



Government of the People's Republic of Bangladesh
Ministry of Local Government, Rural Development and Cooperatives
Local Government Division

National Hygiene Promotion Strategy for Water Supply and Sanitation Sector in Bangladesh 2012





Local Government Division
Ministry of Local Government, Rural Development and Cooperatives
Government of the People's Republic of Bangladesh

National Hygiene Promotion Strategy for Water Supply and Sanitation Sector in Bangladesh 2012



Secretary
Local Government Division
Ministry of Local Government, Rural Development and Cooperatives
Government of Bangladesh

PREFACE

In line with the spirit of Millennium Development Goals (MDG), National Public Health targets aim to reduce high mortality rate resulting from diarrhoea and also water-sanitation related multiple diseases like dysentery, typhoid, cholera and hepatitis through and improved water supply and sanitation system.

Supply of safe-drinking water in Bangladesh occasionally suffers from various technical and institutional constraints which need to be addressed in a systematic manner with a comprehensive strategic planning to sustain the results. Therefore improving water quality, hygiene practices and safe excreta disposal - all need to be taken into consideration with a holistic approach for reducing transmission of water-borne diseases.

National campaigns and advocacy focusing on sanitation started with an emphasis on the latrine promotion during 1980s. The focus gained momentum in late 2003 when the Government of Bangladesh (GOB) organized the South Asian Conference of Sanitation (SACOSAN) and declared the goal of attaining 100% sanitation by 2010. Sanitation was given a further boost in 2005 when GOB developed a national Sanitation Strategy as a means of achieving the relevant MDG goals. The strategy emphasized more on safe human excreta disposal in connection with sanitation. Hence the matter of hygiene promotion needs to be addressed with due diligence so that it remains as an integral part of National Sanitation Strategy.

It gives me pleasure to see that the National Hygiene Promotion strategy (NHPS), 2012 has been an integral part of the Sector Development plan 2011- 25. Furthermore, 'Hygiene Promotion' has integrally been related to water supply and sanitation practices which determine the health-conscious behavior of people enabling them to make an informed and adequate choice. Our children are being given hygiene education as part of their curriculum in school which will definitely make an impact in bringing the desired change in the community-behavior in this regard. The influence of educated children would have a splashing effect in the society as a whole. The need for physically challenged people and also the socio-economic aspect of geographically difficult areas have also been taken into consideration in the NHPS. The successful implementation of NHPS would require effective coordination and consultation among all concerned both at the managerial level as well as with those at the receiving end like poor underprivileged people including those living in the urban slums.

I feel happy to see that extensive stakeholder consultations have been undertaken with specialized organizations of the Government, Autonomous bodies, Research organizations, NGOs and development partners in the process of NHP formulation. It has also been reviewed by the Members of Expert Group formed by the National Forum for water supply and sanitation.

I express my deep gratitude to the Hon'ble Minister and the State Minister in charge of Local Government Division for providing their valuable guidance in developing the NHPs.

I thank my colleagues of the Local Government Division (LGD), Policy Support Unit and related attached departments for their proactive role and continued support to facilitate the strategy formulation.

I take this as my privilege to introduce this NHPS to all stakeholders with an optimistic note that all our efforts will bring the desired results through successful implementation of the strategy.



Abu Alam Md. Shahid Khan
Secretary

FOREWORD

The National Hygiene Promotion Strategy (NHPS), 2012 is an integral part of the Sector Development Plan (SDP), 2011-25 for water and sanitation sector in Bangladesh. The NHPS provides a frame work for implementation, coordination and monitoring of various activities for launching hygiene promotion at national, regional and local level. The Strategy formulation has been made through a wide range of Stakeholder consultations at various levels and finally reviewed by members of Expert Groups from specialized organizations including representatives from DPHE, UNICEF, WHO, WSP-SA, World Bank, Water Aid, BRAC and NGO Forum for Public Health.

The Strategy suggests that during the early phase of implementation of hygiene promotion three critical behaviors of personal hygiene, food hygiene and menstrual hygiene to be addressed. Improvement of hygienic behavior is expected to progress with the development of increased awareness level, and improvement of affordable facilities through research and innovative technical solutions. Environmental hygiene and control of pollution of water sources are to be addressed in the subsequent phases of the implementation of the strategy.

There are challenges of coordination for implementation of hygiene promotion campaign but stakeholder's participation by various Government agencies, LGIs, NGOs and development partners shall overcome the constraints. Besides, allocation of resources, the flow of funds for hygiene promotion activities including capacity building of the relevant sector agencies would need to be dealt with proper care and with diligence.

I would like to express my gratitude to the participants who have rendered valuable inputs and taking part in the review process and preparation of the NHPS document.

Finally I appreciate the tremendous efforts of the Policy Support Unit (PSU) and its officials, who worked relentlessly with the dynamic leadership of the Project Director Kazi Abdul Noor of Policy Support Unit (PSU) in the process of preparation of the NHPS.



Zuena Aziz
Additional Secretary (WS)
Local Government Division

ACKNOWLEDGEMENT

The promotion of better hygiene, alone, or in combination with better water supply and/or sanitation, can have a major impact on reducing disease prevalence and public and private health costs. Government of Bangladesh and other stakeholders working in the Water, Sanitation and Hygiene Sector have long been felt the need of a National Hygiene Promotion Strategy for Bangladesh to have agreed strategic effort to improve public health situation. The present 'National Hygiene Promotion Strategy (NHPS), 2012 is a product of broad consultation and collaboration and PSU would like to acknowledge the contribution made by government officials, experts, organizations and development activist involved with Water, Sanitation and Hygiene Sector.

I take this opportunity to express my profound gratitude and deep regards to Mr. Abu Alam Md. Shahid Khan, Secretary, LGD for his exemplary guidance, and support in accomplishing this strategy formulation.

I am indebted to Ms. Zuena Aziz, Additional Secretary (WS) and Mr. Shams Uddin Ahmed, Deputy Secretary (WS), Local Government Division for their incessant support in carrying out the initiative.

I also appreciate members of the 'Working Group' and Expert Group for providing necessary guidance and valuable comments to the PSU and consultants in various phases of preparing the national strategy.

I thankfully acknowledge the contribution made by Water Aid, NGO Forum, BRAC, DSK, PSTC, VERC, UNICEF, WSP-WB, WHO, ADB, WASH Alliance, DPHE, Ministry of Education, Ministry of Primary and Mass Education, Ministry of Health and Family Welfare, Ministry of Agriculture through active participation in consultative meeting and workshops.

Special thanks to Mr. Mogens Strunge Larsen, Head of Development Cooperation and Mr. Jan Moller Hansen, former Deputy Head of Mission, Embassy of Denmark for mobilizing financial resources for the formulation of 'Hygiene Promotion Strategy'.

My appreciation also goes to Mr. Shariful Alam, former Project Director (Deputy Secretary), Policy Support Unit and Mr. Paul-Erik Frederickson, Senior Sector Adviser, for undertaking this initiative.

Finally, I appreciate the contribution of Mr. Torsten Malmendorf, Sector Adviser, PSU staff members and Team of consultants from Institute of Water Modeling (IWM) and Participatory Management Initiative for Development (PMID) for their relentless effort and ensuring their accomplished task in scheduled time.



(Kazi Abdul Noor)
Project Director (Joint Secretary)
Policy Support Unit
Local Government Division

Table of Contents

ACRONYMS AND ABBREVIATIONS	iii
1. □ BACKGROUND	1
□ 1.1 □ INTRODUCTION	1
□ 1.2 □ HYGIENE PROMOTION	2
□ 1.3 □ OBJECTIVE OF NATIONAL HYGIENE PROMOTION STRATEGY (NHPS)	2
□ 1.4 □ SCOPE OF NHPS	2
2. □ STRATEGY DEVELOPMENT PROCESS	3
□ 2.1 □ STAKEHOLDERS CONSULTATION	3
□ 2.2 □ HYGIENE PROMOTION FRAMEWORK	5
□ 2.2.1 □ POLICY GUIDELINES	5
□ 2.2.2 □ GUIDING PRINCIPLES	6
3. □ KEY STRATEGIES	7
□ Strategy 1: □ Compliance to the existing public policies, strategies and legal instruments	7
□ Strategy 2: □ Focal Ministries and Agencies and their Role and Responsibilities	8
□ Strategy 3: □ Role of NGOs, Private Sector and Development Partners	10
□ Strategy 4: □ National level hygiene promotion	11
□ Strategy 5: □ Hygiene promotion in hard-to-reach areas	11
□ Strategy 6: □ Behavioral and social change communication (BSCC) strategy	14
□ Strategy 7: □ Explore and replicate successful hygiene promotion models	15
□ Strategy 8: □ Ensure the potential use of the social organizations	15
□ Strategy 9: □ Budgetary allocation for Hygiene Promotion	15
□ Strategy 10: □ Gender mainstreaming in the service planning, implementation and monitoring	15
4. □ CAPACITY BUILDING, R&D, MONITORING & EVALUATION	16
□ 4.1 □ CAPACITY BUILDING OF WSS SECTOR INSTITUTIONS	16
□ 4.2 □ R&D INITIATIVES ON HEALTH AND HYGIENE ISSUES	16
□ 4.3 □ MONITORING AND EVALUATION GUIDELINES	16
□ 4.4 □ OPERATIONAL GUIDELINES FOR MEASURING BEHAVIOR CHANGE	17
5. ACTION PLAN	18
□ 5.1 □ SUPPORTING ACTIONS FOR STRATEGY IMPLEMENTATION	18
□ 5.2 □ KEY STEPS FOR IMPLEMENTATION	18
□ 5.3 □ ACTION OF KEY ACTORS	20
□ 5.4 □ THE TIME FRAME	21

ACRONYMS AND ABBREVIATIONS

BCC□	Behavior Change Communication
BHE□	Bureau of Health Education
CC□	City Corporation
CHT□	Chittagong Hill Tract
CLTS□	Community Led Total Sanitation
DGHS□	Directorate General of Health Services
DPHE□	Department of Public Health Engineering
FGD□	Focus Group Discussion
GOB□	Government of Bangladesh
HIP□	Hygiene Improvement Framework
HYSAWA□	Hygiene, Sanitation and Water Supply
IEC□	Information, Education and Communication
IWM□	Institute of Water Modeling
LGED□	Local Government Engineering Department
LGI□	Local Government Institutions
MDG□	Millennium Development Goal
MIS□	Management Information System
MoE□	Ministry of Education
MoH&FW□	Ministry of Health and Family Welfare
MoLGRD&C□	Ministry of Local Government, Rural Development and Cooperatives
MoPME□	Ministry of Primary & Mass Education
M&E□	Monitoring and Evaluation
NGO□	Non Government Organization
NHPS□	National Hygiene Promotion Strategy
NIPSOM□	National Institute of Preventive and Social Medicine
NWSS□	National Forum for Water Supply and Sanitation
PMID□	Participatory Management Initiative for Development
PPP□	Public Private Partnership
PSU□	Policy Support Unit
R&D□	Research and Development
SDP□	Sector Development Plan (for WATSAN)
SMS□	Short Message Service (of Mobile Phones)
UNICEF□	United Nation Children's Fund
UZF□	Upazila Parishad
UP□	Union Parishad
WASH□	Water, Sanitation and Hygiene
WATSAN□	Water and Sanitation
WHO□	World Health Organization
WSP□	Water Safety Plan
WSS□	Water Supply and Sanitation
WSSD□	World Summit on Sustainable Development

1.1 BACKGROUND

1.1 Introduction

Water and excreta related diseases such as diarrhoea, worm infestation and other respiratory diseases still remain a major health concern in Bangladesh. A very recent study observed that the health related economic loss due to inadequate sanitation is 84% of the total economic impacts or equivalent to 5.3% of GDP in Bangladesh. More than BDT 195 billion is lost due to premature mortality. Health related productivity loss is estimated at 31.9 billion, time lost at home, work and school is significant. Another study in Bangladesh suggests that improved water and sanitation facilities reduce diarrhoea by 99%, dysentery by 90%, intestinal worms by 51%. Washing hand with soap or simply rinsing hands without soap prior to preparation of food can reduce occurrence of diarrhoea in children.

National public health targets and Millennium Development Goal (MDG) are to reduce morbidity and mortality due to diarrhoeal as well as water sanitation related other disease. The focus of the water supply intervention was primarily to reduce the high rate of under-five child mortality mainly due to diarrhoea, and to provide safe drinking water to control vector-borne diseases like diarrhoea, dysentery, typhoid, cholera and hepatitis. Subsequently, the control of microbial quality of water received priority in drinking water supply, and for that, groundwater supply becomes an obvious option. By early 90's, Bangladesh achieved almost universal (i.e. about 97%) drinking water supply coverage until the success was overshadowed by the presence of excessive arsenic in the shallow aquifers. The success of the primary strategy was based upon the creation of an enabling environment for increased access to water supply and sanitation facilities. The water supply alone did not remarkably reduce the disease burden.

In the 1980s, national campaigns and advocacy focusing on sanitation started with an emphasis on the latrine promotion. The focus gained impetus in late 2003 when GOB organized the South Asian Conference on Sanitation (SACOSAN) and declared the goal of 100% sanitation by 2010. Sanitation was given a further boost in 2005 when the GOB developed a National Sanitation Strategy as a means of achieving the relevant MDG goals. Even though hygiene promotion was supposed to be an integral part of the strategy, the strategy was skewed more to the advantage of sanitation focused mainly on safe human excreta disposal considering the national priority of that period rather than hygiene in terms of the elements of the strategy.

Improving water quality, hygiene practices and excreta disposal are all important in reducing disease transmission. Furthermore, evidence also suggests that combined improvements to all activities have a greater impact on disease transmission than the sum of their individual activity. Improving hygiene practice often involves greater water usage and it is therefore important that hygiene promotion strategy is to be integrated with the overall sector policies and strategies to improve access to safe drinking water supply and sanitation. Therefore, the need for developing and implementation of a functional 'national strategy for hygiene promotion' has evolved to make the available water supply and sanitation service provisions in public health and the overall well-being of the people effective, and thus sustainable.

¹ WSP-WB Study by Guy Hutton and Dr. Abul Barakat, 2011

² ICCDRB-Study by Steve Luby 2011

1.2 Hygiene Promotion

Hygiene promotion includes strategies that encourage or facilitate a process whereby people assess, make considered choices, demand, effect, and sustain hygienic and healthy behaviors. This encompasses personal, domestic, and environmental hygiene practices and any action or initiative taken to erect barriers to diseases. In this strategy paper, the 'Hygiene Promotion' is considered particularly related to water supply and sanitation.

1.3 Objective of National Hygiene Promotion Strategy (NHPS)

The objective of the national hygiene promotion strategy is to promote sustainable use of improved water supply and sanitation infrastructures and to create an enabling environment ensuring comprehensive hygiene promotion and practices to reduce water and sanitation related diseases.

1.4 Scope of NHPS

The range of hygiene behaviors and social norms that may affect disease transmission can be broadly classified into five clusters called 'behavioral domains'. These are:

- Disposal of human feces i.e. sanitation hygiene
- Selection, use and protection of safe water sources i.e. water hygiene
- Personal (including menstrual) hygiene
- Food preparation and handling i.e. food hygiene
- Domestic and environmental hygiene (e.g. small drainage and household waste management) i.e. environmental hygiene

No single programme can effectively cover all practices in all domains, and hence there is a need to prioritize which practices are likely to be most effective in preventing in diseases transmission. In this context, the scope of the NHPS is limited to improve hygiene practices relevant to water supply and sanitation, considered to be the priority area for prevention of diseases from fecal oral transmission.

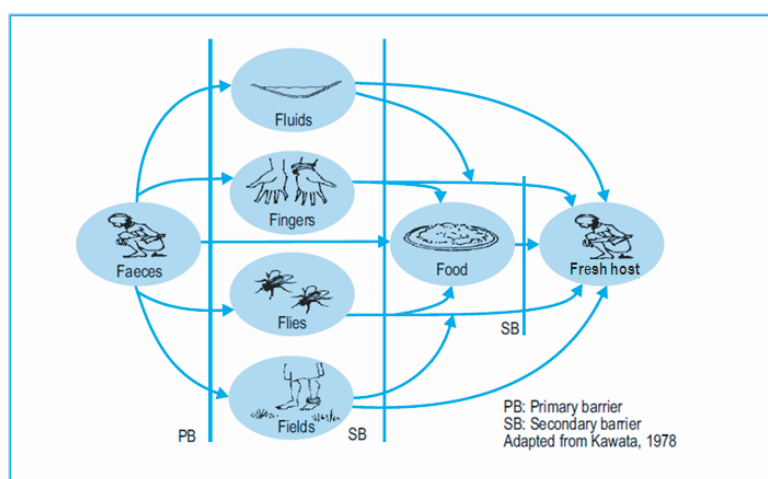


Figure 1: Hygiene barriers to disease from fecal oral transmission

The diagram explains the primary barrier as safe excreta disposal and secondary barrier as hygiene education, awareness and promotion.

2.2 STRATEGY DEVELOPMENT PROCESS

2.1 Stakeholders Consultation

The development of the strategy involves a variety of participatory methods and a wider consultative process. It encompasses intensive task coordination and management through a LGD-led Working Group established under the framework of the National Forum for Water Supply and Sanitation (NF-WSS) besides, an in-depth review of the national and international references. Stakeholder consultations were carried out with relevant government agencies, non-government organizations, and research organizations. Regional workshops were conducted in various geo-physical locations and cultural contexts in Bangladesh. Interviews and focus group discussions were held with the local level government officials (i.e. Upazila Nirbahi Officer (UNO), Upazila health & Family Planning Officer (UHFPO), Upazila Education Officers (UEO), Union Parishad (UP) chairmen and members Officers and Officials of Department of Public Health Engineering (DPHE), representatives of Local Government Institutions (UP Chairmen and Members, Paurashava/ City Mayors and Councilors) and NGO project managers, social workers and communities in different part of the country.

Table 1: Stakeholders consultation process

Levels	Consultative dialogues/ FGD/ Meetings
Central Level (Department Agencies Professionals)	<ul style="list-style-type: none"> Working Group Meetings formed by LGD, representing major WSS stakeholders to review the Strategy Frame work and Strategy Document Presentation in national level stakeholders' workshop to review the Strategy Document Presentation of draft NHPS in the National Forum for Water Supply and Sanitation Expert Group Meetings formed by NF-WSS, representing major WSS stakeholders for strategy document review Presentation in the National Forum for Water Supply and Sanitation for approval
Specialized Agencies	Consultation with DPHE, NIPSOM WSP-SA, WB, UNICEF, WHO, WAB, ICDDR'B, BRAC, NGO-Forum,
Regional Level (Stakeholders in different hydro and geo-physical focus)	<ul style="list-style-type: none"> District and Upazila Administration, Paurashava, DPHE, DGHS, LGED, Directorate of Education (Primary & Secondary)

<ul style="list-style-type: none"> ■ CHT ■ Coastal, ■ Haor, and ■ LWT regions 	<ul style="list-style-type: none"> ■ NGO, Private Sector ■ WATSAN Committees
Upazila Level	<ul style="list-style-type: none"> ■ Upazila Parishad ■ Govt. and Non-govt. department and agencies ■ UNO, UZ Chairmen, DPHE, others ■ WSS project officials
Union Level	<ul style="list-style-type: none"> ■ Union Parishad Chairmen and Members ■ CBOs, Schools, WATSAN Committee
Community level	Community leaders and people

In addition to stakeholder consultation, meetings of the 'Working Group Members' were held in the inception, interim phase and after the submission of the 'draft final report'. A special meeting with DPHE was held with the participation of senior members of DPHE and comment was incorporated. Subsequently a 'National Workshop' was held to review the Strategy Document and finally an 'Expert Group' from DPHE, WHO, UNICEF, WSP-SA, World Bank, Water Aid, BRAC and NGO Forum reviewed the NHPS document. Outcome of various consultations is discussed below:

- Integration of hygiene into water supply and sanitation programme is considered essential;
- Demonstration of good hygiene practices is useful and necessary;
- Adoption of mix multimedia development communication and social marketing approaches for sustainable behavior change is necessary;
- Research and development for innovation of technological solutions and behavioral change factors are necessary;
- Involving communities, educational institutions and Local Government Institutions (LGIs) in all stages of planning, programming and implementation considered essential;
- Emphasizing on special needs in terms of communities and geo-physical locations, culture and situations are pointed out; Adopting different strategies for hard-to-reach areas considered necessary;
- Exploring successful use of locally available resources, well coordinated and synergetic programming both at central and local level are considered essential;
- Ensuring policy compliance and enforcement by the service providers and targeted community are emphasized;
- Ensuring adequate physical provision of water supply and sanitation for hygiene promotion are considered as precondition;
- Determining focal agencies and their roles and responsibilities at all levels for coordination of hygiene interventions is very important;
- Separate allocation and increased financing for hygiene promotion is proposed;
- Capacity strengthening of public and private sector agencies for improved service delivery has been recognized;
- Systematic follow-up and M&E for measuring behavior change and gaining public health benefits are also emphasized.
- During emergency and calamities special allocation for resource and NGO mobilization with support of local government and national agencies has been recognized.

2.2 Hygiene Promotion Framework

The Hygiene Promotion Strategy for Water Supply and Sanitation in Bangladesh has been developed on the basis of a Hygiene Improvement Framework (Figure 3)³. The three components of the framework are: access to hardware, hygiene promotion, and enabling environment. An integrated program with all three components is the ideal for hygiene promotion.

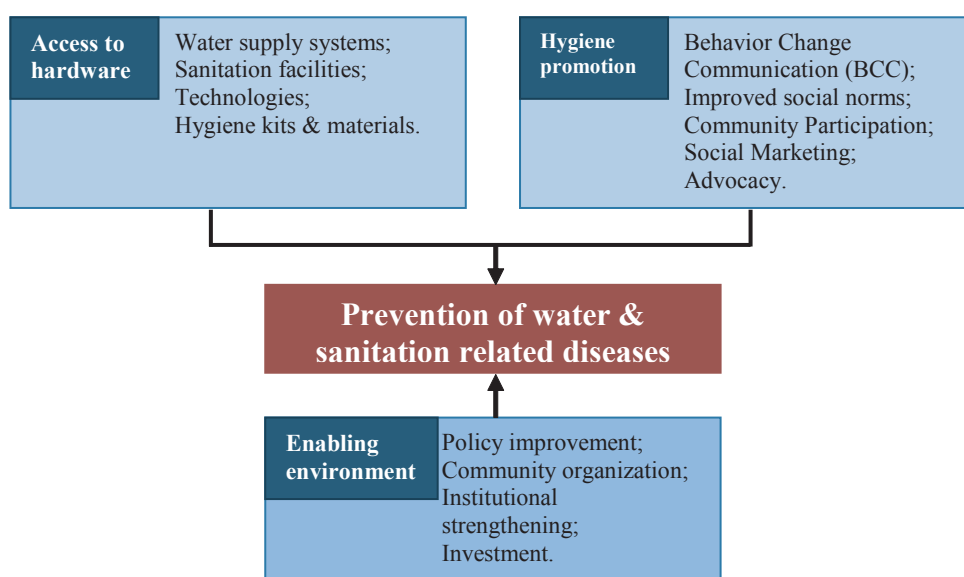


Figure 2: Framework for prevention of water & sanitation related diseases

2.2.1 Policy Guidelines

There are a number of policies, strategies and legal instruments which recognizes the challenges in the water supply, sanitation and hygiene sector. These documents supports the improvement in the WASH sector, although falls short of providing a complete guidance for hygiene promotion. The following policy, strategies and legal instruments have been identified that are relevant for developing the Hygiene promotion strategy.

- National Water Safety Framework (WSF) in Bangladesh, 2011
- Sector Development Plan (FY2011-25), 2011
- Bangladesh Environmental Conservation Act (Amendment), 2010
- Local Government (Paurashava) Act, 2009
- Local Government (City Corporation) Act, 2009

³ USAID, Bureau of Global Health, Infectious Disease Division, Environmental Health Team

- Upazila Parishad Act, 2009
- Union Parishad Act, 2009
- Local Government Circulars (on hygiene promotion), March 2007
- Pro-poor Strategy for Sanitation Sector, 2005
- The National Sanitation Strategy, 2005
- Bangladesh Poverty Reduction Strategy Paper (BPRSP), 2005
- Sanitation Related Policy decisions, 2004
- National Water Policy, 1999
- National Policy for Safe Water Supply and Sanitation, 1998
- Bangladesh Environmental Conservation Rules, 1997
- WASA Act, 1996
- Bangladesh Environmental Conservation Act, 1995
- Shops and Establishment Act, 1969
- Factories Act, 1965
- The Pure Food Ordinance, 1959
- The Public Health (Emergency Provisions) Ordinance, 1944
- The Penal Code, 1860

2.2.2 Guiding Principles

Upon lessons learnt from the most successful and effective hygiene promotion programmes nationally and internationally, the following guiding principles were drawn and followed at every stages and level of preparing this strategic document:

- Hygiene would consider primarily for survival and good health and the integral part of safe water and sanitation programme;
- Communities are considered as central to the planning and implementation process and social, cultural and technical appropriateness in the localized contexts are essential;
- Decentralization of services and programming authorities are necessary;
- Hygiene pertains to dignity and status;
- Demand creation for sustained hygiene practice is a precondition;
- Investment and partnership building for scaling up and sustainability through awareness raising, capacity building, hygiene promotion, local resource mobilization and the creation of funding mechanism are necessary;
- Gender sensitive approach to address the specific needs of women, girls and children are essential;
- Emergency preparedness (risk reduction approach) provision has to be a part;
- Disable friendly approach to address differently able men, women and children are considered.

3. KEY STRATEGIES

The National Hygiene Promotion Strategy is a dynamic document and will be reviewed after five year. Service providing agencies shall undertake a comprehensive and holistic approach for implementing hygiene promotion interventions to bring-in maximum use benefit of the physical provision of water supply, sanitation and health impact through integrating hygiene components. They shall ensure multi-agency participation and use of comparative advantages of relevant government agencies for wider coverage and intensive behavioral and social promotion. The situational (i.e. socio-economic, cultural, living condition, land tenure, present level of access to WASH facilities) issues of rural and urban communities shall also be addressed. Appropriate communication messages, channels, and tools must be developed and mobilized. A systematic research on intervention effects and regular monitoring of behavioral and social changes are undertaken.

Categorically, the hygiene promotion strategies are as follows:

- Strategy 1: Compliance to the existing public policies, strategies and legal instruments
- Strategy 2: Focal Ministries and Agencies and their Role and Responsibilities
- Strategy 3: Role of NGOs and private sector
- Strategy 4: National level hygiene promotion
- Strategy 5: Hygiene promotion in hard-to-reach areas
- Strategy 6: Behavioral and social change communication (BSCC) strategy
- Strategy 7: Explore and replicate successful hygiene promotion models
- Strategy 8: Ensure the potential use of the social organizations
- Strategy 9: Budgetary allocation for hygiene promotion
- Strategy 10: Gender mainstreaming in the service planning, implementation and monitoring

Strategy 1: Compliance to the existing public policies, strategies and legal instruments

The National Sanitation Strategy, 2005 recognizes that hygiene contributes to the prevention of transmission of excreta related diseases and seeks to create effective barriers between pathogens that cause diseases, the intermediate carrier and the people. The strategy therefore recommends that health and hygiene education and promotion

- must be an integral part of all sanitation and water supply projects,
- must be undertaken by all line agencies and ministries,
- should be targeted at all levels of the community and with particular focus on high risk groups and communities and
- must be sensitive to specific local issues.

The Sector Development Plan (SDP), 2011 recognizes that hygiene promotion is the backbone of water and sanitation interventions. Health benefits are best achieved when water and sanitation interventions are combined with hygiene promotion. The SDP states that although development in hygiene promotion have occurred over a long period of some 30-40 years, a common approach towards hygiene promotion by all stakeholders and projects are still absent. The SDP rightly pointed out that the National Policy for Safe Water Supply and Sanitation, 1998 needs to be updated with important issues like climate change, water safety plan and hygiene promotion which have emerged as important issues in the last decade. The SDP also recommends that hygiene promotion should be incorporated into all national strategies and guidelines. In the above context, the requirement of a National Hygiene Promotion Strategy for Water Supply and Sanitation Sector becomes imperative.

The Public Health (emergency provision) Ordinance, 1944 makes special provision for preventing spread of human diseases, safe guarding public health and maintaining adequate medical services. However, it is not explicit about the protection of water sources and soils. This is supplemented by the Bangladesh Environmental Conservation Act, 1995 and Bangladesh Environmental Conservation Rules, 1997, which provide the basis of modern environmental pollution control in Bangladesh. The Act has defined authorities of Department of Environment (DoE) in terms of its rights and

obligations to control environmental pollution, which includes pollution of water sources and soil in Bangladesh. Provisions of the Act provided legal basis for taking punitive actions against violators.

The Pure Food Ordinance, 1959 covers food manufacturing, producing, wrapping, storing and selling of food items. But it does not cover such activities at personal or at household level. Local authorities are empowered for making bye-laws in these connections as necessary to address local or regional conditions and needs.

The Factories Act, 1965 targets only factory workers in respect of maintaining cleanliness, disposal of wastes and effluents, supply of drinking water and latrine facilities. Promulgate similar legal instrument for workers in others sectors.

The Penal Code, 1860 is specific about punitive actions against any negligent act likely to spread infection of diseases dangerous to life. The local authorities are made aware of the provision of this act, particularly in contamination of water sources and soil, to take necessary actions in this regards.

The Paurashava Act, 2009 & City Corporation Act, 2009 provides responsibility of public health and control of infectious diseases on the Pourashavas and City corporations respectively. The acts enable authorities to ensure all activities including development, operation and maintenance and control of the water supply and sanitary facilities including public toilets, solid waste disposal pollution control and maintaining hygienic environment in its jurisdiction. It also provides establishing public facilities in schools, health clinic, slaughter houses, washing and communal bathing & washing facilities etc. It covers control of sale of food and maintaining food hygiene in shops, market place and control of sale of milk and milk products, safe disposal of dead animal and livestock. The NHPS should ensure enforcement of existing provision of guidelines and acts and enhance activities for effective maintenance of public facilities in respective jurisdiction and hygiene promotion. Punitive actions by respective authorities are taken for any non-compliance of the provision of the Acts.

Water Supply and Sewerage Authorities operates within the provision of WASA Act, 1996. An essential provision of the Act is that Government will have to finance or be a surety for finance. It also allows high degree of autonomy to its board of directors selected from civil society of professional repute. All WASAs are responsible for operation and maintenance of water supply, storm water drainage and sewerage services for the respective cities in Dhaka, Chittagong, Khulna and Rajshahi. There is a need for increased cooperation and coordination between WASAs and City Cooperation for NHPS to make effective in urban sector.

Pro-poor Strategy for Sanitation Sector, 2005 defines the hardcore poor and recommends for basic minimum service level and provision for subsidies for the special communities. Such provisions are to include also hygiene promotion.

Strategy 2: Focal Ministries and Agencies and their Role and Responsibilities

The Local Government Division (LGD) of MoLGRD&C is mandated to provide policy guidelines and coordination to the WSS sector. The National Forum for water supply and sanitation (NF-WSS) under LGD is to coordinate, provide guidance and resource allocation for hygiene promotion activities at the national level. They are also to monitor the progress and success of the hygiene promotion activities through WATSAN committees in both rural and urban areas.

The Ministry of Health and Family Welfare (MoHFW) and Ministry of Education (MoE) play a significant role in WASH activities through Upazila Health and Family Planning Officers, Upazila Education Officers and Union Health and Family Planning Assistants, who are working at community level and members of the respective WATSAN committees. They are to strengthen their present role in WATSAN committees for hygiene promotion activities in their jurisdictions. It is recommended that their monthly reporting should highlight or record on hygiene promotion activities.

The Ministry of Primary and Mass Education (MoPME) is to ensure hygiene education in the primary schools and ensure hygiene practices in the schools by ensuring facilities, including running water system, through Directorate of Primary Education (DPE) at upazila and district levels. The hygiene practice issues included in the curriculum of primary education to be reviewed and improved, as necessary. The same are also incorporated in the curriculum of secondary level.

The Ministry of Information (MoI) is to take responsibilities of spreading the hygiene related messages countrywide by mass media campaign and spreading of information through all electronic and print media channels.

Policy & Monitoring Support Committee of NF-WSS will be responsible for policy, strategy and implementation of Sector Development Plan (SDP) as well as institutional and financial issues. The Policy Support Unit (PSU) of LGD will be the Secretariat of the committee. The Committee will also provide guidance to hygiene promotion at national level.

The Technical Committee of NF-WSS will be responsible for technical aspects and functioning of the thematic groups. DPHE will act as its secretariat.

The Local Consultative Sub-group (LCG) for water supply and sanitation sub-sector is an association of bilateral and multilateral development partners with participation of other stakeholders including Government agencies and NGOs for sharing experiences, issues, challenges and harmonizing the sector development activities for water supply, sanitation sub-sector and hygiene promotion.

Department of Public Health Engineering (DPHE) is the lead agency for water supply and sanitation sector in Bangladesh. DPHE is to continue coordination and implementation of hygiene promotion activities along with managing national sanitation campaign within its jurisdiction.

WASAs are semi-autonomous bodies with management entrusted to boards and report directly to MLGRD&C. Dhaka WASA covers water supply, stormwater drainage, and sewerage services. Chittagong, Rajshahi and Khulna WASA, presently, deal only with water supply services. WASAs to ensure their participation in hygiene promotion in their respective jurisdictions in coordination with the city corporations.

City Corporations and Paurashavas are to coordinate and implement all water, sanitation and hygiene promotion activities (hardware and software) in their jurisdictions, together with other WASH service providing agencies and individuals, including progress monitoring of water, sanitation and hygiene activities at their level.

The Upazila Parishad is mandated to coordinate water, sanitation and hygiene activities with Union Parishads and other national agencies under their respective jurisdiction. The Upazila WATSAN Committee and other respective WATSAN Committees will coordinate and facilitate hygiene promotion activities in their respective jurisdiction.

The hill councils in Chittagong Hill Tracts (CHT) areas are responsible for planning and implementing of water, sanitation and hygiene promotion activities, creating effective partnership with communities, undertake effective collaboration with NGOs/CBOs and private sector, business enterprises and individuals.

Union Parishads are the lowest tier of the Local Government in rural areas. Union/Ward WATSAN Committees shall implement and monitor WASH activities.

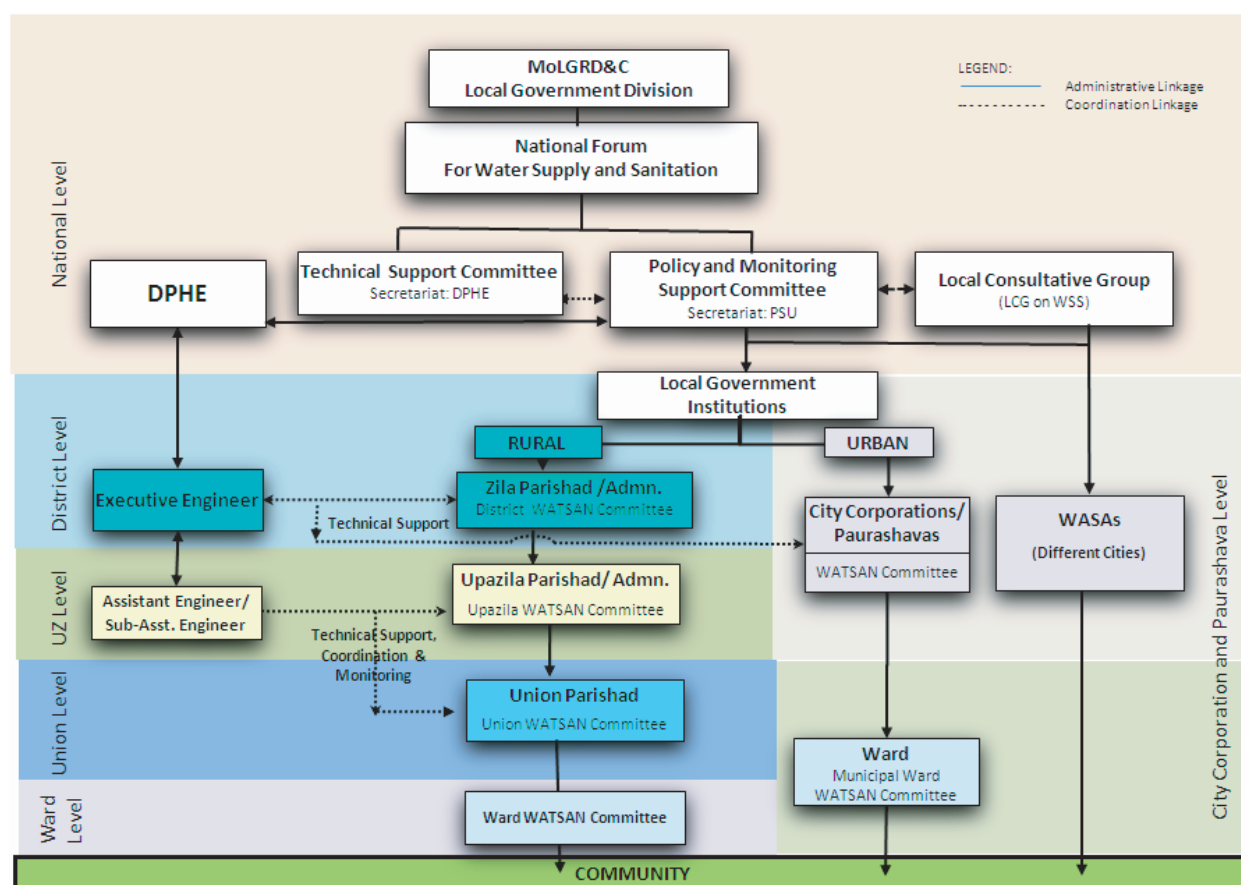


Figure 3: Sector Coordination Mechanism for Hygiene Promotion

Strategy 3: Role of NGOs, Private Sector and Development Partners

NGOs play an important role in helping certain population groups, or filling gaps in government services. NF-WSS at LGD shall coordinate WASH activities undertaken by GoB and NGOs at national level, while WATSAN committees shall coordinate the WASH activities at local level.

The private sector is already active in hygiene promotion as a mechanism for expansion of their market by promotional activities for personal hygienic related products (*soaps, sanitary pads, ORS, water storage tanks, pipes, hand washing buckets, toilet papers etc*). Effective Public-Private Partnership (PPP) will be a win-win situation for both public and private sector. The public sector will gain from expertise and resources under respective corporate social responsibility (CSR) initiatives with the private sector for promotional activities, while private sector will gain from expansion of their market. Proper incentive packages should be in place for private sector to encourage them in hygiene promotion activities.

The development partners also play an important role in supporting safe water supply and sanitation services through projects or programs. They can also play a key role in extending support to implement Hygiene Promotion Strategy and prompting hygiene behavior as an integral part of WSS projects.

Strategy 4: National level hygiene promotion

Promoting hygiene at national level is required through coordination among the (health, education, environment, information, agriculture, fisheries etc.) ministries, departments, academic/research institutions to increase access to safe water, sanitation and hygiene facilities in the country, with special attention to the poor, marginalized and vulnerable group of people including women, girls, children and differently able people in a sustainable and equitable manner. Following are the regular national hygiene promotion strategies.

- Demand responsive and demand driven approaches are adopted and implemented to extend WASH facilities in all communities through awareness building, organizing local communities through WATSAN committees, linking the community demand with technical (DPHE, WASAs, NGOs) and financing entities (Individual, community, GoB, Development partners).
- Integration of water safety plan (WSP) in the main stream of WASH activities.
- Develop internet-based information system on WASH programmes, resource allocation and utilization for better accountability and transparency in the sector. This will help in avoiding duplication of efforts in WASH activities. These are to be integrated with National MIS on WSS activities.
- Thematic group on 'Hygiene Promotion (HP)' within the NF-WSS of LGD to facilitate dialogue and discourse among stakeholders (GoB agencies, Development Partners, NGOs, private sector, CBOs, Civil Society, electronic and print media, activists, etc.).
- Special attention and options in WASH facilities and hygiene promotion activities for handicapped population.
- Effective media (electronic, print and community radio) partnership for awareness building for hygiene promotion at national and local levels.
- Ensure hygiene education and practice in primary and secondary schools.
- Inclusion of hygiene promotion in Primary, Madrasa and Secondary education curriculum.

Bangladesh is a disaster prone area having recurring floods, river erosion, cyclones and storm surges. Hygiene promotion during these emergencies should involve planning and a systematic attempt to enable people to take action to prevent water and excreta related diseases and provide a practical way to facilitate community participation. Following strategies need to be considered for responding to emergencies:

- Emergency preparedness programme must include hygiene component
- Flood shelters and other public/private institutions should have adequate water, sanitation facilities and hygiene kits
- Hygiene promotion activities with key messages must be undertaken during emergencies
- Flood and cyclones are seasonal; so hygiene materials must be pre-positioned in flood/disaster-prone areas before disaster
- Community participation in designing facilities, hygiene kits, and outreach system
- Use and maintenance of facilities by establishing a voluntary system
- Selection and distribution of hygiene items and ensuring the optimal use of hygiene items
- Communicating with WASH stakeholders for coordination and collaboration.

Strategy 5: Hygiene promotion in hard-to-reach areas

Strategies for hard-to-reach areas have special features related to the socio-economic (i.e. poverty levels, educational status, socio-cultural structure, age and sex, etc.), outreach (towards hard-to-reach areas and population), geo-physical (i.e. flood-plain, hilly, drought-prone, char, coastal areas) and hydro-geological (i.e. arsenic, salinity and low water table etc.) conditions. Hygiene promotion strategies for these specified areas shall include the following special considerations.

a) Chittagong Hill Tract (CHT) Areas

The social structure, cultural practices, level of education, language, topography, accessibility to water and sanitation facilities and perception of hygiene are different in the CHT compared to other rural areas of Bangladesh.

The topographic condition in hilly area makes it difficult to identify water sources. The transportation of conventional sanitary hardware uphill is done on head load. The people have very limited idea about the risk of using surface sources untreated. In this context, the following strategies are adopted.

- To allow access to safe water round-the-year, identify and harness alternative sources of water supply. The probable sources include: rainwater harvesting and storage, water reservoirs in hilly gorges and river valleys, gravity flow system, infiltration gallery and storage, etc.
- Research on devising appropriate household water storage facilities are made to store water for longer period avoiding contamination
- Devising and making available light weight sanitation hardware (plastic ring slab, ring well etc.) and eco-sanitation facilities, as required.
- Media communication through radio, T.V spot or promotional messages and campaigns in local language/dialect are developed.
- The social structures of the community being different, head man, karbari, social and indigenous religious leaders, who have considerable influence in the community, are engaged and motivated to carry out hygiene promotion in their area.
- Engaging local cultural groups and using community radio for behavioral and social norms development purposes.
- Being water scarce area, promotion of sanitation devises requiring less use of water (i.e. dry sanitation) to be made. Awareness building on conservation of water is to be made.

b) Coastal and offshore islands

The coastal belt is one of major hard-to-reach areas, where people are frequently exposed to natural disasters like cyclone, storm surge and tidal floods. There are numerous water sources in the area, but safe water sources round-the-year are limited due to saline water intrusion in rivers and aquifers. Climate change impacts have worsened the situation and would further deteriorate in the coming years. In this context, the following strategies are adopted.

- Investigate alternative water supply options like pond sand filter, rain-water harvesting system, deep tube well including affordable desalination technologies.
- Investigate aquifer recharge with rain water for reduction of salinity in shallow aquifer. Shallow shrouded tube well in some cases can be introduced.
- Community water supply and sanitation facilities on raised ground are made available.
- Hygiene promotion activities are carried out in the pre-disaster, during disaster and post-disaster period. Awareness building on spread of water borne diseases during disaster by SMS, through megaphone and leaflets in public places and places of worship.
- Emergency water supply during disaster are ensured. Appropriate water purification technology including mobile purification plants mobilized.
- Raised platform for toilets are constructed in lieu of conventional shallow pit.
- Volunteers and health workers are mobilized for taking care of hygiene issues in cyclone shelters during disaster period.

c) Low Water Table (LWT) and Barind areas

The major challenge to hygiene promotion in the LWT and Barind areas is limited access to safe water round-the-year. Due to major irrigation abstraction, groundwater table is depleting significantly. As a result, access to safe water is becoming more difficult. The available surface water sources like rivers and ponds dries up during winter and summer months. Climate change impacts are also making the situation more difficult as the incidences of drought events are becoming more frequent. The situation is expected to further aggravate in coming years. Awareness about hygiene issues is also very limited among the people. In this context, the following strategies are adopted.

- Investigate and make available alternate water sources like rainwater harvesting and water reservoirs/ impounding reservoirs.
- Limit irrigation abstractions within the safe yield of the groundwater aquifers to prevent depletion of groundwater

levels. Conduct investigation and studies in this context. Water supply for drinking water and sanitation from the irrigation network is suitable in many areas, appropriate mechanism are devised for the purpose.

- Being water scarce area, promote sanitation devices requiring less use of water (including dry sanitation). Awareness building on conservation of water is required.
- Increased use of surface water for irrigation and other domestic purpose by excavating pond/canals

d) Wetlands (Haor and Beels)

The haor and wetlands remain inundated for major part of the year. The water supply and sanitation situation in the area is appalling, with little coverage of hygienic latrines and widespread open defecation. The people of the area depend mainly on water supply from tube wells, which go under flood-water leaving safe water sources vulnerable. In this context, the following strategies are adopted.

- Appropriate models for hygienic latrines in the wetlands shall include raised platform, raised pits and floating latrines. Depth of conventional pit latrine should be limited to avoid ground water contamination. Further research in this area to continue.
- Protection of community level latrines and water sources is necessary during flood events
- In addition to regular programmes, hygiene promotion activities are carried out in the pre-flood, during flood and post-flood period. Awareness building on spread of water borne diseases during disaster by SMS, through megaphone and leaflets in public places and places of worship.
- Ensure emergency water supply during floods. Mobilize appropriate water purification technology including mobile purification plants.

e) Char areas

The hard-to-reach char areas are home of the poorest and most vulnerable communities in the country where water and sanitation coverage is far below standard. These areas are flooded partially or fully during floods and are subjected to river erosion making the safe water sources and sanitation facilities vulnerable. In these areas the groundwater table is shallow and the soil is predominantly sandy. Contamination of ground water from open defecation and pit latrines is a major problem. The people of the area are excluded from the mainstream and mostly out of reach of conventional hygiene promotional campaigns. In this context, the following strategies are adopted.

- Appropriate models for hygienic latrines in the char areas shall include raised platform, raised pits and floating latrines. Depth of conventional pit latrine should be limited to avoid ground water contamination. Further research in this area to continue.
- Protection of community level latrines and water sources is necessary during flood events
- In addition to regular programmes, carry out promotional activities on hygiene aspect in the pre-flood, during flood and post-flood period. Awareness building on spread of water borne diseases during disaster by SMS, through megaphone and leaflets in public places and places of worship.
- Ensure emergency water supply during floods. Mobilize appropriate water purification technology including surface water treatment plant/mobile purification plants.
- As the char areas are, in most cases, out of reach of mainstream promotional channels, national hygiene promotion campaigns might not reach the char inhabitants. In this areas community based organizations (CBOs) and NGOs to take major role in hygiene promotion.

f) Urban Slums and Squatters

Millions of poor and underprivileged people are living in the slums and squatters in various urban areas in Bangladesh. There are no proper human excreta disposal practices, safe wastewater disposal and drainage practices in these areas. Use of hang-latrine is common in slum areas. This is a major cause of contamination of water sources. Personal, domestic and environmental hygiene practices are practically absent for lack of awareness, inadequate safe water supply and sanitation facilities. While rural areas are covered by health workers under the Ministry of Health and Family Welfare, there is no such equivalent arrangement for the urban poor, most of whom

would be unlikely to receive hygiene promotion messages since there is also no national level campaign. Given the rising number of urban areas, this is an issue requiring attention. In this context, the following strategies are adopted.

- Safe piped water supply to urban slums to be ensured by WASAs or Paurashava authorities.
- Campaigns undertaken by the city corporations and Paurashavas to promote and make available sanitary latrine facilities; carry out the campaigns in a participatory manner to instill a sense of ownership in the local communities.
- Awareness campaign by Ward WATSAN committees on practicing proper hygiene behavior among slum dwellers.
- The slums are located, generally, in backward and under developed part of urban areas. These areas are frequently located in low lying areas where wastewater and storm water are accumulated from the slum and other part of the urban areas and not adequately drained. WASAs and Paurashavas should ensure that there is adequate wastewater and drainage facilities, which are to be implemented in a participatory approach with slum-dwellers.
- Introduce Cluster/Community latrine with appropriate waste disposal facilities.

Strategy 6: Behavioral and social change communication (BSCC) strategy

Effective hygiene promotion usually includes, among others, a range of strategies primarily aiming to improve hygiene behavior and therefore, bring-in positive changes in associated socio-cultural norms, so as to make people conscious about their adverse behaviors and prevent the spread of water and sanitation related diseases. It calls for an effective communication strategy to be in place, containing a set of methods and tools to identify behavioral gaps in hygiene practice, develop messages to communicate and provide a diversified channel of communicating targeted behavioral practices and negative social norms to change. Generally, extensive use of interpersonal communication, use of mass media, community media such as interactive popular theatre and social media such as SMS, face- book, use of social marketing approach, community participation, social mobilization and national hygiene promotion campaigns are the major BCC strategies undertaken.

These strategies include the followings:

- Promotion of 'cluster behavior', which includes access to safe water and hygienic sanitation facilities, hygiene promotion techniques and enabling environment should be attempted to increase the possibility of improved hygiene behavior in target groups and maintenance of these behavioral practices.
- The channels to reduce diarrhoea and water borne diseases in children under five are the parents who are to be influenced by health care providers/health care assistants, religious and community leaders.
- Women play the most important role in hygiene promotion at household level. Active women-to-women interactions to be given priority. Participation of women for hygiene promotion to be ensured.
- Specific programs for hygiene promotion for school children to be implemented. Children can be the motivators and supporters of positive hygiene activities in households.
- Religious leaders can be excellent communication channels for community members. Inclusion of religious leaders in WATSAN committees is required.
- The National Forum for Water Supply and Sanitation (NF-WSS) shall undertake high level advocacy activities for hygiene promotion in association with various stakeholders, which includes sector ministries (water resources, health, education, environment, information, agriculture, fisheries etc.), departments, academic/research institutions. NGOs, development partners, civil society and private sector.
- Organize national hygiene promotion campaigns consistently.
- Campaign territories to be defined for creating sustainable public health impacts addressing specific behavioral domains. Personal (including menstrual) hygiene facilities and services shall cover individual households, educational institutions, religious institutions, offices, market places, and other places where people usually stay longer times (more than 1-2 hours) of a day. Food hygiene shall cover a range of places starting from household kitchen to commercial shops, restaurants, hotels, places of recreation and entertainment (e.g. parks, cinema hall), long-tour transports (e.g. rail, steamer, ships, aircraft), street and mobile vendors. Environmental hygiene shall cover all urban and rural areas wherever sanitation (i.e. onsite and off-site) including waste management is relevant.

- Undertake collaborative initiatives with the private sector for promoting the use of soaps, sanitary pads, ORS, water storage tanks and pipes, hand washing buckets, toilet papers, water purification devices, etc.
- Social marketing and distribution channels to be developed for soap, chlorination tablet, low cost plastic wash basin, ORS etc through CBOs by means of one-to-one approach, leaflets, group meetings, fairs and demonstrations.
- The NF-WSS under LGD will guide media campaign for nation-wide hygiene promotion
- With consultation with NF-WSS, appropriate authorities will develop and distribute IEC and BCC materials through its field offices to WATSAN committees for participants groups.
- Other forms of local media, social media and mass media (bill boards, poster, leaflets, miking, SMS, radio, TV, mobile film shows etc.) to be used by different actors of hygiene promotion as may be required.

Strategy 7: Explore and replicate successful hygiene promotion models

The success of behavioral and social change communication programs will depend largely on the targeted segments of community people. Thus, formative research and in-depth studies on community perceptions and behavior change requirements, as well as systematic design of promotional interventions are to be undertaken to secure the desired public health impacts. Explore the successful models of mass mobilization, social norm change and communication campaign from within the country and abroad, and replicate those into the pilot programs.

Strategy 8: Ensure the potential use of the social organizations

The most critical element of hygiene behavior and social change campaigns are to rightly identify the factors having influence on the personal beliefs, social orientation and practices. Attempts are to be made to identify appropriate use of the various local government systems, social organizations, educational institutions, and indigenous leaderships from within the society for hygiene promotion. Ensure the potential use of the social organizations (i.e. religious/faith based organization, youth forces and their national and local associations, if any), educational institutions (i.e. schools) and school children for the purpose.

Strategy 9: Budgetary allocation for Hygiene Promotion

The Local Government Division (LGD) in 2004 made a number of sanitation related policy decisions, which provides block allocation for each Upazila Parishad of which 20 percent is allocated for improvement of sanitation activities including promotion of hygiene. Furthermore, the sanitation guideline provided by LGD also enabled WATSAN committees to facilitate hygiene promotion through 'awareness meeting' one in each ward, two meetings at upazila level, once in each year at all educational institutions (Schools, Madrasas, College) for raising awareness. In addition 'Sanitation Mela' is observed in each year and publicity has been made in public places for hygiene promotion, in accordance with the guideline issued in various circulars of LGD. Assessment of the outcome of these promotional activities to be made to review the effectiveness of the utilization of the budgetary allocation for sanitation and hygiene promotion. Based on the assessment review of the budgetary allocation to be made.

Strategy 10: Gender mainstreaming in the service planning, implementation and monitoring

The act of mainstreaming gender presents challenges for a diverse range of institutional functions, behaviors and attitudes, including policy making, planning, implementation, monitoring and evaluation, agenda setting and benchmarking. Thus, it shall focus on:

- Shifts in organizational culture and ways of thinking, as well as in the goals, structures and the resource allocation of the agencies
- The development of a number of procedures relating to gender responsibility, accountability, coordination, monitoring, evaluation and personnel policy
- Role of women in hygiene promotion to be considered, not only in terms of their token roles (as gender advisor, women officer) but as an empowered group of advocates and champions for change together with men, who are willing to listen, adapt and contribute.

4. CAPACITY BUILDING, R&D, MONITORING & EVALUATION

4.1 Capacity Building of WSS Sector Institutions

Capacity building for hygiene promotion shall not be a discrete function. It must be an integral part of the strategy for improving sector capacity to address problems related to water supply, sanitation and hygiene promotion. Capacity building initiatives must involve relevant target-groups as well.

The national agencies such as National Institute for Local Government (NILG), Bangladesh Academy for Rural Development (BARD), Rural Development Academy (RDA), International Training Network (ITN) of BUET can be used for capacity building of the sector institutions.

The GoB has the Essential Services Package (ESP) under the Health and Population Sector Programme (HPSP). Child Health Care is an important component of ESP. The HPSP assigns priority to Behavioral Change Communication (BCC). Capacity building for hygiene promotion can benefit from these programmes.

Training of trainers (TOT) at different levels (national, district, upazila and union) on hygiene promotion activities should be made. The trainers to be recruited from different organizations, will form a pool of trainers' and provide services with different WATSAN committees.

All relevant agencies need to strength their hygiene promotion units and its initiatives with adequate number of professional staffs and capacity.

4.2 R&D Initiatives on Health and Hygiene Issues

For demonstrating those effects through appropriate behavior and social changes, it is important to undertake R&D initiatives on selected issues, for example:

- Hand-washing with soap and clean water before food handling and after defecation;
- Hand-washing with soap and clean water after cleaning baby's bottom and defecation
- Use of safe water for drinking, cooking and washing purposes;
- Use of sanitary latrines with hygienic manner;
- Safe disposal of sludge (human and animal excreta) and household waste;
- Menstrual hygiene, among other.
- Water quality monitoring

Research and Publications on 'Hygiene Promotion activities and their effectiveness' in different areas should be shared among other actors and stakeholders

4.3 Monitoring and Evaluation Guidelines

Monitoring is to be carried out at two levels:

- (1) progress monitoring to measure the achievement of targets set for different phases, and
- (2) impact monitoring to evaluate behavior change as a result of interventions.

Monitoring of the hygiene promotion activities shall include qualitative and quantitative aspects with particular attention to the gender specific information. Simple, time-bound indicators based on the specific objectives need to be developed and the means of verification is to be identified to measure progress and effects over time.

A mix of methods is to be used for the monitoring and evaluation purposes. Monitoring is to be done as much as possible in partnering with the community and the monitoring results is to be shared with the community. This will ensure that the community obtains feedback of their own efforts and consequently is to be able to make decisions regarding the future actions. Wherever needed, the existing monitoring system is to be adapted to accommodate the requirements of the participatory monitoring of hygiene promotion activities.

The implementing agencies, on regular intervals and over a longer period, shall undertake the monitoring studies. These studies shall serve as evidence for the impact monitoring, thus supplementing the baseline survey. At the same time, the experience gained from these studies shall allow for better and more detailed adjustments of the activities and campaign approaches. The progress and impacts are to be monitored and evaluated through the periodic surveys and formative researches, and the result of which are to be compared to the baseline surveys.

In addition, the consolidation of experiences and the performance assessments of the different WSS components, enabling comparative analysis is to be undertaken.

- A base line survey on hygiene issues is to be undertaken under joint monitoring program (JMP) initiated by WHO-UNICEF, based on multiple indicator cluster survey (MICS). The database is to be updated may be once in every 1 or 2 year;
- Developing a Management Information System (MIS) including the major verifiable indicators and tools for hygiene promotion is to be need; The Directorate of Health Services (DHS) may be involved through the National Forum for WSS under LGD to identify hygiene related indicators.

4.4 Operational Guidelines for Measuring Behavior Change

Individual departments, agencies and organizations involved in the water supply, sanitation and hygiene promotion programmes are to be responsible for developing their own programme operational guidelines and the M&E frameworks including methods and tools for measuring the desired behavior change. However, the following matrix presents an overview of the guidelines including the key indicators of hygiene behavior change to be measured. The number of indicators to be used in the MIS system of any agency would be depending upon the programme objectives, service components and the organizational interests. Example of WASH Indicators, Proxies and Methods (both the qualitative and quantitative) are to be used in applicable cases as follows;

Table 2: Operational Guidelines

Behavioral domains	Verifiable indicators (behavioral output level)	Proxies
Water hygiene	<ul style="list-style-type: none"> - <input type="checkbox"/> Percent of population safely collect, store <input type="checkbox"/> and use drinking water - <input type="checkbox"/> Percent of population wash raw fruits and <input type="checkbox"/> vegetable with safe water before eating - <input type="checkbox"/> Percent of population safely manage domestic <input type="checkbox"/> and institutional wastewater 	<ul style="list-style-type: none"> - <input type="checkbox"/> % decrease in <input type="checkbox"/> diarrhoeal episodes and <input type="checkbox"/> prevalence - <input type="checkbox"/> % households having <input type="checkbox"/> water-point and kitchen <input type="checkbox"/> areas clean
Sanitation hygiene	<ul style="list-style-type: none"> - <input type="checkbox"/> Percent of population/households regularly <input type="checkbox"/> use sanitary latrines - <input type="checkbox"/> Percent of households regularly maintain <input type="checkbox"/> cleanliness of sanitary latrines - <input type="checkbox"/> Percent of household safely dispose of human <input type="checkbox"/> (including children) and animal excreta 	<ul style="list-style-type: none"> - <input type="checkbox"/> % increase in apparently <input type="checkbox"/> clean latrines and intact <input type="checkbox"/> water seals - <input type="checkbox"/> % open defecation <input type="checkbox"/> decreased
Personal (including menstrual) hygiene	<ul style="list-style-type: none"> - <input type="checkbox"/> Percent of population use soap and clean water for <input type="checkbox"/> hand-washing before handling/taking meals/foods - <input type="checkbox"/> Percent of population use soap and clean water for <input type="checkbox"/> hand-washing after defecation (self) 	<ul style="list-style-type: none"> - <input type="checkbox"/> % decrease in diarrhoeal <input type="checkbox"/> episodes and <input type="checkbox"/> prevalence

Behavioral domains	Verifiable indicators (behavioral output level)	Proxies
	<ul style="list-style-type: none"> - <input type="checkbox"/> Percent of population use soap and clean water for <ul style="list-style-type: none"> <input type="checkbox"/> hand-washing after cleaning baby's bottom - <input type="checkbox"/> Percent of population use sandals during latrine use - <input type="checkbox"/> Percent of use of sanitary napkins or clean, dry rags <ul style="list-style-type: none"> <input type="checkbox"/> during menstruation and washing used rags with soap, <input type="checkbox"/> dry in sunlight and store in clean and safe place for reuse 	<ul style="list-style-type: none"> - <input type="checkbox"/> % latrines and water points <ul style="list-style-type: none"> <input type="checkbox"/> having hand washing and <input type="checkbox"/> menstrual facilities <input type="checkbox"/> (i.e. soap, napkin box nearby) - <input type="checkbox"/> % decrease in lower <ul style="list-style-type: none"> <input type="checkbox"/> abdominal and urinary tract <input type="checkbox"/> infection among girls and <input type="checkbox"/> women
Food hygiene	<ul style="list-style-type: none"> - <input type="checkbox"/> Percent of population/families keep food always <ul style="list-style-type: none"> <input type="checkbox"/> covered (domestic and commercial) - <input type="checkbox"/> Percent of population use cleaned (by safe water) <ul style="list-style-type: none"> <input type="checkbox"/> utensils for serving food and drinks 	<ul style="list-style-type: none"> - <input type="checkbox"/> % increase in food <ul style="list-style-type: none"> <input type="checkbox"/> covering observed - <input type="checkbox"/> % decrease in diarrhoeal <ul style="list-style-type: none"> <input type="checkbox"/> prevalence
Environmental hygiene	<ul style="list-style-type: none"> - <input type="checkbox"/> Percent of population/households/institutions use to <ul style="list-style-type: none"> <input type="checkbox"/> keep their premise surroundings always clean - <input type="checkbox"/> Percent of decrease in open defecation or use of <ul style="list-style-type: none"> <input type="checkbox"/> hanging latrines - <input type="checkbox"/> Percent of population/households safely manage solid <ul style="list-style-type: none"> <input type="checkbox"/> and liquid waste 	<ul style="list-style-type: none"> - <input type="checkbox"/> % of household surroundings <ul style="list-style-type: none"> <input type="checkbox"/> appeared clean - <input type="checkbox"/> % increase in sanitary <ul style="list-style-type: none"> <input type="checkbox"/> latrine use

5. ACTION PLAN

5.1 Supporting Actions for Strategy Implementation

Implementation of the National Hygiene Promotion Strategy for Water Supply and Sanitation will require systematic approach, tools and guidelines. Not necessarily that the system is required as a precondition of the implementation process to start, rather that should be gradually developed and incorporated into the present system of operation in each service providing agency. For putting those in place, the following key steps and actions are recommended:

- Preparing a Guideline for Implementation and Coordination of the hygiene promotion programmes;
- Arranging periodic training and orientation programs for the departmental staff and agencies on the public health and hygiene issues;
- Developing client-service providers accountability relationships;
- Undertaking comprehensive monitoring system over the hygiene promotion interventions.

Other than the set of recommendations furnished above, the implementation of the strategy may require periodic review of its particular segments/components, guidance and institutional set-up aiming towards strengthening the efforts to secure improvement of public health. This must have implications on the achievement of the national plans, policies and strategies. It may include incorporation of the adaptation strategies to emerging issues and challenges, and any other lessons to be replicated.

5.2 Key Steps for Implementation

The key steps for implementation of the national hygiene promotion strategy are provided below. It is expected that **all stakeholder agencies and organization will prepare their own action plans** within the framework and guidelines as provided in the NHPS.

Table 3: Key Steps for Implementation

	Key Steps	Focal Point	Executing agencies/organizations
1	Base line Survey and updating database	PSU, LGD	UNICEF/ WHO
2	Comprehensive hand washing campaign	NF-WSS, LGD	MoHFW/ MoInf /DPHE/City Corporations/Paurashava/NGOs/CBOs/ private sector/other relevant organizations/UPs
3	Hygiene promotion in educational institutions	MoE, MoPME	School Management Committees
4	Review and ensure compliance of relevant policies, strategies and legal instrument	NF-WSS, LGD	PSU
5	Capacity building and training program on hygiene promotion	NF-WSS, LGD	NILG, BARD, ITN, RDA, DPHE
6	Protection of water sources	MoEF.	DoE/DPHE/BWDB/LGD
7	Provide sufficient sanitation facilities	NF-WSS, LGD	DPHE/WASA/Paurashava/City corporation/UPs
8	Research and development on communication materials, tools, improved sanitation facilities	NF-WSS, LGD	ICDDR, B/DPHE/UNICEF/NGOs and other relevant organizations
9	Strengthen and stimulate the WATSAN committees,	NF-WSS, LGD	PSU/ DPHE/NGOs/ other WSS service providing agencies
10	Foster media partnership on hygiene promotion	NF-WSS, LGD	MoI
11	Review and rationalize budgetary allocation for hygiene promotion	NF-WSS, LGD	PSU

5.3 Action of Key Actors

The recommended actions of the key actors are summarised below. All stakeholder agencies and organizations will prepare their own action plans for implementation.

Table 4: Recommended Action of the Key Actors

Key Actors	Actions
Local Government Division (LGD)	<ul style="list-style-type: none"> • Operationalize the strategy through government notification • Establish the ministry-level coordination mechanism to support WASH Planning, its implementation and monitoring programs • Integrate regulation of the hygiene promotion interventions including financing. • Provide guidance and support for the departments concerned through proper planning and adequate budgetary allocation. • Provide separate budgetary provision for hygiene promotion activity.
Policy Support Unit (PSU), LGD	<ul style="list-style-type: none"> • Provide policy orientation, implementation and clarification to the key government and non-government agencies involved in WSS sector. • Facilitate inter-departmental coordination on behalf of the LGD. • Share information among the ministers, departments and the agencies. • Monitor performance, and review and update sector policies, strategies and plans.
Department of Public Health Engineering (DPHE)	<ul style="list-style-type: none"> • Facilitate integration of the hygiene promotion component into the existing and future projects and programs. • Build capacity of and provide guidance for the LGIs (particularly for rural areas) for hygiene promotion along water supply and sanitation. • Promote R&D for the technology development and marketing. • Develop and supply the monitoring tools. • Document and dissemination the lesson learnt.
WSS Donors	<ul style="list-style-type: none"> • Align the relevant policies and strategies. • Coordinate with the government and other private sector agencies including the NGOs. • Share information.
WASAs	<ul style="list-style-type: none"> • Align the organizational policies, strategies and project implementation plans. • Reinforce the implementation through undertaking capacity building activities. • Coordinate with other WSS sector agencies working within the territory.
Local Government Institutions (LGIs)	<ul style="list-style-type: none"> • Align the organizational policies, strategies and project implementation plans. • Reinforce the implementation through undertaking capacity building activities. • Coordinate with other WSS sector agencies working within the territory.
NGOs	<ul style="list-style-type: none"> • Harmonize the policy and strategy. • Coordinate with the LGIs.
Private Sectors	<ul style="list-style-type: none"> • Harmonize the policy and strategy. • Coordinate with the LGIs.

5.4 The time frame

The NHPS is a living document. It will be consciously reviewed and updated from time to time. The Sector Development Plan (SDP), 2011-25 prepared by the Local Government Division is to guide the water supply and sanitation sector. The SDP will be applicable for a period of 15 years, starting from FY 2010-11, divided into a short term period (2011-15), medium term (2016-20) and long term (2021-25). The national hygiene promotion strategy shall also follow the same timeframe. The following diagram provides the phasing of the Strategy with fixed priorities.

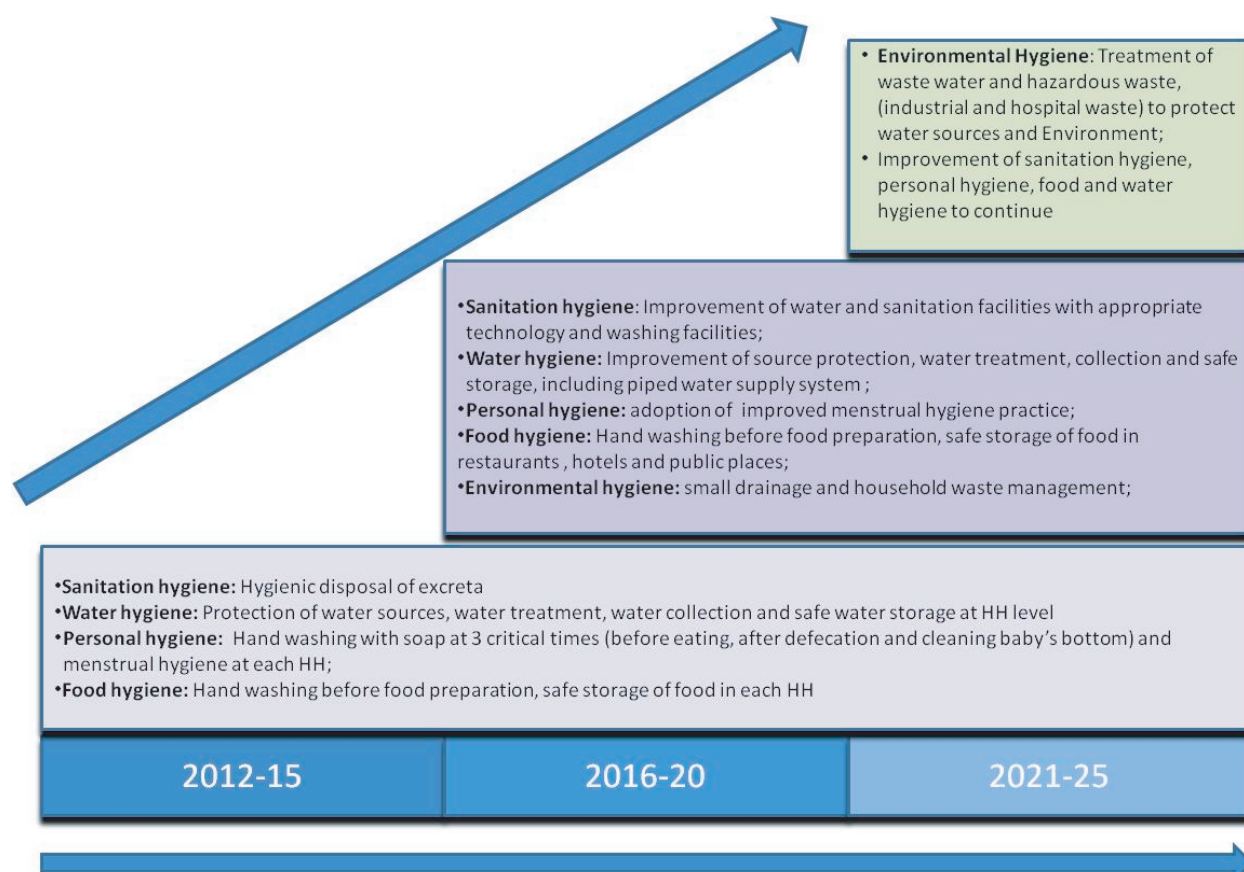


Figure 4: Time Frame of NHPS