National Surveillance and Monitoring Frameworks

for NCDs Control and Prevention in WHO South-East Asia Region

(as extracted from respective most recent official National multisectoral action plans)

Contents

Introduction:

In May 2013 the 66th World Health Assembly adopted the comprehensive global monitoring framework (GMF) for the prevention and control of noncommunicable diseases. The Global Monitoring Framework included a set of indicators capable of application across regions and country settings to monitor trends and assess progress made in the implementation of national strategies and plans on noncommunicable diseases.

The purpose of this document is to provide detailed guidance to Member States so they can correctly measure each of the 25 indicators and monitor their progress over time. For each indicator, a complete definition is provided, appropriate data sources are identified and a detailed calculation, where applicable, is provided.

Global Monitoring Framework:

Member States have agreed 25 indicators across three areas which focus on the key outcomes, risk factors and national systems response needed to prevent and control NCDs. (see figure 1).

Figure 1. Global Monitoring Framework

Framework Element	Target	Indicator
OUTCOMES		
Premature mortality from noncommunicable disease	 1. A 25% relative reduction in the overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases	1. Unconditional probability of dying between ages of 30 and 70 from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases
Additional indicator		2. Cancer incidence, by type of cancer, per 100 000 population
BEHAVIOURAL RISK FACTORS		
Harmful use of alcohol	 2. At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context	3. Total (recorded and unrecorded) alcohol per capita (aged 15+ years old) consumption within a calendar year in litres of pure alcohol, as appropriate, within the national context 4. Age-standardized prevalence of heavy episodic drinking among adolescents and adults, as appropriate, within the national context 5. Alcohol-related morbidity and mortality among adolescents and adults, as appropriate, within the national context
Physical inactivity	 3. A 10% relative reduction in prevalence of insufficient physical activity	6. Prevalence of insufficiently physically active adolescents, defined as less than 60 minutes of moderate to vigorous intensity activity daily 7. Age-standardized prevalence of insufficiently physically active persons aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent)
Salt/sodium intake	 4. A 30% relative reduction in mean population intake of salt/sodium	8. Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years

Tobacco use	 5. A 30% relative reduction in prevalence of current tobacco use	9. Prevalence of current tobacco use among adolescents 10. Age-standardized prevalence of current tobacco use among persons aged 18+ years
BIOLOGICAL RISK FACTORS		
Raised blood pressure	 6. A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances	11. Age-standardized prevalence of raised blood pressure among persons aged 18+ years (defined as systolic blood pressure ≥140 mmHg and/or diastolic blood pressure ≥90 mmHg) and mean systolic blood pressure
Diabetes and obesity	 7. Halt the rise in diabetes & obesity	12. Age-standardized prevalence of raised blood glucose/diabetes among persons aged 18+ years (defined as fasting plasma glucose concentration ≥ 7.0 mmol/l (126 mg/dl) or on medication for raised blood glucose) 13. Prevalence of overweight and obesity in adolescents (defined according to the WHO growth reference for school-aged children and adolescents, overweight – one standard deviation body mass index for age and sex, and obese – two standard deviations body mass index for age and sex) 14. Age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as body mass index ≥ 25 kg/m² for overweight and body mass index ≥ 30 kg/m² for obesity)
Additional indicators		15. Age-standardized mean proportion of total energy intake from saturated fatty acids in persons aged 18+ years 16. Age-standardized prevalence of persons (aged 18+ years) consuming less than five total servings (400 grams) of fruit and vegetables per day 17. Age-standardized prevalence of raised total cholesterol among persons aged 18+ years (defined as total cholesterol ≥5.0 mmol/l or 190 mg/dl); and mean total cholesterol concentration

NATIONAL SYSTEMS RESPONSE		
Drug therapy to prevent heart attacks and strokes	 8. At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes	18. Proportion of eligible persons (defined as aged 40 years and older with a 10-year cardiovascular risk ≥30%, including those with existing cardiovascular disease) receiving drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes
Essential noncommunicable disease medicines and basic technologies to treat major noncommunicable diseases	 9. An 80% availability of the affordable basic technologies and essential medicines, including generics required to treat major noncommunicable diseases in both public and private facilities	19. Availability and affordability of quality, safe and efficacious essential noncommunicable disease medicines, including generics, and basic technologies in both public and private facilities
Additional indicators		20. Access to palliative care assessed by morphine-equivalent 21. Adoption of national policies that limit saturated fatty acids and virtually eliminate partially hydrogenated vegetable oils in the food supply, as appropriate, within the national context and national programmes 22. Availability, as appropriate, if cost-effective and affordable, of vaccines against human papillomavirus, according to national programmes and policies 23. Policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans fatty acids, free sugars, or salt 24. Vaccination coverage against hepatitis B virus monitored by number of third doses of Hep-B vaccine (HepB3) administered to infants 25. Proportion of women between the ages of 30–49 screened for cervical cancer at least once, or more often, and for lower or higher age groups according to national programmes or policies

Global Targets for NCDs:

Nine areas have been selected from the 25 indicators in the Global Monitoring Framework to be targets (see figure 2): one mortality target (previously agreed at the WHA in May 2012); six risk factor targets (harmful use of alcohol, physical inactivity, dietary sodium intake, tobacco use, raised blood pressure, and diabetes and obesity), and two national systems targets (drug therapy to prevent heart attacks and strokes, and essential NCD medicines and technologies to treat major NCDs). The targets are both attainable and significant, and when achieved will represent major accomplishments in NCD and risk factors reductions. The global NCD targets are intended to focus global attention on NCDs and would represent a major contribution to NCD prevention and control. Targets have been set for 2025, with a baseline of 2010.

Figure 2. Global voluntary targets for NCDs

A 25% relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases

At least 10% relative reduction in the harmful use of alcohol

A 10% relative reduction in prevalence of insufficient physical activity

A 30% relative reduction in mean population intake of salt/sodium

A 30% relative reduction in prevalence of current tobacco use

A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances

Halt the rise in diabetes and obesity

At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes

An 80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major noncommunicable diseases in both public and private facilities

NCD Global Monitoring Frameworks: National indicators and targets in WHO South-East Asia Region

Framework Element		Global Target	Bangladesh	Bhutan		DPR Korea	India		Indonesia	Maldives	Myanmar		Nepal	Sri Lanka		Thailand		Timor-Leste	
Target year			**2025**	**2020**	**2025**	**2025**	**2020**	**2025**	**2025**	**2025**	**2021**	**2025**	**2025**	**2020**	**2025**	**2015**	**2025**	**2020**	**2025**
MORTALITY & MORBIDITY																			
Premature mortality from NCDs		1. A **25%** relative reduction in the overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases	**25%**	**-**	**25%**	**30%**	**10%**	**25%**	**25%**	**25%**	**15%**	**20%**	**25%**	**10%**	**25%**	**25%**	**25%**	**7%**	**20%**
BEHAVIOURAL RISK FACTORS																			
Harmful use of alcohol		2. At least **10%** relative reduction in the harmful use of alcohol 2, as appropriate, within the national context	**10%**	**5%**	**10%**	**10%**	**5%**	**10%**	**10%**	**10%**	**5%**	**10%**	**10%**	**5%**	**10%**	**10%**	**10%**	**5%**	**10%**
Physical inactivity		3. A **10%** relative reduction in prevalence of insufficient physical activity	**10%**	**5%**[1]	**10%**	**50%**	**5%**	**10%**	**10%**	**10%**	**5%**	**10%**	**10%**	**5%**	**10%**	**10%**	**10%**	**5%**	**10%**
Salt/sodium intake		4. A **30%** relative reduction in mean population intake of salt/sodium	**30%**	**15%**	**30%**	**30%**	**20%**	**30%**	**30%**	**30%**	**10%**	**20%**	**30%**	**10%**	**30%**	**30%**	**30%**		
Tobacco use		5. A **30%** relative reduction in prevalence of current tobacco use in persons aged 15+ years	**30%**	**15%**	**30%**	**40%**[3]	**15%**	**30%**	**30%**	**30%**	**5%**	**10%**	**30%**	**15%**	**30%**	**30%**	**30%**	**10%**	**20%**
BIOLOGICAL RISK FACTORS																			
Raised blood pressure		6. A **25%** relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances	**25%**	**10%**	**25%**	**25%**	**10%**	**25%**	**25%**	**25%**	**10%**	**20%**	**25%**	**12.5%**	**25%**	**25%**	**25%**	**10%**	**25%**
Diabetes and obesity		7. Halt the rise in diabetes & obesity	**Halt the rise**	**-**	**Halt the rise**	**Halt the rise**	**-**	**Halt the rise**	**Halt the rise**	**Halt the rise**	**Halt the rise**		**Halt the rise**	**Halt the rise**		**Halt the rise**		**Halt the rise**	
NATIONAL SYSTEMS RESPONSE																			
Drug therapy to prevent heart attacks and strokes		8. At least **50%** of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes	**50%**	**20%**	**50%**	**50%**	**30%**	**50%**	**50%**	**50%**	**25%**	**50%**	**50%**	**25%**	**50%**	**50%**	**50%**	**25%**	**50%**
Essential NCD medicines and basic technologies to treat major NCDs		9. An **80%** availability of the affordable basic technologies and essential medicines, including generics, required to treat major NCDs in both public and private facilities	**80%**	**80%**[2]	**80%**[2]	**80%**	**60%**	**80%**	**80%**	**80%**	**50%**	**80%**	**80%**	**40%**	**80%**	**80%**	**80%**	**50%**	**80%**
Household indoor air pollution		Relative reduction in households use of solid fuels as the primary source of energy for cooking	**50%**	**30%**	**50%**	**NA**	**25%**	**50%**					**50%**	**25%**	**50%**				

1 in urban population; **2** public facilities; **3** Smoking rate in males of 17+ years

MULTISECTORAL ACTION PLAN FOR PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASES
with a three-year operational plan (2018–2021)

Noncommunicable Disease Control Programme
Directorate General of Health Services
Health Services Division
Ministry of Health & Family Welfare
Government of Bangladesh

March 2018

With the technical support from
World Health Organization
Bangladesh

Core values

- *Whole-of-government and whole-of-society approach*: Build multisectoral partnerships among government and nongovernment agencies, and communities in NCD policy development and programme implementation.
- *Universal health coverage*: All people should have access to promotive, preventive and curative, and rehabilitative basic health services.
- *Cultural relevance*: Policies and programmes should respect and take into consideration the specific cultures and the diversity of populations in Bangladesh.
- *Reduce inequities*: Policies and programmes should address the social determinants and needs of poor and marginalized communities, and reduce health and social inequities.
- *Life-course approach*: NCD services should occur at multiple stages of life starting with maternal health and include preconception, antenatal and healthy ageing.

Objectives

- To accelerate and scale up responses to NCDs through effective multisectoral partnerships and "health in all policies" approach.
- To improve the capacity of individuals, families and communities to live a healthy life and reduce the risk of developing NCDs by increasing health literacy and creating healthy and safe environments, conducive to making healthier choices.
- To strengthen the health system by improving access to health care services for primary prevention, early detection and treatment of NCDs.
- To establish a sound surveillance, monitoring and evaluation system that generates data for evidence-based policy and programme development.

Targets

In alignment with the UN High Level Political Declaration of 2011, Bangladesh will commit towards achieving the 2025 NCD targets and 2030 SDG targets. Potential indicators for the 2025 targets are listed in Annexure 3. Through the implementation of the Multisectoral NCD Control and Prevention of NCDs (2018–2025), Bangladesh will aim to achieve the proposed 2025 targets (see Table 1).

Table 1. NCD targets

Area	Baseline	2025 targets
Overall mortality from cardiovascular diseases, cancers, diabetes or chronic respiratory diseases	*	25% relative reduction
Reduction in the harmful use of alcohol	STEPs 2010	10% relative reduction
Reduction in prevalence of current tobacco use in persons aged over 15 years	STEPS 2010	30% relative reduction
Reduction in prevalence of insufficient physical activity	STEPS 2010	10% relative reduction
Reduction in mean population intake of salt/sodium	*	30%relative reduction
Relative reduction in prevalence of raised blood pressure	STEPS 2010	25% relative reduction
Halt rise in obesity and diabetes	STEPS 2010	0
Reduction in the proportion of households using solid fuels (wood, crop residue, dried dung, coal and charcoal) as the primary source of cooking	Survey 2010	50%
Increase the number of eligible people receiving drug therapy and counseling (including glycaemic control) to prevent heart attacks and strokes		50%

Improve the availability of affordable basic technologies and essential medicines, including generics, required to treat major NCDs in both public and private facilities		80%

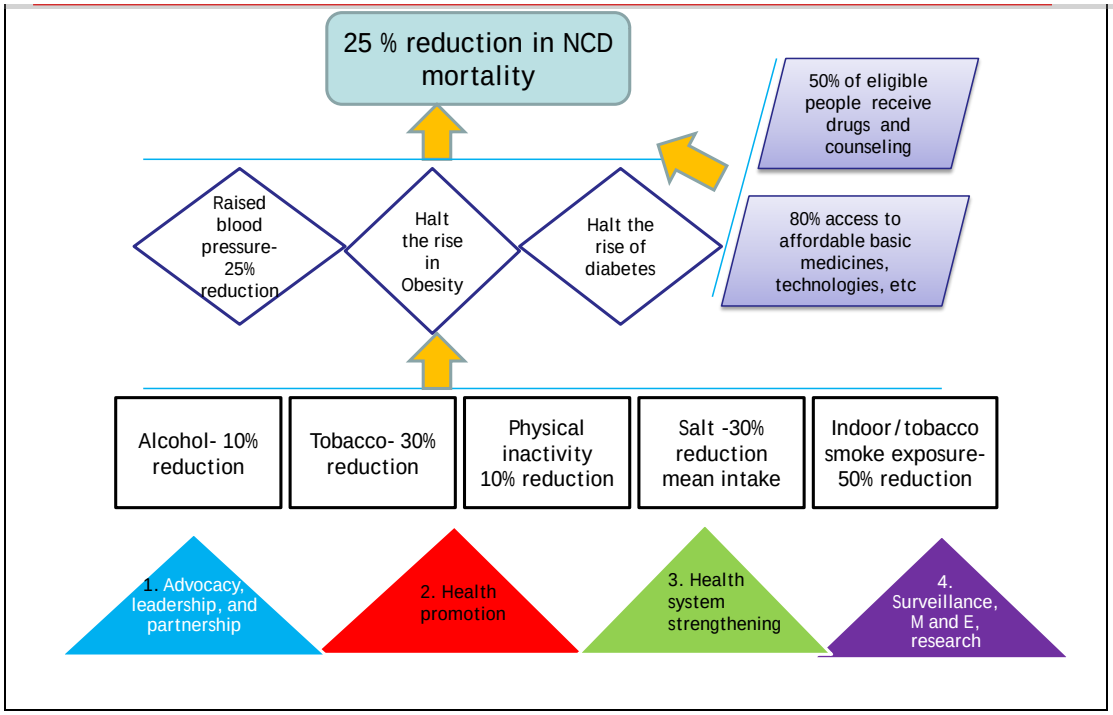
*to be determined

Strategic priority action areas

This action plan is based on the four strategic priority action areas outlined in the *Action plan for the prevention and control of noncommunicable diseases in South-East Asia, 2013–2020*.

It is congruent with the 25 indicators and 10 regional targets of the WHO Comprehensive Global Monitoring Framework. As shown in the figure below, four action areas will contribute towards the goals and targets mentioned in the previous section.

Figure 1. Multisectoral NCD response



Action area 1: Advocacy, leadership and partnerships

Multisectoral approaches for NCD control will require meaningful involvement of a wide range of actors – such as non-health government sectors, academia, private sector, civil society organizations, other organizations, individuals, families and communities – for undertaking appropriate actions that contribute to the improvement of health outcomes. Effective leadership is required to foster partnerships among various stakeholders to address NCD control.

- Establish Healthy City Project with guidelines for implementation and mechanisms for monitoring and evaluation.
- Establish institutional supervision of young children (under 5 years) through community day care centres and promotion of playpens for children below two years, to reduce exposure to water bodies.
- Conduct advocacy and training workshops among teachers to promote healthy behaviours in schools and work places.
- Discourage sale of processed foods high in harmful fats, sugars and salt in schools and work place catering facilities.

Actions to reduce household air pollution:

- Strengthen advocacy in support of transition to cleaner technologies and fuels (liquefied petroleum gas, bio-gas, solar cookers, electricity, and other low fume fuels).
- Promote private producers to manufacture improved stoves by providing bank loans and stove designs.
- Create mass awareness through popular print and electronic media about the health impacts of indoor air pollution.
- Develop programmes aimed at encouraging the use of improved stoves, good cooking practices, reducing exposure to fumes, and improving ventilation in households.
- Create awareness and develop appropriate strategies to reduced exposure to second-hand tobacco smoke in households.

Action area 3: Health systems strengthening for early detection and management of NCDs and their risk factors

Health systems should be strong enough to ensure the success of NCD prevention and control. To improve the coverage of NCD services to the maximum in need of it, sustain the programme by including it in the universal health package administered through a people-centered approach.

Actions under this area aim to improve the efficiency of the health system, particularly the primary health care system. Full implementation of actions in this area should improve access to health-care services, increase competence of primary health care workers to address NCDs, expand community-based approaches for early detection, improve referrals, lead to greater integration of NCDs into heath sector reforms and plans, empower communities and individuals for self-care, and ensure evidence-based interventions supported by universal health coverage.

Actions:

- Adapt the WHO PEN disease interventions by developing guidelines, protocols and tools to support implementation of the essential health services package in primary health care facilities.
- Review essential drug list and other supplies for treatment of hypertension, diabetes, cardiovascular diseases, chronic obstructive pulmonary disease and revise the essential drug list.
- Make basic NCD drugs available at the primary health care level.
- Integrate healthy lifestyle education (physical activity, healthy diet, reduction of salt, tobacco and alcohol) in all health facilities including MCH and family planning services.
- Implement special NCD programmes targeting marginalized and special needs populations.
- Incorporate NCDs curriculum with focus on primary care in pre-service and in-service training for health professionals.

- Study sustainable health financing options to cover NCD services within the essential health services package to protect poor from financial risks.

Action area 4: Surveillance, monitoring and evaluation, and research

Valid, available and timely data are important for evidence-based policy implementation. This area includes key actions for strengthening surveillance, monitoring and research in NCD control. The desired outcome is to improve availability and use of data for evidence-based policy and programme development. Health information systems should integrate the collection of NCD and risk factor data from multiple sources and strengthen competences for the analysis and use of information. The activities should facilitate NCD and risk factor research to enhance the knowledge base of effective interventions; and support the translation of evidence into policies and programmes.

Actions:

- Conduct surveys such as NCD STEPs, GATS and GYTS at regular intervals.
- Strengthen national cancer registration through hospital- and population-based cancer registries.
- Document annual consolidated NCD implementation reports of multi-stakeholders.
- Develop a national priority research agenda for NCDs based on consultations with academia, WHO and other stakeholders.
- Support NCD research alliance with academia, stakeholders, WHO and the Government, and improve the use of NCD surveillance and research data.
- Review implementation rate of the current NCD operational framework, and evaluate compliance with tobacco laws, food safety regulations/policies and healthy settings programmes.
- Integrate the online reporting of NCDs at the district and upazila levels with DHIS2 (District Health Information System) of DGHS.
- Conduct secondary analyses of the STEPS survey data.
- Strengthen the civil registration and vital statistics system.

Stages of implementation of the action plan

A relatively short-term plan can drive results as opposed to a long-term plan that could lead to loss of momentum and loss of accountability on the way. The action plan will be implemented in two stages to ensure better implementation rate. The first stage will be implemented over a period of three years from July 2018 through June 2021. The second stage of the action plan will be implemented from July 2021 through June 2025. After stock taking of the implementation of the Multisectoral NCD Action Plan 2018–2021, the next operational plan will be developed for 2025 targets.

Monitoring and evaluation

The progress of and fidelity towards the plan will be assessed yearly (implementation documentation)[6]. However, stakeholders' six-monthly progress report to the NMNCC Secretariat will serve as a near real-time activity of implementation assessment of the operational plan for taking corrective actions and providing managerial guidance. The NMNCC Secretariat's ACPR should contain an analytical situation describing the overall implementation of the operational plan, progress of each stakeholder against the planned activities, and the reasons for achievements or delays as shown in Box 1 below. It is crucial that adequate support and staff time is dedicated to produce a good quality ACPR. The report should be crisp and content laden not exceeding more than 20–30 pages including graphs, tables and pictures. The report should be submitted to the Prime Minister and the Cabinet. Stakeholders, donor agencies and media should have access to the ACPR.

Box 1. ACPR six-monthly progress report template

Annual Consolidated Progress Report

Reporting period (Financial year)……

Contents

Executive summary

Section I: Overall progress and performance (Describe the overall implementation rate of the activities, financial spending rate)

Section II: Stakeholder performance (Describe the implementation rate by each stakeholder, and ministries and agencies involved)

Section III: Lessons (Identify agencies who were highly successful in implementing the plan and highlight success stories and innovations employed by these agencies)

Section IV: Debottlenecking (Discuss bottle necks and challenges faced in the implementation and propose recommendations to overcome them)

Necessary outputs

The initiation and scaling up of the action plan will rely on a small number of necessary activities. The eight outputs identified in Table 3 below will determine the promptness of implementation of the three-year operational plan, and hence are "necessary". The earlier these necessary outputs are achieved, the faster the remaining activities of the operational plan can be implemented. Therefore, high priority should be accorded to achieve these outputs as soon as the plan is launched.

Table 3. Necessary output indicators

1.	Assign at least two additional staff to manage the multisectoral NCD action plan under the NCDC unit of the DGHS
2.	Form the NMNCC

[6] Implementation documentation refers to the simple tallying of activities and processes carried out as implementation activities of the programme (Issel LM. Health program planning and evaluation: A practical, systematic approach for community health. Boston: Jones & Bartlett Learning; 2004).

Royal Government of Bhutan

THE MULTISECTORAL NATIONAL ACTION PLAN FOR THE PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASES

[2015-2020]

This document was granted approval during the 80th Lhengye Zhungtshog session held on 6th July 2015.

"Attainment of the highest standard of physical, mental and social wellbeing for all Bhutanese by adopting healthy lifestyles and reducing exposures to risk factors that contributes to NCDs"

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 program development

2.5. National NCD Targets for Bhutan

The Action Plan endorses the SEA Regional NCD Action Plan's ten voluntary targets to be achieved by 2025 and sets medium term targets to be achieved by 2020 as shown in the table below:

Table 1: NCD Targets for 2020 and 2025

Target areas	2020	2025
Relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases	.....	25%
Relative reduction in the harmful use of alcohol	5%	10%
Relative reduction in prevalence of current tobacco use in persons aged over 15 years	15%	30%
Relative reduction in prevalence of insufficient physical activity *(in urban population)*	5%*	10%
Relative reduction in mean population intake of salt/sodium	15%	30%
Relative reduction in prevalence of raised blood pressure	10%	25%
Halt the rise in obesity and diabetes	.....	0 % rise
Eligible people receive drug therapy and counseling (including glycemic control) to prevent heart attacks and strokes	20%	50%
Availability of affordable basic technologies and essential medicines, including generics, required to treat major NCDs in public facilities	80%	80%
Relative reduction in the proportion of households using solid fuels (wood, crop residue, dried dung, coal and charcoal) as the primary source of cooking	30%	50%

**in urban population*

2.6. Priority Action Areas

Strategic action area 1: Advocacy, partnerships, and leadership
Action area: 1.1. Advocacy
Raise awareness on NCDs by informing politicians and policy makers on NCD and the major risk factors
Action area: 1.2. Partnerships
Strengthen the National NCD Steering Committee and develop multisectoral procedures and structures between key partners, beginning with the most relevant and motivated ministries
Action area: 1.3. Leadership
Ensure highest political leadership and commitment for NCDs (Head of state, Ministers etc) by identifying existing and creating new opportunities to speak publicly, participate in national and international conferences, showcase achievements and host NCD related events
Strategic action area 2: Health promotion and risk reduction
Action area: 2.1. Reduce tobacco use
Improve enforcement of all aspects outlined in the updated Tobacco Control Rules and Regulations (2013) through effective partnerships with police, border police, customs and other enforcement entities
Action area: 2.2. Reduce harmful use of alcohol

3.4 Strategic action area 4: Surveillance, monitoring and evaluation and research

Partners: Ministries of health, education, Bhutan Narcotic Control Agency, and BAFRA

Table 11: Action area 4, surveillance, monitoring and evaluation and research

Action area: 4.1. Strengthen surveillance.		Activities		Lead agency	Implementing partners	2015	2016	2017	2018	2019	2020
4.1.1	Strengthen civil registration and vital statistics through improved collection of demographic data as well as age-and cause of death data using verbal autopsy tools.	4.1.1.1	Review and endorse SOPs for strengthening civil registration system based on cause of deaths including NCD deaths	HMIS-MoH							
		4.1.1.2	Conduct training courses for health workers on registration and reporting on deaths including verbal autopsy	HMIS-MoH							
		4.1.1.3	Orient community members of the local government on reporting deaths to the health facilities	HMIS-MoH							
		4.1.1.4	Train Medical Record Officers (MROs) to improve ICD Coding for diseases	HMIS-MoH							
		4.1.1.5	Conduct a study of deaths in a nationally representative sample of Bhutanese population to establish baseline for NCD premature mortality	LSRDP-MoH	HRU-MoH						
4.1.2	Conduct a population surveys to inform the progress on NCD Actions	4.1.2.1	Conduct WHOSTEP survey of NCD Risk factors following 2014 survey	LSRDP-MoH							
		4.1.2.2	Conduct five yearly Global School Health Survey	DYS/ MoE							
4.1.3	Improve fluoride content of drinking water in Bhutan	4.1.3.1	Conduct a small scale feasibility study of fluoridation of water source	Oral Health Program							

Action area: 4.2. Improve monitoring and evaluation.			Activities	Lead agency	Implementing partners	2015	2016	2017	2018	2019	2020
4.2.1	Monitor and evaluate the progress of multi-sectorial efforts to implement priority interventions.	4.2.2.1	Develop stakeholder reporting format through a stakeholder workshop	LSRDPP-MoH /	All stakeholders						
		4.2.2.2	Organize annual stakeholder meetings to share the progress and yearly work planning	LSRDP-MoH	All stakeholders						
		4.2.2.3	Conduct mid-term and end line evaluation of the action plan in 2017 and 2019 and publish evaluation reports	LSRDP-MoH	All stakeholders						
		4.2.2.4	Compile Annual National NCD Implementation Report	DoPH (LSRDP)							
		4.2.2.5	Conduct Brief External Review (BER)	DoPH	NSC						
		4.2.2.6	Conduct Global Adult Tobacco Survey (GATS)	BNCA	HPD-MoH						
Action area: 4.3. Strengthen research											
4.3.2	Strengthen collaboration between national, regional and international research centers and develop reliable long-term research partnerships based on MoUs	4.3.2.1	Define a national NCD research agenda through a stakeholder workshop	HRU/ LSRDP-MoH							
		4.3.2.2	Facilitate submission of annual grant proposals to conduct NCD prioritized research	HRU-MoH/ LSRDP							
		4.3.2.3	Publish NCD related interventions of Bhutan in international journals	LSRDP-MoH / HRU-MoH							
		4.3.2.4	Conduct joint survey/ surveillance of food contents of pesticides, heavy metals, mycotoxins and other harmful adulterants/ contaminants	BAFRA	PHL						

4.12 FINANCING

The multisectoral national action plan will be embedded as the annual work plan of the local governments and other agencies to ensure an integrated and sustained financing. Similar to other sectoral developmental plans, NCD action plans should be proposed by government agencies in the annual budget proposal of the Royal Government of Bhutan. Funds will be released directly to the implementing agencies. This will promote greater decentralization of NCD plans and generate ownership and accountability at the grassroot.

While most of the funding will rely on the government grants and budgetary support, stakeholders will also compete for mobilizing from other sources such as UN agencies and other developmental partners.

4.13 MONITORING AND EVALUATION FRAMEWORK

Performance monitoring

A key step for effective implementation of the plan is building ownership and accountability among stakeholders. This will be enhanced by instituting a Brief External Review (BER) which will be conducted by an agent contracted by the NSC for a duration not extending 3 weeks. BER will be conducted at the end of 2016, 2017, and 2019. For the years 2018 and 2020, indepth reviews is scheduled through Midterm and the Whole-plan evaluation. The BER will be important exercise to inform the NSC on the progress and bottleneck in implementation of the action plan. The BER will be presented to the NSC.

The main purpose of the BER is to:

- Assess the overall performance and implementation of the plan;
- Assess performance of the stakeholders and build accountability for the Action Plan; and
- Identify bottlenecks, solutions and recommend adjustments to the implementation modality

The indicators stated in the multisectoral accountability framework discussed in the section 4.9 will be included integral part of BER reports.

Logical Framework

Various inputs and activities are designed in logical approach to produce outputs, outcomes and impacts. (See figure 5). The ultimate goal of the action plan is public health goal of reducing NCD diseases and burden. These goals can only be realized jointly by contribution of various sectors and implementing broad based programs. It is equally important for other sectors and partners to see how they contribute in the ultimate public health goal. The process and output indicators for each agency and sectors will be tracked and transparently reported in the National Annual NCD Report.

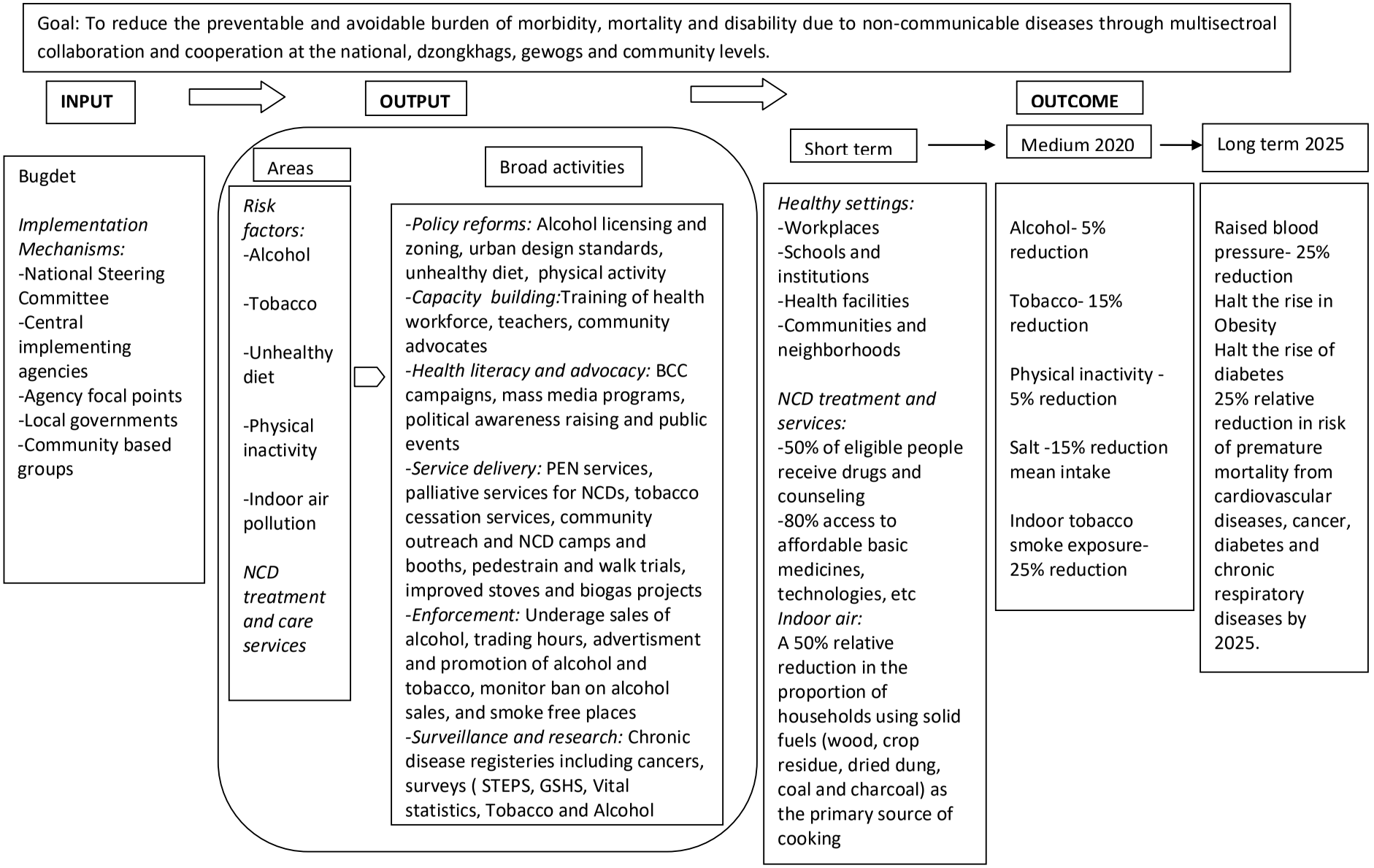


Figure 5: Log Frame for NCD Action Plan

National Strategic Plan for the Prevention and Control of Noncommunicable Diseases in DPR Korea 2014-2020

Ministry of Public Health

December 2014

7. Monitoring and evaluation

The Political Declaration adopted at High-Level Meeting of General Assembly proposed the establishment of an international mechanism to control noncommunicable diseases as one of the goals in the prevention and control of noncommunicable diseases. The country strategy for the prevention and control of noncommunicable diseases also aims at achieving this goal.

The WHO recommends the following monitoring and evaluation indicators.

- The level of risk factors of noncommunicable diseases (Monitoring and evaluation of risk factors)
- Prevalence of and mortality from noncommunicable diseases (Monitoring and evaluation of the consequence of noncommunicable diseases)
- Monitoring and evaluation of health care system for the prevention and control of noncommunicable diseases (Monitoring and evaluation of methodology and capacity)

In order to prevent and control successfully the noncommunicable diseases, the implementation process must be monitored and evaluated thoroughly and be improved according to the result. The Ministry of Public Health takes the responsibility of controlling entire process of strategy implementation, reports the result to Multisectoral Coordination Committee and takes necessary measures. The implementation bodies besides of the Ministry of Public Health communicate annually to the Ministry of Public Health about their activities.

The monitoring of risk factors and determinants of noncommunicable diseases and the monitoring of diseases may be done in a way of collecting periodical screening data and patient clinical chart data through routine health statistic system. In order for the success in monitoring, it is important to ensure the quality of statistics in primary health care facilities and district and county hospitals as well as the continuity of patient registration. As for the death data, it must be collected using national death reporting system and compared with data aggregated to the Ministry of Public Health, Public Security Agencies and resident administration institutes in order to ensure its quality.

8. Indicators and targets

Basing on the strategic goals proposed in the Global Strategy for the Prevention and Control of Noncommunicable Diseases 2013-2020 adopted at World Health Assembly and the goals of South East Asia Action Plan 2013-2020 signed at WHO South East Asia Regional Meeting, goals by indicators to be achieved until 2025 are as follows.

No	Indicator	Target
1	NCD premature mortality	30% reduction
2	Smoking rate in males of 17 years and above	40% reduction
3	Harmful use of alcohol	10% reduction

4	Physical inactivity	50% reduction
5	Salt intake	30% reduction
6	Raised blood pressure	25% reduction
7	Drug therapy and counseling	50% coverage
8	Essential NCD medicines and technologies	80% coverage
9	Diabetes/obesity	0% increase
10	Cancer screening for males and females of 40 years and above	90% coverage

9. Multisectoral plans for combating risk factors

9.1 Prevention and control of smoking

Activities	Responsible agencies
Update of National Law on Tobacco Control and monitoring and evaluation of enforcement of the law	Supreme People's Committee, Ministry of Public Health, Education Committee and Ministry of Security
Raise in tobacco price	Cabinet, Ministry of Finance
Reduction of import and sale of foreign tobacco	Cabinet, Ministry of Trade
Establishment and reduction of smoking places in offices and public places	Law enforcement divisions
Raising awareness of tobacco control law and advocate harmful effect of direct and indirect smoking	Civil societies, mass media, Ministry of Public Health, Education Committee
Placement of non-smoking stickers and posters in no smoking places	Ministry of Commerce, Ministry of Public Health, Education Committee
Conducting consultations for insertion of pictorial warnings on surface of cigarette boxes	Law enforcement offices, Ministry of Commerce, Ministry of Food and Commodities, Ministry of Public Health
Conduct regular survey of smoking status and strengthen the report system	Ministry of Public Health, Education Committee, Bureau of Statistics
Strengthen roles of responsibilities of education institutions on tobacco control and collaboration of social awareness and family education	Education Committee, Ministry of Public Health
Provide regular counseling to communities on quitting smoking in PHC level	Ministry of Public Health
Strengthen collaboration with international agencies on tobacco control activities	Ministry of Public Health

Ministry of Health
& Family Welfare
Government of India

National Multisectoral Action Plan for
Prevention and Control of Common Noncommunicable Diseases
(2017-2022)

STRATEGIC AREA 4 : SURVEILLANCE, MONITORING, EVALUATION AND RESEARCH
KEY OUTCOMES: Information on time trends of key indicators in the National Monitoring Framework regularly produced

Outputs	Process/Activities	Year (2017-2022)						Partners/ Agencies/ Stakeholders*	Indicators
		17	18	19	20	21	22		
Mechanisms established for Monitoring &Evaluation (M&E) of NMAP activities and database maintained for NCDs at National Level	Set-up a National Steering Committee for Monitoring, Surveillance and Evaluation for activities outlined in NMAP	✓	✓					MoHFW	Notification of a National Steering Committee on M&E; Number of Steering Committee (M&E) meetings heldPercent of States participated in NCD Capacity Survey to provide information on functionality of NMAP
	Set-up a data management system to compile, analyze and report/disseminate information on action taken by different sectors		✓	✓				**MoHFW,** ICMR, MoAYUSH	
	Establish quality assurance structures and mechanisms for monitoring and evaluating strategies of NMAP at national and subnational levels	✓	✓	✓				MoHFW, ICMR	
Effective integrated programme management information system leveraging existing HMIS for NPCDCS developed and implemented	Analyze existing HMIS to identify linkage modalities with NCDs services; Under NPCDCS, develop standard protocols for collection, analysis and reporting of data for different NCDs services at all levels		✓	✓				**State NCD Cells,** MoHFW (NHM), Dte.GHS	Availability of an online reporting system
	Analyze existing HMIS to identify linkage modalities with NCDs services; Under NPCDCS, develop standard protocols for collection, analysis and reporting of data for different NCDs services at all levels	✓	✓	✓	✓	✓	✓	**State NCD Cells,** MoHFW (NHM), Dte.GHS	
	Enable linkage of individual patients across the health system through usage of unique identifiers and IT	✓	✓	✓	✓	✓	✓	**Dte.GHS,** ICMR, MoHFW (NHM)	Percent of registered patient tracked through IT systems

*Ministries /Departments leading the process/activities are highlighted in bold text

Outputs	Process/Activities	Year (2017-2022)						Partners/ Agencies/ Stakeholders*	Indicators
		17	18	19	20	21	22		
Robust surveillance mechanisms established for measurement of burden due to NCDs and their risk factors	Set-up a National Technical Advisory Group (NTAG)for national NCD surveillance activities, NCD Burden Assessment, and to harmonize data collection across different surveys/ data sources the country	✓	✓	✓	✓	✓	✓	**ICMR, MoHFW**	Number of functional registries for NCDs surveillance
	Set-up a National Technical Advisory Group (NTAG)for national NCD surveillance activities, NCD Burden Assessment, and to harmonize data collection across different surveys/ data sources the country	✓	✓					ICMR	
Periodic surveys conducted to monitor the trend of indicators as identified under the National Monitoring Framework (NMF) for prevention and control of NCDs	Develop and disseminate standardized survey methodology and tools for collecting information on National Monitoring Framework (NMF) with States/UTs		✓	✓	✓	✓	✓	ICMR	Number of functional registries for NCDs surveillance
	Establish a central pool of resources (human resources , IT tools and training manuals) for facilitating NMF surveys at sub-national level		✓	✓	✓	✓	✓	**Department of Health Research** (DHR)/ ICMR/Identified Agency	
	Conduct periodic national level surveys to monitor the targets and indicators outlined in NMG; Take measures to integrated indicators of National NCD Monitoring Framework in other National Health Surveys	✓					✓	**DHR/**ICMR/Identified Agency	Availability of periodic data on health systems performance indicators
	Conduct periodic National NCD Health Facility Survey or integrate health systems performance indicators in existing health facility surveys	✓					✓	**DHR/**ICMR/Identified Agency	
	Conduct periodic School Based Health Surveys to collect information on prevalence of adolescent NCD factors such as Global Youth Tobacco Survey, Global School Health Survey	✓					✓	**DHR/**ICMR/Identified Agency	Periodic data on adolescent related NCD indicators (through Global Youth Tobacco Survey, Global School Health Survey)

*Ministries /Departments leading the process/activities are highlighted in bold text

Outputs	Process/Activities	Year (2017-2022)						Partners/ Agencies/ Stakeholders*	Indicators
		17	18	19	20	21	22		
Research priorities for NCDs identified and studies conducted	Establish a Technical Expert Group to review and Identify national research priorities in NCDs	✓	✓					DHR/ICMR	Percent of Union and State NCD budget allocated for research activities Monitoring of operation research projects funded by State/Union Government
	Institutionalize long-term research in identified medical colleges and academic institutions		✓	✓	✓	✓	✓	DHR/ICMR	
	Allocate sufficient funds within programmes for NCD related research		✓	✓	✓	✓	✓	MoHFW/DHR/ICMR	
	Conduct research studies to estimate direct and indirect economic and other impacts due to NCDs		✓	✓	✓	✓	✓	**DHR**/ICMR	
	Conduct and publish operational and policy research as relevant to NPCDCS and other national NCD programme needs		✓	✓	✓	✓	✓	**DHR**/ICMR	
Mechanisms for effective monitoring and evaluation of health promoting activities established	Conduct and publish operational and policy research as relevant to NPCDCS and other national NCD programme needs		✓					**MoHFW**/ICMR/ HPSI	Health Promotion Monitoring framework in place Monitoring of indicators through different mechanisms
	Monitoring the implementation of heath promoting policies /programme/schemes of sectors		✓	✓	✓	✓	✓	**MoHFW**/ICMR/ HPSI	
	Evaluate the impact of mass media campaigns		✓	✓	✓	✓	✓	**MoHFW**/ICMR/ HPSI	

*Ministries /Departments leading the process/activities are highlighted in bold text

Annex 1

Timeframe for Implementation

Time Frame	Integrated Multisectoral coordination	Health Promotion	Health Systems Strengthening	Surveillance, Monitoring, Evaluation and Research
2017-18 2018-19	Establish mechanisms for inter-ministerial collaboration and set up a high level inter-ministerial Standing Committee of Secretaries	Set up Health Promotion Society of India with involvement of other stakeholders	Conduct needs assessment of NCD services at different level of health care	Set-up a National Steering Committee for Monitoring, Surveillance and Evaluation for activities outlined in NMAP
	Establishment and operationalisation of Central NCO Division (CND) in MoHFW to coordinate the inter-ministerial activities	Under GST, raise taxes on all types of tobacco. products, Sugar Sweetened Beverages, HFSS food and alcoholic beverages to reduce consumptions	Appropriate strategies for recruitment and retention of NCD health care workforce	Under NPCDCS, develop standard protocols for collection, analysis and reporting of data for different NCDs services at all levels
	Set-up inter-ministerial Committee on NCDs under chairmanship of Secretary (Health and Family Welfare)	Accelerate full implementation of COTPA and amend COTPA (in line with (WHO-FCTC)	Scaling up NCD flexi pool budgetary allocation for strengthening NCD services mentioned under NPCDCS	Develop and disseminate standardized survey methodology and tools for collecting information on National Monitoring Framework (NMF) with States/UTs
	Conduct orientation sessions on NCDs for elected representatives at Union and States level Strengthen NCD Unit at centre and States/UTs with recruitment of various experts	Develop a National Alcohol Policy through multi- stakeholder consultative process	Include essential NCD medicine in National List of Essential Medicine for each level for health care	Establish a Technical Expert Group to review and Identify national research priorities in NCDs
	Include NCD related activities in the United Nations Sustainable Developmental Framework (UNSDF)	Implementation of interpretative front of pack labelling and detailed nutrient labelling at the back of pack	Mainstream AYUSH providers into health systems with focus on prevention, control and management of NCDs	Monitoring framework developed for health promotion activities

2017-18 2018-19	Bring NCDs related issues on the agenda of meetings of Central Council of Health & Family Welfare Meetings, Mission Steering Group meetings	Implement health promotion guidelines in National Curriculum Framework Leverage the implementation of policies/ programmes/ schemes of education, sports, urban development, women and child development sectors to promote physical activity and other healthy lifestyle interventions	Develop/ Revise Standard Management Guidelines (SMGs) for major NCDs for different levels of health care Implementation of NCD strategies mentioned in National Health Policy, 2017	
2019-22	Set-up of Standing Committee of secretaries under the chairmanship of Chief Secretary to devise multisectoral actions at State level Liaison and coordination of multisectoral activities with stakeholders / partners at district level Periodic consultations with all relevant stakeholders Hold meetings periodically to harmonize the work of UNCT and other development partners	Regulate advertisement of demerit goods through amendment of advertisement code of Cable Television Networks Rules& Norms of Journalist Conduct; and Trademark Rules Leverage existing schemes of agriculture and food processing sectors for reducing wastage of fruits and vegetables Limiting facilities in Industrial corridors, Special Economic Zones Implement strategies to regulate trade of demerit goods under Foreign Trade Policy,2015-2020 and other Bilateral/Multilateral International Trade Agreements	Setting up of training mechanism including creating a pool of institutions/trainers in public and private sector and conduct training of existing workforce Devise mechanism for improving the availability and accessibility of promotive, preventive, diagnostic, curative, rehabilitative & palliative NCD services at different level of health care Leverage existing services such as counselling, laboratory facilities available under different National Health Programmes Implement Electronic Medical Record (EMR) for sharing of patient data among health care providers	Establish quality assurance structures and mechanisms for monitoring and evaluating strategies of NMAP at national and subnational levels Enable linkage of individual patients across the health system through usage of unique identifiers and IT Conduct periodic national level surveys to monitor the targets and indicators outlined in NMG Conduct and publish operational and policy research as relevant to NPCDCS and other national NCD programme needs

2019-22		Formulate Urban Transport action plan to promote non-motorized transport based on National Urban Transport Policy, 2014 Implement measures to control and mitigate indoor and ambient air pollution such as leveraging Graded Response Action Plan on air pollutions etc.	Develop guidelines/ schemes for involvement of NGOs and private sector for NCDs related health service Expand social health Insurance schemes like RSBY and other government sponsored schemes to cover NCDs among Below Poverty Line (BPL) populations Advocacy with media & entertainment industry to allocate free airtime/ free print space for health promotion particularly for NCD risk factors	Monitoring the implementation of heath promoting policies /programme/schemes of sectors Establish quality assurance structures and mechanisms for monitoring and evaluating strategies of NMAP at national and subnational levels

Annex 5

National Response to NCDs

Targets and Indicators - National Monitoring Framework for Prevention and Control of NCDs

National NCD Monitoring Framework

S.No.	Framework element	Targets		
		Outcome	2020	2025
1.	Premature mortality from NCDs	Relative reduction in overall mortality from cardiovascular disease, cancer, diabetes, or chronic respiratory disease	10%	25%
2.	Alcohol use	Relative reduction in alcohol use	5%	10%
3.	Obesity and diabetes	Halt the rise in obesity and diabetes prevalence	No mid-term target set	Halt the rise in obesity and diabetes prevalence
4.	Physical inactivity	Relative reduction in prevalence of insufficient physical activity	5%	10%
5.	Raised blood pressure	Relative reduction in prevalence of raised blood pressure	10%	25%
6.	Salt/sodium intake	Relative reduction in mean population intake of salt, with aim of achieving recommended level of less than 5gms per day	20%	30%
7.	Tobacco use	Relative reduction in prevalence of current tobacco use	15%	30%
8.	Household indoor air pollution	Relative reduction in household use of solid fuels as a primary source of energy for cooking	25%	50%
9.	Drug therapy to prevent heart attacks and strokes	Eligible people receiving drug therapy and counselling (including glycemic control) to prevent heart attacks and strokes	30%	50%
10.	Essential NCD medicines and basic technologies to treat major NCDs	Availability and affordability of quality, safe and efficacious essential NCD medicines including generics, and basic technologies in both public and private facilities	60%	80%

National Monitoring Framework for Prevention and Control of Noncommunicable Diseases
NCD TARGETS and INDICATORS

S.NO.	Framework element	Targets			Indicators
		Outcomes	2020	2025	
Mortality and morbidity					
1.	**Premature mortality from NCDs**	Relative reduction in overall mortality from cardiovascular disease, cancer, diabetes, or chronic respiratory disease	10%	25%	1. Unconditional probability* of dying between ages 30-70 from cardiovascular disease, cancer, diabetes, or chronic respiratory disease 2. Cancer incidence, by type of cancer, per 10,00,00 population
NCD Risk factors					
2.	**Alcohol use**	Relative reduction in alcohol use	5%	10%	3. Age standardised prevalence of current alcohol consumption in adults aged 18+ years
3.	**Diabetes and obesity**	Halt the rise in obesity and diabetes prevalence	No mid-term target set	Halt the rise in obesity and diabetes prevalence	4. Age standardised prevalence of obesity among adults aged 18+ years (defined as body mass index greater than 30 kg/m^2) 5. Prevalence of obesity in adolescents(defined as two standard deviations BMI for age and sex overweight according to the WHO Growth Reference) 6. Age standardised prevalence of raised blood glucose/diabetes among adults aged 18+ years (defined as fasting plasma glucose value 126 mg/dl or on medication for raised blood glucose
4.	**Physical inactivity**	Relative reduction in prevalence of insufficient physical activity	5%	10%	7. Age standardised prevalence of insufficient physical activity in adults aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent) 8. Prevalence of insufficiently physically active adolescents (defined as less than 60 minutes per day of physical activity)
5.	**Raised blood pressure**	Relative reduction in prevalence of raised blood pressure	10%	25%	9. Age-standardized prevalence of raised blood pressure among persons aged 18+ years (defined as systolic blood pressure ⩾ 140 mmHg and/or diastolic blood pressure ⩾ 90 mmHg) and mean systolic blood pressure
6.	**Salt/sodium intake**	Relative reduction in mean population intake of salt, with aim of achieving recommended level of less than 5 gms per day	20%	30%	10. Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years.
7.	**Tobacco use**	Relative reduction in prevalence of current tobacco use	15%	30%	11. Age standardised prevalence of current tobacco use (smoking and smokeless) among adults aged 18+ years 12. Prevalence of current tobacco use (smoking and smokeless) among adolescents
8.	**Household air pollution**	Relative reduction in household use of solid fuels as a primary source of energy for cooking	25%	50%	13. Proportion of households using solid fuels as a primary source of energy for cooking
		Additional indicator			14. Age standardised prevalence of adults (aged 18+ years) consuming less than five total servings (400 gms) of fruit and vegetables per day
National systems response					
9.	**Drug therapy to prevent heart attacks and strokes**	Eligible people receiving drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes	30%	50%	15. Proportion of eligible adults (defined as aged 40 years and older with a 10-year cardiovascular risk greater than or equal to 30% including those with existing cardiovascular disease) receiving drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes
10.	**Essential NCD medicines and basic technologies to treat major NCDs**	Availability and affordability of quality, safe and efficacious essential NCD medicines including generics, and basic technologies in both public and private facilities	60%	80%	16. Availability and affordability of quality, safe and efficacious essential NCD medicines including generics, and basic technologies in both public and private facilities
11.	**Additional indicators**				17. Access to palliative care assessed by morphine-equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer 18. Vaccination coverage against hepatitis B virus monitored by number of third doses of Hep-B vaccine (Hep B3) administered to infants 19. Proportion of women aged between 30-49 screened for cervical cancer at least once 20. Proportion of women aged 30 and above screened for breast cancer by clinical examination by trained health professional at least once in lifetime 21. Proportion of high risk persons (using tobacco, smoking and smokeless and betel nut) screened for oral cancer by examination of oral cavity

* Not dependent on probability of other causes of death

NOT APPROVED

NATIONAL STRATEGIC ACTION PLAN FOR THE PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASESs (RAN PP-PTM) 2016-2019

Draft- version 4 August, 2016

DIRECTORATE GENERAL OF DISEASE CONTROL
AND ENVIRONMENTAL SANITATION
MINISTRY OF HEALTH OF THE REPUBLIC OF INDONESIA
2016

CHAPTER 3: NATIONAL TARGETS FOR NCD PREVENTION AND CONTROL BY 2019

Prevention and control of NONCOMMUNICABLE DISEASESs (NCDs) is an inseparable part of a health development program aimed at improving the quality of human lives, to make every individual productive, having competitive edge, and contribute to the national development. As such, the purpose of NCD prevention and control is geared towards reducing morbidity, mortality and disability, as well as lessening the economic burden brought about by NCD to achieve the goals of national health development and national development.

As a manifestation of the state's participation in the global effort to prevent and control NONCOMMUNICABLE DISEASES, **it is recommended that the targets sets should adopt the global targets established for 2025 as reference**, as follows:

- A 25% relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases
- A 10% relative reduction in the harmful use of alcohol
- A 10% relative reduction in prevalence of insufficient physical activity
- A 30% relative reduction in mean population intake of salt/sodium
- A 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years
- A 25% reduction in prevalence of raised blood pressure
- Halt the rise in obesity and diabetes
- 50% of eligible people receive drug therapy and counseling (including glycemic control) to prevent heart attacks and strokes
- An 80% availability of affordable basic technologies and essential medicines, including generics, required to treat major NCDs in both public and private facilities
- 50% relative reduction in the proportion of households using solid fuels as the primary source of cooking

In **the National Medium Term Development for 2015-2019, targets have been set that have to be achieved by 2019 in the prevention and control of NONCOMMUNICABLE DISEASES, using the following key indicators**: a) reduced prevalence of **hypertension** among people who are 18 years old and above **23.4**%; b) proportion of **obesity** among people who are 18 years old and above maintained at 26.2%, and c) reduced prevalence of **smoking** among people who are 18 years old or less to 5.4%.

Overall, the indicators set up to measure achievement of the goals established for the prevention and control of NONCOMMUNICABLE DISEASESs for the 2015-2019 period are as stipulated in Table 3.1. The indicators used in the National Plan of Action for the Prevention and Control of NONCOMMUNICABLE DISEASESs already refer to the global and regional agreement as contained in the Global Action Plan for the Prevention and Control of Non Communicable Diseases 2013-2020 and Action Plan for the Prevention and Control of Non Communicable Diseases in South-East Asia 2013-2020. The set targets have been adjusted in accordance with the existing human resources capacity and the NCD epidemiology and its determinants in Indonesia.

Table 3.1 National Targets for the Prevention and Control of NONCOMMUNICABLE DISEASES 2016-2019

		Baseline	Target		Means of Verification
			By 2019	By 2025	
Morbidity and Mortality					
1	Mortality from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases (%)	59.5 (I)	**–10**% (53.6)	25 % relative reduction	Civil registry system
Biological Risk Factors					
2	Prevalence of **hypertension** among person aged ≥ 18 year age group (%)	25.8 (II)	**–10**% (23.4)	25 % relative reduction	RISKESDAS WHO/STEPs
3	**Prevalence of overweight and obesity among age 18+ years (%)** • Prevalence of overweight in persons age 18+ years • Prevalence of **obesity** in persons age 18+ years	26.2 (II) 15.4 (II)	Halt the rise in overweight and obesity	Halt the rise in overweight and obesity	WHO/STEPs RISKESDAS WHO/STEPs
4	Prevalence of raised blood glucose/diabetes among persons aged 18+ years (%)	6.78	Halt the rise in diabetes	Halt the rise in overweight and obesity	WHO/STEPs RISKESDAS
Behavioral Risk Factors					
5	Prevalence of **tobacco use** among persons aged 15+ years (%)	36.3(II)	–10% (32.7)	30% relative reduction	WHO/STEPs RISKESDAS
6	Total **alcohol** per capita (15+ year old) consumption in litres of pure alcohol(to clarify per capita or proportion of population)	4.6 (I)	– 10% (4.14)	10% relative reduction	RISKESDAS
7	Prevalence of **insufficiently physically active** persons aged 18+ years	26.1 (I)	–10% (24.8)	10% relative reduction	WHO/STEPs RISKESDAS
8	Proportion of population aged ≥ 10 years with **low fruit and vegetable consumption** (%)	93.5 (I)	–5% (88.8)	No target	RISKESDAS
9	Age-standardized mean population **intake of salt** (sodium chloride) per day in grams in persons aged 18+ years.	6.5 (III)	–10% (6)	30% relative reduction	Total diet survey RISKESDAS
Health System Response					
10	Availability of **Essential Medicine** and NCD Technology (%)	80% (III)	80%	80%	WHO/SARA
11	Coverage of **drugl therapy and counseling** for at-risk people aged >40 years for the prevention of heart attack and stroke (%)	n.a.	30%	50%	STEPs RISKESDAS
12	Percentage of women aged 30-50 years detected with cervical (IVA) & breast cancer (Sadanis) (%)	9	50		**TBD**

	through posbindu			Associations	
4. Community based approaches					
4.1 Build community networks for NCD screening and health education	• Engage community organizations and religious bodies for health promotion and NCD prevention	• A network with community organizations and religious bodies for NCD established	Local Government	Ministry of Social Affair, Ministry of Religion, Ministry of Women Empowerment and Child Protection	2016-19
	• Orient community groups, volunteers on home care (including palliative) for chronic diseases	• Community groups, volunteers on home care (including palliative) oriented for chronic diseases	PHCs, Ministry of Health	Community groups	
	• Orient *kadre* at Postbindu for NCD education and risk factor identification and screening	• *kadre* at Postbindu oriented for NCD education and risk factor identification and screening	Local Government	Ministry of Health	

5.2.4 Strategic action 4: Surveillance, monitoring and evaluation, research

Objectives

- Strengthen surveillance of major NCDS as a part of Health Information System
- Strengthen monitoring and evaluation of key interventions of the national strategic action plan for RAN PP-PTM 2015-2019
- Promote implementation of translational research and evaluation on NCDs and their risk factors

Strategic actions	**Activities**	**Outputs**	**Lead agency**	**Relevant**	**Time**

				sectors	frame
1. Strengthen Surveillance of main NCDs and their risk factors					
1.1 Integration of NCD related information into national health information system	• Strengthen facilities for health information system, particular at district level • Incorporate NCD information into "data & information-- national health profile" • Improve NCD information collection from district through province to ministry of health	NCD profiles at district, provincial and national level established	Center for data and information (PUSDATIN)	NCD Directorate	• 2020
	• Improve NCD website for user friendly and informative	Improvement of NCD website	NCD Directorate		• 2017
1.2 Improve mortality and morbidity data in SRS	• Incorporate mortality data related to NCDs into the Indonesia Sampling Registry System (SRS) in 128 sub districts with support of civil registry office/ ministry of home affairs MOHA) , and National statistics bureau, .	National mortality report with cause of death; Mortality data related to NCDs improved in the selected areas	National institute of Health research and development (NIHRD)	Center for data and information (PUSDATIN) and NCD Directorate /MOH	• 2020
	• strengthen population level cancer registry	Report of cancer registry	BKR (Health Service Directorate)	NCD Directorate	• 2018
1.3 Strengthen surveillance on NCD risk factors and health	• Conduct STEPS survey and GSHS	Report of STEPs	NCD Directorate/NIHRD		• 2018

service for NCD management	• Conduct GATS	Report of GATS	NCD Directorate/NIHRD		• 2019
2. Improve monitoring and evaluation of implementing NCD programmes					
2.1 Strengthen capacity and promote network for monitoring and evaluation	• Conduct workshop and training for surveillance personnel on tobacco and NCD surveillance, data management and analysis	Report of workshop and training	BKR(Health Service Directorate)	NCD Directorate, Center for data and information (PUSDATIN)	
	• Review a set of core indicators to monitor the implementation of NCD MAP	A set of core indicators developed and implemented	NCD Directorate (Ministry of Health)		2017
	• Adapt the SARA for monitoring essential medicines and basic technologies for NCDs	Report of essential medicines and technologies for NCDs	Health service Directorate (Ministry of Health)	NCD UNIT Directorate for basic health service	2017
	• Conduct evaluation of PEN services including follow up care of patient for NCD services	Report of evaluation of PEN including follow up care of patient for NCD services	NCD Directorate		
	• Review monitoring checklists for provincial and district level health supervisors and include tobacco and NCD services in the checklists	The checklists for provincial and district level health supervisors and include tobacco and NCD services in the checklists developed	NCD Directorate (Ministry of Health)		
3. Strengthen NCD research					
3.1 Increase research to generate	• Mapping national NCD research activities	Report of mapping NCD research activities	(Ministry of Health)	NIHRD	

local evidences related to burden of diseases, health services, health economics	• Facilitate establishment of networking of national health professional organization for NCD research	National network for NCD research established	(Ministry of Health)	NIHRD	
	• Conduct NCD burden study including cause of death	Report of NCD burden	NIHRD	NCD Directorate (Ministry of Health)	2018
	• Conduct economic evaluation of NCD services at primary health care services	Report of economic evaluation of NCD	NIHRD	NCD Directorate (Ministry of Health)	2018
	• Document best practices in NCD risk factor management in Indonesia	Report of best practices in NCD risk factors management in Indonesia	NCD Directorate (Ministry of Health)		2018
	• Undertake research on economic burden of tobacco and agro-economics studies	Report of economic burden of tobacco and agro-	NIHRD	NCD Directorate (Ministry of Health)	2018
	• Conduct evaluation on laws on advertising and marketing of alcohol products	Report on evaluation on laws on advertising and marketing of alcohol products			
	• Undertake impact analysis of tobacco and alcohol control policies/laws	Report of impact analysis of tobacco and alcohol control policies/laws	NAPZA (alcohol and substance abuse)	NCD unit	

- Identify implementation gaps and propose measures to implement newer strategies and programmes
- Support stakeholder in accessing resource needs for implementing their commitments
- Facilitate bilateral/ multi-lateral meetings to advance work on thematic issues and agreed NCD goals, and
- Prepare consolidated reports on the implementation of the NCD response

6.1.2 Provincial and district Level NCD Committees

The NCD committees will be constituted at the provincial and district levels under the chair of the governor and mayors respctively. The core functions of these committees are to:

- Provide cross sectoral coordination to mainstream NCD prevention and control at provincial and district levels;
- Identify and access local Government resources for the implementation of the RAN PP-PTM;
- Conduct a quarterly meeting to monitor the implementation of the RAN PP-PTM);

6.1.3 Multisectoral collaboration accountability indicators

The progress of work of the coordination mechanism will be monitored in an accountability framework consisting of both process indicators and outcome indicators. The multisectoral coordination mechanism will be monitored using the following accountability process indicators:

- Number of full time and part time staff for multisectoral coordination
- Number of coordinating body meetings convened in a year at national and provincial levels
- Number of agencies attending the coordinating body meetings
- Sector-wise process indicators for the plan
- Resource allocation and utilization for NCDs by relevant sectors
- Policy decisions taken by the Coordinating body and other sublevel committees
- Number and nature of assistance requests received and processed by the Secretariat

6.1.4 Annual Consolidated Progress Report on NCD response to the President

The Joint Secretariat will generate an Annual Consolidated NCD Report on implementation of NCD prevention and control at the end of each financial year to the President. The report will highlight the overall achievements, performance of each implementing agency, document success, identify challenges and recommend solution to overcome the barrier in implementing the NCD action plan. The report will also be made available to the other stakeholders and international partners.

Similarly, provincial governments will generate annual report on multisectoral NCD response in thier jurisdiction.

6.2 Monitoring and evaluation of implementing NCD MAP

6.2.1 A logic model for monitoring a National Multisectoral Action Plan for NCDs

6.1 Figure 1 provides a logic model for monitoring a national multisectoral action plan for NCD prevention and control from inputs, process to outcomes. (Figure 6.1). The comprehensive global framework for monitoring prevention and control of NCDs will guide this process (Annex 1)

6.2.2 A framework for monitoring and evaluating progress in implementing national NCD MAP

Table 6.1 provides a national framework for monitoring and evaluating progress in implementing national NCD MAP, including key elements such as strategic action, output, leading agency, relevant agency, timeframe, process indicators and outcomes (targets).

6.2.3 Data sources and main methods for monitoring and evaluation

Mortality and morditiry data from the SRS

There are many data sources from health sector and relevant sectors that can be used to estaimate the health status of the population and monitor the trends of noncommunicable diseases, for instance, mortality and morbidity due to NCDs can be gained from the annual report of national health information generating from **sample registry system**. In addition, data of cancer can be get from national cancer registry areas in country in order to estimate the cancer morbidity.

Risk factors and health care data from WHO STEPs and GSHS

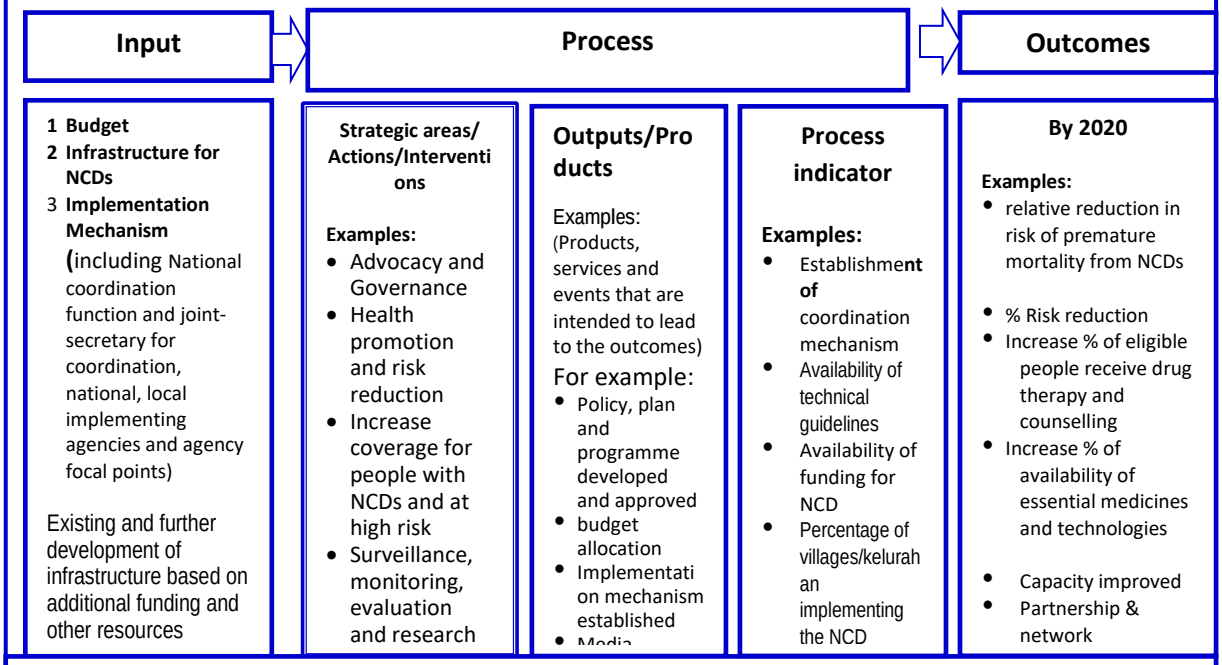
WHO/STEPs and GSHS surveys can provide information on prevalence of main risk factors and coverages of risk factors and national response to NCDs every five years

National survey on progress in implementation of NCD MAP

An important component of the monitoring and evaluation framework is monitoring and reviewing the progress in implementing activities included in the program. Therefore, a national survey with **a set of core process indicators** is necessary to collect information on the status of implementing the activities. In addition, adapting WHO SARA can also provide information on the essential medicines and basic technologies in country.

Figure 1 A National Monitoring Framework

Goal: To improve healthy life and reduce the preventable and avoidable burden of morbidity, mortality and disability due to NCDs through multisectoral action at the national, local and community levels.



Data sources: National NCD Risk Factor Survey (STEPS), Global School-based Health Survey (GSHS), Global Youth Tobacco Survey (GYTS), Civil Registration, Cancer and Other NCD Registries and NCD Hospital-based Mortality Registry, and national adapted SARA for essential medicines, and natioanl capcity survey for implementing NCD MAP.

Table 6.2 National monitoring and evaluation of implementing NCD MAP

Strategic area	Strategic Action	Output	Lead agency	Relevant sector/	Timeline	Indicators of Progress	Outcomes
Strategic area 1: Advocacy, partnership and leadership							
1.1 Advocacy, partnership and leadership	• **Strengthen advocacy for NCD prevention and control**	• Advocacy packages on prevention and control of NCDs available. produced and advocate activities conducted	• Ministry of human development and culture • Ministry of health (NCD unit)	KESJAOR and health promotion UNIT	2016-2020	• **Establishment of time-bound national targets and indicators based on WHO guidance (1) #** • **An operational multisectoral national strategy/action plan that integrates the major NCDs and their shared risk factors (4)#** • NCD related targets incorporated into the monitoring framework of the Sustainable Development Goals Establishment of joint-secretary for improving coordination • No of relevant sectors prioritized and implemented NCD interventions • Adequate fund allocated for implementing National NCD MAP • Availability of adequate human resources at national, district and	• All NCD targets
	• **Strengthen national coordination for multisectoral action on the prevention and control**	• Establishment of national joint-secretariat for coordinating and facilitating implementation of NCD MAP	• Human development and culture • Ministry of Health • Ministry of home affairs	• All other relevant sectors	2016-2020		
	• **Enhance international cooperation**	• Participation in international dialogue on NCDs	• Ministry of Health	• All relevant sectors	2016-2020		
	• **Finance NCD prevention and control**	• Adequate fund for NCDs provided	• Human development and culture • Ministry of finance • Ministry of health	• Relevant sectors	2016-2020		

						grass root levels to perform NCD related activities	
Strategic area	**Strategic Action**	**Output**	**Lead agency**	**Relevant sector/**	**Timeline**	**Indicators of Progress**	**Outcomes**
Strategic area 2: Reduce risk factors and promoting health							
2.1 Reduce tobacco use	• Raise taxes on tobacco product (R)	• A taxation mechanism for tobacco established	• Ministry of Finance	• Ministry of Health		• **Reduce affordability of tobacco products by increasing tobacco excise taxes (5.a) #** • **Create by law completely smoke-free environments in all indoor workplaces, public places and public transport(5.b) #.** • **Warn people of the dangers of tobacco and tobacco smoke through effective health warnings and mass media campaigns (5.c)** • **Ban all forms of tobacco advertising, promotion and sponsorship(5.d) #** • *Percentage of districts that has small free zone law in school*	**3 A 30% relative reduction in prevalence of current tobacco use in persons aged over 15 years** • Minimum 50% of districts that has implemented smoking free zone law in schools
	• Expand and enforce Smoke-Free Laws (P)	• Report of executive review to amend smoke free article in the prevailing Government Regulation No.109/2012					
	• Warn the dangers of tobacco (W)	• Process to amend the Government Regulation No.109/2012 initiated					
	• Introduce comprehensive ban on tobacco advertising, promotion and sponsorship (E)	• Broadcasting Law and Press Law to prohibit tobacco advertisements on mass media amended					
	• Ban sale of tobacco products to minors	• Policies/regulation on ENDS products developed					
	• Capacity building for tobacco cessation (O)	• National quitline established					

	• Accession to FCTC	• Report of technical analysis and policy discussions on national impact of FCTC accession prepared					
2.2 to reduce alcohol use	• Increase taxes on alcoholic beverages	• Taxes on all types of alcoholic beverages Increased, accounting for various percentage of alcohol volume				• **Regulations over commercial and public availability of alcohol (6.a) #** • **Comprehensive restrictions or bans on alcohol advertising and promotions (6.b) #** • **Pricing policies such as excise tax increases on alcoholic beverages (6. C)**	• **A 10% relative reduction in the use of alcohol**
	• Strengthen enforcement of existing policies on ban of advertisement and promotion of alcoholic beverages	• Report of assessment on advertisement and promotion of alcoholic drinks conducted and submitted					
	• Review and update alcohol legislations and policies	• Report of alcohol legislations and policies developed and published					
	• Restrict production and sale of cheap local alcohol	• Rules on illegal sale of cheap illegal alcohol products enforced					
	• Promote programs to reduce alcohol related violence and injuries	• National Ban use of alcohol among motorists (drivers) implemented					
	• Advocate community based and political support for enforcement of alcohol laws and policies	• Social mobilization campaigns against alcohol abuse and illegally produced alcoholic drinks conducted					

2.3 Promote healthy diet high in fruit and vegetables and low in saturated fat/trans-fat, free sugar and salt	• Implement the Global Strategy on Diet, Physical and Health(DPAS)	• New work plan for implementing DPAS developed and implemented				• **Adopted national policies to reduce population salt/sodium consumption (7. a) #** • **Adopted national policies that limit saturated fatty acids and virtually eliminate industrially produced *trans* fatty acids in the food supply (7. b). #** • **WHO set of recommendations on marketing of foods and non-alcoholic beverages to children (7. c). #** • **Legislation /regulations fully implementing the International Code of Marketing of Breast-milk Substitutes (7. d). #** • Proportion of population aged ≥ 10 years with **low fruit and vegetable consumption** (%) • Number and duration of unhealthy food and drink advertisements during children programmes on major TV channels. • Number of companies following the nutrition labelling guidelines	• **A 30% relative reduction in mean population intake of salt/sodium** • **A 25% reduction in prevalence of raised blood pressure and or contain the prevalence of raised blood pressure** • Halt the rise in obesity and diabetes • **A 5% reduction in population aged ≥ 10 years with low fruit and vegetable consumption**
	• Advocate for healthy diet	• Advocacy material developed and activities conduced					
	• Develop and update national food based dietary guidelines	• National food based dietary guidelines updated					
	• Strengthen food and nutrition labelling	National communication and implementation strategy to advocate the food based Indonesian dietary guidelines developed and approved					
	• Develop fiscal policies to subsidize consumption of vegetables and fruits	• Fiscal policies to subsidize consumption of vegetables and fruits developed and implemented					
	• Increase availability food products low in fat, salt and sugar	• National guidelines on sugar, salt and fat developed and adapted					
2.4 Promote physical activity	• Promote physical activity (PA) awareness across all age groups	• National or sub-national PA guideline and recommendation				• **Public awareness on diet and/or physical activity(8)#**	• **A 10% relative reduction in prevalence of**

Annex 4: Comprehensive Global Monitoring Framework for Noncommunicable Diseases, Including a Set of Indicators

Table 1 presents a set of 25 indicators. The indicators, covering the three components of the global monitoring framework, are listed under each component. The comprehensive global monitoring framework, including the set of 25 indicators, will provide internationally comparable assessments of the status of noncommunicable disease trends over time, and help to benchmark the situation in individual countries against others in the same region, or in the same development category. In addition to the indicators outlined in this global monitoring framework, countries and regions may include other indicators to monitor progress of national and regional strategies for the prevention and control of noncommunicable diseases, taking into account country- and region-specific situations.

Table 1. Indicators to monitor trends and assess progress made in the implementation of strategies and plans on noncommunicable diseases

Mortality and morbidity
1. Unconditional **probability of dying** between ages 30 and 70 years from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases. 2. **Cancer incidence**, by type of cancer, per 100 000 population.
Risk factors
Behavioural risk factors: 3. Harmful use of **alcohol**: Total (recorded and unrecorded) alcohol per capita (15+ years old) consumption within a calendar year in litres of pure alcohol, as appropriate, within the national context. 4. Harmful use of **alcohol**: Age-standardized prevalence of heavy episodic drinking among adolescents and adults, as appropriate, within the national context. 5. Harmful use of **alcohol**: Alcohol-related morbidity and mortality among adolescents and adults, as appropriate, within the national context. 6. Age-standardized prevalence of persons (aged 18+ years) consuming less than five total servings (400 grams) of **fruit and vegetables** per day. 7. Prevalence of insufficiently **physically active** adolescents (defined as less than 60 minutes of moderate to vigorous intensity activity daily). 8. Age-standardized prevalence of insufficiently **physically active** persons aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent). 9. Age-standardized mean population intake of **salt (sodium chloride)** per day in grams in persons aged 18+ years. 10. Age-standardized mean proportion of total energy intake from **saturated fatty acids** in persons aged 18+ years.[i] 11. Prevalence of current **tobacco** use among adolescents. 12. Age-standardized prevalence of current tobacco use among persons aged 18+ years. Biological risk factors:

13. Age-standardized prevalence of raised **blood glucose**/diabetes among persons aged 18+ years (defined as fasting plasma glucose value ⩾7.0 mmol/L (126 mg/dl) or on medication for raised blood glucose).
14. Age-standardized prevalence of raised **blood pressure** among persons aged 18+ years (defined as systolic blood pressure ⩾140 mmHg and/or diastolic blood pressure ⩾90 mmHg); and mean systolic blood pressure.
15. Prevalence of **overweight and obesity** in adolescents (defined according to the WHO growth reference for school-aged children and adolescents, overweight – one standard deviation body mass index for age and sex, and obese – two standard deviations body mass index for age and sex).
16. Age-standardized prevalence of **overweight and obesity** in persons aged 18+ years (defined as body mass index ⩾25 kg/m^2 for overweight and body mass index ⩾ 30 kg/m^2 for obesity).
17. Age-standardized prevalence of raised **total cholesterol** among persons aged 18+ years (defined as total cholesterol ⩾5.0 mmol/L or 190 mg/dl); and mean total cholesterol.

National systems response

18. Proportion of women between the ages of 30–49 screened for **cervical cancer** at least once, or more often, and for lower or higher age groups according to national programmes or policies.
19. Proportion of eligible persons (defined as aged 40 years and over with a 10-year cardiovascular risk ⩾30%, including those with existing cardiovascular disease) receiving **drug therapy and counselling** (including glycaemic control) to prevent heart attacks and strokes.
20. Availability and affordability of quality, safe and efficacious essential noncommunicable disease **medicines, including generics, and basic technologies** in both public and private facilities.
21. Vaccination coverage against **hepatitis B** virus monitored by number of third doses of Hep-B vaccine (HepB3) administered to infants.
22. Availability, as appropriate, if cost-effective and affordable, of **vaccines against human papillomavirus**, according to national programmes and policies.
23. Policies to reduce the impact on children of **marketing of foods and non-alcoholic beverages** high in saturated fats, *trans*-fatty acids, free sugars, or salt.
24. Access to **palliative care** assessed by morphine-equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer.
25. Adoption of national policies that limit **saturated fatty acids and virtually eliminate partially hydrogenated vegetable oils** in the food supply, as appropriate, within the national context and national programmes.

VOLUNTARY GLOBAL TARGETS FOR THE PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASES

Table 2 provides nine voluntary global targets for consideration by Member States. Achievement of

these targets by 2025 would represent major progress in the prevention and control of noncommunicable diseases.

Table 2. A set of voluntary global targets for the prevention and control of noncommunicable diseases

Mortality and morbidity	**Indicator**
Premature mortality from noncommunicable disease	
Target 1: A 25% relative reduction in overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases.	• Unconditional probability of dying between ages 30 and 70 from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases.
Risk factors	**Indicator**
Behavioural risk factors	
Harmful use of alcohol[ii]	
Target 2: At least a 10 % relative reduction in the harmful use of alcohol[iii], as appropriate, within the national context.	• Total (recorded and unrecorded) alcohol per capita (15+ years old) consumption within a calendar year in litres of pure alcohol, as appropriate, within the national context. • Age-standardized prevalence of heavy episodic drinking among adolescents and adults, as appropriate, within the national context. • Alcohol-related morbidity and mortality among adolescents and adults, as appropriate, within the national context.
Physical Inactivity	
Target 3: A 10% relative reduction in prevalence of insufficient physical activity.	• Prevalence of insufficiently physically active adolescents defined as less than 60 minutes of moderate to vigorous intensity activity daily. • Age-standardized prevalence of insufficiently physically active persons aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent).
Salt/sodium intake	
Target 4: A 30% relative reduction in mean population intake of salt/sodium.[iv]	• Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years.
Tobacco use	

Target 4: A 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years.	• Prevalence of current tobacco use among adolescents. • Age-standardized prevalence of current tobacco use among persons aged 18+ years.
Biological risk factors:	
Raised blood pressure	
Target 6: A 25% relative reduction in the prevalence of raised blood pressure or contains the prevalence of raised blood pressure according to national circumstances.	• Age-standardized prevalence of raised blood pressure among persons aged 18+ years (defined as systolic blood pressure od pressure according to national circumstances.quiv
Diabetes and obesity[v]	
Target 7: Halt the rise in diabetes and obesity.	• Age-standardized prevalence of raised blood glucose/diabetes among persons aged 18+ years (defined as fasting plasma glucose value ⩾ 7.0 mmol/L (126 mg/dl) or on medication for raised blood glucose. • Prevalence of overweight and obesity in adolescents (defined according to the WHO growth reference for school-aged children and adolescents, overweight – one standard deviation body mass index for age and sex and obese – two standard deviations body mass index for age and sex). • Age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as body mass index ⩾25 kg/m2 for overweight and body mass index ⩾30 kg/m2 for obesity).
National system response	**Indicator**
Drug therapy to prevent heart attacks and strokes	
Target 8: At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes..	• Proportion of eligible persons (defined as aged 40 years and over with a 10-year cardiovascular risk ontrol) to prevent heart attacks and strokes..index ⩾30 kg/m2 for obesity). body mass index for age and sding glycaemic control) to prevent heart attacks and strokes.
Essential noncommunicable disease medicines and basic technologies to treat major noncommunicable diseases	

Target 9: An 80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major noncommunicable diseases in both public and private facilities.	• Availability and affordability of quality, safe and efficacious essential noncommunicable disease medicines, including generics, and basic technologies in both public and private facilities.

NO: PLAN/23-MOH/2016/01

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

August 2015

Endorsed by
Hussain Rasheed
State Minister
Policy Planning & International Health Division
Ministry of Health

Khadeeja Abdull Samad Abdulla
Permanent Secretary
Ministry of Health
Date: 18 January 2016

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.

(i) A 25% relative reduction in overall mortality from cardiovascular diseases, cancers, diabetes, or chronic respiratory diseases
(ii) A 10% relative reduction in the harmful use of alcohol
(iii) A 30% relative reduction in prevalence of current tobacco use in persons aged over 15 years
(iv) A 10% relative reduction in prevalence of insufficient physical activity
(v) A 30% relative reduction in mean population intake of salt/sodium
(vi) A 25% relative reduction in prevalence of raised blood pressure
(vii) Halt the rise in obesity and diabetes
(viii) 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)
(ix) A 50% of eligible people receive drug therapy and counseling (including glycaemic control) to prevent heart attacks and stroke
(x) 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.

- 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:

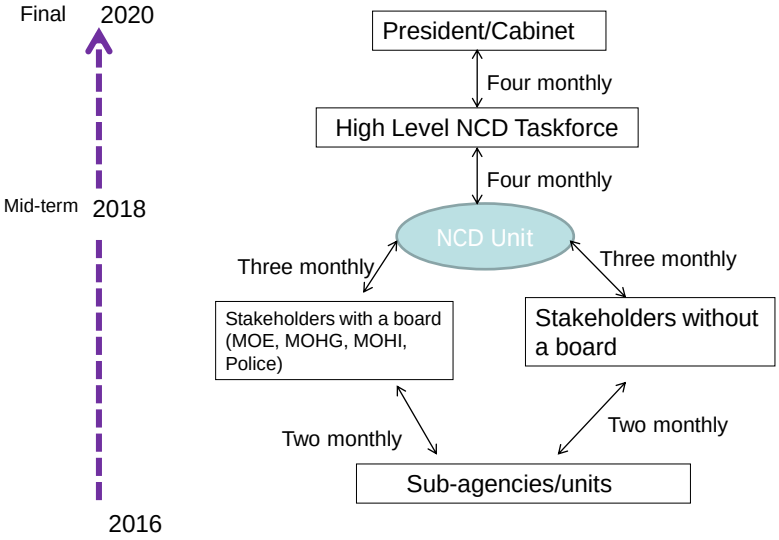
- Scale up PEN interventions in all health centers
- Establish one national Quit line and twenty five tobacco cessation clinics
- Expand cervical, oral and other cancer screening programs
- Introduce NCD clinics including provision of care for diabetes
- Train primary health care workers on NCD interventions 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

Flow chart 1: Appraisal channel & frequency of reporting of progress of activities for Multi-sectoral NCD Action Plan



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 2: Tobacco control indictors and means of verification (Mov)

Process	Short term	Medium	Long term
Revision of tobacco law to align with the provisions of the FCTC (Mov: Gazetted document of the government)	Pictorial warning and packaging of tobacco products (Mov: Annual market survey of tobacco products by HPA)	People aware about health effects through pictorial warning on tobacco packages (Mov: market survey of tobacco products by HPA)	Prevalence of tobacco use among adolescent reduced Age standardized prevalence of tobacco use among persons aged 18+ years
Targeted programs to reduce second hand smoke with priority focus home exposures (Mov: Annual reports of the High Level NSD taskforce)	Health workers, NGOs, Pest workers actively engaging in advocating for tobacco indoor smoke free households (Mov: Annual reports at the HPA)	Increase in tobacco smoke free households (Mov: Annual report on **smoke free household program** compiled by HPA) Decrease indoor exposure to second smoke at homes among children (Mov: Five yearly GSHS)	
Revision of tobacco taxation policies (Mov: Print of tobacco taxation policy document)	Incremental tobacco tax collection adjusted to inflation (Mov: Annual revenue report of Customs)	Tobacco consumers reporting reducing/quitting tobacco use due to high cost (Mov: Survey questionnaire adapted for STEPS and GSHS collected five yearly)	
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)	Rapid response enforcement teams visiting the sites (Mov: Annual jointly published reports on violation and penalty by police and HPA)	Decrease in smokers in smoke free designated sites (Mov: Annual compliance check reports of the tobacco control unit/HPA)	
Compliance check program through decoy purchase attempts for tobacco laws as an quality improvement tool (Mov: Decoy shopping evaluation protocol)	"No smoking " and " no tobacco sale below 18 years" prominently displayed in designated smoke free zones (Mov: Annual published report of decoy purchase attempt)	Increase in observation of smoke free restaurants, bars, hotels and legally designated public places (Mov: Annual published report of decoy program)	
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)

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

Process	Short term	Medium term	Long term
Adoption of national dietary recommendation for all age groups and for different conditions and information integrated into national BCC & mass media campaign (Mov: Published mass media and BCC	Increase airtime for healthy lifestyle events on mass media channels such as in social media,(facebook, tweeter), TV, radio and print media (Mov: Air time contract award document and activity reports of the	Increase awareness of dietary recommendations in population (Mov: STEPS and GSHS and midterm and end line evaluation reports)	Age standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ year

strategy)	media organizations)		Population achieving recommended level of servings of fruits and vegetables Reduction in consumption of food containing transfat and hydrogenated vegetable oil
Adoption of policies to reduce of food products high in saturated fatty acids and eliminate hydrogenated vegetables oils in food supply(Mov: Published policy documents)	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)	Decrease market availability of food products with high content of transfat and hydrogenated oils (Mov: Annual published market inspection reports of HPA/MFDA)	
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)	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)	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)	
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

Process	Short term	Medium term	Long term
Adopt of relevant components on Global Strategy on Reducing Harmful Use of Alcohol (Mov: Published policy document)	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)	Population aware on alcohol abstinence policy (Mov: STEPS survey)	Increased alcohol abstinence among young people
Assumptions: Police provide good cooperation and funds are available			

Table 6 : Indicators for NCD and metabolic risk factors and means of verification (Mov)

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

Ministry of Health and Sports
The Republic of the Union of Myanmar

National Strategic Plan for Prevention and Control of NCDs (2017-2021)

Myanmar

July 2017

Surveillance, Monitoring, Evaluation and Research

Surveillance, Monitoring, Evaluation and Research Monitoring is an integral part of implementation of any public health program. The purpose of this component is to know whether the intended results are being achieved as planned. The actions listed under this objective will assist in monitoring national progress in the prevention and control of non-communicable diseases, as per the national monitoring framework consisting of indicators and targets. Monitoring will provide internationally comparable assessments of the trends in non-communicable diseases over time. It will also provide the foundation for advocacy, policy development and coordinated action and help to reinforce political commitment.

The type of activities that this strategy include identifying sources of data and integrating surveillance into national health information systems and undertake periodic data collection on the behavioural and metabolic risk factors (harmful use of alcohol, physical inactivity, tobacco use, unhealthy diet, overweight and obesity, raised blood pressure, raised blood glucose, sodium intake and hyperlipidemia), and determinants of risk exposure such as marketing of food, tobacco and alcohol, with disaggregation of the data, where available, by key dimensions of equity, including gender, age (e.g. children, adolescents, adults) and socioeconomic status in order to monitor trends and measure progress in addressing inequalities.

Although effective interventions exist for the prevention and control of non-communicable diseases, their implementation is inadequate. Applied and operational research, integrating both social and biomedical sciences, is required to scale up and maximize the impact of existing interventions. WHO's prioritized research agenda for the prevention and control of non-communicable diseases drawn up through a participatory and consultative process provides guidance on future investment in noncommunicable disease research. Countries need to identify their own priority research needs and build capacity to address them.

There is presently a serious mismatch between the rising NCD burden and the research capacity and research output in Myanmar. There is both a quantitative (few people do research) as well as qualitative (poor research capability of existing researchers) deficit. The basic prerequisites to promote health research includes leadership, a competent research workforce, adequate financing, and adequately equipped research institutions.

The key outcome to be achieved by this strategy is the increase in availability of national evidence to support decision making by policy makers and program managers.

The specific outcomes are:

1. Time trends of key indicators identified as a part of the National Monitoring Framework are regularly available.
2. Establishment of a national system for surveillance of NCDs and their risk factors
3. Mechanism for regular comprehensive evaluation of the National Strategic Plan is developed and
4. National capacity for operational research on NCDs and their risk factors is strengthened.

3. National NCD Monitoring Framework

In keeping with the WHOs call for each country to develop its own national NCD monitoring framework, national consultations were held in February – March 2017 in Myanmar to deliberate on them. The data on NCDs and their risk factors as well as existing surveillance systems were reviewed and national monitoring indicators and targets were agreed upon. These provide the necessary monitoring framework to evaluate the progress of this National Strategy for Prevention and Control of NCDs.

While deciding, it was realized that these targets may be too ambitious for Myanmar as it has only recently started addressing NCDs through public health programs. A total of 22 indicators were finalized in the national monitoring framework. These along with possible sources of data for them are shown in table 1 below.

Targets were set for nine of them. Also as this National NCD Strategic Plan ends in 2021, the mid-term targets were aligned with that. While fixing the targets, the following points were taken note of:

1. Global voluntary targets set by WHO
2. Baseline levels in 2010 as estimated by WHO
3. Results of trends of many risk factors whose information was available through at least two national level surveys (See Annexure 2). Despite differences in age groups and some definitions used, the data is robust enough to discern trends for key risk factors.
4. Planned activities under the NSAP for NCDs

The decided targets are shown in table 2. These targets (except for those of health system response) are relative reduction from a baseline of the levels at 2010. The national NCD risk factor Survey for 2009 provides a good indication of the baseline to be expected. For the indicators that were not measured in 2010 (raised blood glucose) 2014 data may be used. Some of the baseline estimates for 2010 have been prepared by WHO and are part of the country profiles generated by it in 2014.

Table 1: NCD Indicators in National NCD Monitoring Framework

No	Indicators	Data sources
1.	Unconditional probability of dying between ages 30-70 from cardio-vascular disease, cancer, diabetes, or chronic respiratory disease	Periodic National Surveys on causes of death
2.	Cancer incidence, by type of cancer, per 10,00,00 population	Cancer Registry
3.	Total (recorded and unrecorded) alcohol per capita (aged 15+ years old) consumption within a calendar year in litres of pure alcohol	Administrative reporting Systems
4.	Age standardised prevalence of heavy episodic alcohol drinking among adolescents and adults as appropriate in the national context	National NCD RF Surveys for adults and adolescents based on standard methodology
5.	Age standardised prevalence of overweight and obesity among adults aged 18+ years (defined as body mass index greater than 30 kg/m^2)	
6.	Prevalence of overweight and obesity in adolescents (defined as two standard deviations BMI for age and sex overweight according to the WHO Growth Reference)	
7.	Age standardised prevalence of raised blood glucose/diabetes among adults aged 18+ years (defined as fasting plasma glucose value 126 mg/dl or on medication for raised blood glucose	
8.	Age standardised prevalence of insufficient physical activity in adults aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent)	
9.	Prevalence of insufficiently active adolescents (defined as less than 60 minutes per day of physical activity)	
10.	Age standardised prevalence of raised blood pressure among adults aged 18+ years and mean systolic blood pressure.	
11.	Age standardised mean population intake of salt per day in gms in persons aged 18+ years	
12.	Age standardised prevalence of current tobacco use (smoking and smokeless) among adults aged 18+ years	
13.	Prevalence of current tobacco use (smoking and smokeless) among adolescents	
14.	Age standardised prevalence of adults (aged 18+ years) consuming less than 5 total servings (400 gms) of fruit and vegetables per day	
15.	Age standardized prevalence of raised total cholesterol among persons aged 18+ years (> 5 mmol/l) and mean total cholesterol	
16.	Proportion of households using solid fuels as a primary source of energy for cooking	
17	Proportion of eligible adults (defined as aged > 40 years with a 10-year CVD risk greater >30% including those with existing cardiovascular disease) receiving drug therapy and counselling (including gylcemic control) to prevent heart attacks and strokes	
18.	Proportion of women aged between 30-49 screened for cervical cancer at least once	
19.	Availability of quality, safe and efficacious essential NCD medicines including generics, and basic technologies (in both public and private facilities	Health Facility Survey based on WHO-SARA method
20.	Vaccination coverage against hepatitis B virus monitored by number if third doses of Hep-B vaccine (Hep B3) administered to infants	EPI reports
21.	Availability of vaccines against Human Papilloma Virus as per national immunization schedule	Ministry of Health and Sports (EPI report)
22.	Policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans fatty acids, free sugar or salt	Ministry of Health and Sports

Table 2: List of Targets for NCD Prevention and Control in Myanmar

Indicators	Baseline Levels (2010 WHO estimate)*	Targets for Relative reduction from baseline		Comments/Justification
		2021	2025	
1. Unconditional probability of dying between ages 30-70 from cardiovascula, disease, cancer, diabetes, or chronic respiratory disease	0.24[1]	15%	20%	This was set at a lower level than global one as rest of the targets were also set lower than global one. Myanmar is at an early stage of addressing the NCD epidemic and this target is more realistic.
2. Age standardised prevalence of heavy episodic alcohol drinking among adults (%)	10.3[3]	5%	10%	Despite challenges, it was felt that it might be good to stick to the global targets.
3. Prevalence of current tobacco use in persons aged over 15 years (%)	Smoked - 22[1] Smokeless– 29.7[2]	5%	10%	The rates are stable between 2009-2014 for smoked tobacco though are increasing for smokeless tobacco. A more conservative target was preferred.
4. Prevalence of insufficient physical activity among adults (%)	12.7[2]	5%	10%	There was a slight increase between the two surveys and it was decided to keep the global target.
5. Mean population intake of salt/sodium (mgs/day)	Not available	10%	20%	This aspect has not been measured in the two surveys and a more conservative target was preferred as interventions are yet to be discussed at national level.
6. Prevalence of raised blood pressure (%)	28.9[1]	10%	20%	The target was lowered as both tobacco and salt intake targets which are the two most important risk factors were kept low.
7. Prevalence overweight and diabetes (%)	Overweight-25.4[2] Diabetes – 10.5[3]	Halt the rise		Global targets were retained.
8. Proportion of eligible people receive drug therapy and counseling (including glycemic control) to prevent heart attacks and strokes (%)	32[3] (2014)	25%	50%	Global targets were retained.
9. Availability of affordable basic technologies and essential medicines, including generics, required to treat major NCDs in public facilities (%)	N/A	50%	80%	Global targets were retained.

Source for baseline

[1] *Non communicable disease Country Profiles 2014 World Health Organization*

[2] *NCD RF Survey Myanmar 2009*

[3] *NCD RF Survey Myanmar 2014*

Multisectoral Action Plan for the Prevention and Control of Non Communicable Diseases (2014-2020)

Government of Nepal

Part III Action Plan for Prevention and Control of NCDs For Nepal (2014-2020)

Nepal NCDs and NCD risk factors

The UNGA resolution only calls upon member states to develop an action plan for the 4 diseases/ 4 risk factors namely: Cardiovascular diseases (CVDs), Chronic Respiratory Diseases (CRD), Cancers and Diabetes and tobacco use, harmful use of alcohol, unhealthy diet, and physical inactivity. The Nepal action plan in addition would address Indoor air pollution, Road safety, Oral health and mental health as one additional risk factor and 3 additional NCDs.

Vision

All people of Nepal 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

The goal of the multisectoral action plan is to reduce preventable morbidity, avoidable disability and premature mortality due to NCDs in Nepal.

Specific objectives

1. To raise the priority accorded to the prevention and control of non-communicable 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 non-communicable diseases
3. To reduce modifiable risk factors for non-communicable 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 non-communicable diseases and underlying social determinants through people centered primary health care and universal health coverage.
5. To promote and support national capacity for high quality research and development for the prevention and control of non-communicable diseases
6. To monitor the trends and determinants of non-communicable diseases and evaluate progress in their prevention and control

Targets

In line with the sentiments of South East Asia Regional NCD targets, Nepal also adopts the same 10 targets to be achieved by 2025.

1. 25% relative reduction in overall mortality from cardiovascular diseases, cancers, diabetes, or chronic respiratory diseases
2. 10% relative reduction in the harmful use of alcohol
3. 30% relative reduction in prevalence of current tobacco use in persons aged over 15 years
4. 50% relative reduction in the proportion of households using solid fuels as the primary source of cooking

5. 30% relative reduction in mean population intake of salt/sodium
6. 25% reduction in prevalence of raised blood pressure
7. Halt the rise in obesity and diabetes
8. 10% relative reduction in prevalence of insufficient physical activity
9. 50% of eligible people receive drug therapy and counseling (including glycemic control) to prevent heart attacks and strokes
10. 80% availability of affordable basic technologies and essential medicines, including generics, required to treat major NCDs in both public and private facilities

The country action plan also relies on the following overarching principles and approaches.

Focus on equity: Policies and programmes should aim to reduce inequalities in NCD burden due to social determinants such as education, gender, socioeconomic status, ethnicity and migrant status.

Multisectoral 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 governments, 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 system 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 programmes 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.

Table 4: Health sector and non-health sector synergies

Health sector program	Non-health sector programs
• Oral health program • Reproductive and child health programs • Mental health program • Nutrition program • Tobacco Control Plan 2013-2016 of the NHEICC, of the MoHP • Trauma centers	• Outdoor air pollution control program • Road Safety and enforcement program of traffic police • Enforcement programs for alcohol and tobacco of police and trade • Sustainable Environment Programs • Food and fruit production projects • Pilot initiatives of the academic institutions • Civil Society programs

National NCD action Plan Monitoring and Evaluation Frame work

The M & E framework will follow a set of indicators as in table 5. Monitoring will include monitoring of morbidity and mortality from NCDs (impacts), monitoring of risk factors (determinants of NCDs) and monitoring of the health care system response (interventions and capacity).

Ministry of health and Population will assume overall in-charge monitoring of the NCD action plan under the guidance of the national Steering Committee.

The implementing partners will submit a six monthly implementation reports to the NCD Unit of the MoHP using a standard reporting forms. The reporting forms will be developed by the NCD unit in consultation with the key partners. An annual progress report will be published; the report will be disseminated widely through media coverage. This report also will feed into the annual performance review to be conducted by an independent body.

The following are the key targets to be accomplished during the plan period and by 2020.

Table 4: National Monitoring framework, including targets and set of targets of NCDs

Target/Outcome	Indicator	Source of data	Frequency of collection
A 25% relative reduction in the overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases	Indicator 1: Unconditional probability of dying between ages of 30 and 70 from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases	Mortality data analysis	Baseline and end line
At least 10% relative reduction in the harmful use of alcohol,	Indicator 2: Age-standardized prevalence of heavy episodic drinking among adolescents and adults	Recommended source: Adolescent or school health surveys Alternative course: STEPs Survey	Baseline and end line in five years
10% relative reduction in prevalence of insufficient physical activity	Indicator 3: Prevalence of insufficiently physically active adolescents, defined as less than 60 minutes of moderate to vigorous intensity activity daily	STEPS Survey	Baseline and end line in five years

30% relative reduction in prevalence of current tobacco use in persons aged over 15 years	Indicator 4: Prevalence of current tobacco use among adolescents Indicator 5: Age-standardized prevalence of current tobacco use among persons aged 18+ years	STEPS survey	Baseline and end line in five years
30% relative reduction in mean population intake of salt/sodium	Indicator 6: Age-standardized mean population intake of salt(sodium chloride) per day in grams in persons aged 18+years	Pilot urinary salt assessment STEPS survey	One in five years
25% reduction in prevalence of raised blood pressure	Indicator 7: Age-standardized prevalence of raised blood pressure among persons aged 18+ years (defined as systolic blood pressure > 140 mmHg and/or diastolic blood pressure >90 mmHg) and mean systolic blood pressure	STEPS survey	Once in five years
Halt the rise in obesity and diabetes	Indicator 8: Age-standardized prevalence of raised blood glucose/diabetes among persons aged 18+ years (defined as fasting plasma glucose concentration > 7.0 mmol/l (126 mg/dl) or on medication for raised blood glucose)	STEPS survey	Once in five years
50% relative reduction in the proportion of households using solid fuels as the primary source of cooking	Indicator 9: Proportion of households in rural areas using solid fuels (firewood, animal dung, coal) as primary source of cooking	National household survey	Routinely and align with household survey
50% of eligible people receive drug therapy and counseling (including glycemic control) to prevent heart attacks and strokes	Indicator 10: Proportion of eligible persons (defined as aged 40 years and older with a 10-year cardiovascular risk >30%, including those with existing cardiovascular disease) receiving drug therapy and counseling (including glycaemic control) to prevent heart attacks and strokes	PEN intervention assessment	End of five years
80% availability of affordable basic technologies and essential medicines, including generics, required to treat major NCDs in both public and private facilities	Indictor 11: Availability and affordability of quality, safe and efficacious essential noncommunicable disease medicines, including generics, and basic technologies in both public and private facilities	Logistic management supply study	End of five years
Cancer patients receiving palliative care with opiod analgesics increased to x%	Indicator 12: Access to palliative care assessed by morphine equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer	Hospital and health facility records	End line and baseline assessment
Decrease in dental caries of 5-6 year old school children by X % Decrease in Periodontal disease among 35-44 yrs old by X %	Indicator 13: Proportion of children aged 5-6 years screened with dental caries Indicator 14: Proportion of adults between 35- 44 years screened with periodontal disease	Dental survey	Once in five years
Treatment and service gap for mental disorders reduced by 35%	Indicators 15: Proportion of persons with a mental disorder who have accessed treatment and social services within the past year (%)	National mental health morbidity survey (Baseline and end line)	Baseline and end line surveys in five years
Adoption of policies limiting saturated fatty acid/transfat	Indicator 16: Adoption of national policies that limit saturated fatty acids and virtually eliminate partially hydrogenated vegetable oils in the food supply, as appropriate, within the national context and national program	Document records	One time
Increase in vegetable and fruit consumption	Indicator 17: Age-standardized prevalence of persons (aged 18+ years) consuming less than five total servings (400 grams) of fruit and vegetables per day	STEPS survey	Once in five years

Decrease in prevalence of raised cholesterol	Indicator 18: Age-standardized prevalence of raised total cholesterol among persons aged 18+ years (defined as total cholesterol >5.0 mmol/l or 190 mg/dl); and mean total cholesterol concentration	STEPS survey	Once in five years
Reduce treatment and service gap for mental disorders by 35%	Indicator 19: Proportion of persons with a mental disorder who have accessed treatment and social services within the past year	Baseline and periodic follow-up surveys of households (to calculate local prevalence of disorders and service uptake relating to them) and health and social care facilities (to calculate service provision for persons with mental disorder)	Periodic

Key assumptions for the multi-sectoral action plan

There are several factors that will determine the success of implementing the action plan. The key assumptions for the success of the NCD action plan include:

- The political commitment of the government to NCD issue remain unchanged
- Proposed legislation and regulations to support policies are endorsed
- Proposed functional NCD unit with timely sub units in particular is established at the MOHP
- The other stakeholders including the enforcement agencies are effectively participate in implementing the NCD action plan
- Proposed committees are diligently are able to meet and function
- The annual joint work planning and review exercises are conducted routinely
- Financial resources are increased for implementing the program
- WHO and other donors provide continued partnership, support and guidance at the country level

NATIONAL MULTISECTORAL ACTION PLAN FOR THE PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASES 2016-2020

MINISTRY OF HEALTH, NUTRITION AND INDIGENOUS MEDICINE

SRI LANKA

Summary of targets and monitoring framework of the Prioritized National Multisectoral Action Plan for the Prevention and Control of Noncommunicable Diseases

Summary of targets and monitoring framework of the Prioritized National Multisectoral Action Plan for the Prevention and Control of Noncommunicable Diseases

	Baseline	Target 2020	Target 2025	Indicator	Measurement Technique
Premature mortality from NCD	17.6% (1)	10% relative reduction	25 % relative reduction	Mortality of NCD (Unconditional probability of dying)	Death registry
Physical inactivity	25% (2)	5% relative reduction	10% relative reduction	prevalence of insufficiently physically active among adults	STEPS survey
Salt/sodium intake	8.4 gram/day	10% relative reduction	30% relative reduction	mean population intake of salt in persons aged 18+ years	Appropriate method should be developed
Tobacco use (among males)	29.8% (3)	15% relative reduction	30% relative reduction	Prevalence of current t obacco use among adults	STEPS survey
Use of alcohol (among males)	26% (4)	5% relative reduction	10% relative reduction in the use of alcohol	Prevalence of current alcohol use among adults	STEPS survey
Raised blood Pressure	16.1% (5)	12.5% relative reduction	25% relative reduction	Prevalence of raised blood pressure among adults	STEPS survey
Diabetes and obesity	4.7% (6)	Halt the rise	Halt the raise in diabetes & obesity	Prevalence of raised blood glucose/diabetes among adults	STEPS survey

	Baseline	Target 2020	Target 2025	Indicator	Measurement Technique
Drug therapy to prevent CVD	Not available	At least 25% of eligible people to receive	At least 50% of eligible people to receive	Proportion of eligible persons receiving NCD care	Appropriate method should be developed
Essential NCDs medicines and basic technologies to treat major NCDs	43.4% (7)	80% available in 50% of the institutions	80% availability in all the relevant institutions	Availability of essential NCDs medicines,	Appropriate method should be developed
households using solid fuels as the primary source of cooking	not available	25% relative reduction	A 50% relative reduction in the proportion of households	proportion of households using solid fuels as the primary source of cooking	Appropriate method should be developed

(1) Estimates 2012 WHO
(2) Low level of total physical activity, STEPS Survey, 2008
(3) Daily and non-daily smokers among males STEPS Survey, 2008
(4) Current drinkers (past 30 days) among males STEPS Survey, 2008
(5) Raised blood pressure excluding those on medication, STEPS Survey, 2008
(6) Obesity (those with BMI>30), STEPS Survey, 2008
(7) Primary Health Care Institutions having one month's buffer stock for 16 essential NCD, 2014, World Bank SHSDP data

(Draft) Thailand Healthy Lifestyle Strategic Plan Phase II 5-Year Non-Communicable Diseases Prevention and Control Plan (2017-2021) and related Action Plan

Strategy 4: Development of the data monitoring and management

Strategy / Key Performance Indicators (KPIs)	Strategy	Indicators	Action owner
Strategic goal Related agencies can identify population in risk-prone group, sickness group as well as red zones and risk-prone environment in an accurate and timely manner leading to timely support needed for launching measures to effectively prevent and control NCDs **KPIs** Percentage of agencies which can identify risk issues to determine measures to prevent and control NCDs in a correct, complete, and timely manner	**Strategy 4.1: To develop information network on district, provincial, regional, and national levels** Product 4.1.1: Mechanism to develop and monitor information integration for NCDs surveillance purposes is available. Product 4.1.2: Information on sickness and risk-prone behavior monitoring at health service stations stemming from existing reporting and information system is available in a correct, complete, and timely manner. Product 4.1.3: Sentinel surveillance system for result of medical care given	**Strategy 4.1 indicators** ● Percentage of agencies on district's, provincial, and national level which can perform NCDs surveillance in accordance with the required standards	- Bureau of Non-Communicable Diseases, Department of Disease Control - Bureau of Epidemiology, Department of Disease Control - Bureau of Policy and Strategy, Office of Permanent Secretary, Ministry of Public Health - ICT Center, Office of Permanent Secretary, Ministry of Public Health - National Statistical Office - Health Information System Development Office - National Health Security Office (NHSO) - Bureau of Registration Administration, Ministry of Interior - Bureau of Occupational and

		to patients with type II diabetes and high blood pressure by hospitals under supervision of the Ministry of Public Health and medical centers in Bangkok Product 4.1.4: Accurate information system to record NCDs-related death Product 4.1.5: Integration of information on NCDs surveillance, risk-prone behavior, health intelligence from population surveys to enable continuous updates on provincial level Product 4.1.6: Connection of relevant information (environment, risk-prone behavior, sickness, death, and abnormalities (5 dimensions)) to create integrated surveillance system for NCDs and risk factors on district and national levels Product 4.1.7: Assessment of information system for NCDs service available at public medical centers to track the quality of reporting and ensure systematic development	Environmental Disease, Department of Disease Control - Bureau of Tobacco Control - Office of Alcohol Control Committee - Bureau of Health Promotion, Department of Health - Department of Physical Activity and Health, Department of Health - Bureau of Nutrition, Department of Health - Health Education Division, Health Service Support Department - Institute for Population and Social Research , Mahidol University - Epidemiology Unit, Prince of Songkla University - Health System Research Institute - Office of the Basic Education Commission - Bureau of Student Activities Development - Office of Vocational Education Commission

	Product 4.1.8: Correct and complete database of population having cancer on national level is available. Strategy 4.2: **To maximize potential of information management and analysis to monitor NCDs and risk factors on district's and national level** Product 4.2.1: Personnel working in medical statistics and information relating to NCDs surveillance, whom are provided with NCDs information management training Product 4.2.2: Personnel assigned to manage a specific disease or regional NCDs System Manager on sub-district, district, and provincial levels whom are provided with training relating to information management, analysis, and reading result of NCDs information as per the 5-dimension surveillance framework	Strategy 4.2 indicators ● Percentage of personnel of relevant agencies mastering NCDs surveillance information management and analysis	- National Electronics and Computer Technology Center - Department of Labour Protection and Welfare, Ministry of Labour - Social Security Office, Ministry of Labour
	Strategy 4.3: **To develop the NCDs surveillance system risk factors related**	Strategy 4.3 indicators	

	to organizations and specific demographics Product 4.3.1: Surveillance system for NCDs risk factors at educational institutions Product 4.3.2: Surveillance system for NCDs risk factors at business premise	• Percentage of educational institutions mastering timely surveillance of NCDs risks among students and university students • Percentage of corporations mastering timely surveillance of NCDs risks among employees	

Table 2: Situation of 9 Gobal Targets in Thailand

Item	Year	Survey Result (%)	% Change	Target 2015
1. Premature Mortality	2010	11.6%	up 0.17 %	down 25%
1.1 Unconditional probability of dying from NCD between 30 and 70 years old	2015	11.8%		
Source: death certificates statistics	2010	343.06 / 100 000	up 10 %	
1.2 Premature mortality (30 – 69 years old) from coronary artery disease, cerebrovascular disease, chronic obstructive pulmonary disease, diabetes, and cancer	2013	355.30/ 100 000		
Source: Thai BOD				
2. Harmful use of Alcohol	2009	13.95 %	up 14.69%	down 10%
2.1 % heavy drinkers in the last 12 months	2014	11.90 %		
Source: NHES	2011	7.13 L	not down	
2.2 Pure alcohol consumption per capita	2014	6.91 L		
Source: Excise Department, MOF	2015	6.95 L		
	2016	7.11 L		
3. Prevalence of physical inactivity	2009	18.4%	up 3.8%	down 10%
Source: NHES	2014	19.2%		
4. Average salt and sodium consumption for Thai people	2009	3,246 mg/day	(No reference)	down 30%
Source: NHES	2014	No report		
5. Prevalence of tobacco use among 15+ years old	2011	21.4%	down 10.7%	down 30%
Source: National Statistics Office	2017	19.1%		
6. Prevalence of raised blood pressure among 15+ years old (adjusted prevalence among 18+ years old)	2009	21.4% (22.6%)	up 15.4%	25%
Source: NHES	2014	24.7 % (26.9%)		
7.1 Prevalence of high blood sugar level/diabetes mellitus among 15+ years old (adjusted prevalence among 18+ years old)	2009	6.9 % (7.3%)	up 29.0%	0 %
Source: NHES	2014	8.9% (9.6%)		
7.2 Prevalence of obesity among 15+ years	2009	34.7% (9.1%)	up 8.1%	0 %
Source: NHES	2014	37.5% (11.3%)		
8. Eligible people receive drug therapy & counselling to prevent heart attack	2010	N.A		50%
Source: MESRESNet	2011	N.A		
9. Affordable technology to treat major NCD	2010	N.A		80%
Source: MESRESNet	2011	N.A		

National Strategy for Prevention and Control of Noncommunicable Diseases (NCDs), Injuries, Disabilities and Care of the Elderly

&

NCD National Action Plan 2014-2018

Ministry of Health, Timor-Leste

1.4 National NCD Monitoring Framework with indicators and targets

Monitoring serves to raise awareness and reinforce political commitment for stronger and more coordinated national action on NCD prevention and control. A comprehensive NCD monitoring framework includes relevant process and outcome indicators. WHO has proposed a set of 25 indicators as a part of its Global NCD monitoring framework and identified voluntary targets for nine of these indicators. These have been adapted to the national context while deciding on national indicators and fixing national targets. As a part of the national monitoring framework, a total of 24 indicators have been identified (table 4), out of which targets have been set for 12 indicators (table 5). Targets have been set only for those indicators that are critical for monitoring, for whom the strategies being planned are expected to start showing results and for those indicators where data collection appears feasible in the timeframe proposed. The actual baseline values for these targets will be estimated according to the baseline data for 2010 for risk factors for which information is available. For others, the data from 2014-15 as generated will be used.

It is recognized that there is a lack of baseline data on most of the indicators proposed globally and the national efforts for prevention and control of NCDs have just started. There is also currently inadequate capacity in the country to implement this strategy, despite a strong political commitment. Therefore, the proposed targets for 2025 may be considered as ambitious. The baseline data generated by 2015 and the possible availability of a second set of data points by 2020 will enable a more realistic setting of the targets for 2025. Therefore, it is proposed to review the targets in 2020. The current government planning cycle is for 2014-18 and thus would enable an evaluation of this plan in 2020. The Demographic Health Surveys, an important source of data for monitoring are likely to be conducted 2014 and 2020. Setting up of a surveillance mechanism as indicated in table 6 is critical to generate the baseline and monitor the progress of the NCD program in the country.

Table 4. List of indicators in the National NCD monitoring framework.

Outcomes (mortality and morbidity)
1. Unconditional probability of dying between ages 30-70 from cardiovascular disease, cancer, diabetes, or chronic respiratory disease. 2. Cancer incidence**,** by type of cancer, per 100 000 population.
Exposures (risk factors)
3. Age-standardized prevalence of current tobacco use among persons aged 18+ years 4. Prevalence of current tobacco use among adolescents (13-17 years) 5. Total (recorded and unrecorded) alcohol per capita (15+ years old) consumption within a calendar year in litres of pure alcohol, as appropriate, within the national context. 6. Age-standardized prevalence of heavy episodic drinking among persons aged 18+ years. 7. Age-standardized prevalence of persons (aged 18+ years) consuming less than five total servings (400 grams) of fruits and vegetables. 8. Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years. 9. Prevalence of insufficiently physically active (defined as less than 60 minutes of moderate to vigorous intensity activity daily) among adolescents (13-17 years) 10. Age-standardized prevalence of insufficiently physically active persons aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent. 11. Age-standardized prevalence of raised blood glucose/diabetes among persons aged 18+ years (fasting plasma glucose value ≥7.0 mmol/L (126 mg/dl) or on medication for diabetes 12. Age-standardized prevalence of raised blood pressure among persons aged 18+ years (defined as systolic blood pressure ≥140 mmHg and/or diastolic blood pressure ≥90 mmHg); and mean systolic blood pressure. 13. Prevalence of overweight and obesity in adolescents (defined according to the WHO growth reference for school-aged children and adolescents, overweight – one standard deviation body mass index for age and sex, and obese – 2 SD BMI for age and sex). 14. Age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as body mass index ≥25 kg/m2 for overweight and body mass index ≥ 30 kg/m2 for obesity). 15. Age-standardized prevalence of raised total cholesterol among persons aged 18+ years (defined as total cholesterol ≥5.0 mmol/L or 190 mg/dl); and mean total cholesterol. 16. Proportion of households with solid fuel use as their primary source of cooking

Health System response
17. Proportion of women between the ages of 30–49 screened for cervical cancer at least once. 18. Proportion of eligible screened for oral cancers at least once. 19. Proportion of eligible persons (defined as aged 40 years and over with a 10-year cardiovascular risk ≥30%, including those with existing cardiovascular disease) receiving drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes. 20. Availability and affordability of essential noncommunicable disease medicines, including generics, and basic technologies as per the national package in both public and private facilities. 21. Proportion of primary health care workforce trained in integrated NCD prevention and control. 22. Vaccination coverage against hepatitis B virus monitored by number of third doses of Hep-B vaccine (HepB3) administered to infants. 23. Policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, *trans-fatty* acids, free sugars, or salt. 24. Adoption of national policies that limit saturated fatty acids and virtually eliminate partially hydrogenated vegetable oils in the food supply, as appropriate, within the national context and national programmes.

Table 5. National targets set for NCD prevention and control for 2020 and 2025

Indicator	Targets	
	Mid term (2020)	**End term (2025)**
1. Unconditional probability of dying between ages 30 and 70 years from four major NCDs.	7% relative reduction	20% relative reduction
2. Age-standardized prevalence of current tobacco use among persons aged 18+ years	10% relative reduction	20% relative reduction
3. Prevalence of current tobacco use among adolescents (13-17 years)	15% relative reduction	30% relative reduction
4. Age-standardized prevalence of heavy episodic drinking among adults,	5% relative reduction	10% relative reduction
5. Prevalence of insufficiently physically active adolescents (13-17 years)	5% relative reduction	15% relative reduction
6. Age-standardized prevalence of insufficiently physically active persons aged 18+ years	5% relative reduction	10% relative reduction
7. Age-standardized prevalence of overweight and obesity in adults aged 18+ years	Not set	Halt the rise (0% increase)
8. Age-standardized prevalence of raised blood glucose/diabetes among adults	Not set	Halt the rise (0% increase)
9. Age-standardized prevalence of raised blood pressure among adults aged 18+ years	10% relative reduction	25% relative reduction
10. Drug therapy to prevent heart attacks and strokes (includes glycemic control), and counselling for people aged 40 years and over with a 10-year cardiovascular risk greater than or equal to 30% (includes those with existing cardiovascular disease).	25%	50%
11. Availability of generic essential NCD medicines and basic technologies in both public and private facilities.	50%	80%
12. Proportion of primary health care workforce trained in integrated NCD care	50%	80%
13. Coverage with Vaccination against hepatitis B virus (HBV).	80%	95%

Table 6. Sources of data and frequency of data collection needed for monitoring targets set for NCDs

Indicators covered	Frequency	Source /Comments
Mortality indicators	Annually for deaths in hospital and along with DHS (once in 5 years) for the deaths in houses	Hospital reporting and special Cause of death survey
Risk factor among adults	Every five years	Adults NCD risk factors survey
Risk factor among adolescents	Every Five years	School based student survey
Health System response	Every Five years	Health Facility Survey; NCDRF Survey, Routine hospital reporting using supervisory check list