati Raj Acts have been given below.

3.1. Mysore Village Panchayats and Local Boards Act (1959)

Village Panchayats

The erstwhile Mysore State had a long history with regard to panchayat and local institutions. According to the provisions of the Mysore Village Panchayats and Local Boards Act (1959), the village panchayat, consisting of revenue villages or a group of villages with a population ranging from 1,500 to 10,000, would have 11 to 19 elected members with reservation for SCs/STs in proportion to their population. It also provided for co-option of women members, not more than two. The functions were assigned to the village panchayats as given in **Table 7**.

Table 7: Functions of the Village Panchayats under the Act (1959)

Functions	Description
Obligatory	Provision of drinking water, sanitation , village lighting, construction, repair and maintenance of village roads, bridges and water tanks
Regulatory	Eating places , shops and shows, maintenance of public buildings, grazing and forest lands
Discretionary	Co-operation, public health and cottage industries

Four standing committees - agriculture, health, village industries, and social justice- carried out the works of the panchayats. The main activities of these committees were to formulate programmes/schemes and to implement them. A secretary was employed to look after the administrative

matters. Meetings were called at least once in every month and special meetings were held whenever the need arose. It is important to note that water supply and sanitation work had been assigned to the community for its effective implementation even before effecting the 1959 Act. A National Water Supply and Sanitation Programme was introduced in 1954. The programme was executed with people's participation and was devoted to the construction of open wells in the villages where there were no wells or the number of open wells were inadequate. Despite the aim of ensuring people's participation in implementation, it was observed that only easy habitations were being repeatedly attended to leaving the difficult habitations with no facilities. Besides this, recurring droughts in the state made the situation worse. Groundwater table fell and the open wells went dry and the people faced serious scarcity of drinking water. The Government of Karnataka initiated a bore-wells programme through the minor irrigation and Public Health Engineering Department in 1971 with the help of 5 drilling rigs received from the UNICEF (Government of Karnataka 2000). There was no separate government agency for implementing rural water supply programmes till 1980. Minor Irrigation and Public Health Engineering Department used to implement such water supply works. The Public Health Engineering Department (PHED) was established with an independent chief engineer in 1980 for rural water supply, sanitation and other works related to public health activities. With the Act of 1985, the PHED was reorganised and these works were transferred to the Zilla Parishads but technical guidance, planning and monitoring was retained by the PHED.

Panchayat Fund

The Act provided for constitution of a panchayat fund. Panchayats were empowered to get 30 per cent of the land revenue collection of the village and another 10 per cent of land revenue collection as discretionary grant. The panchayats could levy taxes on lands, buildings, traders, fairs, festivals, entertainment, vehicles and fees on bus-stands, markets, cart stands and water works.

Taluk Development Boards

The Taluk Development Boards (TDBs) were constituted as an intermediary tier for each taluk. The membership of the TDB varied depending on the population. A TDB of less than one lakh population could elect a minimum of 19 members with reservation for SCs/ STs. There was provision for co-opting not more than two women members. The TDBs were entrusted with the tasks as shown in **Table 8**.

Table 8: Functions of the TDBs under the Act (1959)

Functions	Description
Obligatory	Establishment and maintenance of public health institutions , construction and maintenance of primary school buildings, minor irrigation, drinking water works , public roads, social education, promotion of industry and agriculture, and organisation of relief works
Regulatory	Control of fairs and festivals, establishment of markets etc.

The Block Development Officer (BDO), who was also the executive head of the TDB, headed the administrative wing. To assist the BDO there were subject matter specialists, i.e., extension officer and village-level workers. The BDO was responsible for carrying out the decisions of the TDB, co-ordinating its activities and preparing plans. The BDO was an implementing agency for most of the special economic programmes sponsored by both the union and state governments.

Finances of TDB

The TDBs had a highly restricted and narrow tax-base. They were not given complete freedom even to levy duty on transfers of immovable property. The Government made an annual grant of 50 per cent of land revenue collected in the taluk and an amount equal to 10 per cent of the land revenue collection of the state. The TDBs mainly depended on these sources.

District Development Councils

The District Development Councils (DDCs) were constituted at the district level. DDCs were visualised strictly as an advisory and co-ordinating body. All the presidents of TDBs together with MPs, MLAs and MLCs and some official members constituted this body. The deputy commissioner, being head of the administration in the district, was the ex-officio president of the council.

Functions and Finances of District Development Councils

The DDCs were responsible for approval of budgets passed by the TDBs, reviewing the work of the TDBs and providing guidance and assistance, and co-ordinating the works of the TDBs. The DDCs were not assigned with any independent source of revenue.

The 1959 Act provided a politico-administrative structure of the PRIs but failed to provide adequate access for weaker sections. It also failed to integrate the PRIs into state planning and development administration.

The PRIs were short of sufficient financial resources and most of their funds came from the government.

3.2. The Karnataka Zilla Panchayat, Taluk Panchayat Samithis, Mandal Panchayats and Nyaya Panchayats Act, 1985.

An important attempt was made by enacting the Karnataka Zilla Panchayat, Taluk Panchayat Samithis, Mandal Panchayats and Nyaya Panchayats Act (1985) for strengthening the decentralisation process in the state. The 1985 Act provided for a directly elected body both at the district and mandal panchayat levels. This Act provided scope for the institutional arrangements for decision-making with people's participation, administrative arrangements for delegation of powers and financial arrangements for the devolution of funds and schemes to the lower levels from the state (Sivanna 2002; Aziz 1993).

Gram Sabha

The Gram Sabha (village council) was regarded as the soul of the Panchayati Raj system. It was a council of all those on the electoral roll of a revenue village. All persons who had attained 18 years of age could be members of the Gram Sabha (GS). The functions of the GS have been presented in **Table 9**.

Table 9: Functions of the Gram Sabha

Function	Description
Meeting	<ul style="list-style-type: none"> ➤ Twice in a year ➤ Presided by the President of Mandal Panchayats ➤ Facilitate an interface between government officials and elected members and providing an opportunity for the people to voice their needs, aspirations and day-to-day problems
Task	<ul style="list-style-type: none"> ➤ Discuss and review all the problems and programmes of Mandal in regard to development ➤ Select beneficiaries for the programmes ➤ Preparation and promotion of plan for the development of the village ➤ Organise sanitation and drainage schemes of the village ➤ Mobilise voluntary labour and contribution in kind or cash ➤ Assist the Mandal in the implementation of development schemes

Mandal Panchayat

The Mandal Panchayat was the first elected tier of the PR system comprising a cluster of villages with a population of 8,000 to 12,000. Every 400 population would have an elected member. Seats were reserved for women, SCs/STs to the extent of 25 per cent and 18 per cent, respectively. The president and vice-president, who were indirectly elected, were empowered to convene meetings and supervise officers and employees. Each mandal panchayat had a secretary and had the power to appoint its own employees. The mandal panchayats were entrusted with many functions as presented in **Table 10**.

Table 10: Functions of the Mandal Panchayats under 1985 Act

Functions	Description
Obligatory	<ul style="list-style-type: none"> ➤ Sanitation and health which includes construction and maintenance of wells and tanks, supply of water, sanitation, provision of public latrines, etc. ➤ Village lighting, construction, repair and maintenance of village roads, bridges ➤ Responsible for planning and implementation of programmes/schemes ➤ Formulation and implementation of development plan/schemes
Regulatory	Regulation of eating places, shops, shows, buildings, grazing and forest lands, curing, tanning and dyeing of skins and hides
Discretionary	Promote health, safety, education or general well-being of the people, management of forests, wasteland cultivation etc.

The mandal panchayats functioned through three standing committees as shown in **Table 11**.

Table 11: Committees of the Mandal Panchayats and Their Functions

Committee	Functions
Production	Concerned with agriculture, animal husbandry and rural industry
Social justice	Look after the interests of the scheduled castes and tribes, backward classes and women
Amenities	To perform functions in respect of public health, education, and public works

Mandal Fund

Each mandal panchayat had a fund called Mandal Fund which was formed by (a) the amount which was allotted to the mandal from the state government or Zilla Parishad, (b) the proceeds of levied taxes on buildings, entertainment, markets, water rate, fee for grazing cattle and water supply, (c) income from non-tax resources like royalty, rent, income from forest, etc., and (d) per-capita grants received from the zilla parishads.

In comparison with the long list of functions assigned to the mandal panchayats, the available resources were very meagre. Evidently, a substantial part of the mandal fund had to come from the centre/state governments. Under the statute, the state government was required to make a grant at the rate of Rs. 10 per person residing in the mandal calculated on the basis of the last preceding census (Meenakshisundaram 1994). On an average, the income of the mandal panchayats ranged between Rs. 2 lakh and Rs. 4 lakh per year. The Gadgil formula (see **Table 12**) was applied for the allocation of funds to the mandal panchayats, which gave more weightage to population and area than to the indicators of backwardness (Aziz 1993).

Table 12: Weightage and Criteria for the Allocation of Funds to the Mandal Panchayats

Sl. No.	Criteria	Weightage (%)
1	Population	50
2	Area of Mandal	15
3	Dry land area	15
4	Agricultural labour population	10
5	Per capita resources raised	10
		100

Source: Aziz 1993

Taluk Panchayat Samiti

The Taluk Panchayat Samiti was a purely nominated body consisting of ex-officio members such as the presidents of mandals in the taluk, all MLAs, MLCs and ZP members representing the taluk, and five members belonging to SCs/STs, backward classes and women, co-opted with the approval of the ZP. The MLA representing the taluk was the president and the BDO was the secretary of the samiti. The samiti had powers of supervision and review of mandal works, and the co-ordination of the work related to more than one mandal. Under this set-up, taluk was not given any planning functions and it was entrusted only nominal roles of inter-mandal co-ordination and supervision. Taluk was also not entrusted with any financial resource mobilisation powers.

Zilla Parishad

The Zilla Parishad (ZP) was the second directly elected tier of the PR system constituted at the district level under the 1985 Act. The members of the ZP were elected with 25 per cent of the seats reserved for women and 18 per cent seats for the SCs/STs. The Members of Parliament and MLAs were entitled to take part in the proceedings and had voting rights, but could not hold office. The president and vice-president were elected from amongst the members of the ZP and were given the status and salary of a minister of state and deputy minister in the state government.

A Chief Secretary was selected from the IAS cadre to head the administrative machinery of the ZP. The position of the Chief Secretary was higher than that of the Deputy Commissioner of the district. He/she was responsible for all the developmental activities of the district and worked under the direct supervision of the ZP president. All the officers and staff of development departments at the district level came under the ZP (Chandran 1993; Meenakshisundaram 1994). As a result, there was enough scope for identifying and articulating people's needs and aspirations. The administrative set-up was made accountable to the elected bodies. Thus, to a great extent, the theoretical aspect of the decentralisation was implemented in practice under the 1985 Act in Karnataka.

Functions of ZP

Functions of the ZP, as per the Act, have been presented in **Table 13**.

Table 13: Functions of the Zilla Parishad under 1985 Act

Functions	Description
Important functions	<ul style="list-style-type: none"> ➤ Formulation and implementation of district plans ➤ Supervision, co-ordination and integration of all development schemes in the district
Area of functions	<ul style="list-style-type: none"> ➤ Construction and maintenance of hospitals and dispensaries, schools, literacy campaigns, community groups ➤ Agriculture and agricultural training, commercial farms and seed farms, animal husbandry, development of irrigation and small-scale industry, development of fish farming ➤ Welfare of SCs/STs and backward classes ➤ Establishment and maintenance of all roads in the district ➤ Rural electrification

Committees of Zilla Parishad

There were 9 standing committees for each ZP for undertaking different functions (see **Table 14**).

Table 14: Committees of Zilla Parishad and Their Functions

Committees	Functions
General standing	Functions relating to the establishment matters and all miscellaneous residuary matters
Finance and audit	Framing of budget and general supervision of the revenue and expenditure
Planning and development	Development of the plan of the district, co-operation and small saving schemes
Public works and amenities	Communications, buildings, rural housing, village extension, relief against natural calamities, water supply and other allied matters
Social justice	Welfare of SCs/STs and backward classes
Education	Educational activities, survey and evaluation, adult literacy, cultural activities
Health	Health services, hospitals, water supply, family welfare and other allied matters
Industries	Village and cottage industries
Agriculture and animal husbandry	Agriculture production, animal husbandry, contour bunding and reclamation

District Planning Unit

The ZP was designed to be the main agency for planning and implementation. All development departments including health and family welfare at the district level and the below were brought under the umbrella of the ZP. A district planning unit, comprising the chief planning officer, regional planning officer, project appraisal officer, statistical officer and other experts in each district, was proposed for providing some degree of expertise so that monitoring of the district plan formulation and implementation could be better. A district planning cell was introduced in the state planning department which conducted Karnataka Development Programme (KDP) monthly review meetings to monitor the progress of the district schemes. The state development council was established under the Chairmanship of the Chief Minister with presidents of all ZPs as members - on the pattern of the National Development Council -to give an opportunity to the elected members at the district level to evolve plan priorities and policies (Aziz 1993).

Finances of the ZP

The ZP did not have independent taxation powers. It used to receive grants from both the state and central governments, rental income from assets, capital receipts and loans and deposits obtained from institutions. To carry out the plan and programmes of the ZP, the government had made corresponding allocations in plan and non-plan budgetary provision. The scale of transfer, in monetary terms, for instance, in 1987-88, was to the tune of 28.3 per cent of the state's own plan outlay (37.2 per cent inclusive of centrally sponsored schemes) and was transferred to the district sector. On the non-plan side, the transfer amounted to a little over 20 per cent. On an average, the total income of the ZP varied from Rs. 50 crore to 60 crore per year. As regards the personnel, about 37 per cent of the government employees, of whom primary school teachers constituted the largest number, came under the administrative control of the ZP (Sivanna 2002; Chandran 2000). The State government used a modified Gadgil formula for allocation of ZP plan outlay (**Table 15**). It can be seen that half the weightage was given to the population and the other half to the indicators of backwardness. The latter was expected to ensure higher allocation of resources to the backward districts (Aziz 1993).

In brief, the two-tier decentralised set-up as it existed in Karnataka under the 1985 Act had certain provisions which ensured the involvement of and close co-ordination between officials and elected members.

Table 15: Indicators and Weightages for Determining Zilla Parishads' Share in the State Plan Outlay

	Indicators	Weightage (%)
1	Population	50
2	Backwardness in agriculture as measured by the value of agricultural output per hectare	5
3	Backwardness in irrigation as measured by the proportion of irrigated area to net area sown	7
4	Backwardness as measured by the value of industrial output	5
5	Backwardness in communication as measured by road and railway mileage per 100 sq. km and per lakh of population	5
6	Backwardness in financial infrastructure as measured by the size of population served by each commercial and cooperative bank	2
7	Backwardness in medical and health facilities as measured by the number of hospitals per 1,000 population/bed-population ratio	5
8	Backwardness in power supply as measured by the proportion of villages electrified	5

9	Problems of the weaker sections	
	(a) as measured by the proportion of SCs/STs in the population	2
	(b) as measured by the proportion of landless agricultural labourers	2
10	Special problems of Malnad areas and drought-prone areas	
	(a) as measured by the area under forest	2
	(b) as measured by the rural population of drought-prone areas	2
11	Literacy percentage	5
12	Performance in family planning programme	3
	Total	100

Source: Aziz 1993

3.3. The Karnataka Panchayati Raj Act, 1993

The Karnataka Panchayati Raj Act, 1993, ensured the involvement of weaker sections in development by providing reservation of seats and positions for SCs/STs, women and backward classes. It is interesting to note here that the implementation of the Act has ensured that all segments of the society are represented in the PRIs. The representation of women is more than the mandated one-third as mentioned in the Constitutional Amendment. In Karnataka, presently, 45 per cent of the gram panchayat members are women (**Table 16**). The proportion of women in all the three tiers increased over a period of time, a positive development towards the long journey of women's empowerment and political participation.

In conformity with the Eleventh Schedule of the 73rd Amendment Act, the 1993 Act in Karnataka has accorded functions and duties to three-tier elected bodies with three different schedules, viz., Gram Panchayat is responsible for the subjects as mentioned in Schedule I; responsibility of the subjects mentioned in the Schedule II is given to the Taluk Panchayat; and subjects included in the Schedule III are looked after by the Zilla Panchayat. A diagrammatic presentation of the three-tier elected government structures and their linkage with the line departments can be seen in Chart 2. A detailed discussion on the administrative set-up at GP, TP and ZP is included in the following sections.

Gram Sabha and Ward Sabha

There are two forums at the grassroots level in which ordinary people can participate in the development process besides the elections, viz., the Gram Sabha and the Ward Sabha. The Act (1993) provides the Gram Sabha with enough powers to ensure people's direct participation in planning and implementation of development programmes. It is made mandatory to conduct meetings of the Gram Sabha twice in a year and discuss matters as desired by the people. It is expected that the Gram Sabha

Table 16: Elected Representatives in PRIs in 1993 and 2001

	Election 1993*							Election 2001**						
	No of PRIs	Total Members	SCs	STs	Women	Backward Class A B		No of PRIs	Total Members	SCs	STs	Women	Backward Class A B	
GP	5,675	80,627	17,918 (22.3)	7,575 (9.4)	35,305 (44)	-	-	5,659	80,073	14,871 (18.6)	7,499 (9.4)	35,922 (45)	21,079 (26.3)	5,573 (7)
TP	175	3,340	601 (18)	169 (5)	1343 (40.2)	-	-	176	3255	583 (18)	244 (7.5)	1375 (42.2)	876 (27)	217 (7)
ZP	20	919	165 (18)	47 (5)	335 (36.4)	-	-	27	890	158 (17.7)	54 (6)	339 (38)	239 (27)	60 (7)

Note: Figures in parentheses are percentages to total.

Sources: * - Chandran 2000; ** Records of RDPR, Govt. of Karnataka

will play an important role in ensuring people's direct participation in planning, mobilisation of local resources, and implementation. With this, the participation by weaker sections and women is expected to increase. Gram Sabha meetings generate awareness about the significance of community participation.

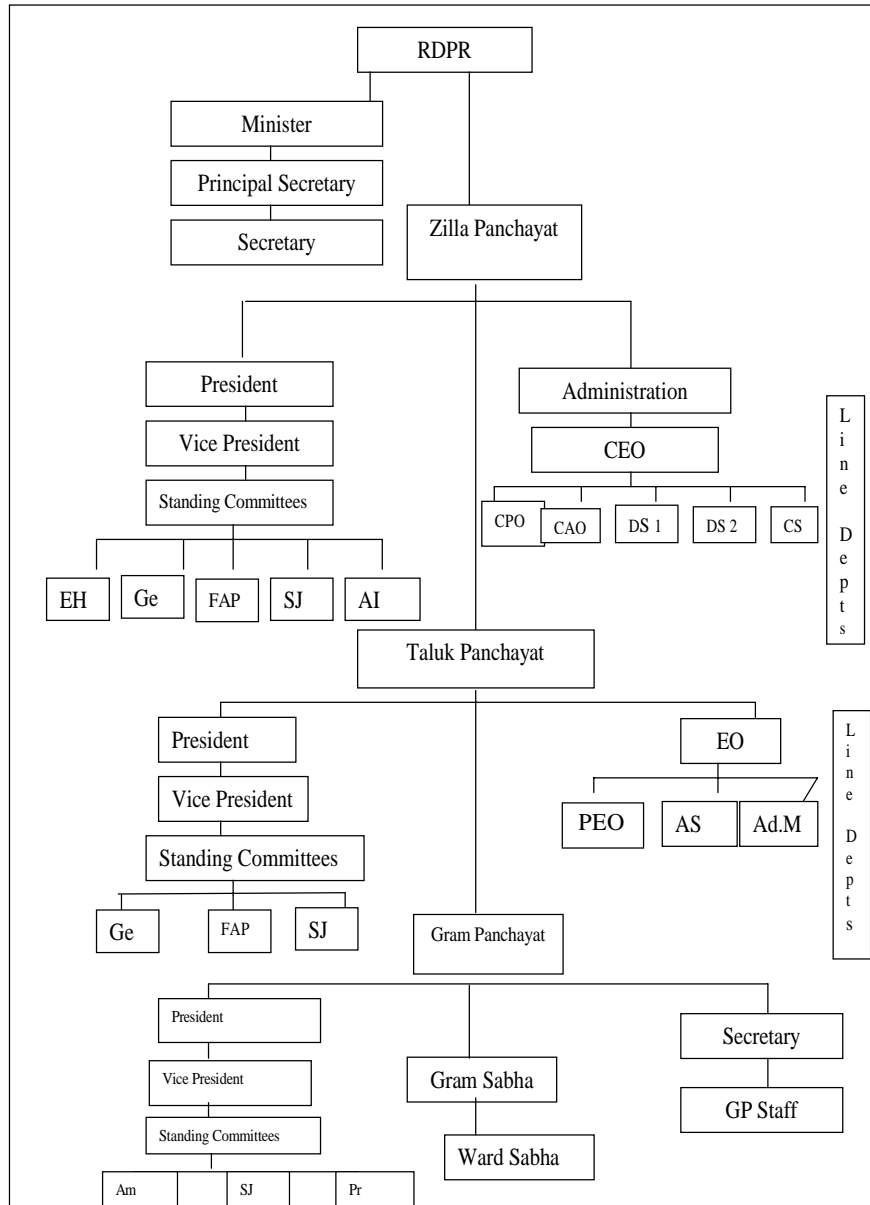
The Gram Sabha enhances transparency in the development process of the panchayats. It provides access to information like all estimates, list of beneficiaries, assistance given under each scheme, muster rolls, bills, vouchers, accounts, etc., for public scrutiny. The Gram Sabha checks on the arbitrariness in decision-making by the elected members. The Panchayat members may have to think twice before taking any arbitrary or biased decisions. However, it is also observed that the attendance at gram sabha meetings has been thin and declining virtually everywhere. Villagers do not feel they are stakeholders in the gram sabha because the role and functions of the gram sabha are inadequate, even non-existent. Gram sabha meetings have thus been reduced to a meaningless ritual, primarily aimed at approving the decisions and work undertaken by the GP (Sivanna 2001: Bhargava and Raphael 1994).

To overcome the lack of interest and participation in gram sabhas, the Karnataka Panchayati Raj Act (Amended in 2003) has made provision for the constitution of the Ward Sabha. Ward is a constituency of a member of the GP. The Ward Sabha is held once in six months and is presided over by the member representing the ward in the GP. The major and common tasks of the gram sabha and the ward sabha are mobilising villagers, mobilising resources, decision-making, beneficiary selection, scheme implementation and monitoring etc.

The Ward Sabha and the Gram Sabha are vested with statutory duties and responsibilities to be discharged. The community should not become mere recipients of some facilities. In fact, every activity, undertaken in the GP area, should be the concern of the Gram Sabha and the Ward Sabha. The prerequisite is that the community is well informed and has free access to information of all departments of the government. Thus, the field-level functionaries should be made responsible for enhancing awareness about the programmes and ensure people's active involvement. For a meaningful empowerment of the Gram Sabha and the Ward Sabha, they must be entitled to all the information required for transparent and good governance, as well as given duties which would make the elected members answerable to the Grama/Ward Sabha.

The salient features regarding public health in relation to the Gram Sabha and the Ward Sabha have been presented in **Table 17**.

Chart 2: Decentralised Governance Set-up in Karnataka (under 1993 Act)



Note: EH – Education and health, Ge – General, FAP – Finance audit and planning, SJ – Social justice, AI – Agriculture and industries, Am – Amenities, Pr – Production, CEO- Chief Executive Officer, CPO- chief Planning Officer, CAO- Chief Accounts Officer, DS- Deputy Secretary, CS- Council Secretary, EO- Executive Officer, PEO- Panchayat Extension Officer, AS- Accounts Superintendent, Ad.M- Administrative Manager

Table 17: Salient Features of Public Health Functions in Gram Sabha and Ward Sabha

Level	Procedures and tasks
Ward Sabha	<ul style="list-style-type: none"> ➤ Meeting twice in a year ➤ Presided over by the elected member of the ward ➤ Facilitates an interface between government officials and elected members and provides an opportunity for the people to voice their needs, aspirations and day-to-day problems ➤ Listing out the felt needs of the people and the village ➤ Ensures awareness programme with regard to sanitation, safe drinking water and pollution control ➤ Mobilises voluntary services to the public health centre in disease prevention and reports incidences of epidemics and natural calamities ➤ Ensures drinking water supply to all its residents ➤ Provides assistance for garbage disposal ➤ Provides assistance for sanitation
Gram Sabha	<ul style="list-style-type: none"> ➤ Meeting twice in a year ➤ Presided over by the president of the GP ➤ Facilitates an interface between government officials and elected members and provides an opportunity for the people to voice their needs, aspirations and day-to-day problems ➤ Discusses and reviews all problems and programmes of the GP regarding development ➤ Select beneficiaries for the programmes/schemes ➤ Preparation and promotion of the plan for development of the village (listing out the felt needs of the people and villages) ➤ Approval of plan/schemes ➤ Organises sanitation and drainage schemes of the village ➤ Mobilises voluntary services to the public health centre in disease prevention and reports incidences of epidemics and natural calamities ➤ Mobilises the community for participation in IEC campaign ➤ Protection of tanks, tank beds, groundwater etc. ➤ Mobilises voluntary labour and contribution in kind or cash ➤ Assists GP in the implementation of development schemes

Source: The Karnataka Panchayati Raj Act, 1993 (amended in 2003)

Gram Panchayat

The Gram Panchayat (GP) is the lower tier of the PRI system comprising a cluster of villages with a population of 5,000 to 7,000. Every

400 population has an elected member. The members of the GP varying between five and thirty are to be elected for a term of five years by the villagers on the basis of universal adult franchise. One-third of the seats are reserved in each category for persons belonging to SCs/STs, other backward classes and women. The GP is to elect its Adhyaksha (president) and Up-Adhyaksha (Vice President) at its first meeting. The president and vice-president are empowered to convene meetings and supervise officers and employees.

A Secretary - an officer of the Government - runs the administration of the Gram Panchayat under the control of Adhyaksha. He draws his salary and allowances from the ZP funds. The secretary shall perform all the duties and exercise all powers imposed or conferred upon him by the Act (Section 111).

The matters and subjects vested with the Gram Panchayats under the Act of 1993 (Schedule I) are many, including public health and environmental sanitation. It becomes obligatory on the part of the GP to make reasonable provision for public health and sanitation within its jurisdiction. **Table 18** shows the subjects related to public health and sanitation under the purview of the GPs. It appears that wide-ranging functions are delegated to the GPs.

It may be appropriate to mention here that the Karnataka Panchayati Raj (Amendment) Act, 1997 made it mandatory for anyone who wants to contest election to the panchayats to have a household sanitary latrine. Those who have no sanitary latrines for use of his/her family are not eligible to contest the election. This provision, incorporated only in Karnataka, has, in a way, resulted in the construction of about 45,000 sanitary latrines in rural areas (Govt. of Karnataka 2000). These are the latrines constructed by elected panchayat members due to the fear that they may be disqualified for not having a latrine. However, this provision, which has some significance for maintaining public health and sanitation, was withdrawn later.

Meeting of GP and Standing Committees: An Inter Sectoral Co-ordination Mechanism at the Grassroots level

The GP meets once in a month for the transaction of business (Section 52 amended in 2003) presided over by the President. To ensure greater participation of the members in GP meetings, a quorum of 'one-half' of the members is insisted. The secretary sends information on the venue and agenda of the meeting to the members and officers with seven and three days' notice for ordinary and special meetings, respectively. The Secretary also sends letters to other officers, who work under the jurisdiction GP but not necessarily under the control of the GP (like PHC

Table 18: Role of GPs in Public Health and Environmental Sanitation in Karnataka under 1993 Act

Task related to public health and sanitation	Approaches suggested under the Act (under Sections 58, 68, 69, 75, 77, 78, 82, 85, 86, 87, 88, 89, 90, 91, 92, 99, 100, 101, 106 etc.)
Provision of sanitation	<ul style="list-style-type: none"> ➤ Not less than 10 per cent of the household latrine coverage in a year ➤ Construction and maintenance of adequate number of community latrines for men and women ➤ Notifying the owner for improving the sanitary condition or maintaining clean drainage or construction of drainage if the place is risky to health ➤ Carry out drainage, sewer, conduit, tunnel, culvert, pipe or water course ➤ Maintenance, deepening or improving the drains ➤ Construction of new drains ➤ Inspection of drains
Provision of drinking water supply	<ul style="list-style-type: none"> ➤ Delivery of clean and sufficient water ➤ Construct, repair and maintain tanks/wells and clear streams/water courses ➤ Maintenance of water supply schemes ➤ Chlorinating of water ➤ Clean or repair private tanks etc., for providing facilities for water ➤ Prohibit bathing, washing of clothes or animals etc. that are likely to pollute water of any source ➤ Prohibit use of water from any source during epidemics ➤ To make by-laws regarding provision of water supply ➤ Provide notice for cleaning and maintaining of water sources if the water is dangerous to health or safety of the public ➤ Impose penalty if the source of water is contaminated by certain works like bathing, deposits, washing animals or clothes
Provision of waste management	Earmarking places for dumping waste and manure
Provision for promoting health	<ul style="list-style-type: none"> ➤ Facilitate activities that are likely to promote health, safety etc. ➤ Prevention and remedial measures against epidemics
Disposal of corpses	Disposal of corpses by burning or burial, licensing of place for burial
Control of infectious diseases	Inspect the places where infectious disease are reported or suspected, cleansing or disinfecting buildings or premises
Regulation and Licensing	Strict vigil and inspection of hotel, restaurant, eating house, sweet meat shop, bakery, slaughter houses for maintaining hygiene and cleanliness, impose penalty

Source: Compiled from the Karnataka Panchayati Raj Act, 1993

medical officer, agricultural and veterinary officer etc.) for their presence in the meeting. In the meeting, the officer may be asked/questioned for his/her performance regarding the matter concerned. All activities specified in Schedule-I form the basis for discussion in the meeting. Obligatory functions assigned to the GP lay more emphasis on subjects relating to sanitation and drainage system, maintenance of water supply schemes and public streets, household latrines and community latrines, filling up insanitary depressions and reclamation of unhealthy localities, and earmarking places away from dwelling houses for dumping garbage and manure and protection of biodiversity. Standing committee's decisions are also part of the discussion of this meeting. During the outbreak of epidemics, the GP may hold special meetings for discussing the situation and may advise the officer concerned on ensuring better service to the affected people.

Standing Committees

It is evident that the Government of Karnataka has taken significant steps in promoting development at various sectors by empowering PRIs. The constitution of Standing Committees is one such step in this direction. The standing committees also can build network among different functionaries, representatives and people. It is mandatory to constitute various standing committees at each level for ensuring better provision of services. An Amenities Committee at the GP level can be constituted to perform functions of public health, education, public works and other related functions of the GP (Section 61 of KPR Act, 1993). **Table 19** provides the details regarding functions and membership of standing committees at the GP level. The amenities committee can co-opt a representative from a local organisation/NGO working in related areas. This gives strength to the elected members for handling technical matters related to specific functions.

Water supply and sanitation schemes form an important part of the civic responsibilities of the GP. The maintenance of health and hygiene is also the responsibility of the GP. The Panchayat Act also empowers GPs to make bye-laws with regard to public health, like regulation of sanitation and conservancy, inspection and destruction of unfit food and drink exposed for sale, regulation of markets, slaughter house etc. (Section 315). Even though the Panchayats Act has given the responsibility of water supply and sanitation to the GP, schemes like Nirmala Karnataka are still part of the state sector plan but assigned to the GP only for implementation. It is good to hand over such water supply and sanitation responsibility to the GP (Government of Karnataka 2002) since GP is working at the grassroots level with close interaction with the people.

Table 19: Standing Committees and Their Functions in GPs

Name of the Committee	Functions of the Committee	Number of members
Production	Performing functions relating to agriculture, animal husbandry, rural industries and poverty alleviation	➤ Each committee consists of not less than 3 and not more than 5 elected members including Adhyaksha and Upadhyaksha.
Social justice	Promotion of education, economic, social and other interests of the SCs/STs and Backward classes; protection of castes and classes from social injustice and any form of exploitation	➤ The members of the standing committees shall be elected from the members of GP. The Adhyaksha shall play his/her role as ex-officio and chairman of the committees on production and amenities
<i>Amenities</i>	Perform functions in respect to education, public health , public works and others	➤ The Upadhyaksha shall be ex-officio and chairman of the social justice committee. ➤ Each committee can co-opt a representative from local organisation

Source: The Karnataka Panchayat Raj Act, 1993 (amended in 2002)

Gram Panchayat Plan

The preparation of plans for economic development and social justice is the key functional obligation devolved to the GP (Article 243 G of the Constitution of India). GPs are required to prepare plans for their development taking into account the suggestions and felt needs of the community as expressed in the Ward Sabha and Gram Sabha meetings (Section 309). Then the secretary of the GP prepares an annual plan, budget proposal and action plan that may again be placed in the Gram Sabha/Ward Sabha for its consideration and later placed at the GP meeting for its approval. Then the plan is sent to the Taluk Panchayat (TP) and the TP prepares a plan based on the GP's plan. The GP in Karnataka has the power to approve any scheme, which may cost up to Rs. 10,000 without external sanction. In this case, the GP can often prepare the necessary plan and implement it without depending on the TP or external sanction. The GP also can make necessary plan for promoting public health and improving sanitation as well as give priority when it prepares its development plan. According to Schedule-I, the GP has enormous responsibility regarding public health.

Gram Panchayat Fund

Every GP has a fund called GP Fund which is formed by (a) the amount which is allotted to GP fund from the State Government or Zilla Panchayat or Taluk Panchayat, (b) the proceeds from the levy of taxes on building, entertainment, markets, water rate, fee for grazing cattle and water supply, (c) income from non-tax resources like royalty, rent, income from forest, etc., (d) the Government grant (to be utilised for meeting electricity charges, maintenance of water supply, sanitation and other welfare activities). In comparison with the long list of functions assigned to the GPs, the resources available are not very substantial. The average internal resource mobilisation per capita ranges from Rs.7.66 to Rs.15.20 in Karnataka, which is lower than that of Maharashtra or Punjab (see **Table 20**).

Table 20: State-wise Internal Resource Mobilisation (IRM) per Capita of Selected Village Panchayats in India (1992-93 to 1997-98)

States	Range of minimum IRM (Rs.)*	Range of maximum IRM (Rs.)
Andhra Pradesh	3.59 to 40.08	7.81 to 140.17
Haryana	10.67 to 70.75	24.65 to 118.12
Himachal Pradesh	0.66 to 12.88	1.98 to 48.76
Orissa	0.33 to 5.48	1.13 to 16.06
Uttar Pradesh	0.19 to 4.97	0.22 to 31.41
West Bengal	0.41 to 3.33	1.15 to 8.54
Assam	0.37 to 3.33	0.61 to 9.22
Kerala	5.46 to 50.36	8.25 to 78.42
Karnataka	7.66#	15.20 #
Maharashtra	16.03#	56.09 #
Punjab	12.56#	28.27 #
Rajasthan	0.09 to 20.62 @	-
Tamil Nadu	2.82 to 39.48 \$	-

Note: * : Excluding the Years which recorded 'nil' IRM.

: Combined Data for 8 sample Village Panchayats.

@ : 1997-98 only. \$: Average figures for the entire 6-year period.

Source: www.indiastat.com

The state government provides an annual grant of Rs.5 lakh to every Gram Panchayat irrespective of the population size and area. During 2005-06, on an average, about Rs. 12 lakh additional funds/grants were

given to the GP for different developmental programmes. In Karnataka, the GP receives from the state and central governments sources together about Rs. 17 lakh in a year. The GP has financial autonomy only on their own funds for spending according to their preferences. The grant received from the State/Centre has to be utilised according to the given prescription.

Taluk Panchayat

A Taluk Panchayat (TP) is established for each taluk excluding the urban areas. It only means that the TP has jurisdiction over rural areas within the taluk. As a unit of local self-government, it discharges the functions, exercises powers, responsibilities and duties conferred by the Karnataka Panchayati Raj Act, 1993. The TP consists of three categories of members: 1) elected on the basis of rural population in the taluk which represents a minimum of 10,000 population, 2) one-fifth of the presidents of GPs within the TP area (ex-officio), and 3) the MPs and MLAs, and the members of Karnataka Legislative Council (elected/selected) from the taluk areas (ex-officio). One-third of the seats of the elected representatives is reserved in each category for persons belonging to SCs/STs, other backward classes and women. The TP elects its President and Vice-President at its first meeting.

For Taluk Panchayat, an Executive Officer is appointed from the State Civil Services who works under the Taluk Adhyaksha (president). The executive officer is responsible for co-ordinating the development activities carried out by the various departments. He also monitors and supervises the implementation of programmes and schemes carried out by the taluk panchayat and Gram Panchayats. He takes necessary measures for the speedy execution of all works and developmental schemes like housing, school enrolment, sanitary latrines etc., of the TP. The executive officer has to attend every meeting of the TP and also has the right to attend the meeting of any committee.

The TP performs the functions specified in Schedule-II. The State Government or the Central Government provides funds for the performance of any function. It becomes obligatory on the part of the TP to make reasonable provision for public health and environmental sanitation within its jurisdiction. **Table 21** shows the subjects related to public health and sanitation under the purview of the TPs. Very few limited functions are delegated to the TP and the body is involved mainly in supervisory, advisory, reviewing tasks and maintaining co-ordination amongst the GPs of the taluk.

Table 21: Role of Taluk Panchayats in Public Health and Environmental Sanitation in Karnataka

	Tasks related to public health and sanitation	Approaches suggested under the Act (under Section 145)
Obligatory functions	Provision of water supply	<ul style="list-style-type: none"> ➤ Construction and augmentation of water supply works ➤ Facilitate not less than 40 litres per capita
	Water supply and sanitation in primary school	<ul style="list-style-type: none"> ➤ Providing adequate water supply and promoting sanitation ➤ Maintenance of water supply and sanitation
	Waste management	Acquiring land for locating manure pits away from the dwelling houses
Supervisory, advisory and coordinatory functions	Health related tasks	<ul style="list-style-type: none"> Water supply works Household and community latrine Progress of immunisation Strengthening of public health units Establishment of sub centres School health programmes Equipment and linen supply Promotion of health and family welfare Health and sanitation at fairs and festivals

Source: Karnataka Panchayat Raj Act 1993

Meetings and Co-ordination at the Taluk Level

A Taluk Panchayat is mandated to hold a meeting for the transaction of business at least once in two months at the headquarters of the TP. The Executive Officer sends the notice regarding the venue and agenda of the meeting to the members and officials ten and seven days in advance for ordinary and special meetings, respectively. The Executive Officer also sends letters to other officials for his/her presence in the meeting who work under the jurisdiction of the TP but may not come under the direct control of the TP, like taluk health officer, BDO etc. One-third of the total number of members of the TP form the quorum.

The Karnataka Development Programme (KDP) monthly meeting of the Taluk Panchayat is held on the 5th of every month and is presided over by the President of the TP. This meeting reviews all development programmes, including the 20-point programme, in the taluk. The review committee consists of the President and Vice-president of the TP, Tahasildar,

chairpersons of the standing committees of the TP, Block Development Officer, EO of the TP, all taluk-level officers of the development departments and all representatives of the public sector undertakings, co-operative societies and institutions established under the Act.

The KDP quarterly meeting of the taluk is presided over by the MLA. The committee consists of MLAs, MLCs, and Member of Parliament, a representative from each section like SCs/STs, backward classes, religious minorities, women, two representatives from the general category rendering social service, the adhyaksha of the primary agriculture and rural development bank, assistant commissioner, the adhyaksha of the TAPCMS, a representative from the DCC bank, tahasilder, BDO, and the Executive Officer of the TP. Resolutions are passed to draw the attention of the ZP or the District Heads concerned with regard to problems and functioning of departments.

Standing Committees

It is mandatory to constitute various standing committees at the TP level for ensuring better provision of services. **Table 22** provides the details regarding functions and membership of standing committees at the TP level. The General Standing Committee performs functions relating to village extensions, water supply, rural housing and relief.

Table 22: Standing Committees and Their Functions at the Taluk Panchayat Level

Name of the committee	Functions of the committee	Number of members
<i>General</i>	Establishment matters, communications, building, rural housing, village extensions, relief, water supply etc.	◆ Each committee consists of not more than 6 elected members including the chairperson.
Finance, audit and planning	Finance, budgets, scrutinising proposals for increase of revenue, examination of receipts and expenditure statements etc.	◆ The member shall be elected from among the members of Taluk panchayat
Social justice	Promotion of education, economic, social and other interest of the SCs/STs and Backward classes; protection of castes and classes from social injustice and any form of exploitation etc.	◆ The Adhyaksha shall play his/her role as <i>ex-officio</i> chairman of Finance, Audit and Planning committee. ◆ The Upadhyaksha shall be an <i>ex-officio</i> chairman of the General committee. ◆ The Executive Officer shall be the <i>ex-officio</i> secretary of every committee.

Source: The Karnataka Panchayat Raj Act 1993

Plan of Taluk Panchayat

Every TP is mandated to prepare every year a development plan for the taluk considering the plans of the Gram Panchayats and forward it to the Zilla Panchayat for approval. The TP is not given any substantial planning functions and it is entrusted with only nominal roles of inter-GP co-ordination and supervision. Planning at the TP level is still a by-product of sectoral planning. Being aware of the financial limits, every department prepares a list of activities to be carried out and the same is submitted to the taluk panchayat.

Taluk Panchayat Fund

Every TP has a fund called TP Fund which is formed by (a) the amount which is allotted to the TP from the State Government or Zilla Panchayat, (b) the proceeds of fees imposed by the TP, cess on land revenue, surcharge on stamp duty levied by the state government, (c) income from rent, or other source, and (d) The Government grant. It can be stated that the TP is mainly dependent on government grant since it has very limited source of income. On an average, it is found that in Karnataka the TP receives Rs. 19 crore per year from the state and central governments.

Zilla Panchayat

A Zilla Panchayat is established for every revenue district and has jurisdiction over the rural areas only. The ZP is the top-tier body of the panchayat system. The ZP consists of three categories of members like the TP: 1) the elected members; 2) Presidents of the TPs; and 3) the MPs, MLAs, MLCs from the district area. One-third of the seats are reserved in each category for persons belonging to SCs/STs, other backward classes and women. The ZP is to elect its own President and Vice-President at its first meeting.

The administration of the ZP is headed by a Chief Executive Officer (CEO) who is assisted by a Chief Planning Officer (CPO) and Chief Accounts Officer (CAO). The rank of the CEO is not below that of the Deputy Commissioner of a district. All officers, including the CEO, have to function under the supervision of the president, who is the executive head of the ZP. The CEO may perform various functions as imposed or conferred upon him by the Act. The CEO can monitor every person in possession of moneys, accounts, records or other property pertaining to PRIs. He is entitled to attend the meetings of all standing committees.

The ZP performs the functions specified in Schedule-III. The state government or the central government provides funds for the performance

of any function. **Table 23** presents the functions of the ZP. The ZP has obligatory functions to promote the health of the people.

Table 23: Role of ZP in Public Health and Environmental Sanitation in Karnataka

Functions	Approaches suggested under the Act(Section 184)
Health infrastructure	➤ Establishment of health centres including maternity centres to cover the entire population within 5 years
Provision of water supply	➤ Construction of underground water recharge structure to ensure availability of water in the wells ➤ Prevention of drilling of irrigation borewells in the vicinity of drinking water wells to ensure adequate supply of water

Source: The Karnataka Panchayati Raj Act, 1993 (amended in 2002)

3.4. Meetings of ZP and Its Standing Committees

The ZP holds the meeting for the transaction of business once in two months presided over by the Adhyaksha. All District Officers, Taluk Panchayat Adhyakshas, MLAs, MPs, MLCs (subject to certain conditions) attend the meeting. The Chief Executive Officer sends notice on the venue and agenda of the meeting to the members and officers with ten and seven days notice for ordinary and special meetings, respectively. The CEO sends letters to other officers who work under the jurisdiction of the ZP, for their presence in the meeting. In case they fail to attend the meeting, their deputy or other competent subordinate officer should represent them at the meeting. In the meeting, the officer may be asked for explanation on his responsibilities. Issues like absence of a medical officer at the PHC or the outbreak of diseases or the status of water supply schemes may be discussed in the meeting. One-third of the total number of members of the ZP shall form the quorum. The ZP reviews the specific performance of the departments and action taken report. The ZP can also evaluate and monitor the progress of work or the duty of various functionaries whose work is placed under the jurisdiction of PRIs.

Apart from these, the CEO convenes the meetings of all the EOs of the TPs and district-level officers once in a month to review in detail the implementation of all schemes.

Monthly/KDP or Meeting: The President of the ZP presides over the monthly meeting with all the Standing Committee chairpersons and District Officers (20-point programmes review). KDP quarterly meeting is presided over by the Minister-in-charge of the District.

Standing Committee

Table 24 presents different standing committees at the ZP level and their functions. These standing committees can be seen as mechanisms for developing co-ordination between different functionaries, representatives and the people. At the zilla panchayat level, the Education and Health standing committee can monitor the functions like health services, hospitals, water supply, family welfare and other allied matters (Section 186). The chairperson of the standing committee presides over the meeting. All the Departmental Officers concerned with the subject matters on the agenda must attend the meeting. In the General Body meeting of the ZP, the proceedings of the standing committees are submitted for approval by the chairperson or members of the committee.

Apart from standing committees, there are other committees and a series of meetings in which PRIs and line departments take decisions together and review the status and performance and various projects and programmes (like disease surveillance committee).

It is important to note that even though there are standing committees at the GP, TP and ZP levels, the committee meetings at the GP and TP levels are hardly held or never take place. Meetings of the standing committee on health and education at the ZP level are held regularly and important decisions regarding vacancies, purchase of drugs and equipments, control of epidemics etc., are discussed. In general, it is observed that this standing committee functions effectively to a certain extent though DHOs complain that there are a few incidences wherein the committee interfered in the functioning of the DHO, particularly with regard to the purchase of drugs and equipments (Sekher 2001). However, the standing committees at the GP level are practically defunct. Even in the general meetings of the GP and the TP, issues relating to public health and sanitation rarely come up for discussions, an indication for the low priority given to health issues.

Based on an analysis of the minutes of the meetings of the general body/standing committee of the two Gram Panchayats and two Taluk Panchayats coming under the Mysore Zilla Panchayat, it was found that the issues related to vector control and incidence of diseases never or very rarely came up for discussion (**Table 25**). However, when the incidence of dengue was reported in Hunsur taluk, the TP discussed that matter at a special meeting. Though health matters were discussed at the GP and TP meetings, the emphasis was laid on issues related to appointment/transfer of personnel and infrastructure development. Water supply related problems attracted many debates, but the quality of water was never discussed. It is important to mention here that whenever sanitation issues were discussed,

it was only related to the ongoing externally aided project of WATSAN being implemented in this district. In other words, how to improve the sanitary facilities in a normal situation never received attention of the committees. With regard to the meetings of the ZP standing committee on education and health, the minutes clearly indicate the importance given to purchase of drugs and equipments, supply of milk and bread to the hospitals, construction/repair of buildings and absence/vacancy of medical personnel. The problems related to water supply figured prominently in the TP and GP meetings. This included repair and maintenance of borewells and piped water lines, collection of water charges, construction of borewells and water supply schemes etc.

Table 24: Standing Committees and Their Functions in Zilla Panchayats

Name of the committee	Functions of the committee	Number of members
General	Establishment matters, communications, building, rural housing, village extensions, relief, etc.	➤ Each committee consists of not more than 7 elected members including chairman.
Finance, audit and planning	Finance, budgets, scrutinising proposals for increase of revenue, examination of receipts and expenditure statements, plan priorities, allocation of outlays to developments, horizontal and vertical linkages, implementation of guidelines issued by the Govt., review and evaluation of planned programmes	➤ The members are elected from the members of ZP ➤ The Adhyaksha shall play his/her role as ex-officio chairman of Finance, audit and planning committee. ➤ The Upadhyaksha shall be ex-officio chairman of the General committee.
Social justice	Promotion of education, economic, social and other interests of the SCs/STs and Backward classes; protection of castes and classes from social injustice and any form of exploitation etc.	➤ Chief Executive Officer shall be the ex-officio secretary of the General committee and he shall nominate one of the Deputy Secretaries as ex-officio secretary for each of the remaining committees.
Education and health	All educational activities, undertakes planning within the framework of national policy and state plans, survey and evaluation, adult literacy and cultural activities, Health services, hospitals, water supply, family welfare and other allied matters.	
Agriculture and industries	Agricultural production, animal husbandry, co-operation, village and cottage industries industrial development etc.	

Source: The Karnataka Panchayat Raj Act, 1993 (amended in 2002)

Table 25: PRI Meetings and Issues for Discussion: An Analysis of the Minutes of Proceedings

Name of PRIs	Types of meetings	No. of meetings	No of issues discussed	Incidence of diseases	Water supply Communi- School	Sanitation Communi- School	Vector control	Health matters Medicines and Equipment	(infrastructure, personnel, Hospital food	purchases, other works) Infrastructure Personnel supervision management	Developmental works (not rela- ted to health)	Miscellaneous			
Mysore ZP	Standing committee (Health & Education)	11	188	–	–	3	–	3	–	13	10	13	12	72	62
Hunsur TP	Standing/General body	4	17	–	3	–	–	–	–	2			1	8	3
	Special	1	8	1									3	1	3
	Total	5	25	1	3					2			4	9	6
Mysore TP	Standing/General body	4	38		6	1					4			24	3
	Executive* KDP** (quarterly)	2	30			1							1	15	13
	KDP (monthly)	1	8		2						2		1	2	1
	Total	8	88		9	2					6		2	51	18
Ummattur GP	Standing/General body	12	45		7	4								10	24
	Emergency	1	2		1									1	1
	Total	13	47		8	4								10	25
Aspathre Kaval GP	Standing/General body	9	48		2	1	2				1			17	25
	Emergency	1	1												1
	Special	1	1											1	1
	Total	11	50		2	1	2				1			18	26
Total no. of meetings and issues discussed		48	398	1	22	3	7	5	0	15	10	20	18	160	137

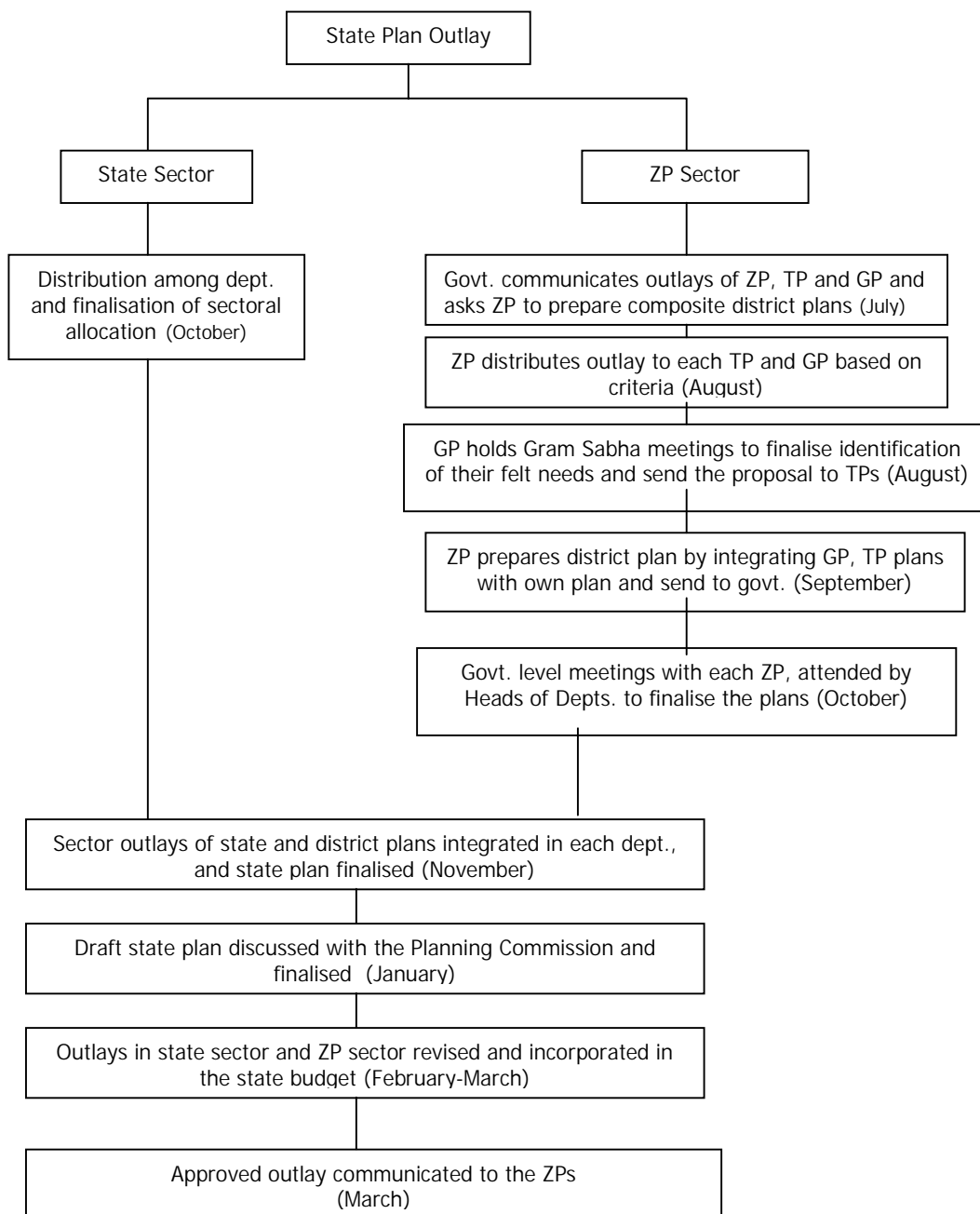
Note: * – Meetings of secretaries of GP

** – KDP-Karnataka Development Programme involving all the departments and chairpersons of elected bodies and standing committees.

WATSAN project (both the village level and schools) supported by UNICEF is being implemented in Mysore District.

Source: Analysis by the authors based on the minutes of the meetings held during the year 2003 of the selected PRIs from Mysore District.

Chart 3: District Planning Process in Karnataka



Source: Raphael 2000

Plan of Zilla Panchayat

As per Section 309 of the Karnataka Panchayati Raj Act (1993), every tier prepares a development plan every year. Every GP prepares a development plan for the current year as prescribed by the Gram Sabha which is forwarded to the TP for its approval and the TP sends this plan to the ZP. These TP plans are handed over to every sectoral department along with the ZP's own plan which includes sectoral plan within its financial limits taking into consideration all plans of GPs, TPs and ZP. The ZP planning unit compiles all sectoral plans and prepares a draft district plan. The state planning department indicates to the ZP the share of the PRIs for the subsequent year. The planning unit in the ZP, in turn, indicates the share of resources to TPs and GPs.

The draft plan allocation, so determined, is placed before the standing committee of the ZP on finance, audit, planning committee and then sent to the planning department. The planning department holds discussions with the Chiefs of the ZP along with the district department heads concerned including state level heads and finalises the draft plan of ZPs.

This draft is placed for approval in the budget session of the legislature and approval is obtained as link document along with Annexure both for plan and non-plan components. The planning unit in the ZP considers the sanctioned plan outlays in the link documents and initiates the preparation of action plan for the year. The TPs and GPs are also indicated the outlays available for their schemes. The processes involved in planning can be seen in **Chart 3**.

The PRIs are responsible for managing 435 plan schemes and 230 non-plan schemes coming under 18 departments. Even though the Panchayat Act has given the power for planning and implementation, in practice, only the responsibility of implementation of schemes/programmes has been given to PRIs. **Table 26** shows the schemes/programmes related to health, water supply and sanitation under RDED. It is evident that except for water supply and sanitation, the GP has no direct role to play in any issue related to public health.

District Planning Committee

There is a District Planning Committee (DPC) constituted at the district level as per Section 310 of the Karnataka Panchayati Raj Act, 1993. The DPC consolidates the plans prepared by the ZPs, TPs and GPs as well as Town Panchayats, Municipal Councils and the Municipal Corporations in the district and prepares a draft development plan for the district as a whole. This committee considers any special case like the common matter between

Table 26: Schemes/Programmes Related to Health, Water Supply and Sanitation under RDED

	Plan			Non-plan		
	ZP	TP	GP	ZP	TP	GP
Medical and health services	30	6	-	43	4	-
Indian system of medicine	7	1	-	-	-	-
Family Welfare	15	-	-	1	-	-
Water supply and sanitation	23	1	2	3	2	-
Total	75	8	2	47	6	-

Source: Records of the Rural Development and Engineering Department

two or more ZPs/TPs/GPs as well as town panchayats. This committee can bring co-ordination between urban or rural plan so that overlapping may be avoided. The committee looks after the available resources that are required for the implementation of the plan. However, the committee is not allowed to alter the plans prepared by the bodies except the common plan of two or more panchayats. The chairperson of the committee forwards the development plan for integration into the state plan. The committee may encourage the NGOs by providing funds for innovative pilot projects.

The DPC may guide the local bodies in the preparation of annual plans and the five-year plan. The Ward Sabha and Gram Sabha's decisions are considered extensively so that the felt needs of the people are reflected in the plan. The committee may study or organise a seminar for discussing any matter for special priority. It can also evaluate the plan schemes and send its report for further consideration. The DPC may utilise the services of individual experts, academic institutions and research organisations in the preparation of innovative plans. The DPC fund consists of the contribution of local bodies and grants-in-aid provided by the central or state government. The fund may be used for the management of meetings and commissioning of studies etc.

Funds for PRIs

The state has transferred nearly 665 plan and non-plan schemes in about 25 development sectors to all the three tiers of the PRIs. The constitution of State Finance Commission (SFC) is a major step in Karnataka for the purpose of distribution of resources between the state and the local bodies. The lumpsum grants provided to PRIs are partly responsible for the complacency on their resource mobilisation efforts, particularly at the GP level (Babu 2004).

There is a Zilla Panchayat Fund for every ZP. The fund is formed from different sources like (a) the amount which is allotted to Zilla Panchayat, (b) the proceeds of fees imposed by the ZP, cess on land revenue, (c) income from rent, or other source, and (d) the Government grant. In 2005-06, approximately Rs.90 crore per annum (including plan and non-plan sources from the state and central governments) is the average amount received by ZPs in Karnataka.

It is evident that the PRIs have no independent sources of funds except some revenue collection. They depend on state and central funds. **Table 27** presents the allocation of funds provided by the state during the financial years 2000-01 to 2002-03. Generally, the PRIs receive funds from three sources, viz., a) funds allocated by the state government to the PRIs every year in its budgetary outlays; b) grants released by the Central government in accordance with the recommendations of the central finance commission to strengthen the resource base of the PRIs; and c) specific grants released by the Central government in respect of centrally sponsored schemes.

Table 27: Allocation of Funds (Rs. in Crores) of the PRIs in Karnataka

Year	Plan	Non-plan	Total
2000-2001	962.35 (24.96)	2,892.47 (75.04)	3,854.82
2001-2002	1,083.21 (26.57)	2,993.94 (73.43)	4,077.15
2002-2003	673.00 (17.00)	3,286.47 (83.00)	3,959.47

Note: Figures in parentheses are percentages to total

Source: State Finance Commission, Govt. of Karnataka

Besides this, the Panchayat Act 11 of 2000, Section 9, has ensured that every GP receives a grant of Rs 2 lakh from the state government for meeting electricity charges, maintenance of water supply schemes, sanitation and other welfare activities.

Table 28 presents the allocation of outlays to different tiers of the PRIs. Allocation of resources to the PRIs is dependant on state's income derived from Non-Loan Government Own Revenue Receipts (NLGRR). These sources are taxes levied, interest accruals, fees, duties under budget heads, general services, social services and economic services and other non-tax items that are not loans. It is suggested by the second State Finance Commission that 32 per cent of NLGRR be allocated to the PRIs.

Table 28: Allocation of Outlays of PRIs in the State (Rs. in Crores)

Tier	2000-2001			2001-2002			2002-2003		
	Plan	Non-plan	Total	Plan	Non-plan	Total	Plan	Non-plan	Total
GP	136.11 (14.14)	-	136.11 (3.53)	220.07 (20.32)	-	220.07 (5.40)	198.07 (29.43)	-	198.07 (5.00)
TP	441.72 (45.90)	1,834.44 (63.42)	2,276.16 (59.05)	466.86 (43.10)	1,876.10 (62.66)	2,342.96 (57.47)	168.96 (25.10)	2,140.65 (65.14)	2,309.61 (58.33)
ZP	384.52 (39.96)	1,058.03 (36.58)	1,442.55 (37.42)	396.28 (36.58)	1,117.84 (37.34)	1,514.12 (37.14)	306.06 (45.47)	1,145.82 (34.86)	1,451.88 (36.67)
Total	962.35 (100)	2,892.47 (100)	3,854.82 (100)	1,083.21 (100)	2,993.94 (100)	4,077.15 (100)	673.09 (100)	3,286.47 (100)	3,959.56 (100)

Note: Figures in parentheses are percentages.

Source: State Finance Commission, Karnataka

The PRIs usually receive funds against different schemes and programmes. When PRIs receive funds from the State or the Centre, they also receive along with the funds the rules and instructions about the how to implement the schemes. In this case, there is no scope for planning at different levels. The PRIs usually play a role in the selection of beneficiaries, identification of felt needs, identification of place where plan can be implemented etc. Besides, the funds for most of the schemes come through various departments and major responsibilities are entrusted to the line departments. Seen in this context, there may be a further need for a constitutional compulsion to get the state governments committed to share their powers and resources with panchayats (Chandrashekar 2000).

The Eleventh Finance Commission of the Government of India has recommended grants about Rs.10,000 crore for local bodies during 2000-05, to be utilised for maintenance of civic services in rural and urban areas. The annual grant recommended is Rs. 1,600 crore for rural local bodies and Rs. 400 crore for urban local bodies. Though the hallmark of decentralisation in Karnataka has been the transfer of a large number of schemes along with personnel and funds, (there were 371 plan and 228 non-plan schemes in all the three tiers taken together in 2001-02), according to a detailed study (Rao *et al* 2004), a significant proportion of the outlay is concentrated in a handful of schemes (See **Table-29**). Any improvement in service delivery is only possible if funds are untied and provision of greater flexibility for the PRIs. This, to a great extend, can be achieved through consolidation of schemes and the provision of funds on a lumpsum basis.

Table: 29 Schemes Implemented by Gram Panchayats in Karnataka, 2001-02 and 2002-03

Name of the Scheme	2001-02 Outlay Rs. in lakhs	Percent of GP Plan Outlay	Percent of District Plan Outlay	Outlay Rs.in lakhs	2002-03 Percent of GP Plan Outlay	Percent District Plan Outlay
A. Central Schemes						
1. Maintenance of Piped water supply Schemes	1419.06	4.5	0.8	1721.32	6.9	1.4
2. Maintenance of Mini-water Supply Scheme	1200.32	3.8	0.7	1307.24	5.2	1.1
3. JGSY/SGRY	8788.23	28.1	4.8	7213.2	28.9	5.8
4. Other Centrally Sponsored schemes	7.22	0	0			
Total A: Central Schemes	11414.83	36.6	6.2	10241.76	41.1	8.3
B. State Schemes						
1. Grants to Gram Panchayats	11318	36.3	6.2	8399.11	33.7	6.8
2. Development Grants to Gram Panchayats	8488.5	27.2	4.6	6299.3	25.3	5.1
B. State Schemes	19806.5	63.4	10.8	14698.41	58.9	11.8
Total GP Schemes	31221.33	100.0	17.0	24940.17	100.0	20.1
Total District Sector Outlay	183436.6		100.0	124120.5		100.0

Source: Link Document, RDPR, Government of Karnataka, as cited by Rao *et al*, 2004

3.5. Activity Mapping among the Zilla Panchayats, Taluk Panchayats and Gram Panchayats

The Karnataka Panchayati Raj Act, 1993 lists a number of tasks like construction of household and community latrines and maintenance, cleaning of roads, drains, tanks, wells etc., among the functions of the GP. Implementation of rural sanitation schemes and provision of drinking water are also listed among the functions of taluk and zilla panchayats. There is an overlapping of many functions between the three tiers which can be a source of confusion and administrative delays in programme implementation. To overcome this problem, recently the state government has come out with activity mapping wherein specific responsibilities are identified at the three levels. A particular job/responsibility has been given to a particular level of

the PRIs to avoid overlapping.

Table 30 shows the distribution of activities of the PRIs in the provision of drinking water supply. Based on a field-based study in Karnataka (as well as in Uttaranchal), it was found that if appropriate policy framework for political, administrative and fiscal decentralisation was provided, the local bodies would be in a position to undertake the functions related to water supply and sanitation (Rajasekhar and Veerashekharappa 2004). As can be seen, the responsibility of maintaining water supply schemes rests entirely with the gram panchayats. They should also identify the schemes and locations for water supply, periodically treat drinking water sources, collect water samples for testing, ensure proper distribution of water to all households etc. The ZP is entrusted with the responsibility of formulation of major water supply schemes, approval of schemes proposed by TPs and GPs, establishing water testing laboratories and awarding contracts for the execution of major schemes coming outside the TP and GP plans.

Table 30: Activity Mapping of PRIs: Drinking Water Supply Functions

Activity	Distribution of functions		
	Zilla Panchayat	Taluk Panchayat	Gram Panchayat
Development of water supply system	1. Formulate major water supply schemes. 2. Technically appraise and approve schemes proposed by TPs and GPs. 3. Award contracts for the execution of major schemes outside TP and GP plans. 4. Establish water testing laboratories for the control of chemical and biogenic impurities.	1. Formulate projects and seek technical approval from ZP. 2. Construct schemes within the prescribed cost limits for TPs.	1. Identify schemes and locations, estimate cost and formulate projects through the involvement of Gram Sabha. 2. Construct wells, tanks and village water supply schemes of its own or as assigned by the ZP or TP. 3. Periodically chlorinate open wells and treat water 4. Ensure proper distribution of water to all households in its villages. 5. Collect water sample for testing
Monitoring rural and water supply schemes	Monitor and supervise the progress, quality of work and target achievement	Monitor and supervise progress and quality of works	Monitor scheme implementation report progress
Maintenance of water supply system			Maintain drinking water schemes, collect water charges and appoint operators wherever necessary

Source: Karnataka State Gazetteer, August 22, 2003.

Similarly, **Table 31** shows the distribution of responsibilities of the PRIs with regard to health and sanitation including hospitals, primary health centres and dispensaries. With regard to healthcare, the ZP is responsible for providing physical infrastructure, co-ordination of communicable diseases programmes, school health programmes, IEC campaigns and planning of rural sanitation programmes. The specific activities identified for the GP include chlorinating of village tanks and wells, spraying of DDT, construction of sanitary latrines, cleaning of roads and drainage, formation of village health committees, and mobilisation of people for family planning and immunisation camps. GPs are also responsible for the supervision of activities of ANMs and anganawadi workers. They are also expected to report the outbreak of epidemics and help emergency medical relief services.

Table 31: Activity Mapping: Health and Sanitation, Including Hospitals, Primary Health Centres and Dispensaries

Activity	Distribution of functions		
	Zilla Panchayat	Taluk Panchayat	Gram Panchayat
Health care	<ol style="list-style-type: none"> 1. Plan through health committees to provide physical infrastructure 2. Coordinate communicable diseases programme with the State 3. Coordinate construction and maintenance and supervision of PHCs 4. Maintain district ISM (Indian System of Medicine) hospitals 5. Periodically conduct Epidemiological surveys 6. Promote school health programmes 7. Organise health awareness rallies and camp 	<ol style="list-style-type: none"> 1. Assist in supervision and maintenance of subcentres and development of field staff 2. Supervise mid-day meals schemes for school children 3. Organise health and family welfare camps and conduct demonstration-cum-exhibition programmes on health, family welfare and sanitation 4. Assist in the supervision of Indian Systems of Medicine (ISM) dispensaries 	<ol style="list-style-type: none"> 1. Assist in the formation of village health committees comprising Panchayat members, representatives of villagers, Village Health Guide (VHG), Trained Birth Assistant (TBA) and Multi-purpose Health Workers 2. Upkeep of village sanitation, clearing of roads and drainage 3. Mobilise and organise people for health and family planning and immunisation camps 4. Coordinate and supervise the construction of sanitary latrines.
Sanitation	<ol style="list-style-type: none"> 1. Plan rural sanitation programmes 2. Promote Information, Education and Communication (IEC) campaigns 	<ol style="list-style-type: none"> 1. Organise and supervise sanitary marts 2. Formulate plan for assisting in the construction of sanitary latrines 3. Assist in the inspection/assessment of quality of public health inputs and services. 	<ol style="list-style-type: none"> 1. Chlorinating village tanks and wells and spraying of DDT. 2. Assist in the construction of individual of sanitary latrines. 3. Report outbreak of epidemics 4. Assist in coordinating emergency medical relief services

Source: Karnataka State Gazetteer, August 22, 2003

3.6. Disease Surveillance System

Disease surveillance is an integrated component of public health measures. It is not merely the collection of information regarding various

epidemics but a detailed epidemiological analysis and initiation of necessary action to control the spread of diseases. Surveillance is essential for the early detection of outbreaks so that effective control measures can be applied at the right time. Unfortunately, the disease surveillance mechanism is not developed properly and managed efficiently. There is no proper reporting and co-ordination mechanism between public healthcare system and private service providers. Recording, reporting and communications systems need to function with accuracy and speed to make surveillance system effective. During our field visits we found that the surveillance committees were not at all meeting regularly and practically there was no contact with private and voluntary agencies working in health sector. Based on the recommendation of the task force on health and family welfare in Karnataka, a coordination committee for surveillance of communicable diseases has been constituted with the Deputy Commissioner of the District as its head. The private and voluntary sector needs to be included in the coverage by the surveillance system. The list of diseases and conditions included in the surveillance system also require to be reviewed and modified at regular time intervals.

At the national level, the Government of India launched the National Surveillance Programme for Communicable Diseases (NSPCD) as a pilot project in 1997 with the objective of improving the health status of the population. The NSPCD intends to strengthen the disease surveillance system, so that early warning signals are recognised and timely follow-up action is initiated. Training of medical and para-medical personnel, up-gradation of laboratories, communication and data processing system, both at the state and district levels, can strengthen surveillance system. The National Institute of Communicable Diseases, Directorate-General of Health Services, coordinates NSPCD at the central level.

3.7. Public Health Act and Regulations in Karnataka

In general, the Public Health Act has brought out many regulations such as reducing exposure to communicable diseases, regulation of water supply, drainage, sewerage, solid waste disposal, toilets, housing standards, food sanitation, markets, slaughter houses, cattle keeping practices, vector control, nuisance abatement, disease notification and response, immunisation, and regulation of public spaces and commercial establishments. It is the responsibility of the State Government to enforce the regulations and implement schemes both in rural and urban areas. Improvement of public health and protection of environment are the duties imposed on the State. It shall be the duty of the State to apply the "Directive Principles of the State

Policy" specified in the Constitution, which is fundamental to the governance of the country. Article 47 stipulates that the State should improve public health as a primary duty. Article 48-A imposes a responsibility on the State to protect and improve the environment.

The Mysore Health Act, 1944 (Mysore Act X of 1944) was enacted for advancing public health in the State of Mysore. The Act consisted of 148 Sections in 15 Chapters. The Public Health Board and the Director of Public Health were the enforcement authorities. The District Board and Health Officers at the level of local authorities were given the task of enforcing regulations in the matters of public health. Under the provisions of the Public Health Act, the State had the power to inspect, control and superintend the operations of local authorities and give directions from time to time. The local authorities were performing actual enforcement of the provisions of the Public Health Act.

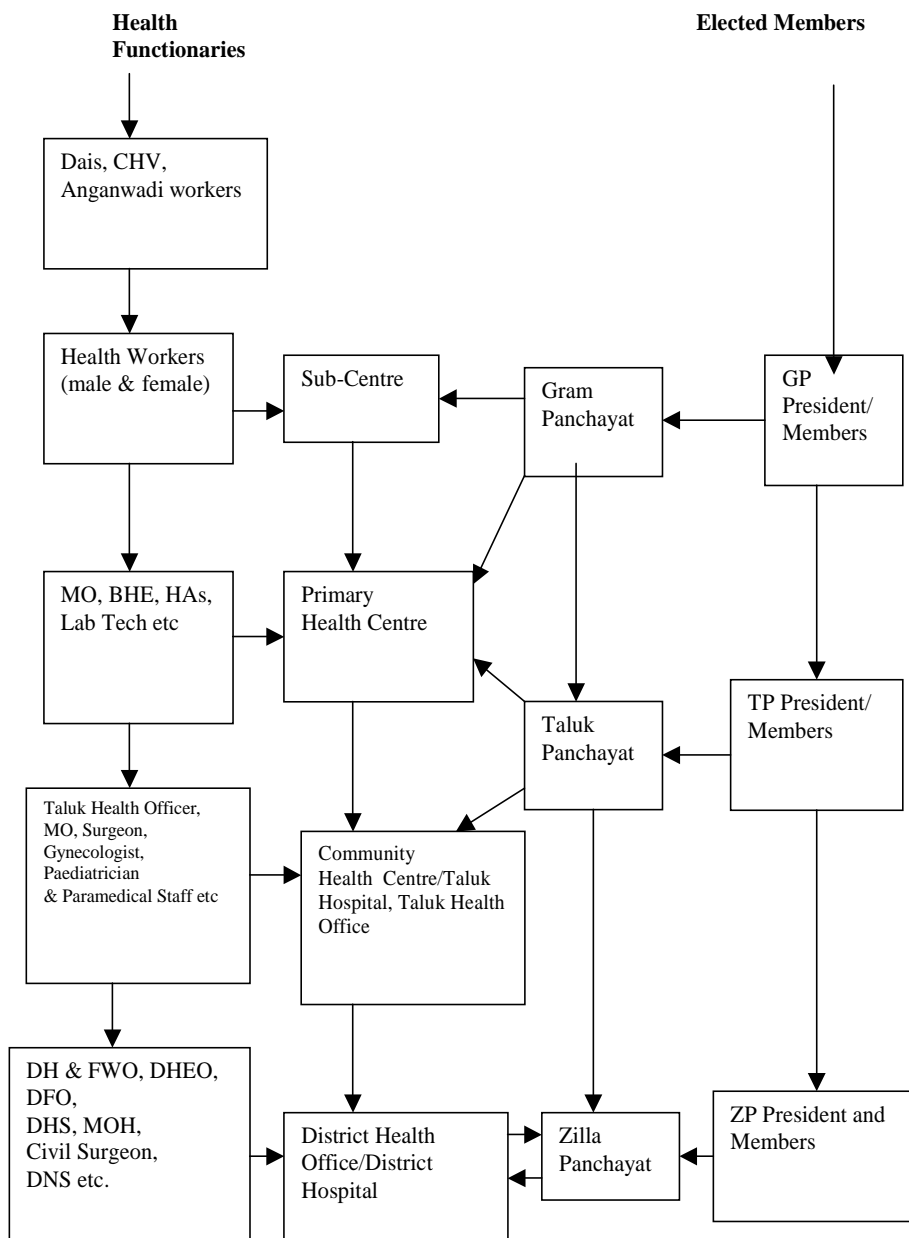
The Karnataka Municipalities Act, 1964 (with effect from 1-4-1965) consisted of provisions relating to power connected with drainage, water works, promotion of public health, safety and convenience, the prevention of nuisance, regulation of markets, sale of goods, prevention of dangerous diseases, nuisances from certain trade and occupations and general penalty. Many of the provisions of the Public Health Act are found in the Karnataka Municipalities Act, 1964.

The report of the Task force on Health and Family Welfare in Karnataka (Government of Karnataka 2001 a) has suggested that there is need for a comprehensive Public Health Act in the state, that will replace the Mysore Public Health Act, keeping in view of the decentralisation of powers to Panchayats and municipalities under the 73rd and 74th Constitutional Amendment Acts, with suitable modifications. The Central Bureau of Health Intelligence, New Delhi, has brought out the "Model Public Health Act" in 1987.

3.8. Linkages Between PRIs and Health Department at the District Level

The PRIs can evaluate and monitor the progress of work or activities of various functionaries whose work is placed under their jurisdiction. It is evident that, in general, the GP is in touch with the functionaries of Sub-Centres and the PHC coming under its jurisdiction. Similarly, the Taluk Panchayat has linkages with Primary Health Centres and Community Health Centre. Taluk Panchayats may have control over the Medical Officer and other health functionaries of PHC and CHC. Similarly, at the district level, the District Health and Family Welfare Office is responsible for providing

Chart 4: Linkages between PRIs and Health Care System at the District Level in Karnataka



Source: Sekher 2002

the public healthcare. There is a direct link between the District Health Office and the Zilla Panchayat. The district health officer (DHO) in consultation with the Zilla Panchayat implements most of the health, disease-control and family welfare programmes. In Karnataka, the District Hospitals are not placed under the authority of the DHO. **Chart 4** shows the linkages between the PRIs and functionaries of the healthcare system at the district level in Karnataka.

The roles of the PRIs in improving the rural healthcare facilities are emphasised in the National Health Policy (Government of India, 2002) and also in the National Population Policy (Government of India, 2000). The new initiative of the Central Government, the National Rural Health Mission (NRHM), also underscores the significant role of the PRIs in the implementation and supervision of healthcare programmes (See **Box. 1**).

Box: 1 National Rural Health Mission (NRHM): 2005-2012

The goal of the mission is to improve the availability of and access to quality healthcare, especially for those residing in rural areas, the poor, women and children. One important strategy in this regard is to train and enhance the capacity of Panchayati Raj Institutions (PRIs) to own, control and manage public health services.

The NRHM envisages the following roles for PRIs:

- States have to indicate in their MoUs the commitment for devolution of funds, functionaries and programmes for health, to PRIs.
- The District Health Mission (DHM) is to be led by the Zilla Parishad. The DHM will control, guide and manage all public health institutions in the district, sub-centres, PHCs and CHCs.
- Accredited Social Health Activists (ASHAs) are to be selected by and be accountable to the Village Panchayat.
- The Village Health Committee of the Panchayat has to prepare the Village Health Plan, and promote intersectoral integration.
- Each sub-centre has a untied fund for local action @ Rs.10,000 per annum. This Fund is deposited in a joint bank account of the ANM and Sarpanch and operated by the ANM, in consultation with the Village Health Committee.
- PRI involvement in Rogi Kalyan Samitis for good hospital management.
- Provision of training to the members of PRIs is necessary.
- Making available health-related databases to all stakeholders, including Panchayats at all levels.

Source: Mission Document of NRHM, Ministry of Health and Family Welfare, Govt. of India, 2005.

3.9. Inter-Sectoral Coordination Mechanisms

How is inter-sectoral coordination achieved in public health? We first examined the existing mechanisms for coordination at different levels starting from the district level and going to the lower levels. We have looked at the issues that are normally discussed in these forums to understand whether public health issues get attention in the meetings. The main weakness in the system of coordination now appears to be linked to the fact that there are no specific agenda items relating to public health or disease control in the relevant forums. One can imagine this to happen, that is, discussions to take place, at least in the case of district surveillance committee meetings. However, these meetings are not held regularly.

There are many forums in the PRIs where issues relating to health/public health are discussed. They are many and the only issue is whether discussions on public health have been effective/ relevant.

The forums are:

1. Ward Sabha, Section (3) of KPR Act (Amendment) 2003
2. Gram Sabha, Section (3A)
3. Gram Panchayat Meeting, Section (58)
4. Meeting at the office of Taluk Panchayat Executive Officer
5. Taluk Panchayat Standing Committee Meeting
6. Taluk Panchayat KDP Meeting- Monthly
7. Taluk Panchayat KDP Meeting- Quarterly
8. General Body Meeting of the Taluk Panchayat
9. Zilla Panchayat Meeting - CEO's office
10. ZP: Standing Committee on Education and Health
- 11: ZP: General Body Meeting
12. ZP: KDP Meeting - monthly
13. ZP: KDP Meeting - quarterly

In addition,

1. Disease Surveillance Committee, which is convened quarterly; the DC is the Chairman, the Secretary being the DHO.
2. The Village Water Supply and Sanitation Committee set up in the districts where the World Bank Water Supply and Environmental Sanitation Projects have been implemented. The proceedings usually relate to water rates and maintenance aspects.
3. District Co-ordination Committee meeting once in a quarter convened by the district deputy commissioner. Any department having a problem of co-ordination with other departments in the district or outside can send the matter for inclusion in the agenda to sort out.

Some details regarding forums (items 1-13 above) have been given in Annexure F.

3.10. Training for PRIs in Public Health Issues

It is observed that a majority of the elected members of panchayats have no awareness about various health issues. Given the relatively lower educational attainments of panchayat members, their lack of exposure to any kind of governance (overwhelming majority of the women members are housewives and belong to deprived communities) and political inexperience, their participation in the PRI system and ability to discharge their responsibilities are not very effective. In order to make the decentralised institutions work, it is imperative to sensitise these leaders about their new roles and responsibilities related to health and other development aspects through training and motivation.

Abdul Nazir Sab State Institute of Rural Development (ANSSIRD), Mysore, is an institute established mainly with the intention of imparting training to the elected representatives of Panchayati Raj Institutions, training of Officers of Development Departments with regard to different development programmes, training of Officers of Financial Institutions and Representatives of NGOs with regard to the rural development activities, research programmes, evaluation of development schemes, etc. The Institute is conducting about 50-55 training programmes every year. The institute is also developing the training curriculum and modules for the GP, TP and ZP members. Besides this, many institutes are also facilitating training programmes for the elected representatives (see **Box 2**).

Though the state governments have set up training institutions for panchayat members, in general, they are found to be inadequate to meet the demands of a large number of elected representatives. Continuous training programmes for health needs to be organised to orient members of the PRIs regarding their responsibilities. There is a need to develop innovative training methodologies and appropriate training materials for this purpose. There are different experiments undertaken by research institutions and NGOs to formulate participatory training methodologies to orient the local leaders (Sekher 2002). In a situation like this, where we have to train a large number of elected representatives in each district (preferably during the first three months of their tenure), the government alone cannot handle this task.

Satellite-Based Training Programme

The satellite-based training centre has been established at SIRD, Mysore, in 2002. With the advancement of satellite communication system,

a new training methodology has been developed in collaboration with ISRO. The network, with its own uplinking system, has been extended to all taluks in the state with "two-way audio and one-way video" conferencing facility. There is provision for imparting training to 7,500-8,000 candidates at a time in each training programme. Up to the end of March 2003, programmes were conducted for 112 days in which 663.30 hours of transmissions were telecast.

A training programme for capacity-building of gram panchayat members has been taken up in Karnataka. During the first phase, 18,220 members of 1,310 Gram Panchayats in 44 taluks are being trained through Satellite-Based Training Programme in 5 stages of 2 days duration each at an estimated cost of Rs. 9.63 crore. Up to the end of March 2003, the first 3 stages of training programmes had been completed. During the first 3 stages of training programme, the participation level was 87 per cent, which was really outstanding. A separate training programme is being conducted for the absentees.

Box 2: Training PRI Members on Health Issues: The Chitradurga Experiment in Karnataka

The Institute for Social and Economic Change (ISEC), Bangalore, undertook a pilot training project in Chitradurga District on issues related to health and social development in 1998. By using locally available resource persons and specially developed training modules and video documentary, a new training methodology was evolved with the co-operation of the local NGOs. The training arrangement in the informal atmosphere of the villages, facilitated greater participation of local leaders. The local volunteers, who imparted the training, were familiar with local conditions and this ensured that their services would be available to the elected members any time in future. The involvement of voluntary organisations in this innovative programme ensured better participation of the representatives of the local bodies. It also facilitated a convergence of expertise and skills of government and non-governmental sectors for a better and a more effective training exercise at the grassroots level. The Chitradurga experiment received wide acclaim from trainers, PRI members and the government. The methodology adopted in this project was found to be participatory and less time-consuming. The post-training evaluation revealed that the training contributed significantly not only towards enhancing the level of awareness and self-confidence among the local leaders, but also towards improving their performance with regard to the provision of basic healthcare in rural areas.

Source: Sekher 2002

There is a need to explore the use of the powerful electronic media like television and radio for orienting elected members living in every nook and corner of the state (see **Box 3**).

Box 3: Sensitising PRIs on Health Issues Through Electronic Media

An innovative training project was carried out in six districts of Karnataka to create awareness among GP members about health issues using the electronic mass media. ISEC, at the request of the Population Foundation of India and the Govt. of Karnataka, carried out this pilot project during 2001-02. In collaboration with the State Health Department, ISEC initiated a project on production of television documentaries on health issues. Twelve episodes of health education programmes were telecast from Bangalore Doordarshan Kendra (DD-1 Channel) on Thursdays between 6 and 6.30 PM. With the help of voluntary organisations, panchayat members were brought to television sets in their own villages for group viewing and discussions. The post-project evaluation indicates that this orientation programme was acceptable to the local leaders. Informal channels such as television proved effective in initiating important attitudinal and behavioural changes at the grassroots level, where a majority of the people may have had little formal education.

Source: Sekher 2003

3.11. Suggestions of the Expert Committees of Karnataka Government

Considering the administrative and financial difficulties faced by PRIs in implementing and monitoring various schemes, recommendations were made by different experts committees to streamline the functioning of the PRIs and for better co-ordination between the PRIs and the line departments for efficient service delivery. The Task Force on Health and Family Welfare (Government of Karnataka 2001a) has recommended many measures to improve the situation (see **Box 4**).

According to the Final Report of the Karnataka Administrative Reforms Commission (2001b), Panchayati Raj Institutions have succeeded in ensuring that health personnel are accountable to the public to some extent. It has resulted in better functioning of PHCs and improved attendance of doctors and paramedical staff. But, in many instances, it is also observed that the lack of faith and respect between health functionaries and the panchayat leaders adversely affected the provision of services. The Commission also made some recommendations regarding the promotion of health service delivery under the purview of panchayats. The major recommendations have been shown in **Box 5**.

Though the government has initiated many plans and programmes for the promotion of public health, the delivery of population-based health services remains poor both due to shortage of trained human resources and finance as well as lack of sufficient emphasis on these services both by the provider and the public. For example, though water quality surveillance is the mandated function of health department, there are only six water quality

Box 4: Recommendations of the State Task Force on Health and Family Welfare

1. Greater involvement of PRIs and people for improving the health services: The involvement of panchayat institutions and the community in providing health services should be encouraged for improvement and enhancement of these services based on real needs. For enhancing such involvement, information should be made available to the community and a forum must be developed. It is also necessary to sensitise the officials in this regard.
2. Establishment of a separate committee for health, education and sanitation in the Gram Panchayat.
3. Involvement of women members in health and family welfare: Training course in health for empowering women members of the panchayats and women community leaders need to be organised.
4. Improving health plans as part of development plan: Model health plans need to be formulated by the PRIs. Such model plans would assist in developing the health component of the district development plan.
5. Improve coordination between the department of health and family welfare services and the local authorities, with clear responsibility of the department in all technical matters: The health hierarchy needs to be oriented defining its role in the panchayat system and its relationship with these bodies. A system of monitoring the health activities of the ZPs by the commissioner needs to be established. The RDPRD and the health department may develop a system of feedback from the health hierarchies in order to render the mutual inter-active role between the health department and the panchayat bodies more productive.
6. Enable the DHOs to plan and implement activities effectively: The meeting of the ZPs may be regulated according to the circulars of the department of RDPR regarding frequency, so as to permit district health personnel, particularly the DHO, to carry out inspections and supervision more intensively.
7. Ensure greater involvement of the people in all health activities: Village communities should be encouraged to form village health committees with wide membership, including representatives of women's groups, the youth, the ANMs, the Anganwadi Workers, and others. These committees would have to be trained in the conduct of meetings, prioritising local health issues, preparation of health plans, etc.
8. A woman of the village should be appointed by the GP as a health functionary to assist the ANM.
9. Continuous training programmes for health need to be organised to orient members of the panchayat bodies regarding their responsibilities, powers and duties and to impart management schemes.

Source: Final Report of the Task Force on Health and Family Welfare,
Government of Karnataka (2001a)

testing laboratories (manned by poorly trained staff), which are hardly adequate to carry out the function optimally in the whole of Karnataka state. Similarly, having only one food inspector for a district with an average population size of 1-3 millions can hardly achieve the mandated objectives.

There are very few entomologists in the state to scientifically guide the vector surveillance and control process. Though there is some scope for improvement in the delivery of public health services with more efficient use of existing resources by placing appropriate focus on these services, there is definitely a need for more trained human resources to deliver all types of public health services.

Box 5: Recommendations of the Karnataka Administrative Reforms Commission

1. **Simplification of administrative procedures:**
 - a) The number of meetings in which DHO's presence is required need to be regulated and provision should be made wherein DHO can depute programme officers to the ZP meeting depending on the issues coming up for discussion. This is because the DHOs spend considerable time to attend all ZP meetings and are unable to devote much time for field visits and supervision of the programme; b) 60 per cent of the drugs and equipments are purchased from the ZP budget. DHO, in consultation with the Taluk Health Officers, prepares the inventory of items to be purchased, and sends the list to the standing committee on health for deliberations and, later, to the ZP general body for approval. It is observed that in some instances, the list of medicines and manufacturers had been altered in these meetings, which resulted in not only delay in procuring medicines but also poor quality drugs. One should not forget the fact that the ZP is in no way qualified to decide on a technical matter like this. The list submitted by DHO, if it is within the prescribed norms, should be approved by the ZP; and c) for the repair of vehicles, which costs more than Rs. 1,500, the DHO need to take prior permission and approval of ZP. In many cases, this has led to delay in repairing vehicles, affecting the supervision of field programmes. DHO may be allowed to use his discretion up to Rs.10,000 for the repair of vehicles.
2. **Frequency of interaction:** At the district level, frequent interaction and supervision are taking place between ZP and district health office, but at the taluk and village levels, practically there is no interaction and involvement. The health committees rarely meet and even in taluk and gram panchayat meetings, health issues are seldom discussed. There is an urgent need to activate the health committees for the benefit of the community.
3. **Provision of training:** Training and orientation programme on health and related issues are to be given to all panchayat members at the beginning of their tenure. This will help them realise their responsibilities and the need for co-operating with health functionaries at all levels.
4. The health bureaucracy and the ZP should work more closely and need to understand their complementary roles. There is a need to evolve a better co-ordination mechanism between PRIs and health department.
5. The government should seriously consider privatising the non-clinical services in hospitals/CHCs/PHCs. The experiences from few hospitals under KHSDP, where non-clinical services have been contracted out, is encouraging.
6. The outstanding contributions of the health personnel need to be recognised by the state government. Awards should be instituted for noteworthy performances of doctors, programme officers and field workers.

Source: Final Report of the Karnataka Administrative Reforms Commission, Govt. of Karnataka (2001b)

CHAPTER 4

DELIVERY OF POPULATION-BASED HEALTH SERVICES IN RURAL KARNATAKA: THE SELECTED SERVICES

Global experience indicates that there are many approaches to the provision of population-based health services - there is no single solution in terms of its organisation and financing. The specific approach used in a particular context needs to be based on an assessment of available institutional mechanisms and resources. In this section, we examine the delivery of selected PPPHS in rural areas and offer one set of possible options for enhancing the effectiveness of their delivery.

4.1. Safe drinking water: a health service

Contaminated drinking water is one of the major causes of high levels of communicable disease burden in the developing countries. While water is a basic biological necessity for human survival, ensuring that it is free from bacteriological and harmful chemical contamination is an important public health service. Thus, while access to drinking water still remains a major problem and rightly receives a lot of emphasis from policy-makers and donors, there is an apparent lack of adequate emphasis on monitoring and ensuring quality of water to maximise the health impact of investments made on ensuring access to water.

In 1981, the 34th World Health Assembly in a resolution emphasised that safe drinking water is a basic element of "primary healthcare" which is the key to the attainment of "health for all by the year 2000 AD". Water should also be integrated with other Primary Healthcare components because it is an essential part of health education, food and nutrition, and also Maternal and Child Health.

Drinking water supply in public policy

Being a biological necessity, supply of drinking water is a highly visible public service and has received considerable emphasis in the public and donor policies. In India, provision of drinking water is a state responsibility. However, a national water supply and sanitation programme was introduced in the social welfare sector in 1954. The Central government provided assistance to the states to establish special investigation divisions in the Fourth Five-Year Plan (1970-73) to carry out identification of the problem villages characterised either by inadequate water availability or by unsafe water (high fluorides, brackishness, etc.).

In 1973, the subject of water supply and rural sanitation was transferred from the Ministry of Health to the Ministry of Works and Housing (currently designated as Ministry of Urban Affairs and Employment) and Local Self-Governments. Considering the magnitude of the problem and the need to accelerate the pace of coverage of problem villages, the Central government introduced the Accelerated Rural Water Supply Programme (ARWSP) in 1972-73 to assist the states and the Union Territories with 100 per cent grants-in-aid to implement the schemes in such villages. This programme continued till 1973-74. But, with the introduction of the Minimum Needs Programme (MNP) during the Fifth Five-Year Plan (from 1974-75), it was withdrawn. The programme was, however, reintroduced in 1977-78 when the progress of supply of safe drinking water to the identified problem villages under the Minimum Needs Programme was not found to be satisfactory.

In 1981, the International Drinking Water Supply and Sanitation Decade (1980-1991) was launched in India by the Ministry of Works and Housing. The National Drinking Water Mission was launched under the Ministry of Rural Development in 1986 (renamed as Rajiv Gandhi National Drinking Water Mission in 1991) to ensure maximum inflow of scientific and technical expertise into the rural water supply programmes and to deal with the problems of quality of drinking water (GOI 1996). The 'National Water Policy' was formulated in 1987 which gave priority to drinking water supply. Special problems were tackled through five specific submissions, viz., 1) Control of brackishness, 2) Eradication of guineaworm, 3) Removal of excess iron, 4) Control of fluorosis, 5) Scientific source finding and conservation of water and recharging of aquifers.

Currently, the financial and technical support to the rural water supply systems is provided by the Central government, through the Department of Drinking Water Supply in the Ministry of Rural Development. The Department of Drinking Water Supply was especially created in 1999 to deal with the issues of drinking water. In addition, the Ministry of Water Resources, and the Ministry of Environment and Forests are also involved in certain aspects of water delivery and monitoring of water quality. In addition, the Ministry of Urban Affairs and Development is responsible for the development of drinking water supply in the urban areas. However, the planning, designing, construction, operation and maintenance of urban and rural water supply systems (including laboratories for process control) are undertaken by the Public Health Engineering Departments (PHEDs) and the Water Supply and Drainage Boards of the respective state governments.

The metropolitan cities have their own public water supply systems and laboratories for testing and monitoring the quality of water.

Access to safe drinking water

The basic norms for defining access to safe drinking water sources are being revised by the Ministry of Rural Development to reflect improvements in access to safe water. It has now been stipulated that a water supply source should serve a maximum of 150 people, with the maximum distance that people need to travel to fetch water not exceeding 1 km in the plains and 50 meters in hilly terrains.

Drinking Water Supply

The Census 2001 data show that 37 per cent of the households in India had tap water connection, and the rest were collecting water from other sources (Table 32). Tubewell/ hand pump was the major source of drinking water as 41 per cent of the households depended on these sources. The per cent of households provided with tap water has been increasing over the years. In 1981, about 23 per cent of the households were reported to have connected with tap water, the proportion was over 32 per cent in 1991 and nearly 37 per cent in 2001. But, the coverage of households with safe drinking water sources is still inadequate in the country. The rural-urban differences illustrate that in rural areas just around 25 per cent of the households had access to tap water during 2001. But, as the data do not capture the quality or quantity of water supplied, it is difficult to conclude that all such households with tap water connection had safe drinking water sources.

Table 32: Per cent of Households with Different Sources of Drinking Water - India

Type of source	1981			1991			2001		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Tap	23.03	10.29	63.24	32.26	20.6	65.06	36.7	24.3	68.7
Well	51.71	61.63	20.4	32.23	38.00	15.91	18.2	22.2	7.7
Tubewell/ Handpump	15.16	16.21	11.82	30.04	34.9	16.32	41.3	48.9	21.3
Tank, Pond, Lake, River, Canal, Spring	6.69	8.31	1.6	3.33	4.27	0.66	2.7	3.5	0.7
Others	3.41	3.56	2.94	2.14	2.17	2.04	1.2	1	1.5

Source: Census of India - 1981, 1991, and 2001

Provision of safe drinking water supply is an important public health activity that is undertaken by the governments. Efforts of the Central and state governments to provide drinking water supply for households have made significant improvements in the coverage of households with safe drinking water supply over the period. The improvement seen across the states has been indicated in **Table 33**. The proportion of households with safe drinking water supply, defined as households sourcing water from tap, borewell, tubewell, has increased from 38 per cent in 1981 to 78 per cent in 2001. The improvement in the coverage of households with safe drinking water supply is more impressive in rural India, where the per cent of households rose from a low 26.5 to 73.23 per cent between 1981 and 2001. Almost all the states have shown impressive performance in providing households with safe drinking water sources. We should, however, point out that this data, unfortunately, do not tell us about the quantity of water supplied or its quality.

Table 33: Distribution of Households Having Safe Drinking Water Facilities (in percentages)

States	1981			1991			2001		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
A. P.	25.89	15.12	63.27	55.08	48.98	73.82	80.15	76.85	90.16
Bihar	37.64	33.77	62.36	58.76	56.55	73.39	86.59	86.11	91.23
Gujarat	52.41	36.16	86.78	69.78	60.04	87.23	84.09	76.87	95.40
Haryana	55.11	42.94	90.72	74.32	67.14	93.18	86.06	81.13	97.31
Karnataka	33.87	17.63	74.4	71.68	67.31	81.38	84.55	80.52	92.12
Kerala	12.20	6.26	39.72	18.89	12.22	38.68	23.39	16.88	42.84
M. P.	20.17	8.09	66.65	53.41	45.56	79.45	72.55	61.51	88.55
MHR	42.29	18.34	85.56	68.49	54.02	90.5	79.82	68.42	95.36
Orissa	14.58	9.47	51.33	39.07	35.32	62.83	64.19	62.88	72.32
Punjab	84.56	81.8	91.13	92.74	92.09	94.24	97.60	96.91	98.88
Rajasthan	27.14	13	78.65	58.96	50.62	86.51	68.18	60.45	93.52
T. N.	43.07	30.97	69.44	67.42	64.28	74.17	85.55	85.29	85.91
U. P.	33.77	25.31	73.23	62.24	56.62	85.78	87.81	85.46	97.16
W. B.	69.65	65.78	79.78	81.98	80.26	86.23	88.53	86.99	92.29
All India	38.19	26.5	75.06	62.3	55.54	81.38	77.92	73.23	90.01

Source: Census of India, 1981, 1991 and 2001

The states of Bihar, West Bengal, Haryana, Punjab, Tamil Nadu and Uttar Pradesh have reported impressive performance by covering more than 85 per cent of the habitations. But, the efforts need to be strengthened further, particularly in Rajasthan, Orissa and Kerala, which have less percentage of habitations covered with adequate drinking water supply. (In the case of Kerala, a caution is needed as the households have their own sources of water supply and the settlements are dispersed). The wide coverage of households/habitations today has been possible because of the investment made by the governments. Both the Central and state governments have assigned priority to providing safe drinking water supply and to fulfil this goal, they have increased the financial resources being allocated through budgetary provisions.

Table 34 summarises information from National Family Health Surveys on the per cent of rural population using safe drinking water (piped water, handpumps and covered wells) in 1992 and 1998. On the whole, 75 per cent of the Indian rural population is using water from safe water sources though there are substantial interstate variations.

The per cent of rural population in Karnataka having access to safe water is relatively very high compared to the national level, with almost 56 per cent of the population having access to piped water and another 26 per cent to the hand-pumps. Only 12 per cent of the population use water from open wells and 2 per cent of the population use surface water from river, stream, pond or lake. Access to safe water is also relatively equitable in Karnataka (**Table 35**). In addition, 72 per cent of the rural population in Karnataka (same as all-India average) live close enough to the water sources as not to require more than 15 minutes to go to the water sources, fetch water and come back home (based on NFHS-2, 1998-99).

Thus, as a result of concerted efforts of the Central and state governments, access to drinking water from safe sources, such as tap water and hand-pumps, has increased considerably with 72 per cent of the population in India having access to these sources within 15 minutes of total water collection time. However, almost one-fourth of rural population in the country remains underserved.

The source of drinking water at district level in Karnataka has been presented in **Table 36**, as per the 2001 Census. As can be seen from the table, for nearly 59 per cent of the households, the tap is the source of drinking water. Seventeen per cent of the households obtain water from handpump and 9 per cent from tube well. Open well is the source for 12 per cent of the households in the state (in districts like Udupi, Uttara Kannada, and Dakshina Kannada, it is as high as 60 per cent).

Table 34: Per cent of Rural Population Using Water from Safe Drinking Water Sources in Different States.

	1992-93	1998-99
India	69.8	75.0
North		
Delhi	98.4	100.0
Haryana	64.1	83.3
Himachal Pradesh	53.8	75.9
Jammu and Kashmir	49.1	68.3
Punjab	98.8	98.9
Rajasthan	53.4	64.7
Central		
Madhya Pradesh	54.6	56.9
Uttar Pradesh	75.9	84.7
East		
Bihar	72.9	80.0
Orissa	59.2	66.1
West Bengal	86.1	89.7
Northeast		
Arunachal Pradesh	77.5	80.6
Assam	63.4	61.1
Manipur	39.5	42.5
Meghalaya	52.2	39.8
Mizoram	28.6	55.5
Nagaland	80.9	45.7
Tripura	58.8	61.6
West		
Goa	60.7	56.6
Gujarat	72.3	80.0
Maharashtra	69.3	72.7
South		
Andhra Pradesh	60.2	75.1
Karnataka	71.3	85.3
Kerala	71.2	18.8
Tamil Nadu	78.4	83.9

Note: Based on NFHS-I (1992-93) and NFHS-2 (1998-99), India.

Source: IIPS (1995), IIPS and ORC Macro (2000).

Table 35: Per cent of Rural Population in Karnataka Using Drinking Water from Different Sources, NFHS, 1998-99

	Poorest	2nd Poorest	Middle	2nd Richest	Richest	Total
Piped into the residence/yard/plot	0.9	3.8	12.8	27.3	41.8	10.8
Public tap	47.2	53.6	46.5	33.8	20.0	45.2
Handpump in residence/yard/plot	1.1	1.0	1.2	2.4	5.0	1.5
Public handpump	34.3	24.5	23.0	16.5	6.3	24.7
Well in residence/yard/plot	0.7	1.3	2.5	3.7	8.4	2.2
Open well	2.2	2.0	3.2	6.1	13.1	3.6
Public covered well	2.0	1.5	1.0	1.5	0.0	1.5
Public open well	8.9	9.9	8.2	7.1	4.3	8.5
Spring	0.0	0.0	0.3	0.7	1.2	0.2
River, stream	0.8	0.0	0.8	0.2	0.0	0.4
Pond, lake	1.9	2.5	0.3	0.8	0.0	1.4
Tanker truck	0.0	0.0	0.1	0.0	0.0	0.0

Source: IIPS and ORC Macro, 2001.

Many problems have been encountered in supplying safe drinking water. The most important being operation and maintenance, especially of small, scattered sources (such as handpumps) in 56 rural areas and unplanned location of housing in rural settlements relative to the source of water. Lack of proper maintenance may force people to use unsafe water sources even when a safe source is available. Efforts have been directed towards improving the management of water sources, including creation of water user groups and community management.

An accurate assessment of types of water sources used is important to ascertain the requirements for quality monitoring of water. However, as discussed below, while provision of drinking water is a high priority area for both national and state governments and has high public demand, there is less demand for monitoring and surveillance of quality of water mainly due to poor awareness among the public of health implications of contaminated water. Public complaints about poor quality of water surface only when water is visibly dirty or has bad odour. *Despite increase in piped water supply, the epidemics of cholera, typhoid, hepatitis and gastroenteritis are commonplace in India in both urban and rural areas. Neglect of*

Table 36: Distribution of Households by Source of Drinking Water, Karnataka-2001

Districts	Total number of households	Percentage of households with sources availed for drinking water							
		Tap	Hand Pump	Tube well	Well	Tank, Pond, lakes	River, canal	Spring	Any other
Karnataka	10,232,133	58.9	17.1	8.6	12.4	1.1	1.1	0.3	0.6
Belgaum	761,914	49.5	17.0	8.5	20.6	0.7	2.9	0.3	0.6
Bagalkot	293,347	54.0	22.2	9.9	10.0	0.2	2.7	0.1	0.9
Bijapur	323,275	37.7	36.1	6.5	17.3	0.2	1.7	0.1	0.5
Gulbarga	542,937	45.6	28.6	6.6	15.9	0.6	1.9	0.3	0.5
Bidar	247,350	51.7	21.2	6.7	17.9	0.8	0.2	0.1	1.3
Raichur	298,100	51.8	18.1	6.7	10.6	4.8	5.0	2.5	0.6
Koppal	210,649	60.9	25.4	6.4	4.0	1.5	1.3	0.1	0.4
Gadag	180,351	71.0	12.1	4.2	5.5	4.8	1.5	0.3	0.7
Dharwad	289,789	73.4	7.6	5.6	2.5	9.3	0.8	0.0	0.8
Uttara Kannada	266,481	24.7	6.5	2.3	60.7	2.9	1.2	1.0	0.6
Haveri	255,761	69.9	16.2	11.3	0.7	0.1	0.9	0.0	0.8
Bellary	368,360	76.3	11.9	5.5	2.6	0.8	1.8	0.7	0.4
Chitradurga	294,724	58.8	28.1	11.4	1.3	0.0	0.2	0.0	0.2
Davanagere	333,888	67.4	18.1	10.6	2.6	0.2	0.5	0.1	0.7
Shimoga	330,832	57.9	9.6	5.1	23.1	1.6	1.3	0.8	0.6
Udupi	206,222	12.6	3.0	3.8	77.4	0.9	1.1	0.2	0.8
Chikmagalur	239,728	55.3	19.2	7.3	11.4	2.2	2.7	1.0	0.9
Tumkur	545,493	55.3	29.9	11.8	2.5	0.1	0.1	0.1	0.3
Kolar	499,535	71.0	12.8	13.4	2.1	0.1	0.0	0.1	0.5
Bangalore	1,418,289	77.8	5.4	13.0	2.9	0.2	0.0	0.1	0.7
Bangalore Rural	383,592	69.9	17.2	10.4	1.9	0.2	0.1	0.1	0.4
Mandya	368,794	66.1	21.6	5.6	6.1	0.1	0.5	0.1	0.1
Hassan	360,089	54.6	29.1	9.3	5.4	0.6	0.5	0.2	0.3
Dakshina Kannada	349,695	31.0	2.3	5.2	57.1	2.5	0.6	0.4	0.8
Kodagu	124,098	34.1	8.9	10.2	37.5	3.1	3.3	1.7	1.3
Mysore	535,927	71.3	17.9	6.0	3.3	0.2	0.8	0.1	0.4
Chamarajanagar	202,913	46.7	40.4	6.0	5.8	0.4	0.3	0.1	0.2

Note: 1. This table excludes institutional households
 2. Near premises have been considered if it availed within 100 metres for urban areas and 500 metres for rural areas

Source: Census of India, Tables on Houses, Household Amenities and assets, Karnataka - 2001

health aspects of the provision of drinking water has led to less than optimal impact on health outcomes than suggested by the investments in this area. To summarise, drinking water supply is treated as a 'basic amenity' rather than as a health service, and there is little involvement of the health department in the delivery of safe drinking water supply either in advisory or technical capacity.

Box 6: Experience of Kinnigoli Gram Panchayat in Dakshina Kannada

This panchayat demonstrated that water supply schemes can be maintained by collecting tariffs from the households. The scheme comprised a borewell as the source for water that feed 5,000-litre overhead tank. There were nearly 100 pipe connections to individual houses. The total cost of the system had been estimated at Rs 7 lakh. The people of this panchayat raised Rs. 70, 000 against the 10 per cent as desired by the Sector Reforms Schemes. The panchayat ensured regular water supply to all the households. The panchayat expected to levy and collect a one-time advance charge of Rs 1,000 for each connection but failed to collect the water charges. It was decided to levy a higher rate on higher incremental consumption. A new tariff formula was devised for the *Guttakaadu* scheme based on monthly consumption. The formula was if a family consuming 3 Kls of water would pay Rs 50, the same rate is applicable upto 10 Kls. When a family is consuming 15 Kls, they would pay Rs. 100 and for 30 Kls, they would pay Rs. 350. For implementing such tariff system, the panchayat put water flow meters on each of its pipe connections to the 113 houses. To keep a proper account of electric power consumed by the submersible pump, the panchayat got a separate electric meter. The system is working very well and the cost collection rate is 100 per cent.

Source: Deccan Herald, April 19, 2003

Quality of drinking water

Though the quality of water is as important as the quantity of water, the statistics of water quality are rarely available. There is no institutional framework for testing and monitoring the quality of water. Most urban water supply systems in India, except in metro cities, do not have any system of water quality monitoring and surveillance. Even in the metro cities, where they do have the system of internal water quality monitoring, the guidelines are rarely followed and rarely evaluated. There is no clearly defined systems of internal or external quality assurance (which is practically non-existent).

In the cities with intermittent water supply and underground sewerage, there is a high-risk of contamination of water distribution system with faecal matter resulting in the spread of water- and excreta-related diseases such as cholera, hepatitis, typhoid and diarrhoea. The practice of computation of the per cent of population having access to safe drinking water from the type of source of water that are considered safe as per the UNICEF definition (piped water, ground water, protected wells and springs), may inflate the proportion of population having access to safe water.

Lack of institutionalised quality monitoring and surveillance has been well recognised even by the GOI. However, the emphasis on this aspect is still lacking as evidenced by only few perfunctory references to the quality monitoring in GOI website. While the new guidelines under 'Swajaldhara' programme launched by the GOI in December 2002 envisages sharing of

part capital cost of the scheme and 100 per cent sharing of operation and maintenance costs by the users, it specifies no guidelines for quality monitoring and surveillance and does not provide for any financial provisions for monitoring of water quality.

Box 7. Monitoring of Water Quality is Often Not Explicitly Stated in the Department List of Functions

The list of stated functions of PHED department of the state of Madhya Pradesh

1. Survey, investigation, preparation and execution of water supply schemes for towns and villages;
2. Survey, investigation, preparation and execution of sewerage and sewage disposal schemes for towns;
3. Execution of rural sanitation schemes;
4. Supply of safe drinking water at places of fair;
5. Coordination in the prevention of pollution of water bodies due to discharge of industrial wastes; and
6. Giving technical advice to various Government departments and local bodies on Public Health Engineering topics.

Criteria /standards for drinking water quality

WHO developed the 'guidelines for drinking water quality' intended for use by countries as a basis for the development of standards for exposure limits for bacteriological, viral, chemical and physical limits, which if properly implemented, would ensure the safety of drinking water. The Central Pollution Control Board is responsible for the quality of water in India at the national level. In addition, Indian Council of Medical Research developed the 'Manual of Standards of Quality of Drinking Water Supplies' (1975), which is still in existence. Indian Standards Organisation (ISO) (Bureau of Indian Standards) also specified standards of drinking water quality, as applicable to bottled water. There are not many substantial differences in the standards developed by different agencies. However, these standards are not disseminated to the fieldworkers who are responsible for the provision of water.

Dissemination of the standards of water quality surveillance

Interviews with the functionaries in the water supply department in the state of Karnataka reveal lack of clarity about the standards of water quality followed in the state. There are no clearly defined guidelines or manuals in the department that outline the procedure of water quality surveillance from the water source to providing feedback to the users and the corrective action. At the general level, the laboratory capacity is not adequate with the lab network being limited to district level laboratories. Even many of the district laboratories are non-functional due to lack of staff

and or equipment. There is confusion in the field as to who is responsible for the collection of samples-the field worker of the health department (ANM, or junior male assistant), the junior engineer belonging to the PHED department or the watermen hired by the local Gram Panchayats. However, none of these functionaries is adequately trained in the collection of water samples and lacks required materials and resources to initiate the process-clean sterile bottles, transport to take the samples to the lab in time. Field visits also reveal that none of these functionaries has been officially communicated on these responsibilities or ever evaluated on this function.

Elements of water quality surveillance

The activities that ideally should be included in the surveillance function are:

- a) *Surveillance at the time of installation of new source:* Approval of new sources (clear guidelines should be laid by the state government and enforced by the GPs)-development of code of practice for well construction, pump installation and plumbing: Interviews with the key functionaries in the rural engineering department show that at least officially, the water needs to be tested for its chemical quality before installation of water system. However, with decentralisation, the installation of water systems is done by Panchayati Raj Institutions. It is difficult to trace the records for different individual water sources in the Zilla Panchayat office or in the rural engineering office and there is no central data base established at any level regarding the quality of water at the time of installation. Therefore, it is difficult to assess how rigorously these guidelines are being followed.
- b) *Laying down clear guidelines for operation of different types of water sources:*
 - Disinfection of plant and the distribution system after repair or interruption of supply
 - Periodic flushing programmes and cleaning of water storage facilities
 - Certification of operators
 - Regulation of chemical substances used in water treatment
 - Cross-connection control, back-flow prevention and leak- detection control

Laying down these guidelines for every water source and full understanding and rigorous adoption of them by the field functionaries may partly substitute for regular bacteriological testing. However, interviews with the field functionaries and examination of the reports in both Zilla Panchayat and

Rural Engineering Department show that the written guidelines in this respect are not available and are not being followed adequately.

- c) *Sanitary surveys:* On-the-spot inspection and evaluation by a qualified person of the entire water supply system is an essential aid for adequate interpretation of the lab results. The purpose of the survey is detection and correction of faults and deficiencies. These should be done regularly by the provider agency (as a part of regular internal quality assurance process) as well as by an external independent agency as a part of external quality assurance process. Currently, these sanitary surveys are not being undertaken as a regular component of water quality surveillance. Any assessment, if ever undertaken, is done after the news of epidemic outbreak.
- d) *Monitoring programmes including provision for central and regional analytical laboratory services:* The state agency should specify the methods and frequency of sampling of water according to different types of water sources. The recommended frequency of sampling should realistically take into account the lab capacity and transport funds available to transport the samples to the laboratories.
- e) *Inspection of quality control in bottled-water and ice-manufacturing operations:* This comes under the Food and Drug Adulteration Act. Surveillance is the responsibility of designated food inspectors. As per the data provided by the district agency as well as by the municipalities, the samples tested are highly inadequate in number.

Institutional structures for surveillance of water quality

In urban areas, water quality surveillance to ensure that drinking water is safe is generally the responsibility of the urban local bodies themselves. The responsibility for proper operation of the system to produce safe drinking water is that of the water supply agency. The local authority is legally responsible to ensure that drinking water delivered to the consumers is safe (GOI 1996). In rural areas, the responsibility is not legislatively defined but it is presumed that the department that is concerned with the subject of rural water supply is technically responsible for water quality surveillance.

In Karnataka, officially, the water quality surveillance programme is being undertaken by the Rural Development and Panchayati Raj Department. However, the responsibilities are not welldefined and the programme is almost non-functional at the ground level. The programme is more functional at the time of commissioning of the water supply projects

and the monitoring is focused more on the chemical impurities in drinking water than addressing the problem of water-related diseases.

Box 8: Assam Public Health Engineering Department (APHED):

Twenty-three District Level Laboratories (DLL) in each of the districts of Assam have been established to facilitate Water Quality Analysis. The laboratories are equipped with different sophisticated instruments and facilities for testing different water quality parameters, and the staff of the laboratories is well trained in and outside the state of Assam. Each of the laboratories is to perform at least 150. physical and chemical analyses and 60 bacteriological analyses of water samples each month. To maintain the seasonal changes of water quality, water from different sources have been analysed at the interval of a week. After analysing the water sample, if any water quality parameter is found beyond the permissible limit, necessary steps are taken to maintain the quality. The active performance of the laboratories has made the APHED capable of detecting various water quality problems.

Source: <http://aphe.nic.in/eventsfr.htm>

In most of the states, setting up district laboratories is one of the most important components of water quality surveillance established either by the PHED or state water boards. In Karnataka, under this programme, 26 district-level water quality testing laboratories have been sanctioned, out of which 18 have been established, but only seven are working due to lack of staff [the rural engineering department maintained that there is no approved position of chemical engineers or chemists in the departments and hence, no one to run the laboratories]. Even where laboratories are functioning, the efforts are focused mainly on the chemical testing of water for excess fluoride, nitrate or brackishness, etc., and even then that function is not done in a systematic manner.

In many states, these laboratories also offer private services and any individual/ body can apply for testing of water quality of their source on payment of some fee. However, establishing water quality labs is only one component of the programme, and the key lies in devising systematic guidelines for carrying out water quality surveillance with laying down standards of both internal and external quality surveillance.

Public health laws and supply of drinking water

The Water (Prevention and Control of Pollution) Act is a comprehensive piece of legislation passed by Parliament in 1974 to provide legal deterrent against the spread of water pollution and provides for the constitution of Central and State Water Boards and Joint Water Boards. Since biological contamination of water also constitutes 'pollution of water', the state boards and central board should serve as independent external bodies and should carry out regular sanitary survey of samples of water

sources in both rural and urban areas and enforce the provider agency to comply with the standards of water quality for drinking water-both chemical and biological.

Health education and provision of drinking water

The provision of good water supply does not in itself secure freedom from water-borne diseases (the ultimate objective of this service) - as there is substantial risk of water contamination by improper storage, poor personal hygiene (not washing hands, etc). Some studies have noted that mere handwashing at five critical moments reduces the incidence of water-borne diseases by more than 50 per cent.

Currently, neither central nor state nor district runs any comprehensive public education programme on the proper use of drinking water and other personal hygiene practices having bearing on impact of health outcome of safe drinking water. Little funds are earmarked in the water supply programmes formulated by the Department of Drinking Water Supply in the Central government or by the programmes formulated by the state government. Even those meager funds are either not utilised or utilised very ineffectively as the departments implementing these programmes have little capacity in organising an IEC programme. The health department, which has the capacity to run IEC programmes and has specialised staff to do it, is not involved at all.

Water storage practices

Educating communities in proper storage is very essential in India in both urban and rural areas. The intermittent supply of water in most cities in India (i.e., water is delivered only for some time, ranging from half an hour to two-three hours) and lack of water source within household/yard for most rural households necessitates water storage in both urban and rural areas almost universally. All the efforts and investments done in water quality surveillance and in ensuring quality of water may go waste if people are not educated in the correct water storage practices. In addition, water storage has important implications for vector breeding also. Some of the vectors, such as *Aedes aegypti* responsible for the spread of dengue fever, breeds in rather shallow stored water in the households.

Some of the time-tested practices for correct water storage include use of containers with a tap or taking out water with a ladle with long handle. The health department or any other agency need to clearly identify these issues and should include them under the IEC programme. In addition, the health department or other departments responsible for water supply could fund research into development of low-cost, affordable water storage

containers which are easy to clean with a tap dispenser that allows taking water out of it without touching it. The departments concerned aiming to encourage proper water storage practices can also take up social marketing of these containers.

Recommendations

The situation analysis leads us to the following recommendations:

A. Organisational Aspects

- 1) *Specifying clear organisational responsibility:* Clear organisational responsibilities need to be specified for water quality surveillance from the level of the state government to the village level.
- 2) The state health department or other departments designated for it (e.g. Rural engineering or PHED department) should clearly articulate the problem of water contamination in the state and its potential health implications and state a policy/plan for maintaining both biological and chemical quality of water.
- 3) *Involving communities:* Community and community-based organisations must be an integral part of efforts to ensure water quality. Building community awareness may be necessary to elicit its support.

B. Functional Aspects

- 1) Development, issue and communication of standards of quality of drinking water: The state health or rural engineering/public health engineering department should take lead in this matter and issue the standards of quality to districts and lower level agencies. All the concerned from the state level to the village level should be aware of these standards. Water quality standards as developed by ICMR and other agencies can be used for this purpose.
- 2) Development of a comprehensive IEC plan by the state health department including focus on better water storage and handling practices and other personal hygiene measures. The implementation of IEC activities should take place at different levels.
- 3) *Legal measures for protection of water source:* The Gram Panchayat should prohibit washing, bathing, defecation near drinking water sources to prevent their contamination. Every GP should formulate and enforce the law locally and penalties may be levied for the contravention of law.
- 4) *Development of required infrastructures:* Regular surveillance of water quality requires regular sanitary surveys and testing of water for chemical or biological contamination. This requires a well-functioning,

networked infrastructure down to the level of the village. It is not necessary to set up an exclusive laboratory for water quality testing, but laboratories created under different departments may be specified for this purpose in different locations. An inventory of existing resources needs to be made-including laboratories in the private sector, medical colleges, etc. However, clear-cut jurisdiction for every lab should be defined.

Box 9. Evaluation and Monitoring Indicators for the Effective Delivery of Safe Water (that Should be Reported by the Provider Agency at specified intervals)

Output indicators:

a) Access

- Per cent of the population served by the safe water source
- Per cent of population served by the safe water source with the minimum specified quantity of water supplied

b) Quality

- Per cent of water sources tested per month for bacteriological quality
- Per cent of water sources tested per month for chemical quality
- Per cent of water sources that did not pass the bacteriological criteria for water quality
- Per cent of water sources that did not pass the chemical criteria for water quality
- Per cent of water sources where corrective action was taken when contamination was found.

c) IEC: Household sample survey

- Per cent of women who reported washing hands regularly at five critical moments
- Percent of households using safe water storage and handling practices
- Per cent of household storing water correctly

C. Managerial Aspects

- 1) Regular Internal quality assurance
- 2) External quality assurance
- 3) All the laboratories testing water samples should be linked to a computerised data base which will help in tracking the quality of water from a source over time.
- 4) Evaluation of the staff on the basis of maintenance of water quality: development of output and outcome indicators to be specified.
- 5) Regular publication of the status of water quality-both bacteriological and chemical by the department concerned. The results should be regularly communicated to all the concerned stakeholders, including gram panchayats.
- 6) Regular training and reorientation courses for the staff concerned: The relevant department at the state level should regularly organise courses on water quality surveillance for different levels of personnel including watermen hired by the gram panchayats.

- 7) Periodic evaluation of district health agencies' efforts to maintain the bacteriological quality of water by the state government.

Box 10: The Kerala Experience of Rural Water Supply and Sanitation (RWSS)

The GP is playing an integral role in planning and management of RWSS services in Kerala. Decentralised management of RWSS is part of the State's policy as laid down in the People's Plan. Responsibility for the implementation of RWSS schemes is given to the Beneficiary Committee (BC) by the GP. The GP monitors the BC's functioning and is responsible for O & M of the completed scheme. GP identifies potential RWSS schemes to be undertaken and then constitutes Task Forces for each sector, including water and sanitation. The Task Force for water and sanitation initiates the planning process on the basis of discussions with the communities at the ward level for their endorsement. The Task Force's plan is then discussed at a development seminar, and endorsed by the GP and approved by the Block Level Panchayat Committee and the District Panchayat Committee. The completion of this planning process can take up to three months. Once the plan is approved, a BC is constituted, and funds are transferred to it for implementing the project. Works are undertaken through open tenders or community contracting. Significant financial powers have been given to GPs to ensure efficiency in the scheme. The quality of service delivery and O&M of water supply schemes has not yet been fully examined. Despite some success in Kerala RWSS, the project needs to create new systems for public works and procurement, improve financial management, ensure more checks and balances to minimise misutilisation of funds and to build capacity to improve long-term planning methods. Emphasis is laid on transparency to make the model a success.

Source: Water Supply Programmes - South Asia (WSP - SA) 1999

4.2. Sanitation

Hygienic disposal of human excreta is the cornerstone of all public health services. The health hazards of improper excreta disposal include: soil pollution, water pollution, food contamination. Human excreta, being one of the most important breeding places for housefly, also contributes to the propagation of flies and hence, to diseases transmitted by it. In addition, this is associated with very high prevalence of round worm and hook worm infection (associated with soil pollution) among children perpetuating high prevalence of malnutrition among them, high incidence of water-borne diseases, etc.

However, notwithstanding the health aspects of the safe excreta disposal, the social perception of what constitutes safe excreta disposal differs considerably from the scientific professional recommendations. Some of the most important social perceptions pointed out by sociologists are:

- 1) People should defecate away from their homes to protect the homes from diseases.
- 2) Latrines are the breeding places of flies and hence, should not be near

the house.

- 3) Latrines are perceived to be foul and dirty and associated with bad smell, so they should not be close to the houses.
- 4) Latrines are expensive and beyond their means to install.
- 5) Children's faeces are harmless and can be disposed of in the home by throwing in and around the house.
- 6) People are not able to relate soil pollution associated with open field defecation and the worm infestation in the children.

Sanitation in public policy

Despite such high public health importance and almost universal practice of open defecation in rural areas, the issue of safe disposal of human excreta in rural areas did not receive much priority in public policy in India. Though rural sanitation is a 'state subject' and is among the 29 subjects in the 11th Schedule to the Constitution that have been transferred to the PRIs, the issue of rural sanitation did not develop an identity of its own in the state government's plans, policy announcements and political governance agendas. There was little public demand for hygienic disposal of human excreta (to some extent this may be due to people's perception that defecating away from homes in the open is in fact a hygienic disposal of faeces and does not constitute any health hazard) and state/central health department did little to articulate the issue of improper faecal disposal and to correct people's misperception regarding what constitutes hygienic disposal of human excreta and to generate demand for sanitary latrines and other hygienic practices.

The Rural Sanitation Programme was initiated only during the Seventh Five-Year Plan period (1985-1990) under the Ministry of Rural Development; and was implemented through the drinking water supply division of the ministry. Later on, a full-fledged department was constituted for drinking water supply within the Ministry of Rural Development during 1999. Funds were provided under the Central Rural Sanitation Programme (CRSP) and state allocation for Minimum Needs Programme. Twin-pit, four-flush (TWPF) type latrine was recommended for the rural areas in the whole country based on the recommendation of the Technical Advisory Group constituted in 1983 for this purpose (UNICEF 2002). However, almost half of the funds released under CRSP remained unutilised and the physical target for construction of latrines lagged behind considerably. No data were collected on actual utilisation of the sanitary latrines constructed as progress was monitored in terms of number of latrines constructed. Stories of use of constructed latrines as storage rooms were galore. Due to the poor

performance, in 1990-91, the coverage target of 25 per cent of all rural households by 1995 was revised downwards. The budgetary allocation for sanitation continued to be relatively small compared to water even in the Eighth Five-Year Plan with states earmarking few budgetary resources for rural sanitation. Though a 1993 national-level seminar strongly recommended an approach with education and health linkages, the programme did not figure on the agenda of the health department and continued to be a 'latrine construction' programme of rural engineering or rural development department.

CRSP was restructured in 1999 into a demand-responsive, community-led 'Total Sanitation Campaign (TSC)' implemented in a project mode at the level of district by the Zilla Parishads or by some other district-level project implementation agency (GOI 2004). The national-level nodal agency issued detailed guidelines, including how the programme needed to be implemented and the type of institutional structures to be created for the whole country. The policy under the new programme is a shift from paying high subsidies to households/individuals for the construction of latrines to no or low subsidies for only the 'Below Poverty Line (BPL)' households and generating demand for the services.

As of January 2004, the programme was being implemented in 374 districts and the entire country was proposed to be brought under TSC within the next two years. The main elements of the programme included demand-driven approach based on intensive IEC (funding shared between the GOI and the state in the ratio of 80:20); preliminary or baseline survey to assess the status of sanitation and hygiene practices (100% centrally assisted); creation of rural sanitary marts and production centres (funded on 80:20 basis); construction of individual household latrines, construction of community sanitary complexes, school sanitation and hygiene education and Anganwadi toilets.

Sanitation in public policy in Karnataka

As mentioned above, the articulation of rural sanitation issues is quite recent even in Karnataka. The Rural Development and Panchayati Raj Department in Karnataka is implementing two major programmes to improve the status of rural sanitation-*Nirmala Gram Yojana (NGY)* and *Swachha Gram Yojana*-with the cooperation of Panchayati Raj Institutions and non-government organisations. NGY is primarily a subsidy-driven individual household latrine construction programme with payment of 80 per cent of the construction cost (subject to a maximum of Rs. 2,000 for BPL families and Rs. 1,200 for APL families). The amount of subsidy paid

is much higher than the recent GOI guidelines issued under TSC. The state government claims NGY to be the most ambitious rural sanitation programme launched in any state with construction of about 1.5 lakh latrines each year since the launch of the programme on October 2, 1995. Though the state duly acknowledges the prevention of water-borne and faecal-borne diseases as the main justification of the programme, this message is not conveyed down the line and in the programme design-with only 10 per cent of the funds allocated for IEC activities, and even that on items of dubious value-paying Rs. 25 to the motivator on completion of each latrine and/or training of two mason for every GP. The programme fails to recognise that though the cost of the latrine may be an obstacle to the low coverage in the state, it is also due to lack of felt need and lack of awareness on the part of the people that open air defecation is harmful to the health (and this relationship is not very intuitive to the majority of illiterate masses in India who have totally internalised this practice over the years). The critical IEC components are also missing from 'Swachcha Gram Yojana' - a more comprehensive rural habitat improvement programme involving pavement of roads, sullage and stormwater drains, provision of community compost yards and smokeless stoves and construction of community, household and school latrines.

Access to sanitary facilities for safe human excreta disposal in rural areas

NFHS I and II provide data on the availability of household latrines for the entire country, as presented in **Table 37**. On the whole, less than one-fourth of India's rural population had access to household sanitary latrines (actual utilisation may even be lower) in 1998, increasing from 13.4 per cent in 1992-93. Availability of household latrines was very low ranging from 8.7 per cent in Madhya Pradesh to 13 per cent in Rajasthan and Bihar in the northern Hindi belt. South India also had a dismal position with the notable exception of Kerala. The situation was relatively better in northeastern India (with the exception of the state of Meghalaya). Though the situation did not change much between 1992 and 1998 in most of the states (despite the Central govt. programme of providing subsidies for household latrine construction), noticeable improvements were seen in a few states (e.g., J and K, Himachal Pradesh, Assam, and Goa) (**Table 37**).

Table 37: Rural Population Having Access to Household Latrine
(In percentages)

	1992-93	1998-99
India	13.4	21.4
North		
Delhi	54.9	72.4
Haryana	10.2	20.2
Himachal Pradesh	5.0	21.3
Jammu and Kashmir	5.5	46.7
Punjab	22.7	35.9
Rajasthan	7.1	13.2
Central		
Madhya Pradesh	5.6	8.7
Uttar Pradesh	7.3	12.6
East		
Bihar	8.8	13.3
Orissa	5.8	10.1
West Bengal	20.6	31.2
Northeast		
Arunachal Pradesh	70.3	71.7
Assam	47.1	64.3
Manipur	78.8	89.7
Meghalaya	43.5	46.5
Mizoram	97.5	95.3
Nagaland	75.6	69.9
Tripura	77.2	90.9
West		
Goa	29.1	48.4
Gujarat	16.8	22.8
Maharashtra	10.5	16.7
South		
Andhra Pradesh	8.1	13.3
Karnataka	9.3	15.1
Kerala	67.0	84.9
Tamil Nadu	9.2	15.2

Source: Based on NFHS-I and NFHS-II (IIPS 1995, IIPS and ORC Macro 2000).

Table 38 shows the availability of household latrines by household economic status in the rural areas of Karnataka. Non-availability of household latrines is almost universal for the poorest population while only 15 per cent of the richest rural population reported so. However, 61 per cent of the 2nd

richest quintile also reported having no access to household sanitary latrines. A negligible proportion of the population used public toilets in rural areas. In addition, an examination of trends between 1992 and 1998 shows some improvement in the middle and the 2nd richest quintile, with little change in the situation in the poorest 40 per cent and the richest 20 per cent of the population.

Table 38: Access to Sanitary Facilities in Rural Karnataka by Socio-Economic Status in 1998-99

(in percentages)

	Poorest	2nd Poorest	Middle	2nd richest	Richest	Total
Own flush toilet	0.1	0.4	2.4	17.4	51.8	6.1
Shared flush toilet	0.0	0.0	0.4	1.5	1.1	0.4
Public flush toilet	0.0	0.4	1.1	0.2	1.6	0.5
Own pit toilet/latrine	0.3	1.3	6.3	18.7	30.5	6.4
Shared pit toilet/latrine	0.1	0.1	0.3	1.1	0.0	0.3
Public pit toilet/latrine	0.0	0.3	0.3	0.1	0.0	0.2
No facility	99.6	97.5	89.2	61.1	15.0	86.1

Source: Calculated from NFHS-II (1998-99)

According to 2001 Census, the availability of toilet facility for households at district level in Karnataka has been given below. In many districts, less than 10 per cent of the rural households had toilet facility. It was as low as 3 per cent in Bijapur district. Districts like Gulbarga, Raichur, Bidar, Gadag, Bagalkot and Koppal also had very low coverage of sanitation facilities in rural areas (**Table 39**).

Can the state achieve 100 per cent coverage with its current programmes?

On the whole, access to household latrines in rural Karnataka improved only marginally from 9.3 per cent in 1992 to 13.9 per cent in 1998. This goes counter to the success claimed by the state government under 'Nirmala Grama Yojana'-a massive latrine construction campaign launched on 2nd October 1995. As per the data provided by the state government, 4.68 lakh individual household latrines were constructed between 1996 and 1998. The state government is still relying heavily on the provision of subsidies to both BPL and APL families for the construction of latrines and has not accepted the guidelines in the national programme (restructured since 1999) of providing incentives only to the BPL families.

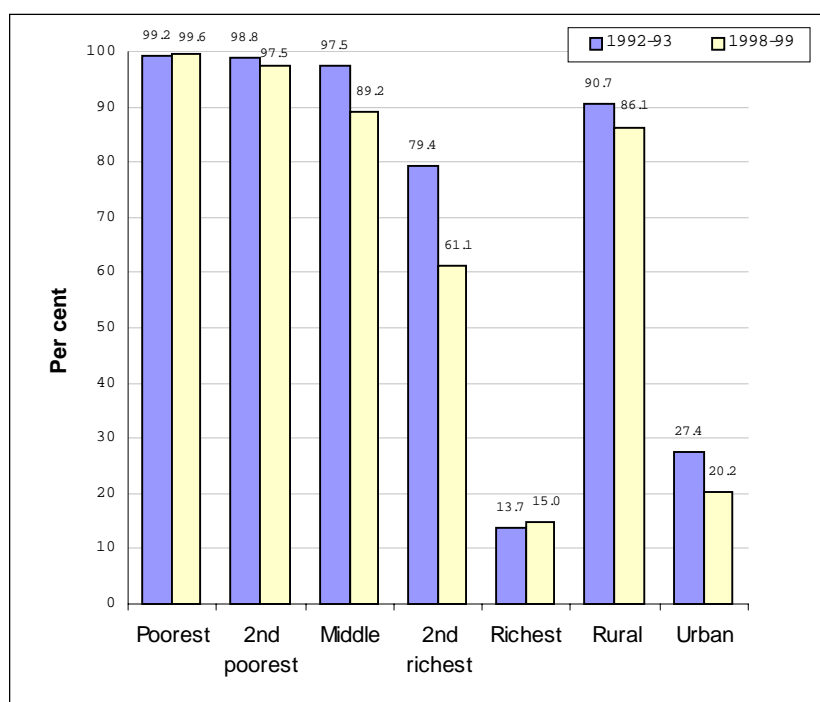
Table 39: Availability of Toilets at the District Level in Karnataka - 2001

(Percentage of Households)

District	Availability of toilets		
	Total	Rural	Urban
Belgaum	21.67	10.12	58.03
Bagalkot	13.56	5.38	33.66
Bijapur	11.99	3.35	43.20
Gulbarga	18.62	5.15	57.16
Bidar	19.44	8.19	62.31
Raichur	15.51	6.12	42.98
Koppal	13.79	8.52	39.46
Gadag	16.20	7.05	33.53
Dharwad	45.48	15.55	69.66
Uttara Kannada	34.59	22.49	64.09
Haveri	26.37	17.60	61.50
Bellary	27.18	12.51	53.65
Chitradurga	21.10	11.14	65.35
Davanagere	33.53	18.85	66.77
Shimoga	48.19	33.01	75.84
Udupi	56.29	49.88	83.89
Chikmagalur	42.02	32.85	79.53
Tumkur	26.00	13.91	76.00
Kolar	33.35	19.82	74.76
Bangalore	85.28	40.98	91.07
Bangalore Rural	33.79	20.66	83.05
Mandya	25.41	16.31	73.68
Hassan	27.77	16.68	79.29
Dakshina Kannada	62.52	47.21	86.05
Kodagu	52.06	48.54	74.60
Mysore	44.13	16.72	89.71
Chamarajanagar	18.11	11.48	56.50
KARNATAKA	37.50	17.40	75.23

Sources: Census of India 2001. Series 1, Tables on Houses, Household Amenities and Assets.

Chart 5: Per cent of Population that Defecates in the Open in Rural Karnataka by Socio-Economic Status in 1992-93 and 1998-99



Source: NFHS-1 and 2, (IIPS 1995 and IIPS and ORC Macro, 2000).

As of 1 July 2000, the state had a population of 52.3 million, out of which 34 million resided in rural areas (65%). With an average household size of 5.3 in rural areas (NFHS-2, 1998), there were approximately 6.29 million households, out of which 86 per cent (or 5.41 million) did not have any toilet facility as of 1998. This is tantamount to constructing 54 lakh latrines. Even if the state government figures for constructing latrines (between 1996 and 2001) are accepted—an average of 1.5 lakh latrines per year at the best—it would require approximately 36 years to have complete coverage! This clearly suggests that the state should take a hard look at its policies to promote rural sanitation and should focus on the generation of demand for sanitary latrines through intense IEC campaign aimed at changing people's perceptions as to what constitutes safe disposal of human excreta and how the current practices are adversely affecting their health.

¹Of course, this calculation assumes that no household takes up latrine construction spontaneously on its own.

Institutional and administrative arrangements

Chart 6 depicts the current institutional and administrative arrangements for implementing the rural sanitation programme at different administrative levels. The Department of Drinking Water Supply in the Ministry of Rural Development is the main nodal agency concerned with rural water supply and sanitation. At the state level, 'Rural Development and Panchyati Raj Department' (as in the state of Karnataka) is the nodal agency for the implementation of TSC through the PRIs. In turn, the PRIs use the rural development department functionaries for motivation and the Rural Engineering Department for construction. Though in most of the states, the nodal department for drinking water supply and sanitation is the same, there are a few exceptions.

Important points to note about this arrangement are:

- 1) *Missing link of the health department at all the administrative levels:* Though engineering is an important aspect of rural sanitation, health consequences of the open air defecation is the main justification of the programme. In the Indian context, where open-air defecation carries cultural connotation with it and people lack the understanding of its health linkages, ignoring health department in the delivery of such services is a serious flaw (albeit recognised by the rural development department itself in its guidelines and the national seminar in 1997, it failed to do anything about it). Failure to involve health department in a discreet manner reflects the failure of the public sector to convey to the community the health aspects of the programme (which is the main justification of the programme-women's respect and dignity are all secondary). The public health engineering and rural development departments failed totally in articulating the health justification of the programme to the community. In addition, the message regarding health coming from health personnel will have more impact than from non-health personnel.
- 2) *Prescription of institutional structures at the national level:* In its guidelines for the implementation of TSC, the Central government prescribed detailed parallel non-statutory institutional structures, such as village water supply and sanitation committee (VWSC), for the whole country irrespective of the local institutional context (e.g., how institutionalised PRIs are in a particular district). In the revised guidelines for TSC published in 2004, it is stated that the implementation of TSC requires large scale social mobilisation. So, its implementation at the district level should be done by the ZP. However, in case the ZP is not

in existence, district water supply and sanitation mission should implement the project. In states where water supply and sanitation are handled by two different departments, separate institutional set-up may also be made subject to the condition that officials handling water supply should be actively associated with this institutional set-up. The VWSCs are basically envisaged to be the platforms to institutionalize community participation. However, reading between the lines in the guidelines regarding the process of constitution of such groups, it seems these groups have to be organised by the government with no accountability from these bodies. The concerns relating to such structures are:

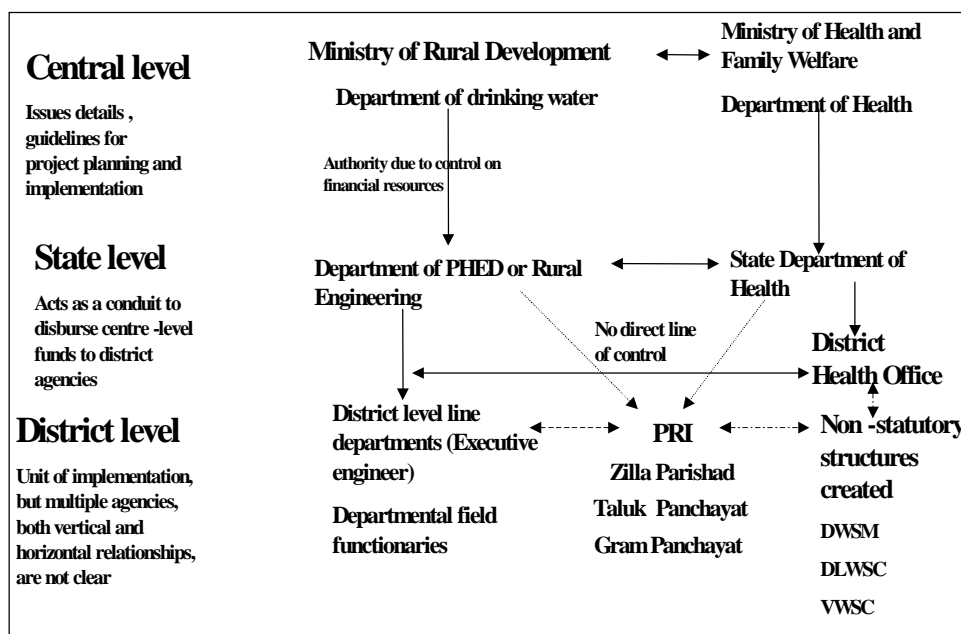
- that they undermine the authority of the statutory bodies such as gram panchayats, which are duly elected by the community;
- that it may be difficult to enforce accountability from these temporary structures;
- creation of such temporary structures undermines development of sustainable institutional culture and organisational learning;
- that they do not truly represent community participation, as several members are nominated by the government functionaries (which definitely undermines the authority of elected members);
- that VWSC has failed to correct the neglect of sanitation services as reflected in several state review mission reports (GOI 2003, 2004)
- that it puts extra burden on the district/state authorities (for which they are hardly prepared or have designed any systems) to monitor and evaluate multiple agencies in the field. In one single district, there may be more than 1,000 such committees. The guidelines issued by the Central government do not say how and who will monitor the performance of these committees; and
- that it takes precious time away from the field functionaries that could have been better spent in the Gram Sabha.

Thus, some pilot projects comparing the effectiveness of different institutional structures need to be undertaken before prescribing uniform guidelines for the whole country. The decision to create and design such structures should be left to the GPs and gram sabhas, which have the membership of all adult members, and they should be institutionalised as a platform of community participation.

- 3) *Lack of clarity in the vertical and horizontal relationships* (especially at the district level) and roles of different departments: neither the state government nor Central government has taken any trouble in specifying

the exact role, responsibilities and rights of each institutional structure in the network of institutions involved.

Chart 6: Administrative and Institutional Arrangements for the Implementation of Rural Sanitation Programme



Programme design

The key programme features of the TSC are:

- 1) implementation in a project mode, with project proposals emanating from a district, scrutinised by the state government and sanctioned by the Central government.
- 2) start-up activities: Baseline survey, preparation of project implementation plan, initial orientation and training of key programme manager at the district level (100% centrally assisted, cost not to exceed 5% of total project cost).
- 3) IEC activities: Each project district has to prepare a detailed IEC action plan with defined strategies to reach all sections of the communities. Provision for recruitment of a motivator, who will be paid in terms of the number of households motivated by him to construct latrines.
- 4) Creation of rural sanitary marts and production centres.

- 5) Cash incentive for the poorest of the poor households to construct household latrine.
- 6) Construction of latrines in schools and Anganwadis.
- 7) Construction of community sanitary complexes to be maintained by GP, and 20 per cent of the capital cost to be contributed by the community.
- 8) The funds will be directly released by the Central government to the district-level implementing agency and the state government will release its share also directly to the district once the central share has been released.

The funding pattern for the programme is: Baseline activities (5%); IEC (>15%), rural sanitary marts (>5%); construction of individual household latrines and community complexes (up to 60%); construction of latrines in schools/anganwadis (>10%); administrative charges (<5% subject to a ceiling of Rs 40 lakh per district).

Though sanitation is a state subject, neglect of the subject by the states led the Central government to use its financial clout to direct states to accord appropriate priority to sanitation programmes. However, the programme mainly focusing on providing subsidies/incentives to the BPL families failed to convey the importance of the subject to most of the states, which took the Central government guidelines as 'directives' and mechanically tried to attain the target of latrine construction by the BPL families except in a few states (such as Andhra Pradesh-where the programme has been given great political importance) rather than developing holistic plans to promote overall sanitation in the villages with no open-air defecation. There is no monitoring of whether the APL families are constructing and using the latrines or not. Though the 'Nirmal Puruskar' constituted by the Central government promotes the concept of 'open defecation free villages', it failed to evoke sufficient enthusiasm regarding the concept.

Some problems with the design

- The health messages of the programme are not clear.
- The technical standards and guidelines for the construction of latrines have not been developed and enforced and the state review mission reports the use of suboptimal technology in many states endangering the contamination of water table.

Recommendations

A. Institutional arrangements

1) Role of the Central government:

Dos:

Research into low-cost sanitation technology solutions, development of effective IEC messages, implementing national-level campaign using national-level TV/radio programmes. Can provide finance to the states, but monitoring should include the most critical components rather than monitoring just the aspects for which the funding is provided. Instead of providing direct funding for subsidies for the construction of latrines, it may make funding for other programmes (such as for water supply, roads, etc.) conditional on adoption of safe hygienic behaviours by the community. Clearly articulating the importance of rural sanitation in the policy statements and political governance to put the programme in its proper perspective is important.

Don'ts:

- Sanctioning individual schemes for each village at the national level: The district level projects are sanctioned at the national level by the 'national scheme sanctioning committee' introducing unnecessary bureaucracy-the national-level committee has no better information than the state-level committee, and the job of sanctioning of the scheme should have been best left to the district level.
- Prescribing details about how the programme needs to be implemented.
- Neglecting the health department. The engineering department should just provide technical assistance to the health department and the health department should be made the nodal agency rather than the department of drinking water in the rural development department.

2) Role of the state government:

a. A nodal agency needs to be designated by the state government to provide the necessary oversight and technical support to the district agencies. This agency could be within the Department of Rural Development and Panchayati Raj, or the Department of Health. It should work closely with other related departments, such as the Department of Rural Engineering - as well as with technical institutions, which can provide the necessary laboratory support as well as research support for investigating problems and finding appropriate solutions for them.

- b. Articulating the importance of the programme to the district agencies and ensuring that district agencies make appropriate efforts on the programme commensurate with its public health importance. The state government to this end may use persuasive methods, specific incentives and disincentives. Making grants to other programmes to districts should be conditional on performance in rural sanitation. To convey the right message to the GPs, the state government has to accord appropriate importance to the programme.
- c. Developing and adapting the guidelines/standards for sanitation technology and enforcing them strictly through the GPs.
- d. Implementing a state-level IEC programme and developing guidelines and providing technical support for IEC programme at the district level by the State Health Education Bureau in the Department of Health (rather than creating a separate IEC cell in the rural engineering department).
- e. Monitoring and evaluation of the performance of district authorities on the most critical aspects of the programme.
- f. Providing a revolving fund at the level of the state government from where the district authorities can borrow if they feel the need.

District level:

- Health department: The district and block health educators should be made the nodal technical officers-in-charge by the ZPs concerned who should run an intense IEC campaign. These officers should contact the engineering officers in the district regarding the technical designs of the toilets and should coordinate with them to communicate the same to the communities.
- Gram Panchayat should be made the local agency for the implementation of an integrated sanitation programme.
- GP should discuss the issue in the Gram Sabha (should be a forum of an IEC) and should develop a community monitoring system to reduce the practice of open-air defecation. The GP may constitute some community-level committees in the Gram Sabha if need be.
- Gram Panchayats should ensure both community participation and community obedience in the programme. Making use of sanitary latrines obligatory by the GP/ other health agency-open field defecations are punished with a fine. There are examples of effective use of such disincentives imposed on open-air defecation in the form of monetary fine or in terms of other penalty (such as stopping water supply) by

VWSC in the state of Orissa (State Review Mission, GOI, 2003).

- Creation of revolving funds at the level of community. The successful implementation of sanitation projects in Midnapore district of West Bengal has proved that the community can and will bear the cost of sanitation if a sense of ownership is created in them through effective IEC. This new concept of community management (rather than just encouraging voluntary labour) aims at assigning the role of controlling their own systems to the community itself. Community funds were also observed in several villages in Orissa.
- Community toilets/ wash facilities: GPs should build and maintain adequate number of public toilets/ wash facilities that are clean, hygienic and well-maintained. The facilities should be based on an assessment of the likely usage: usage should be promoted especially by the poor households who may not build individual toilets.
- School facilities: Every school should have sanitation facilities that are mandated by the school system. Maintenance should be ensured.
- Zilla parishads should maintain a revolving fund (based on assistance from the Central/State govt.) from which GP can draw if need be.
- Zilla parishads should assign specific tasks under the programme to the departments under it-making the district health department as the nodal department for the programme and making it obligatory on the district PHED to make available necessary technical assistance to the GP for the construction of latrines.
- Zilla parishads should assign the task of monitoring and evaluation of the programme to the health department and should review the action plan and progress of the programme in its regular meetings.

B. Financing Aspects

- Abolish subsidies or financial incentives for the construction of latrines.
- The revolving loan at the level of the GP may be constituted from its own income, community contributions, and initial base capital provided by Zilla Parishad based on the assistance provided by the state government.
- Provide loans for construction to all on the acceptance of certain conditions on technical specifications.

C. Monitoring and Evaluation

Development of monitoring indicators in addition to the number of latrines constructed:

- Per cent of population covered with sanitary facilities.
- Per cent of population having no access to the sanitary facilities (currently

the state/Central govt. reports the progress in terms of number of latrines constructed-which gives no idea of the magnitude of the problem).

- Per cent of people aware of ill-health effects of the open-air defecation.
- Per cent of adult population still using open-air defecation.
- Per cent of households disposing stools of children under 5 correctly.
- Per cent of population practising hand-washing after ablution.

Box 11: Experience of Belandur Gram Panchayat in Bangalore District

The Belandur Gram Panchayat has an underground drainage system and garbage collection facilities. The villagers don't have water problem. There is no distributional discrimination between the rich and the poor. The panchayat ensures equal quantity of water to every household. It has provided mini water schemes with 5 overhead tanks to every ward. A member residing in the ward takes the responsibility for the maintenance of water supply facilities. Besides this, there are 5 employees who have been employed by the GP for the maintenance of drinking water supply. The GP has made bye-laws for fair delivery of water to all the households. A penalty of Rs. 2,000 can be levied for illegal water connection or the regular connection may be disconnected for a period of six months. About Rs. 25 lakh has been spent on the construction of the drainage system. Toilets are being constructed for all the households, including those living below the poverty line. There is no evidence of open defecation in the panchayat area. In 2001-02, about 365 toilets were constructed in this panchayat under different schemes. The GP took a mandatory decision that it would construct more than 40 latrines in a year. 100 per cent water tariffs are collected from the people. It is important to mention that the annual income of the panchayat is more than Rs. 1.7 crore. Factors that play a crucial role in making the activities of this panchayat a success are many. However, the important factor is the quality of leadership as provided by the president of the panchayat and his team.

Source: Nayak, Bhargava and Subha 2004.

D. Development of a Holistic Multilevel IEC Campaign

The work of IEC should not be left to the districts alone. A multilevel campaign should be launched at the national, state and district levels. The responsibility and use of media should be chosen at different levels based on its cost-effectiveness. Development of messages that can be broadcast at the national level TV and radio channels should be done by the national government. Similarly, development of messages in the state- specific languages for broadcasting at the state-level TV and radio channels should be carried out by the state (preferably health department). At the national level, the expertise of the institutions in areas such as Central Bureau of the Information and Education should be fully utilised. On the other hand, districts and lower levels are more suited to make use of other media-such as wall-painting, brochures, group talks, community meeting, school education, etc. The state government should provide necessary technical assistance to the district level in preparing the materials, etc.

The health department should take the overall responsibility of hygiene education-the IEC cell should be created in the health department, not in the engineering department. A message about the cause and harmful health effects of open defecation coming from a doctor/health personnel will have much more impact than coming from a junior engineer. The PHED department has relatively no history of doing IEC-while health department has an established record in IEC-be it for family planning or AIDS or Polio. However, people should be made to understand the linkage between open defecation and worm infection in the children (or, for that matter, other problems)-as this is not very intuitive and people generally consider going out to the fields away from home more hygienic.

Box 12: Sant Gadge Baba Clean Village Sanitation Campaign in Maharashtra

The Maharashtra Government has been playing a key role in running the Sant Gadge Baba Village Sanitation Campaign (SGBVSC). The idea has been to create an atmosphere which motivates people to become the driving force in sanitation efforts, while promoting new habits that can be sustained thereafter. The Gram Panchayats (GPs) play the central role in the SGBVSC. The SGBVSC is not a programme or scheme and is a campaign to educate and motivate the rural communities. The SGBVSC is a contest, whereby communities compete against each other in order to gain a reward, to be used for the collective good. Points are earned as a variety of cleanliness principles are implemented, ranging from toilet use to personal hygiene. In the competition, the three highest-scoring villages at each level (Block, District, Region and State) are awarded a cash prize to be used for the benefit of the entire community, though not necessarily for sanitation purposes. The main benefit to the villages involves reputation and recognition rather than simply monetary gain and the communities stand to lose their recognition if they do not maintain their village in ways that are environmentally sound. Interested villages register to participate in the competition and to implement various specified works that lead to an environmentally clean village. The village through its own resources and labour undertakes all the works. The villages are then evaluated by independent committees on the specified criteria and other aspects like equity, innovations etc. The villages that score the highest marks are awarded 'prizes' at different levels. Those villages which do not 'win' do not receive either cash or subsidy from the Government. In addition to other works, an estimated one lakh household latrines are being built in the state as a result of this programme. A total expenditure of Rs. 6.6 crore in the form of cash prizes leverages the creation of an estimated Rs. 200-250 crore worth of rural infrastructure, annually, through collective community action.

Sources: DDWS 2002; WSP-SA 2002.

Though the media chosen will vary across different levels, the key messages that need to be transmitted should be decided at the national and state levels after careful deliberations and after scrutinising the research evidence on the social perceptions associated with open-air defecation. The

bottomline in the IEC messages is clearly articulating the linkage between different health problems prevalent in rural India (worm infestation, other faecal-borne infections) and the practice of open-air defecation.

Box 13: Sanitation in Midnapur District in West Bengal

Experience in West Bengal draws attention to the importance of the role of local government in collaboration with a local NGO called **Rama Krishna Mission Lok Shiksha Parishad (RKMLSP)**, in facilitating sanitation improvement in the district. The UNICEF supported the programme. The dedication, interest and coordination of the local government and the NGO are the driving force to ensure success in sanitation in the district. The coverage of households by sanitary latrines in the district increased to 60 per cent in 2001 from five per cent in 1991. This success can be attributed to effective cooperation in the provision of hygiene and health education, regular monitoring of the activities. WATSAN (Water and Sanitation) Committees have been formed at District, Block and Gram Panchayat levels. The Zilla Parishad then carefully selects the NGO who will best carry out the field-level projects, monitoring and evaluation, while the Gram Panchayats select the motivators who then establish direct contact with the households. Every week, scheduled meetings are held at Gram Samsad, Gram Panchayat, Block, Sub-Division and District levels in order to maintain close lines of communication, as well as to strengthen the capacity at each level. This programme uses IEC as a means of informing and drawing commitment from the community. The programmes are implemented under the supervision and guidance of panchayats. The RKMLSP implements the programme with the help of youth clubs which promote the concept of hygienic sanitation in their areas. Nandigram II Block in the district has achieved the distinction of being the first block in the country to have saturated all rural households with sanitary toilets.

Sources: WSP-SA 2002; World Bank 1999; Roy 1996

E. Research and Innovation:

At the level of Central and State Governments, the government should sponsor:

- Social research: development of more effective health education methods based on community perceptions.
- Technological research: development of safer and affordable latrine designs-both private and public.
- Clear-cut guidelines and standards should be developed for constructing toilets which should be compulsorily enforced throughout the state-to avoid contamination of water table due to wrong design-digging the hole too deep reaching the water table, using wrong lining material which allows seepage (as noticed in several state review missions, GOI).

**Box: 14 "An Open Defecation-free Village": Success Story of
Keerapalayam Panchayat in Tamil Nadu**

Keerapalayam panchayat in Cuddalore district got a unique distinction in 1998 of being declared as the 'First Totally Sanitised Village Panchayat' in Tamil Nadu state. All the 1,160 households have individual toilets of which 563 were built under the DANIDA-assisted sanitation programme and 50 under the CRSP scheme. Within a year, more than 600 toilets were constructed. The Gram Panchayat provided both the primary schools and one high school in the village with sanitation facilities. Sanitation does not finish with the construction of toilets alone. It goes with household collection of garbage, which has been implemented by the panchayat. Big garbage pits have been constructed in many parts of the village to compost the degradable and non-degradable wastes. With the initiative of Panchayat leadership and the involvement of local people, this model village is now looking neat and clean and free from garbage and open defecation.

Source: <http://www.rural.tn.gov.in/keerapalayammain.htm>

4.3 Vector Control

The arthropod (mosquitoes, flies, mites, etc.)-borne diseases constitute major health problems in India. The most important diseases include: malaria, filarial, Dengue fever, Japanese Encephalitis, and scabies. Both early detection and effective treatment and vector control are equally important to reduce the parasitic load and ultimately to reduce the incidence of these diseases. However, in this section, we primarily focus on vector control efforts.

Rapid urbanisation and industrialisation without adequate drainage facilities have led to the spread of breeding places of mosquitoes. The mosquitoes, responsible for transmission of filariasis, breed profusely in dirty water collections, viz., stagnant drains, cesspools, septic tanks, burrow pits, and in fact, all types of water collection. Similarly, the Aedes mosquito, which transmits dengue fever, breeds in artificial water collections in and around human dwellings, such as water found in discarded tins, broken bottles, fire buckets, flower pots, coconut shells, earthen pots, tree holes, and the like.

General principles of vector control

The five general principles of vector control are:

- 1) *Environmental control:* Elimination of breeding places, filling and drainage operation, carefully planned water management, proper disposal of refuse and other wastes, cleanliness in and around houses, etc. Some of these are minor engineering methods such as filling and leveling and drainage of breeding places and can be carried out by the local bodies with community participation.

Since the Indian rural economy is largely agricultural based on surface irrigation, it contributes to mosquito breeding. In addition, in many states, the houses are constructed in the farm fields themselves increasing the exposure of man to the mosquito. Promotion of intermittent irrigation with proper water management may help reduce the breeding of mosquitoes.

If water cannot be drained, making it unsuitable for mosquito breeding using larvicidal measures-such as using larvivorous fish and changing the salinity of the water-help in mosquito control.

- 2) *Chemical control*: A wide range of insecticides belonging to organochlorine, organophosphorus and carbamate groups of compounds targeted against larvae and adult mosquito have been used for control of vector-borne diseases. However, vector control by insecticides alone is no longer fully effective because of resistance developed in over 100 species of arthropods and also the issue of environment pollution. However, there are still a few alternative control methods that are as efficient and economical as insecticides.
- 3) *Biological control*: Still in infancy. The impact on health of man himself is not well studied.
- 4) *Genetic control*: These methods are nowhere near the stage where they can be used on a large-scale in an effective way.

An Integrated approach: Since no single method of control is likely to provide a solution in all situations, the present trend is to adopt an 'integrated approach' for vector control combining two or more methods with a view to obtaining maximum results with minimum effort and to avoid excessive use of any one method.

Vector control in public policy

Control of vector-borne diseases is one of the most important national health programmes since Independence in India. Under the national programme for Malaria and Filariasis control, the Central government provides assistance for insecticides in kind on 50:50 basis. There is no single programme for 'Vector control' executed by a single department, rather, vector control activities are undertaken and fragmented under several national programmes for individual vector-borne diseases (such as National Malaria Control Programme or National Anti-Malarial Programme, National Filariasis Control Programme, and National Kala Azar Control Programme). However, there are no organised or systematic control activities against the remaining mosquito-borne infectious diseases. Japanese Encephalitis and Dengue fever

are the other two important vector-borne diseases, which are supposed to be managed by the states from their own resources with minimum need-based assistance provided by the Centre out of the funds available for National Malaria Control Programme.

Under the National Malaria Control Programme, districts have been classified into three categories based on annual parasite rate. Approximately, 100 districts covering 62.2 million population have been classified as hardcore endemic districts. The Malaria Control Programme has been christened as Enhanced Malaria Control Programme in these districts under which District Malaria Control Societies have been established to improve the effectiveness of the programme. These societies directly receive cash assistance from the Central government. In addition, separate programmes have been formulated for urban areas. Urban Malaria Scheme is operative in 131 towns in the country with more than 40,000 population and malaria incidence of more than 2 per 1,000 population in the last three years.

The National Filaria Control Programme is operative in endemic towns covering approximately 40 million population through 206 filarial control units, 199 filaria clinics and 26 filarial survey units. The vector control strategy involves weekly larvicidal measures including use of larvivorous fish.

Though the programme in the remote and rural areas relies considerably on community participation (drug distribution centers/depots manned by Panchayat members, forest/revenue officials and other community workers), insecticide operations in areas with API 2 and above, being a specialised task, have been retained as a vertical programme, under supervision of District Malaria Officers.

In almost all the vector-borne diseases, a three-pronged approach has been used:

- 1) Early detection and treatment of disease to reduce parasite load
- 2) Anti-adult and anti-larval measures to reduce vector density
- 3) IEC and community participation

However, in practice, vector control has become synonymous with insecticides spraying, and neglect of environment management.

Institutional and administrative arrangements

The Malaria and Filaria Control Programmes are still very much implemented as vertical programmes, though, at the cutting-edge level, the same machinery-PHC, and peripheral health workers-is responsible for the implementation of the programmes.

The Department of Health in the Ministry of Health and Family Welfare is responsible for overseeing the National Malaria Control Programme and National Filariasis Control Programme. The technical support at the national level is provided by the Joint Director (Malaria) and Joint Director (Entomology) in the Directorate of Health. The Department of Health in the ministry is responsible for overall formulation of the policy and programme, though state governments still have a lot of room to incorporate context-specific programme components especially with respect to the implementation of the programme.

At the state level, the state health department is responsible for supervision and implementation of the programmes. In Karnataka, there is the director of national programmes and the Joint Director (Malaria and Filariasis) reports directly to him.

At the district level, there is a position of district Malaria officer who looks after all the aspects of Malaria and Filariasis control, including early detection and treatment as well as vector-control activities. In 100 highly endemic districts, the district Malaria committees have been constituted since 1997 with the World Bank support. We did not come across any annual action plan at the district level.

At the taluk level and below, the programme is basically integrated with primary healthcare. Medical doctors, ANMs and MPWs are supposed to carry out all activities under the programme at the village level.

Vector control and local rural bodies

There are no explicitly defined roles and responsibilities of decentralised bodies of governance (PRIs), though these bodies are responsible for drainage and solid waste disposal activities in their jurisdiction as described later. Drainage and solid waste disposal are the two most important environment management activities for vector control. In addition, the ZP standing committee on education and health and the amenities committee at the Gram Panchayat level are responsible for monitoring health programmes in their jurisdiction. These committees are expected to meet once in two months to discuss health related issues, or more often, if required, during any emergency. However, the field visits to the Raichur and Tumkur districts showed that these committees were not very proactive in monitoring the health programmes and outcomes in their jurisdiction and most of them did not even meet regularly. Issues on procurement or contract for some construction activities rather than performance of specific programmes or health issues most often formed the agenda of these committees. DHO was the most common officer who monitored the performance of the

programme. The programmes have their own reporting systems as per the requirements of the national programmes.

Vector control and community participation

The field visits did not reveal any evidence of systematic, organised community participation in vector-control programmes. Most of the spraying work (which is the mainstay of vector control) was done by the PHC by contracting casual labour without consulting the communities. Similarly, there were no consultations between communities and local bodies and health authorities on the need for undertaking minor environmental engineering works (e.g., filling up a small puddle, etc) and encouraging the communities to do so.

Vector control and autonomous research institutions

ICMR and regional vector-control organisations are sponsored by the Central government and are responsible for research into different aspects of vector control. However, research findings from these institutions sometimes do not influence the implementation of the programme at the field level, where the programme is typically based on ad hoc spraying of insecticides-supplied by the Central government-by casual labour. Vector-control programme in India has almost become synonymous with spraying of insecticides with neglect of environmental management. Even the spraying activities are carried out in an ad hoc manner using untrained casual labour with little community participation.

Technical issues in vector-control programmes

- Over-reliance on chemical control of vectors with neglect of environmental managements
- Lack of training of the medical officers at PHC in basic entomology to carry out the vector-control operations in the villages
- Weak IEC component: Community and individual habits decide the vector transmission
- Poor lab facilities and human resources at the cutting-edge level: PHC and below to carry out the diagnostic services

Recommendations

A. Organisational Aspects

- 1) Establishing clear institutional and organisational responsibilities for different activities for vector control: PRIs should play a lead role in vector control. The Health and Education Committee of the ZP and Amenities Committee of the GP should take the initiative and should set

clear targets for the relevant health authorities.

- 2) Proactive organisation of community participation: The Gram Panchayat may organise a campaign just before every rainy season to carry out minor engineering works and cleaning to reduce vector breeding. These events can also serve to increase community awareness about different aspects of vector control, including transmission of malaria and filaria.

B. Functional Aspects

- 1) Establishment of integrated epidemiological surveillance units at the district level covering both private and public providers for all the mosquito-borne diseases.
- 2) A most neglected aspect in the programme is implementation of minor engineering works and advocating communities to adopt protective measures to reduce mosquito breeding. This work seems to be everybody's responsibility and hence, no one's responsibility.
- 3) Legal enforcement to prevent certain activity and to enforce community obedience to undertake certain measures to reduce vector breeding.
- 4) Research: Continuous monitoring of susceptibility/resistance of different mosquito carriers to currently used insecticides.
- 5) Developing norms for insecticide sprays/fogging: Insecticide sprays or foggings to reduce adult mosquito population should not be done 'routinely' but as specifically planned and applied judiciously, in chosen places and times, as the last resort in malaria control. The use of insecticides under health programmes or for other purposes (in agriculture) should be regulated and monitored by the state health authorities, through the integrated vector-borne programme.
- 6) Developing annual action for vector-control activities: A time-bound annual plan should be formulated by PRIs in consultation with health authorities and communities taking into account the local breeding habits and disease incidence patterns.
- 7) A well laid-out multi-level information, education and communication programme with clear messages developed after taking into account the available social research. IEC should target general public, health and paramedical workers as well as members of local bodies.

C. Management Aspects

- 1) An integrated vector-control programme designed and implemented by the state government for all the major vector-borne diseases. The entomological personnel and expertise, material and money, already available in the districts but which are fragmented due to vertical

restrictions, should be brought together, in a streamlined manner. This will result in better effectiveness and efficiency in controlling all mosquito-borne infectious diseases.

- 2) Control and monitoring of all malariogenic activity.
- 3) Human resource development: Entomological capacity needs to be greatly enhanced by filling vacancies with qualified personnel and making regular entomological surveillance a crucial component of epidemiological surveillance strategies at all levels. In addition, trained labour needs to be developed for carrying out spraying and fogging activities, as the field visits reveal that these activities are carried out most of the times by untrained contractual labour.

The state government could utilise the inputs and resources available under different centrally sponsored programmes implemented as vertical, parallel and exclusive operational schemes and weave them into one holistic vector-borne disease control programme. The National Rural Health Mission will facilitate these and other creative efforts at disease control by permitting some flexibility in the use of disease-control budgets.

4.4. Surface Water Drainage

Effective drainage can do much to help reduce vector breeding. The issue of underground sewerage and stormwater drainage has received much more serious attention in urban areas than in rural areas as this is more easily perceived as an impediment to urban functioning. However, with increase in population and development of large, thickly populated villages, these issues are gaining importance even in rural areas. As of today, almost no village has underground sewerage connection.

Institutional structures

Rural local bodies are responsible for providing appropriate drainage services in the rural areas. However, drainage services are highly inadequate in rural areas where pools and puddles filled with dirty water are seen almost everywhere especially after rains. Most of the rural local bodies don't have sufficient funds to provide drainage services, which are highly capital-intensive, or even to provide minor engineering support to fill up the puddles etc., created after rains. Even when provided, most of the drainage in the rural areas is open-vulnerable to blockage if not properly maintained. These drains themselves serve as important vector-breeding places if blocked.

In most of the states and at the Central government level, there is no committed budget item for provision of surface water drainage services

in rural areas. Recently, many panchyats planned for the construction of open drainage channels using funds provided under several Central and state government employment-generation schemes such as Jawahar Rojgar Yojna. In Karnataka, the recently launched integrated village development scheme 'Swachha Grama Yojna', which envisages at least 10 per cent community contribution, also has a component of provision of open drainage services. Even where the panchayats are able to construct the drains, they are not able to maintain them in the absence of any regular committed budget for this purpose. This combined with disposal of solid wastes by the households into the drains leads to frequent blockage of drainage channels.

Recommendations

1. At the state level: Development of state-level rural drainage policy in the department of rural engineering.
2. At the panchayat level: Provision of a committed budget item for the maintenance of drains.
3. A schedule of the frequency of cleaning drains and performing other drain maintenance work should be posted at the panchayat headquarters, along with the budget for drain maintenance. This will enable community members to monitor the service provision, as well as build their own awareness of the importance of keeping their drainage systems functioning.
4. Community mobilisation and education: Gram Sabha should be used as a platform to inform the community of the need for community participation in proper maintenance of drains. Panchayats may organise 'Community drains cleaning days' at regular intervals to ensure unblocked drains.
5. Panchayats should regularly undertake the inspection of drains to carry out preemptive maintenance.
6. Public Health Act: An integrated public health act should include provisions on both in-house drainage provision and for the maintenance of community drains. This will give legal backup to panchayats to ensure community compliance for the maintenance of community drains.

4.5 Solid Waste Disposal

Proper disposal of solid wastes is an important population-based health service having implications for the spread of vector-borne diseases (such as those transmitted by flies, and by mosquitoes due to blockage of drains). The subject of solid waste disposal has become very vast and technically complicated with specialised attention needed for the disposal of

biological hospital wastes, industrial wastes, etc. Considering the scope of this study, this section deals only with general solid waste disposal as the diagnostic entry point, though disposal of special solid wastes is an important topic in itself.

Box 15: SGBCV Campaign: Impact Visible at Borban GP

There was no drainage system, and drain water used to flow into the street causing foul smell and breeding of mosquitoes; open defecation was common causing water and air pollution; there were only 14 toilets in a village of 726 people. Women used to suffer from stomach/constipation problem. As a result of **SGBCV** Campaign, drains were constructed; there is now an open gutter system of 700 ft long. A 'Jumbo Soakpit' (13' x 13' x 13') is used for draining waste water. Waste water from every household is collected in the gutter with pipes connected to household outlets. About 65 families channel their drain water into their household garden. There is no open defecation; there are 108 household toilets, 1 community toilet. Loans were provided for constructing household toilets. 94 toilets were constructed within 25 days under the campaign. The toilets are indeed used.

Source: Notes of Field Visit by ISEC Study Team (January 2004)

In rural areas in India, there is no system for organised collection and disposal of refuse. Refuse is thrown around the houses indiscriminately resulting in gross pollution of the soil. Fortunately, villages are characterised by significantly less generation of solid wastes than the urban areas. Most of the solid household wastes generated in rural areas are biodegradable-kitchen wastes and animal excreta, etc. Most of the households dispose it of by throwing them in front of the houses to be eaten by animals-which acts as a source of breeding of houseflies and soil pollution and may result in the blockage of drainage channels during rainy season.

Institutional structures

The lowest level of local governance bodies (panchayats) is responsible for solid waste disposal in the rural areas. In general, there are no centrally or state government sponsored programmes for this purpose (except for subsidies for installation of household biogas plants which helps in the disposal of animal excreta). Lack of any committed funds for this service has resulted in the neglect of this important public health function in the rural areas. In most of the places, the panchayats have no specific established system for solid waste collection and disposal.

Recommendations

A. Organisational Aspects

1. Rural local bodies are best positioned to carry out this job, as it exists currently.
2. Delineate the elements of an integrated waste management policy at the state level: The state Department of Rural Development and Panchayati Raj should develop a written policy on solid waste disposal in rural areas in consultation with the rural local bodies and community groups. The policy should clearly lay down the guidelines that can be followed by the local bodies.
3. Most of the rural local bodies do not have financial and technical resources to carry out this task. The relevant state department should identify mechanisms for improving the financial and technical capacity of local self-governments with regard to solid waste handling.

B. Functional Aspects

1. As pointed above, most of the rural households do not store the refuse but just throw it out. The Gram Panchayats should be made aware of this issue, and they, in turn, should promote the use of covered dustbins by the households while awaiting final collection/disposal.
2. Digging of 'manure pits' for the village, and by individual households: The garbage, cattle dung, straw and leaves should be dumped into the manure pits and covered with earth after each day's dumping. Two such pits will be needed- when one is closed, the other will be in use. In 5-6 months, the refuse will be converted into manure, which can be returned to the field. This method is effective and relatively simple in rural communities. Gram Panchayats should be made aware of this method, and they, in turn, should promote it in the villages under their jurisdiction. Village residents should be required to deposit their garbage correctly in these pits.
3. Promotion of biogas plants: Though this centrally sponsored scheme is in operation now for a number of years, there are few success stories. However, the scheme is good in theory as animal excreta accounts for a large proportion of total solid wastes generated in rural areas. In Tamil Nadu, biogas-based units are being installed-to help in recycling solid wastes in the rural areas (State Review Mission, TN). The state government should do an assessment of viability and constraints in the installation of biogas plants in consultation with the Gram Panchayats.

4. House-to-house collection system: Though house-to-house collection system is currently being proposed and tested in urban areas, the system may work equally well in some large, densely populated villages.
5. Public education: Like other population-based health services, public education on the health hazards of improper solid waste disposal is a necessity. People generally have little interest in cleanliness outside their homes. Public education needs to be carried out by a well-planned IEC programme executed at different levels (central, state, district and village) by all known methods of health education-pamphlets, newspapers, broadcasting, films, etc.

Box 16: Accountability of Health Functionaries to the Panchayats

The West Bengal government has not succeeded in achieving the expected outcome in health sector despite the long experience of decentralisation. The health workers of Primary Health Centres (PHC) did not provide the services at the door-step of the people. The health workers were out of station most of the time. They were supposed to make door-to-door visits in the villages, collect information and educate people about preventive methods of unwanted pregnancy and diarrhoea, and provide the antenatal care to pregnant women etc. These health workers were supposed to take blood samples for testing for malaria every month. But it was observed that they collected the blood sample from one person and made several slides using the same blood to show that blood was collected from many persons. In general, people were unhappy with the provision of health services.

The panchayat had no control over them since they were accountable only to the health department. The senior health officials rarely monitored the activities of peripheral health workers. However, it was the responsibility of the elected members to report in respect of malaria, small pox, cholera or any other epidemic diseases to the standing committee meeting which was supposed to be held once in a week (Thursday). Based on this information, the President of GP could seek necessary support from the Health Centre if any emergency condition prevailed.

To ensure efficiency in the health delivery services, the government of West Bengal placed health workers of sub-health centres under the control of GP. It has been made mandatory that the health worker can draw his salary only by producing a no-objection certificate from the president of the GP. As a result of this decision, the health workers became more punctual and friendly to the people and to their representatives. They started spending more hours in the health centres and also found time to visit villages regularly.

A field survey carried out in two villages in West Bengal revealed that the health workers became more accountable and effective when they were placed under the direct monitoring of GP.

Source: Islam 2004

6. Community mobilisation: The solid waste disposal is a public good. Non-compliance by a few community members may endanger the health of

others. Hence, community mobilisation is necessary for the effective delivery of this service. The community mobilisation may take the form of organisation of village cleanliness days, etc. In large villages, the communities may be involved in primary collection of refuse from house-to-house, which may be followed by secondary collection by the Panchayats. This is being tried on a pilot basis in Bangladesh though in urban areas.

7. Legal enforcement: A public health act may become handy to enforce compliance among non-conforming community members.

C. Managerial

Evaluation of panchayats' performance: While evaluating the performance of panchayats, appropriate disposal of solid waste should be included as one of the criteria.

CHAPTER 5

ASSESSMENT OF THE CURRENT SCENARIO AND RECOMMENDATIONS

Decentralisation of governance in India received a major push forward by the 73rd and 74th Constitutional amendments, which led to the formation of three-tier Panchayati Raj Institutions in the rural administration and urban local bodies with considerable powers of governance. Specific roles and functions were drawn up for these local government bodies and their financial structure was also specified. The provision of public health services has been assigned to these local government bodies.

Karnataka has been one of the states where decentralisation of governance has been pursued more aggressively. It has transferred not only the functions assigned to the PRIs in the Karnataka Panchayati Raj Act of 1993, and the personnel needed to discharge these responsibilities but also financial resources required. It is, therefore, clear that the decentralised system will continue to be the pattern of governance in the state and the delivery of public health services will be the responsibility of the PRIs. In this context, an assessment of the working of the PRIs in the provision of basic public health services would provide insights into the strengths and weaknesses of the system so that recommendations can be drawn to turn the system into a more effective one.

In this chapter, we identify some crucial issues that define the current state of the system of delivery of the basic public health services in the rural areas of the state, and provide an assessment and recommendations drawn from this assessment.

5.1. The Overall Institutional Framework

1. The overall goals, delineation of roles, functions and responsibilities

Assessment: The Karnataka Panchayati Raj Act spells out the responsibilities of the local self-government bodies with respect to the provision of water supply, sanitation and the health services, in general. These goals, however, are at a general level and do not specify monitorable outcomes as the objectives. Under specific programmes, some monitorable intermediate objectives are specified but not actually enforced: for example, specification that additional 10 per cent household toilets would be constructed in villages by GPs each year under the Nirmala Grama Yojana. The Panchayati Raj Institutions are empowered to provide these services utilising

the infrastructure of the departments of health, engineering, rural development and so on. However, the specific roles of each department have not been articulated from the viewpoint of optimising the impact on health outcomes. The arrangement does not provide scope for accountability with respect to health outcomes. The preventive public health effort is ignored in the health services systems. This needs to change. Even at the state level, we do not find systematic efforts to constantly upgrade the public health scenario. As an example, there is very little of IEC effort relating to basic public health issues although it is often said that lack of community awareness on these issues is a major factor for the poor co-operation by the society in the efforts to improve public health (sanitation).

Recommendations:

- i. At the state level, there should be a clear policy towards basic public health services; monitorable objectives should be specified. The objectives could be in the form of health outcomes or processes or both. For example, achieving progressively better vector-control objective is one item. Progressively reducing incidence of outbreaks of water-borne diseases is another outcome-based objective.
- ii. At the state level, there should be systematic efforts to identify the problems faced in achieving the goals and identifying remedies and taking action to rectify the weaknesses in the system. A systematic linkage with the research community in addressing these challenges should be established.
- iii. It is necessary to provide specific goals for the PRIs that are monitorable by the community. Model bye-laws need to be framed so that the GPs, especially, have a set of rules that clarify their roles with respect to the basic public health services. The bye-laws should specify the obligations of the GPs and of the community. Development of a health plan and its implementation should be the focus of efforts of the GP.
- iv. The specific responsibility of different functionaries with respect to public health in the PRIs should be spelled out. Monitorable functions need to be specified at different levels. For example, the Health Committee of the ZP should examine the reports on water quality, disease incidence, sanitation conditions, food quality checks in its meetings. The District Health Officer should provide an assessment of the situation in relation to the past and indicate the likely scenario in the next three months. The same is true for the meetings at the TP and GP levels.
- v. Capacity-building: The PRI functionaries elected and the executive should attend sensitisation course each year. The necessary trained

- personnel should be employed directly or through intermediary agencies (such as NGOs) to implement the programmes relating to public health.
- vi. In order to make these roles/ functions practical, plans for resources need to be made. Private funds for public health purposes need to be mobilised to implement the monitorable plans.
 - vii. Village-level (GP) goals: Village health plans should be drawn up by the GPs that improve the local environment in a systematic manner. To begin with, these plans should contain a domestic waste disposal system; plans to remove water-logging conditions; build community-level public conveniences, organise 'clean village days' at least twice a year; organise vector-control programmes as per the schedule; ensure testing of water quality as per the schedule; produce a charter of citizen rights.

2. Enforcement of Public Health Laws

Assessment: The GPs are responsible for enforcing public health laws such as Anti-Food Adulteration Act (with laboratory support at the district level) at the GP level. But there is very little understanding of the implications of this responsibility at that level. There are no standard formats for the issuing of licence, no checks, no efforts to improve the quality. Actually, the GPs could insist on the condition that any new house/ building that is constructed should have adequate sanitation facilities. Such requirements should become part of the GP bye-laws, and the necessary instruments for the enforcement of obligations should be provided to the GPs by the state-level authorities.

Recommendations:

- i. The model bye-laws need to be framed for GPs, regarding sanitation and food safety. GPs should be encouraged to adopt bye-laws which meet the minimum requirements of these models.
- ii. Mechanisms to implement these obligations under the bye-laws need to be constantly reviewed and support mechanisms developed.

3. Discharging the GP-level obligations:

Assessment: The GP-level amenity committee is one forum to monitor public health conditions in the GP. By including health personnel in its deliberations, the GP should optimally use this forum. The GPs at present lack the necessary outreach to mobilise the community for public health programmes on a sustained basis and they may also not be a forum to provide a continuous interaction with the community. For example, the GP members who get elected may not be the best people to undertake tasks relating to public health. There is some experience with the water supply/sanitation

committees at the village level now. The weakness of these committees is said to be their inability to mobilise funds for the maintenance of the water supply systems.

Recommendation:

- i. The GP should form a Health Committee or a Health Club (an 'inclusive' organisation, especially taking women members), which would be a community organisation that has specific tasks assigned by the GP. In addition, the organisation should be free to carry out works relating to public health issues. For the tasks assigned by the GP, resources should be earmarked from its own resources. The community organisation should be encouraged to raise its own additional funds. Women should be given a special role in these organisations (if these are not exclusively for women). Health Clubs should pursue the implementation of the Health Plan for the village. There should be a 'Mahila Sabha' preceding the 'Gram Sabha'. All women voters in the village should be eligible to participate in the Mahila Sabha. The recommendations of the Mahila Sabha should be considered in the Gram Sabha.

4. Improving awareness of the need for better basic public health services

Assessment: There are no systematic efforts not to provide information for the community regarding the importance of water quality, sanitation, vector control, hygiene in public places, and, more importantly, how individuals and communities can act to improve the situation. There are some activities at the school level which sensitise the students regarding health, in general. There is a need to provide this information widely, intensively and in a sustained manner.

Recommendation:

- i. The department of health at the state level should plan an intensive and sustained programme of health education focusing on basic public health services. The mass media such as television and radio should be used intensively to sensitise communities on the need for their involvement and action. The state-level media/ messages should be translated into local-level messages. Women should be particularly targeted for the message. There should be an 'information-hub' on public health issues at the PHC level where information is available and where questions would be answered on matters relating to public health issues. Actually, there is a need to provide technical support for solving public health

related problems at the community level or even at the individual level. The state should go the extra mile to encourage people to take up public health work. Competitions should be organised for communities that encourage them to realise better local environment for themselves.

5. Mobilising Communities

Assessment: In the villages where there are externally aided programmes some institutional framework has been developed that provides for wider participation in the development programmes as in the case of Village Water Supply and Sanitation Committees. However, this is not a uniform approach throughout the state. Generally, the GPs are responsible for the maintenance and operation of the water supply systems and the sanitation efforts.

Recommendation:

- i. The community participation is lacking in sanitation efforts, in general. We have noted above the need for a village-level health plan that sets out the objectives of the GP in a definite time-frame. In a sense this would be the obligation of the GP to the community. Development of this plan should be a community-level activity. We have also noted the need for a community-level organisation. The 'Health Club' could be the agent which promotes and enables community mobilisation. The ZPs should institute village competitions based on the objective criteria relating to public health. The Maharashtra's Sant Gadge Baba campaign is a model that can be adapted (for details, see Annexure G).

6. Incentives for staff:

Assessment: At present, there are no incentives for better performance of staff that are involved in public health tasks. There may actually be disincentives because of low priority to public health services, in general.

Recommendation:

- i. The staff should be motivated to deliver the charter in the form of Health Plans. The staff assigned to public health tasks in the department will have considerable role in the proposed programme. This staff should have some distinctive uniform: a special cap/ a distinctive band around the arm. However, there are also other agencies involved. Those that are involved in public health services may be provided this distinctive identification with a service.

It is important, however, that the village-level/ PHC-level staff are particularly motivated. The staff at this level should be rewarded through community organisations. At the higher level, the staff from the

department of health should get recognition for their efforts, again through the assessment of performance of the community-level indicators. For example, performance of GPs in a TP or TPs in a ZP should be the criterion for evaluation of the taluk-level staff, or ZP-level staff of the department of health.

The staff should also have well-conducted motivational programmes at different levels. These programmes should provide training and motivation. The programmes may be conducted by a qualified NGO or private agencies based on specific MoUs.

7. Inter-sectoral coordination

Assessment: Various inter-sectoral forums exist at different levels in the PRI system, including the state level. These forums function effectively in response to outbreaks, but do relatively little to anticipate and avert outbreaks. To this end, they need to have on their routine agenda the task of reviewing the public health reports and discussion of measures needed to avert outbreaks.

Recommendation:

We suggest that these forums should be identified at the state, ZP, TP and the GP levels. At each administrative level, the Department of Rural Development and Panchayati Raj (RDPR) and the health department officials need to review the public health reports and discuss what actions are required. Where these actions fall outside their own purview, they need to insert specific agenda items in intersectoral meetings to request the other departments cooperation and action.

- i. The Disease Surveillance Committee at the state level should be made functional with the participation of secretaries from the departments of health, RDPR, agriculture, irrigation, etc.
- ii. At the ZP level, the meetings of the Health Committee should be attended by district-level officers from the above departments.
- iii. At the TP level, the meetings of the Standing Committee should get the participation of officers from the departments noted above;
- iv. At the GP level, the meetings of the Amenities Committee should have participation from relevant PHC and the School Committee;

In each case, specified reports should be in the agenda for discussion and action.

8. Developing a monitoring mechanism for basic Public Health Services

Assessment: At present, there are no systematic monitoring mechanisms to assess the working of the amenities/ facilities from the point of view of their impact on health. It is necessary to develop a systematic mechanism by which information is available to decision-makers to act and improve the situation.

Recommendation:

We propose a set of reports that provide an assessment of the state of basic public health services at the local level for decision-makers at different levels of PRI/ state government hierarchy.

- a) Health compliance reports by the PHCs: upon execution of the project
 During the implementation of any project, like water supply, toilet facilities or construction of drainage at the village level, the PHC sends a report on the project and its adverse impact on public health, if any. The CEO of the ZP may instruct the DHO with relevant information to get the compliance status report from PHCs. This report goes to DHO with copies to THO and GP. DHO informs CEO on the report with directions if remedial measures are needed. The remedial instructions should also be copied to PHC and GP. The CEO should direct the relevant department to get the problem remedied and get the compliance certificate from PHC. If the compliance certificate is not obtained, the project should be treated as incomplete. THO is expected to do a supervisory check on projects reported as having problems and discuss the findings with DHO in the monthly meetings and the DHO should take up the matter with CEO to find a solution if the problem persists. Separate file should be kept on new projects with health compliance difficulty for examination by higher authorities.
- b) Water quality reports: at specified regular intervals, e.g., every three months

The PHCs should send water test reports (bacterial contamination) to the THO. Every village should get the test done within this interval. If the test indicates contamination, remedial action should be indicated to the GP. THO should indicate the names of problem villages (contamination) to the DHO. The DHO should inform the CEO on problem cases immediately, and also ask for compliance with remedial measures through EO of TP. The water quality reports and the follow-up issues should be discussed in the Standing Committee on Health and Education of ZP. The ZP should release a press statement on the results of water quality tests. In case of

repeated quality problems in the same area, the CEO should organise a team with health department officials and engineering staff to deal with the problem. The GP with consistently good quality reports (6 months in a row) should be given a grant by the ZP to supplement its water supply maintenance budget (Rs 500 maximum, once in 6 months). Separate records should be kept on the villages with water quality problem for inspection by higher authorities at the ZP level.

c) Water adequacy reports: on the same schedule as the water quality reports

The GP should keep a record of the quantum of water supplied per day through the MWS and PWS schemes in a village. These reports should go to the TP (EO's office) and a compiled report (providing per capita supply) for the GPs where the supply is significantly lower than the norm should go to the DHO and the CEO. Remedial actions should be provided to the GPs in terms of better health measures. The water adequacy problems should be brought to the attention of ZP through the Health Committee meetings. The Health and Education Committee should provide a press statement on the adequacy of water.

d) Report on Standards of Environmental Hygiene: once in three months

The PHC should provide a report on environmental sanitation in the villages, indicating the conditions relating to:

- Roads/streets (cleanliness)
- Drains (whether flowing/ choked)
- Public places (market/ shops/ restaurants)
- Community toilets (cleanliness, availability of water)
- Garbage disposal

A rating scale should be developed and the report should go to the THO with a copy to the GP. The GP should develop remedial action in consultation with the TP. The THO should compile the findings and report to the DHO the problematic cases. The DHO should inform the CEO of the Zilla Panchayat and an action plan to be indicated to the GPs through TPs. Repeated problem cases need to be addressed through penalties. The Health Committee should discuss the environmental sanitation reports in the meetings. The Health and Education Committee should provide a press statement on the quality of environmental sanitation in the district every quarter. Higher officials should keep separate files on problem cases in the ZP for inspection. Top 3 GPs in a TP with consistent (at least twice in top 3 in 6 months in a row) good quality reports should be given a grant by the ZP to supplement its sanitation budget (Rs 500 maximum, once in 6 months).

e) Vector-control reports

A set of activities over the annual cycle needs to be specified to assure timely and smooth implementation of vector-control activities. Oversight and support of actual implementation also needs to be designed, and here we offer one possible design. PHCs should file vector-control reports every three months, specifying the actions they have taken, and the reasons for any short comings. This report should go to the THO with a copy to the GP. The problem cases should be reported by the THO to the DHO. The remedial measures are to be indicated by the DHO to the PHCs with a copy to EO and GP. Two successive failures to adhere to the norms should be reported to the CEO by DHO. The CEO should then get the necessary action to achieve a solution. The Health Committee should discuss the reports on vector-control activities in the regular meetings. The Health and Education Committee should provide a press statement on the vector-control activities in the district once in every three months. Higher officials should keep separate files at the ZP level on problem cases for inspection. The PHCs with consistently good performance over the one year period should receive recognition by the ZP in the form of a commendation letter.

f) Social audit reports

The GPs should get an audit of the services provided by them from the citizens every year. A survey should be conducted on the quality of services:

- Water supply: quality and quantity
- Drainage
- Streets
- Community toilets
- Compliance by citizens on: toilets, garbage disposal, payment of water charges
- Conditions in public places (markets/ restaurants/ slaughter houses)

An audit survey should be carried out and processed by the local school and the report given to the GP and PHC. The survey instruments should be designed by an independent agency and the schools should be trained in carrying out the survey and processing information. The PHC should forward the report to the TP. The TP should compile GP reports and send the names of the best 3 and the worst 3 GPs to the ZP. The ZP should recognise the best performance through a special monetary award to supplement the GP budget. The worst performers should be announced in a press statement. The Health and Education Committee should provide an

annual press statement on the social audit of water supply and sanitation status in the district.

9. Resources

Assessment: Resources provided for training, education, monitoring, social mobilisation in the area of basic public health services from the viewpoint of promoting healthcare need to be augmented, and attention needs to be paid to making their use much more effective. This is one of the major failures of policy. A realistic assessment needs to be made and strategies to provide and utilise these resources should be put in place.

Recommendation:

We propose a step-by-step approach in the strategy for resources. The mass education programme has to be extensive, intensive and sustained. However, mere education may not be effective. Therefore, some activities are needed. Clean Village Campaigns with the support of the Health Clubs would have to be organised. Training for the health staff is essential. Sensitisation of the PRIs is essential. So are the facilities for testing water quality.

The resources for these activities should be provided from a special fund for improving public health services with contributions from the government, community and the Centre. Clear guidelines need to be established for the use of these resources, and for assuring maximum effectiveness in the operation of the funds.

10. An Overall Strategy

Assessment: There are a number of initiatives in different contexts today in development efforts in the state that have an implication to public health outcomes. One key weakness today is the lack of strategy that optimises the impact on public health.

Recommendation:

From the viewpoint of PRIs which have been charged with the responsibility of providing these services, they need to develop an overall strategy in this context. The initiatives in terms of improving awareness, putting to work specific schedule of tasks on a routine basis, achieving community participation in the programmes would be very critical to instil a strong sense of urgency in this area. However, a sense of urgency cannot be expected to be maintained over a long period of time. Therefore, every effort must be made to build the implementation and monitoring of these activities into the routine functioning of the PRIs.

5.2. Recommendations Relating to Specific Services

In the section above, we noted the assessment of the current scenario and have made recommendations on the overall institutional framework and mechanisms to improve the delivery of the preventive, population-based public health services in the rural areas. We now present a few important recommendations that are specific to the selected services. A detailed set of suggestions/ recommendations pertaining to organisational, functional and managerial aspects have been listed in the previous chapter.

Drinking Water Supply

- i. The state health or the rural engineering/public health engineering department should take the lead in the development, issue and communication of standards of quality of drinking water to districts and lower level agencies. All the concerned from the state level to the village level should be made aware of these standards.
- ii. Legal measures for the protection of water source: The Gram Panchayat should prohibit washing, bathing, defecation near drinking water sources to prevent their contamination.
- iii. Regular surveillance of water quality requires regular sanitary surveys and testing of water for chemical or biological contamination as well as a functioning networked infrastructure down to the level of the village. It is not necessary to set up exclusive laboratory for water quality testing, but laboratories created under different departments may be specified for this purpose in different locations.
- iv. The department of health should provide evaluations of the quality of service to both service providers as well as general public through regular, periodic reports. Regular communication of the status of water quality-both bacteriological and chemical-by the department concerned to all the stakeholders concerned should be followed.
- v. External quality assurance: The evaluation of quality of service should be carried out by regular user surveys as well as independent assessments.
- vi. The relevant department at the state level should regularly organise courses on water quality surveillance for different-level personnel, including the water men hired by the panchayats.

Sanitation Services

Success on the sanitation front has been much less than that in the provisioning of drinking water.

- i. The designated nodal agency for supporting the panchayats in the provision of sanitation services should develop and implement a framework for assuring service delivery. Where needed, it should commission the development of appropriate sanitation technology and supply other technical support for the district agencies.
 - a. Developing and adapting the guidelines/standards for sanitation technology and enforcing it strictly through the GP.
 - b. Providing a revolving fund at the level of the state government from where the district authorities can borrow if needed.
- ii. The GP should discuss the issue in the Gram Sabha (should be a forum of an IEC) and should develop a community monitoring system to reduce the practice of open-air defecation. The GP may constitute some community-level committees in the Gram Sabha, if need be. The Gram Panchayats should ensure both community participation and community obedience in the programme-open field defecations are punished with a fine.
- iii. The zilla parishad should assign the task of monitoring and evaluation of the programme to the health department and should review the action plan and progress of the programme in its regular meetings.
- iv. Abolish subsidies or financial incentives for the construction of latrines. The revolving loan at the level of the GP may be constituted from its own income, community contributions, and initial base capital provided by the Zilla Panchayat based on the assistance provided by the state government.

Vector Control

- i. Establishing clear institutional and organisational responsibilities for different activities for vector control: The PRIs should play a lead role in vector control. The Health and Education Committee of the ZP and Amenities Committee of the GP should set clear targets based on the recommendations of the relevant health authorities.
- ii. Establishment of integrated epidemiological surveillance units at the district level covering both private and public providers for all mosquito-borne diseases. This would constitute part of the broader disease surveillance programme of the Central government.
- iii. An integrated vector-control programme, designed and implemented by the state government for all the major vector-borne diseases. Thus, the entomological personnel and expertise, material and money, already available in the districts but which are fragmented due to vertical

restrictions, will be brought together, in a streamlined manner. This will result in better effectiveness and efficiency in controlling all mosquito-borne infectious diseases.

iv. Entomological capacity needs to be greatly enhanced by filling vacancies with qualified personnel and making regular entomological surveillance a crucial component of epidemiological surveillance strategies at all levels. In addition, trained labour needs to be developed for carrying out spraying and fogging activities, as the field visits reveal that these activities are carried out most of the time by untrained contractual labour.

Surface Water Drainage

- i. Community mobilisation and education: The Gram Panchayats should use the institutions of Gram Sabha, Ward Sabha and, more importantly, the village-level organisations that it may form (Health Clubs) to inform the community about the need for community participation in the proper maintenance of the drains.
- ii. Model bye-laws need to be developed with provisions on both in-house drainage and for the maintenance of community drains, and panchayats should adopt bye-laws which meet at least the minimum requirements of these model bye-laws. This will give legal backup to the panchayats to ensure community compliance for the maintenance of community drains.

Solid Waste Disposal

- i. Rural local bodies are best positioned to be responsible for this job. The State Department of Rural Development and Panchayati Raj should develop a written policy on solid waste disposal in rural areas in consultation with the technical services (department of health), rural local bodies and community groups. The policy should clearly lay down the guidelines that should be followed by the local bodies, and associated model bye-laws for adoption by rural local bodies.
- ii. House-to-house collection system: Though a house-to-house collection system is currently being proposed and tested in urban areas, the system may work equally well in some large, densely populated villages. In most villages, people can also take their waste to the designated village waste disposal sites.
- iii. The solid waste disposal is a public good; non-compliance by a few community members may endanger the health of others. Hence, community mobilisation is extended for the effective delivery of this

service. The community mobilisation may take the form of organisation of weekly village cleanliness days, etc. In large villages, the communities may be involved in primary collection of refuse from houses, which may be followed by secondary collection by the Panchayats.

The recommendations summarised above, though comprehensive, remain less clear on the question of providing institutional mechanisms to ensure accountability of the service providers on the quality of service. Some institutional innovations are necessary to deal with this issue. The issue of food safety is another area where more specific recommendations are difficult, except to point out that the current system of licensing food vendors and food handlers is extremely weak because of inadequate training and mechanisms for monitoring. A system of self-certification combined with monitoring and significant penalty for non-compliance of standards should be provided in the comprehensive Public Health Act. PRIs will have a major role in the implementation of the Public Health Act.

Our observations from Karnataka indicate that the PRIs can play a positive role in improving public health amenities and services. Being closer to the people, they are in a better position to understand the local requirements and preferences of the people. Many GPs have already initiated measures to improve the quality of water supply and sanitation. The crucial aspect here is community participation. This, to a certain extent, depends on awareness creation. It is necessary to orient the PRI members about their roles and responsibilities in providing better public health services as well as the need for assigning top priority to health issues among the activities of the PRIs. The coordination mechanism between the line departments and the PRIs still remain ambiguous in many respects, and there is a need to evolve administrative procedures for better and effective coordination. Given its reasonably good track record in the decentralisation of power, authority and finances, Karnataka provides a good opportunity for the PRIs to demonstrate their capability in improving public health service delivery for the benefit of all. This, to a great extent, depends on the cooperation, coordination and mutual trust between health bureaucracy and panchayat leadership.

Annexure A:

Study Methodology

The situation analysis and recommendations in this monograph are based on a detailed literature review on the subject, observations of the actual service delivery in the field and interviews with the officials at different administrative levels (state, district, and Gram Panchayats) in Karnataka. In addition, field visits were made to Maharashtra to understand the population-based service delivery and, particularly, the total sanitation campaign.

Literature review involved review of all the GOI and the state of Karnataka publications, recommendations of previous task forces constituted for health services, publications on the delivery of population-based health services in other countries.

Discussions in Karnataka were undertaken with the State Health Department, State Rural Engineering Department, State Rural Development and Panchayati Raj Department, State Public Health Laboratory, Karnataka Health Systems Development Project, and Karnataka Water Supply and Sewerage Board. Within each department, qualitative semi-structured interviews were conducted with the key functionaries at different levels. For example, in the Department of Health, interviews were conducted with the Principal Secretary, (Health), Commissioner of Health, Director of Health Services, Joint Director (IEC), Joint Director (Malaria and Filariasis). Similarly, in the Department of Rural Engineering, interviews were conducted with Superintendent Engineer (Rural Engineering) and Deputy Directors. In each department, efforts were made to examine different types of records-e.g., for human resources, the job descriptions for different employees; in IEC, any IEC plan, budget documents, etc; and in case of malaria, the results of disease surveillance, and the laboratory maintained by the department.

At the district level, field visits were undertaken in two districts-Raichur and Tumkur in Karnataka. Within each district, two taluks and four gram panchayats were visited. Direct observations were made on the service delivery by examining the laboratory facilities, records of disease surveillance, etc. Field visits were also carried out in selected Gram Panchayats and Taluk Panchayats of Mysore district to understand the functioning of Standing Committees of PRIs. Detailed discussions were held with the CEOs of Zilla Panchayats, elected representatives at ZP, TP and GP levels and functionaries of health department.

The State-level standing committee for the study held its meeting once in every six months to review and discuss the results and recommendations.

Annexure: B**Extracts from the National Policy Documents of Government of India***Role of Local Self-Government Institutions*

"NHP-2002 lays great emphasis upon the implementation of public health programmes through local self-government institutions. The structure of the national disease control programmes will have specific components for implementation through such entities. The Policy urges all State Governments to consider decentralizing the implementation of the programmes to such Institutions by 2005. In order to achieve this, financial incentives, over and above the resource normatively allocated for disease control programmes, will be provided by the Central Government".

- National Health Policy-2002.

Decentralised Planning and Programme Implementation

"The 73rd and 74th Constitutional Amendment Acts, 1992, made health, family welfare, and education a responsibility of village panchayats. The panchayati raj institutions are an important means of furthering decentralised planning and programme implementation in the context of the NPP-2000. However, in order to realise their potential, they need strengthening by further delegation of administrative and financial powers, including powers of resource mobilisation. Further, since 33 per cent of the elected panchayat seats are reserved for women, representative committees of the panchayats (headed by an elected woman panchayat member) should be formed to promote a gender-sensitive, multi-sectoral agenda for population stabilisation that will "think, plan and act locally, and support nationally". These committees may identify area-specific unmet needs for reproductive health services, and prepare need-based, demand-driven, socio-demographic plans at the village level, aimed at identifying and providing responsive, people-centered and integrated, basic reproductive and child healthcare. Panchayats demonstrating exemplary performance in the compulsory registration of births, deaths, marriages and pregnancies, universalising the small family norm, increasing safe deliveries, bring about reductions in infant and maternal mortality, and promoting compulsory education up to age 14, will be nationally recognised and honoured".

- National Population Policy-2000.

Annexure: C**Healthcare Workforce and Health Facilities in Public and Private Sectors in India.**

Indicator and measure	Value
Doctors	
Total number (1998) (includes all systems) (CBHI)	1,109,853
Population per Doctor	880
Percentage of doctors in rural areas (1981) (census)	41
Percentage of all doctors in private sector (estimated)	80-85
Nurses	
Total number (1996)	867,184
Population per nurse	976
Doctor per nurse (1996)	1.4
Hospitals	
Total Number (1996)	15,097
Population per hospital	56,058
Percentage of hospital in private sector	68
Estimated total number of hospitals	71,860
Estimated population per hospital	11,744
Estimated percentage of hospitals in private sector	93
Hospital beds	
Total number (1996) (CBHI)	623,819
Population per hospital bed	1,357
Percentage of beds in rural areas	21
Percentage of beds in Private sector	37
Estimated total number of beds	1,217,427
Estimated population per bed	693
Percentage of beds in private sector	64
PHCs	
Total number	22,975
Rural population per PHC	27,364

Note: PHCs-primary health centres. The estimate for manpower is based on Medical Council lists. The estimate for the number of hospitals and beds are based on the extent of underestimation in government (Central Bureau of Health Intelligence (CBHI) data found in Andhra Pradesh in a 1993 census of all hospitals by the Director of Health Services and the Andhra Pradesh Vaidya Vidhan Parishad; they found 2,802 hospitals and 42,192 hospital beds in the private sector in Andhra Pradesh as against only 266 hospitals and 11,103 beds officially reported by CBHI in that year. Thus, compared with the official (CBHI) data, the number of private hospital was larger by a factor of 10.5, and the number of beds by a factor of 3.8.

Source: as cited by Peters et al (2002).

Annexure D**Eleventh Schedule of 73rd Amendment Act
(Article 243G)**

1. Agriculture, including agricultural extension.
2. Land improvement, implementation of land reforms, land consolidation and soil conservation.
3. Minor irrigation, water management and watershed development.
4. Animal husbandry, dairying and poultry.
5. Fisheries.
6. Social forestry and farm forestry.
7. Minor forest produce.
8. Small-scale industries, including food-processing industries.
9. Khadi, village and cottage industries.
10. Rural housing.
11. Drinking water.
12. Fuel and fodder.
13. Roads, culverts, bridges, ferries, waterways and other means of communication.
14. Rural electrification, including distribution of electricity.
15. Non-conventional energy sources.
16. Poverty alleviation programme.
17. Education, including primary and secondary schools.
18. Technical training and vocational education.
19. Adult and non-formal education.
20. Libraries.
21. Cultural Activities.
22. Markets and fairs.
23. Health and sanitation, including hospitals, primary health centres and dispensaries.
24. Family welfare.
25. Women and child development.
26. Social welfare, including welfare of the handicapped and mentally retarded.
27. Welfare of the weaker sections and in particular, of the Scheduled Castes and the Scheduled Tribes.
28. Public distribution system.
29. Maintenance of community assets.

Annexure E**SCHEDULES - I, II, and III (Karnataka Panchayati Raj Act, 1993)****SCHEDULE - I (Gram Panchayat)****I. General Functions:**

- (1) Preparation of annual plans for the development of the Panchayat area.
- (2) Preparation of annual budget.
- (3) Providing reliefs in natural calamities.
- (4) Removal of encroachments on public properties.
- (5) Organising voluntary labour and contribution for community works
- (6) Maintenance of essential statistics of the villages.

II. Agriculture, including Agricultural Extension:

- (1) Promotion and development of agriculture and horticulture.
- (2) Development of waste lands.
- (3) Development and maintenance of grazing lands and preventing their unauthorised alienation and use.

III. Animal Husbandry, Dairying and Poultry:

- (1) Improvement of breed of cattle, poultry and other live-stock.
- (2) Promotion of dairy farming, poultry and piggery.
- (3) Grassland development.

IV. Fisheries:

Development of fisheries in the villages.

V. Social and Farm Forestry, Minor Forest Produce, Fuel and Fodder:

- (1) Planting and preservation of trees on the sides of roads and other public lands under its control.
- (2) Fuel plantations and fodder development.
- (3) Promotion of farm forestry.
- (4) Development of social forestry.

VI. Khadi, Village and Cottage Industries:

- (1) Promotion of rural and cottage industries.
- (2) Organisation of conferences, seminars and training programmes, agricultural and industrial exhibitions for the benefit of the rural areas.

VII. Rural Housing:

- (1) Distribution of house sites within Grama thana limits.
- (2) Maintenance of records relating to the houses, sites and other private

and public properties.

VIII. Drinking Water:

- (1) Construction, repairs and maintenance of drinking water wells, tanks and ponds.
- (2) Prevention and control of water pollution.
- (3) Maintenance of rural water supply schemes.

IX. Roads, Buildings, Culverts, Bridges, Ferries, Waterways and other means of Communication:

- (1) Construction and maintenance of village roads, drains and culverts.
- (2) Maintenance of buildings under its control or transferred to it by the Government or any public authority.
- (3) Maintenance of boats, ferries and waterways.

X. Rural Electrification, including Distribution of Electricity:

- (1) Providing for and maintenance of lighting of public streets and other places.

XI. Non-Conventional Energy Source:

- (1) Promotion and development of non-conventional energy schemes.
- (2) Maintenance of community non-conventional energy devices, including bio-gas plants.
- (3) Propagation of improved chullahs and other efficient energy devices.

XII. Poverty Alleviation Programmes:

- (1) Promotion of public awareness and participation in poverty alleviation programmes for fuller employment and creation of productive assets, etc.
- (2) Selection of beneficiaries under various programmes through Gram Sabhas.
- (3) Participation in effective implementation and monitoring.

XIII. Education, including Primary and Secondary Schools:

- (1) Promotion of public awareness and participation in primary and secondary education.
- (2) Ensuring full enrollment and attendance in primary schools.

XIV. Adult and Non-Formal Education:

Promotion of adult literacy.

XV. Libraries:

Village libraries and reading rooms.

XVI. Cultural Activities:

Promotion of social and cultural activities.

XVII. Markets and Fairs:

Regulation of fairs (including cattle fairs) and festivals.

XVIII. Rural Sanitation:

- (1) Maintenance of general sanitation.
- (2) Cleaning of public roads, drains, tanks, wells and other public places.
- (3) Maintenance and regulation of burning and burial grounds.
- (4) Construction and maintenance of public latrines.
- (5) Disposal of unclaimed corpses and carcasses.
- (6) Management and control of washing and bathing ghats.

XIX. Public Health and Family Welfare:

- (1) Implementation of family welfare programmes.
- (2) Prevention and remedial measures against epidemics.
- (3) Regulation of sale of meat, fish and other perishable food articles.
- (4) Participation in programmes of human and animal vaccination.
- (5) Licensing of eating and entertainment establishments.
- (6) Destruction of stray dogs.
- (7) Regulation of curing, tanning and dyeing of skins and hides,
- (8) Regulation of offensive and dangerous trades.

XX. Women and Child Development:

- (1) Participation in the implementation of women and child welfare programmes.
- (2) Promotion of school health and nutrition programmes.

XXI. Social Welfare, including Welfare of the Handicapped and Mentally Retarded:

- (1) Participation in the implementation of the social welfare programmes, including welfare of the handicapped, mentally retarded and destitute.
- (2) Monitoring of old-age and widow pension schemes.

XXII. Welfare of the Weaker Sections and in Particular the Scheduled Castes and Scheduled Tribes:

- (1) Promotion of public awareness with regard to welfare of Scheduled Castes, Scheduled Tribes and other weaker sections.
- (2) Participation in the implementation of the specific programmes for the welfare of the weaker sections.

XXIII. Public Distribution System:

- (1) Promotion of public awareness with regard to the distribution of essential commodities.
- (2) Monitoring the public distribution system.

XXIV. Maintenance of Community Assets:

- (1) Maintenance of community assets.
- (2) Preservation and maintenance of other community assets.

XXV. Construction and Maintenance of Dharmashalas, Chatras and similar institutions.**XXVI. Construction and Maintenance of Cattle Sheds, Pounds and Cart-Stands.****XXVII. Construction and Maintenance of Slaughter Houses.****XXVIII. Maintenance of Public Parks, Playgrounds etc.****XXIX. Regulation of Manure Pits in Public Places.****XXX. Establishment and Control of Shandies.****XXXI. Such other functions as may be entrusted.****SCHEDULE - II****(Taluk Panchayat)****I. General Functions:**

- (1) Preparation of Annual Plans in respect of the schemes entrusted to it by virtue of the Act and those assigned to it by the Government or the Zilla Panchayat and submission thereof to the Zilla Panchayat within the prescribed time for integration with the District Plan.
- (2) Consideration and consolidation of Annual Plans of all Gram Panchayats in the Taluk and submission of the consolidated plan to the Zilla Panchayat.
- (3) Preparation of Annual budget of the taluk and its submission within the prescribed time to the Zilla Panchayat.
- (4) Performing such functions and executing such works as may be entrusted to it by the Government or the Zilla Panchayat.
- (5) Providing relief in natural calamities.

II. Agriculture, including Agricultural Extension:

- (1) Promotion and development of agriculture and horticulture.
- (2) Maintenance of agricultural seed farms and horticultural nurseries.
- (3) Storing and distribution of insecticides and pesticides.
- (4) Propagation of improved methods of cultivation.
- (5) Promotion of cultivation and marketing of vegetables, fruits and flowers.
- (6) Training of farmers and extension activities.

III. Land Improvement and Soil Conservation:

Assisting the Government and the Zilla Panchayat in the implementation of land improvement and soil conservation programmes of the Government.

IV. Minor Irrigation, Water Management and Watershed Development:

- (1) Assisting the Government and Zilla Panchayat in the construction and maintenance of minor irrigation works.
- (2) Implementation of community and individual irrigation works.

V. Animal Husbandry, Dairying and Poultry:

- (1) Maintenance of veterinary and animal husbandry services.
- (2) Improvement of breed of cattle, poultry and other live-stock.
- (3) Promotion of dairy farming, poultry and piggery.
- (4) Prevention of epidemics and contagious diseases.

VI. Fisheries:

Promotion of fisheries development.

VII. Khadi, Village and Cottage Industries:

- (1) Promotion of rural and cottage industries.
- (2) Organisation of conferences, seminars and training programmes, agricultural and industrial exhibitions.

VIII. Rural Housing:

Implementation of housing schemes and distribution of house sites in villages outside Grama thana limits.

IX. Drinking Water:

- (1) Establishment, repairs and maintenance of rural water supply schemes.
- (2) Prevention and control of water pollution.
- (3) Implementation of rural sanitation schemes.

X. Social and Farm Forestry, Minor Forest Produce, Fuel and Fodder:

- (1) Planting and preservation of trees on the sides of roads and other public lands under its control.
- (2) Fuel plantation and fodder development.
- (3) Promotion of farm forestry.

XI. Roads, Buildings, Bridges, Ferries, Waterways and other means of Communication:

- (1) Construction and maintenance of public roads, drains, culverts and other means of communication which are not under the control of any other local authority or the Government.
- (2) Maintenance of any building or other property vested in the Taluk Panchayat.
- (3) Maintenance of boats, ferries and waterways.

XII. Non-Conventional Energy Sources:

Promotion and development of non-conventional energy sources.

XIII. Poverty Alleviation Programmes:

Implementation of poverty alleviation programmes.

XIV. Education, including Primary and Secondary Schools:

- (1) Promotion of primary and secondary education.
- (2) Construction, repair and maintenance of primary school buildings.
- (3) Promotion of social education through youth clubs and mahila mandals.

XV. Technical Training and Vocational Education:

Promotion of rural artisan and vocational training.

XVI. Adult and Non-Formal Education:

Implementation of Adult Literacy.

XVII. Cultural Activities:

Promotion of social and cultural activities.

XVIII. Markets and Fairs:

Regulation of fairs and festivals.

XIX. Health and Family Welfare:

- (1) Promotion of health and family welfare programmes.
- (2) Promotion of immunisation and vaccination programmes.
- (3) Health and sanitation at fairs and festivals.

XX. Women and Child Development:

- (1) Promotion of programmes relating to development of women and children.
- (2) Promotion of school health and nutrition programmes.
- (3) Promotion of participation of voluntary organisations in women and child development programmes.

XXI. Social Welfare, including Welfare of the Handicapped and Mentally Retarded:

- (1) Social welfare programmes including welfare of handicapped, mentally retarded destitutes.
- (2) Monitoring the old-age and widow pensions and pensions for the handicapped.

XXII. Welfare of the weaker sections and in particular, of the Scheduled Castes and Scheduled Tribes:

- (1) Promotion of welfare of Scheduled Castes, Scheduled Tribes and other weaker sections.
- (2) Protecting such castes and classes from social injustice and exploitation.

XXIII. Maintenance of Community Assets:

- (1) Maintaining all community assets vested in it or transferred by the Government or any local authority or organisation.
- (2) Preservation and maintenance of other community assets.

XXIV. Public Distribution System:

Distribution of essential commodities.

XXV. Rural Electrification:

Promotion of rural electrification

XXVI. Co-operation:

Promotion of co-operative activities.

XXVII. Libraries:

Promotion of libraries.

XXVIII. Such other functions as may be entrusted.

SCHEDULE - III**(Zilla Panchayat)****I. General Functions:**

Overall supervision, co-ordination and integration of development schemes at Taluk and District levels and preparing the plan for the development of the district.

II. Agriculture (including Agricultural Extension) and Horticulture:

- (1) Promotion of measures to increase agricultural production and to popularise the use of improved agricultural implements and the adoption of improved agricultural practices.
- (2) Opening and maintenance of agricultural and horticultural and commercial farms.
- (3) Establishment and maintenance of godowns.
- (4) Conducting agricultural fairs and exhibitions.
- (5) Management of agriculture and horticultural extension and training centres.
- (6) Training of farmers.

III. Land Improvement and Soil Conservation:

Planning and implementation of land improvement and soil conservation programmes entrusted by the Government.

IV. Minor Irrigation, Water Management and Watershed Development:

- (1) Construction, renovation and maintenance of minor irrigation works.
- (2) Providing for the timely and equitable distribution and full use of water under irrigation schemes under the control of the Zilla Panchayat.
- (3) Watershed development programmes.
- (4) Development of groundwater resources.

V. Animal Husbandry, Dairying and Poultry:

- (1) Establishment and maintenance of taluk and village veterinary hospitals, first-aid centres and mobile veterinary dispensaries.
- (2) Improvement of breed of cattle, poultry and other livestock.
- (3) Promotion of dairy farming, poultry and piggery.
- (4) Prevention of epidemics and contagious diseases.

VI. Fisheries:

- (1) Development of fisheries in irrigation works vested in the Zilla Panchayat.
- (2) Promotion of inland, brackish water and marine fish culture.

(3) Implementation of fishermen's welfare programmes.

VII. Khadi, Village and Cottage Industries:

- (1) Promotion of rural and cottage industries.
- (2) Establishment and management of training-cum-production centres.
- (3) Organisation of marketing facilities for products of cottage and village industries.
- (4) Implementation of schemes of State Boards and All-India Boards and Commissions for development of rural and cottage industries.

VIII. Small-Scale Industries including Food-Processing Industries:

Promotion of small-scale industries.

IX. Rural Housing:

Promotion of rural housing programme.

X. Drinking water:

Promotion of drinking water and rural sanitation programmes.

XI. Minor Forest Produce and Fuel and Fodder:

- (1) Promotion of social and farm forestry fuel plantation and fodder development.
- (2) Management of minor forest produce of the forests raised in community lands.
- (3) Development of wasteland.

XII. Roads, Buildings, Bridges, Forest Waterways and other means of Communications:

- (1) Construction and maintenance of district roads and culverts, causeways and bridges (excluding State Highways and village roads).
- (2) Construction of administrative and other buildings in connection with the requirements of the Zilla Panchayat.

XIII. Non-Conventional Energy Sources:

Promotion and development of non-conventional energy sources.

XIV. Poverty Alleviation Programmes:

Planning, supervision and monitoring the implementation of poverty alleviation programmes.

XV. Education, including Primary and Secondary Schools:

- (1) Promotion of educational activities in the district, including the establishment and maintenance of primary and secondary schools.
- (2) Establishment and maintenance of ashram schools and orphanages.

- (3) Survey and evaluation of education activities.

XVI. Technical Training, and Vocational Education:

- (1) Establishment and maintenance of rural artisan and vocational training centres.
- (2) Encouraging and assisting rural vocational training centres.

XVII. Adult and Non-formal Education:

Planning and implementation of programmes of adult literacy and non-formal education programmes.

XVIII. Markets and Fairs:

Regulation of important fairs and festivals in the district.

XIX. Health and Family Welfare:

- (1) Management of hospitals and dispensaries under the management of Government or authority.
- (2) Implementation of maternity and child health programmes
- (3) Implementation of family welfare programmes.
- (4) Implementation of immunisation and vaccination programmes.

XX. Women and Child Development:

- (1) Promotion of programmes relating to development of women and children.
- (2) Promotion of school health and nutrition programmes.
- (3) Promotion of participation of voluntary organisations in women and child development programmes.

XXI. Social Welfare, including Welfare of the Handicapped and Mentally Retarded:

Promotion of social welfare programmes, including welfare of handicapped, mentally retarded and destitute.

XXII. Welfare of the weaker sections and in particular of the Scheduled Castes and Scheduled Tribes:

- (1) Promotion of educational, economic, social, cultural and other interests of the Scheduled Castes, Scheduled Tribes and Backward Classes.
- (2) Protecting such Castes, Tribes and Classes from social injustice and all forms of exploitation.
- (3) Establishment and management of hostels of such Castes, Tribes and Classes.
- (4) Supervision and management of hostels in the district, distribution of grants, loans and subsidies to individuals and other schemes for the

welfare of Scheduled Castes, Scheduled Tribes and Backward Classes.

XXIII. Maintenance of Community Assets:

- (1) Maintenance of community assets vested in it or transferred to it by the Government or any local authorities or organisation.
- (2) Assisting the Government in the preservation and maintenance of other community assets.

XXIV. Cultural Activities:

Promotion of social and cultural activities.

XXV. Public Distribution System:

XXVI. Rural Electrification:

XXVII. Co-operation:

Promotion of co-operative activities.

XXVIII. Libraries:

Promotion of libraries.

XXIX. Such other functions as may be entrusted.

Annexure F**Forum for Inter-Sectoral Coordination**

Name of the committee	Prevailing monitoring system in PRIs
Ward Sabha, Section (3) of KPR Act (Amendment) 2003	As per the latest amendments to the KPR Act, 'Ward Sabha' is the body of voters in a Panchayat constituency of a G.P., meets once in six months, presided over by a member of the G.P. elected from the constituency. Mobilise labour or contribute in cash or kind for development works. Must report any outbreak of diseases to GP and concerned authorities. Assist the GP in sanitation arrangements and removal of garbage.
Grama Sabha, Section (3A)	Meets once in six months. Presided over by the Adhyaksha of the Gram Panchayat a minimum of 100 members is the quorum to encourage/ensure that a large number of voters take part in the affairs of the Gram Sabha. Approves the Action Plan of the GP under various programmes such as cleanliness, sanitation arrangements and protection of public health and impart awareness.
Grama Panchayat Meeting, Section (58)	Now meets 'once in a month'. Presided over by the President of the GP, 'one-half' of the members being quorum to ensure greater participation of the members in GP meetings. All activities specified in the Schedule I obligatory – maintenance of public streets, providing sanitation and drainage system, maintenance of water supply schemes, household latrines and community latrines, filling-up in sanitary depressions and netlaning unhealthy localities, immunisation programme. Standing Committee on Amenities reviews functions relating to public health.
Taluk Panchayat Executive Officer	The Executive Officer of the Taluk Panchayat convenes the meeting of all the Secretaries of the GPs every fortnight. The objective is to review the progress achieved in the various development programmes, regarding housing, school enrolment, sanitary latrines etc.
Taluk Panchayat Standing Committee	The General Standing Committee performs functions relating to village extensions, water supply and as residuary matters, health also. The Vice-President is the chairperson.
Taluk Panchayat KDP Meeting - Monthly	KDP meeting of the Taluk Panchayat is held every month with the President of the GPs. All Taluk level Officers attend including Chairpersons of the Standing Committees.
Taluk Panchayat KDP Meeting- Quarterly	KDP meeting of the Taluk presided over by the MLA, and all the Taluk level Officers attend. Resolutions are

	passed to draw the attention of the ZP or concerned District Heads with regard to problems of departments, like sanction not being received etc.
General Body Meeting of the Taluk Panchayat	Meets once in two months. Reviews all the functions performed by the Taluk level Officers in respect of schemes/ programmes. All the MLAs, MLCs, subject to certain conditions, attend the meetings.
Zilla Panchayat Meeting	The CEO convenes the meetings of all the EOs and District level Officers once in a month to review in detail the implementation of all schemes. The Department heads like the Engineering (water supply), Health are also called for reviewing specific performance, or deficiency of services, pointed out in the General Body Meetings.
Standing Committee on Education and Health	The Chairperson of the Standing Committee presides over the meeting. All Officers of the Departments concerned with the subject matters on the Agenda attend. Discussions are specific, detailed and generalities are avoided. In fact, in the General Body meeting of the ZP, the proceedings of the Standing Committees are proposed for approval by the chairperson or members of the Committee.
General Body Meetings	Held once in two months, is presided over by the Adhyaksha. All District Officers, Taluk Panchayat Adhyakshas, MLAs, MPs, MLCs (subject to certain conditions) attend the meeting. Action plans, review of specific performance by any department. Action taken report are critically reviewed.
Monthly KDP/Meeting	The President of the ZP presides over the meeting with all the Standing Committee chairpersons and District Officers attending (20 point programme review).
KDP Quarterly	Once in a quarter, presided over by the Minister-in-charge of the District.

Annexure G

Guidelines of Gadge Baba Campaign in Maharashtra

Guidelines for the Implementation of Sant Gadge Baba Village Sanitation Campaign and Rashtra Sant Tukodji Maharaj Clean Village Competition²

(Extracts from the Government Circular)

It has been decided to implement Sant Gadge Baba Gram Swachhata Abhiyan from 2nd October to 17th October, 2000. Those Gram Panchayats which will actively participate in the Campaign shall be awarded cash prizes, which will go to first 3 Gram Panchayats from each district, and one Gram Panchayat, which will be declared as the cleanest in the State. The prizes will be given in the name of Rashtra Sant Tukodji Maharaj. The Chief Executive Officer (CEO) of Zilla Parishad (ZP) should give wide publicity to the Campaign. It should be ensured that all the Gram Panchayats in the district implement this Campaign. During the monthly meeting of Gram Panchayat, the objective of the Village Sanitation Campaign should be explained.

Meeting of the Gram Sabha shall be organised in each Gram Panchayat. The CEO/ BDO should make arrangements to depute a special officer from ZP or Panchayat Samiti to attend the meeting of the Gram Sabha. Village Sanitation Campaign Committee should be constituted in the Gram Sabha. This Committee may include Sarpanch, Upa-Sarpanch, representatives of Mahila Mandal, Yuvak Mandal, members of Gram Shikshan Sudhar Samiti, representatives of Ex-Servicemen, backward classes, opinion leaders in the village, Government Servants at the village level, Anganwadi Sevika, students' representative, Primary and Secondary school teachers, Social Workers, other village- level institutions, etc. The members of the above Committee shall be selected in Gram Sabha. The Gram Sabha may also appoint a dynamic, hard-working person as the Chairman of the Committee. ZP Office-bearers, PS Office-bearers, CEO, District Heads, BDO and other Officers and employees at the taluka level should visit villages during the Campaign period and should guide and encourage Village Sanitation Campaign Committee to participate whole-heartedly in the programme.

The members in each of the Committees shall be in accordance with the Government Resolution. It shall be the responsibility of the officers at village, Panchayat Samiti and district level to ensure that the work of Village Sanitation Campaign shall be continued vigorously by the Gram Panchayats found to be eligible for the competition.

ZP Councillors' Constituency-Level Selection Samiti - Firstly, ZP Councillors-Level Samiti shall visit all the Gram Panchayats in that constituency and shall

² Source: Circular No. Campaign-2000/CR-427/WS-16, dated 16th September 2000, Water Supply and Sanitation Department, Government of Maharashtra, Mantralaya, Mumbai

evaluate the work done under the Village Sanitation Campaign. The evaluation of Gram Panchayats in ZP Councillors' Constituency shall be done by ZP Councillors' Constituency-level Committee constituted from the members selected from PS area other than the one in which GPs to be inspected are falling. It should be ensured by the CEO that cross-evaluation shall not be done under any circumstance. If all the Blocks are not ICDS Blocks or post of Mukhya Sevika is vacant, then the CEO may make arrangement for making the appointment of any other Mukhya Sevika from other area. CEO, ZP, should make arrangements for a vehicle for the inspection visits of the Committees. Village- Level Sanitation Committee shall submit the information of the work done to the Selection Committee. The Selection Committee shall allot marks. The Committee should declare the names of first 3 GPs chosen from each ZP Councillors' Constituency in a meeting of the Prabhag Samiti of that ZP Constituency specially held for the purpose and should then submit the evaluation report to CEO and BDO.

Panchayat Samiti Level Selection Committee - This Committee shall evaluate all the GPs ranked by all the ZP Councillors' Constituency-Level Selection Committee in the PS for which it is appointed. This Committee shall be constituted from persons in another Panchayat Samiti. It should be ensured here also that there will be no cross-evaluation by the PS-Level Committees. The Committee should fill the marksheet on the spot after visiting each of the GP. The Committee should select first 3 GPs in order of merit from that PS and should declare their names at the meeting of the PS held for the purpose. It may also discuss plus and minus points in the meeting so that the GP can improve its performance for the remaining rounds of competition.

District-Level Selection Committee - The District-Level Committee shall evaluate those 3 GPs from each PS which are declared by each of the PS-Level Selection Committees. The marksheet shall be filled and sealed on the spot. The District-Level Selection Committee shall declare the first 3 GPs in order of merit in the general meeting of the ZP held for the purpose.

Divisional-Level Selection Committee - The evaluation of the GP ranked first from each of the district in a Division by the Committee constituted under the Chairmanship of the Divisional Commissioner and the name of the GP ranked best from the Division shall be declared by the Divisional Commissioner in a meeting of ZP Presidents and CEOs to be organised in the Office of the Divisional Commissioner. The Divisional Commissioner to the Secretary, Water Supply and Sanitation Department, shall communicate the name of the best GP in the Division.

State-Level Selection Committee - The State-Level Committee shall visit all the GPs ranked first from each of the Divisions and shall select the best GP from the State. The GP ranked first in the State shall be given a cash prize of Rs.25 lakh in a function to be held in that village. This programme shall be organised by the Divisional Commissioner in whose jurisdiction the GP so ranked falls.

**Norms for the Evaluation of Performance under Gram Swachhata
Abhiyan and Allocation of Marks.**

1. Drinking Water (Total Marks 10)	Marks
Public source – Cleanliness, waster water disposal, water quality monitoring, check on water wastage	2
Repairs cost – household connections/number of sources. Expenditure for the same. Stand-posts – permanent arrangement for repairs. Adequacy of stock of TCL Powder, its quality, regularity and proportion of use.	2
Performance of Village Water and Sanitation Committee, system for regular revision of water charges. Rate and actual recovery of water charges etc.	2
Participation of women in management. Overall sanitation condition where water pipes are laid etc.	2
Water handling in home, its storage, use of quality purification tablets etc.	2
2. Personal Hygiene (Total Marks 10)	
Participation of women, children, students and senior citizens	2
Analysis of medical check-up reports in school and Anganwadi and the proportion of various ailments noticed that are caused due to unhygienic practices as observed from the report.	3
Assessment of habits of children, including nail cutting etc.	2
Sanitation environment around houses, schools, public buildings, Government offices, etc.	3
3. Food Items (Marks 5)	
Eateries and shops in villages, sanitation condition therein, especially in shops nearby schools. Quality of food items in bazaar and hotels. (Committee may ensure cleanliness of food items by actually visiting some of the houses in a village)	5
4. Preventive measures against the spread of epidemics (Marks 5)	
No. of epidemics in the last 1 year in the village, No. of persons affected and No. of deaths etc. Whether the village has got Red Card? If so, whether measures have been taken as suggested in the Card, etc.	5
5. Unconventional Energy Sources (Marks 5)	
No. of improved chullahs in the village – their use, Use of Solar energy in the village, No. of Gobar Gas Plants in the village – their use	5
6. House Arrangement (Marks 5)	
Cleanliness in the front and back yards of houses, internal cleanliness of the house, use of local material in the construction of house. “Less Expenditure, Better Cleanliness” should be given priority in the evaluation.	5
7. Community Participation (Marks 10)	
Involvement and interest shown by teachers, students, women, village level institutions, NGOs in the campaign. Unity and awareness of villagers for the campaign.	10

8. Toilets (Total Marks 15)

No. of individual latrines in the village, their use, cleanliness, etc.	
How many households are deprived of this facility	4
Soakpits – How many households make use of them. Use of material in the soakpits as manure. Cleanliness around soakpits, whether soakpits are beyond the distance of 3 metres from drinking water sources, state of their maintenance etc.	2
No. of public toilets in village, their use, maintenance and cleanliness	1
Use, maintenance and cleanliness of toilets in public buildings in the village	2
Whether village is scavenger-free?	1
Cleanliness in toilets and urinals in schools, whether there exist separate arrangements for boys and girls, state of its maintenance etc.	4
State of toilets constructed under Government Sponsored Scheme, whether according to Government norms, quality of construction and percentage of use. Whether there are any charges of corruption in the implementation of the programme etc.	1

9. Solid Waste Disposal (Total Marks 15)

No. of dustbins in the village, their use, utilisation/disposal of garbage collected	2
Utilisation/disposal of garbage collected in individual houses	2
Ban on use of plastic	1
State of village cleanliness, community participation, preventive measures, whether any penal measures are taken by the community against a person making dirt.	3
Cleanliness of public places and roads in the village, regularity of sweeping etc.	2
Cleanliness in Gram Panchayat Office, religious places, cattle sheds, schools, mandals etc. and arrangements for its regular observance	5

10. Waste Water Disposal (Total Marks 10)

System of waste water disposal	2
Drainage (underground and open)	2
Whether drainage water is used for irrigation or such other purpose, arrangement to avoid danger to the village from storm water.	2
Waste water in individual houses, arrangements made for non-flow of waste water in village, whether waste water is led to safe places to avoid pollution of drinking water sources.	2
Whether a safe distance is kept from drinking water source.	2

11. Family Welfare (Total Marks 10)

No. of eligible couples who have undergone sterilisation in the village	3
Whether the rate of growth of population in village is less than the State average?	4
No. of families in village having 2 or less than 2 children.	3

Total	100
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