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**Meeting the Health Needs of Urban Poor  
The Urban Health Challenge in Madhya Pradesh**

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## **Background**

Madhya Pradesh is one of the backward states of India in terms of health and well being of the people. The state has second highest death rate and second highest infant mortality rate in the country according to the sample registration system (Government of India, 2004a). The sample registration system also indicates that the risk of death during the early neonatal period; during the peri-natal period and in the age group 0-4 years is highest in Madhya Pradesh as compared to other states of the country (Government of India, 2002a). A similar situation is revealed through the National Family Health Survey (International Institute for Population Sciences and Macro International, 2001).

The official response to the prevailing poor health situation in the state is the public health care delivery system. The public health care delivery system in the state is a three tier system comprising of primary, secondary and tertiary level health institutions. The focus of the public health care delivery system has traditionally been on expanding and strengthening the rural health care services delivery network. This focus is primarily based on three counts. First, nearly three fourth of the population of the state lives in the rural areas. Second, the health indicators of the rural population are poorer than the health indicators of the urban population. Third, most of the non-government health care facilities are located in the urban areas.

The situation that prevails in Madhya Pradesh is similar to the situation that prevails in most of the states in India, especially in the large states that constitute the Hindi speaking belt - Bihar (including Jharkhand), Rajasthan, Uttar Pradesh (including Uttaranchal) - and Orissa. This bias of the public health care delivery system towards rural health issues is largely the result of the policies followed at the national level since independence. In any case, the preoccupation of the public health care services delivery system with the issues related to rural health, has resulted in a lop-sided approach to addressing the urban health problems and issues in the evolution and expansion of the public health care delivery system. Relatively better level of almost all health indicators

in the urban areas as compared to the rural areas has provided the empirical support to this rural bias in the public health care services delivery system. Addressing the urban health problems and issues has rarely been given a priority in health policy formulation.

There are however reasons for adopting a more rational approach to urban health issues. The first and the foremost reason for a new, focused, wisdom to urban health issues is a significant growth of urban population during the second half of the last century throughout India including Madhya Pradesh. Between 1951, the year of first population census after independence and 2001, the year of last population census, urban population in Madhya Pradesh increased by almost 13 million - from just 2.77 million to almost 16 million (Government of India, 2004b). In 1951, urban population constituted to less than 15 per cent of the total population of the state. This proportion increased to more than 26 per cent in 2001. Most of this comparatively rapid population growth of the urban areas has largely been the result of a) migration of people in large scale from rural to urban areas, and b) reclassification of rural areas as urban areas as the result of the increase in the size of the population over the years.

With the increase in the urban population, the urban poor have also swelled in terms of both the numbers and the proportion of urban poor to the total urban population. Estimates of the proportion of population living below poverty line prepared by the Government of India indicate that nearly half of the urban population of the state was living below the poverty line in 1993-94; this proportion was only about 40 per cent in the rural areas. During the two decades between 1973-74 and 1993-94, the proportion of urban poor in the state decreased by less than 10 percentage points whereas the proportion of rural poor decreased by a whopping 22 percentage points (Government of India, 2001). In terms of absolute numbers, the number of urban poor in Madhya Pradesh is estimated to have increased from 3.22 million in 1991 to almost 6 million in 1991. Obviously, meeting the health needs of the urban poor has emerged a major public health challenge in Madhya Pradesh.

The main reason for giving less than due attention to urban health in health policy and planning in India is the evidence that health situation in the urban areas are better than that in rural areas in terms of key mortality indicators. However, the time trend in urban mortality indicators appears to be a cause of concern. The empirical evidence suggests that the decline in almost all indicators of mortality in the urban areas is considerably slower than that in the rural areas and in many states of the country including Madhya Pradesh, this slowdown has taken place at a relatively higher levels of mortality. This slowdown in urban mortality at a much higher level is argued to be a reflection of the neglect to urban health issues.

The current strategy and approach of the Government of India and, therefore, of the state governments to address the health needs of the rapidly increasing urban population is based on the growth and expansion of the private health care delivery network. The basis of this approach stems from the fact that nearly all private health care delivery institutions - hospitals, nursing homes, clinics, etc. - are located in the urban areas in a state like Madhya Pradesh. Because of the very heavy concentration of health care delivery institutions, the health services provider density in the urban areas is very high. As such, there appears little logic in the public investment in the urban health care delivery system.

The above reasoning, however, has many flaws when the focus is on the urban poor which now constitute the majority of the urban population. First, unlike the public health care services, the private health care services are not available either without cost or at a reduced cost. These services are generally available at a cost which is beyond the reach of the majority of the urban population who are classified as poor. Because of these cost considerations alone, the access of the majority of the urban poor to the private health care facilities and services which are in abundance in the urban areas is seriously restricted. This also implies that the growth and expansion of the private health care delivery system in the urban areas may have only a limited impact on the health of the urban poor.

The second flaw in the aforesaid approach of addressing the urban health issues is the near total neglect of preventive and health promotive components of the health care facilities and services by the private health care delivery system. Private health care institutions are primarily for profit organizations. In the effort towards maximizing their profits, these institutions generally focus upon technology intensive curative health care services. This focus on technology driven curative health services increases the cost of services. In any case, because of the near total preoccupation with the curative health services, the private health care delivery system contributes little towards creating and sustaining a healthy environment in the urban areas.

The third flaw in addressing the urban health care issues through the private health care system based approach is that the private health care institutions are not evenly distributed across urban settlements. It is well known that majority of the private health care institutions are concentrated in a few large metropolitan cities and towns and in small towns, towns with a population of less than 50,000 inhabitants, there is a serious shortage of private health care services and facilities. In these small towns, the health needs of the people are very poorly addressed and, again, the worst sufferer is the urban poor.

The above considerations provide the rationale for evolving a comprehensive urban health care programme that can meet the current and future health care needs of the urban population, especially the health needs of the urban poor. This requires a sound strategy which can not only provide adequate health security to the urban population, especially the urban poor but can also be sustained in the years to come. Needless to emphasize, any such strategy must be accepted and owned by the people. A sound strategy, after all, is the first and the most crucial step in the evolution of an effective service delivery programme.

In this paper, we outline an urban health care strategy that has the potential to meet the health needs of the urban population with a focus on the urban poor. The strategy outlined in the present paper may become

the basis for developing a comprehensive urban health care development programme in Madhya Pradesh. The strategy presented here is derived from the evidence based approach to addressing urban health issues and the age old concept that people's health must be in people's hand. Although the focus of the paper is on Madhya Pradesh, yet it is obvious that the strategy suggested here can be applied to other states and regions of the country where urban health is fast emerging a major public health challenge.

### **Patterns of Urbanization in Madhya Pradesh**

Madhya Pradesh is relatively a lowly urbanized state of the Republic of India. At the time of the 2001 population census, 15.967 million people in the state, approximately 26.45 per cent of the total population, were enumerated to be living in areas which have been classified as urban in the 2001 population census (Government of India, 2004b). In terms of proportion of urban population to the total population, Madhya Pradesh ranks ninth amongst the 15 major states of the country.

The urban population of the state is distributed over 368 towns of varying population size ranging from 1.64 million to just 1840 according to the 2001 population census. Majority of the towns in the state, however, are either small or medium size towns. There are only 3 million plus cities in the state according to the 2001 population census whereas more than 60 per cent of the towns had a population of less than 20 thousand in the year 2001.

The distribution of the urban population of the state across the 368 urban settlements is very heavily skewed. There is a very heavy concentration of urban population in big towns and cities of the state. For example, more than one fourth of the total urban population of the state is concentrated in just three million plus cities of the state – Indore, Bhopal and Jabalpur - according to the 2001 population census. By contrast, the 227 small towns of the state - towns with population less than 20 thousand at the 2001 population census, account for just about

16 per cent of the total urban population. The Lorenz curve (Figure 1) reflects the very highly uneven distribution of the urban population across towns and cities of the state. This highly uneven distribution of the urban population has some very important implications to meeting the urban health needs.

The pattern of urbanization differs drastically across the districts of the state. In district Bhopal, more than 80 per cent population lives in urban areas according to the 2001 population census. In districts Indore and Jabalpur also, majority of the population is now living in the urban areas. By contrast, the urban population in district Dindori, constitutes less than 5 per cent of the population enumerated in 2001 population census was classified as urban.

On the whole, the rate of urbanization in Madhya Pradesh has been relatively slow as compared to other states of India. During the 50 years between 1951 and 2001, the urban population of the state increased by 2.77 million to 16.1 million at an average annual growth rate of 3.52 per cent per year (table 1). The process of urbanization in the state peaked during the decade 1971-81 when the urban population of the state increased at the rate of 4.25 per cent per year. Since then there has been a considerable slowdown in the process of urbanization as the rate of urban population growth decreased to less than 3 per cent per year during the decade 1991-2001. However, despite a slowdown in the urban population growth, the net addition to the urban population continues to increase. During the decade 1991-2001 alone, more than 3.8 million people were added to the urban population of the state.

Despite a relatively slow rate of urbanization in the state at present, the urban population is expected to increase very rapidly in the next fifty years. Using the projection methodology based on urban-rural growth difference and employed by the United Nations (United Nations, 1975), it is projected that the urban population of the state will increase to approximately 80 million in the first half of the current century (table 1). By the year 2051, more than half of the population of the state will be

living in areas which are classified as urban according to the definition of the urban area adopted at the 2001 population census. This means that, in the next 50 years, almost 43 million people are expected to be added to the existing urban population of the state either because of increase in the population of existing urban areas or because of the reclassification of the existing rural areas as urban areas as the result of the increase in population. With the increase in the urban population of the state, the number of urban settlements will also increase substantially. It is also estimated that in 15 districts of the state, the proportion urban will cross the 50 per cent mark by the year 2051. Obviously, such a massive increase in population will put some very severe strain on basic urban services and services delivery infrastructure including the urban health services delivery infrastructure. This strain will be further compounded by the fact that a very large proportion of this massive population growth will be constituted by migrants from rural to urban areas and rural settlements which will be classified as urban settlements primarily because of size considerations. It is expected that majority of migrants will be low-income population who will be living in urban slums or in urban areas with poor living conditions. Considerable efforts and investments will be required to develop health care services delivery infrastructure to meet the health needs of the urban population that is expected to grow rapidly in the years to come.

### **Urban Health Scenario in Madhya Pradesh**

Estimates of death rate, infant mortality rate and the expectation of life for the urban and rural areas for India and for its constituent states are available from the sample registration system since 1971 onwards (Government of India, 2002). On the other hand, information about selected health related indicators for the urban areas is available from the National Family Health Survey carried out in 1992 and in 1998-99 as well as the rapid household survey under the reproductive and child health programme (Population Research Centre Bhopal and International Institute for Population Sciences, 1995; International Institute for Population Sciences and Macro International, 2001; International Institute for Population Sciences, *no date*). The National Family Health

Survey provides information at the state level only whereas the rapid household survey under the Reproductive and Child Health Programme provides district level estimates of health situation.

Based on the estimates available through the sample registration system, trends in the death rate and in the infant mortality rate are shown for rural and urban areas of Madhya Pradesh in figures 2 and 3 respectively. An important feature of the trend in both death rate and infant mortality rate is a considerably slower decline in the two indicators of mortality in urban as compared to rural areas over the last 30 years. Between 1971-73 and 2000-02, the death rate in rural Madhya Pradesh decreased by 7.36 absolute points whereas this decline was of the order of only 3.57 absolute points in the urban areas. Similarly, the rural infant mortality rate decreased by 62 absolute points in between 1971-73 and 2000-02 but the urban infant mortality decreased by only about 41 absolute points. Figure 2 also suggests that decline in the death rate in the urban areas has virtually been stagnant since 1993. This is so despite the fact that the death rate in urban Madhya Pradesh continues to be fairly high as compared to the national average and as compared to the death rate in states like Kerala and Tamil Nadu. A similar situation may be observed from figure 3 in case of infant mortality rate. As the result of this stagnation, the gap between rural and urban death rates has narrowed down considerably in the recent years. As of 2002, the death rate in urban Madhya Pradesh was estimated to be 7.2 while the infant mortality rate was 56 (Government of India, 2004b). These levels are well above the national average of 6.1 and 40 respectively. Clearly, the stagnation or the slowdown in the decrease in the death rate and the infant mortality rate in urban Madhya Pradesh is reflection of poor health care services in the urban areas of the state. Although, detailed information about the access to and use of public and private health care delivery services in the urban areas of the state are not available, yet the observed slowdown in the decrease in urban death rate and infant mortality rate clearly suggests that the increasing concentration of private health care delivery services in the urban areas has contributed little in accelerating the pace of mortality decline in these areas.

The influence of differing trends in the death rate and the infant mortality rate is well reflected in the trend in the expectation of life at birth in the rural and urban areas of the state also. The increase in the expectation of life at birth for the combined population and for males and females have been relatively slower in the urban as compared to the rural areas. Estimates available from the sample registration system suggest that, in the rural areas, the expectation of life increased by 8.4 years between 1970-75 through 1993-97 whereas this increase was just 6.8 years in the urban areas (table 3). The situation appears to be particularly serious for urban females. The expectation of life at birth for urban females increased by only 6.7 years between 1970-75 and 1993-97 as compared to an increase of more than 9 years among rural females (Government of India, 1984; 2000).

Any discussion based on the urban population as a whole, however, masks the significant difference in the health status of population of different income groups. An analysis of information collected during the National Family Health Survey, 1998-99 reveals some very strong inequality in the health status of population of different income groups within the urban population. Estimates of key indicators of the health status in the urban areas according to the standard of living index are shown in table 4. The table reveals very succinctly that in the urban population with low standard of living index, the health situation is even poorer than that in the population with low standard of living index in the rural areas. The table highlights the fact that the urban poor should at least be given the same priority as the rural poor as far as improvements in the health and well being is concerned.

### **Urban Health Care Delivery System**

Health care facilities in the urban areas are available through both public and private health care systems. Although, information about the total number of private and non-government health care delivery institutions in the urban areas and their distribution by size class of towns is not currently available, yet it is well known that the distribution of these institutions is very highly skewed towards big towns and cities. In small

towns, the presence as well as the scope of the private health care delivery institutions has been found to be extremely limited. Moreover, health care services delivery through the private health care delivery system is largely limited to curative services only. Involvement of the private health care delivery system in the delivery of preventive health care services and services that promote health and well being of the people is extremely restricted.

The urban public health care delivery system, on the other hand, is neither well defined nor well organized. This is in quite contrast to the rural public health care delivery system which is both well defined as well as well organized at least theoretically. The organization of the rural public health care delivery system is such that it, at least theoretically, covers the whole rural population of the state through a hierarchy of health care delivery institutions. These institutions are conceptually linked to each other through the referral system. They provide only primary health care services to the rural people. In the urban areas, no such network of public health care delivery institutions exists.

Two types of public health care delivery institutions currently exist in the urban areas. The first category of institutions consists of those institutions which cater the health needs of the urban people primarily through clinic based services. These include urban civil dispensaries and urban civil hospitals. These institutions are very few in numbers and most of them were established before independence.

The second category of public health care delivery institutions are those which cater the health needs of both urban and rural populations. These institutions serve as the referral institutions for the rural public health care delivery system. The district hospitals are public health care delivery institutions of this category. All the district hospitals in the state are located in the urban areas but they also cater the health needs of rural population also. Similarly, all Community Health Centres and a number of Primary Health Centres are also located in areas which are classified as urban during the 2001 population census. These institutions, in addition

to providing, referral support to the rural public health care delivery system, also extend managerial and technical support to rural health care delivery institutions. These institutions also provide primary health care services for the urban people.

Perhaps the most serious drawback of the existing urban public health care delivery system, as it exists today, is that it lacks a comprehensive yet well organized primary health care services delivery network. This fact is recognized even in the National Health Policy 2002 (Government of India, 2002b). The main sufferer of the absence of a well organized urban primary health care delivery system is the urban poor which accounts for most of the mortality, morbidity and diseases burden. There have been attempts to provide some of the primary health care services – primarily family planning and maternal and child health services – through Urban Family Welfare Centres, Post Partum Centres and Urban Health Posts but a comprehensive urban primary health care services delivery network is yet to be evolved in all urban settlements in the state. The result of the lack of a such a system is that a large proportion of the urban population, especially the urban poor, are devoid of the basic primary health care services. This results in an increase in morbidity and diseases burden. Lack of a comprehensive urban primary health care services delivery system also results in an increased load for primary health care services in the secondary and tertiary level public health care institutions. The preoccupation with primary health care services for urban people affects the quality as well as the efficiency of secondary and tertiary level health care services that is contemplated to be provided through these institutions with the result that secondary and tertiary health care services get affected.

The most pressing need of addressing the health needs of the urban population, especially the urban poor, therefore, is the evolution of a comprehensive primary health care services delivery network in the urban areas that can effectively meet the primary health care needs of the urban population, especially the urban poor. It is important that this network is planned and put in place for all urban people - poor as well as rich - as

both poor as well as the rich have primary health care needs which are primarily preventive and health promotive in nature. Similarly, the proposed urban primary health care services delivery system should not be limited to large metropolitan towns and cities as has been the approach so far. Rather, it should be extended to all urban areas, especially, the small towns and urban settlements where the private health care delivery system is largely absent and where only skeleton public health care delivery services exist at present.

It is obvious that to be successful in meeting the basic health needs of the urban people, especially the urban poor, the proposed urban primary health care delivery network must be people-based. Moreover, to sustain the system, the people and their organizations should actively be involved in planning, designing, implementing and supervising the system so evolved. The people and their organizations must also be responsible for sustaining and upgrading the system according to the felt health needs of the urban people. Most importantly, the people and their organizations must bear the cost of any such urban primary health care delivery network at least partially, if not fully. The government and other organizations should facilitate and support the people and their organizations like local self government and other people's organizations in building up the community level capacity and expertise to plan and manage and supervise such a system. This capacity building role of the government and other facilitating organizations is extremely important in the development and sustenance of the urban primary health care services delivery network as the technical and managerial capacity of the community based people's organizations is extremely weak at present. In the absence of the technical and managerial capacity at the grass roots level, the effectiveness of the urban primary health care delivery network will always be susceptible.

### **The Urban Health Care Strategy**

The health of the people living in urban areas is very substantially determined by their living and working conditions, the quality of their physical and social and economic environment and the quality and availability of health care services at an affordable cost. Given this

understanding of health and health related issues facing the urban areas, health is everybody's business and almost all statutory and non-statutory sectors of the government as well as non-government agencies and organizations have a role to play in the development of urban health care delivery system that can meet the current and the future health needs of the urban population, especially the urban poor.

The first consideration in evolving an urban health care strategy is the realization of the fact that the health needs of the urban people are not uniformly distributed across all population groups. As such, any comprehensive and systematic approach to addressing the urban health needs must address prevailing inequalities in the health status and urban poverty; the specific needs of the most deprived and most vulnerable population groups; the social and economic root causes of ill health and positioning of health related issues in the centre of urban development efforts. Health needs of the urban people can be effectively addressed only by putting health issues on the agenda of decision-makers in towns and cities and by building a strong lobby for public health movement at the local level. Urban local bodies are in a unique position to promote health and sustainable development. They have the constitutional responsibility of improving the life of the people living in the urban areas. At the same time, they have direct responsibility for such issues and conditions that have major impacts on health of the people – environment, housing, social services, health care services delivery, etc.

Health needs of the people are not static; they are dynamic in nature. They keep on changing with the change in the living conditions of the people and morbidity patterns. As one set of health needs are met through comprehensive and sustained efforts, new sets of health care needs emerge. Similarly, no two urban locations can have the same set of health care needs. Any system designed and developed to meet the health care needs of the people must therefore be adaptive to changes in these needs over time as well as across urban areas. Addressing health care needs of the people should not be an outcome of any urban health development programme. Rather, the urban health improvement

programme should be a process which should continuously create and improve those physical and social environments and expand those community resources which enable people and their organizations to support each other in performing all the functions of the life.

Health of the people is not merely the absence of disease or infirmity. The roots of health and well being of the people are located in their physical, mental and social environment in which they live and work. The 'Health for All' strategy that has been advocated by the World Health Organization to address the physical, mental and social dimensions of health and well being of the people has the following six cardinal principles:

- Reduction in health inequalities between population groups and across different regions.
- Emphasis on health promotion and disease prevention to help people reach their full physical, mental and social capacity.
- Inter-sectoral cooperation to ensure that people have access to prerequisites for health and are protected from environmental hazards and risks.
- Active community participation to promote and sustain local health action.
- A focus on primary health care that provides accessible services where people live and work.
- International cooperation to address health problems that transcend national boundaries.

Given the complex nature and multiplicity of the dimensions of health and health related issues, successful evolution and development of any urban health improvement programme based on the primary health care approach should be based upon

- Explicit political commitment to the principles and strategies of the urban health improvement programme.
- Establishment of new organizational structures which are necessary to manage the change that is expected to accrue through lasting improvements in urban health situation.

- Commitment to developing a shared vision for the urban areas, with a health plan and work on specific themes.
- Investments in formal and informal networking to promote health.

Based on the above considerations, it is possible to outline a strategy to address the health care needs of the people living in the urban areas. The strategy outlined below can constitute the basis for developing a comprehensive urban health improvement programme that has the potential of meeting the health needs of the poorest of the urban poor. Essential features of the proposed strategy are described below:

*Mission Statement.* The Mission of any urban health improvement programme should be to improve the quality of life of the people living in the urban areas through lasting improvements in the health and well being of the people through a process of health promotion which means enabling people to take control over, and to improve, their health.

*Strategic Framework.* Five elements make up the strategic framework for health promotion:

- a. promoting healthy public policy,
- b. creating supportive environments,
- c. strengthening community participation,
- d. improving personal skills; and
- e. reorienting health care delivery system.

*Operational Framework.* To accomplish the aforesaid Mission and to operationalize the strategic framework, active and sustained involvement of the people through their democratically elected urban local bodies is necessary. At the same time, continued support of the government through its different development departments, especially Department of Urban development and Administration and Department of Public Health and Family Welfare is also necessary. This involvement of the people through the urban local bodies and the support of the

government may be ensured through the following operational framework:

- The Urban Local Bodies may be delegated necessary administrative and financial powers and responsibility to conceptualize, plan, implement, supervise and sustain town and city specific health improvement programme. This urban health improvement programme will invariably focus on promoting and sustaining local health action based on the primary health care approach. The urban health improvement programme will be owned by respective Urban Local Bodies and not by the government.
- The government, through the Department of Urban Development and Administration and the Department of Public Health and Family Welfare, may facilitate such urban health improvement programme by supporting the Urban Local Bodies to develop the capacity and technical skills to identify the health needs of the people and to conceptualize and implement the solutions to the identified health needs. This support will include designing pilot urban health improvement projects at the initiative of Urban Local Bodies and training to members and staff of Urban Local Bodies in aspects related to planning, managing and sustaining urban health improvement programmes.
- The urban health improvement programme will vary in the context and in contents for different urban settlements of the state depending upon the specific health needs of the people. Essential features of any such programme will include development of primary health care services delivery network effectively covering the urban poor and developing frameworks for involving the private health care delivery system for supporting the primary health care services delivery network.
- The urban health improvement programme should establish mechanisms for linking the primary health care services delivery network with secondary and tertiary public and private health care delivery institutions. If secondary and tertiary health care facilities do not exist in any urban settlement then the urban health

- improvement programme should create opportunities and facilities to extend referral support to urban primary health care activities.
- The cost of the urban health improvement programme should be shared jointly by the people, the Urban Local Bodies and the government. Financial support of the government should be based on the performance of the programme. Every urban health improvement programme should develop its own set of objectively verifiable indicators to measure the programme performance. The government may also allocate a fixed proportion of funds to Urban Local Bodies out of the state resources to specifically developing and implementing the urban health improvement programme.
  - The urban health improvement programme must establish linkages with other development activities directly relevant to the health and well being of the people. These include functional literacy, especially among females and males of reproductive age group, minimizing poverty and developing necessary infrastructure for the delivery of primary health care services.
  - Leadership to improving the health and well being of the people living in urban settlements may be provided by their own democratically elected local bodies. The government should only facilitate the Urban Local Bodies to initiate and sustain the town or city specific urban health improvement programme.

### **SWOT Analysis**

It will be useful to carry out a SWOT (strength, weakness, opportunity and threat) analysis of the aforesaid strategy to examine its practical feasibility and operational viability so as to further crystalize the strategic thinking for addressing the health needs of the urban population, especially the urban poor. The SWOT analysis is also expected to help in developing community needs based urban health care services delivery models using the BEAT approach. The BEAT approach means the urban health care strategy should be translated into specific programme interventions and activities on the basis of the following criteria:

- **B**uilding the interventions on the strengths of the strategy;
- **E**xpanding the available community level opportunities to achieve programme objectives and goals;
- **A**voiding perceived threats to the implementation of the strategy by incorporating appropriate mechanisms in the design of the programme;
- **T**oning down the weaknesses of the strategy rather than highlighting these weaknesses at every stage of programme development.

The BEAT approach is a simple and straightforward way of translating the urban health improvement strategy into a feasible yet optimal set of interventions and programmes directed towards improving the health status of the urban people and that can be conceived designed and implemented by the Urban Local Bodies. It is a simple yet logical way of operationalizing any concept and idea directed towards the health and well being of the people.

A summary of the salient findings of the SWOT analysis of the urban health care strategy proposed in this paper is given in table 5. Salient features of the strategy highlighted in the table provides a first hand assessment of the conceptual appropriateness and operational feasibility of the proposed urban health care strategy in meeting out the health needs of the urban population of the state, especially the urban poor. The findings of the analysis, although tentative, may provide some useful directions for developing, and implementing a comprehensive health improvement programme for the urban areas of the state.

## **Conclusions**

Urban health is fast emerging a major public health challenge in view of the rapid urbanization. More and more people today tend to move to urban areas and prefer to live in towns and cities. With the increase in the urban population, the inequality in terms of income, education and

health has also increased within as well as across the urban areas. There is therefore a pressing need to evolve a model of health care services delivery that can effectively address the health related issues that are emerging in the urban areas of the state.

The urban health care strategy outlined and discussed in this paper is an attempt in this direction. It fulfills the basic principles of the Health for All approach of the World Health Organization in terms of equal rights to health to all population groups; a focus on health promotion and diseases prevention; inbuilt mechanism for the participation of the people and their organizations in health improvement processes and programmes; scope for multi-sectoral cooperation and coordination to address health related issues; and adoption of practical, scientifically sound and socially acceptable methods and technology to meet the health needs of the urban population. The strategy professes that improving health of the people is a joint responsibility of the people, their organizations and the government. Being people based, it is oriented towards the health of the people and not towards the health care services delivery system. This approach is particularly appropriate in the context of the 74<sup>th</sup> amendment in the Constitution according to which democratically elected local bodies have been entrusted with the responsibility of meeting the health needs of the urban people.

Entrusting the responsibility of addressing the primary health care needs of the urban people to democratically elected urban local bodies may however require considerable capacity building of these organizations in health planning and in primary health care management and administration as these bodies have little experience of planning and managing health care services in the past. The need of the time is that the government, through appropriate policies and programmes facilitates this capacity building process at the earliest possible.

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Table 1: Trend in urban population growth in Madhya Pradesh.

Year	Urban population (million)	Proportion of total population	Decadal increase (million)	Average annual growth rate (%)
1951	2.769	14.87		
1961	3.865	16.64	1.096	3.33
1971	5.577	18.58	1.712	3.67
1981	8.528	22.34	2.951	4.25
1991	12.274	25.27	3.746	3.64
2001	15.967	26.45	3.693	2.77
<i>2011</i>	<i>22.05</i>	<i>29.07</i>	<i>5.950</i>	<i>3.14</i>
<i>2021</i>	<i>30.53</i>	<i>32.63</i>	<i>8.480</i>	<i>3.25</i>
<i>2031</i>	<i>43.37</i>	<i>38.57</i>	<i>12.840</i>	<i>3.51</i>
<i>2041</i>	<i>60.34</i>	<i>46.04</i>	<i>16.970</i>	<i>3.30</i>
<i>2051</i>	<i>79.63</i>	<i>53.70</i>	<i>19.290</i>	<i>2.77</i>

Source: Figures for 1951 through 2001 are taken from different population census. Projections for the period 2001-2051 are prepared by the author.

Table 2: Trends in death rate and infant mortality rate in urban and rural areas of Madhya Pradesh.

Year	Death rate		IMR	
	Rural	Urban	Rural	Urban
1971	16.6	9.8	144	79
1972	19.9	11.6	165	102
1973	17.9	11.2	152	106
1974	16.9	9.6	145	83
1975	19.8	11.1	159	90
1976	17.7	10.2	145	88
1977	19.4	9.6	157	88
1978	16.0	9.9	151	87
1979	16.5	8.7	153	79
1980	16.4	9.3	152	80
1981	18.0	9.3	152	80
1982	16.3	9.0	145	79
1983	15.9	8.7	135	76
1984	15.5	9.0	130	76
1985	15.3	9.4	131	79
1986	14.8	8.8	124	82
1987	14.6	8.0	128	81
1988	15.4	9.8	128	83
1989	13.9	8.6	125	78
1990	13.7	7.6	120	61
1991	14.9	9.2	125	74
1992	13.9	8.5	109	74
1993	13.9	7.8	113	67
1994	12.6	7.4	105	57
1995	11.9	7.8	104	61
1996	11.8	7.6	102	61
1997	11.7	7.7	99	57
1998	11.9	7.8	104	56
1999	11.1	7.6	96	55
2000	11.1	7.5	93	54
2001	10.8	7.2	92	53
2002	10.5	7.2	90	56

Source: Sample Registration System

Table 3: Expectation of life at birth in rural and urban areas of Madhya Pradesh.

Year	Rural			Urban		
	Male	Female	Total	Male	Female	Total
1970-75	46.6	44.8	45.7	56.3	57.1	56.6
1976-80	48.1	47.1	47.6	57.8	58.9	58.3
1981-85	50.0	50.2	50.0	59.4	61.4	60.3
1986-90	52.1	50.8	51.5	59.2	63.0	61.1
1991-95	53.4	52.9	53.2	61.1	63.0	62.8
1993-97	54.4	53.9	54.1	62.0	63.8	63.4
Increase between 1970-75 and 1993-97	7.8	9.1	8.4	5.7	6.7	6.8

Table 4: Health status indicators by standard of living in Madhya Pradesh.

Indicator	Urban				Rural			
	Low	Medium	High	Total	Low	Medium	High	Total
Neonatal mortality	69.7	47.3	23.2	44.0	62.2	56.1	49.8	57.8
Infant mortality	99.4	63.3	36.6	61.9	94.3	95.2	73.2	92.5
Under 5 mortality	131.9	91.4	41.0	82.9	174.1	146.1	88.2	152.2
Percentage of children up to 3 years of age underweight	72.4	46.5	25.6	44.3	59.9	61.2	41.1	58.4
Percentage of children up to 3 years of age stunted	60.6	43.0	23.9	39.8	58.5	57.4	38.2	54.3
Percentage of children 12-23 months of age completely immunized	20.6	37.3	58.8	41.2	10.8	17.1	40.2	17.0
Percent of children 12-23 months left out of UIP	25.2	22.8	6.2	17.4	54.2	40.4	13.1	42.9
Percent of children 12-23 months dropping out of UIP	36.1	26.8	15.2	24.9	26.1	26.2	24.0	26.1

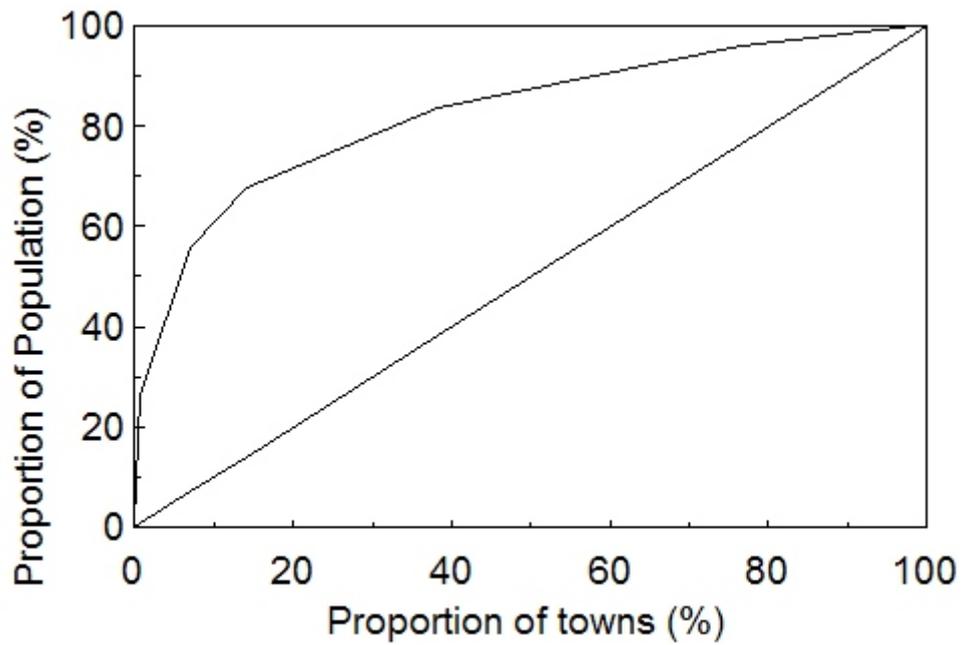
Indicator	Urban				Rural			
	Low	Medium	High	Total	Low	Medium	High	Total
Percent of children suffering from								
ARI	25.1	23.4	21.5	23.4	31.2	31.2	28.7	30.9
Fever	36.3	30.1	29.2	31.1	31.2	30.7	32.5	31.0
Diarrhoea	30.7	28.8	20.9	26.6	20.5	23.6	25.0	22.4
Prevalence of modern methods of contraception	39.1	51.3	64.8	52.5	35.5	41.4	54.2	39.3
Percentage of home deliveries	73.8	56.2	25.5	50.1	90.8	87.0	67.4	86.5
Percentage of deliveries attended by health professional	38.1	55.9	85.4	61.5	14.1	20.1	51.1	20.9
Percentage of women having anaemia of any nature	55.0	45.1	43.8	46.2	63.3	55.3	44.7	57.0
Percentage of children having anaemia of any nature	88.5	70.6	69.7	73.7	75.9	76.0	70.3	75.4
Percentage of households without toilet facility	86.7	38.8	3.0	35.2	98.8	93.3	53.7	92.3

Source: National Family Health Survey, 1998-99.

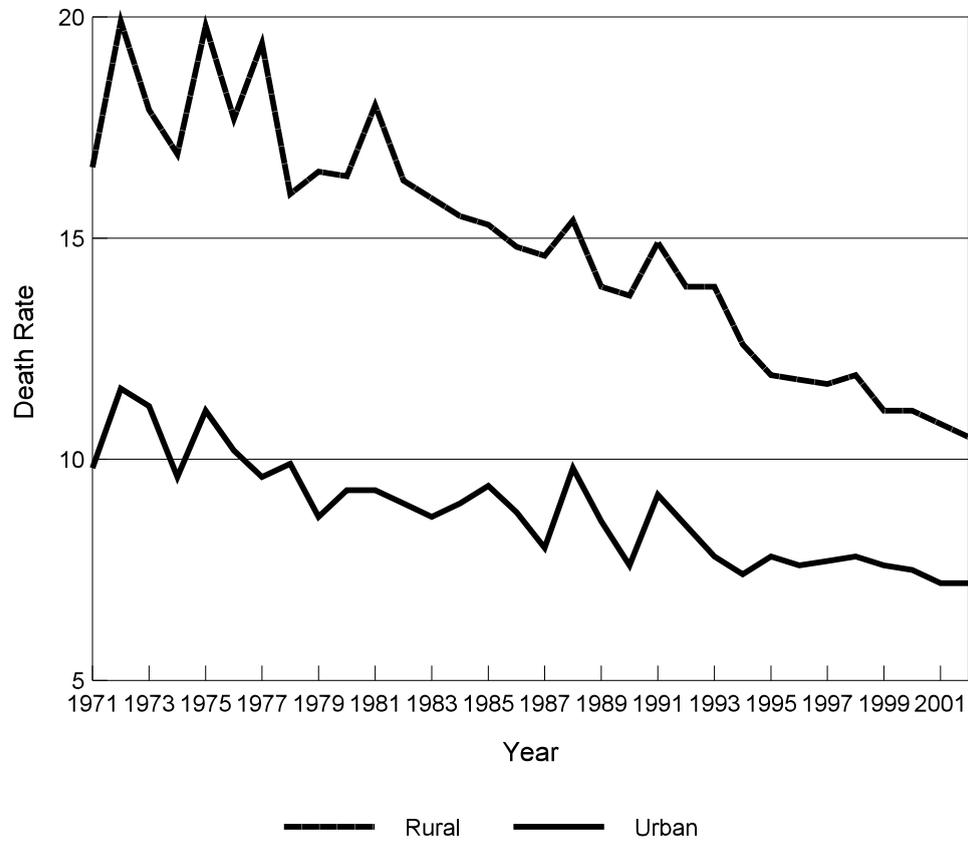
Table 5: The SWOT analysis of the proposed urban health care strategy.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• People's based.</li> <li>• Involves people and their organizations at all stages of programme development.</li> <li>• Based on identified health needs of the people.</li> <li>• Focus on universal access to primary health care services.</li> <li>• Links health improvement activities with other social and economic development activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Urban Local Bodies have little capacity to identify health needs and to design and implement solutions to meet out these health needs.</li> <li>• Extremely poor urban primary health care services delivery infrastructure in urban areas.</li> <li>• Lack of manpower having skills to delivery primary health care services.</li> </ul>
<ul style="list-style-type: none"> <li>• Recognition to urban health issues as a priority issue at national and state level.</li> <li>• Strong political commitment to involvement people in welfare and development activities.</li> <li>• Resources available for developing urban primary health care services delivery network.</li> <li>• Constitutional mandate for Urban Local Bodies for investing in health care services delivery.</li> </ul>	<ul style="list-style-type: none"> <li>• The cost of developing the urban primary health care services delivery network in some urban areas may be quite demanding.</li> </ul>
Opportunities	Threats

Figure 1: Lorenz curve of urban population distribution in Madhya Pradesh.



**Figure 2** Trends in rural and urban death rate in Madhya Pradesh: 1971-2002.



**Figure 3** Trends in rural and urban infant mortality rate in Madhya Pradesh: 1971-2002.



**Figure 4** Figure 4: Expectation of life at birth in rural and urban Madhya Pradesh.

