

Regional Strategic Plan
for Integrated Neglected Tropical
Diseases Control
in South-East Asia Region

2012-2016





Informal Consultation on Finalization of Regional Strategic Plan
for Integrated Neglected Tropical Diseases Control: 2011-2015
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Regional Strategic Plan for Integrated Neglected Tropical Diseases Control in South-East Asia Region

2012-2016



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Abbreviations

AIDS	acquired immune deficiency syndrome
CBR	community-based rehabilitation
CNTD	Centre for Neglected Tropical Diseases
CRME	Centre for Research in Medical Entomology
DHF	dengue haemorrhagic fever
GNNTD	Global network for neglected tropical diseases
GET	global elimination of trachoma
HIV	human immunodeficiency virus
IEC	information, education and communication
IRS	indoor residual spraying
IVM	integrated vector management
JE	Japanese encephalitis
LF	lymphatic filariasis
M&E	monitoring and evaluation
MDA	mass drug administration
MDG	Millennium Development Goal
NGO	nongovernmental organization
NTD	neglected tropical diseases
PCT	preventive chemotherapy
RC	Regional Committee
RPRG	Regional Programme Review Group
RTI	Research Triangle Institute
SCH	schistosomiasis
SEA	South-East Asia

STH	soil transmitted helminthiasis
TAS	transmission assessment survey
TB	tuberculosis
TF	Trachomatous folliculitis
TT	Trachomatous entropion-trichiasis
USAID	United States Agency for International Development
WHA	World Health Assembly
WHO	World Health Organization

Executive summary

Around one billion people in the developing world are the victims of poverty-related tropical diseases widely known as “Neglected Tropical Diseases (NTD)”. The World Health Organization (WHO) South-East Asia (SEA) Region accounts for 26% of the current global population of 7 billion (2011). It also accounts for 50% of the one billion people living below the poverty line. Among the WHO regions, the SEA Region has the second-highest burden of NTD. Of the 17 NTD listed by WHO, the priorities for the SEA Region are lymphatic filariasis (LF), soil transmitted helminthiasis (STH), kala-azar (visceral leishmaniasis), blinding trachoma, leprosy, endemic treponematosi (yaws), dengue and rabies, for which effective public health interventions are available. Visceral schistosomiasis (SCH) is still prevalent in small pockets of Indonesia. In addition, Japanese encephalitis (JE) is reported by some of the countries. The SEA Region has made remarkable progress in the control/elimination of some of the diseases. Leprosy has been eliminated as a public health problem from the Region.

WHO developed a Global Plan to Combat Neglected Tropical Diseases 2008 - 2015. It recommended five public-health strategies for the prevention and control of NTD: preventive chemotherapy (PCT); intensified case management; vector control; the provision of safe water, sanitation and hygiene; and veterinary public health. Although one approach may be found useful to control a specific disease, evidence suggests that more effective control/elimination can be attained when all five approaches are combined wherever needed and delivered to the population at risk. Many of these diseases are found to co-exist (be co-endemic) in many geographic locations (e.g. districts) and a single intervention strategy works out to be no more cost-effective. Since many of these diseases (LF, STH, trachoma and SCH) are amenable to PCT and co-endemic, it is advisable to plan integrated rather than individual PCT delivery. This integrated approach would reduce the burden of drug delivery for individual diseases for health workers and also reduce the operational cost. Considering cost-effectiveness and the cost-benefit of the integrated approaches for NTD control in resource-limited countries, the adoption of integrated NTD control plans is advocated.

The Regional Strategic Plan for integrated NTD control 2012-2016 has been developed in line with the WHO Global Plan to Combat NTD 2008-2015. It was

finalized in an informal consultation of experts held at the WHO Regional Office for South-East Asia, New Delhi on 9-10 August 2011.

The strategic plan deals with four main intervention packages: (i) mass drug administration (MDA) or PCT for LF, STH, SCH and trachoma; (ii) integrated vector management (IVM) for vector-borne NTD (LF, kala-azar, dengue/dengue haemorrhagic fever or DHF and Japanese encephalitis or JE); (iii) case-finding and treatment for leprosy, kala-azar, trachoma and yaws; and (iv) integrated disability prevention and care for LF and leprosy.

Since an Asia-Pacific strategy for dengue prevention and control is available, it is not included in this integrated plan. Similarly, neglected tropical zoonotic diseases viz rabies and leptospirosis are not included in this plan.

The Regional Strategic Plan has the following targets:

Vision: A Region free from morbidity due to NTD.

Goal: To prevent/control/eliminate NTD in the Region.

Objectives:

- (1) To develop and implement integrated approaches to prevent/control/eliminate NTD in the Member countries of the SEA Region.
- (2) To establish the necessary facilities and deliver the available interventions for NTD in a cost-effective manner through multi-intervention packages.
- (3) To strengthen country capacity to develop, implement, monitor and evaluate an integrated plan of action.
- (4) To strengthen laboratory services to support NTD control.

Regional targets

To achieve global targets, the Regional targets are set to suit the plan period 2012-2016:

- To eliminate LF as a public health problem by achieving a microfilarial rate of less than 1% in at least six of the nine endemic countries (Bangladesh, India, Maldives, Nepal, Sri Lanka and Thailand).

- To cover at least 50% of school-age and pre-school-age children requiring preventive chemotherapy for STH.
- To eliminate SCH by reducing prevalence of high-intensity infections to less than 1% in Indonesia by 2016.
- To eliminate blinding trachoma by reducing prevalence to less than 5% active trachoma in children 1-9 years and fewer than 1/1000 trachomatous entropion-trichiasis (TT) in all ages of the population in two (Myanmar and Nepal) of the three affected countries by 2016.
- Elimination of kala-azar by reducing the incidence of new cases to fewer than 1 per 10 000 population in endemic areas at the *upzilla* level in Bangladesh, sub-district level in India, and district level in Bhutan and Nepal by 2015.
- To reduce new cases of yaws to zero in endemic districts in Indonesia and Timor-Leste by 2016 and reach elimination at Regional level by 2020.
- Reducing the rate of occurrence of new leprosy cases with grade-2 disability to a level below one per million population by 2020. A 35% reduction in grade-2 disabilities in new cases from 2011 to 2015 is to be used to evaluate progress towards the long-term goal.

The following steps have been identified to develop the integrated strategic plan:

- (1) Assessment of the burden of NTD and integrated mapping to plan integrated interventions depending on the magnitude of the co-endemicity.
- (2) Identification of locally specific integrated approaches for selected disease groups.
- (3) Development and implementation of multi-intervention packages: (i) MDA/PCT for LF, STH, trachoma and SCH; (ii) IVM to deal with LF, kala-azar, dengue/JE; (iii) treatment and case management in leprosy, kala-azar and trachoma; (iv) disability management in leprosy, LF and trachoma.
- (4) Strengthening of health systems to deliver the intervention packages.
- (5) Capacity-building of health workforce including community volunteers.

- (6) Ensuring free, easy and timely access to diagnosis, treatment and prevention services.
- (7) Integrated advocacy and information, education and communication (IEC) packages.
- (8) Promoting partnership and community mobilization.
- (9) Promoting intersectoral and inter-programmatic approaches.
- (10) Timely procurement of quality drugs.
- (11) Research to improve or develop new tools.
- (12) Resource mobilization.
- (13) Integrated surveillance, database management, monitoring and evaluation (M&E).
- (14) Integrated vector management.
- (15) Development of a plan of action, estimating budget, funding gap analysis using available tools and time frame.

WHO initiatives

WHO pioneered the concept of projecting NTD as a group that causes substantial morbidity / mortality in several countries and that these diseases affect mainly the poorest of the poor and other marginalized groups, i.e. the neglected population groups. WHO also emphasized the fact that if NTD are not addressed, the cycle of poverty is sustained. This was followed by the establishment of the department of NTD at WHO Headquarters in 2003. WHO organized three international meetings in 2003, 2004 and 2005 to develop strategies and tools for intensified control of NTD through a four-pronged approach:

- Ensuring broader coverage and greater accessibility to rapid impact interventions.
- Promoting and strengthening IVM.
- Improving surveillance and quality of care for diseases with limited control tools.
- Encouraging research for new and improved tools.

In October 2006, WHO developed and published a set of comprehensive guidelines on the integrated use of drugs for mass PCT. These guidelines were distributed to the Member countries. In 2012, WHO released a Roadmap for Implementation – Accelerating work to overcome the global impact of neglected tropical diseases to reach global targets by 2020.

The control of many NTD, e.g. leprosy, LF, kala-azar, trachoma and STH, has received a boost through resolutions adopted at the World Health Assemblies (WHA) and/or WHO Regional Committees (RC). WHO has used its lead role in health to involve other UN agencies, international donor partners and pharmaceutical drug donors to support NTD control.

WHO Regional Office for South-East Asia organized three international partners' meetings on NTD targeted for elimination: the first in Bangalore, India in November 2005, the second in Jakarta, Indonesia in February 2007 and the third in Bangkok, Thailand in 2010. These meetings helped to raise awareness among the partners about the magnitude and needs of NTD and facilitated mobilization of funds for NTD in Member countries.

WHO-SEARO established a Regional Programme Review Group (RPRG) for elimination of LF and Technical Advisory Groups for kala-azar and leprosy. The office developed Regional Strategic Plans for LF (revised 2010) and kala-azar and yaws (revised 2011). It is expected that the Regional Strategic Plan for Integrated NTD Control would be a very useful advocacy tool for Member countries.

1. Introduction

Around one billion people in the developing world are the victims of poverty-related tropical diseases widely known as “neglected tropical diseases” (NTD) because they receive less attention from health-policy-makers and funding bodies.

The WHO SEA Region accounts for 26% of the current global population of approximately 7 billion (2011). It also accounts for 50% of the global total of one billion people living below the poverty line. Among the WHO regions, the SEA Region has the second-highest burden of NTD. Since NTD are related to poverty, the Region has the highest burden of some NTD, e.g. LF, STH, kala-azar, leprosy and dengue. The following NTD continue to be reported by some of the Member countries of the Region:

- (1) LF in nine countries (not in Bhutan and the Democratic People’s Republic of Korea).
- (2) STH in all 11 countries.
- (3) Blinding trachoma in three countries (India, Myanmar and Nepal).
- (4) Visceral schistosomiasis in three small pockets in Central Sulawesi of Indonesia.
- (5) Kala-azar in four countries (Bangladesh, India and Nepal, with Bhutan reporting sporadic cases).
- (6) Yaws in three countries - India, Indonesia, Timor-Leste (India achieved elimination).
- (7) Leprosy in all 11 countries (eliminated as a public health problem).
- (8) JE in all 11 countries except Bhutan, DPR Korea and Maldives.
- (9) Dengue/DHF in all 11 countries except the Democratic People’s Republic of Korea.

In addition, food-borne trematodes like *Fasciola hepatica* are found in India and Thailand whose burden is not yet fully known. There are also cases of other trematode infections such as *Paragonimus*, *Clonorchis sinensis* and *Fasciolopsis buski* in north-east states of India and Thailand that must be addressed since effective PCT with triclabendazole is available via WHO donations. The countries may consider including food-borne trematodes in their country plans.

Other NTD such as rabies and leptospirosis which are listed as zoonotic diseases are not included in this strategic plan because strategies and available interventions cannot be easily integrated with the diseases addressed by this integrated strategy. Since Asia-Pacific Strategy and Regional Comprehensive Guidelines for Prevention and Control of Dengue/DHF are available separately, dengue/DHF is not included in this strategic plan. Chikungunya generally occurs along with dengue fever outbreaks, is also not included in the strategic plan.

NTD are neglected because of:

- failure of public health policy resulting in lower priority.
- failure in resource allocations resulting in inadequate attention to controlling the diseases.
- failure of research and development resulting in lack of improved or new tools.
- failure in effective implementation of available interventions resulting in continued high burden of NTD.

NTD kill fewer people than acquired immune deficiency syndrome (AIDS), malaria and tuberculosis (TB), but most NTD cause severe physical disabilities and deformities (especially LF, leprosy and trachoma). The physically disabled become victims of stigma, prejudices, discrimination, economic loss and are often deprived of their human rights. Together or individually, NTD cause enormous social and economic loss at the family, community and national levels. Additionally, they also seriously burden the health systems of the affected countries and drain scarce resources since disabling diseases also necessitate socioeconomic rehabilitation.

2. The burden of neglected tropical diseases in South-East Asia

The SEA Region has completed its first mapping by country of common NTD (1).

Disease	Global burden	SEA Region burden	Remarks	Reference
Lymphatic Filariasis	1.39 billion people	877 million	Population requiring PCT	2
Soil transmitted helminthiasis	2 billion people	372 million (children)	Pre-school and school-age children requiring PCT	3
Trachoma	1.2 billion people live in trachoma-endemic areas	362 million people live in endemic areas	Population living in endemic areas in India, Myanmar and Nepal	4
Visceral Schistosomiasis	>200 million (5)	2937 school age children(6)	Revised estimate: requiring PCT in Indonesia	5,6
Yaws	Not known	8309 (new cases)	Reported new cases in Indonesia in 2009	7
Leprosy	228 474 new cases	156 254 (new cases)	New cases detected in 2010	8
Kala-azar	500 000 cases estimated annual incidence (9)	100 000 (10) 147 million (10)	Estimated annual incidence of cases At-risk population	9, 10
Dengue and DHF	2.5 billion population	1.3 million population	Population at risk	11
Japanese encephalitis	(i) 2.4 billion population live in endemic areas (ii) estimated annual new cases 50 000 (12)	175 000 estimated cases(13)	Estimated annual incidence in children (0-14 years)	12,13

- (1) WHO-SEARO/CDS Newsletter, January, 2011: Mapping of Neglected Tropical Diseases in the South-East Asia Region
- (2) WHO (2011) Global Programme to Eliminate Lymphatic Filariasis: Progress Report on mass drug administration, 2010: WER, No. 35, 2011
- (3) WHO (2012): STH Progress Report 2001-2010 and Strategic Plan 2011-2020
- (4) Mariotti SP et al: Trachoma: global magnitude of a preventable cause of blindness. Br. J Ophthalmology, 2009: 93

- (5) Steinmann P et al. Schistosomiasis and water resources development: systematic review, meta analysis, and estimates of people at risk. *Lancet Infectious Diseases*, 2006, 6.
- (6) WHO (2012): Schistosomiasis: Progress Report 2001-2011 and Strategic Plan 2012-2020(draft)
- (7) Integrated NTD Control Plan Indonesia 2011-2015(MoH)
- (8) WHO (2011): Leprosy Update 2011: Weekly epidemiological Record, No.36
- (9) Control of the leishmaniasis; WHO Technical Report Series, 949, 2010
- (10) WHO 2011: Regional Strategic Framework for Elimination of Kala-azar from the South-East Asia Region 2011-2015
- (11) WHO (2011): Comprehensive Guidelines for Prevention and Control of Dengue and DHF. Revised and expanded edition
- (12) Burke DS, Leake CJ: Japanese encephalitis. In: Monath TP, editor. *The arboviruses: epidemiology and ecology*, Vol.3. Boca Raton: CRC Press; 1988.
- (13) Tsai TF. New initiatives for the control of Japanese encephalitis by vaccination: minutes of a WHO/CVI meeting, Bangkok, Thailand, 13-15 October 1998. *Vaccine* 2000; 18

The SEA Region has made remarkable progress in the control or elimination of many of these diseases, particularly leprosy, LF, kala-azar and yaws. Leprosy was eliminated as a public-health problem in the SEA Region in 2011. Yaws has been eliminated (zero new cases) in India and the country is heading towards declaring itself yaws-free. Member countries have the basic infrastructure and facilities to control or eliminate NTD if additional technical and financial support is provided.

The five public health strategies for NTD control are:

- (1) Preventive chemotherapy (PCT) of population at risk/infected.
- (2) Intensified case-finding and management.
- (3) Integrated vector control/management (IVM).
- (4) Provision of safe water, sanitation and hygiene.
- (5) Veterinary public health.

Taking into consideration these strategies, in this Regional Strategic Plan for Integrated NTD Control 2012-2016, the following disease groups are considered:

- (1) NTD where MDA or PCT is the primary intervention: LF (9 countries), STH (8 countries), SCH (Indonesia), trachoma (India, Myanmar, Nepal) and food-borne *Fasciola hepatica* infection (India and Thailand).

- (2) NTD where case-finding and case management is the main intervention: leprosy (11 countries) and kala-azar (4 countries).
- (3) NTD where case management and limited PCT is practiced for contacts: yaws (Indonesia and Timor-Leste). Since azithromycin single dose administration twice a year is recommended to affected community including cases by WHO (2012), yaws disease elimination may be combined with other NTD amenable to PCT.
- (4) NTD where IVM is a major preventive intervention: LF (9 countries), kala-azar (4 countries), dengue (10 countries), Chikungunya (6 countries), JE (8 countries).

3. Factors in the insufficient attention to control of neglected tropical diseases

A combination of factors is responsible for insufficient attention being given to NTD by endemic countries, bilateral/multilateral agencies, national and international nongovernmental organizations (NGOs), etc:

- The diseases do not attract global/national attention because of comparatively low numbers and mortality and the fact that they are generally localized to specific geographic areas;
- NTD predominantly affect the people living in poverty-dominated rural areas or urban slums, or in population groups in remote, hard-to-reach, inaccessible and economically backward areas, whose voices or problems are rarely highlighted;
- Control efforts for NTD have to compete with human immunodeficiency virus (HIV), TB, and malaria, and emerging and re-emerging infectious diseases which receive greater international attention and funding;
- NTD are not specifically mentioned in the list of goals to be achieved by 2015 under the Millennium Development Goals (MDGs);
- Addressing communicable diseases that affect poor people and the impact of physical or mental disabilities that some of these

diseases produce has not been projected as a human-rights or ethical/moral issue;

- It is not yet fully realized that NTD together pose a big threat to economic progress and development and that they maintain the poverty cycle in developing countries;
- There is a lack of research on the economic and social impact of NTD;
- They receive lesser media attention since their news value is much lower than other diseases with a high mortality rate.

Given the above facts, WHO decided to project NTD as a group which together cause morbidity/mortality of substantial proportions and impact development in the affected countries. Therefore, there is a need to change the situation and effectively tackle NTD because the necessary cost-effective tools and interventions already exist to prevent, control or eliminate most of them. The overlapping of these diseases in a country and the limitations of the health systems makes it imperative to tackle them through integrated approaches.

The necessity for integrated action against NTD is further accentuated by principles enshrined in the WHO Constitution such as the right to health, the positive link between pro-poor policies and improved equity and health, and the impact NTD can have on achieving the MDGs.

WHO issued its first document on NTD at the First Meeting of Experts and Partners held in Berlin, Germany in December 2003. A second meeting was also held in Berlin in 2005. Subsequently, WHO developed a Global Plan to Combat Neglected Tropical Diseases 2008-2015, to encourage and guide the endemic countries to develop NTD control plans. The present Regional Strategic Plan aims at guiding the Member countries in planning and implementing integrated approaches and delivering multi-intervention packages to prevent, control or eliminate NTD in Member countries of the SEA Region.

4. Vision, goal, objectives and regional targets

4.1 Vision

A Region free from morbidity due to Neglected Tropical Diseases.

4.2 Goal

To prevent/control/eliminate Neglected Tropical Diseases in the Region.

4.3 Objectives

- To develop and implement integrated approaches to prevent/control/eliminate NTD in the Member countries of the SEA Region.
- To establish the necessary facilities and deliver the available interventions for NTD in a cost-effective manner through multi-intervention packages.
- To strengthen country capacity to develop, implement, monitor and evaluate an integrated plan of action.
- To strengthen laboratory services to support NTD control.

4.4 Global targets

The following targets are fixed or proposed to achieve the disease elimination as a public health problem by predefined levels of prevalence and new case detection:

- LF: Elimination by achieving microfilarial rate of less than 1% by 2020.
- STH: Elimination of morbidity by reducing prevalence of moderate-and heavy-intensity infections below 1% by 2020 by covering at least 75% of children requiring deworming.
- SCH: (1) Control morbidity by 2020, reaching targets of 100% geographic coverage, 75% population coverage, and <5%

prevalence of heavy-intensity infections; (2) eliminate SCH as a public-health problem by 2025 by reducing prevalence of heavy-intensity infection to <1%; (3) interrupt transmission of SCH from all WHO Regions by 2025 by reaching zero incidence.

- Elimination of blinding trachoma by 2020 in line with World Health Assembly resolution WHA 51.11 and WHO-GET definitions, to reach prevalence of less than 5% active trachoma in children 1-9 years and less than 1/1000 trachomatous trichiasis (TT) in all ages/groups of the population.
- Eradication of endemic treponematoses (yaws) by 2020.
- Reducing the rate of occurrence of new leprosy cases with grade-2 disability to a level below one per million population by 2020. A 35% reduction in grade-2 disabilities in new cases from 2011 to 2015 is to be used to evaluate progress towards the long-term goal.

4.5 Regional targets

To reach global targets, the Regional Strategic Plan sets the following targets by 2016:

- To eliminate LF as a public health problem by achieving a microfilarial rate of less than 1% in at least six of the nine endemic countries (Bangladesh, India, Maldives, Nepal, Sri Lanka and Thailand).
- To cover at least 50% of school-age and pre-school-age children requiring preventive chemotherapy for STH.
- To eliminate schistosomiasis by reducing prevalence of high-intensity infections to less than 1% in Indonesia.
- To eliminate blinding trachoma by reducing prevalence to less than 5% active trachoma in children 1-9 years and fewer than 1/1000 TT in all ages/groups of the population in two of the three affected countries.
- Elimination of kala-azar by reducing the incidence of new cases to fewer than 1 per 10 000 population in endemic areas at the

upzilla level in Bangladesh, sub-district level in India, and district level in Bhutan and Nepal by 2015.

- To reduce new cases of yaws to zero in endemic districts in Indonesia and Timor-Leste by 2016 and reach elimination at Regional level by 2020.
- Reducing the rate of occurrence of new leprosy cases with grade-2 disability to a level below one per million population by 2020. A 35% reduction in grade-2 disabilities in new cases from 2011 to 2015 is to be used to evaluate progress towards the long-term goal.

5. Strategic plan: Principles for action

5.1 Assessment of the burden of NTD and integrated mapping

The burden of most NTD in the SEA Region is fairly well known. However, the burden of diseases like trachoma and food-borne trematodes, e.g. *Fasciola hepatica* and other trematode infections, is yet to be established. Only three of the Region's 11 countries report trachoma, and only two countries – India and Thailand – report *Fasciola hepatica* infection. The possibility of these diseases occurring in other countries of the Region cannot be ruled out. A rapid assessment should be undertaken for incidence of trachoma especially in India and *Fasciola hepatica* infections in the countries of the Region.

Based on the available baseline data and geographic distribution of diseases, countries are advised to develop integrated mapping since some of the most common NTD overlap in the same district/sub-district. LF and STH are most common problems in the Region and overlap in many districts. Trachoma, STH and LF overlap in Nepal and Myanmar and some areas of India. SCH overlaps with LF and STH in some isolated pockets in Central Sulawesi province in Indonesia. Case-finding and management related to leprosy/LF and kala-azar also overlap in some districts. Such mapping would be useful for integrated PCT delivery, case-finding and treatment, including disability management (LF and leprosy).

Expected result

- Integrated mapping of NTD regionally and in each Member country will be completed by 2013.
- Accurate data on the burden of NTD and their overlap, including geographic distribution in the Region, will be known.

5.2 Integrated approach for selected disease groups

Many NTD have common features that make integrated approaches feasible. Some of these features are concentration among marginalized groups and under-served communities; overlap in districts/sub-districts; common PCT delivery approach; and common service providers (same health workers/community volunteers). An integrated synergic approach will streamline operational activities, reduce the burden on health workers, enhance efficiency, improve cost-effectiveness and ensure that community needs are comprehensively met.

An integrated approach requires political will and policy and administrative support. WHO will assist Member countries in advocacy, provision of strategy documents and technical assistance for planning and implementation.

Expected result

- Control and elimination of NTD included in national health policy and an integrated NTD control plan is developed and adopted by Member countries.
- Health-policy decision-makers are committed to integrated NTD control and allocate sufficient funding towards this.
- Good coordination mechanism is established across different departments and sectors dealing with NTD control.
- All countries revise their national plans for individual NTD control and develop an appropriate integrated plan of action for implementation.

5.3 Development and implementation of multi-intervention packages

There are effective interventions for prevention, treatment, control and elimination of most NTD. Thus NTD can be classified based upon available interventions that can be delivered as a package for their prevention, treatment, control and elimination, as follows:

- **MDA or PCT** – for LF, SCH, STH and trachoma
- **IVM** – for vector-borne NTD like LF, kala-azar, dengue fever/DHF, JE, and Chikungunya
- **Treatment and case management facilities** – for trachoma, yaws, kala-azar and leprosy
- **Integrated disability prevention, alleviation, care and rehabilitation** – for disability-prone diseases like LF and leprosy

Expected result

- Member countries develop multi-intervention packages for selected disease groups and implement the intervention strategies feasible to local situation and needs.

5.4 Strengthening health-care systems to deliver the intervention packages

The success of the NTD control strategies will depend on the motivation and capacity of the district, sub-district and primary health centres/sub-health centres to effectively implement the integrated intervention strategies through primary health care services. There will be a need to increase the health workforce or provision of better infrastructure at the periphery, especially in remote or inaccessible geographic locations. Therefore, district health officials should be motivated to be innovative, streamline existing services and mobilize the available health workers and community volunteers to deliver the intervention packages. While implementing intervention packages, priority should be accorded to strengthening health systems.

Expected result

- Capacity of Member countries for planning, implementing, M&E of NTD control through integrated approaches is strengthened at the national, district and sub-district levels through the primary health care system.

5.5. Capacity-building of health staff and community volunteers

The National Plan for NTD control should include an integrated training plan to build the capacity of the health workforce and community volunteers or drug distributors to be involved in the delivery of intervention packages with a focus on drug delivery, possible side-effects, counseling and referral in case of severe adverse events, case-finding and management including integrated disability management. Training/orientation should also include maintaining basic records at the village level, compilation of data and forwarding information to the next level. Where required, even health workers should be oriented in maintaining drug records to avoid shortage or wastage.

WHO will assist Member countries in developing integrated training materials and organizing training activities.

Expected result

- Strengthened capacity for delivery of PCT, case management and recording and reporting through comprehensive training/orientation of health staff and community volunteers.

5.6 Ensuring free, easy, and timely access to diagnosis, treatment and prevention of the diseases in the package

The implementation plan should include timely procurement of quality drugs and diagnostics including donations and other requirements at the district and sub-district levels in order to ensure free and easy access to the interventions. Member countries with the support of partners and WHO should (i) improve affordability of diagnostics and medicines (ii) ensure uninterrupted availability of diagnostics and drugs (iii) strengthen logistics management, i.e. procurement, appropriate storage, importing (including

customs clearance) and in-country transportation and peripheral distribution. Regular monitoring of the supply chain system should be an integral component of the plan.

Quality control of diagnostics and drugs is an essential component of improving quality of the services and reducing/preventing untoward events. Member countries should ensure regular quality control of supplies.

Since more and more donors are donating drugs to Member countries, they should avail themselves of the opportunity by providing in-country facilities to ship the drugs with the assistance of WHO.

Since smooth functioning of the supply chain system requires adequate training in logistics management at various levels, Member countries should accord priority to this while developing integrated plans.

Expected result

- In-country supply chain system is strengthened.
- Sufficient quantities of quality drugs/diagnostics are available at the district/sub-district level/primary health centres for delivery of the intervention packages.
- The endemic populations have easy and timely access to high-quality drugs and preventive tools, free of charge.
- Technical assistance and adequate allocation of resources are ensured.
- Regular reporting and monitoring system is strengthened.

5.7 Integrated advocacy and information, education and communication packages

Development of appropriate integrated advocacy and IEC packages at national/sub-national levels is crucial in building up political and community support. While developing IEC materials, stress should be laid on available evidence regarding drug safety, high cure rate, prevention of disability, reduction in anaemia, weight gain, increased school attendance and increased earning capacity, etc.

Advocacy is an important component to sustain political commitment and policy support as well as funding. This will ensure easy accessibility and high coverage of the intervention packages.

This will also be useful to ensure community participation and support from local influential groups like religious leaders, school/college teachers, local industries, etc.

Appropriate education of media personnel is an essential component in the success of delivering treatment packages since media can convey either the success or failure of the programme to the public.

Expected result

- Increased awareness of impact of treatment interventions at regional and country levels.
- Integrated advocacy and IEC packages are developed and disseminated to all the stakeholders in Member countries.
- Socioeconomic impact analysis of NTD carried out and results disseminated.

5.8 Promoting partnerships, resources and community mobilization

The growing awareness of the impact of NTD and their potential to threaten achievement of the MDGs, coupled with availability of low-cost effective interventions, has led to new global initiatives and partnerships resulting in increased mobilization of funds.

Many international and national donors/developmental partners have begun supporting NTD control in Member countries of the SEA Region. More and more drug donors are coming forward to support LF, STH, trachoma and SCH treatment activities. WHO will assist the countries in locating new partners and involvement of the existing partners in the efforts to develop and implement integrated approaches and deliver multi-intervention packages. WHO also encourages public–private partnership initiatives to combat NTD. Such initiatives could be global, regional or at national/sub-national levels.

There is a potential for collaborating with pharmaceutical companies and national/international academic institutions for conducting operational and laboratory research.

It is equally important to consider community force in terms of local leaders (including women's organizations) and key local groups such as teachers, youth, media personnel, trade associations and medical practitioners, etc. as partners and mobilize their involvement and support for the integrated programme.

Expected result

- Collaboration with existing partners strengthened and new partners involved in implementing integrated interventions for NTD in Member countries.
- More resources are mobilized and NTD control/elimination is intensified.
- Community mobilization and involvement is ensured for implementing integrated interventions.

5.9 Promoting intersectoral and interprogrammatic approach

The overlap of NTD in specific geographical regions or areas and the commonalities related to risk factors, factors promoting spread/transmission, environmental factors, lack of awareness and methods of drug delivery have links to other sectors such as education, immunization, nutrition, agriculture, environment, water and sanitation, poverty reduction programmes, information and broadcasting, etc. It is therefore necessary to involve related sectors/ministries to support and assist the integrated NTD programme. A holistic approach would be more rewarding in the elimination of some of the NTD in the long run since all are related to poverty. Deworming alone would not be rewarding without improved water and sanitation provision.

Expected result

- Intersectoral and interprogrammatic collaboration established for integrated control of NTD in Member countries.

5.10 Research on improved or new tools for NTD control

There is scope and a need to develop improved or new tools for diagnosis, treatment and prevention of NTD and establish innovative approaches to deliver the interventions. National NTD control programmes will identify and assist national research centres and WHO Collaborating Centres to embark upon laboratory as well as operational research pertaining to NTD.

The recent clinical trial with azithromycin 2 gram single dose for yaws case treatment in Papua New Guinea has shown a more or less equal cure rate compared to injection benzthine penicillin (Lancet 2012). Azithromycin single dose (2 gram) is recommended by WHO in 2012 (the meeting report is under preparation).

Expected result

- Research on NTD is given priority in Member countries and funds are allocated for research and innovative approaches.

5.11 Resource mobilization

The success of the Strategic Plan depends on mobilization of sufficient resources and their allocation for the implementation and delivery of the intervention packages for control of NTD. Member countries should assume the primary responsibility to mobilize and allocate resources. Of late, the scope for increased resources has received a boost. Efforts should be made to advocate major international funding agencies such as The Global Fund, World Bank, Asian Development Bank and international foundations.

Expected result

- Required resources – human, material and funds – mobilized and allocated to control/eliminate priority NTD in the SEA Region.

5.12 Integrated surveillance, database management, monitoring and evaluation

Surveillance of NTD should be incorporated into the integrated disease surveillance programmes and databases of all Member countries. A strong national and sub-national-level (including district) monitoring system should be developed to continuously monitor progress and outcome of the preventive chemotherapy. The national NTD control programmes will establish supervision, M&E procedures, indicators and mechanisms to periodically review progress and take corrective action.

WHO will assist in providing necessary technical support to Member countries in establishing effective NTD surveillance systems.

Expected result

- M & E system is strengthened for integrated NTD control and regular reviews are conducted.

6. Intervention packages

6.1 Mass Drug Administration (MDA)

MDA or preventive chemotherapy (PCT) is considered to be one of the most cost-effective and safe public health interventions to reduce the disease burden of LF, STH, SCH and trachoma. The strategy involves delivering a combination of two or three drugs once or twice a year to the entire target or eligible population at risk for a period of five to six or more years, depending upon the disease prevalence in the target population. The drugs given in the SEA Region are diethyl carbamazine citrate (DEC) + albendazole for LF, albendazole /mebendazole for STH, praziquantel for SCH and azithromycin for trachoma.

The benefits of MDA include:

- Improved physical and mental growth of children
- Prevention of anaemia in children and pregnant women
- Prevention and treatment of LF, STH, SCH and trachoma

- Reduction of disease burden including disabilities
- Increased production capacity and economic generation.

It is important to ensure high coverage to obtain good results through effective pre-MDA preparatory activities, i.e. creating community awareness regarding the benefits of MDA, possible rare side effects, mobilization of community involvement and dissemination of information on MDA dates and seeking cooperation of key groups like the media, religious leaders and local community leaders.

6.2 Integrated Vector Management (IVM)

Many of the NTD are vector-borne diseases, e.g. LF, kala-azar, dengue/DHF, JE and Chikungunya. IVM will help to reduce the burden of all these diseases along with malaria which is co-endemic in most of the countries. IVM builds on selective vector control with targeted use of different vector control methods simultaneously or consecutively. In the selection of methods, it is important to know the breeding and resting habits of the vectors. The control methods include:

- (a) Personal protective measures
- (b) Larval control
- (c) Adult vector control
- (d) Environmental management

Personal protective measures – The most cost-effective personal protective measure is the use of insecticide-treated bed nets which should be provided free of charge or at subsidized rates. Other measures include use of household insecticides or repellants, clothing to cover exposed parts of the body and insect-proofing of households wherever feasible.

Larval control – Larval control is relevant if the breeding places are limited in number and a high proportion of them are accessible and of manageable size. Manmade and household larval habitats such as lidless water tanks, discarded containers, pots, rubber tyres, coconut shells, etc. can be tackled through awareness and involvement of the community.

Adult vector control – One of the most effective adult vector control measures is indoor residual spraying (IRS) with long-acting insecticides. It is particularly useful if the vector population is endophilic. IRS is not effective against JE vectors which require “space sprays”, which have a limited value during outbreaks.

Environmental management – This includes water management, solid waste management and drainage to develop a clean environment to prevent or reduce vector breeding.

6.3 Diagnosis, treatment and case management facilities for trachoma, kala-azar, yaws and leprosy

The control of the above diseases is dependent on early diagnosis, prompt/proper treatment and effective case management. National NTD control programme/s should focus on the following activities:

Diagnosis

- Capacity for clinical diagnosis of trachoma, kala-azar, yaws and leprosy using WHO case definitions
- Capacity to confirm diagnosis of kala-azar using rapid diagnostic test – rk39

Prompt and proper treatment with quality drugs/case management facilities

This applies to kala-azar, trachoma, yaws and leprosy.

Activities:

- Estimation of drug requirement and procurement
- Capacity-building of staff
- Monitoring and supervision

6.4 Integrated morbidity management

Sufferers of diseases like leprosy, LF, and trachoma are prone to develop physical disabilities if timely diagnosis and treatment is not provided. Therefore, it is important to have facilities for prevention, early detection, management and care of disabilities.

Activities

- Patient self-care learning, creating awareness among the family members to recognize early signs of disabilities using WHO guidelines
- Capacity-building of staff including community volunteers to prevent and manage disabilities
- Outreach camps for case identification and surgery
- Procurement of materials like bandages, splints, plaster of paris (PoP), buckets for soaking
- Procurement of drugs for morbidity management
- Facilities for physiotherapy and specialized footwear
- Schemes for community-based rehabilitation (CBR).

7. Recording and reporting

An integrated recording and reporting system for all NTD in the national plan will greatly reduce paperwork and the burden on the peripheral health staff. However, the national programmes implementing MDA for LF and STH and other control/elimination programmes such as leprosy, kala-azar and trachoma are already using reporting forms for individual programmes. WHO has developed a joint reporting form. The Member countries may adopt this as per their needs.

8. Framework for implementation, monitoring and evaluation

The Regional Strategic Plan will be adopted and implemented by the Member countries individually or wherever feasible through inter-country cooperation, with technical advice and guidance by the WHO Regional and country offices. WHO will assist the national programmes for NTD control in collaborating with other national and international NGOs, UN organizations and related ministries.

Objective	Task of Member countries	Task of WHO Regional and Country Offices
1. Formulation and implementation of the national plan for integrated NTD control.	(a) Development of the National Plan of Action	a) Assist Member countries in developing National Plans; b) Advocate incorporating NTD projects into major country projects
2. Accord priority to NTD whose control or elimination is endorsed by WHA or RC resolutions	(a) Ensure political will and policy support for NTD endorsed for control or elimination by WHA or RC resolutions	(a) Provide technical assistance for NTD endorsed by WHA or RC resolutions
3. Ensure intersectoral and inter-programmatic coordination	(a) Coordination between relevant sectors, various partners, ministries, WHO Collaborating Centres and national NGOs to encourage their involvement b) Formation of national-level NTD coordinating committee	(a) Coordination between UN organizations and international NGOs to seek their support for integrated NTD control b) Assist Member countries in the formation and sustaining of committees

9. Indicators for monitoring and evaluation of the regional plan

Strategic Area	Indicators
Integrated approach for selected NTD	<ol style="list-style-type: none"> 1. Number of countries where integrated control of NTD is incorporated into national health policy 2. Number of countries which have identified one national NTD officer/ coordinator/monitoring and evaluation officer for all NTD 3. Number of countries which have developed and implemented integrated NTD control plans
Assessment of the burden of NTD	<ol style="list-style-type: none"> 1. Number of countries which have established a disease monitoring system 2. Size of countries, estimated populations currently affected, those at risk and eligible population
Development and implementation of multi-intervention packages	<ol style="list-style-type: none"> 1. Number of countries which have developed and are implementing multi-intervention packages 2. Number of countries started reporting data on treatment coverage for preventive chemotherapy and other interventions in integrated programme
Capacity-building of health staff and community volunteers	<ol style="list-style-type: none"> 1. Number of countries implementing training programmes for integrated NTD control 2. Proportion (%) of health personnel (%) trained in integrated NTD control 3. Number of laboratories strengthened for diagnosis of NTD
Integrated advocacy and IEC packages to cover the selected NTD	Number of countries which have developed and disseminated an advocacy/IEC package for Integrated control of NTD

Strategic Area	Indicators
Promoting partnerships and community involvement	<ol style="list-style-type: none"> 1. Number of partners which have continued their funding support, and number of new partners involved 2. Number of public–private partnership initiatives for NTD in Member countries –(a) global, (b) regional, (c) national 3. Number of community-level organizations supporting NTD control
Ensuring free and timely access to high-quality medicines and diagnostics	<ol style="list-style-type: none"> 1. Number countries receiving donated drugs and diagnostics, number of people treated, number of diagnostic tools available and in use 2. Number of countries that have implemented quality control systems for different medicines and diagnostics
Promoting inter-sectoral and inter-programmatic approach	Number of countries that have adopted intersectoral and inter-programmatic approach to NTD control
Strengthening IVM	<ol style="list-style-type: none"> 1. Number of countries that have implemented IVM strategies 2. Number of countries that have strengthened country capacity in IVM
Research on new or improved tools	Number of research programmes and collaborating centres involved in research on NTD
Resource mobilization	Budget allocated to NTD control by governments and NGOs/partners in their annual plan
Integrated surveillance, data management, monitoring and evaluation	Number of countries that have strengthened integrated surveillance, data management, M&E.

10. Developing estimated budget for funding gap analysis

To help countries to develop an estimated budget for their integrated NTD control plan, WHO and international agencies [e.g. Research Triangle Institute (RTI)] have developed tools for funding gap analysis. Member countries are encouraged to develop realistic budgets using the funding gap analysis tool.

11. Key challenges in integrated approaches

The Region has made substantial progress in combating some NTD individually in spite of several constraints. Elimination of leprosy as a public health problem was achieved in all eleven countries by 2011. India, the only country in the Region endemic for guinea worm, was declared free from the disease by 2000. Maldives and Sri Lanka have already reached a point of elimination of LF, and the process of verification has been initiated. Thailand is marching towards reaching a point of elimination of LF. Yaws has been eliminated from India, which is planning to declare itself free from yaws. The regional targets set in this Strategic Plan can be achieved if some key challenges are addressed and overcome:

- (a) Ensuring sustained political commitment and policy support through advocacy
- (b) Sustained mobilization of sufficient resources nationally and internationally
- (c) Ensuring a supply chain system for timely delivery of quality drugs
- (d) Sustained incountry capacity of health workers
- (e) Promoting an intersectoral, inter-programmatic approach to NTD control and ensuring coordination between governments and NGOs for various activities
- (f) Cost-effective and efficient implementation and delivery of integrated Interventions

- (g) Scaling up access to the available interventions and scaling up coverage to more than 80% of the target population requiring preventive chemotherapy
- (h) Developing new or innovative local specific strategies and tools.

12. WHO initiatives and achievements

WHO pioneered the concept of projecting NTD affecting poor people as a group that causes substantial morbidity/mortality in several countries. WHO also emphasized the fact that if NTD are not addressed, the cycle of poverty is sustained. This was followed by the establishment of the Department of NTD at WHO Headquarters in 2003.

WHO organized three international meetings in 2003, 2004 and 2005 to develop strategies and tools for intensified control of NTD through a four-pronged approach:

- Ensuring broader coverage and greater accessibility to rapid impact interventions
- Promoting and strengthening IVM
- Improving surveillance and quality of care for diseases with limited control tools
- Encouraging research for new and improved tools

In October 2006, WHO developed and published a set of comprehensive guidelines on the integrated use of drugs for mass PCT. These guidelines have been distributed to the Member countries.

Many NTD such as leprosy, LF, kala-azar, trachoma and STH have received a boost through resolutions adopted at the World Health Assembly and/or WHO Regional Committees. WHO has used its lead role in health to involve other UN agencies, international NGOs and foundations to support NTD control.

The SEA Regional Office for South-East Asia organized three international partners' meetings on NTD targeted for elimination: the first in Bangalore, India in November 2005, the second in Jakarta, Indonesia in February 2007 and the third in Bangkok, Thailand in 2010. These meetings helped to raise awareness among partners about the magnitude and needs

of NTD and facilitated mobilization of funds for NTD in the Region and among Member States.

The Regional Office also established an RPRG for elimination of LF and technical advisory groups for kala-azar and leprosy.

The Regional Office also developed Regional Strategic Plans for LF (2010-2015) and for kala-azar(2011-2015) and yaws (2012-2020).

13. Timeframe for achieving regional targets

Year	Targets
2012	<ol style="list-style-type: none"> 1. Regional Strategic Plan for Integrated NTD Control is ready and shared with 11 Member countries. 2. The Member countries are advocated to incorporate integrated NTD control into national health policy. 3. Member countries initiate assessment of burden of priority NTD and develop integrated mapping (co-endemicity mapping). 4. National plan of action for integrated NTD control initiated. 5. Member countries initiate development of integrated IEC materials. 6. Member countries identify one national-level NTD officer/coordinator/M&E officer for integrated NTD control. 7. Member countries form National NTD Task Force/Coordination Committee and start functioning. 8. Member countries initiate partnerships, resource mobilization and community mobilization. 9. Member countries initiate development of intersectoral and interprogrammatic approaches.
2013	<ol style="list-style-type: none"> 1. Member countries integrated NTD control into national health policy (Bangladesh, India, Indonesia, Myanmar, Nepal and Timor-Leste). 2. National Plans of Action (POA) for integrated NTD control developed and implemented (Bangladesh, India, Indonesia, Myanmar, Nepal, Timor-Leste). 3. National task force/coordination committees begin functioning (Bangladesh, India, Indonesia, Myanmar, Nepal and Timor-Leste). 4. Capacity-building/orientation in integrated PCT delivery, M&E (PCT); national- and sub-national level programme managers/M&E officers and

Year	Targets
	<p>community-level volunteers involved in treatment delivery.</p> <ol style="list-style-type: none"> 5. Member countries deliver integrated preventive chemotherapy. 6. Member countries begin developing integrated PCT M&E guidelines including joint reporting of NTD data (Bangladesh, Indonesia, Nepal). 7. IVM implemented by Member countries. 8. Transmission assessment survey (TAS) in LF-MDA, assessment of impact of STH deworming, impact of SAFE strategy in trachoma and SCH initiated. 9. Case-finding and management in yaws and kala-azar linked to integrated NTD control and progress in elimination monitored.
2014	<ol style="list-style-type: none"> 1. Maldives, Sri Lanka and Thailand begin developing integrated NTD control plan. 2. Post-MDA LF surveillance activities are integrated with other disease surveillance activities. 3. Morbidity management of LF and leprosy integrated. 4. Member countries continue TAS in LF-MDA, assessment of impact of STH deworming, impact of SAFE strategy in trachoma and PCT in SCH. 5. Independent evaluation of progress in elimination of LF, STH, trachoma, SCH, kala-azar and yaws through integrated NTD control plan completed.
2015	<p>Member countries implement recommendations of independent evaluations and accelerated elimination activities wherever needed.</p>
2016	<p>Member countries achieve the following mid-term targets to reach global targets by 2020:</p> <ol style="list-style-type: none"> 1. To eliminate LF as a public health problem by achieving microfilarial rate of less than 1% in at least six of the nine endemic countries (Bangladesh, India, Maldives, Nepal, Sri Lanka and Thailand) by 2016. 2. To cover at least 50% of school-age and pre-school-age children requiring preventive chemotherapy for STH infection by 2016. 3. To eliminate SCH by reducing prevalence of high-intensity infections to less than 1% in Indonesia by 2015. 4. To eliminate blinding trachoma by reducing prevalence to less than 5% active trachoma in children aged 1-9 years and less than 1/1000 TT in all ages of the population in two (Myanmar and Nepal) of the three countries by 2016. 5. Elimination of kala-azar by reducing the incidence of new cases to fewer than 1 per 10 000 population in endemic areas at the <i>upzilla</i> level in

Year	Targets
	<p>Bangladesh, sub-district level in India, and district level in Bhutan and Nepal by 2015.</p> <p>6. To reduce new cases of yaws to zero in all the endemic districts in Indonesia and Timor-Leste by 2016 and reach elimination at Regional level by 2020.</p> <p>7. A 35% reduction in grade-2 disabilities in new leprosy cases at the end of 2015 compared to the baseline at the end of 2011.</p>

Annex 1

Generic template for developing plan of action for integrated NTD control

The template of the National Plan of Action of WHO/HQ, Africa and Indonesia was referred to while developing this generic regional template.

(Countries may modify suitably according to the country situation/availability of information)

Situational analysis

1. Country profile

1.1 Geography and climate

1.2 Political situation and administration

1.3 Demography

Gross national income per capita

Total expenditure on health per capita

Total expenditure on health as % of GDP

No. of Regions/States/Provinces

No. of districts

No. of Urban areas

Total population (Census : ____)

Population growth (%)

Proportion of pre-school-age children and SAC population

Proportion of females to total population

Literacy rate (%)

Proportion of people living in urban areas

1.4 Socioeconomic profile

- Economic indicators
- Education indicators
- Sanitation indicators

1.5 Health profile

- Health indicators
- Health system development
- Water and sanitation
- Immunization programme
- School health programme
- Nutrition programme
- Pregnant women clinic programme

2. Endemic situation of neglected tropical diseases

Lymphatic Filariasis

Current endemic situation, vectors, parasites, epidemiology, etc.

Mapping (Year): No. of endemic districts and population:

Morbidity information:

Strategies for control/national guidelines/work plans, etc.:

Vector control methods:

Health Workforce (all categories separately):

Prevalence of microfilarial (Mf) rate by district/implementation units

State/Province	District	Mf rate	Survey method and year

Progress of Mass Drug Administration (Preventive Chemotherapy)

MDA progress for LF elimination (Year _____)

Year	No. of IU covered	Total population requiring MDA	Target population (eligible)	No. of people treated	Programme coverage	National coverage

Disability alleviation activities

Year	Total no. of lymph edema	Total no. under care	Total no. of scrotal swellings	Total no. operated	Other

Soil Transmitted Helminthiasis (STH)

Current endemic situation, type of helminthes, epidemiology etc

Mapping: No. of endemic districts and population – Pre-school and school age

Other high-risk groups:

Strategies for control/national plans/guidelines

Water and sanitation information (Urban/rural; percentage of population accessing good water/sanitation facilities)

School health programme

Prevalence survey of STH by district (if available)

Province/State	District	STH prevalence	Survey method (year)

Classification of endemicity

High risk (prevalence: 50% or more); moderate risk (prevalence: 20% or more and less than 50%); low risk (prevalence: less than 20%)

Progress in deworming

Deworming drug used: Albendazole/Mebendazole

Mode of delivery: LF-MDA campaign/School health programme/immunization/nutrition campaigns/any other

Population group	Year	Year	Year
Pre-school age children			
Total no. of endemic districts			
No. of districts targeted			
Population at risk			
Population requiring PCT (target pop)			
Population treated & programme coverage (%)			
National coverage of population at risk			
Geographic coverage (of endemic districts)			
School-age children (SAC)			
Total no. of endemic districts			
No. of districts targeted			

Population group	Year	Year	Year
Total population at risk			
Population targeted			
Population treated & programme coverage (%)			
National coverage of population at risk			
Geographic coverage (of endemic provinces)			
Women of child-bearing age (WCBA)			
No. of districts targeted			
Population at risk			
Population targeted			
Population treated			

Schistosomiasis

Current endemic situation, vectors, parasites, epidemiology, etc.

Mapping: No. of endemic districts and population

Strategies for control/plans/activities:

Environmental control

Prevalence of schistosomiasis by district

Province	District	S. japonicum prevalence	Survey method (year)

Progress in preventive chemotherapy

Drug: Praziquantel: Dose and frequency

Population group	Year	Year	Year	Remarks
School-aged children				
Total no. of districts endemic				
No. of districts targeted				
Total population at risk				
Population targeted				
Population treated and programme coverage (%)				
National coverage of population at risk				
Geographic coverage (of endemic provinces)				

Trachoma

Current endemic situation, epidemiology, etc.

Mapping: No. of endemic districts and population

Strategies for control: Implementation of SAFE strategy/guidelines

Environmental improvement

Trachoma prevalence by district

Province	District	Prevalence		Survey (year)
		TF	TT	

Total no. of districts endemic for trachoma:

Total population at risk for trachoma:

Progress in trachoma elimination

PCT drug used: Drug and dose and frequency: Oral: Eye ointment:

Year	No. of districts covered	Target population	No. people treated with antibiotics	Programme coverage	National coverage

Surgery

Year	No. of districts covered	Target population for surgery	No. of eye surgeries done	Programme coverage	National coverage

Facial cleaning

Year	No. of districts covered	Target population taught facial cleaning	No. of people practicing facial cleaning	Programme coverage	National coverage

Environmental improvement

Year	No. of districts covered	Target population taught facial cleaning	No. of people practicing facial cleaning	Programme coverage	National coverage

Linking yaws, leprosy and kala-azar to integrated NTD control

Yaws

Current endemic situation, epidemiology, etc.:

Mapping: No of endemic districts and population at risk

Strategies for control/national plan/guidelines

Water and sanitation and hygiene

Drugs used and availability (Azithromycin / Benzthine penicillin injections)

Endemicity

State/Province	District	Yaws detection rate/100 000	Method (Year)

Progress in yaws elimination: active survey and treatment

Treatment followed: Azithromycin/Injection Benzthine Penicillin

Year	District	Population. Surveyed (village/school)	No. of cases detected	No. of Cases treated	No. of contacts	No. of contacts treated

Add information on yaws cases voluntarily reported

Leprosy

Current endemic situation, epidemiology, etc.

Strategies for control/national plans/guidelines:

Drugs used and availability:

Endemicity

State/ Province	District	Case detection		Case detection rate/ 100 000	Grade-2 disability
		MB	PB		

Progress in MDT programme

Province	District	No. of cases treated		Total
		MB	PB	

Disability alleviation activities

Kala-azar

Current endemic situation, vectors, epidemiology, etc.

Mapping: No. of endemic districts and population at risk

Strategies for control/national plans/guidelines

Vector control

Endemicity

Province	District	Case detection rate/100 000	Year

Progress in treatment

Drugs used: Drug/dose and duration:

State/ Province	District	Cases detected	Cases treated

Co-endemicity of NTD

Co-endemicity mapping: Completed/in progress

State/ Province	District	LF	STH	SCH	TRA	Yaws	Leprosy/ kala-azar	No. of NTD/ district

3. Developing National Five-Year Plan of Action (generic format)

(Countries may modify suitably according to the country situation/priority)

3.1 Goal and objectives:

Vision:

Goals/Target:

Objectives:

Goal/Target:

NTD	Global	National	Objectives
LF			
STH			
SCH			
TRA			
Yaws			
Other			

3.2 Strategic approaches and actions

Based on the challenges/opportunities and the objectives identified for the national NTD programme, identify the key strategic approaches and actions that need to be implemented in an integrated manner in order to achieve the above-mentioned goal and objectives.

Objective 1:

Strategic approach	Strategic action	Timeframe	Remarks
Scaling up PC interventions	Programme coordination		

Write the narrative explanation of the planned activities, with particular emphasis on integration across diseases.

Coordination: Programme/taskforce/Intersectoral/partners

Advocacy/resource mobilization/social mobilization

Training/orientation

IEC activities (including hygiene education)

Drug transport (from central medical store to drug distributors)

Case management (morbidity control, surgery)

Severe adverse events, surveillance, management and reporting

Monitoring and Evaluation

- Monitoring of the health impact
- Monitoring of coverage
- Reporting of adverse events

Improving water and sanitation

Integrated vector management

3.3 Partners and stakeholders

List all the partners and stakeholders involved with NTD control activities in the country and their activities and responsibilities.

3.4 Timeframe for monitoring and evaluation

MDA for lymphatic filariasis

Activity	2012	2013	2014	2015	2016
Total LF endemic IUs					
MDA in the endemic IUs					
Sentinel/spot surveys					
Stop MDA (TAS 1)					
Post-MDA surveillance					
Post-MDA surveillance TAS 2, 3					

Activity	2012	2013	2014	2015	2016
Preparation of dossier					
Verification of elimination					

Preventive chemotherapy (deworming) for soil transmitted helminthiasis

Activity	2012	2013	2014	2015	2016
Baseline STH prevalence survey (if required)					
Pre-school-age children					
School-age children					
Women of child-bearing age					
At-risk adults (special high-risk occupation)					
Assessment of impact of deworming					

Preventive chemotherapy for trachoma

Activity	2012	2013	2014	2015	2016
Baseline assessment surveys					
Case detection and treatment or PCT					
Health education on face-washing and disease prevention					
Environmental sanitation education and other improvements					
Surgery for trachoma complications					
Post-intervention endemicity level assessment					

Preventive chemotherapy for schistosomiasis

Activity	2012	2013	2014	2015	2016
Baseline survey					
Total no. of districts/sub-districts endemic					
No. of districts targeted					
Total population at risk					
Population targeted					
Population treated and programme coverage (%)					
National coverage of population at risk					
Geographic coverage (of endemic provinces)					
Assessment					

Estimated budget for integrated NTD control (Year _____)

(Add/delete activities for budgeting purpose depending upon co-endemicity of NTD)

Activity	LF	STH	SCH	TRA	Yaws/KA
Coordination					
Programme/Taskforce					
Intersectoral					
Partners, etc.					
Advocacy/Social mobilization					
Resource mobilization					
Training/Orientation					
IEC activities					
Mapping					

Activity		LF	STH	SCH	TRA	Yaws/KA
Drug procurement and supply						
Drug distribution	School-based					
	Community-based (e.g. LF-MDA)					
	Other					
Monitoring (list activities-----) 1. 2. etc						
SAEs (surveillance, management, reporting)						
Assessments (LF-TAS, STH, etc.)						
Evaluation (elimination, etc.)						
Integrated Vector Management						
Morbidity control						
Review meetings/external review, etc.						
Any other activity						
Total						

After estimating annual budget for each activity, summarize in the following table.

Summary of estimated budget requirement for five years

Activities	2012	2013	2014	2015	2016	Total
1.						
2.						
continue						
Total						

Identifying funding gaps

Activities	Total budget for five years	Contribution from government	Contribution from partners	Funding gap
1.				
2.				
continue				
Total				

(Funding gap analysis can be done using tools)

Estimating drug needs (add/delete drugs):

NTD	Drug	2012	2013	2014	2015	2016
LF	DEC					
	Albendazole					
STH	Albendazole					
	Mebendazole					
SCH	Praziquantel					
Trachoma	Tetracycline					
	Azithromycin					

NTD	Drug	2012	2013	2014	2015	2016
Yaws	Inj.Benzthine Penicillin					
	Azithromycin tablets					
Leprosy	MDT					
Kala-azar	Miltofocin/ AmBisome/any other					

Annex 2

World Health Assembly Resolutions

- (1) Resolution WHA 31.58 on Control of Endemic treponematosi (Yaws), 1978
- (2) Resolution WHA 44.9 (Recalling WHA 40.35): Elimination of Leprosy as a public health problem, 1991 and WHA 51.15, 1998
- (3) Resolution WHA 50.29: Elimination of Lymphatic Filariasis as a Public Health Problem, 1997
- (4) Resolution WHA 51.11: Global Elimination of Blinding Trachoma, 1998
- (5) Resolution WHA 60.13: Control of Leishmaniasis, 2007
- (6) Resolution WHA 54.19: Schistosomiasis and Soil transmitted helminthiasis, 2001
- (7) Resolution WHA 55.17: Prevention and Control of DF/DHF, 2002

Annex 3

Additional references

- (1) WHO (2012): Accelerating Work to Overcome the Global Impact of Neglected Tropical Diseases: A Roadmap for Implementation.
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- (3) WHO Weekly Epidemiological Record No.13 (2011): Working to Overcome the Global Impact of Neglected Tropical Diseases.
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- (14) Jai P. Narain et al (2010): Elimination of Neglected Tropical Diseases in the South-East Asia Region of the World Health Organization. WHO Bulletin.
- (15) WHO (2010): Regional Strategic Plan for Elimination of Lymphatic Filariasis 2010-2015.
- (16) WHO (2011): Regional Strategic Framework for Elimination of Kala-azar from the South-East Asia Region 2011-2015.
- (17) WHO (2006): Regional Strategy on Eradication of Yaws (2006-2010). (Under revision)

- (18) WHO (2011): Comprehensive Guidelines for Prevention and Control of Dengue and Dengue Haemorrhagic Fever (revised and expanded version).
- (19) WHO: Dengue Strategic Plan for the Asia-Pacific Region 2008-2015.
- (20) WHO (2009): Enhanced Global Strategy for Further Reducing the Disease Burden Due to Leprosy: Plan period 2011-2015.
- (21) Sunish IP et al (2007): Vector control complements mass drug administration against *bancroftian* Filariasis in Tirukoilur, India. *Bulletin of the WHO*, February 2007; 85(2).
- (22) Mani et al, (2004): Effectiveness of two annual, single-dose mass drug administrations of diethylcarbamazine alone or in combination with albendazole on soil-transmitted helminthiasis in filariasis elimination programme. *Trop Med Int Health* 9:1030-1035.
- (23) WHO (2011): Implementation of Integrated Vector Management: Report of the Regional Meeting, Chiang Mai, Thailand, 2010.
- (24) M. Oriol et al, (2012): Single-dose azithromycin versus benzthine benzyl penicillin for treatment of yaws in children in Papua New Guinea: an open-label, non-inferiority, randomized trial. *The Lancet*, January 2012.
- (25) WHO Weekly epidemiological record, 51/52 (2011): Managing Morbidity and Preventing Disability in the Global Programme to Eliminate Lymphatic Filariasis: WHO Position Statement.
- (26) www.who.int/neglected_disease/en

Annex 4

Report on Informal Consultation on Finalizing Regional Strategic Plan for Integrated Neglected Tropical Diseases 2012-2016

The WHO Regional Office for South-East Asia organized a two-day informal consultation to finalize the draft Regional Strategic Plan for Integrated Neglected Tropical Diseases: 2012-2016 in New Delhi on 9-10 August 2011.

Dr Myo Thet Htoon, Team Leader, Global Leprosy Unit at the Regional Office welcomed the participants on behalf of the Regional Director and opened the consultation. He highlighted the increasing priority and focus given by WHO and international partners to the control/elimination/eradication of some of the priority NTD. He added that the time is opportune to integrate activities combating NTD through cost-effective innovative approaches since more and more pharmaceutical partners and donors are coming forward to support such approaches. He urged the experts to discuss in depth and finalize the regional strategic plan to move forward.

Dr A.P. Dash, Regional Adviser, Vector-Borne and Neglected Tropical Diseases (VBN), WHO-SEARO, welcomed the participants and explained that the main objective of the informal consultation was to finalize the draft Regional Strategic Plan for Integrated NTD Control: 2012-2016, prepared by the Regional Office. He also emphasized that the regional strategic plan will be an advocacy tool for Member countries to initiate integrated approaches to reach global targets by 2020, taking the maximum advantage of the opportunities available.

Technical sessions

1. *Progress in eliminating NTD in South-East Asia*

Dr A.P. Dash in his presentation highlighted that the South-East Asia Region (SEAR) accounts for the second highest burden of NTD among WHO regions. Leprosy, LF, STH, kala-azar, trachoma, SCH and yaws are some of the priority diseases targeted for elimination. Leprosy had been eliminated as a public health problem from the Region by 2011. Yaws has been eliminated as a disease in India. The Region has developed a map showing distribution of NTD (Annex 1). He summarized the current status

of implementation and progress in the Region related to control/elimination of the targeted diseases. Since several drugs are available from pharmaceutical donors through WHO and more and more international partners are coming forward to support integrated NTD control activities, the Region can hope to achieve some of the targets set for elimination by 2015 or 2020. The SEA Region has already developed a Regional road map in line with WHA resolutions and the global road map.

2. *Global Plan to Combat Neglected Tropical Diseases: 2008-2015*

Dr C.R. Revankar, NTD Officer from VBN / SEARO in his presentation, described salient features of the WHO Global Plan to Combat Neglected Tropical Diseases: 2008-2015. This plan prioritizes some NTD according to (i) tool-ready diseases targeted for elimination or eradication by resolutions of the WHA and Regional Committees (dracunculosis, leprosy and LF); (ii) other tool-ready diseases (blinding trachoma, onchocerciasis, SCH, STH, yaws, rabies, etc.) and (iii) tool-deficient diseases (buruli ulcer, Chagas disease, dengue, etc.). With the advent of effective MDA/PCT, some diseases, e.g. LF, SCH and blinding trachoma had been reduced. The global plan identified some of the important strategic areas to develop regional and national plans involving integrated approaches. Some of these are: assessment of the burden of NTD and zoonoses, integrated approach and multi-intervention packages, strengthening health care systems and capacity-building, advocacy, supply of free drugs, strengthening partnerships and resource mobilization, and implementation of IVM.

Accordingly, the Regional Strategic Plan for integrated NTD control which is to be finalized in this consultation has been drafted. The plan encompasses LF, STH, SCH, blinding trachoma, kala-azar, yaws and leprosy.

3. *Experiences from ongoing integrated NTD control: Lessons learned and challenges*

Dr John Gyapong, Vice Dean, School of Public Health, University of Ghana gave a broad viewpoint about health services, health financing, human resources, logistics, information systems and governance issues relating to African countries as a group and their influence on NTD control/elimination activities. He explained how an efficiency of 98% can result in effectiveness

of only 37% when parameters such as access, drug distribution, compliance and patient follow-up are affected.

Since most African countries have generally weak health systems and limited human and other resources, Dr Gyapong gave some suggestions on how to implement integrated NTD control without waiting for strengthening of health systems. He emphasized that innovative approaches have to be worked out for implementing NTD interventions using existing health systems, however weak. It has been successfully done in a few countries in Africa utilizing workers from other ministries and sectors.

Dr Gyapong pointed out that delivery of preventive chemotherapy for LF, STH, onchocerciasis, SCH and trachoma can be grouped together. In addition, social mobilization, IEC, training, morbidity control and preventive measures like LLIN and vector control can be integrated. In conclusion, he highlighted the following:

- Where things fit well, do them together; where they don't, do them separately;
- Look for ways and means to coordinate efforts to deliver in the most cost-effective way;
- Work together to design integrated interventions;
- Be willing to be flexible for adaptation;
- The aim should be on "delivery of interventions" and not so much on "preserving a system that does not deliver".

4. *Integrating STH MDA into integrated NTD control*

Dr Maria Rebollo from the Centre for Neglected Tropical Diseases (CNTD), UK suggested the following ways of integration:

- (a) Interventions that target similar age-groups, e.g. school-age children or pre-school children: childhood vaccinations, nutrition, vitamin A, MDA for LF/STH;
- (b) Interventions meant for women of child-bearing age;
- (c) Interventions that share a frequency of distribution, e.g. annual for LF, SCH and trachoma; biannual for STH, vitamin A, etc.

Dr Rebollo pointed out that it is important to ensure that implementation of integrated strategies is operationally feasible with the health staff and drug distributors adequately trained and logistics in place. With regard to integrated IEC, she cautioned that not all messages can be integrated, even though this would be ideal.

Dr Rebollo explained how deworming as a strategy for STH control can be used as a measure for covering other NTD programmes – deworming shows visible results through worms being expelled in the faeces and the improvement in the physical/mental growth of children. She emphasized that there are factors beyond MDA and integration such as safe water, sanitation, hygiene and proper excreta disposal which need to be addressed. It is obvious that the fight against helminthes cannot be by drugs alone. In conclusion, she reminded participants of the acronym “WASHED”: Water; Actors; Sanitation; Hygiene; Education and environment; Deworming. She elaborated on WASHED through the experiences of countries like Brazil, Cameroon and Haiti.

5. *Integrating trachoma elimination into integrated NTD control in Nepal*

Dr B.B. Thapa from the Trachoma Control Programme, Nepal highlighted the main features of “Vision 2020 – The Right to Sight” and the WHO-recommended SAFE strategy for control of blinding trachoma. He also gave details of the trachoma rapid appraisal, trachoma prevalence survey and the impact survey carried out in Nepal. He discussed trachoma control activities that could be integrated into other NTD control and informed that on the basis of NTD mapping done in Nepal, it is proposed to implement an integrated programme for LF, STH and trachoma in 10 districts, LF and STH in 50 districts, STH and trachoma in two districts, and STH alone in 13 districts. Twelve districts are yet to be mapped. The activities that can be integrated include capacity-building, IEC, MDA and morbidity control.

Dr Thapa mentioned the following challenges in implementing integrated activities that need to be addressed: inadequate resources, lack of common tools, resistance from health workers, parallel delivery strategies and lack of coordination. He concluded by suggesting that the integrated mapping and integrated implementation followed by Nepal could serve as a model for other countries.

6. *RTI/NTD control programme in Nepal: A partner's viewpoint*

Dr R.P. Raman explained that Research Triangle Institute (RTI) assists the Government of Nepal in planning, designing and implementing integrated NTD control, encompassing LF, STH and trachoma. The government decides on the activities which are to be integrated.

RTI support to the Government of Nepal includes (a) development of an integrated plan of action for NTD in April 2010; (b) supporting the Steering Committee and the Technical Working Group meetings of all stakeholders. The meetings are chaired by the Director-General of Health Services; (c) development of integrated IEC as a first step, with future plans to develop integrated training materials for different levels of health workers; (d) doing a financial gap analysis for the benefit of all stakeholders; (e) assisting in the integrated implementation and monitoring of LF and STH; (f) assisting in the integrated mapping of NTD.

7. *Integrating lymphatic filariasis MDA into integrated NTD control*

Dr Revankar highlighted that the Global Programme for Elimination of Lymphatic Filariasis is the most rapidly expanding global health programme today with a remarkable global impact. He said that the goal of reducing the NTD burden will be achieved if LF elimination becomes a success.

He pointed out that a “treasure box” has opened for NTD since (a) NTD have attracted interest in a crowded global health landscape; (b) elimination of NTD is specifically mentioned as an objective in the Global Health Initiative of the President of the USA; (c) support for NTD has already been received from the United States Agency for International Development (USAID), the UK Department for International Development (DFID), the Bill & Melinda Gates Foundation and some G-8 countries; (d) a number of pharmaceutical companies are donating the required drugs; and (e) more and more partners are joining to fight NTD. In addition, there is a realization that control of NTD will have a positive impact on the achievement of the MDGs. He pointed out that a very effective and attractive low-cost package of PCT could effectively combat LF, STH, SCH and trachoma in the SEA Region, and cost savings could be achieved through integrated innovative approaches.

8. Strategic Plan for Control of NTD in Indonesia

Dr Rita Kusriastuti, Director, Vector Borne Disease Control, MoH, Indonesia described the burden and endemicity of LF, SCH and STH in her country. All three parasites – *W.bancrofti*, *Brugia malayi* and *Brugia timori* – are prevalent in the country, and 334 of the 450 districts are LF-endemic, with about 12 000 chronic cases recorded. She explained the salient features of the Action Plan for Elimination of Lymphatic Filariasis 2011-2015 and said that Indonesia hopes to achieve LF elimination by 2020.

During 2010, MDA was implemented in 110 of the 337 endemic districts and by 2015, 230 districts will be covered. The remaining districts will implement MDA by 2017.

Dr Kusriastuti said that SCH is endemic only in three pockets of Central Sulawesi province. She explained the salient features of the Plan of Action for Elimination of Schistosomiasis which aims at reducing the prevalence in humans and snails to <1% by 2015 through selective MDA with praziquantel biannually.

STH control is integrated with LF. The country aims to reduce STH prevalence to <20% by 2015.

Dr Kusriastuti listed some of the important challenges: (a) mobilization of adequate resources (presently nearly 75% of the planned activities remain unfunded); (b) limited social mobilization, IEC and advocacy; (c) difficulties in intersectoral and inter-programmatic coordination; (d) difficulties in reaching remote and hard-to-reach areas. She concluded by emphasizing that the challenges can be overcome if adequate funds are available.

Addressing an integrated NTD control plan in Indonesia, she said that the Ministry of Health has developed a five-year plan 2011-2015 combining LF, STH, SCH and linking leprosy and yaws. USAID is the main partner committing funding for the implementation of the plan.

9. *Incorporating integrated vector management into integrated NTD control*

Dr N. Arunachalam from the Vector Control and Research Centre (VCRC), Pondicherry, India, emphasized the growing need for IVM in order to tackle NTD since many of them are vector-borne. He highlighted the five key elements for successful IVM: (1) advocacy, social mobilization and legislation; (2) cross-sector collaboration; (3) integrated approaches; (4) evidence-based decision-making; and (5) capacity-building.

Dr Arunachalam elaborated upon the various vector control methods experimented with at Centre for Research in Medical Entomology for rice-field mosquitoes, including effective water management, use of insecticide-treated curtains/nets, use of polystyrene beads, application of extended polystyrene (EPS) beads in modified cesspit, insect growth regulators (especially for dengue control), biological control, use of copepods, *Bacillus thuringiensis israelensis* (Bti), use of larvivorous fish, insecticide-treated materials, lethal ovitraps, etc. He said that it is possible to implement community-based vector control with proper orientation of the community. Simple methods like elimination of containers, coconut shells, tyres, covering water tanks and use of insecticide-treated nets can have an impact on the control of vector-borne diseases.

10. *Resource mobilization and role of partners*

Dr Amanda Miller (GNNTDC/USA) pointed out that mobilization of resources needs (a) creating political will at global, regional and national levels; (b) easy access to data; (c) highlighting the impact of interventions; (d) creating efficiencies; (e) effective social media campaign. She stressed the importance of advocacy in highlighting the work/activities, highlighting the social indicators like improved school attendance, increased cognition, disability alleviation, effective morbidity management, projection of success stories, writing for the blogs, e.g. www.endtheneglect.com, sharing of data, pictures, quotes, quotes from satisfied clients, etc. as useful tools in resource mobilization.

11. *Developing integrated action plans: funding gap analysis*

Dr Rebollo of CNTD emphasized that the health ministry in each country leads the national NTD control programme and partners provide funding support and technical assistance. She said that the National Plan of Action should clearly state who is doing what, where and how.

The multi-year National Plan of Action should have a summary situation analysis, realistic and achievable goals, objectives, and expected results, actions/activities to be implemented, a logical framework and a budget plan. For purpose of developing integrated action plans, the first step is to identify activities that can be integrated – mapping, advocacy, social mobilization, training and school-based or community-based MDA are some of these. The next step is to undertake a funding gap analysis as follows:

- Total estimated costing of NTD programmes (A)
- Expected contribution from government and donors (B)
- Funding gap (C) = A-B

In trying to do the above analysis, it is necessary to collect country/demographic data, estimated cost per person treated, determine total costs by activity, identify “cost drivers” and link the NTD programme budget by impact. A funding gap analysis tool is available from WHO.

12. *Integrated monitoring and evaluation and reporting*

Dr John Gyapong stressed that coverage is the most important monitoring indicator, common to all WHA resolutions. He illustrated his point by presenting Resolution WHA 50.29 on Elimination of Lymphatic Filariasis (1997) and WHA 54.19 on Control of Schistosomiasis and STH (2001). He mentioned the new M&E website which links to NTD data and the Global Health Observatory. He said that we now have simplified tools for M&E and the possibility to collect data using mobile phones. Drug monitoring will be a crucial component.

Finally, he hoped that countries would move towards submitting data in one single national report, covering all diseases where PCT is employed.

13. Finalizing draft Regional Strategic Plan for integrated NTD Control 2012-2016

Dr Derek Lobo gave a summary of the draft Regional Strategic Plan. The draft was finalized by the participants after in-depth discussion.

Recommendations

The participants, placing on record their appreciation and thanks to the Regional Director, WHO SEA Regional Office for taking the initiative to develop a Regional Strategic Plan for Integrated NTD Control, made the following recommendations:

- (1) The WHO Regional Office for South-East Asia to assist Member countries in developing and implementing Integrated NTD control plans of action and ensure achievement of the regional targets within a specified timeframe.
- (2) The WHO Regional Office to consider adopting a resolution at the Regional Committee urging Member countries to give high priority to integrated NTD control and allocate adequate resources for implementation of integrated strategies/activities, since the implementation of critical activities for integrated NTD control will depend on mobilization of adequate resources, inter-sectoral approaches and strong political commitment and policy support.
- (3) Considering that the LF elimination programme is the largest public health programme using the strategy of PCT/MDA in the Region, covering a population of 880 million in 2010, it is recommended that Member countries integrate LF elimination with other diseases where PCT/MDA is the main intervention, e.g. STH, SCH, and trachoma, where the diseases are co-endemic. Non-PCT diseases such as kala-azar and yaws, wherever applicable, are to be linked to integrated plans.
- (4) Noting that IVM can be an effective preventive measure for vector-borne NTD, it is recommended that the WHO Regional Office encourage implementation of IVM as a useful adjunct to PCT for integrated control of NTD.
- (5) WHO-SEARO in collaboration with Member countries should explore the possibility of accessing funds from the Global Fund for HIV/TB/malaria for integrated NTD control. The possibility of obtaining funds from international and national foundations and other bilateral/multilateral agencies may also be actively explored.

Around one billion people in the developing world are the victims of poverty-related tropical diseases widely known as “neglected tropical diseases (NTD)”. The WHO South-East Asia (SEA) Region accounts for 26% of the current global population of seven billion. Among the WHO Regions, the SEA Region has the second-highest burden of NTDs. Since many NTDs are co-endemic in districts, integrated approaches for prevention and care are found to be cost-effective. Lymphatic filariasis (LF), soil-transmitted helminthiasis (STH), kala-azar, blinding trachoma, schistosomiasis, yaws and leprosy are some of the priority NTDs in the Region being targeted for control/elimination.

The Regional Strategic Plan for integrated NTD control 2012-2016 was drafted and finalized at an informal consultation of experts held at the WHO Regional Office for South-East Asia, New Delhi on 9-10 August 2011.

This report presents the synopsis of deliberations held at the consultation, as well as recommendations.



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