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Research Paper Geography

Health and Environment in Sustainable Development: The Interaction and Investigation of Policy 'Health for All' by 2000AD in the District of Burdwan

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ABSTRACT

The desire for healthy environment and sustainable development is a global aspiration that has acquired a new momentum following the historic United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro on 1992. People's awareness of the detriments inflicted on the environment by various development processes is today precise and more profound than at any other time in global history. Yet, actions to address these issues lag far behind this upsurge in awareness. All these conditions pose unimaginable risk to human health. Growing population combined with insufficient health facilities create major challenges with respect to the attainment of sustainable development in the district of Burdwan.

KEYWORDS: Health, Environment, Sustainable Development

Introduction

Sustainable development nowadays is the buzzword for environment and development scenario. There are several domain and linkages between different facets of sustainable development. Some areas and linkages have received more emphasis while others have been left untouched. Environment and health is one such area wherein the changes in environment are affecting human morbidity and mortality. The fact that many people are not able to adapt to such circumstances, while others are forced to do so is the antithesis of sustainable development (Singh, 2004).At the time of the Earth Summit in 1992, the WHO commission on Health and Environment presented an assessment of the relationship between health and environment in the context of development. The commission's report was a major contribution to UNCED and brought health towards the top of the environment and development agenda. The role of a good heath care system is very much important for preventing disease. In a society where rich and poor people, affluent localities and slums, developed region, backward regions with and without resources exist together and governed by a single political authority, inequality in the provision of medical care is bound to occur (Akhtar, 1991).

Study Area

The district of Burdwan(Fig.1) occupies an area of 7,024 sq km and supports a total population 69, 19, 698 (2001 census) of which about 36 percent live in urban area and 64 percent in rural area. In 2001 there were 39 hospitals, 134 health centres, 745 clinics and 64 dispensaries in the district of Burdwan. At present there is only one medical college and hospital, four sub-divisional hospitals, six rural hospitals, twenty nine block primary health centres and one hundred three primary health centres distributed in the entire district Objectives



The work has been done with the following objectives:

a) To study environmental impact on health
b) To assess the policy Health for All by AD 2000
c) To identify the gap between policy and reality

Two Facets of Sustainable Development in Relation to Health

Sustainable development encompasses both the issue of environmental impact on health as well as the effect of socio-economic development on health. The ultimate objective of sustainable development can only be achieved if rudiments of basic environmental health interventions are ensured. Thus it is imperative to have an understanding of linkages and means of assessing the probable impacts. Policy makers and planners have comprehensive strategy towards minimizing the ill effects of environment and development on health (Singh, 2004).

Health, Environment and Sustainable Development

It is becoming increasingly clear that the environmental factors that most affect health are in turn linked to underlying pressure on the environment. These pressures are determined by driving forces, such as population growth, inequitable resource distribution, consumption patterns, technological development and components of economic development (Schaefer, 1999).

In the area under study environmental quality is an important determinant of human health both directly and indirectly. Deteriorating environmental conditions are a major contributing factor to poor health and poor quality of life thus hindering sustainable development.

Populations are most at risk from traditional environmental health hazards, which constitute the largest environmental proportion of the district burden of disease. They include lack of water supply, sanitation, poor housing, shelter, unsafe food and high prevalence of disease vectors.

The population in the district experiencing rapid industrialization tends to be at risk both from traditional environmental health hazards such as gastro-enteritis and from modern hazards such as air and water pollution, hazardous waste, unsafe use of chemicals including pesticides and workplace hazards.

Growing population combined with the unfulfilled basic needs of the poor; create major challenges with respect to the attainment of sustainable development in the district of Burdwan.

Within cities, mortality and morbidity rates are higher among people in low income settlements – due to poor housing, high population density, pollution, lack of basic services and inadequate social amenities than among people in more affluent areas.

In rural areas, the main environmental health problems consist of the traditional hazards caused by water and sanitation deficiencies, poor indoor air quality and disease vectors. Poor environmental quality is directly responsible for preventable ill health with diarrhoeal diseases heading the list.

Vector borne diseases are closely linked to geographic and climatic conditions and contribute the largest share of the diseases which affect this district.

Lack of basic sanitation, poor water supply and poor food safety contributes greatly to diarrhoeal disease oriented mortality and morbidity.

Curative measures have brought the number of deaths from several diseases, but action that deals with the root causes of those diseases continues to be lacking.

The major diseases prevalent in the district of Burdwan are japanese encephalitis, kalaazar, malaria, diarrhoea, hepatitis, arsenicosis and tuberculosis, as the tropic of cancer passes through the district and hence the tropical diseases are most prevalent.

Importance of Health Infrastructure for Sustainable Development

The emerging consensus in development policies is that without expanding access to social infrastructure through efficient education and health services, it is not possible to pursue poverty alleviation and human development. Improvement in the health status of the society has been considered to be as the major thrust area of India since inception of the planning era (Chatterjee and Ghosh, 2003).

Improvement in health status of the population has been one of the major emphasizing areas for the social development programmes of the country. This was to be achieved through improving the access to and utilization of health services with special focus on underserved and under privileged segments of the population (Ramachandran, 2003).

Substantial decrease of morbidity and mortality is more likely to be accomplished through an improved system for health including preventive and curative services. Therefore, necessity of sufficient availability of health services such as hospitals, health centres, beds and doctors can be over prioritised (Akhtar and Izhar, 1991).

As environmental sanitation, water, food, nutrition and conditions of shelter have improved, people have become less susceptible to various diseases. But improvement in the health of the people occurs only through improvements in public health and medical services (Misra, 1970). Therefore, preventive and curative health services have important implications in the improvement of health status of a country.

The increasing policy focus on sustainable development offers new opportunities to design the public health narrative with that of sustainable development to promote both sustainable health for the population and a sustainable health care system (Adshead, Thorpe and Rutter, 2006).

The sustainable use of finite natural resources is a major determinant of health. The interdependence between the sustainability of the human species needs full recognition and the development of new health practice. Public health and sustainable development should can and must be the same, not merely linked or synergistic or cross cutting.

A new paradigm is beckoning. The government's strategy on sustainable development, securing the future is a brilliant public health document both for health protection and health improvement (Public Health, 2006).

The objective of human resource development has all through remained at the top of the priority list in framing subsequent five year plans. The planners and policy makers conceived that the success of a plan depends on the extent to which human resources were developed in terms of education, skills, health and well-being. In Alma Ata Declaration (1978) it was committed to achieve "Health For All by 2000 AD". Subsequently, the Government of India framed the National Health Policy in 1983 to achieve "Health For All by 2000 AD". For developing the country's vast human resource and for speeding up the total socio-economic development and attaining an improved quality of life, renewed faith was reposed on primary health care as one of the main instruments of action.

The primary health care infrastructure provides the first level of contact between the population and health care providers (Ramachandran, 2003). Realising its importance in the delivery of health services, the centre, states and several government related agencies simultaneously started creating primary health care infrastructure and manpower.

The adoption of primary health care programme has resulted in gradual transformation of the rural health infrastructure to a multitier integrated health subsystem. Our government had committed to attain the goal of health for all by AD 2000. The norms to be fulfilled in this regard were:

i. One community health volunteer for every village for a population of 1,000 choosen by the community to form the base unit

ii. One sub centre for a population of 5,000 in the plains and 3,000 in hilly and tribal areas

iii. One primary health centre for a population of 30,000 in the plains and 20,000 in hilly and tribal areas and

iv. One community health centre for a population of one lakh for one community development block.

Investigation of Policy Health For All by AD 2000

The policy is that of the planner using statistical and geographical data and economic arguments (Thomas, 2000).Often it appears to have little impact, but occasionally the affects practice. In Alma Ata Declaration (1978) it was committed to achieve "Health For All by 2000 AD". Subsequently, the Government of India initiated a national health policy designed to increase the provision of health care not just to some but to all the population of the country. But there is a wide gap between the policy and the reality.

Table 1: Gap between Ideal Ratio and Actual Ratio of BPHC / 100,000 Populations, PHC / 30,000 Populations and SC / 5000 Populations

Block / Municipal Corporation Municipality	Ideal Ratio of BPHC / 100,000 Population	Actual Ratio of BPHC / 100,000 Population	Ideal Ratio of PHC / 30,000 Population	Actual Ratio of PHC / 30,000 Population	Ideal Ratio of SC / 5000 Population	Actual Ratio of SC / 5000 Population
Asansol sub-division						
Salanpur	1	0.64	1	0.38	1	0.42
Barabani	1	0.91	1	1.09	1	0.77
Raniganj	1	0.98	1	0.30	1	0.54
Jamuria	1	0.89	1	0.53	1	0.62
Asansol (M.C.)	1	0.69	1	0.51	1	0.17
Kulti (M.C.)	1	–	1	0.18	1	–
Raniganj (M)	1	–	1	–	1	–
Jamuria (M)	1	0.77	1	0.46	1	0.85
Durgapur sub-division						
Galsi I	1	0.57	1	0.34	1	0.74
Andal	1	0.59	1	0.18	1	1.00
Faridpur – Durgapur	1	0.92	1	0.83	1	0.69
Pandabeswar	1	–	1	0.41	1	–
Kanksa	1	0.66	1	0.79	1	0.79
Durgapur (MC)	1	–	1	0.06	1	–
Burdwan (N) sub-division						
Burdwan - I	1	0.56	1	–	1	0.56
Burdwan – II	1	–	1	–	1	0.76
Ausgram – I	1	0.94	1	0.84	1	0.98
Ausgram – II	1	0.74	1	1.10	1	0.73
Bhatar	1	–	1	0.76	1	0.80
Galsi II	1	0.74	1	0.44	1	0.78
Burdwan (M)	1	–	1	0.10	1	–
Guskara (M)	1	–	1	–	1	–
Burdwan (S) sub-division						
Memari – I	1	–	1	0.45	1	0.78
Memari – II	1	0.73	1	0.66	1	0.92
Jamalpur	1	0.41	1	0.49	1	0.78
Raina – I	1	0.61	1	0.55	1	0.80
Raina – II	1	0.73	1	1.09	1	0.76
Khandaghosh	1	0.58	1	0.52	1	0.75
Memari (M)	1	–	1	–	1	–
Katwa sub-division						
Mongalkote	1	0.43	1	0.51	1	0.79
Ketugram – I	1	0.68	1	0.41	1	0.82
Ketugram – II	1	0.93	1	0.56	1	0.84
Katwa – I	1	0.66	1	0.59	1	0.82
Katwa – II	1	0.73	1	0.50	1	0.83

Block / Municipal Corporation Municipality	Ideal Ratio of BPHC / 100,000 Population	Actual Ratio of BPHC / 100,000 Population	Ideal Ratio of PHC / 30,000 Population	Actual Ratio of PHC / 30,000 Population	Ideal Ratio of SC / 5000 Population	Actual Ratio of SC / 5000 Population
Katwa (M)	1	–	1	–	1	–
Dainhat(M)	1	–	1	–	1	–
Kalna sub-division						
Purbasthali – I	1	–	1	0.49	1	0.63
Purbasthali – II	1	0.53	1	0.64	1	0.66
Kalna – I	1	0.52	1	0.47	1	0.68
Kalna – II	1	0.65	1	0.79	1	0.69
Manteswar	1	0.47	1	0.41	1	0.75
Kalna(M)	1	–	1	–	1	–

Source: National Health Policy, 1983 and CMOH II, Burdwan, 2006

Gap between ideal ratio of BPHC/100,000 population, PHC/30,000 population and SC/5,000 population was formulated in the National Health Policy 1983 and actual ratio of BPHC/100,000 population, PHC/30,000 population and SC/5,000 population in various blocks, municipal corporations and municipalities in the district of Burdwan is shown in Table1.

There is a wide gap in ideal ratio of health infrastructure and population with actual ratio of health infrastructure and population. Except few blocks, in all the blocks available health care facilities are under national norm. Wide difference is found between ideal ratio of BPHC/100,000 population and actual ratio of BPHC/100,000 population in all blocks, municipal corporations and municipalities. Ideal ratio of BPHC/100,000 population is one. But there is no block, municipal corporation and municipality which can attain the ideal ratio in the district of Burdwan. Only few blocks like Barabani (actual ratio 0.91),Raniganj (actual ratio 0.98), Jamuria (actual ratio 0.89), Faridpur-Durgapur (actual ratio 0.92), Ausgram I (actual ratio 0.94) and Ketugram II (0.93) are closer to ideal ratio. Only three blocks in the district of Burdwan have maintained ideal ratio of PHC/30,000 population. Those blocks are Barabani (actual ratio 1.09), Ausgram II (actual ratio 1.10) and Raina II (actual ratio 1.09). But most of the blocks are far below from ideal ratio of PHC/30,000. Although municipalities and municipal corporations are exceptions because they provide much better health care facilities like hospital. So they are devoid of small scale health care facilities like BPHC, PHC and SC. Wide gap is found between the ideal ratio of SC/ 5,000 population and actual ratio of SC/5,000 population. Ideal ratio of SC/5000 population is one. There is only one block in the district of Burdwan whose actual ratio is equal to ideal ratio of SC/5,000 population. The only block is Andal (actual ratio 1.00).

It is evident from the Table 1 that the infrastructure of sub centres, primary health centres and blocks primary health centres, built in the rural areas touches only a fraction of the rural population. The health policy is not implemented properly. More health centres will be required to cover all the population of the district. New health policy based on sustainability needs to be formulated.

Spatial variation exists in respect of health institutions which include hospitals, health centres, clinics and dispensaries. Industrial pockets are better off than agricultural pockets in terms of health care facilities in the district of Burdwan.

In most of the cases it has been observed that wherever disease intensity is high, health care facility is poor. But there are some cases where disease intensity is high despite higher concentration of health centres, clinics and dispensaries. In fact, this is nothing but a fallacy, because this health centres, clinics and dispensaries often run without any doctor. In reality health care facilities in urban centres are far better than rural areas.

The doctors are urban biased, mainly due to the lack of basic facilities in rural areas. There is a general apathy towards rural service even among other categories of manpower required for rural primary health care service.

Though the government has established a large number of training centres to provide required trained health manpower in the rural areas, the vacancies in the health centres remain unfilled. Another major handicap in the delivery system of health care services is the acute housing problem for these institutions. Most of the health centres are functioning in private buildings without proper facilities like electricity, telephone etc.

Total physical infrastructure available for health care in the district is still inadequate relative to requirement and it has already been noted that there are also problems with the quality of health service delivery in several key areas.Pressure on Burdwan Medical College Hospital has been increasing day by day because of rural surroundings which have threatened public health system in the district of Burdwan. Hospitals, health centres, doctors and beds in relation to existing population are not adequate. Hospital catchment areas cannot touch all section and all parts of the people in the entire district. There has been over dependence on the health care measures arranged by the government and voluntary as well as local efforts have not been able to take up responsibility in any significant measures. The involvement of the people in solving their own health problems has been almost nonexistent.

Some of the flaws in providing basic minimum services to the people are defective programme designing, inadequate delivery mechanisms, noninvolvement of people, lack of motivation and poor implementation of the programme.

Conclusion

Sustainable development encompasses both the issue of environmental impact on health as well as the effect of socio-economic development on health. The ultimate objective of sustainable development can only be achieved if rudiments of basic environmental health interventions are ensured. Thus it is imperative to have an understanding of linkages and means of assessing the probable impacts. Policy makers and planners have comprehensive strategy towards minimizing the ill effects of environment and development on health.

In the district of Burdwan health infrastructure has several gaps which needed to be strengthened. Appropriate measures are to be adopted to strengthen co-ordination between primary health care and the related development activities in nutrition, drinking water supply, sanitation, housing and social welfare. Sustainable development is a requirement in any attempt to tackle health inequalities. The one main barrier to effective programmes in the reduction of health inequalities is the lack of a commitment to those that sustain programmes and that support communities.

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