Multi-sectoral Action Plan For The Prevention And Control of Noncommunicable Diseases in Maldives (2016-2020)

August 2015

Endorsed by
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Policy Planning & International Health Division
Ministry of Health

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Permanent Secretary
Ministry of Health
Date: 18 January 2016
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<tbody>
<tr>
<td>ARC</td>
<td>Advocating Rights for Children</td>
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<tr>
<td>CBOs</td>
<td>Community Based Organizations</td>
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<td>CDD</td>
<td>Communicable Disease Division</td>
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<td>DSM</td>
<td>Diabetes Society of Maldives</td>
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<td>FHS</td>
<td>Faculty of Health Sciences</td>
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<td>FCTC</td>
<td>Framework Convention on Tobacco Control</td>
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<td>GSHS</td>
<td>Global School Health Survey</td>
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<td>HIS</td>
<td>Health Information Systems</td>
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<td>HPA</td>
<td>Health Protection Agency</td>
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<td>HRD</td>
<td>Human Resource Division</td>
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<td>HSD</td>
<td>Health Service Division</td>
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<td>IGMH</td>
<td>Indira Gandhi Memorial Hospital</td>
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<td>MED</td>
<td>Ministry of Economic Development</td>
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<td>MFDA</td>
<td>Maldives Food and Drug Authority</td>
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<td>MOA</td>
<td>Ministry of Agriculture</td>
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<td>MOE</td>
<td>Ministry of Education</td>
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<td>MOF</td>
<td>Ministry of Finance</td>
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<td>MOHG</td>
<td>Ministry of Health</td>
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<td>MOHI</td>
<td>Ministry of Housing and Infrastructure</td>
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<td>MRL</td>
<td>minimum residual limit</td>
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<td>MYS</td>
<td>Ministry of Youth and Sports</td>
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<td>NCDs</td>
<td>Non-Communicable Diseases</td>
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<td>NDA</td>
<td>National Drug Agency</td>
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<tr>
<td>NGOs</td>
<td>Non-Governmental Organizations</td>
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<td>NIE</td>
<td>National Institute of Education</td>
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<td>PHS</td>
<td>Public Health Surveillance</td>
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<tr>
<td>PIH</td>
<td>Planning and International Health</td>
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STAKEHOLDERS PARTICIPATED IN DEVELOPING THE ACTION PLAN

Advocating Rights for Children
Department of Customs
Dhamanaveshi (Urban Health Center, Male’)
Diabetic Association of Maldives
Faculty of Health Science Male’ City Council
Indira Gandhi Memorial Hospital
Local Government Authority
Maldives Police Office
Ministry of Economic Development
Ministry of Education
Ministry of Health and Gender
Ministry of Housing and Infrastructure
Ministry of Youth and Sports
National Drug Agency
Villingili Health Center
ACKNOWLEDGEMENT

Multi-sectoral Action Plan for Prevention and Control of Noncommunicable Diseases in Maldives (2016-2020) was developed through iterative consultations among the stakeholders representing government and nongovernment organizations. The NCD Unit/Health Protection Agency of the Ministry of Health coordinated and chaired the stakeholders meetings.

The Southeast Asia Regional Office and the Country Office for Maldives of the World Health Organization provided the financial and technical support to develop the Action Plan. The document was prepared by Dr. Gampo Dorji, a visiting consultant of World Health Organization.

PART I - BACKGROUND SITUATION

INTRODUCTION

The health status of the Maldivians has improved significantly. The life expectancy increased from 57 years in 1990 to 75 years in 2009 and the other indicators such as maternal and child survival rates have also shown similar leap.¹ Maldives ranks one of the top countries in the SAARC after Sri Lanka in health indicator achievements. As the economy and living standards improve, the country is also experiencing the epidemiological transition with a swift change of disease burden from communicable to non-communicable diseases. Chronic non-communicable diseases are emerging as the main cause of morbidity and mortality in the country with the fast changing lifestyle and development. NCDs (including injuries) account for 78% of the total disease burden.²

NCDs are expected to be a key challenge for the population health as the country is increasingly being exposed to globalization and NCD risk factors: tobacco use, importation of unhealthy food (diet rich in saturated fats or high salt consumption) and inadequate consumption of vegetables and fruits and urban sedentary lifestyles. NCDs have far reaching negative externalities not only through health of the affected individual, but losses incurred to family members, society and country due to productivity loss and prolonged care and treatment needed for a member with NCDs.

BURDEN OF NCDS

According to the Maldives’ vital statistics (VRS), Non-communicable Diseases have been identified, as the leading cause of mortality and the rate has been on the increase for sometime, recording highest in the Region in 2014, with 81% of total deaths. The age standardized mortality rates for non-communicable disease (excluding injuries) was ten times higher as compared to communicable diseases in 2008 (598 per 100 000 population versus 59 per 100 000 population).¹ The leading causes of death for the Maldives, in 2012

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¹ World Health Statistics 2012
² Maldives Health Profile 2014, MOHG, March 2014
were cardiovascular diseases (CVDs), ischemic diseases, hypertensive diseases as the top diseases followed by chronic respiratory diseases and diabetes.\(^2\)

CVDs jumped from the tenth cause of death, in 1990 to the first position in 2010 contributing to 6.2% of the Years of life lost (YLLs). Similarly the ranking of Diabetes and COPD burden also moved up.\(^3\) In terms of the absolute figures, circulatory deaths in 2008 was 395, and respiratory deaths was 158 of the 1070 deaths,\(^4\) NCDs clearly exceeding 50% of the annual mortality for that year.

**RISK FACTORS**

Dietary habits, high blood pressure, high body mass index and smoking were in the top five attributable risk factors for the burden of disease in the country.\(^3\) Population/city based surveys show that the prevalence of NCD risk factors has not shown any decrease in the population in the past decade.

**Tobacco use:** Tobacco use is highly prevalent in the Maldivian society. The STEPS surveys in 2004 and 2011 shows that there is little change in smoking prevalence. Although there is a slight decrease in prevalence of smoking (22.0% in 2004 versus 18.3% in 2011), the initiation of smoking tended to have shifted to a younger age (21.6 in 2004 versus 19 years in 2011).

Not only is the overall prevalence of current smokers quite high (19%) of which mostly men contributed to smoking (34.7%), the dose of smoking was hazardous with a mean daily cigarette sticks of 14.3. (STEPS survey 2011). Another major concern is the alarming exposure to second hand smoke; 21.3% reported being daily exposed at home and 17.1% at work place. Close attention must be paid to the growing culture of tobacco use among youths; according to the GSHS 2009, among young people aged 13- 15 years, 72% reported trying cigarettes before 14 years of age, and about 9% of children aged 13-15 years smoked on one or more occasions in the past 30 days.

**Alcohol use:** Overall prevalence of current drinkers is less than 1 % as per the STEPS 2011. Although this is encouraging, statistics suggest that a small portion of young children are taking up alcohol as well according to the GSHS 2009. Nearly 4% of children reported consuming alcohol and majority who consume in an amount to get drunk.

**Fruits and vegetable consumption:** Fruit and vegetable consumption is also falling far behind the recommended intake. In Male City, 92.6% of men and 94.6% of women consumed only one serving of fruits and /or vegetables per day\(^5\) much lesser than WHO

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\(^2\) Global burden of disease country report - Maldives

\(^3\) Vital Registration System, Ministry of Health & Family 2009

\(^4\) WHO STEPS survey on risk factors for noncommunicable diseases Maldives, 2011

\(^5\) WHO STEPS survey on risk factors for noncommunicable diseases Maldives, 2011
recommended serving of five portions of fruits and vegetables in a day. In a typical week, fruits were consumed on 3.3 days and vegetables on 3.8 days.

Unhealthy diet: Maldivians also appear to consume diet rich in saturated fats. There is no data of mean salt intake for Maldivian population. The expert opinions speculate that salt consumption would be much higher than the recommended level of <5 g/day. 6

Physical inactivity: Sedentary lifestyle may be high. According to the STEPS survey 2011, 45.9% (39.1% man and 52.4% women) were not achieving the recommended level of physical activity in Male’ City. In fact the level of physical inactivity in 2011 almost remained the same as compared to 2004. According to the GSHS 2009, about 70% of children did not achieve required level of physical activities.

Metabolic risk factors: About 26% of Male’ residents were obese in 2011. Females were more obese as compared to males (27.8% versus 23.5%) and the same was true for severe obesity (14.5% in females versus 8.6% for males). According to the STEPS (2011), 7% were currently hypertensive or taking medication for raised blood pressure.

PROGRESS, CHALLENGES AND OPPORTUNITIES FOR CONTROL OF NCDS

Health Master Plan (2006-2015) recognizes health promotion and NCD prevention as a key approach to improve population health. The two year national strategic plan (2008-2010) for NCD was yet another clear step taken to address NCDs. Even though the Strategic Plan could not be implemented at a full scale, important milestones were achieved. The key ones were instituting NCD surveillance through NCD STEPS survey, creation of NCD Unit at the HPA, enactment of tobacco laws, piloting PEN intervention and sensitizing political bodies on NCDs in the country.

The health system is well distributed and staffing levels of doctors, nurses and other health workers have improved in the past few years particularly through the hire of expatriates from outside. The health centers and hospitals are equipped to provide basic level of care for all health services including NCDs. With the number of private health care providers on the rise, the coverage and options for NCD related services would also increase. Special attention must be paid in maintaining equity in access to NCD services due to geographical spread of islands.

Sizeable numbers of NGOs are directly or indirectly engaged in prevention and control of NCDs and other health issues. NCDs need to be managed within the existing framework of the Maldives legal and governance structure creating an inclusive process for all sectors participation and contribution. While managing the basic health care services, the capacity

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6 Interview with Dr. Ali Nazeem, MD (Internal Medicine), Indira Gandhi Memorial Hospital, Male’, April 17, 2014
of tertiary care facilities cannot be ignored. Currently, IGMH, regional Hospitals, Atoll Hospitals and ADK hospital provide the tertiary services; capacity improvement is required for advanced NCD management either through building the capacity of the institutions and/or developing better referral linkages within or outside the country.

The State sponsored social health insurance scheme, Aasandha provides universal coverage which is an immense safety net for the Maldivians. However, the insurance scheme needs to be responsive to address the gaps that may arise with the surging population needing NCD medical care and to minimize out of pocket payments and catastrophic health expenditure.

Urbanization and demand of physical space will also be a challenge for physical activity promotion. Ever increasing traffic volume and associated pedestrian accidents are a problem in Male’.

This provides an invaluable opportunity to rethink the urban structural development, vehicle import policies and restructuring major cities like Male’ to enable long range planning.

Sole dependence on the imported food products, the country needs strong domestic policies. Capacity strengthening is required at the MFDA to ensure proper regulation of the quality of imported food products and other goods. The globalization effects of trade are palpable with high use of tobacco, fast acculturation of beverage promotion and changing food habits in the country. With the implementation of a risk factor based model of NCDs prevention and control, influences and conflict of interest of tobacco, food and beverage industries can be transparently managed.

Existing school based healthy lifestyle programs, momentum in tobacco control laws, and the growing interest of NGOs for NCD prevention and control and recognition by non-health government sectors on NCDs as a cross sectorial issue holds a great opportunity for a true multisectoral response for NCDs in the Maldives. The Health Awards, given out annually in connection with the World Health Day in recognition of excellence in healthcare services, has been instrumental in the healthcare facilities according greater importance to broaden their spheres of service, including those related to the control and management of NCDs. The government’s plans to restructure the capital city, with a focus to provide more recreational and socializing areas, and new initiatives like the recently opened, Rasfannu beach area would result in tangible health outcomes, in the foreseeable future.

PART II- APPROACHES AND STRATEGIC ACTIONS

PROCESS OF DEVELOPMENT OF THE MULTISECTORAL NCD ACTION PLAN

The Action Plan was developed through a multi-step process of consensus building of the stakeholders. A technical consultant of World Health Organization was appointed to initiate

7 Injury prevention program, HPA
the discussion and gather views and suggestions from the stakeholders from April 13-May 6, 2014. The consultant did the desk review of the NCD response and met with stakeholders individually and in group. Stakeholders were organized in thematic clusters and a two day meeting was conducted on April 21-22, 2014. The recommendations of the stakeholders were compiled and the document was circulated for feedback. A final stakeholder consultation was held on April 30, 2014.

CONTEXT
The Republic of Maldives recognizes the increasing prevalence of NCD risk factors and the growing burden of NCDs in the population as a developmental issue. In order to tackle the growing urgency of the NCD burden in a swift and decisive manner, the Multi-sectoral NCD Action Plan (2014-2020) will be a national blue print and will provide a clear pathway in the nation’s pursuit to join the global fraternity to achieve the voluntary NCD targets for 2025. The Action Plan builds on the past initiatives implemented under the Maldives National Strategic Plan for Prevention and Control of NCDs 2008-2010. The Action Plan is also motivated by nation’s commitments made at the international and regional forums most important among them being:

- The Political Declaration of the High-level Meeting of the United Nations General Assembly on the Prevention and Control of NCDs ( September 2011)
- Resolutions of the Twenty-ninth Meeting of the Health Ministers in SEARO, 2011.

SCOPE AND LINKAGES
The Multi-sectoral NCD Action Plan will cover four key modifiable risk factors (tobacco use, consumption of diet with high saturated fatty acids, hydrogenated vegetable oils, high salt, physical inactivity and alcohol use and four key NCDs (cardiovascular diseases, diabetes, chronic obstructive pulmonary diseases and cancer). The Action Plan will ensure a holistic approach embracing policy, legal and structural components necessary to address complex social determinants of NCDs and their risk factors. Most importantly, the Action Plan will have heavy reliance on the partnership of non-health stakeholders and their efforts to integrate NCD prevention strategies within their plans. Within the Health Sector, the Action Plan will build synergies with the existing programs such as tobacco control, maternal and child health, injury prevention and road safety, environmental health, nutrition, mental health and prevention of substance abuse to name a few.

DETERMINANTS AND RISK FACTORS OF NCDS
The action plan will be guided by the pyramidal framework shown below to prioritize NCD interventions. The framework portrays the influence of social determinants, effect of globalization and urbanization on the metabolic risk factors and subsequent development of
the clinical NCD conditions. The increasing burden of NCDs is attributed to social determinants of health, in especially population ageing, rapid and unplanned urbanization, effects of globalization (such as trade and irresponsible marketing of unhealthy products), low literacy and poverty. The policies addressing social and economic determinants at the macro level have impacts on NCDs. The health sector related interventions generally targeted at the upper level of the pyramid are costlier while an intervention at the lower portion of the pyramid caters to larger population and are cost effective and multisectoral in nature. The framework demonstrates the need of a comprehensive approach addressing the various levels of determinants for implementing NCD prevention and control.

![Figure 1: Determinants of NCDs. Adapted from SEA Regional NCD Action Plan](image)

**VISION**

For all people of the Republic of Maldives to enjoy the highest attainable status of health, well-being and quality of life at every age, free of preventable NCDs, avoidable disability and premature death.

**GOAL**

To reduce preventable morbidity, avoidable disability and premature mortality due to NCDs in the Republic of Maldives.

**SPECIFIC OBJECTIVES**

1. To raise the priority accorded to the prevention and control of noncommunicable diseases in the national agendas and policies according to international agreed development goals through strengthened international cooperation and advocacy
2. To strengthen national capacity, leadership, governance, multisectoral action and partnership to accelerate country response for the prevention and control of noncommunicable diseases

3. To reduce modifiable risk factors for noncommunicable diseases and underlying social determinants through creation of health-promoting environments

4. To strengthen and orient health systems to address the prevention and control of noncommunicable diseases and underlying social determinants through strengthening primary health care approach.

5. To promote and support national capacity for high quality surveillance and operational research development for the prevention and control of noncommunicable diseases.

**TARGETS FOR 2025**

The country goals for 2025 will align with the regional targets with only a slight variation in goal viii. This goal will target to reduce indoor tobacco smoke exposure rather than reducing indoor air pollution due to use of fossil fuels.

1. A 25% relative reduction in overall mortality from cardiovascular diseases, cancers, diabetes, or chronic respiratory diseases
2. A 10% relative reduction in the harmful use of alcohol
3. A 30% relative reduction in prevalence of current tobacco use in persons aged over 15 years
4. A 10% relative reduction in prevalence of insufficient physical activity
5. A 30% relative reduction in mean population intake of salt/sodium
6. A 25% relative reduction in prevalence of raised blood pressure
7. Halt the rise in obesity and diabetes
8. A 50% relative reduction in prevalence of exposure to second hand smoke in homes, work places and public places in closed settings (restaurants, hotels, bars)
9. A 50% of eligible people receive drug therapy and counseling (including glycaemic control) to prevent heart attacks and stroke
10. An 80% availability of affordable basic technologies and essential medicines, including generics, required to treat major NCDs in both public and private facilities

**GUIDING PRINCIPLES**

The NCD national action plan relies on the following overarching principles and approaches.

**Focus on equity:** Policies and programs should aim to reduce inequalities in NCD burden due to social determinants such as education, gender, socioeconomic status and migrant status.
**Multi-sectoral actions and multi-stakeholder involvement:** To address NCDs and their underlying social determinants and risk factors, functioning alliances are needed within the health sector and with other sectors (such as agriculture, education, finance, information, sports, urban planning, trade, transport) involving multiple stakeholders including government, civil society, academia, the private sector and international organizations.

**Life-course approach:** A life-course approach is key to prevention and control of NCDs, starting with maternal health, including preconception, antenatal and postnatal care, and maternal nutrition; and continuing through proper infant feeding practices, including promotion of breastfeeding and health promotion for children, adolescents and youth; followed by promotion of a healthy working life, healthy ageing and care for people with NCDs in later life.

**Balance between population-based and individual approaches.** A comprehensive prevention and control strategy needs to balance an approach aimed at reducing risk factor levels in the population as a whole with one directed at high-risk individuals.

**Empowerment of people and communities:** People and communities should be empowered to promote their own health and be active partners in managing disease.

**Health systems strengthening:** Revitalization and reorientation of health care services are required for health promotion, disease prevention, early detection and integrated care, particularly at the primary care level.

**Universal health coverage:** All people, particularly the poor and vulnerable, should have access, without discrimination, to nationally determined sets of the needed promotive, preventive, curative, rehabilitative and palliative basic health services, as well as essential, safe, affordable, effective and quality medicines and diagnostics without exposing the users to financial hardship.

**Evidence-based strategies:** Policies and programs should be developed based on scientific evidence and/or best practice, cost-effectiveness, affordability, and public health principles.

**Management of real, perceived or potential conflicts of interest:** Public health policies for the prevention and control of NCDs should be protected from undue influence by any form of vested interest. Real, perceived or potential conflicts of interest must be acknowledged and managed.

**Strategic Priority Action Areas**

The priority activities for the Republic of Maldives are structured around four strategic action areas. Implementation of these strategic actions will lead to a reduction in overall
mortality from the four main NCDs. All actions will be implemented in close collaboration with other health programs such as infectious diseases control, maternal and child health, immunization, school health and occupational health services and the programs of other stakeholders.

**Strategic action area 1: Advocacy, partnerships and leadership.** Actions under this area aim to increase advocacy, promote multisectoral partnerships and strengthen capacity for effective leadership to accelerate and scale-up the national response to the NCD epidemic under the national government.

**Key milestones:**
- Establish a High Level NCD Taskforce and a NCD Unit.
- Advocate parliamentarians, City Council members, Local Councils
- Institute School Health Promotion Board at the MOE, Workplace Health Promotion Board at the HPA, Urban Planning Board at the MOHI and Enforcement Board at the Maldives Police
- Advocate greater resource allocation to fund NCD activities within the sectoral plans
- Explore funding partners for NCD prevention and control

**Strategic action area 2: Health promotion and risk reduction.** Actions under this area aim to promote the development of population-wide interventions to reduce exposure to key risk factors. Effective implementation of these actions will lead to reduction in tobacco use; increased intake of fruits and vegetables; reduced consumption of saturated fat, salt and sugar; reduction in harmful use of alcohol; increase in physical activity; and reduction in second hand exposure to tobacco smoke.

**Key milestones:**
- Gazette tobacco law
- Promote tobacco smoke free homes to eliminate exposure of children to second hand smoke in homes and reduce exposure to second hand smoke in other settings
- Implement BCC and mass media national campaigns on healthy lifestyle promotion using national recommendations of physical activity and diet
- Develop progressive policy measures to minimize consumption of saturated fatty acids and banning of hydrogenated vegetable oils
- Implement healthy lifestyle promotion for school children of all age groups in school settings
- Adapt a public health approach to address alcohol use among young people
- Adopt urban structural alignment to promote walkability and physical activity in Male’
- Create two open air mass physical activity grounds providing free physical activity sessions by a professional instructor
Advocate for swimming as a physical activity and construct washrooms near beaches to promote swimming
- Pilot work place health promotion initiatives in six organizations: MOH, Civil Service Commission, Bank of Maldives, STO, Dhiraagu and Ooreedoo

**Strategic action area 3: Health systems strengthening for early detection and management of NCDs and their risk factors.** Actions under this area aim to strengthen health systems, particularly the primary health care system. Full implementation of actions in this area will lead to improved access to health-care services, increased competence of primary health care workers to address NCDs, and empowerment of communities and individuals for self-care.

**Key milestones:**
- Scale up PEN interventions in all health centers
- Establish one national Quit line and twenty five tobacco cessation clinics
- Expand cervical, oral and other cancer screening programs
- Introduce NCD clinics including provision of care for diabetes
- Train primary health care workers on NCD interventions and train specialized tertiary care teams
- Provide long term trainings for specialists
- Strengthen ex-country referral system by reviewing and renewing MoUs with the treatment centers abroad
- Sign MoU with Asanda and pharmacies for non-interrupted drug availability for basic NCD treatment

**Strategic action area 4: Surveillance, monitoring and evaluation, and research.** This area includes key actions for strengthening surveillance, monitoring and research. The desired outcome is to improve availability and use of data for evidence-based policy and NCD program development.

**Key milestones:**
- Sustain population based surveillance by continuing ongoing STEPS and GSHS
- Introduce compliance monitoring program for tobacco rules
- Recruit additional three staff to strengthen NCD surveillance at the Public Health Surveillance Unit
- Conduct Walkability survey in Male’
- Conduct a pilot study on salt consumption
- Conduct a total diet study
- Monitor MRL in food content
- Develop cancer registry in IGMH
- Conduct six monthly progress review meetings among stakeholders
- Conduct mid-term evaluation in 2017 and end line evaluation in 2020
PART III- MANAGEMENT FRAMEWORK

The implementation of the Multisectoral Action Plan requires engagement of relevant stakeholders from the government, non-government bodies and private sectors. NCD prevention and control being a multidimensional and cross cutting in nature, effective mechanisms are required to coordinate for a successful implementation of the Action Plan.

TWO-STAGED IMPLEMENTATION

The seven year Multi-sectoral Action Plan will be considered as a two stage approach.

Stage I: The first stage will be implemented from 2014 through 2017. Under this phase, the focus will be to initiate pilot interventions, prepare and launch the national BCC and media campaign, address policy gaps and legal provisions needed to address NCDs, train human resources, and to streamline procurement and supply chain of medicines and equipment. A mid-term evaluation of the action plan will be conducted at the end of 2017.

Stage II: This stage will be implemented from 2018 through 2020 after making adjustments based on the recommendations of the midterm review. The focus of this phase is to accelerate the BCC and media campaign, expand prevention programs and scale up the pilot interventions, address the quality of service delivery.

ROLE OF STAKEHOLDERS

Roles of key ministries and stakeholders are presented in the following table. The action plan will remain flexible to include any partners not envisaged or included at the time development of the plan in future.

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<th>Sl. No.</th>
<th>Ministry/agency</th>
<th>Potential roles in NCD prevention and control</th>
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<tbody>
<tr>
<td>1.</td>
<td>Office of the President/Council</td>
<td>Provide national policy directives and funding for Multisectoral NCD Action Plan</td>
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<td></td>
<td>of Ministers</td>
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<td>2.</td>
<td>Ministry of Education</td>
<td>Integration of healthy lifestyle programs on NCD prevention in schools through curricular or non-curricular</td>
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<td></td>
<td>advocate for ban of food with high trans fat and physical activity, dissuade children from consuming tobacco</td>
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<td></td>
<td></td>
<td>and other harmful substances</td>
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<td>3.</td>
<td>Ministry of Youth and Sports</td>
<td>Promotion of national guidelines for physical activity and diet</td>
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<td>4.</td>
<td>Maldives Police</td>
<td>Enforcement of tobacco and other NCD related regulations</td>
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<td>5.</td>
<td>Ministry of Agriculture</td>
<td>Promote production of fresh vegetables at affordable prices</td>
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<td>6.</td>
<td>Maldives Broadcasting Corporation</td>
<td>Regulate ban on advertisement and sponsorships by alcohol, tobacco and unhealthy food</td>
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<td>7.</td>
<td>Ministry of Economic Development</td>
<td>Pricing and taxation of tobacco, alcohol and unhealthy food products</td>
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<tr>
<td>8.</td>
<td>Maldives Customs</td>
<td>Enforce and implement pricing and taxation of tobacco, alcohol and unhealthy food products regulations</td>
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<tr>
<td>9.</td>
<td>Ministry of Housing &amp; Infrastructure</td>
<td>Enforcement and implementation of urban design and healthy urban planning</td>
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<td>10.</td>
<td>City/ Atoll/Island Councils</td>
<td>Advocate for good urban planning, implement physical structural policies and integrate NCD advocacy in their sectoral plans</td>
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<tr>
<td>11.</td>
<td>Ministry of Health</td>
<td>Mass media campaigns for prevention of NCDs, provision of clinical services for NCD patients, regulate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>tobacco laws and food safety laws</td>
</tr>
<tr>
<td>12.</td>
<td>Media Organization</td>
<td>Promote mass media for healthy lifestyle promotion and NCD advocacy</td>
</tr>
<tr>
<td>13.</td>
<td>CBOs /NGOs</td>
<td>Advocacy and promotion of NCD services, health education and peer outreach</td>
</tr>
<tr>
<td>14.</td>
<td>Private Sector</td>
<td>Assert corporate social responsibility by promoting physical activity at work place, creating smoke free</td>
</tr>
<tr>
<td></td>
<td></td>
<td>workplaces and educating on healthy food</td>
</tr>
</tbody>
</table>
HIGH LEVEL NCD TASKFORCE:
A High Level NCD Taskforce will be constituted under a special directive of the President to oversee the multisectoral activities for NCD action plan. In particular, the Taskforce will be responsible for:

- Guiding stakeholder implementation of multi-year work plans
- Informing the government on the national policy and legal issues related to NCD control including ways to allocate greater financial resource for NCD response
- Maintaining the momentum and national spirit for NCD response

The High Level Taskforce will be adequately represented by the parliament, government agencies, civil societies, NGOs and media organizations. The Taskforce will meet once in four months or a minimum of three times a year. Detailed terms of reference of the High Level NCD Taskforce and the NCD Unit/Secretariat will be approved by the President. The Taskforce and the Secretariat will come into function on the day of granting approval by the President.

NCD UNIT/MOH
The MOH will be responsible for the national coordination for the NCD response. The the NCD Unit in the Health Protection Agency will be the secretariat to the High Level NCD Taskforce and the coordination point for the Multisectoral NCD Action Plan. The NCD Unit therefore will be strengthened with additional human resources to perform the secretarial, coordination and implementation functions of the national action plan as shown the following:
SUB COMMITTEES FOR HIGH LEVEL NCD TASKFORCE

The NCD Unit as a secretariat will propose formation of subcommittees as and when deemed necessary. Constituting a permanent technical committee is not necessary as the issues in NCDs and lifestyle promotion is too diverse to rely on a fixed committee. Formation of subcommittees will be approved by the High Level NCD Taskforce. The function of a subcommittee is to deliver a particular task requiring broader consensus and inputs from a team. When an issue can be addressed by a single agency, Taskforce may call upon the designate agency present the issues through an official correspondence singed by the chair/vice chair of the Taskforce. Clear terms of reference with deliverables and time frame for the assignment will be stated in the letter.
Subcommittee will be dissolved by the Taskforce after satisfactorily completing the task. The dissolution will also be officially conveyed through a written correspondence from the chair/vice chair of the High Level Taskforce.

**FORMATION OF AGENCY BOARDS/COMMITTEES**

As agencies embrace the NCD Action Plan, at times stakeholders are likely to face unforeseen policy challenges, legal and implementation issues that need support and wisdom of the many. In such situations, stakeholders are recommended to resort to dialogue and problem solving mechanisms through formation of committees, holding consultation of field experts or engaging in cross-sectoral consultations as necessitated by the issue at hand.

Tobacco Control Board is already functional. In addition, the following key stakeholder boards are recommended as not having these boards may risk poor delivery on the action plan.

**SCHOOL HEALTH PROMOTION BOARD**

The health promotion board will be formed at the Ministry of Education. The main function of the board will be to guide the implementation of school based programs reflected in the Action Plan.

The board will be chaired by a high level executive of the MOE. Varying memberships are encouraged with the following mandatory stakeholder representation: adolescent and child health program of MOE, a representative of the MOH, representatives from school principals, a representative of a NGO. The board will meet a minimum of once in three months. The minutes and recommendations of the board will be shared with the NCD Unit/HPA routinely.

**WORK PLACE HEALTH PROMOTION BOARD**

The Workplace Health Promotion Board will be based at the NCD Unit of the MOHG. The main function of the board is to guide the implementation of the agencies involved in piloting workplace health promotion in Male’ and to guide expansion of similar approaches in work places in the Maldives.

The board will be chaired by a member from the one of the pilot sites: Civil Service Institute, Bank of Maldives, STO, Ooredoo and Dhiraagu. The other board members will be invited from the Diabetes Society, Society for Health Education, Civil Service Commission, and a Fitness Center in Male’. HPA will be a permanent board member. The board will meet a minimum of once in three months and maintain proper documentation of the meetings.
URBAN PLANNING BOARD
The Urban Planning Board will be based at the Ministry of Housing and Infrastructure. The Urban Planning Board amongst its other agenda is to advocate for integration of planning and design affecting the built environment and physical availability of urban spaces and consider health in urban planning approach. The board will be chaired by a senior executive or an elected member of the Ministry.

The board will consist of members from Male’ city council, two health experts from the MOHG and Faculty of Health Sciences, and two NGO members in addition to other stakeholder representatives. The Board will meet a minimum of once in three months. The minutes and recommendations of the board will be documented.

ENFORCEMENT BOARD
The Enforcement Board will be led by the Police Department. The key function of the Enforcement Board is to promote cooperation among the enforcement agencies and improve enforcement of tobacco laws, food safety regulations, food marketing and packaging laws and any other related regulations affecting NCDs. The stakeholders will review the enforcement status; discuss issues regarding the enforcement and find solutions for better enforcement at a national level and not merely for Male’ City.

The board will be chaired by a High Command in Police. The mandatory board members include a representative each from HPA, MFDA, Maldives Customs, a NGO and a Media organization. Like other boards, enforcement board will also meet a minimum of once in three months and minutes of the meetings will be properly documented.

APPRAISAL AND CHANNEL OF COMMUNICATION
A proper line of coordination and communication is a necessity to facilitate smooth coordination and timely flow of information. Information flow pertains to tracking the performance of stakeholders through routine submission of progress report to the Secretariat (NCD Unit) and onward submission of information to the President. The flow chart below depicts the channel and frequency of flow of reports from the stakeholders.
PART IV- MONITORING THE RESULTS

PROCESS MONITORING OF STAKEHOLDER WORK PLAN

Stakeholders will be accountable for their work plans. The work plan will be integrated within their sectoral plans. The national M& E protocol for the Multisectoral National NCD Action Plan will be finalized through a stakeholder meeting and seek endorsement of the High Level Taskforce.

In order to track the implementation progress, three monthly activity progress reports will be collected by the NCD Unit/Secretariat at the end of March, June, September and December. A special activity reporting forms will be developed by a team of stakeholders. Stakeholders will be oriented on the coordination protocol and reporting format. During the subsequent years of implementation, any new coming members will also be oriented on the coordination protocol and reporting format.

The NCD Unit will review the progress and provide feedback within the 14 working days of the receipt of activity reports. The feedback will include the progress against the set indicators.

The progress for 2020 will be measured through few critical process indicators and short term and medium term outcome indicators. The key indicators are defined for each risk factor, diseases and other service delivery areas. Process and short term indicators are aimed towards midterm plan (2017) and the medium term and few long term indicators are
expected to be achieved by 2020. The majority of the long term indicators should be achieved by 2025.

A summary of critical indicators to be used for tracking the progress of the Multisectoral NCD Action Plan along their means of verifications and key assumptions are described in the following tables:

<table>
<thead>
<tr>
<th>Table 2: Tobacco control indicators and means of verification (Mov)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process</strong></td>
</tr>
<tr>
<td>Revision of tobacco law to align with the provisions of the FCTC (Mov: Gazette of the government)</td>
</tr>
<tr>
<td>Targeted programs to reduce second hand smoke with priority focus home exposures (Mov: Annual reports of the High Level NSD taskforce)</td>
</tr>
<tr>
<td>Revision of tobacco taxation policies (Mov: Print of tobacco taxation policy document)</td>
</tr>
<tr>
<td>Intense enforcement program on tobacco rules in smoke free zones, designated places and underage sales (Mov: Written work plans of police and HPA for joint enforcement activities)</td>
</tr>
<tr>
<td>Compliance check program through decoy purchase attempts for tobacco laws as a quality improvement tool (Mov: Decoy shopping evaluation protocol)</td>
</tr>
</tbody>
</table>

Assumptions: Tobacco law is gazette and funds are available for implementation of activities
### Table 3: Indicators for physical activity promotion and means of verification (Mov)

<table>
<thead>
<tr>
<th>Process</th>
<th>Short</th>
<th>Medium</th>
<th>Long term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop national physical activity guidelines for all age groups in various settings (Mov: Print documents of national physical activity guidelines)</td>
<td>Information dissemination of on social media and other media programs (Mov: BCC and mass media campaign strategy annual report)</td>
<td>More people of all age group aware on the recommendations of physical activity (Mov: Mid-term evaluation report of BCC and mass media campaign and STEPs and GSHS)</td>
<td>Prevalence of insufficient physical activity adolescents defines as less than 60 minutes of moderate to vigorous intensity activity daily</td>
</tr>
<tr>
<td>Healthy lifestyle promotion in schools (Mov: Annual work plans targeting healthy lifestyle promotion)</td>
<td>Physical activity programs integrated as school wide policy to achieve national physical activity recommendations at school setting (Mov: Annual progress report of MOE)</td>
<td>School children are aware and engage in physical activity promoting sessions at school (Mov: GSMS)</td>
<td>Age standardized prevalence of insufficient physical activity persons aged 18+years (defined as less than 150 minute of moderate-intensity activity per week , or equivalent)</td>
</tr>
<tr>
<td>Pilot healthy lifestyle at workplace (Mov: Signed MoUs of participating stakeholder and HPA)</td>
<td>Number of organization integrating work place healthy lifestyle promotion in key corporate and government settings (Mov: Activity reports of the pilot workplaces)</td>
<td>More workers involved in physical activity at work place (Mov: Evaluation report on piloting work place healthy lifestyle promotion in five organizations)</td>
<td></td>
</tr>
<tr>
<td>Improvise urban structural designs in Male’ city and other major urban settings (Mov: Annual work plans of urban planning board and Male’ city council)</td>
<td>Functional Urban Planning Board with City Council and HPA representative and NGOs established at MOHI</td>
<td>Streets conducive for pedestrians (Mov: Walkability survey once in five years)</td>
<td>People participating in regular physical activity at the public ground increased (Mov: Annual assessment report on use of public ground of HPA)</td>
</tr>
<tr>
<td></td>
<td>Develop urban structural changes improvising long term design plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pedestrian designated streets (Mov: Activity report of Urban Planning Board and Male’ city council)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Two public physical activity promoting grounds established in Male’ (Mov: Physical verification of sites)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Assumptions: Greater leadership by school systems, City Council and Ministry of Urban Development and Infrastructure and funds available for health promotion

### Table 4: Indicators for promotion of healthy diet and means of verification (Mov)

<table>
<thead>
<tr>
<th>Process</th>
<th>Short</th>
<th>Medium</th>
<th>Long term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption of national dietary recommendation for all age groups and for different conditions and information integrated into national BCC &amp; mass media campaign (Mov: Published mass media and BCC)</td>
<td>Increase airtime for healthy lifestyle events on mass media channels such as in social media, (facebook, tweeter), TV, radio and print media (Mov: Airtime contract award document and activity reports of the)</td>
<td>Increase awareness of dietary recommendations in population (Mov: STEPS and GSHS and Mid-term and end line evaluation reports)</td>
<td>Age standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ year</td>
</tr>
<tr>
<td>Strategy</td>
<td>Media Organizations</td>
<td>Population Achieving Recommended Level of Servings of Fruits and Vegetables</td>
<td>Reduction in Consumption of Food Containing Transfat and Hydrogenated Vegetable Oil</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Adoption of policies to reduce of food products high in saturated fatty acids and eliminate hydrogenated vegetable oils in food supply (Mov: Published policy documents)</td>
<td>Increase public educational programs on risk of transfat and hydrogenated vegetables oils in integrated BCC campaign (Mov: Activity reports, Contract award documents for mass media of HPA) Increase monitoring of food contents of salt and saturated fatty acids and transfat levels (Mov: Annual published market inspection reports of MFDA/HPA)</td>
<td>Decrease market availability of food products with high content of transfat and hydrogenated oils (Mov: Annual published market inspection reports of HPA/MFDA)</td>
<td></td>
</tr>
<tr>
<td>Introduce policies to reduce food marketing to children for non-alcoholic beverages and food high in saturated fatty acids, transfat, high sugar or salt (Mov: Published policy documents of HPA)</td>
<td>Decrease in advertisement of non-alcoholic beverages and food high in saturated fatty acids, transfat, high sugar or salt decreased (Mov: Annual media assessment reports by HPA/NGOs)</td>
<td>Decreased accessibility and availability of non-alcoholic beverages and food high in saturated fatty acids, transfat, high sugar or salt in the market (Mov: Annual market assessment reports by HPA/NGOs)</td>
<td></td>
</tr>
</tbody>
</table>

Assumptions: Legal measures in place for banning food with high contents of hydrogenated vegetable oils and transfat and funds are available to advocate healthy diet

Table 5: Indicators for prevention and control of alcohol use

<table>
<thead>
<tr>
<th>Process</th>
<th>Short term</th>
<th>Medium term</th>
<th>Long term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adopt of relevant components on Global Strategy on Reducing Harmful Use of Alcohol (Mov: Published policy document)</td>
<td>Increase educational programs on alcohol abstinence among young people (Mov: Annual activity reports of stakeholders compiled by NCD Unit) Alcohol involved road crashes and alcohol-involved crime (Mov: Published joint annual report of HPA and police)</td>
<td>Population aware on alcohol abstinence policy (Mov: STEPS survey)</td>
<td>Increased alcohol abstinence among young people</td>
</tr>
</tbody>
</table>

Assumptions: Police provide good cooperation and funds are available
Table 6: Indicators for NCD and metabolic risk factors and means of verification (Mov)

<table>
<thead>
<tr>
<th>Process</th>
<th>Short term</th>
<th>Medium term</th>
<th>Long term</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEN intervention integrated in all health centers (Mov: MOHG training activity reports)</td>
<td>Health workers skilled on PEN intervention (Mov: Three yearly clinical audit report)</td>
<td>NCD patients treated and counselled using NCD protocol (Mov: Three yearly clinical audit report)</td>
<td>Universal health coverage and equitable access to prevention, early detection and treatment of NCDs</td>
</tr>
<tr>
<td></td>
<td>Policies for palliative care for cancer patients through opioid analgesics (Mov: Three yearly clinical audit report)</td>
<td>Better quality of life for cancer patients receiving opioid analgesics (Mov: Three yearly clinical audit report)</td>
<td></td>
</tr>
<tr>
<td>Introduce supportive services for counseling and self-support of NCDs or risk factors (Mov: Activity report of MOHG/NGOs)</td>
<td>Patient-peers involve in tobacco cessation services and diabetes peer counseling (Mov: Clinic activity report of health center/NGOs)</td>
<td>Increased abstinence among former tobacco users and improved quality of life of diabetic patients (Mov: Clinic activity and performance report by health centers/NGOs)</td>
<td></td>
</tr>
<tr>
<td>NCD prevention through cervical and oral cancer screening and vaccination for hepatitis (Mov: Annual work plan documents of MOHG)</td>
<td>More health workers trained and health facilities providing cervical and oral cancer screening (Mov: MOHG activity reports)</td>
<td>Increase uptake of eligible women for routine cervical screening program (Mov: Annual ANC screening records of MOHG for women aged 30-49 screened for cervical cancer)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hepatitis B for children and high risk adults receive vaccination (Mov: Reports of MOHG)</td>
<td>Number of people screened for oral cancers at health centers (Mov: Annual activity reports on oral cancer screening)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase coverage of hepatitis vaccination for children and high risk adults and (Mov: EPI coverage for third dose of vaccination coverage for children/MOHG)</td>
<td></td>
</tr>
<tr>
<td>Streamline drug supply between Asanda, pharmacies and MOHG (Mov: MoU between three agencies)</td>
<td>Timely refill of stocks at pharmacies (Mov: Annual stock monitoring assessment at pharmacy outlets and patient interviews/MOHG)</td>
<td>Non-interrupted refill of NCD drugs and supplies by patients (Mov: Three yearly clinical audits)</td>
<td></td>
</tr>
</tbody>
</table>

Assumptions: Funds are available for capacity development of the health workers and procurement of supplies

CRITICAL FACTORS OF THE ACTION PLAN

Several factors are critical to the success of the Action Plan as listed below. Faltering of one or more of these factors will severely risk the success of the Action Plan. These factors must be therefore closely managed at every stage of implementation.

- Political stability and commitment of the government to NCD remain unchanged
- Proposed legislation and regulations to support policies are endorsed
• The NCD unit in MOHG is supported with required strength of capable staff
• Other stakeholders including the enforcement agencies effectively participate in implementing the NCD action plan
• Proposed boards/committees are diligently able to meet and function
• Annual work planning and review exercises are conducted routinely
• Adequate financial resources are committed
• WHO and other donors provide continued partnership, support and guidance at the country level

DOCUMENTS CONSULTED
1. National Strategic Plan for Prevention and Control of noncommunicable diseases in Maldives, 2008-2010
4. Health Master Plan, Affordable and Quality Health Care for All, Ministry of Health, Republic of Maldives
5. WHO STEPS survey on risk factors for noncommunicable diseases Maldives, 2011
9. Tobacco Control Act (Law 15/2010), Maldives
11. Maldives Health Statistics 2009, Ministry of Health & Family, Republic of Maldives
13. National Standard For Labelling (Draft), MFDA-FCD STAN 4-2014