

Sustainable Development Goals: Bangladesh Perspective

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On 25th September 2015, the United Nations General Assembly adopted the new development agenda: Transforming our world: The 2030 agenda for sustainable development. The post 2015 framework goes beyond the MDGs. It has 17 goals and 169 targets, including one specific [3rd goal] for health with 13 targets.

HEALTH TARGETS IN SDG-3

3.1. By 2030, reduce the global maternal mortality ratio to less than 70 per 100000 live births.

Bangladesh MMR for 2020 was 123/100000 live births, a 21.66% decline from 2019. In UK, 11.66/100000 MMR, 241 women died among 2066997 maternities.

3.2. By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1000 live births and under 5 mortalities to at least as low as 25 per 1000 live births.

In Bangladesh, according to World Bank source, neonatal mortality rate in 2017 was 27/1000 live birth which was 20/1000 live birth in 2022, reflecting a 12% commendable decrease.

3.3. By 2030, end the epidemics of AIDS, TB, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.

Bangladesh is the first country in this region to adopt a comprehensive national policy on HIV/AIDS and Sexually Transmitted Infections [STI] in 1997. Now ongoing 4th strategic program under DGHS to end AIDS by 2030. Counselling, BCC, Needle Syringe Exchange Program [NSEP], abscess prevention and management, STI treatment, referral and linkages etc. are the service components of the strategy.

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National Tuberculosis Control Program

For TB control, there is NTP.

Goal of NTP: End the TB epidemic aiming to achieve a target of 10 new cases/100000/year within 2035. [Projected 2015 baseline of 225 cases/100000].

Objectives of NTP

- i) Increase annual case detection of all forms of TB to more than 90% of all incident cases by 2022 [From baseline of 57% in 2015] with childhood TB contribution of 8% by 2022 [From baseline of 4% in 2015]
- ii) Maintain a treatment success rate of at least 90% in all forms of detected non-MDR-TB cases and ensure quality -controlled treatment services at all implementation sites.
- iii) Increase annual case detection of MDR-TB to 4100 cases [From baseline 800 in 2015] and child MDR case detection to 112 cases by 2022 [From baseline 0 in 2015] and improve management of MDR-TB cases through countrywide implementation of the shorter MDR-TB treatment regimen.
- iv) Ensure that 100% of TB service facilities receive regular supervision and monitoring with appropriate feedback resulting in remedial actions by 2022.
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For Malaria Control

National Malaria Elimination Program [NMEP] is organized by Bangladesh Government. New interventions are rapid diagnostic tests, Artemisin based combination therapy and Long-Lasting Insecticidal Nets [LLINs].

Objective: Early Diagnosis and Prompt Treatment [EDPT] with effective drugs to 90% of malaria patients.

- i) To achieve 100% coverage of 'at risk' population with appropriate malaria preventive interventions by 2018.
- ii) To have 100% malaria patients receiving early and quality diagnosis and effective treatment by 2018.

- iii) To continue strengthening of program management towards elimination by 2020.
- iv) To continue strengthening of disease and vector surveillance, monitoring and evaluation towards malaria elimination.
- v) To intensify Advocacy, Communication and Social Mobilization [ACSM] for malaria elimination.

Bangladesh has dramatically reduced malaria by 93% from 2008 to 2020. The strategy has been district wise, phased elimination; however the last districts targeted for elimination include remote, forested regions which present several challenges for prevention, detection and treatment of malaria.

Control of Communicable Diseases in Bangladesh

Measures include hand washing, infection control standard, precautions for contact, droplet and air-borne transmission. Procedures for decontamination of persons, disinfection of equipment and the environment. Principles are transmission, diagnosis, prevention and control. Objective is ultimately to stop transmission of the causative agent, so that no new individuals will get infected and be at risk of developing the disease. Bangladesh is in the intermediate prevalence zone of hepatitis B virus with an estimated prevalence of 5.4% in the general population.

3.4. By 2030, reduce by one-third premature mortality from non-communicable diseases through prevention, treatment and promote mental health and well-being

Non-Communicable Diseases [NCD] including heart disease, stroke, cancer, diabetes and chronic lung diseases are collectively responsible for 74% of all death worldwide [WHO]. More than three-quarters of all NCD deaths and 80% of the 17 million people who died prematurely or before reaching 70 years of age, occur in low and middle-income countries. NCDs are responsible for 67% of all death in Bangladesh. CVD alone account for 25.1% of total deaths in Bangladesh, will increase to 37.2% by 2030. BDHS survey (2017-18) revealed that over one quarter of individuals aged 18 years and older had diabetes or pre-diabetes in Bangladesh, representing more than 19 million individuals in 2020.

There are 13-15 lakh cancer patients in Bangladesh, with about 2 lakh patients newly diagnosed with cancer each year. Among the males, lung cancer and mouth-oropharynx cancer rank the top two prevalent cancers. Breast cancer is the most common cancer in women of Bangladesh. 22.5 per 100000 females.

3.5. Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

Approximately 2.5 million Bangladeshis are addicted to drugs and 80% are adolescents and young people of 15-30 years. Therefore, there is an increasing tendency of substance abuse in Bangladesh and the problem is more concerning among the adolescents. Commonest drug is cannabis, others are buprenorphine, phensedyl, heroin and alcohol.

Solution: Listen with interest and understanding. Do not demoralize. Convey a positive message that giving up drugs is possible and a drug free life can be healthier and happier.

3.6. By 2020, halve the number of global deaths and injuries from road traffic accident.

Approximately 1.19 million people die each year as a result of road traffic accident. It is a leading cause of death for children and young adults aged 5-29 years. In USA, there are more than four times the number of car accidents of any other country in the world. The figures for 2021 documented 5629 accidents, leading to 7809 deaths and 9039 injuries. The records for 2022 show 6749 accidents, causing 9951 fatalities and 12356 injuries. Road safety foundation working since 2019 to prevent RTA casualties.

3.7. By 2030, ensure universal access to sexual and reproductive health care services, including for family planning information and education and the integration of reproductive health into national strategies and programs.

This episode takes a deeper drive into the four pillars that hold up the reproductive well-being framework: Autonomy, control, respect and systems of support. Reproductive health care enable people and their families to meet their health needs and contribute to progress. RHC focuses on all aspects of human reproduction, including adolescent health, female fatality, contraception and maternal health, postabortion care, safe pregnancy, safe motherhood, reproductive tract infections, STD, HIV/AIDS, Reproductive Health [RH] services of the adolescents, maternal and infant nutrition, cancer of the reproductive tract, infertility, female genital mutilation and violence.

The reproductive health situation in Bangladesh still remains unsatisfactory. There is yet high maternal and child mortality and morbidity in Bangladesh. Though Contraceptive Prevalence Rate [CPR] is 63%, but growth rate is still high. Adolescent reproductive health, premarital and extramarital sex, early marriage and teenage pregnancy, are subject of deep concern.

Bangladesh tries to follow decisions of International Conference on population and development on RH issues and developed a comprehensive plan of action in light of recommendations of the conference.

3.8. Achieve Universal health coverage, including financial risk protection, access to quality essential health care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

United Kingdom has a universal health care system called the National Health Service or NHS. The NHS is responsible for all aspects of the UK healthcare system. In USA, everyone will have affordable health care coverage providing equal access to age appropriate and evidence-based health care services. Everyone will have a primary care physician and a medical home. Singapore has the best health care system in the world in 2023. Canada, Denmark, Sweden, Norway etc. possess the highest quality of life. Bhutan is one of the cheapest countries, Somalia has the poorest quality of life and South Sudan, Burundi, Central African Republic are the poorest country of the world. The establishment of the network of Community Clinics in Bangladesh has been a major milestone, especially for the rural and marginalized areas. Of the nearly 1500[14384] clinics across, each is designed to serve approximately 6000 people with a basic package of essential health, nutrition and family planning services.

3.9. By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, soil pollution and contamination.

By reducing or removing exposure to chemicals such as from ambient air pollution, household air pollution [In particular from coke stove], second hand smoke and lead, just over one third [35%] of IHD, the leading cause of deaths and disability worldwide and about 42% of stroke, the second largest cause of death can be avoided.

Control measures to avoid hazardous substances

- i) □ Change process to minimize contact with hazardous chemicals.
- ii) □ Isolate or enclose the process.
- iii) □ Use of wet methods to reduce generation of dusts or other particulates.
- iv) □ General dilution ventilation.
- v) □ Use foam hoods.

Five General Measures Are

Elimination, substitution, engineering controls, administrative controls and PPE. A combination of methods usually provides a safer and healthier

workplace then relying on only one method. Soil pollution is caused by different types of human activities.

- i) □ Overuse of pesticides [Loose fertility] presence of excess chemicals increase the alkalinity or acidity of the soil, erosion of the soil refers to the pollution. Land contamination caused by mining, farming and factories, may allow harmful chemicals to enter the soil and water. These chemicals have the potential to kill animals and plants, destroying the food chain. Landfills emit methane, a greenhouse gas that contributes to global warming.
- ii) □ Air pollution caused about 78145 – 88229 deaths in Bangladesh in 2019. Key sources are emissions from motor vehicles, industrial activities, brick kilns, crop residue open burning, household solid fuel combustion.
- iii) □ South Asia is the home to 9 of the worlds 10 cities with the worst air pollution. Dhaka is one of them. Air pollution is responsible for about 20% of the total premature death in Bangladesh. The Bangladesh Environment Conservation Act, 1995 not only acknowledges air pollution but also provides certain provision to combat it. Bangladesh is in 5th position on global air pollution.
- iv) □ Accordingly, among the anthropogenic activities /sources are the issues of untreated industrial effluents, inappropriately disposed municipal wastes, agricultural run of etc. are the main causes of destroying aquatic ecosystems. Arsenic contamination of drinking water is a public health problem in Bangladesh. Almost 57 million people are at risk of arsenic – induced disease (2016) due to chronic contamination of their drinking water with arsenic concentrations exceeding the WHO limit [0.01 mg/l].

5. □ Clean water access for 2020 in Bangladesh was 58.51%. The Government of Bangladesh has undertaken a number of initiatives to combat water pollution and climate change, including the green growth strategy, Bangladesh Environment conservation act and the Bangladesh climate change strategy and action plan.

3.a. Convention on Tobacco control in all countries

WHO framework Convention on Tobacco control [WHO FCTC] on the ground, to reduce the prevalence of tobacco use and exposure to tobacco smoke. Smoking causes cancer, heart disease, stroke, lung diseases, diabetes, COPD. It also increases the risk of TB, certain eye diseases, problems of the immune system including rheumatoid arthritis, cause destruction of the grey matter of the brain among the smokers.

Tobacco use prevalence in Bangladesh is 43.7%, only smoking prevalence is 23.5%. Among the adults, 35% are currently using tobacco. One of the dangerous component of cigarette is nicotine which varies from 6.17-12.65 mg[1.23+ 0.15% of tobacco weight in each cigarette] in domestic cigarettes. Bangladesh is in 8th Position on smoking globally .

3.b. Support the research and development of vaccines and medicine for the communicable and noncommunicable diseases that primarily affect the developing countries- to provide access to affordable essential medicines and vaccines.

Bangladesh Medical Research Council [BMRC] provides MEDLINE literature search service (M-LSS) to the doctors and social scientists. The Institute of Epidemiology, Disease Control and Research [IEDCR] is a Bangladesh Government Research Institute, is performing epidemiological research on communicable and non -communicable diseases and their control in Bangladesh. ICDDR.B, NIPSOM, National Institute of Cancer Research and Hospital, BITID etc. are also engaged in different research works. But in comparison to developed countries and neighboring country like India, we are far behind.

3.c. Substantially increase health financing and the recruitment, development, training and retention of the health work-force in developing countries, especially in least-developed countries and small island of developing states.

An allocation of Tk. 38052 crore has been proposed for the health sector in the budget for 2023-24 fiscal year [5% total budget]. In 2020, health expenditure per capita for Bangladesh was USD 51. Looking at country level data, the health expenditure to GDP ratio remained by for the highest in USA at 16.6% in 2022, followed by Germany at 12.7% and France at 12.1%. Households are the biggest financier of health expenditure in Bangladesh [67% of the total] followed by Government (23%), development partners (7%) and NGO from own sources (3%). The Government allocation for funding for health care as a percentage of its own total spending has steadily declined. The statutory health care system of Bangladesh in principle covers all citizens with a range of services. However,

many sick people every year are left untreated in practice. In response to insufficient and unsatisfactory services in the public sector, private initiatives have been taken since 1980s. The strategy provides a pathway to achieve universal health coverage in Bangladesh by providing Universal risk protection.

According to WHO, Doctor-population ratio in Bangladesh is 5.26:10000, nurse population ratio is 1:5000, bed -nurse ratio 13:1, doctor nurse ratio is 2.5:1. International standard for bed -nurse ratio is 4:1 and doctor - nurse ratio 1:3. So, Bangladesh has to overcome these discrepancies to achieve 'Health For All'.

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