

Kingdom of Cambodia

Nation Religion King



National AIDS Authority

**The Financial resource for the
comprehensive & multi-sectoral response
to HIV/AIDS III (2011-2015)
in Cambodia**

September 2010

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ART	Anti-Retroviral Therapy
BSS	Behavioural Sentinel Surveillance
DFID	Department for International Development (UK)
EW	Entertainment Worker
GFATM	Global Fund for AIDS, Tuberculosis and Malaria
GF R7	Global Fund Round 7
GF R9	Global Fund Round 9
HIV	Human Immunodeficiency Virus
IDU	Injecting Drug User
M&E	Monitoring and Evaluation
MARPs	Most at Risk Populations
MSM	Men who have Sex with Men
NAA	National AIDS Authority
NASA	National AIDS Spending Assessment
NBTC	National Blood and Transfusion Center
NCHADS	National Center for HIV/AIDS, Dermatology and STDs
NSP	National Strategic Plan
OI	Opportunistic Infection
OVC	Orphans and Vulnerable Children
PEP	Post-exposure Prophylaxis
PEPFAR	President's Emergency Plan for AIDS Relief
PLHIV	People Living with HIV
PMER	Planning, Monitoring, Evaluation and Research
PMTCT	Prevention of Mother-to-Child Transmission
RNM	Resource Needs Model
STI	Sexually Transmitted Infection
TB	Tuberculosis
UNAIDS	United Nations Programme on HIV/AIDS
UNDOC	United Nations Office on Drugs and Crime
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	The United Nations Children's Fund
US\$	United States Dollars
VCCT	Voluntary Confidential Counselling and Testing
WFP	World Food Programme
WHO	World Health Organization

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Phnom Penh, 25th October 2010



H.E. Dr. Nuth Sokhom
Senior Minister
Chair of the NAA

EXECUTIVE SUMMARY

This report presents the summary of the costs of Cambodia's National Strategic Plan for a Comprehensive and Multisectoral Response to HIV/AIDS (NSP III) for the period 2011-2015 as well as an estimation of the resources that will be available and an analysis of the forecasted financing gap. The report also explains how data was collected on the resources available and summarizes the methodology used in the estimation of the resources needed as well as its main limitations.

The Resources Needs Model (RNM) was used to estimate the total costs of the NSP III. It is estimated that a total of US\$ 516.3 million will be required for the period 2011–2015 to implement the plan. US\$ 88.6 million will be needed in 2011 and the resources required will gradually increase to US\$ 118.9 million in 2015, reflecting a steady increase in population coverage and targets set forth by the NSP III.

Strategy 1, focusing on HIV prevention activities, amounts to US\$ 180.8 million for the five years, representing 35% of the total costs of the NSP III. Strategy 1/Prevention includes the cost of outreach, peer education and counselling targeting most-at-risk populations (MARPs), condom procurement, clinical prevention activities including-, prevention of mother-to-child transmission (PMTCT), and the prevention and treatment of sexually transmitted infections (STIs). This strategy also involves a number of activities to ensure that within the health system there is the basic infrastructure to practice safety and precautions. The major cost categories of Strategy 1/Prevention are condom procurement, services, interventions targeting Entertainment Workers, mass media, interventions targeting the military, and PMTCT services.

Strategy 2/Care and Treatment accounts for 35% of the total estimated costs for an amount of US\$ 179.2 million. The major costs categories under Strategy 2 include the costs of a new cohort of anti-retroviral therapy (ART) patients due to the new guidelines on ART eligibility of MoH and Voluntary Confidential Counselling and Testing (VCCT).

Strategy 3 dealing with Impact Mitigation amounts to US\$ 45.3 million, 9% of the total costs and targets activities towards HIV-affected orphans and vulnerable children and assistance for People Living with HIV (PLHIV). Strategy 4/Coordination, Management and Administration amounts to 14% of the total costs of the period for US\$ 69.7 million. Strategy 5/Legal and Policy Enabling Environment totals US\$ 4.9 million (1% of total costs). The costs of Strategy 6/Monitoring and Evaluation (M&E), Research and Surveillance are estimated at US\$ 32.4 million (6% of the total NSP costs). Strategy 7/Resource Mobilization costs have been estimated at US\$ 4.1 million for the period (1% of total costs).

This document also presents the results of the estimated sources available for the HIV and AIDS response in Cambodia. Based on data provided by the major financing sources and on documents related to the remaining funding of two rounds of financing of HIV programmes by the Global Fund for AIDS, Tuberculosis and Malaria (GFATM) for Cambodia, resources available for the 2011-2015 period were estimated at US\$ 272.0 million. This amounts to US\$ 54.4 million per year, which is close to the \$US 51.8 million total spending estimate for 2008 derived from the last National AIDS Spending Assessment (NASA). However, this level of funding can only be

categorized as probable as many financing sources mentioned that their level of funding should not be taken for granted because it has yet to obtain formal approval.

The financing gap was calculated on the basis of the costs and the estimates of resources available for addressing HIV/AIDS. The gap is projected to be US\$ 244.3 million for the NSP III period which will run from 2011 to 2015 which means on average there is a funding gap of US\$ 48.8 million per year.

Considering the global economic downturn in the last two years and the reduction in Cambodia's economic growth, it is anticipated that funding for HIV/AIDS in next five years will be less than in the 2006-2010 period. It is hoped that this analysis will contribute to provide an objective basis for prioritization of interventions identified under the new strategic plan.

I. METHODOLOGY

Costing

The Resource Needs Model (RNM) was used to estimate the resource implications of the various prevention, care and treatment and impact mitigation interventions as well as of the programme support identified in the 2011–2015 National Strategic Plan (NSPIII). RNM has been applied in Cambodia for costing HIV and AIDS activities since 2005.

The basic approach of the RNM is to first establish an estimate the size of the population target group in need of specific HIV/AIDS related interventions or services. A coverage target, usually identified in the strategic plan, is then entered into the model to estimate the proportion of the population that will need to be reached by the intervention or will use the service. A unit cost of a given intervention or service is then developed and multiplied by the number of the population that needs to be covered in order to obtain the total cost of the intervention or service.

To adapt the RNM to Cambodia's situation and needs, a process of data reconciliation and verification was undertaken. Meetings were held with various stakeholders, particularly with NAA staff in the PMER department as well as UNAIDS, NCHADS, the United Nations Children's Fund (UNICEF) and other partner organizations in order to identify the data that needed to be adjusted or newly entered into the model.

Many of the sizes of the target groups were obtained from Cambodian surveys such as the Behavioural Sentinel Surveillance (BSS) survey, or other sources such as previous costing exercises. Coverage targets were principally obtained from the NSP III.

Unit costs used in the model were drawn from a unit cost list developed by the NAA and from other previous HIV/AIDS costing exercises carried out in Cambodia as well as from the President's Emergency Plan for AIDS Relief (PEPFAR), the World health Organisation (WHO), and UNICEF procurement price lists.

The RNM was customized to reflect the 7 strategies of the NSP III. The results of the resource needs estimation is broken down by intervention category, by strategy in the National Strategic Plan, and into the standard categories of:

1. Prevention
2. Care and Treatment
3. Impact Mitigation
4. Coordination, Management and Administration
5. Legal and Policy environment
6. M&E, Research and Surveillance
7. Resource Mobilization

An inflation index of 3% per year was built into all the calculations of costs.

Projection of Financial Resources Available

A request was sent via email to HIV/AIDS partners in Cambodia, both bilateral and multilateral institutions and key partners asking them to provide information on their future financing of HIV/AIDS in Cambodia in the period 2011-2015. Partners were requested to disaggregate their financing data by the same categories than those used in the past NASAs. Data on funding available was also collected from GFATM Round 7 and Round 9 and included in the projection of financial resources for HIV/AIDS that will be available in the next 5 years for the implementation of NSP III. Additional information was gathered through visits to a limited number of institutions and through face-to-face discussions on their future funding plans.

Most of the replies that were obtained have offered data for the whole NSP III period. Some institutions could only reveal financing commitments for the first three years of the plan. Also, in those few cases where only total financing amounts were provided and no disaggregated data were submitted, the 2008 NASA percentage distribution was used to break the total amount into the different NASA categories.

Data provided in non United States dollars (US\$) denominated figures were converted using the exchange rates of these currencies with the US\$ in June 2010.

Resource Gap

The resource gap was calculated as the difference between the RNM calculated total costs associated with the implementation of the NSP III and the projected financial resources that will be available for this purpose.

II. COSTING OF NSP III

NSP III Estimated Total Costs

Table 1 below presents the annual and total resource requirements for the period from 2011 to 2015. The total resource requirement for the years 2011-2015 is estimated at US\$ 516.3 million. The cost estimates show a gradual progression from US\$ 88.6 million in 2011 to US\$ 118.9 million in 2015, reflecting an increase in the population, coverage and targets set forth by the NSP III.

Table 1: NSP III Costs Estimates Summary for 2011-2015, in US\$ Million

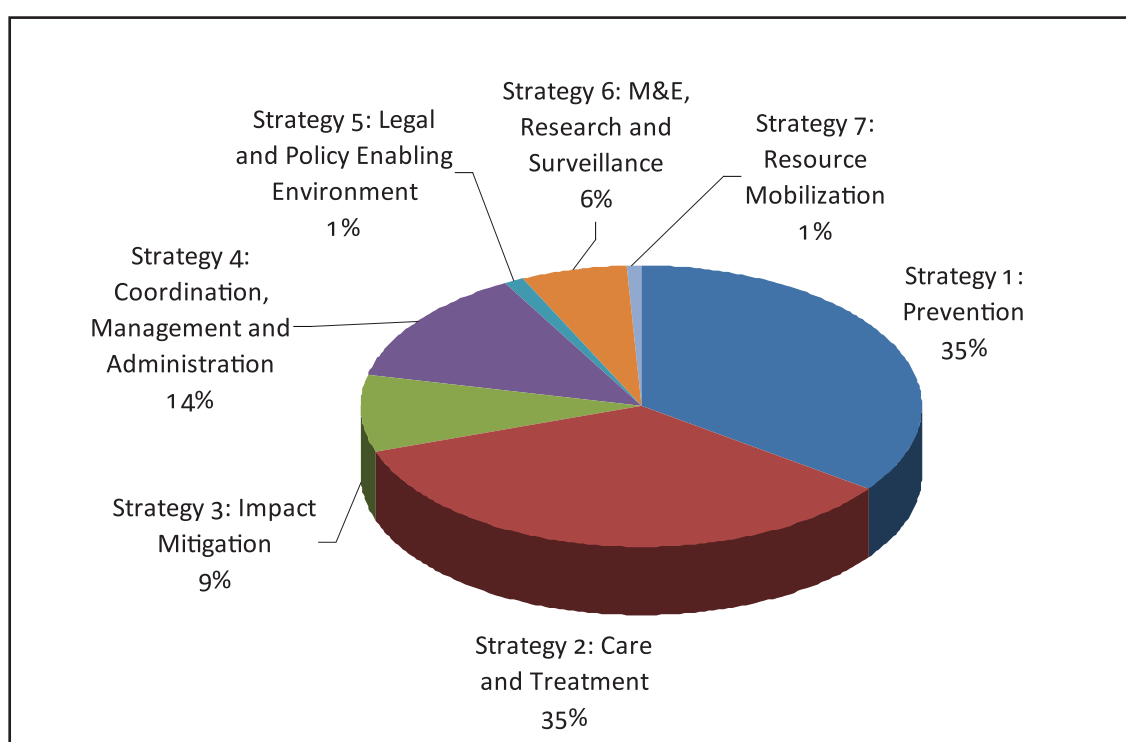
NSP III - Strategies	2011	2012	2013	2014	2015	Total	%
Strategy 1: Prevention	\$ 29.8	\$ 32.5	\$ 35.9	\$ 39.4	\$ 43.3	\$ 180.8	35%
Strategy 2: Care and Treatment	\$ 32.5	\$ 34.0	\$ 35.8	\$ 37.4	\$ 39.5	\$ 179.2	35%
Strategy 3: Impact Mitigation	\$ 7.2	\$ 8.4	\$ 9.1	\$ 9.9	\$ 10.6	\$ 45.3	9%
Strategy 4: Coordination, Management and Administration	\$ 12.0	\$ 12.9	\$ 13.9	\$ 14.9	\$ 16.1	\$ 69.7	14%
Strategy 5: Legal and Policy Enabling Environment	\$ 0.8	\$ 0.9	\$ 1.0	\$ 1.0	\$ 1.1	\$ 4.9	1%
Strategy 6: M&E, Research and Surveillance	\$ 5.6	\$ 6.0	\$ 6.5	\$ 6.9	\$ 7.5	\$ 32.4	6%
Strategy 7: Resource Mobilization	\$ 0.7	\$ 0.7	\$ 0.8	\$ 0.9	\$ 0.9	\$ 4.1	1%
Total	\$ 88.6	\$ 95.5	\$ 102.9	\$ 110.4	\$ 118.9	\$ 516.3	100%

Figure 1 below shows the percentage distribution of each one of the seven NSP III strategies. In the sections which follow the graph each strategy is described in further detail.

Table 1 and Figure 1 show that Strategy 1/Prevention and Strategy 2/Care and Treatment each account for roughly one third of total resources required for the period for a cost of US\$ 180.8 and US\$ 179.2 million respectively.

The cost of Strategy 3/Impact Mitigation amounts to US\$ 45.3 million, 9% of the total costs of NSP III. The costs of Strategy 4 for the Coordination, Management and Administration of the programmes amounts to US\$ 69.7 million or 14% of the total costs associated with NSP III implementation. The costs of Strategy 5/Legal and Policy Enabling Environment's are estimated at US\$ 4.9 million for the 5-year period (1% of the total NSP III costs). The costs of M&E, Research and Surveillance are estimated at US\$ 32.4 million (6%) of total costs. In addition, the costs of Strategy 7 focusing on Resources Mobilization are estimated at US\$ 4.1 million in 2011-2015 (1% of total costs).

Figure 1: NSP III Cost Estimates 2011-2015



Strategy 1: Prevention

Table 2 below shows the details of Strategy 1 concerning Prevention. This strategy will require a total of US\$ 180.8 million and can be analyzed along the lines of different sub- categories which are included in the RNM:

- **Priority populations:** includes the costs of peer education, outreach, venue-based and counselling activities targeting specific groups at high risk of HIV infection to reduce risky behaviour.
- **Service delivery:** comprises the costs of interventions aimed at making specific HIV prevention related commodities and services available to priority populations (e.g., condom provision, STI management, PMTCT).
- **Health care:** consists of the costs of activities aimed at preventing HIV transmission in the health care system and ensuring blood products and medical equipment are safe and health care personnel are protected from HIV infection.

Table 2: Strategy 1 Prevention, in US\$ Million

	2011	2012	2013	2014	2015	Total 5 years
Total	29.8	32.5	35.9	39.4	43.3	180.8
Priority populations						
School Based Interventions	1.1	1.3	1.5	1.8	2.1	7.9
Entertainment Workers	3.4	3.7	4.0	4.3	4.7	20.2
Workplace	1.9	2.0	2.1	2.2	2.3	10.6
Injecting Drug Users	0.9	1.0	1.2	1.5	1.7	6.3
Men who have Sex with Men	1.4	1.5	1.6	1.6	1.7	7.8
Military	2.6	2.7	2.9	3.0	3.2	14.4
Police	0.7	0.7	0.8	0.8	0.8	3.8
Migrants & Mobile Populations	0.6	0.6	0.6	0.6	0.7	3.1
Service delivery						
Condom provision	10.2	11.7	13.2	14.9	16.7	66.8
STI management	1.0	1.1	1.3	1.5	1.7	6.6
PMTCT	1.7	2.2	2.6	2.9	3.2	12.5
Mass media	3.2	3.3	3.4	3.5	3.6	17.0
Health care						
Blood safety	0.3	0.3	0.4	0.4	0.4	1.8
Post-exposure prophylaxis	0.6	0.1	0.2	0.2	0.2	1.2
Safe injection	0.0	0.1	0.1	0.2	0.2	0.6
Universal precautions	0.0	0.0	0.0	0.0	0.0	0.1

The most important cost sub-categories in Strategy 1 Prevention are the following:

- Condom provision for US\$ 66.8 million (13% of total NSP III costs). This reflects the condom needs of the priority populations identified in the NSP III including Entertainment Workers (EWs), Men Who Have Sex With Men (MSMs), Injecting Drug Users (IDUs) as well as condoms required by the general population especially for casual sex.
- Interventions targeting Entertainment Workers amounting to US\$ 20.2 million (4% of the total NSP plan) to meet the needs of the over 35,000 EWs that the NSP is targeting. Mass media accounts for US\$ 17.0 million (3% of total costs) for the NSP III period.
- Programme costs targeting the military and the police will amount to US\$ 14.4 and US\$ 3.8 million respectively. The estimated size of each of these groups is quite significant. The model uses over 131,000 military personnel and 69,000 police for the base year 2011.
- Other costs of Strategy 1 Prevention are the following:
 - PMTCT estimated at US\$ 12.5 these costs reflect the new procedure of administering triple prophylaxis for positive pregnant women
 - Workplace activities estimated at US\$ 10.6 million for the period 2011-2015.

- The Health Care delivery costs account for a total US\$ 3.7 million to ensure blood and other safety measures and promote universal precautions in health care delivery settings. The post-exposure prophylaxis (PEP) costs include a component for PEP kits for rape victims¹. This is in addition to the kits for accidental exposures to HIV infection in health care delivery settings. The PEP costs also include costs of developing guidelines, training materials and training sessions for the police force and providers to deal with rape issues².

Strategy 2: Care and Treatment

Table 3 below shows the details of Strategy 2 on Care and Treatment amounting to US\$ 179.2 million.

Table 3: Strategy 2 Care and Treatment, in US\$ Million

	2011	2012	2013	2014	2015	Total 5 years
Total	32.5	34.0	35.8	37.4	39.5	179.2
ART Therapy	12.2	12.5	13.1	13.4	14.1	65.3
Non-ART care and prophylaxis	13.0	13.7	14.3	15.0	15.8	71.9
VCCT	5.4	5.9	6.4	7.0	7.6	32.4
Home Based Care	1.8	1.9	1.9	2.0	2.0	9.6

Anti-retroviral therapy (ART) totals US\$ 65.3 million and includes the ART needs for adult and paediatric first and second line therapy as well as ART for tuberculosis (TB) patients. The estimated number of people in need of ART was calculated based on the new MoH guidelines for ART eligibility³.

Costs of non-ART care and prophylaxis is estimated at US\$ 71.9 million. This includes costs of laboratory tests, opportunistic infections (OIs) prophylaxis, palliative care, and costs related to the strengthening laboratories and to improving quality assurance.

VCCT services represent the third highest category in terms of costs in Strategy 2/Care & Treatment and amounts to US\$ 32.4 million and represent the interventions necessary to gradually increasing the percentage of the Cambodian population from 5.2% in 2011⁴ to 7% in 2015.

¹This includes costs of developing guidelines and training the police and health care providers in delivering legal and social services to rape victims.

²The model includes a one time cost of developing guidelines and initial training sessions for the police force and service providers in 2011 and maintenance costs from 2012 to 2015 for updating new entrants into the police force and into service provider personnel.

³See www.unaids.org/en/KnowledgeCentre/Resources/FeatureStories/archive/2009/20091130_WHO_recommendations.asp

⁴The model includes a one time cost of developing guidelines and initial training sessions for the police force and service providers in 2011 and maintenance costs from 2012 to 2015 for updating new entrants into the police force and into service provider personnel.

Strategy 3: Impact Mitigation

Table 4 below presents the details for Strategy 3 regarding interventions aimed at mitigating the impact of HIV/AIDS whose total costs are estimated at US\$ 45.3 million for the 5-year NSP III period.

Table 4: Strategy 3 Impact Mitigation, in US\$ Million

	2011	2012	2013	2014	2015	Total 5 years
Total	7.2	8.4	9.1	9.9	10.6	45.3
Orphan care	7.2	7.5	7.9	8.3	8.6	39.5
PLHIV Support	0.0	0.9	1.2	1.6	2.0	5.8

This strategy covers the costs of two main components of the NSP III: support to orphans and vulnerable children (OVC), and assistance to people living with HIV (PLHIV).

Orphans and Vulnerable Children Care

Support to OVC accounts for the largest share of the impact mitigation resources requirements is estimated at US\$ 39.5 million. This estimate represents the costs of the Basic Material Support⁵ (e.g., clothing, school items, mosquito nets) set forth by the Ministry of Social Affairs, Veterans and Youth Rehabilitation as well as emotional support and food assistance (both standard minimum food bundle and protein supplements).

Assistance to PLHIV

Assistance to PLHIV, or a household with one or more PLHIV, was calculated using a unit cost of US\$ 150 in the form of food donations to PLHIV by the World Food Program (WFP)⁶ under the directives of the Ministry of Social Affairs, Veterans and Youth Rehabilitation. The total cost of the assistance is estimated at US\$ 5.8 million for the NSP III period.

Strategy 4: Coordination, Management and Administration

The methodology used for calculating the costs of Strategies 4, 5, 6 and 7 is different to that used for Strategies 1, 2 and 3. The costs of Strategies 4 to 7 are not directly related to the number of people receiving the intervention or services. They represent an estimation of the overall cost related to management, training, and monitoring and evaluation as these activities are spread across a number of different programme support areas.

The RNM estimates the cost of strategies concerning different programme support as either a percentage of total resources required for the implementation of the programme or as an absolute amount when this is known or has already been costed. In this case the first option has mainly

⁵List from the Ministry of Social Affairs, Veterans and Youth (MoSVY).

⁶MoSVY, UNICEF and other stakeholders are discussing changing food donations to cash transfers in the near future.

been used to estimate the costs of Strategies 4, 5, 6 and 7 and of their sub-components. While this approach is imperfect, none of these strategies and their related activities is articulated with sufficient detail in the NSP III to allow for a more detailed costing.

The calculated resources can be matched to the estimated actual spending in the base year in order to calibrate the percentages to realistic levels.

Table 5 below shows that the total cost associated with Coordination, Management and Administration will amount to US\$ 69.7 million for the NSP III period.

Table 5: Strategy 4 Coordination, Management and Administration, in US\$ Million

	2011	2012	2013	2014	2015	Total 5 years
Total	12.0	12.9	13.9	14.9	16.1	69.7
Programme Management	10.4	11.2	12.1	13.0	14.0	60.8
Training	0.7	0.7	0.8	0.9	0.9	4.1
Logistics	0.7	0.7	0.8	0.9	0.9	4.1
Laboratory Equipment	0.1	0.1	0.2	0.2	0.2	0.8

Programme management costs were calculated based on a percentage derived from past National AIDS Spending Assessments (NASAs). It is expected that with economies of scale, a 15% percentage applied to the total costs of NSP III should be enough to cover management costs needs.

Other costs associated with Strategy 4 are training and logistics, each estimated at US\$ 4.1 million for the period 2011–2015. In addition, laboratory equipment costs were included in the strategy for approximately US\$ 800,000 for the total period. The RNM model does not calculate capital costs necessary for programme expansion but minimal costs of laboratory equipment were added in previous costing exercises and have been maintained in the NSP III cost estimation.

Strategy 5: Legal and Policy Enabling Environment

Table 6 below presents the total cost of Strategy 5 which is estimated at US\$ 4.9 million for the NSP period.

Table 6: Strategy 5 Legal and Policy Enabling Environment, in US\$ Million

	2011	2012	2013	2014	2015	Total 5 years
Total	0.8	0.9	1.0	1.0	1.1	4.9
Enabling Environment	0.7	0.7	0.8	0.9	0.9	4.1
Strategic Communications	0.1	0.1	0.2	0.2	0.2	0.8

Two main activities are included in this strategy:

- Creating a legal and policy environment that facilitates implementation of HIV/AIDS interventions, estimated at US\$ 4.1 million; and
- Strategic communications estimated at approximately US\$ 800,000.

Strategy 6: M&E, Research and Surveillance

The table below shows that the total cost of Strategy 6 is estimated at US\$ 32.4 million.

Table 7: Strategy 6 M&E, Research and Surveillance, in US\$ Million

	2011	2012	2013	2014	2015	Total 5 years
Total	5.6	6.0	6.5	6.9	7.5	32.4
Research/Surveillance	2.1	2.2	2.4	2.6	2.8	12.2
Monitoring & Evaluation	3.5	3.7	4.0	4.3	4.7	20.3

The methodology for calculating the cost of Strategy 6 is based on a GFATM-recommended formula. The often used rule-of-thumb states that 5% of programme funding should be allocated to monitoring and evaluation (M&E), along with 3% for research⁷. By using this formula the costs of M&E were estimated at US\$ 20.3 million, and the combined costs of research and of surveillance were estimated at US\$ 12.2 million.

Strategy 7: Resource Mobilization

One percent was applied to the total cost of the NSP III in order to estimate the cost of activities for resource mobilization. This is in line with what has been done in earlier HIV/AIDS costing studies in Cambodia. By using this methodology, the cost of Strategy 7 was estimated at US\$ 4.1 million for the whole NSP III period (see Table 8).

Table 8: Strategy 7 Resource Mobilization, in US\$ Million

	2011	2012	2013	2014	2015	Total 5 years
Total	0.7	0.7	0.8	0.9	0.9	4.1
Resource Mobilization Activities	0.7	0.7	0.8	0.9	0.9	4.1

⁷The GFATM recommends between 5% to 10% of total programme costs for M&E and research.

III. PROBABLE RESOURCES FOR NSP III

Information provided by key HIV/AIDS financing sources in Cambodia together with documents showing the remaining balance of resources from GFATM for Round 7 and Round 9 were used to estimate the available resources for the NSP III period lasting from 2011 to 2015.

Table 9 below presents a summary of the information obtained.

The total resources that will be available for HIV/AIDS from main financing sources for 2011-2015 are estimated at US\$ 272.0 million. This represents an average of US\$ 54.4 million per year which roughly matches total HIV/AIDS spending in 2008 according to the last NASA. This could be interpreted as if the major HIV/AIDS financiers are not planning to increase their contribution to the sector during the 2011-2015 period.

The information presented above comes from the most important financing sources for Cambodia. Most of the organizations that did not respond are not traditionally large financing sources of HIV/AIDS programmes in Cambodia. Hence, it is unlikely that major contributions will materialize at a later stage.

In the correspondence and dialogue with the prospective financing entities, several mentioned that the level of future funding indicated cannot yet be considered as secure funding. They said that their funding prospects would either change or could only be confirmed for a period of 2-3 years. Other organizations are currently in their biennium programme negotiations and mentioned that their expected contributions will need to be approved by their headquarter offices. Therefore, the financing data presented should only be viewed as probable funding.

There are two sources of financing that have not been included in this estimation exercise. Firstly, employers in the private sector are not counted. Although the costing estimates that the programme should invest US\$ 10.6 million for workplace programmes, there are employers, especially those with a large workforce, who may already be funding HIV/AIDS activities for their employees. Secondly, there is not yet reliable data on household HIV/AIDS expenditures which should be viewed as part of financing sources.

Therefore, the work presented in this report does not consider the resource implications of private employers or households. It is worth noting that household expenditures on health care and in particular on HIV/AIDS-related health care can be substantial and should be considered in measuring resources available for HIV/AIDS programmes.

Table 9: Sources of Funding for HIV/AIDS in Cambodia, in US\$

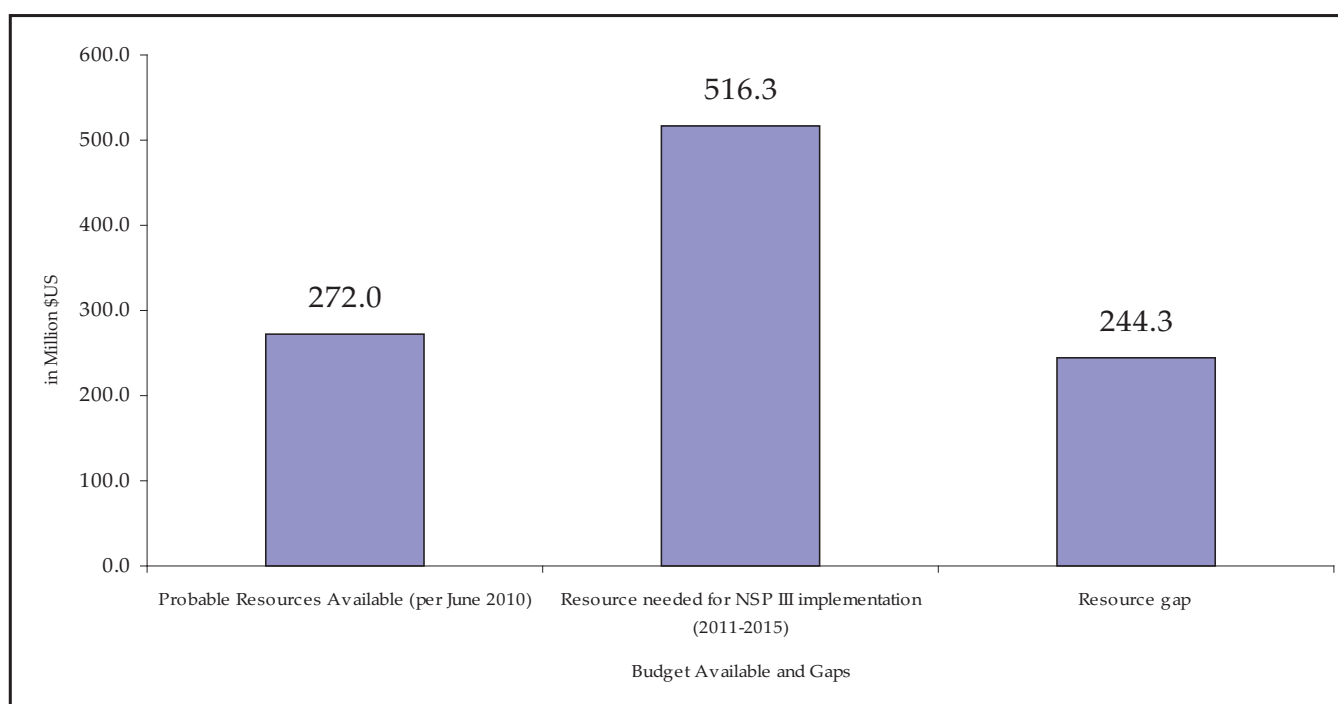
	NAA	NCHADS	NBTC	PEPPA	UNICEF	UNODC	WHO	WFP	DEID	UNESCO	UNFPA	GF7	GF9	UNAIDS	Total
Prevention		2,860,348	2,165,669	41,029,219	5,300,000	50,000	1,150,000		2,190,000	30,000	4,350,000	9,134,485	12,038,279	750,000	80,298,000
Care and treatment		16,272,308		15,449,403	2,000,000		920,000	10,750,000					71,140,112	250,000	116,531,823
Orphans and Vulnerable children				5,402,353	2,400,000			10,750,000					12,945,330		31,497,683
Programme Management and Administration Strengthening	7,714,822	3,296,439							876,000	25,000			13,299,648	1,000,000	25,211,909
HR Recruitment & Retention Incentives - Human Capital		3,049,370				50,000									3,099,370
Social Protection & Services (excluding OVC)						50,000			438,000						488,000
Enabling Environment and Community Development				6,724,500		50,000			876,000	500				25,000	7,655,500
HIV & AIDS related Research (excluding operations)				4,747,125										25,000	4,747,125
Total	7,714,822	25,478,465	2,165,669	73,352,600	9,700,000	200,000	2,070,000	21,500,000	4,380,000	60,000	4,350,000	9,134,485	109,423,369	2,500,000	272,029,411

IV. RESOURCES GAP FOR NSP III

The resource gap was assessed as the difference between resource needs and those resources declared by major financing sources for the period 2011-2015.

Figure 2 below shows that there is a substantial difference between resources needed and probable funding available over the five-year NSP III period.

Figure 2: Comparison of Resources Needed with Probable Funding Available for NSP III, in US\$ Million



Total estimated costs of NSP III are US\$ 516.3 million whereas probable resources available are US\$ 272.0 million. This means that the estimated resource gap is US\$ 244.3 million, or an average of US\$ 48.8 million per year for the 5-year period. This gap approximates the total of US\$ 51.8 million spent for HIV/AIDS related intervention in 2008 as estimated by NASA II. This means both domestic and international resources would need to be twice as high as the total 2008 HIV/AIDS related spending level in order to cover all of the strategies described in the NSP III.

With the international economic crisis of 2008 and 2009, it is expected that donor contributions will decrease in the short to medium term. Therefore, the Government of Cambodia and its partners will need to seek alternative resources for the implementation of the NSP III. It may also be necessary for the Government of Cambodia, development partners, and other stakeholders to review the scope of NSP III and to prioritize interventions in order to make the best out of the funding available.

V. ISSUES AND NEXT STEPS WITH THE NSP III COSTING

This section describes specific issues related to the NSP III costing and the next steps that are necessary for its completion. Annex A describes the main limitations of the RNM model which was used for the costing.

Comparison with previous prevention costing studies in Cambodia

Several costing of HIV/AIDS related national strategic plans and of specific areas and activities have been produced in Cambodia since 2005. The main ones include as follows:

- Costing of the NSP II (2006-2010)
- Costing of the revised NSP II (2008-2010)
- The aids2031 epidemiological and financial projections in Cambodia (2009 - 2031)
- Costing of the national response, March 2010 (Bangkok Costing Training)⁸

The results across the different costing studies vary because they are based on different assumptions. Costings done at different times use different data sets specifically in the estimation of beneficiary populations, coverage targets and their projections, and unit costs.

Table 10 below illustrates this point with a comparison of the results of five different costings which have been conducted in Cambodia for selected prevention interventions. The table uses data produced for 2010 and 2011 by the different costing exercises. Ideally, it would be better to compare the same years. However, due to the linearity of the RNM model, the difference in the data between the years is only marginal and not significant and still allows for comparison.

⁸Staff from NAA and UNAIDS attended the training.

Table 10: Comparison of Costs of Prevention Interventions, in US\$ Million

	<i>NSP II Costing 2006-2010</i>	<i>aids2031</i>	<i>(Revised) NSP II Costing 2008 -2010</i>	<i>March 2010 training</i>	<i>NSP III Costing</i>
<i>Year of Comparison</i>	<i>2010</i>	<i>2011</i>	<i>2010</i>	<i>2011</i>	<i>2011</i>
TOTAL PREVENTION	33.8	28.7	75.7	21.3	29.8
<i>STIs</i>	1.2	2.4	4.8	0.4	1.0
<i>IDUs</i>	1.2	0.1	1.6	0.3	0.9
<i>MSMs</i>	1.1	0.1	8.4	1.1	1.4
<i>VCCT</i>	5.1	5.0	5.9	5.5	5.4
<i>EWs</i>	1.2	0.2	3.7	9.0	3.4
<i>PMTCT</i>	0.8	0.9	8.4	0.4	1.7
<i>Workplace</i>	n/a	4.3	11.5	1.6	1.9
<i>School Based Interventions</i>	5.1	1.0	2.9	1.6	1.1

There is major discrepancy between the estimated cost of prevention interventions in 2010 in the revised costing of the NSP II (US\$ 75.7 million) and the other estimations of yearly prevention costs (average of US\$ 28.5 million). The revised NSP II cost estimates for all the components selected for the comparison (STI, IDU, EW, etc.), except for VCCT, are all much higher than those produced by the other costings which used the RNM⁹.

All of the estimated total and for the selected prevention components costs which were produced by RNM fall within a range between US\$ 21.3 million (March 2010 costing) and US\$ 33.8 million (revised NSP II 2008-2010). The current costing of the NSP III falls in the middle of that range, with US\$ 29.8 million for prevention in 2011.

It is not the purpose of the NSP III costing to reconcile and highlight detailed differences between different data sets. However, the data used for this costing that made use of the RNM were extensively discussed with stakeholders. The data used and the results produced appear normal and they not show significant deviations from the ranges produced earlier in costings that also used RNM.

In brief, the NSP III costing falls within the benchmark results produced by previous estimations. In the future, it is recommended that cost estimations be compared one to another to ensure that new results produced are comparable to previous work.

⁹The NSP II costing was done using a different model which is based on RNM, runs in Microsoft Excel, is simpler than RNM, and uses the same structure (Prevention, Care and Treatment, Mitigation and Management, Management/Policy Environment/Research etc).

Treatment & care: targets and costs need to be updated

The cost estimates generated by this costing for Strategy 2 on Treatment and Care will most likely change in the near future. In fact, NCHADS is currently revising its estimates and its ART requirements, specially based on the new guidelines for ART eligibility issued by MoH¹⁰. It is likely that laboratory testing requirements will change based on the new guidelines.

¹⁰Based on a meeting with Dr Mean Chhivun, Director of NCHADS.

Annexes

Annex A: Limitations of the Resources Needs Model (RNM)

Although the RNM is currently used in resource needs estimations worldwide, it has a few weak points that need to be mentioned:

- Unit costs stay the same: The analysis is essentially a linear analysis, and no changes in unit costs were assumed as programmes are scaled up. This is largely due to lack of data quantifying the exact magnitude of possible changes in unit costs. Where new services or commodities are introduced (e.g., VCCT centers) some non-linearity is allowed and two different unit costs are used, allowing the unit costs for new interventions to take into account start up costs (e.g., equipment and infrastructure costs).
- Infrastructure costs are under-estimated: The model estimates feasible coverage targets assuming an ambitious expansion of current coverage unfettered by current financial resource constraints but without significant development in infrastructure. When substantial additional infrastructure and systems development are needed, RNM does not build the cost for strengthening the infrastructure system to deliver new services that are delivered (e.g., VCCT, PMTCT, ART, blood safety).
- Health systems indirect costs are under-estimated: Resource estimates for interventions led within the health sector (e.g., VCCT sites, PMTCT sites, facility-based care such as OI treatment and OI prophylaxis) do not explicitly take into account the indirect or overhead costs to the health sector. The analysis therefore generally underestimates the resource implications of the health sector involvement.

Annex B: List of Documents and Resources Consulted

1. BBC WST (2008) Cambodia Sentinel Survey 2007, Media and Discussion, Knowledge, Attitudes and Practice About Sexual Matters, HIV and AIDS, Risks, Condoms, HIV Testing and People Living with HIV from a City and Five Provinces: Phnom Penh, Kandal, Kampong Speu, Kampong Chhnang, Battambang and Siem Reap.
2. Futures Group (2006) Estimating Resource Requirements for the Cambodia National Strategic Plan for a Comprehensive and Multi-Sectoral Response to HIV/AIDS 2006-2010.
3. Futures Institute (2007) Goals Model For Estimating the Effects of Resource Allocation Decisions on the Achievement of the Goals of the HIV/AIDS Strategic Plan – Version 3.0.
4. Futures Institute (2009) Resources Needs for HIV/AIDS 2031 (excel “aids2031” spreadsheet).

¹¹NAA (2006) Estimating Resource Requirements for the Cambodian National Strategic Plan for a Comprehensive and Multisectoral Response to HIV 2006-2010 2006.

5. Futures Institute (2010) Resources Needs Model – Cambodia 2008 – 2015 (excel “March 2010” costing training in Bangkok).
6. Global Price Reporting Mechanism (2009) Transaction prices for Antiretroviral Medicines and HIV Diagnostics from 2008 to April 2009.
7. Ministry of Interior (2009) Situation and Response Analysis for HIV and AIDS.
8. Ministry of Interior (2009) Strategic Plan for the Response to HIV and AIDS 2009–2013.
9. NAA (2010) Functional Task Analysis for the Coordinated and Harmonized Response to HIV and AIDS in Cambodia, Draft.
10. NAA (2010) UNGASS Country Progress Report.
11. NAA (2010) National HIV/AIDS Monitoring and Evaluation System Strengthening Plan.
12. NAA (2010) Operational Plan for Mobile and Migrants Populations and HIV/AIDS.
13. NAA (2009) National AIDS Spending Assessment (NASA) Years 2007/2008.
14. NAA (2009) The Assessment of Condom Situation in the Kingdom of Cambodia.
15. NAA (2008) National AIDS Spending Assessment (NASA) Years 2006.
16. NAA (2008) A Situation and Response Analysis of HIV and AIDS in Cambodia, 2007 update.
17. NAA (2008) National HIV/AIDS Monitoring and Evaluation Guidelines.
18. NAA (2007) Revised National Strategic Plan II for a Comprehensive and Multi-sectoral Response to HIV/AIDS, 2008-2010.
19. NAA (undated): Unit costs list
20. NCHADS (2009) Annual Report.
21. NCHADS (2009) The Long Run Costs and Financing of HIV/AIDS in Cambodia. Draft report. aids2031.
22. NCHADS (2007) Report of a Consensus Workshop. HIV Estimates and Projections for Cambodia 2006-2012.
23. Results for Development Institute (aids2031 Financing Working Group) (undated) Cost-effective interventions that focus on most-at-risk populations, Working Paper No 16.
24. UNAIDS and WHO (2009) Joint UN High Level Country Mission in Support of Universal Access for HIV Prevention, Treatment, Care and Support. Aide Memoire: Summary of Findings and Recommendations.
25. Websites accessed in May/June 2010:

- www.msfaaccess.org/main/hiv-aids/pmtct-expert-round-table-report
- www.coburn.senate.gov/public/index - PEPFAR Treatment Costs

Annex C: Data Entry Form Request Sent to Stakeholders

Projected Financial and Non Financial Resources for HIV/AIDS Activities in Cambodia - for NSP III Costing and Resources Gap Analyses					
Please enter the name of the organization (in next column) ----->					
AIDS Spending Categories	2011	2012	2013	2014	2015
Prevention					
Care & Treatment					
Orphans & Vulnerable Children					
Program Management And Administration Strengthening					
Human Resources' Recruitment & Retention Incentives - Human Capital					
Social Protection and Social Services (excluding OVC)					
Enabling Environment & Community Development					
HIV & AIDS-related Research (excluding Operations)					
Total	0	0	0	0	0
Please specify currency used:					
Please feel free to provide any important additional information below:					