WORLD HEALTH ORGANIZATION
DEPARTMENT OF NEGLECTED TROPICAL
DISEASES: SUPPORT FOR CAPACITY
STRENGTHENING AND VISCERAL
LEISHMANIASIS PROGRAMME
COORDINATION (2012–2017)
External Review

October 2017 – January 2018

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Acknowledgements

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The authors declare that they have no conflicts of interest.
Executive summary

This is an Evaluation of DFID’s 2012-17 grant to WHO-NTD, the Geneva-based headquarters of the WHO’s fight against Neglected Tropical Diseases (NTDs). NTDs are a diverse group of communicable diseases that prevail in 149 countries, affecting more than a billion people and costing developing economies tens of billions of dollars every year\(^1\). Some are best addressed with preventive chemo-therapy (PCT), others require specific and complicated diagnosis and treatment of individual patients. WHO-NTD has a separate unit for each of these two disease classes, as well as for vector ecology and management and for zoonotic diseases. These different elements of WHO-NTD’s approach are explained in the Introduction (Chapter 1), while the evaluation team set out their methodology in Chapter 2.

In a pioneering approach, a key element of DFID’s grant was to fund three staff positions within WHO-NTD: a health economist, a logistician and a programme epidemiologist. The logistician and programme epidemiologist manage and drug donations. Unusually DFID also provided specific support to WHO-NTD for the neglected tropical disease visceral leishmaniasis (VL).

Our conclusion is that this has been very successful, with each of the three staff members contributing significantly to essential activities in WHO-NTD’s continued progress against the diseases, itself reflected in the strong performance against logframe indicators (one indicator, relating to integration, was not met but a revision to this is proposed):

- **Economic evidence** has been developed and disseminated, including via peer-reviewed publications. The health economist has led this work, as well as a successful campaign to have NTDs included in the Sustainable Development Goals (Chapter 3).

- Largescale **drug donations have been better managed** than prior to 2012, expanding WHO-NTD’s reach to ever more people who suffer from the diseases. The software platform used for this is developed and administered by the logistician and programme epidemiologist, and has become a means to drive improved programming by countries (Chapter 4).

- **Interaction with other stakeholders**, including Development Partners, countries and WHO Regional and Country Offices and countries, has become increasingly effective, even as some capacity challenges remain.

- **Data** is increasingly gathered and used by WHO-NTD. This has been strongly influenced by both the economic evidence and drug donation software platform referred to above.

- Partly as a result of these improvements, significant **additional resources have been mobilised**, from international development partners, pharmaceutical companies and, gradually, from endemic countries. WHO-NTD is facilitating a series of in-country dialogues to stimulate further the last of these sources.

- **The inclusion of NTDs already in the SDGs** and (from early 2018) in the African Leaders Malaria Alliance (ALMA) scorecards, will help keep NTDs high on policy agendas, and should make further resources likely also.

While hard to quantify and attribute precisely, it is likely that DFID’s investment in these three staff positions has yielded excellent returns and the elimination of some NTDs has been brought sooner

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\(^1\) It is estimated that if the WHO’s control/elimination targets for five leading NTDs (lymphatic filariasis, onchocerciasis, schistosomiasis, soil-transmitted helminths and trachoma) were met then economic gains from increased productivity alone would amount to US$251 billion over 2011-20 and US$313 billion over 2021-30 (Redekop et al., 2017).
than it otherwise would. The consultant presented the draft report to the NTD Key Funders Meeting in February 2018. At the meeting representatives of USAID, the Bill and Melinda Gates Foundation (BMGF) and the END Fund all agreed on the vital role of the three DFID-funded staff positions at WHO-NTD.

**Visceral Leishmaniasis**

In addition to the three staff positions, DFID also supports the fight against a leading disease, **visceral leishmaniasis** (VL), the second-deadliest parasitic disease after malaria and one that requires diagnosis and treatment of individual patients rather than being tackled through mass drug administration. There are several benefits from this additional support on VL within the same grant. Firstly, Gilead offered a high value donation of its innovative anti-VL treatment, AmBisome. A larger (£30m) DFID bilateral VL programme was planned, but passing a relatively small section of the funding (£2.7m) of this to WHO-NTD meant that the donation could be taken advantage of immediately. WHO-NTD was supported to provide technical assistance to endemic countries, to roll out the use of AmBisome as well as coordination and monitoring and surveillance to assess progress. Secondly, this was accomplished with strong enough results that Gilead subsequently agreed an expansion of its donated supply together with additional financial support. Thirdly, progress against VL is particularly important as elimination of the disease as a public health problem is a strong prospect within South Asian countries, which would deliver significant health and economic benefits.

East Africa suffers from a more challenging VL situation, and one of the team conducting this Review visited Ethiopia to monitor progress there. The Ethiopian Federal Ministry of Health was clearly appreciative of the technical assistance and training provided by WHO-NTD and the WHO Country Office. Country policy has developed, with a dedicated NTD department, a second NTD Masterplan has been produced, effective cross-border coordination together with the screening for a range of NTDs of an estimated 400,000 refugees from Sudan and South Sudan. Some Ethiopian Regional Health Bureaux cover a range of VL treatment costs, including patient food and transport. Telephone interviews were used to gauge progress against VL and other NTDs in other African and South Asian countries. The AmBisome donation was judged to be well managed, although this is separate from the software platform referred to above. In both continents, however, further investments are needed from donors, countries and other implementing partners, including in relation to reaching marginalised populations and improving surveillance.

After reviewing progress against the project logframe (Chapter 7), the current document also discusses the financial aspects of WHO-NTD and the DFID grant (Chapter 8) and various aspects of sustainability in relation to WHO-NTD’s work (Chapter 9). The annexes mainly provide a range of background material to the review. Of particular note here is Annex G, which relates the current review to the themes of DFID’s recent Multilateral Development Review (MDR) and how this programme dovetails closely with the success criteria set out in the MDR for productive relationships between DFID and multilateral partners.

The review offers a range of recommendations in each of its chapters, especially in relation to integration, across NTDs and with wider health systems. Where carried out appropriately, this will increase efficiency, aid greater country ownership, and further bolster resource availability. Many of the recommendations on these topics chime with goals already recognised by WHO-NTD and on which work is already underway. These seek to embed current progress and facilitate continued advance in a way that will be sustainable, whatever the trajectory of international resources available for NTDs.

We find WHO-NTD to be playing an effective and well-recognised role in terms of technical guidance and standard-setting on NTDs, one that no other organisation could perform. While the relationship with pharmaceutical companies has improved, however, more could be done to
ensure that these vital partners feel informed. Also, more advantage could be taken of the skills and resources that such companies can offer beyond the donated drugs. A key change of focus for WHO-NTD and other stakeholders must be a **shift from a global perspective on NTDs to a country-level one**, with bespoke approaches to resource mobilisation, increased country ownership, and further improvements in programme effectiveness crafted according to context. This will require **continued availability of the existing DFID-funded capacity** together with **additional capacity** that can be deployed at country level – drawing on skills such as financing/economics, convening/political skills, and data visualisation, presentation, communications skills, even if not necessarily on a full-time basis. It is also likely to involve closer cooperation with stakeholders already showing success in such endeavours, such as the Ending Neglected Diseases (END) Fund. Additional programme skills would also be welcome to complement this, perhaps based nearer the endemic countries such as at the Regional Office for Africa (WHO-AFRO) rather than in Geneva. Another area where WHO-NTD must further develop its approach is in regard to **transition to lower prevalence and elimination** of certain NTDs, which has been done in a somewhat arbitrary way to date.

Recent success should not lead to complacency, and **risks** to WHO-NTD are recognised as risks to the wider fight against NTDs, given the WHO’s continuing unique position. We see the biggest risks as: (1) the loss of key WHO-NTD staff, even though no retirements are programmed; (2) reduction in potential donated pharmaceutical resources; and (3) failure to develop domestic funding and ownership as far as possible. Mitigation will involve further targeted support to WHO-NTD capacity, in a manner coordinated with other major stakeholders.
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<td>AFRO</td>
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<td>ALMA</td>
<td>African Leaders Malaria Alliance</td>
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<td>APOC</td>
<td>African Programme for Onchocerciasis Control</td>
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<td>BCC</td>
<td>Behaviour Change Communication</td>
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<td>BMGF</td>
<td>Bill and Melinda Gates Foundation</td>
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<td>CFR</td>
<td>Case Fatality Rate</td>
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<td>CL</td>
<td>Cutaneous Leishmaniasis</td>
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<td>DALYs</td>
<td>Disability-adjusted Life Years</td>
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<td>DCP</td>
<td>Disease Control Priorities</td>
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<td>DFID</td>
<td>Department for International Development</td>
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<td>DHIS2</td>
<td>District Health Information System 2</td>
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<td>DNDi</td>
<td>Drugs for Neglected Diseases initiative</td>
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<td>DW</td>
<td>Dan Whitaker (author)</td>
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<td>EMRO</td>
<td>WHO Regional Office for Eastern Mediterranean</td>
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<td>END Fund</td>
<td>Ending Neglected Diseases Fund</td>
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<td>EPI</td>
<td>Expanded Programme for Immunization</td>
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<td>ESPEN</td>
<td>Expanded Special Project for Elimination of NTDs</td>
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<td>GLP</td>
<td>Global Leishmaniasis Programme</td>
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<td>HDD</td>
<td>Human Development Department</td>
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<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<td>HMIS</td>
<td>Health Management Information System</td>
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<td>ICFD</td>
<td>In-Country Financing Dialogue</td>
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<td>IDA</td>
<td>International Dispensary Association</td>
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<td>IDM</td>
<td>Innovative and Intensified Disease Management</td>
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<td>JAP</td>
<td>Joint Application Process</td>
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<td>KII</td>
<td>Key informant interview</td>
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<td>LF</td>
<td>Lymphatic Filariasis</td>
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<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<td>MAR</td>
<td>Multilateral Aid Review</td>
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<td>MDA</td>
<td>Mass Drug Administration</td>
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<td>MDG</td>
<td>Millennium Development Goals</td>
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<td>MDR</td>
<td>Multilateral Development Review</td>
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<td>MoF</td>
<td>Ministry of Finance</td>
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<td>MoH</td>
<td>Ministry of Health</td>
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<td>MoU</td>
<td>Memorandum of Understanding</td>
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<td>MSF</td>
<td>Médecins Sans Frontières</td>
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<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>NTD</td>
<td>Neglected Tropical Disease</td>
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<td>OPM</td>
<td>Oxford Policy Management</td>
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<td>PCT</td>
<td>Preventive Chemotherapy and Transmission Control</td>
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<td>PKDL</td>
<td>Post Kala-azar Dermal Leishmaniasan</td>
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<td>R&amp;D</td>
<td>Research and Development</td>
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<td>RDT</td>
<td>Rapid Diagnostic Test</td>
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<td>RPRG</td>
<td>Regional Programme Review Group</td>
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<td>SDG</td>
<td>Sustainable Development Goals</td>
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<td>SEARO</td>
<td>WHO Regional Office for South-East Asia</td>
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<td>SF</td>
<td>Sam Franzen (author)</td>
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<td>SOP</td>
<td>Standard Operating Procedures</td>
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<td>SSG-PM</td>
<td>Sodium Stibogluconate and Paromomycin Combination Therapy</td>
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<tr>
<td>STH</td>
<td>Soil-Transmitted Helminthiasan</td>
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<tr>
<td>STAG</td>
<td>Strategic and Technical Advisory Group</td>
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<tr>
<td>TIPAC</td>
<td>Tool for Integrated Planning and Costing</td>
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<td>ToR</td>
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<td>UHC</td>
<td>Universal Health Coverage</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>VEM</td>
<td>Vector Ecology and Management</td>
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<td>VfM</td>
<td>Value for Money</td>
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<td>Abbreviation</td>
<td>Description</td>
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<td>VL</td>
<td>Visceral Leishmaniasis</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<tr>
<td>WHO-NTD</td>
<td>World Health Organization Department of Neglected Tropical Diseases</td>
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<tr>
<td>WHO-TDR</td>
<td>World Health Organization Special Programme for Research and Training in Tropical Diseases</td>
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1 Introduction

1.1 Background

1.1.1 WHO-NTD

The WHO-NTD coordinates and supports policies and strategies to enhance global access to interventions for the prevention, control, elimination, and eradication of neglected tropical diseases, including some zoonotic diseases.

NTDs are a diverse group of communicable diseases that prevail in tropical and subtropical conditions in 149 countries. They affect more than one billion people and cost developing economies billions of dollars every year. Populations living in poverty, without adequate sanitation and in close contact with infectious vectors and domestic animals and livestock, are those worst affected.\(^2\)

WHO-NTD is divided into five main units that address different types of NTDs according to how best to control them: PCT; innovative and intensified disease management (IDM); vector ecology and management (VEM); neglected zoonotic diseases; and water, sanitation, and hygiene (WASH). Typically, different units have a discrete focus on specific diseases. However, since many diseases can be addressed through multiple disease control strategies, there is some overlap in their work.

The two main disease areas referred to in this report are the PCT and IDM diseases. PCT diseases are those that are controllable through MDA. These include: Lymphatic filariasis (LF), Onchocerciasis, Schistosomiasis, Soil-transmitted helminthiasis (STH), and Trachoma. The IDM diseases are those that require specific and complicated diagnosis and treatment, and that do not fall under the vector, zoonotic, or the WASH units. They include: Buruli ulcer, Chagas disease, Human African Trypanosomiasis, Leishmaniasis, and Yaws.

1.1.2 VL

VL, also known as kala-azar, is one of the most neglected of the NTDs, despite being the second-deadliest parasitic disease after malaria. Until recently, diagnosis and treatment were difficult and dangerous. However, with the advent of AmBisome and other effective and safe medicines and diagnostics, VL control and even elimination as a public health problem in South Asia was made possible. The donation of AmBisome by Gilead also made this otherwise expensive treatment freely available to countries in South Asia\(^3\), where it is the first-line treatment for VL, and East Africa, where it is the second-line treatment. The management of this donation is covered in Chapter 4.

However, for these resources to benefit patients they must be accessible to them. This involves: ensuring supply chains are functional so that drugs can arrive at treatment sites in good condition, are available when needed, and are stored appropriately (cold chain); clinicians being trained to diagnose and treat patients; facilities providing sufficient coverage of services to meet patient needs; and patients being aware of their disease, knowing where to seek treatment, and being able to meet healthcare costs. The business case for this investment recognised the need to

\(^2\) www.who.int/neglected_diseases/about/en/

\(^3\) References to VL in Asia principally involve India, Bangladesh and Nepal, geographically within South Asia but organizationally within WHO’s South East Asia region.
strengthen these components of VL care so that the AmBisome donation and other advancements in care could be leveraged.

For further information on VL disease characteristics and treatment, see Annex A.

1.2 DFID funding to WHO-NTD through this programme

DFID provided £4.8 million from financial year 2011/12 to 2015/16 to the WHO-NTD. The goal of the programme is to contribute to the achievement of the SDGs, in particular target 3.3—to ‘end the epidemics of HIV, tuberculosis, malaria and neglected tropical diseases’ by 2030. The programme will also contribute to achieving the 2012 London Declaration on NTDs and the WHO Roadmap to overcome the global impact of NTDs.

The allocation of funds to different activities is as follows:

- £2 million in core funding to the work plan and budget of the WHO-NTD. This was to support its leadership, convening, empowering, and monitoring roles in the intensified implementation of the Global Plan to Combat NTDs. The majority of this money is largely allocated to funding three staff members: a health economist and two staff that coordinate and manage the preventative chemotherapy drug donations and distribution. A costed extension of £500,000 to the Memorandum of Understanding (MoU) was agreed until 30 June 2018 to provide extended support to this component.

- £2.7 million to support the fight against VL. This investment was strategically added to the £2 million core capacity building investment in order to ‘get the VL ball rolling’ and ensure the Gilead donation of AmBisome could be utilised. This proved a wise decision given the time it took to procure and implement the KalaCORE contract. It focused on technical support, logistics for the management of AmBisome, and coordination, monitoring, and surveillance to assess progress. Specifically, it included support for:
  - Preparation of standard operating procedures (SOPs) for the use of AmBisome including monitoring and reporting of side effects as well as development of training materials for doctors, nurses, and laboratory technicians;
  - Rolling out of AmBisome in Bangladesh including provision of cold chain and training;
  - Technical assistance on VL in East Africa and South Asia;
  - Support to national task forces on VL in countries so they can better coordinate the national response;
  - Procurement of medical supplies (medicines and diagnostic tests) not included in the AmBisome donation (e.g. pentavalent antimonials and paromomycin); and
  - International coordination through annual regional meetings to share lessons, plan annual activities, and address cross-border issues.

This investment did not include any specific support for staffing, while £100,000 was reserved for an end-of-project external evaluation.

The expected results of DFID’s investment are:

For all PCT diseases and VL:

- Increased evidence of the economic impacts, costs and international expenditure, and the benefits of NTD control and treatment;
- The efficient and effective management of new resources channelled through the WHO-NTD (money and products) to distribute drug donations efficiently; and
WHO-NTR support for capacity strengthening and VL programme coordination

- Increased national capacity to effectively support the management of national NTD control programmes in priority countries.

For VL only:

- Strengthened capacity and the necessary logistics to increase the numbers on treatment, and improved policy to support stronger advocacy;
- Effective management of the drug donation of AmBisome; and
- Increased access to effective VL treatment by replacing the use of less-effective treatments.

1.3 Investment rationale

The rationale for this investment was threefold.

First, WHO-NTD plays an important role in the global effort to control or eliminate NTDs. An explanation of their mandate and role in NTD control is provided in Chapter 5. However, while the scope of its role and demands on WHO-NTD have been increasing, staffing cutbacks at WHO meant that they did not have enough technical capacity to be optimally effective. The core funding provided through this investment is therefore meant to overcome capacity constraints at WHO-NTD.

Second, there has been an increasing scale-up of drug donations from pharmaceutical companies, with all signs suggesting this momentum will increase. Of particular relevance was the donation from Gilead of 445,000 vials of AmBisome for VL, announced in December 2011. The initial AmBisome donation did not come with associated funding to pay for the management, distribution, and monitoring of the drug. Therefore, there was a need for an organisation to provide this service so that the drug donations can be effectively leveraged (note, however, that the more recent donation of AmBisome by Gilead does provide associated funding for drug distribution activities). The WHO Global Leishmaniasis Programme (GLP) had been increasingly taking on this role but required funding to support this work. This investment provides that funding.

Third, despite funding crunches in other sectors, NTDs have been enjoying increasing financial support both from industry and donors. However, continuation of this funding was uncertain due to global austerity and other issues such as competing priorities, so there was a need to develop a good economic case for investing in NTD control. WHO-NTD was believed to be in a good position to develop a convincing and influential investment case for NTDs but did not have a health economist on board to do this. This investment provides funding for a health economist.

1.3.1 Other DFID investments in VL

DFID is providing £27.3 million over 4.5 years to a separate project in VL called ‘Tackling Visceral Leishmaniasis in South Asia and East Africa’. This is being implemented by a consortium including Mott MacDonald, London School of Hygiene and Tropical Medicine, Médecins Sans Frontières (MSF), and the Drugs for Neglected Diseases Initiative (DNDi).

This programme, also known as KalaCORE, aims to focus support on the two regions that have the greatest burden of VL: three countries in South Asia (India, Bangladesh, and Nepal) and three countries in East Africa (South Sudan, Sudan, and Ethiopia), to sustainably reduce the economic and health impact of VL. It supports India, Bangladesh, and Nepal to make progress toward eliminating VL, particularly by providing technical assistance, strengthening surveillance, and expanding access to diagnosis and treatment, as well as improving prevention. In East Africa, where less is known about VL, the programme has an additional focus on operational research to
identify effective prevention methods. It also supports enhanced disease surveillance and builds capacity for responding to outbreaks, in order to ensure early detection of disease outbreaks and minimise their spread and impact.\textsuperscript{4}

The KalaCORE contract began in 2014 but slow implementation meant that in some countries activities did not get fully underway until 2015/16. As such, a number of the KalaCORE activities were not new. WHO, through its regional and country offices, and particularly the GLP within WHO-NTD, had been supporting these activities for some time as part of the core WHO mandate. However, the support it could provide to VL was limited by the finances available.

The KalaCORE grant served to considerably expand and strengthen the work that was already being carried out. KalaCORE had many difficulties in implementing the programme in Sudan, however, due to the banking sanctions. In addition, analysis of costs determined that procurement through WHO was cheaper for drugs and diagnostics due to WHO receiving preferential pricing. It was therefore decided that management of the programme in Sudan and procurement would be transferred to WHO.

Specifically, within KalaCORE the budget for WHO is £4.2 million. The WHO work areas are:

**Ethiopia:**
- Purchase of drugs and diagnostics
- Improving the quality of health services by training and strengthening health education

**Sudan:**
- Purchase of drugs and diagnostics
- Improving the quality of health services by training
- Strengthening health education
- National and state capacity building for surveillance and monitoring and evaluation (M&E)

**South Sudan**
- Procurement and delivery of drugs and diagnostics

**Nepal**
- Strengthening M&E

**India**
- Continuous event monitoring (generating regional pharmaco-epidemiological data)

**Combined, this includes support for the following staff:**
- WHO HQ: two medical officers (15% of salary)
- WHO Sudan: one international staff member, admin assistant (50%), two surveillance officers (one in Gedaref and one in Khartoum), one national programme coordinator, and one national clinical coordinator
- WHO Ethiopia: one national officer

WHO-NTR support for capacity strengthening and VL programme coordination

- WHO Nepal: one M&E officer

WHO-NTD, through the work of the GLP, helps facilitate the work of KalaCORE and WHO country offices while also carrying out the activities mandated within the DFID grant. This catalytic work, and the VL activities of KalaCORE including those carried out by WHO, is outside the scope of this evaluation because it does not relate to the investment being evaluated; a separate evaluation of KalaCORE has been commissioned for this purpose. However, within this report it is sometimes necessary to mention the activities of KalaCORE and WHO country offices because they work with the GLP ‘on the ground’ within countries to help achieve outcomes for which WHO-NTD is accountable under its VL grant.
2 Methodology

This evaluation was carried by two consultants, Dan Whitaker (DW) and Sam Franzen (SF), with expert advisory inputs from another consultant, Liz Ollier. All consultants have experience of evaluating WHO and other UN departments and are familiar with tropical disease control.

Upon receiving the Terms of Reference (ToR), Dan Whitaker and Liz Ollier developed an Approach Paper that was approved by DFID. The ToR and the Approach Paper can be found in annexes B and C, respectively. In summary, the methods including a review of relevant literature (all consultants), basic analysis of WHO-NTD financial data (DW), interviews with WHO-NTD staff during a visit to Geneva (DW and SF), interviews and a one-week field visit to observe project activities in Ethiopia (SF), and remote interviews through telephone or Skype (DW and SF). In total, more than 50 interviews were conducted, not including a number of unofficial sources. The list and categories of respondents is presented in Annex D. The level of effort for the evaluation was a total of 48 consultant days shared between the three consultants.

Interviews mainly explored issues surrounding delivery of expected results, as well as financial management and sustainability of the investment. However, due to the considerable overlap of mandate and joint work toward common goals, we also explored the GLP’s wider performance and contribution to progress on VL within the context of work being carried out by KalaCORE. Interviews typically lasted about an hour. At all stages, notes of interviews were kept and shared among the team, and informants were aware of this. Every attempt has been made in this report to respect informant confidentiality, and therefore views and opinions are not attributed to particular respondents.

The consultants presented the draft report to WHO and DFID in January 2018 and to the NTD Key Funders Meeting in February 2018. At the latter meeting representatives of USAID, BMGF and the END Fund agreed on the importance of the three DFID-funded staff positions at WHO-NTD, as well as calling for harmonisation of donors’ work plans and reporting from WHO-NTD to donors.

2.1 Limitations

The review was limited in regard to the number of interviews undertaken and lack of primary quantitative data collection/verification, as well as by time and resources, but every effort was made to ensure that interviews covered the full breadth of experiences and perspectives and data were triangulated wherever possible. Given the focus of this investment on VL, our report concentrates on this disease. Other NTDs are considered where relevant but opportunistically rather than comprehensively. Since Ethiopia was the only field visit, the most detailed country-level data comes from Ethiopian observations; this is why the majority of examples provided are from Ethiopia. Data on other countries is drawn from the literature and interviews only. We do not believe that these limitations affect the rigour of the evaluation. The review team were independent and had free access to information, were not restricted in their lines of enquiry, and were able to report openly and candidly.
3 Evidence of economic aspects of NTDs

3.1 Background, objectives, and approach

As the previous WHO Director-General wrote in 2011, ‘NTDs have traditionally ranked low on national and international agendas’ and the absence of reference to them in the Millennium Development Goals (MDGs) supported this statement. However, the burden of NTDs, which affect over a billion people, was recognised in the 2012 London Declaration on NTDs by a range of stakeholders. What evidence there was suggested that prevention and control might be cost-effective, but this was sparse and little known. DFID sought to address this by funding additional WHO-NTD capacity to obtain increased evidence of the economic impacts, costs and international expenditure and the benefits of NTD control and treatment, to be delivered via the new health economist position.

One of the three DFID grant-funded positions at WHO-NTD is that of the health economist, the first at the department. During the grant period, the health economist led and contributed to original published evidence on NTD cost-effectiveness, synthesis of existent work, and the marshalling of this in broader publications and in a range of discussions. Prominent among these has been including reference to NTDs in the SDGs and mobilising international and domestic resources for NTDs (both of these issues addressed in Chapter 4).

3.2 Inputs into economic evidence gathering and utilisation

The candidate selected for the health economist position had worked previously at WHO’s TB Department, which has a well-developed approach to using economic evidence, as well as centralised, effective financial monitoring. Thus, WHO-NTD to an extent was able to benefit from this capacity, an example of the potential benefits of transfer of staff within the WHO system.

3.3 Outputs: published evidence

3.3.1 WHO-NTD and other WHO reports

As regular global reporting is used in the fight against other major diseases, WHO-NTD has followed this lead and published NTD reports every two years. These serve for advocacy, dissemination of data and situation reporting, and to chart evolving perspectives on NTDs.

The first (2011) and second (2013) reports helped establish the profile of NTDs, set out their links to poverty, and helped publicise the 2020 Roadmap. The third NTD Report, ‘Investing to Overcome the Global Impact of Neglected Tropical Diseases’ (2015), which the health economist contributed to significantly, built on these with particular impact. It represented the first major synthesis of NTD-focused cost-effectiveness evidence in a decade, adding costing for vector control, and setting out an investment case for each NTD. Based on these, global funding requirements were estimated

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5 Dr Margaret Chan in ‘Working to Overcome the Global Impact of NTDs’ (1st NTD Report, 2011), p. iii.
6 http://unitingtocombatntds.org/london-declaration-neglected-tropical-diseases/
7 No comprehensive synthesis of NTD cost-effectiveness data had taken place since chapters 22–24 of the Disease Control Priorities Project (DCP2) of 2006.
9 Evidence had been synthesised in the DCP2.
10 An average of US$ 2.9 billion per year (three-quarters for vector control) over 2015 to 2020 to meet the 2020 Roadmap targets, with a further US$ 1.6 billion annual average to maintain progress over the 2020–2030 period. Calculations exclude the value of donated pharmaceuticals.
as being markedly beyond 2014 NTD foreign aid levels. Options and targets were laid out for meeting the 2020 goals in respect of 12 leading NTDs.

The fourth NTD report of 2017 extended analysis to the issue of NTD control as prevalence is reduced, and was able to link NTDs to the SDG agenda. It also made the most explicit reference yet to the pharmaceutical companies who donate NTD medicines.

Several WHO broader publications also used input from WHO-NTD, including the Global Reference List of 100 Core Health Indicators and World Health Statistics 2017: Monitoring health for the SDGs.

3.3.2 Peer-reviewed publications

WHO-NTD also led or contributed to a stream of peer-reviewed articles, detailed in the following two tables. Note that the health economist is a contributing author to most but not all of these, with other senior WHO-NTD staff also appearing as contributing authors. However, even where the health economist is not a contributing author, such as reference 11, the article cites other publications to which the health economist did contribute (e.g. the third NTD Report) or sets out discussion to which the economist made a substantial contribution (e.g. on NTDs in the SDGs). Additionally, WHO-NTD assisted the economic debate about NTDs by acting itself as peer reviewer for three journals.

There is a balance of topics between evidence on specific NTDs, syntheses of evidence across several diseases, and debates on international health policy and financing. Programme costs and health and economic benefits are assessed. The peer-reviewed media also vary between specialist NTD publications and broader healthcare and policy journals. The articles appear fairly regularly cited, suggesting they have proven influential.  

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11 Citation review using Scopus Preview and Google Search, 17 November 2017.
### Table 1: Peer-reviewed publications led by WHO during the DFID grant period

<table>
<thead>
<tr>
<th>Ref</th>
<th>Title</th>
<th>Authors</th>
<th>Journal</th>
</tr>
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</table>
Table 2: Peer-reviewed publications in which the WHO participated during the DFID grant period

<table>
<thead>
<tr>
<th>Ref</th>
<th>Title</th>
<th>Authors</th>
<th>Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>The socioeconomic benefit to individuals of achieving the 2020 targets for neglected tropical diseases controlled or eliminated by innovative and intensified disease management</td>
<td>Lenk E, Redekop W, Luyendijk M, Fitzpatrick C, Niessen L, Stoik, W, et al</td>
<td>2017 (in press)</td>
</tr>
</tbody>
</table>

Advocacy for NTDs has long used an estimate of annual cost per person reached that is relatively low at around US$ 0.50. Reference 6 in the above table used available economic evidence to review this estimate. Drawing on more than 50 costing studies covering six PCT\(^\text{12}\) NTDs, it did find that this was reasonable ballpark average, albeit with important caveats. The first two relate to domestic and international resource mobilisation. In 90% of studies drug delivery costs are reduced through use of unpaid volunteers, the value of whose labour is not included. Also, the cost of donated medicines is excluded, thus recording costs to donors/countries but not total economic cost and further underlining the dependence on donations from pharmaceutical companies. Based on data from the pharmaceutical companies, the total annual value of donated NTD drugs could be US$ 4 billion.\(^\text{13}\) This compares to WHO-NTD’s estimate of less than US$ 3 billion annually in the period up to 2020 in order to meet the Roadmap targets, so implying that the cost per person treated would be double if donations were accounted for.\(^\text{14}\) Finally, there is strong variance depending on programme scale, with costs per person rising sharply for the smaller volumes that are more relevant as prevalence declines. Despite these caveats, the study helps confirm that PCT mass administration offers a low-cost public health intervention on the path toward universal health coverage (UHC) – a finding with major potential implications (see also Chapter 9).

It should further be noted that the health economist made an important contribution to the third version of Disease Control Priorities (DCP3), as lead author of a chapter on the investment case for NTDs (Reference 8).\(^\text{15}\) As in the case of many of the articles, this was done in conjunction with country-based and donor-related authors, helping ensure a consistent view on NTD economics between stakeholders.

\(^{12}\) See Section 1 on the distinction between PCT and IDM NTDs.

\(^{13}\) i.e. an average unit cost to the pharmaceutical industry of around US$ 2.70 that is not passed on. Note that if this were passed on, donors/countries would doubtless seek to reduce it through using generic rather than branded products as at present.

\(^{14}\) This does not necessarily put NTD PCTs’ strong VfM in doubt, but a more comprehensive cost analysis might strengthen credibility.

3.3.3 Further use of data

An additional output of Reference 6 in the table above was a web-based software application\(^\text{16}\) to calculate setting-specific unit costs against which PCT MDA programme budgets, spending or results-based pay-outs can be benchmarked. This could be potentially useful for MoHs, ministries of finance (MoFs) or implementers, though it has not yet been used at country level. Further country engagement by WHO-NTD may be required to advocate successfully for the use of such tools (see Chapter 9).

WHO-NTD also played a role in the development of an NTD module in the OneHealth integrated health sector budgeting tool\(^\text{17}\) (with Bill and Melinda Gates Foundation (BMGF) support), again software with important potential though uncertainty about how widely it will be used. The third NTD Report states that ‘Country-specific [funding requirement] results will be developed with countries upon request, to facilitate country-level priority-setting’. This could be an important process within forthcoming ICDFs in relation to domestic financing (see below), but has also not yet been realised. As the health policy agenda has evolved, it may now be more appropriate to integrate such plans across more diseases and health system functions, in the context of UHC.

A further data improvement has been the start of national health accounting for NTDs by some countries\(^\text{18}\) (again with BMGF support). Over US$ 100 million of annual spending on NTDs in more than 15 countries has been accounted for in this way, with NTD specification according to country context, although the most recent data published on WHO’s website is 2013.

Note that the work on national health accounting constitutes an example of efficient joint working across separate elements of WHO, as did the development of the costing tool and collaboration with seasonal malaria chemo-prevention, which used WHO-NTD’s approach to benchmark costs.

Significantly, WHO-NTD contributed to the process of SDG indicator development. While this is discussed in more detail in the next chapter, data from WHO-NTD was an important component of what became SDG indicator 3.3.5,\(^\text{19}\)

The data described here and other more ad hoc analyses are also an important component of resource mobilisation initiatives, including via the Impact for Investment Working Group and the April 2017 Stakeholders Meeting (again see Chapter 4).

3.3.4 Comparison with previous outputs, and other current providers of NTD economic evidence

In comparison, prior to 2012, WHO-NTD produced no peer-reviewed publications referring to the economics and financing of NTDs. WHO-NTD representatives also felt that relevant external publications were limited and did not connect to policy, although other interviewees disputed this.\(^\text{20}\) Prior to the DFID grant, WHO-NTD already had a dedicated communications function from 2008

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17. http://spectrumbeta.futuresinstitute.org/. One Health is software designed to help strategic health sector planning in low- and middle-income countries, including through costing and health impact analysis.
WHO-NTR support for capacity strengthening and VL programme coordination

(which continues), focusing on corporate and technical messaging, and with good interaction with central WHO communications. This contributed to the first NTD Report, the Roadmap and the London Declaration. Such work helped build the profile of NTDs, but economic expertise was missing. Some other stakeholders, especially academics, have also contributed further NTD cost-effectiveness analyses during the grant period, sometimes in collaboration with WHO-NTD. The main examples are Emory, Imperial and George Washington universities, as well as the Swiss Tropical Institute. Separate NTD economic work has been carried out by Erasmus University and funded by the END Fund.21

3.4 Conclusions and looking forward

WHO-NTD has produced and contributed to a significant body of economic evidence related to NTDs under the grant period, with substantially increased impact compared to before the grant. The health economist position has been central to this, although the work of the other two DFID-funded positions provides another important input into the body of NTD economic evidence, and other WHO-NTD staff have also collaborated. Key informant interviewees unanimously appreciated this development (described, for example, as ‘a game-changer’ and a ‘sea change in terms of level of rigour’), as well as suggesting that the positive reception of additional NTD evidence acted to drive WHO-NTD toward improved use of data more widely. Examples of this are the evolution of the NTD reports toward the standard of data use in the corresponding reports of other major infectious disease initiatives, as well as the use of coverage data sufficiently to facilitate the ALMA scorecard22 proposal. Donor interviews suggested that the increased credibility created by the recent economic evidence has also translated into resource mobilisation (see Chapter 4) and WHO-NTD input into strategic decision-making.

It is hard to calculate the extent to which this evidence has helped stakeholders work more efficiently and effectively, and the extent to which it has increased resources mobilised (discussed further in the next chapter). However, it seems certain that these improvements easily outweigh the outlay involved in the health economist’s remuneration and associated costs. Thus, this part of the grant exhibits strong apparent value for money (VfM).

The NTD economic evidence agenda still has plenty of useful further direction, however. More information is needed on burden/benefit incidence, particularly more precision about which social groups suffer from NTDs and gain from prevention and control rather than just aggregate numbers. Note that country data availability for people requiring interventions against NTDs is rated as ‘good’ within the World Health Statistics 2016. However, the disaggregation of this data is rated as poor. This information will be relevant for gender, equity, and human rights considerations. It may also be useful in better understanding the ways in which NTD action can contribute to wider equity and UHC agendas.

A second aspect would be to account more fully for the costs related to NTD control, including those related to drug donations and educational and community infrastructure. Any work here could be aligned with the Tool for Integrated Planning and Costing (TIPAC) developed by RTI with United States Agency for International Development (USAID) funds and used in Nigeria and

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21 www.end.org/blogs/engaging-noteworthy-dialogue/2016/05/13/africa-could-save-$52-billion-by-2030-by-ending-neglected-tropical-diseases

22 African Leaders Malaria Alliance, which is considering incorporating progress against NTDs in its effective scorecard measure of national progress used to date in relation to malaria.
Ethiopia. This incorporates full MoH costs, as well as those of NTD partners and projects over multiple years.

An additional key future topic area (discussed more in Chapter 9) regards political and economic evidence as prevalence declines toward elimination. This is a relevant issue for several NTDs and increased knowledge would constitute a global good that would be useful, for example, not only across NTDs but also in relation to malaria in specific countries or sub-national areas. Analysis becomes more complex. The estimates of declining direct costs of NTD prevention/control (which become mainly surveillance and response) may be straightforward. But it also becomes necessary to take account of how the now ‘freed-up’ resources are used (as the health sector can switch to other priorities) as well as the risk of any future resurgence – both more complicated calculations. For both control and elimination analyses, there is also an important political economy dimension. This includes political incentives associated with elimination and credibility risks related to premature WHO elimination certification.

More urgently, WHO-NTD needs to switch its focus further from the global to the national level. Audiences for the utilisation of WHO-NTD economic evidence to date have been primarily global. This was a sensible level at which to begin, but WHO-NTD and other stakeholders are all well aware that the next stage must be to develop and use economic evidence in a way that is tailored to national contexts and audiences – both governments and private sector actors. Key audiences/collaborators will be MoH departments of budget and planning, and in some cases MoFs and selected politicians. Some, though not all, countries will require data specific to them. Evidence collection and use at national (and for larger countries, sub-national) level must be integrated with domestic resource mobilisation efforts (see Chapter 4). Both for some of this and further global work, there should also be analysis that goes beyond the English and French languages to some other major languages spoken in NTD-endemic countries, such as Arabic and Portuguese.

Given the success of the WHO-NTD economic evidence initiative so far, its good VfM, and the importance of further work, there is clearly a need to find a way to retain and develop the relevant capacity within WHO-NTD. A central, guiding staff member as exists at present will be important to ensure consistency and lesson transfer. However, this should also be supplemented with regional/national resources if possible, whose capacity could be built from WHO-NTD in Geneva to advocate using this economic data effectively.

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4 Mobilisation and management of new resources, including donated drugs

4.1 Background, objectives, and approach

A key component of progress against NTDs has been substantial and increasing volumes of commodities and to some extent associated funding, from pharmaceutical manufacturers, worth possibly US$ 4 billion annually. According to the Uniting to Combat NTDs Coalition, international donor aid in support of the 2012 London Declaration is stable at around US$ 250 million per year.

Yet this still remains well below the funding requirement to meet the 2020 Roadmap (detailed in the previous chapter). WHO-NTD and other stakeholders therefore face the challenge of mobilising additional resources, whether international or domestic, as well as increasing efficiency. Given the volatility in both volumes and purposes of international funding, domestic resources are likely to be more sustainable long-term funding.

The development and dissemination of economic evidence on NTDs outlined in the previous chapter served as an input into the resource mobilisation process. The change in 2015 from MDGs to SDGs offered an opportunity to register NTDs more explicitly among health objectives, hence more easily mobilising both international and domestic resources. The growing contribution of pharmaceutical companies through donated drugs has offered another key source of resources in the fight against NTDs.

One of the main objectives of DFID’s grant was ‘The efficient and effective management of new resources channelled through the WHO-NTD (money and products) in order to distribute drug donations efficiently’. This review addresses both mobilisation and management of donated drugs in this chapter, as well as mobilisation of funds; but financial management is addressed in Chapter 8.

4.2 Financial resource mobilisation

4.2.1 Current international donors and trends in funding

It is hard to estimate precisely resource application against NTDs, due to ambiguities in vector control and global and regional coordination funding (e.g. WASH is accounted for separately, although it is important for many NTDs). Key elements of funding are set out in Table 3.
### Table 3: Elements of NTD-related funding

<table>
<thead>
<tr>
<th></th>
<th>Estimated annual values</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>International aid</td>
<td>US$ 254 million in 2014</td>
<td>Pharmaceutical company estimate; lower if lowest negotiated/generic price used, but also excludes staff and other costs</td>
</tr>
<tr>
<td></td>
<td>US$ 263 million in 2015</td>
<td></td>
</tr>
<tr>
<td></td>
<td>US$ 265 million in 2016</td>
<td></td>
</tr>
<tr>
<td>Donated medicines</td>
<td>US$ 4 billion</td>
<td></td>
</tr>
<tr>
<td>Delivery of PCT medicines</td>
<td>Targeted need: US$ 642 million (2017)</td>
<td>US$ 64 million of gap in middle-income countries</td>
</tr>
<tr>
<td>Vector control</td>
<td>Targeted need: US$ 600 million for dengue only (2015)</td>
<td>Minimal external assistance; most countries only respond to epidemics; so largely unfunded</td>
</tr>
<tr>
<td>Other domestic contributions</td>
<td>Ministry of Education deworming actuals not accounted; MoH staff cost around 16% of PCT delivery cost</td>
<td></td>
</tr>
<tr>
<td>Overall funding gap</td>
<td>US$ 390 million excluding vector control in low- and lower-middle-income countries</td>
<td>Additional US$ 60 million gap in middle-income countries</td>
</tr>
</tbody>
</table>

Over the period 2011–2020 an estimated 23 million NTD disability-affected life years (DALYs) will have been averted annually.\(^{24}\) If targets are met then 30 million DALYs could be averted in 2020, rising to 40 million in 2030. Data is lacking for conclusive estimation but in very approximate terms this suggests around US$ 200 per DALY,\(^{25}\) which represents good VfM using the (equally approximate) frequently used approach of comparison to country per capita annual GDP. This includes the full cost of donated drugs, without which the figure would be nearer US$ 30 per DALY.

The main funding players and areas of support are as follows:

- **DFID** supports WHO-NTD capacity, including PCT logistics, health economics; VL, Trachoma, Schistosomiasis, LF, Onchocerciasis, and guinea worm programme. Also provides support for research.
- **BMGF** supports all 10 London Declaration NTDs, including Health Management Information System (HMIS); vector control; Operational Research; WHO-NTD capacity, including Investment Working Group meetings.
- **USAID** support to seven NTDs (PCTs); Operational Research; WHO-NTD capacity, including the M&E Working Group; proposal for Pooled Fund for Innovative Financing (to boost domestic financing).
- **Germany** has long supported research and is planning a moderate-sized NTD implementation programme.\(^ {26}\)

\(^{24}\) [http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0004386](http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0004386)

\(^{25}\) i.e. US$ 4.7 billion annual expenditure to deliver 23 million DALYs. Note that, among many other factors, current DALY savings have been contributed to by efforts dating back to the 1990s.

\(^{26}\) Some encouraging signs include Chancellor Merkel having spoken publicly on NTDs, the Focus on West Africa, and on diagnostics and WASH links.
• **Other bilaterals.** Examples are Canada, Japan, Korea, Kuwait and the UAE. Others such as Spain have scaled back support.

• **World Bank** interest here too has fluctuated but there is significant Bank support in West Africa\(^\text{27}\) and some prospects of further commitment.\(^\text{28}\)

• **Other development banks.** For example, the Islamic Development Bank supporting Uganda’s NTD budget.

• **END Fund** coordinates support from private philanthropists\(^\text{29}\) and supports the World Food Programme.

• **Pharmaceutical companies** provided essential in-kind resources in the form of drug donations but also increasingly financial contributions too. Examples are Pfizer (Zithromax); Merck (Ivermectine); GSK (Albendazole); Johnson and Johnson (Mebendazol); and Gilead (AmBisome).

DFID, BMGF, and USAID have been the most important funders of the fight against NTDs over the period since 2012, and are the key supporters for WHO-NTD at the global level. Other funding has been at WHO regional office level:

• **AFRO** (Expanded Special Project for Elimination of NTDs; ESPEN) – BMGF; Kuwait; Merck; END Fund; DFID; USAID.

• **AMRO** (PAHO; Oncho Elimination Program for the Americas) – USAID; Fundación Carlos Slim.

In some cases, pharmaceutical company financial support has been associated with drug donations (as is the case with Gilead), while in others it has been provided a useful flexibility for the IDM unit of WHO-NTD (see Chapter 1), including salaries (Sanofi).

While some donors have reduced funding there has not been any indication that this was due to dissatisfaction with WHO – Spain for example scaled back foreign aid generally in the face of fiscal challenges.

Increasing funds have been coming from private or mixed private/public sources via the END Fund (over 2012 to 2016 this amounted to US$ 75 million). In November 2017 it was announced that a US$ 100 million ‘Reaching the Last Mile’ fund would be raised, including US$ 20 million from BMGF and US$ 20 million from UAE, to be administered by the END Fund. In 2016, WHO HQ signed a US$ 14 million agreement with Gilead and WHO India, followed by an agreement with BMGF for US$ 2.6 million in 2017.

Nonetheless, overall there is no assurance that the significant funding gap between current NTD aid levels and requirements (see previous chapter) will be closed by international donor funds. Indeed, it is quite possible that international NTD funding overall could fall even before 2020. For instance, in 2015 there was US$ 22 million for the African Programme for Onchocerciasis Control (APOC). In 2016/17, financing for APOC’s successor, the WHO-AFRO-managed ESPEN, which covers all NTDs, is estimated at US$ 8 million per year (although it should be noted that ESPEN has a different role to that of APOC). Overall, WHO-NTD estimates suggest that international NTD funding grew by US$ 4 million in 2015, which is broadly stagnant in real terms.

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\(^{28}\) E.g. possible focus on NTD link to education, results-based funding finance, and further African support.

\(^{29}\) Among these the Lions Club is an important donor, e.g. for Oncho and Trachoma in Sudan, Benin, and Ethiopia.
4.2.2 Domestic financing and trends in funding

The continuing funding gap left by international resources underlines the need for domestic NTD financing flows to increase. This need was stated clearly in the third NTD Report and was something recognised by all stakeholder interviewees. In theory this is feasible. The domestic investment target outlined in the third NTD report was estimated at <0.1% of domestic health expenditure across low- and middle-income countries (<1% in low-income countries alone), declining after 2020.

From the earliest NTD campaigns, endemic countries have provided some vital resources that are still not properly measured (ironically this is often because countries are better integrated than donors). In particular, all MDAs depend on domestic resources for the distribution of drugs, complementing the usual international focus on product, storage, and capacity building. In 2015, the PCT delivery cost was an estimated US$ 356 million, of which frontline staff and transport are major components. Training and school programmes are also often important domestically funded inputs, although Nigeria and Malawi also contribute finance for drug distribution. In a way that is positive for long-term sustainability, general MoH staff and facilities are often involved rather than vertical single-disease inputs. More substantially, endemic countries shoulder a large part of vector control costs, especially in South Asia. India purchased all medicines and insecticides until 2014 when it started to accept donated AmBisome. Analysis by WHO-NTD suggests there will be US$ 40 million of combined NTD expenditure and efficiency savings by endemic countries in 2015.

There have also been some encouraging instances of African endemic countries devoting budgetary resources to NTDs during 2016/17:

**Main 2016/17 NTD domestic funding commitments with which WHO-NTD has been involved**

- Egypt\(^{30}\) US$ 2 million
- Sudan US$ 1.5 million
- Nigeria\(^{31}\) US$ 0.15 million

The World Bank has been associated with leveraging domestic NTD funding in the Sahel region through concessional loans, while the END Fund has facilitated funding in Rwanda, Ethiopia, and Zimbabwe. However, these are not yet enough to suggest that domestic funding sources will meet the NTD funding gap, so this challenge remains.

4.3 Drug donations

According to WHO-NTD, well over a billion patients are provided with donated NTD drugs annually, almost all of which are PCT. The volume of donations, all of which are governed by MoUs, has grown steadily since 1997 and looks set to continue to do so.

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\(^{30}\) Annual commitment, for five years. Previous allocation was US$ 0.1 million per year.

\(^{31}\) Cross River State, supported by a World Bank IDA loan, annual commitment. Note this excludes additional contributions from Nigerian high net worth individuals via the Carter Center.
Pharmaceutical companies’ offering has improved in other ways too, with delivery moving from portside to central warehouses and associated financial contributions becoming more common.

Initially the donations also brought organisational challenges. Each donation had a separate ordering and logistical arrangement, with a lack of specialised capacity for dealing with customs and entry problems leading to bottlenecks. Countries faced high transactions costs, often dealing with multiple contact points. Moreover, with NGOs also ordering from the donation, MoHs had limited visibility regarding drug distribution in their countries. WHO-NTD acted to take over much ordering itself, but this remained fragmented across diseases until the DFID grant. The key phases in management of the donated drugs (PCT) are shown in Table 4.

### Table 4: Stages of drug donation management

<table>
<thead>
<tr>
<th>Stage</th>
<th>Sub-components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug forecast</td>
<td></td>
</tr>
<tr>
<td>Drug application</td>
<td></td>
</tr>
<tr>
<td>Drug application review/approval</td>
<td>Purchase Order (PO) raising by WHO</td>
</tr>
<tr>
<td></td>
<td>PO received by donors</td>
</tr>
<tr>
<td></td>
<td>PO prioritised</td>
</tr>
<tr>
<td></td>
<td>Shipping ‘go signal’ and booking flight/vessel</td>
</tr>
<tr>
<td></td>
<td>Customs clearance</td>
</tr>
<tr>
<td></td>
<td>Transport to national warehouse</td>
</tr>
<tr>
<td>Drug supply (donor to national warehouse)</td>
<td></td>
</tr>
<tr>
<td>In-country drug management</td>
<td>In-country supply (national warehouse to storage points)</td>
</tr>
<tr>
<td></td>
<td>Drug distribution (MDA)</td>
</tr>
<tr>
<td></td>
<td>Treatment and impact report</td>
</tr>
<tr>
<td></td>
<td>Remaining stocks report</td>
</tr>
</tbody>
</table>

With this grant, two dedicated WHO-NTD staff provide the capacity to integrate all PCT donations into a single process, using the **Joint Application Process (JAP)** platform – one working on donation logistics, the other on epidemiology/information management. They are supported by several others in WHO-NTD, including disease focal staff. The Excel-based JAP, also benefiting from pharmaceutical company financial support, has been regularly revised by WHO-NTD and currently covers the following functions:
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- Facilitates forecasting and ordering by countries;
- Also facilitates/requires reporting (epidemiological, utilisation, stock-outs, expiries);
- In bringing these together, promotes programme planning by countries (can link to the District Health Information System 2 (DHIS2));
- Provides a means to coordinate input from in country, WHO country and regional offices, and WHO-NTD, as well as monitor results; and
- Provides improved information on future orders to pharmaceutical companies.

All stakeholders see JAP (and the two staff that operate and maintain it) as a major step forward, reducing transaction costs to countries and pharmaceutical companies, increasing data provision and sharing, and promoting planning. However, several pharmaceutical companies do still complain that they are not party to as much information as are WHO and countries, and that this reduces the efficiency of production (lead times are generally over six months) as well as possibly reducing support for donations within companies, which tend to be eager for data on use of their products. According to some key informant interviews (KII), drug donations are sometimes seen as high cost within companies primarily due to their draw on management time rather than the production costs.

Country capacity for using JAP optimally remains a challenge, partly due to turnover, perhaps also due to requirements such as calculation of stocks (more challenging still where countries are federal/significantly decentralised). WHO-NTD provides some training on this as well as helpful multimedia videos, but there are also suggestions from KII that pharmaceutical company offers of additional financial resources for training have been declined by WHO-NTD. If this is correct this would represent a rare negative approach to resource mobilisation, best practice dissemination, and increasing effectiveness on the part of WHO-NTD.

According to several KII, there are also some inefficiencies related to WHO regional office involvement in the JAP. One example we were given was AFRO’s Regional Programme Review Group (RPRG), which depends on infrequent physical meetings of experts, although there has been some marginal improvement here through using country focal points. The RPRG approach was dropped by the WHO Regional Office for Eastern Mediterranean (EMRO), which uses a more efficient focal point. But once again, coordination is much improved and Geneva – regional office relationships are perhaps a topic beyond the scope of this grant. Interviewees suggested that continued WHO regional office involvement (including input to WHO regional offices from WHO country offices) does help ensure that drug orders are realistic and that they are used prior to expiry once delivered. WHO-NTD also benefits from staff rotated from WHO regional offices, facilitating effective collaboration.

Regardless, it is clear that significant improvement in the management of drug donations has taken place as a direct result of the DFID grant, and thus that the value of this is likely to be a large multiple of its cost. Two staff manage the ordering and shipping of over a billion treatments with 1.8 billion tablets, in challenging environments. Constant hard work at WHO-NTD, both operationally in supporting WHO regional offices/countries in using JAP and in useful improvements to the JAP itself (into which pharmaceutical companies and countries have input), is helping move this function steadily further forward still.

**IDM donations such as AmBisome** remain outside of the JAP and are handled by the WHO-NTD GLP IDM team (i.e. not supported by the DFID grant’s funding of staff in Geneva) in close coordination with Gilead. As with PCT drugs, such management involves rapid reaction to sporadically emerging issues – forecasting, ordering, shipment, delivery, distribution, monitoring, and production cycles – although cold chain requirements add complexity compared to PCT. There is also an online dashboard, which is DHIS2-based and with some similar features to the JAP.
Monitoring has been gradually transferred from Excel/email to online/DHIS2 and is specific enough that WHO-NTD is aware of monthly VL patient numbers and AmBisome stocks by health facility, for example. This is done effectively by the IDM team, which benefits from useful programmatic experience and good relations with stakeholders, although this work represents a considerable burden. WHO-NTD and Gilead are jointly funding a full-time VL position in AFRO. AmBisome has a more significant market value than the PCT drugs yet there have been no reports yet of leakage. As shown in Figure 2 below, the bulk of supply (59%) has been to India. (Note that DFID does procure other VL commodities, such as SSG, through WHO within the KalaCORE programme.)

The WHO AmBisome donation programme covers all national VL programmes, MoHs and NGOs working in the field other than MSF, which declined to join, preferring to purchase AmBisome from Gilead separately. However, there is collaboration between WHO-NTD and MSF in several areas, such as sharing warehouses where government ones are inadequate, and MSF participates in several WHO-hosted NTD expert and partner committees. There have been proposals to merge management of all AmBisome supply between the current separate WHO-NTD and MSF operations, as well as that of other VL commodities, possibly via the International Dispensary Association (IDA), the Netherlands-based procurement agent that MSF already uses. Pooling of both KalaCORE’s and MSF’s AmBisome stocks could increase efficiency by lowering buffer requirements as well as taking order sizes above the minimums demanded by some commodity manufacturers (e.g. for paromomycin). This would also free up the WHO-NTD IDM team for technical and resource mobilisation work. At the time of writing, WHO-NTD hoped to move its emergency stock from Geneva to MSF Logistics in Bordeaux, France, which would free up some WHO-NTD IDM time for technical and resource mobilisation work.

Another option proposed by some interviewees would be combination of IDM into the JAP, a good long-term objective but challenging in the short/medium term given current resources and significant differences between the two donation programmes.

**Figure 2:** Donated AmBisome supplied per country, 2012–2017 (final year incomplete)

![AmBisome shipped per country](source:WHO-NTD VL online dashboard)
4.4  Coordination between stakeholders

Stakeholders reported good general coordination by WHO-NTD. The only caveat to this was that some pharmaceutical companies called for additional transparency and inclusivity.\(^{32}\) Nonetheless, even they clearly felt coordination was improving (including via the NTD Supply Chain Forum) and they supported WHO being the lead interlocutor with countries.

Some coordination is via meetings and informal contacts. Other times it is in the form of data to WHO-NTD via JAP, or from WHO-NTD to all partners via weekly epidemiological review (in addition to the economic evidence of the last chapter). WHO-NTD does still offer a unique platform bringing together key players from NTD-endemic countries, multilateral partners, donors, foundations, NGOs, industry, and research and academic institutions. WHO-NTD also supports donors as they seek to mobilise resources, for example the health economist supporting USAID as it seeks to develop a strategy for raising domestic funding. It is supported in its platform role by the Uniting to Combat NTDs Coalition, with strong advocacy capacity, by the END Fund in resource mobilisation, particularly in the private sector, and by the leading donors in a range of ways.\(^{33}\)

Individual disease consortia\(^{34}\) also help. A well-developed division of labour goes a long way to make up for the additional coordination challenges that come from NTDs not having a formal global partnership as do other major infectious diseases.

Several WHO-NTD working groups play useful coordinating roles. The Access to Medicines Working Group has a sub-working group on donations and on matching production capacity to forecast need. The Investment for Impact Working Group (since 2014, now renamed the NTD Financing Working Group) focuses on resource mobilisation, with a membership of development partners (WHO, World Bank, USAID, END Fund, and various NGOs), academics/research institutions, and country representatives. It is chaired by Uzoma Nwankwo, a health economist from Nigeria’s MoH, and meets annually in Geneva, using BMGF funding, with more frequent informal contact. The name change reflects a shift in its objectives from building economic evidence (which it guided; see previous chapter) to: (1) stimulating domestic NTD finance (eliciting new pledges and following up on existing ones); and (2) encouraging integration.

In-country financing dialogues (ICFDs) are a key strategy for WHO-NTD to advance both the domestic financing and integration agendas, and are led by the NTD Financing Working Group. They will look at budgetary allocations, and private as well as public expenditure on NTDs. Progress has been slower than hoped, with the first expected in Nigeria early 2018, perhaps followed by Sudan or Nepal. Although its federal structure adds complexity, Nigeria is a sensible choice given the Working Group Chair’s links, recent END Fund success there (with both public and private sector funding), and potential fiscal space.

The April 2017 Stakeholder Summit, attended by Bill Gates and Kofi Anan, was designed with objectives including renewing existing pharmaceutical company drug donations, raising political interest and discussion of NTDs within the context of UHC, and stimulating domestic financing. Uniting to Combat NTDs’ scorecard approach, which rates countries on their progress on NTDs, was discussed at the Summit. A more recent independent review of the scorecard\(^{35}\) found it not yet

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\(^{32}\) E.g. more representation in decision-making bodies; more access to operational information such as donation order application status, RPRG requirements, most recent forecasts, in detail when countries change MDA dates; allowing pharmaceutical companies to input into country applications before they are entered into the JAP; more use of pharmaceutical company inventory management capacity; and acceptance of capacity-building offers.

\(^{33}\) E.g. USAID’s NTD development partner matrix (2016), showing what is being supported where and by whom.

\(^{34}\) Examples include: Global Alliance to Eliminate LF; Global Schisto Alliance; International Coalition for Trachoma Control; International Trachoma Initiative; NTD NGDO Network; and Soil Transmitted Helminth Coalition.

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widely used but with good potential. While generally successful, progress on domestic funding was limited, with a single pledge from Nigeria’s Cross Rivers State.

**Intra-WHO coordination** is another challenge (shared throughout the organisation), but this is helped informally by transfers from elsewhere in WHO to WHO-NTD such as the team leader for capacity building (from EMRO) and the health economist from the TB Department. More formally, ESPEN helps in linking to AFRO, working on resource mobilisation and operational as well as technical issues. Annual sub-regional stakeholder meetings also take place (more regularly in Africa than in South Asia, due to limited capacity at the Regional Office for South-East Asia (SEARO)). All donation-related procurement must go through WHO procurement in Geneva and Kuala Lumpur, adding a week or two to lead times and a requirement to educate procurement staff in both locations, who are subject to frequent turnover, on donation issues.

### 4.5 Factors influencing resource mobilisation and management

Attribution is challenging for developments in NTD resource mobilisation and drug donations over the course of the DFID grant. The evolving international health policy environment has been helpful, with the opportunity of SDGs/UHC and pharmaceutical companies’ growing liking for corporate social responsibility (CSR) initiatives. The good working relationships between stakeholders has meant that the actions of individuals such as the previous WHO Director-General Margaret Chan, Bill Gates, ex-President Jimmy Carter and ex-GSK CEO Andrew Witty have all been influential (for instance at the CEO Roundtables where many drug donations are agreed), as well as organisations such as DFID, USAID and BMGF. Many interviewees felt the London Declaration of 2012 was a ‘game-changer’ for NTDs, placing them more prominently on the pharmaceutical company and country agendas, for example.

That said, just as many interviewees used similarly positive terms to describe DFID’s investment in WHO-NTD. Stronger economic evidence clearly made a difference to many funders, international and domestic, and going forward it also provides a foundation for the ICFDs. The third NTD Report’s bringing together of the diseases helped stimulate an integrated perspective, while the inclusion of the NTDs in the SDGs in 2015 is likely to be equally catalytic. Korea, for example, apparently stated flatly that this was the key factor behind their recent announcement of NTD funding. It will also provide influence for country-level programme managers with MoHs. Other stakeholders also contributed to this inclusion, and a further attempt by WHO-NTD to select an additional, tracer NTD indicator for UHC was unsuccessful. Nevertheless, it is clear that the health economist’s economic evidence and proactive attitude were a significant part of the reason for the inclusion. The ICFDs have significant potential for driving domestic funding and sustainability, but unfortunately remain unproven as yet.

DFID’s contribution to directing the evolution and increasing the quality of work at WHO-NTD is mentioned by other leading donors such as BMGF as catalytic and influential in relation to their own further support. Pharmaceutical companies indicated that the improved management of donations by WHO-NTD was an important factor behind increasing donated drug volumes. Gilead’s recent decision to send donated funds directly to WHO-NTD is another vote of confidence.

WHO more widely has played a helpful role in agreeing a reduced (7%, not 13%) overhead for contributions such as through ESPEN.

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36 The end of NTDs has been formally recognised as a target under SDG 3 – *Ensure healthy lives and promote well-being for all at all ages.* ‘The end of NTDs’ will be traced by the number of people requiring interventions against NTDs (target 3.3.), as well as linking other targets, especially, UHC (3.8.1).
4.6 Conclusions and looking forward

Resource mobilisation remains a challenge in the fight against NTDs, given the demanding funding gap identified by WHO-NTD. The DFID grant has had a major positive impact in this area. Drug donation management has been strengthened, helping to increase the flow of medicines without charge – a foundation of prevention and control across all NTDs. The economic evidence compiled in 2015 has been well used, helping ensure that NTDs sit within the SDGs and providing a foundation for ICFDs. Another supporting factor is the collaborative ecosystem of stakeholders, with the END Fund, for example, demonstrating the range of additional funding sources that may exist.

Domestic funding is a key challenge, although existing domestic NTD resources (e.g. volunteers, vector control, etc.) should be recognised as should the importance of non-financial requirements (e.g. capacity and leadership). The ICFDs are the correct next priority, but will be more labour- and time-intensive than prior WHO-NTD activities. Every country will require separate situation analyses, coalition building, evidence building, and visualisation, and will respond to different incentives, both for obtaining pledges and policing their fulfilment. Country programme managers must be centrally involved, as well as WHO country offices, NGOs, and potential local corporate donors (who often enjoy significant influence with decision makers). Outputs should include NTD national health accounting, fiscal space, and national funding gap analyses. Where possible, vector control and monitoring should be collaborative with other programmes. This will require additional capacity, although it will earn some measurable return.

Collaboration with other development partners will become still more important, including the World Bank and END Fund, both of which have elicited domestic resources across a number of endemic countries. At global/regional level, the Uniting to Combat NTDs Coalition and (expected) ALMA scorecards are a promising means to use positive reinforcement and peer pressure at a senior country level.

While attribution is difficult, it is very likely that DFID’s grant has proven excellent VfM in its effect on resource mobilisation, including of donations. Pharmaceutical company interviewees made it clear that the strengthened work of both WHO-NTD donation management staff and the health economist were important reassurances, helping maintain donation flow. Even if the companies’ valuation of their annual donation is conservatively discounted by 50% (to account for the lower cost of some possible generic substitutes, for example), the DFID-funded staff would only need to have protected the drug donation size by less than 0.1% each year to have paid for the entire grant. This ignores all additional gains from improved VL management, contributions to international and domestic resource mobilisation from the provision of economic evidence and the inclusion of NTDs in the SDGs, and gains from improved monitoring and programming via JAP. Moreover, these additional benefits are likely to continue beyond the grant period.

The following are further suggestions for future consideration:

- Pool procurement/supply management for selected VL commodities between WHO and NGO partners, among other reasons to free up WHO-IDM GLP capacity;
- Hold NTD Financing Working Group meetings in endemic countries, in tandem with ICFDs;

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3738 E.g. the Nepalese MoH asked for and seemed to respond to economic evidence but the Philippine MoH responded instead to personal patient stories. Often domestic funding has come when WHO can take advantage of an existing political development (e.g. ‘Clean India’), suggesting political economy skills will help.

38 African Leaders Malaria Alliance, [http://alma2030.org/scorecards-and-reports/map](http://alma2030.org/scorecards-and-reports/map), in which NTDs will be included.
• Support further growth of JAP as a programme management tool for countries, as open as possible to further pharmaceutical company resources for continuous training (to address country staff turnover), both for utility and to help maintain flows of donated medicines;
• As elimination policies are developed, adapt JAP to encompass surveillance for this;
• Promote stronger JAP linkage with DHIS2 (for which many development partners are offering support);
• Consider adding automatic reminders to MoHs on when they need to order to JAP (although this would have to contend with varied national planning/budgeting cycles);
• Review the possibility of merging IDM with the JAP platform over the longer term – though note that the challenges involved in this and the current tightness of relevant human resources mean this is something not to be rushed until full preparation is possible;
• Engage fully with pharmaceutical companies regarding rapid diagnostic test (RDT) development and donation, which may have important potential for increased effectiveness over the longer term (e.g. through integration);
• Promote a more inclusive approach to (especially PCT) pharmaceutical companies, including on data visibility;
• Consider approaching non-pharmaceutical company private sector entities, such as major logistic companies (DHL, etc.), to see if they might similarly wish to donate services;
• While it is important to retain WHO-AFRO’s key role, review whether the RPRG is worthwhile based on EMRO experience and alternative of reviewing orders using fewer reviewers and remote communications more frequently as they come in;
• Help ensure current DFID-funded capacity is maintained, as well as exploring how to most efficiently develop appropriate capacity for greater country-level engagement (possible addition to AFRO for this, complementing the current Gilead-funded VL position there, rather than in Geneva).
5 Support to the management of national NTD control programmes in priority countries

5.1 Background, objectives, and approach

Providing and developing the capacity to manage national NTD control programmes effectively is a core objective for WHO-NTD. WHO regional offices and country offices often support WHO-NTD in this endeavour by providing more localised expertise and coordination functions. Such capacity development is not only important for disease control but also for ensuring integration, domestic ownership, and sustainability.

While the Business Case and ToR have a focus on staffing (in the form of the health economist and staff managing the drug donations) and VL, this investment also supports the broader mandate of WHO: expert technical inputs and oversight; facilitating communication channels and fostering an NTD community with a shared purpose; coordinating partners and stakeholders at global, regional, and national levels; formulation of policy guidelines, norms, and standards; providing advocacy for disease control as well as resource mobilisation; surveillance, monitoring, and reporting disease control statistics.

This chapter will evaluate the extent to which WHO-NTD has strengthened these management elements of NTD control programmes. However, before doing so, we will also explore the current capacity of WHO-NTD and the regional and country offices to fulfil this mandate. This is relevant because the Business Case is predicated on the assertion that this investment is required to ensure that WHO-NTD can continue to support the NTD agenda.

Global level

WHO-NTD is responsible for global coordination as well as providing a normative function through guidelines and recommendations. It also provides technical support on NTD control to regional offices and country offices, which may then offer cascaded support to national governments. Alternatively, where capacity within regional and country offices is weaker, WHO-NTD will also provide support directly to countries. WHO-NTD is supported in this role by the Strategic and Technical Advisory Group for Neglected Tropical Diseases (STAG), which advises on overall policies and strategies as well as more detailed issues through its working groups.

Interviewees were unanimously positive about the technical expertise residing in WHO-NTD and overall felt it was doing a good job. However, its staff were generally considered to be quite ‘stretched’, in part due to their increasing roles in drug donation activities and administrative tasks. Transaction costs associated with applying for funding (made worse by short-term grants), multiple reporting to donors, and bureaucratic systems within WHO also reduced the time available for core work. Such capacity issues were only expected to increase given WHO-NTD’s broadening mandate and future ambitions. Moving forward, there was suggestion that WHO-NTD would benefit from expanding its skill set to cover more cross-cutting skills such as health economics, communication and advocacy, data management, M&E, and dissemination.

However, rather than providing additional human resources at HQ level, WHO-NTD staff and other respondents felt that creating a few more technical and administrative positions at regional and country level would be the best option. This is because WHO-NTD staff spent a lot of their time gap filling and responding to lack of capacity at regional office and country office level. If their

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39 Ibid.
capacity could be increased this would free up time at HQ level, while also providing more cost-effective localised expertise. This may also help to resolve the issue caused by the WHO reporting hierarchy whereby HQ level has no authority over country office level, but instead must go through the relevant regional office. Where regional offices lack capacity to respond to HQ requests, this frequently results in a bottleneck and an inability to hold country offices accountable.

**Regional level**

Regional offices are responsible for convening and implementing regional activities and providing technical support to country offices. They also have an important role in gathering and aggregating country-level data, including drug requests. However, their ability to provide technical support is often sub-optimal because they have a limited number of staff that have to cover multiple technical areas.

AFRO is considered to have the strongest expertise in PCT NTDs because it is host to ESPEN and therefore offers unusually specialised support for NTD control, although only within PCT diseases which are ESPEN’s exclusive mandate. Prior to 2014, WHO-IDM collaboration with AFRO was considered to be problematic, partly due to a lack of expertise in IDM diseases and partly because AFRO still had a limited number of staff given the high intensity of NTD control activities required in the region. However, communication and support has improved since a new individual joined AFRO and the GLP has recently used money from the Gilead support to pay for a full-time leishmaniasis (for both cutaneous and visceral leishmaniasis) focal point in AFRO. DFID’s support to ESPEN is also seen as a contributory factor.

SEARO is considered to provide useful and appropriate technical support for PCT as well as compiling drug requests, facilitating shipping, and supporting elimination dossiers. In-country activities beyond joint evaluation missions are largely left to the country offices because they are relatively stronger in NTD control compared to the country offices in the AFRO and EMRO regions. However, SEARO helps coordinate these activities by acting as a regional hub.

EMRO has the most limited capacity to support NTD control because it only has one regional adviser (like other WHO regions) but bears a huge burden of NTDs. Furthermore, the regional adviser (of two years) is now based in WHO-NTD in Geneva, performing the role of acting regional adviser until a replacement is found. While this individual is considered to be as supportive as possible, a severe lack of specialised staff means that EMRO is largely reliant on WHO-NTD at HQ. Fortunately, the GLP also has an ex-EMRO staffer of five years based in the Geneva office who helps interface with EMRO.

**Country level**

Country offices are meant to provide a localised partnership, coordination, and technical support function to national governments, as well as to act as focal point for HQ and region-led activities. However, it is common that there are insufficient numbers of staff to support general functions, and a lack of technical specialists to support NTD control.

Where capacity exists, this is usually due to projects paying for additional specialised staff (such as VL officers in the Ethiopia and Bangladesh country offices). If skilled country office staff are available, it is not uncommon for them to become overburdened by being requested to support activities outside their country. Even though the Ethiopia country office is considered to be one of the strongest country offices for supporting PCT and IDM disease control, the team there still consider themselves very understaffed given the number of activities they are expected to support. This is also likely to be true for other country offices that have large populations or disease burdens such as Tanzania and Nigeria.

A key problem for WHO-NTD when working with WHO country offices is that country offices report to the regional director, and WHO-NTDs must be invited to contribute to work at the national level.
by the relevant regional and country offices. This means it is not institutionally possible for WHO-NTD to hold country offices to account for their performance on joint activities. While it is possible for WHO-NTD to report issues to the regional director and ask for their support in resolving them, given capacity constraints this can sometimes be problematic. While not directly related to the grant being reviewed in this document, such problems were encountered by WHO-NTD when supporting implementation of VL activities in Sudan: despite significant efforts to try to resolve implementation issues, WHO-NTD was unable to directly affect any changes.

5.2 Coordinating and supporting national NTD control programmes

WHO-NTD is considered effective at coordinating and supporting national NTD control programmes. With the support of regional and country offices, WHO-NTD convenes or participates in several partner groups, regional consultations, and expert committees on NTDs and VL. These meetings provide opportunities for the government, implementers, and other stakeholders to come together and jointly plan their activities. The involvement of WHO is particularly valued because of the high value that governments place on its advice and its ability to deliver a single and trusted message.

Most notable are the activities involved in developing regional and national NTD masterplans, which provide a strategy for integrating NTD disease control and aligning partner activities with national plans and systems. Such coordination supports greater government involvement, capacity building of government staff, and overall transitioning to government ownership. WHO-NTD has been fundamental in developing the blueprint and guidance documents for developing NTD masterplans and in using its convening power to bring all the necessary actors together. Overall, there has been considerable progress in this area but the process of developing masterplans is complex and resource intensive so some countries continue to struggle and are behind schedule on this.

WHO-NTD has good relationships with national governments and is seen as collaborative and receptive to other implementing organisations. Several partners considered themselves to have productive relationships with WHO-NTD characterised by close connections and alignment. Relationships and communication between WHO-NTD, regional offices, and country offices are considered to have improved in recent years, evidenced by the VL coordination meetings in East Africa resuming after a hiatus. An outcome of this was the development and adoption of VL guidelines by countries not currently supported through this grant. Another indicator of effective communication and collaboration is the response to cross-border VL outbreaks, which have reportedly been well coordinated.

5.3 Contributions to NTD and VL policy and advocacy

As stated previously, WHO-NTD has produced an impressive number of policy, guidance, and advocacy documents over the last few years. These include:

- The first (2011), second (2013), third (2015), and fourth (2017) NTD reports;
- Guides for developing NTD masterplans and support to regional and country-specific plans;
- Peer-reviewed publications on the economic impacts of NTDs, needs, and agenda setting;
- Developing and ensuring inclusion of NTD indicators in the SDGs and ALMA scorecard (pending);
- The NTD indicators compendium;
- Resources for establishing and planning disease control priorities;

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42 Ibid.
• Harmonised treatment guidelines for VL and associated training courses (e.g. the PKDL online course);
• The WHO-AFRO guidelines for integrated mapping;
• The WHO-NTD course for programme managers;
• Advocacy videos on the need for VL control in priority countries; and

While all these documents and resources assist advocacy at global levels, NTD masterplans are frequently cited as being a key advocacy tool at regional and country level. This is because developing this document involves bringing ministers of health together to agree to the masterplan for their countries. The high-level nature of such an event and the ‘healthy competition’ this creates between countries can result in domestic resources being committed to plan implementation.

Sharing of data is also seen as important mechanism for advocacy through promoting competition and accountability for results and advertising success stories. WHO-IDM is leveraging this for VL by increasing publication of VL data in the form of country profiles, epidemiological and drug access updates, interactive dashboards (currently only open to partners but wider open access planned), and sharing of progress toward control and elimination.

Some respondents did complain that the publication of reports and guidelines by WHO-NTD can be slow, but they also acknowledged that this was largely a symptom of institutionalised WHO caution and bureaucracy. Indeed, one respondent felt that WHO-NTD was one of the most proactive WHO departments and worked as quickly as the WHO system permitted.

Nevertheless, there remains a notable outstanding issue that requires further global guidance and policy development: the elimination of NTDs. Targets for elimination are cited as arbitrary and generally reflect political commitment rather than sound epidemiological evidence on incidence rates required to keep the disease below a threshold where it is no longer a threat to public health. Guidance on elimination targets as well as calculation of cost estimates, including reaching the most marginalised, would be valuable additions to the literature. Post-elimination strategies are also essential for ensuring that diseases that have achieved elimination as a public health problem continue to maintain their low incidence levels and political commitment for maintenance of elimination is sustained. These should include guidance and standards for monitoring and surveillance systems, which could be required to be put in place before elimination certification can be given.

44 http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0035671
45 www.who.int/leishmaniasis/resources/who_wer9122/en/
46 www.who.int/leishmaniasis/resources/who_wer9238/en/
The approach case detection is the default strategy used for VL for logistical and cost reasons. Patients seek treatment and are diagnosed. This differs from active case detection, which proactively and systematically surveys populations at risk to look for cases of the disease. Passive case detection is the default strategy used for VL for logistical and cost reasons.

The approach has the following disadvantages:

1. **Incomplete data on disease burden.** Passive case detection is carried out in public facilities but a proportion of patients seek care through private providers or public providers that do not offer VL diagnosis or treatment (with the effect that they are not reported as VL patients). As a result, these patients go undetected unless they eventually access care from a public facility that can record them as a VL patient. Since private sector utilisation is very high in South Asia and in some countries in Africa, this may account for a degree of underreporting, and also may result in delays or even limit access to diagnosis and treatment. Such patients are likely to die unless they receive appropriate care.

Passive case detection is also not in line with the WHO Roadmap for VL elimination in South Asia because targets are set at 100% detection and treatment of cases in South

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**Box 1: Examples of NTD coordination and advocacy work in Ethiopia**

Support from WHO-NTD, WHO country office, and KalaCORE is highly appreciated by the MoH at central and peripheral levels. The MoH receives regular communication, mentorship, and advice; so much so they consider WHO and KalaCORE to be a technical arm of the MoH.

WHO-NTD and the country office have been fundamental in bringing government attention to NTDs in Ethiopia and implementing NTD control strategies through the NTD Masterplan, which is now in its second edition. They also provide an important coordination and advocacy role through convening the NTD Taskforce, VL Technical Working Group (quarterly), and cross-border coordination with South Sudan regarding migrant and displaced populations. The Government of Ethiopia is strongly involved in all these activities. For example, the successful and innovative integrated mapping of NTDs in the Gambella refugee camps undertaken by the Federal MoH in Ethiopia in 2015. The camps include more than 400,000 refugees from Sudan and South Sudan who have been screened for many NTDs.

This not only helps coordinate control activities but, combined with other advocacy efforts, has led to stronger government commitment and ownership of NTDs. Examples of this include establishing a NTD department in the MoH, the government paying for Trachoma Trichiasis surgeries, and some regional health bureaus covering VL patient transport and food costs and waiving admission/inpatient fees.

### 5.4 Building national capacity for disease control and surveillance

Country data availability for NTD interventions is rated as ‘good’ within the World Health Statistics 2016. However, the data only determines populations at risk of PCT diseases and the level of disaggregation is rated as ‘poor’, thus making equity and UHC calculations difficult. The GLP published detailed data on the population at risk in high-burden countries in 2016.

Establishing the actual prevalence and incidence of disease within populations is more problematic. Careful monitoring and surveillance are required to map treatment or MDA needs (for PCT diseases only), determine treatment rates, identify disease outbreaks, and determine if disease control or elimination has been achieved. Given the focus of this investment, we will summarise the main monitoring and surveillance approaches being used for VL and the role of the GLP in supporting this.

**VL surveillance**

Case detection for VL in East Africa and South Asia is largely passive, with cases recorded when patients seek treatment and are diagnosed. This differs from active case detection, which proactively and systematically surveys populations at risk to look for cases of the disease. Passive case detection is the default strategy used for VL for logistical and cost reasons.

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47 Full data on screening was not available, but for example in excess of 90% of children (from age-appropriate treatment groups) were treated with Albendazole for deworming, given vitamin A supplementation, and immunized with the Oral Polio Vaccine. UNHCR (2017) *South Sudan Situation; Bi Monthly Ethiopia Situational Report*. 16-30th September 2017
Asia (there are no specific targets for Africa). Therefore, passive detection generally results in lower case detection and associated underestimates of disease burden: if active case detection was implemented, one would expect observed disease prevalence to increase. The challenge is how to afford the huge costs related to regular active case detection and to ensure that all private providers report and refer the suspects or the confirmed cases (in case they are equipped with RDTs).

2. **Delays in treatment.** Relying on individuals to seek treatment can result in delays in seeking treatment due to poor knowledge of the disease and where to seek treatment, seeking treatment from inappropriate providers who are not capable of diagnosing and treating VL, and financial and geographical access barriers.

3. **Detecting PKDL.** Recent evidence has confirmed that all forms of PKDL are infective. PKDL is rarely reported in passive case finding, but active case detection allows PKDL to be detected (in addition to VL) and has led to a large spike in cases in South Asia.

In South Asia, these problems with passive case detection are overcome to an extent by the use of an additional form of case detection, known as **reactive case detection.** It is called reactive case detection because case finding is only conducted in response to finding an index case through passive mechanisms, rather than proactively searching for cases on a routine basis in hot-spot areas (as is done for active case detection). For VL in South Asia, reactive case detection involves determining where a passively identified ‘index’ case came from and then surveying the community for other cases using techniques such as circumferential house-to-house searches around the index case. Other strategies that have been used are fever camps, where everyone who has a fever in the village comes to be screened for VL, or targeted active case detection where villages with very high incidence of disease are targeted for house-to-house screening. In East Africa this approach is only used when epidemics are detected. While the absolute number of cases is not necessarily needed for identifying outbreaks in a known risk area (because the relative increase in incidence highlights a potential outbreak), the lack of accurate data and mapping on disease burdens makes it difficult to know if VL treatment is providing comprehensive coverage.

Nevertheless, these are inherent issues with using passive case detection and for the most part the systems appear to be working effectively. In the absence of providing significantly more resources for active case detection, improvement of the comprehensiveness of the data and decreasing treatment delays involves:

- Increasing health seeking behaviour through behaviour change and communication activities (BCC);
- Ensuring that more facilities and healthcare providers can diagnose VL or have the capacity to refer suspects;
- Providing good quality of care so that patients are encouraged to use public facilities;
- Reducing geographical and financial barriers to accessing care; and
- Consideration of financial incentives to patients and community health workers for completing VL treatment in public health facilities.

These issues will be discussed further in Chapter 6.

**VL monitoring and reporting**

**Compiling data**

Regional offices aggregate VL data annually through reports submitted by MoHs with the support of country offices. The data are then submitted to the GLP. However, this process is widely
perceived as slow, largely owing to the time peripheral levels take to submit data. Further delays are introduced by the need for data cleaning.

The cause of delayed submission and poor-quality data is thought to be the lack of priority given to it by MoHs. Country office staff try to speed things by chasing district programme officers, but this situation will be difficult to resolve unless MoHs place more accountability on timely submission, for instance by making it part of annual work plans.

To resolve this, national IDM annual (or six monthly) review meetings could be institutionalised within the country programmes in VL-endemic countries as best practice for the monitoring of VL and other IDM programmes. While such reviews would obviously only cover endemic IDM diseases that have common monitoring requirements, similar reviews for multiple PCT diseases have been useful and could serve as a model. It could also be convenient and opportunistic to combine IDM review meetings back to back or side by side with PCT meetings.

**Reporting data**

Another concern around collating and reporting NTD data is the multiplicity of systems used. VL and other IDMs are reported on predominantly via a DHIS2 module developed by WHO-IDM50 (the system used for the world leishmaniasis data repository). DHIS2 is already used by countries such as Bangladesh, Nepal, and Sudan, while India uses an Excel-based system (although this varies by state). The Excel sheets can be easily imported into the DHIS2 tool and the GLP has already assisted several countries to configure their Excel files so that they can easily and automatically be uploaded into DHIS2 through a WHO-made app (Excel importer).

The PCT diseases use another system (the Integrated Disease Database) developed specifically for PCT diseases, although it contains sections for other NTDs. In fact, in 2014 the GLP in collaboration with AFRO customised the Integrated Disease Database so that the leishmaniasis section could be fully aligned to the variables and indicators of the GLP. However, national programmes continue to use the software only for PCT diseases (which is not open source). Implementing partners also commonly have their own particular data systems and reporting tools. This results in multiple reporting requirements for governments and WHO offices, adding to reporting delays. It also limits government ability to have a complete picture of disease burden.

While discussing the relative value of each system is beyond the scope of this report, clearly parallel reporting must be reduced and integration with national systems promoted. If national systems do not exist, this presents an opportunity to help develop one, but there should be a clear position within WHO-NTD on what system to use. However, ultimately the leads on any coordinating or aligning initiative should be the countries themselves. In that sense, the GLP does send a clear message to all countries and MoHs: national programmes are sovereign to decide which system or software they want to use and WHO HQ will assist them to establish a mechanism so that MoH data is easily exported to the DHIS2-based GLP data warehouse.

The DHIS2 module is promising because it fits within existing platforms increasingly adopted by countries as their national surveillance system tool and by other WHO global programmes (e.g. the Neglected Zoonotic Diseases Unit (for rabies), the Vector Ecology and Management Unit (for dengue), the WHO Global Tuberculosis Programme, the Joint United Nations Programme on HIV/AIDS, the WHO Global Malaria Programme, and the Department of Health Statistics and Information Systems) and international organisations or initiatives (e.g. PEPFAR, the Global Fund, and CDC Atlanta). However, it is unclear whether the Integrated Disease Database will incorporate into this. This issue was identified by the STAG M&E Working Group, which felt that data systems have not converged as quickly as they should and there is a need to explore how all NTD data can

50 See Box 2.2 in the fourth NTD Report, p. 19.
be migrated to a single system by 2020. However, currently there appears only limited agreement on this between the IDM and PCT units of WHO-NTD.

Publication of data

Finally, concerns were also raised over the how data is being published. Currently, WHO-IDM GPL release VL data when it is formally cleared by member states and it is made publicly available online through the Global Health Observatory, the new country profiles for priority countries, and the Weekly Epidemiological Record (published as a report). Although publication of this data is much improved in recent years, the process can take a long time due to bureaucratic and political hurdles. Examples of this are the World Health Statistics 2017 citing data from 2015 and most VL-burden country profiles only being updated to 2014 and 2015. This has led to some partners and countries requesting access to the raw data earlier, rather than waiting for the published data to be released.

However, WHO can only publish or release data after being authorised by the country (MoH) itself. Therefore, they are not at liberty to disseminate raw data earlier. As such, there is a need for countries to be able to analyse and interpret and quickly disseminate their own data. This would not only encourage greater national ownership but could also incentivise timely reporting. The GLP is encouraging countries to do this through the DHIS2 platform so that data is entered at the most peripheral level possible and then validated by the national level before it can be displayed for public dissemination or internally with selected partners through pre-defined dashboards.

National programme manager training

As presented in the previous section, there is a clear need to improve national monitoring and surveillance capacity. This should not only focus on improving the quality and timeliness of data reporting but also support national governments to demand, utilise, and act upon the data. WHO-NTD has supported this endeavour through the training of 104 national programme managers in the last five years. Regional and district programme managers have also been trained but the number has not been reported.

This training is based on a course developed over five years by the Capacity Strengthening Unit of WHO-NTD, funded by USAID. It is comprehensive (consisting of over 700 slides) and has been translated into multiple languages. The modular content (planning, supply chains, M&E, etc.) allows content to be broken down to meet specific needs. It is an appreciated resource utilised by the African and Western Pacific regional offices and the Pan American Health Organization, thus helping to promote best practices for NTD programme management. WHO-NTD has also developed district-level training courses to allow field officers and district managers to learn about NTDs and to build capacity for PCT programme implementation. It is a cascade-like training with support from regional offices and WHO HQ.

However, the content only covers the PCT diseases, and so does not meet the needs of programme managers implementing IDM disease control. The Capacity Strengthen Unit suggested that adding an IDM disease component would make the training too long, but this does not appear valid because PAHO and some country offices have already added IDM modules. In Ethiopia and Tanzania the training has also been adapted to meet the needs of regional and district programme managers. Given the desire to standardise the training it now seems important for the Capacity

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51 www.who.int/gho/neglected_diseases/leishmaniasis/en/
52 www.who.int/leishmaniasis/burden/endemic-priority-alphabetical/en/
53 www.who.int/leishmaniasis/resources/wer/en/
Strengthening Unit to quality assure and standardise these adaptations by developing a dedicated IDM module.

While it is not possible to assign causality, the provision of this training within project countries may account for the reported improvements in timeliness of reporting and quality of data in East Africa and South Asia (although India remains problematic). However, high levels of staff turnover means frequent re-training is required, and WHO-NTD accepted that current training may not sufficiently meet the capacity strengthening needs of some MoHs. Cross-learning between countries was considered to be an important medium for learning but providing this expanded training is currently not possible due to lack of funds.

The unit cost per individual national programme manager trained (including developing locally appropriate materials) has reduced from US$ 8,500 to US$ 2,500. However, this is still a substantial sum that could act as financial barrier to capacity development. While this figure is considered to be the limit of economy using the current training model, the Capacity Strengthening Unit of WHO-NTD is exploring cheaper alternatives such as peer learning, mentoring, and cascaded training through trainer of trainers. Nevertheless, development of these resources will require additional funding.

Lessons learnt between 2013 and 2017 from the three editions of the interactive online course on Cutaneous Leishmaniasis (CL) and the first edition on skin NTDs, which have been developed by WHO in collaboration with the Open University of Catalonia in Barcelona, show that the unit cost per individual trained was EUR 575 and EUR 750 for a three-month and four-month course respectively. That cost includes the salaries of the disease experts who interact with the participants, which gives the chance to address questions or issues in online forums, something that is not possible with the self-learning methodology.

5.5 Integration of support to the management of national NTD control programmes

Despite resistance from disease-specific groups, WHO-NTD has driven NTD control programme integration by combining disease-specific MDA programmes. The PCT disease control field is now less fragmented, more efficient, and more aligned with national governments. However, the concept of integration is still ambiguous. In its most basic form, integration is about concurrent treatment for MDA, where possible (e.g. co-endemic districts that are pharmacologically safe). However, it could be extended to all aspects of the disease control cycle: planning, capacity building, procurement, logistics and supplies, prevention, treatment, monitoring and surveillance, and reporting.

WHO-NTD has promoted more comprehensive integration through NTD masterplans and associated coordination functions, consolidating drug donations and distribution for several PCT disease drugs (not all), pooling financial and technical resources for PCT control and elimination (e.g. ESPEN), and training that is transferable across PCT diseases. Indeed, the fourth NTD Report focuses on how NTD control can be integrated into the broader 2030 Agenda for Sustainable Development. However, to date, integration has largely focused on the PCT diseases. Integrating IDMs is more difficult as it requires different and more specialised diagnosis and treatment, so concurrent treatment is often not feasible. Nevertheless, the lessons learned from integrating PCT diseases could be applied to some IDM diseases.

WHO-NTD is progressing in this area, as exemplified by the integrated activities being implemented in Ethiopia (see Box 2). However, many respondents stated that disease-, country-, or activity-specific funding often prevents integration because funding is not permitted to be used
for a broader purpose. Even when funding can be pooled this is often made difficult because donors require reporting on investment-specific outcomes or want to know exactly how their money contributed to a positive outcome. Since integration necessarily involves horizontal collaboration, such specific levels of attribution are usually not possible. Box 2 provides a useful case because the positive outcomes cannot be attributed or measurably shared between the different organisations.

**Box 2: Examples of IDM disease integration in Ethiopia**

The Ethiopian MoH, in collaboration with WHO-NTD, other partners and the WHO Ethiopia Country Office, has made good progress in integrating IDM disease management into wider disease control activities. Examples include:

- Ensuring IDM diseases, including rarer ones such as podoconiosis, are included in the NTD masterplan.
- Utilising the government supply chain for distribution of some NTD drugs, and leveraging established cold chains for HIV drugs where required.
- Supporting and utilising the government surveillance system (Public Health Emergency and Management) to identify VL and other IDM diseases cases.
- Adding a limited number of VL indicators into the HMIS and supporting the adoption of DHIS2.
- Adapting the national programme manager training to cover IDM diseases, and training regional and district managers.

Nevertheless, greater integration between PCT and IDMs within WHO is possible. For example:

- The GLP in the IDM Unit sits within WHO-NTD, but separately conducts its own drug donation and distribution, capacity building, and surveillance activities.
- Leprosy is a separate department based in Delhi and does not fall under the IDM unit of WHO-NTD. Equally, Trachoma is in a separate department at WHO HQ and operates largely independently with support from a discrete funding base.
- There does not appear to be structured interaction with the World Health Organization Special Programme for Research and Training in Tropical Diseases (WHO-TDR), which has a great deal of experience in the field of NTDs, especially capacity building. More specifically, WHO-TDR has expertise in VL, especially in India, and has recently published on this topic.54
- WHO-NTD training materials for PCT disease control do not currently accommodate IDM diseases, despite overlapping skill sets being required. As mentioned previously, some regions and countries have already adapted material to meet the needs of some IDM diseases.

### 5.6 Conclusions and looking forward

In 2015, 1.55 billion people required treatment for at least one of the following PCT controllable diseases: LF, Onchocerciasis, STH, Schistosomiasis, and Trachoma.55 This is a fall of 350 million people since 2012 and 446 million since 2010.56 Of those needing treatment for these diseases, a record 991 million people received it, representing a global coverage of 63%, up from 50% in 2014. This represents significant and much needed acceleration in progress toward the 2020 Goals (as shown in Figure 3).

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Much of this success is owed to huge increases in LF and Trachoma coverage from 2008 to 2015 (56% increase for LF and 200% increase in Trachoma coverage). As a result, over 300 million people will cease to require preventative treatment for LF, and in 18 countries LF has either been eliminated as a public health problem or is under surveillance for elimination. In 2015 alone, 56 million people received antibiotic therapy for Trachoma. The project target of 75% of PCT campaigns being implemented as planned has been met, and the proportion of implementing units achieving effective PCT coverage also shows significant increase for all diseases except Schistosomiasis (although there has been a large increase in school-aged children treated and a decrease in endemic foci in target countries: Ghana, Malawi, Tanzania, and Uganda).

Overall there has been good progress in the management and associated implementation of disease control, as evidenced by the statistics. As one respondent put it: ‘If people had been told 10 years ago that in 2017 billions of drugs for NTDs would be donated, NTDs would be high on global and national agendas, and comprehensive and standardised guidelines would be developed, they would never have believed you’. While many players have contributed to this and it is not possible to assign attribution, it is likely that WHO-NTD played an important role in contributing to these successes. While it might be possible for other (potentially leaner and more efficient) organisations to do this, they would not have the required convening power and buy-in of low- and middle-income country governments that is required for action to be taken.

Ensuring WHO-NTD continues to successfully access the resources necessary to be able to undertake this work will be essential if current gains are to be sustained. As noted by the STAG, even current financial contributions are insufficient for all recommendations to be implemented.

Figure 3: Projected PCT, 2020

Lack of funding may also jeopardise WHO-NTD’s ability to lead NTD control and could weaken NTDs’ priority status within WHO. Furthermore, given the limited numbers of NTD donors, removal of DFID support could leave WHO-NTD dependent on an even narrower group of funders that would then dominate the NTD agenda.

Continued external support will also be important to maintain high-quality technical teams. As such, DFID’s investment in human resources appears well founded. However, despite DFID investment, staff shortages still appear to reduce the scope and speed of achievable work. If donors were to consider providing further resources for staffing, the suggestion of funding further NTD focal points within regional offices and country offices appears sensible and could offer better VfM given the higher overheads associated with placing staff in Geneva. Funding for cross-cutting positions such as an M&E focal point would also be very helpful because these people could provide commonly required support across disease units and countries. Such a role may also help promote integration and alignment.

Moving forward, a key area requiring further strengthening is monitoring and surveillance. While current WHO-NTD efforts are important, further work will be required to strengthen technical capacities and data platforms in endemic countries. WHO-NTD should combine the efforts of the PCT and IDM departments where possible. Developing a single reporting and surveillance system for NTDs that is aligned with national HMIS would go a long way toward improving data quality and reporting and reducing the burden on endemic countries.

While integrated management of PCT diseases is now well established, integrating IDM disease control is relatively nascent. This will require joint working among the IDM diseases but also, and perhaps most critically, leveraging PCT experience and resources. A simple example of this would be to adapt PCT capacity strengthening tools to meet IDM needs. To facilitate this, more flexible or core funding to WHO-NTD will be required.
6 Strengthening access and the necessary logistics to increase the numbers on VL treatment

6.1 Background, objectives, and approach

Focusing on the VL-specific activities assigned to WHO-NTD under this investment, this chapter will evaluate the extent to which the GLP has contributed to strengthening the quality of VL case management, supply chain strengthening, and drug distribution coordination. We will then present the current situation regarding access to VL treatment in focus countries because patient access to services is a key outcome. Finally, progress toward the elimination of VL in South Asia and the effectiveness of control of VL in Africa are considered as key impact measures. It should be noted that KalaCORE (see Section 1.3.1) and WHO country offices also contribute to access to VL services and many organisations contribute toward impact measures. These issues are highlighted where relevant.

6.2 Building national capacity to increase the number of people on VL treatment

6.2.1 Case management training

The GLP has made concerted efforts at training healthcare providers to diagnose and treat VL. Over the course of the investment the programme has trained 4,309 individuals (300 in Nepal, 981 in Bangladesh, 2,519 in India, 35 in South Sudan, 220 in Ethiopia, and 254 in Sudan). The numbers of people trained within South Asia far exceed initial targets and the GLP is now considering how to expand this success to the East African countries. The GLP has also developed a self-learning online training course for PKDL, which is seen as a key resource. A total of 190 participants have enrolled from August to December 2017, bringing the current unit cost per individual trained to US$ 80.

The case management training includes practical application of skills (such as physical examination of VL patients, identifying parasites, and carrying out diagnostics) as well as theoretical training. This is then reinforced over time through supportive supervision jointly carried out by WHO country offices and KalaCORE. The Ethiopia country office has also produced several useful VL treatment guidance documents and training materials for facility staff and outreach workers. It is possible that other country offices have also developed similar material but information on this has not been provided.

Overall, this package of training is widely appreciated by countries and KalaCORE and is thought to have improved awareness of the disease as well as capacity to diagnose and treat VL. However, the effectiveness of the training regarding improving knowledge and practice has not been assessed. Furthermore, a high rate of staff turnover in many areas is likely to reduce the impact of the training. Moving forward it would be useful to carry out an assessment of the quality of the training and retention of knowledge and skills so that necessary improvements and any need for repeat training can be ascertained.

61 The Integrated Refresher Training Manual for Endemic NTDs in Ethiopia and a Health Extension Worker Pocket Manual that covers all eight endemic NTDs in Ethiopia.
6.2.2 Drug distribution and cold chain

The GLP manages the donation of AmBisome in close collaboration with Gilead and the procurement of other VL drugs and commodities for priority countries (see Chapter 4). From 2012 to 2014, WHO procured the medical supplies for the three East African countries until KalaCORE took over as per the agreement with DFID. However, given the preferential prices that WHO has access to, DFID requested that WHO take on this role again in 2017.

WHO is also responsible for supporting countries in the effective distribution of these commodities within country, including helping to ensuring cold chain precautions are adhered to (required for AmBisome). To this end, the GLP in collaboration with regional offices, country offices, and MoHs carry out inspections of the status of the government supply chains, as well as the quantity and quality of drugs. The GLP has developed a DHIS2-based online platform to provide a real-time dashboard with information on each commodity at the health facility level in each country.

Across most of the project countries, existing government supply chains and warehouses are utilised and WHO provides fridges (using DFID funds) to facilities where they are not available (note that KalaCORE also provides fridges to facilities where needed). If government supply chains and warehouses do not meet the required standards, alternative supply chains such as those used for HIV drugs (e.g. in remote areas of Ethiopia) and other implementing agencies’ warehouses are used (for instance MSF warehouses are used in Bangladesh). Using existing supply chains not only helps to align with national systems and reduce costs but has also strengthened government supply chains through the provision of technical support and training and the development of SOPs for stock management.

There have been delays in supply, but this is considered reasonable given the difficulty of the task and the level of necessary dependence on other institutions. The main bottlenecks in the process are inaccurate or late ordering of commodities by governments, production of AmBisome sometimes being insufficient to meet demand due to manufacturing issues (AmBisome is a complex drug to manufacture and sometimes batches fail), and delays in getting shipments into countries due to bureaucratic regulations and customs. When delays or stock-outs have occurred, WHO and KalaCORE have been responsive in resolving the situation, for instance by redistributing stocks within or between countries or borrowing emergency stocks from partners such as MSF or using the WHO global emergency stock in Geneva.

Despite these hurdles, both drug distribution and cold chains are considered to have improved over the course of the programme and the supply chain is deemed by all respondents to be largely effective and efficient. While it may have been possible for alternative organisations to carry out this function (e.g. well established and widely used private companies) they may be expected to charge higher overheads for this service. Furthermore, the training and SOPs provided by WHO-NTD are thought to have contributed to improved national capacity and sustainability. The GLP is also now helping with forecasting drug requirements using data from country reporting systems and DHIS2. WHO brings significant added value here because other organisations would struggle to get the country-level cooperation to do this.

Nevertheless, there is potential room for collaboration and coordination with the Expanded Programme for Immunization (EPI) in the countries where the control/elimination efforts for VL are taking place. EPI programmes are usually well equipped and have the infrastructure to accommodate other commodities and drugs in need of a cold chain. Therefore, collaboration with EPI could be explored as a way forward for VL cold chain long-term maintenance. Such collaboration is routinely implemented in some countries such as South Sudan and has been explored in India, but it is recognised that the vertical operational model of many vaccine delivery channels and the large scale at which they operate may make integration difficult in other countries.
Box 3: VL drug supply in Ethiopia

The majority of drug and commodity distribution is done through existing government systems. Overall, VL drugs and other commodity availability has improved. However, limited drug stock tracking and delayed ordering and distribution have resulted in stock-outs or expiries. At the time of the evaluators visit there was a one-month nationwide expiry of the rapid diagnostic rK39. Despite these difficulties, most agree that the benefits of working through the government system (principally alignment, ownership, and sustainability) outweigh the drawbacks. Furthermore, WHO and KalaCORE have reacted quickly to resolve any stock issues. Nevertheless, further efforts at strengthening the government supply chain would be useful. A key area for focus would be for MoH to integrate facility stock management for VL drugs within the national Integrated Pharmaceutical Logistics System, as has been done for malaria medication.

6.3 Access to VL treatment

Access to VL treatment has improved over the course of the programme, especially in the South Asian countries. In the first year of the project, only 28% of patients in Bangladesh received AmBisome as the first-line treatment. This has increased at an impressive rate to reach 100%, which exceeds the 90% target. Treatment with AmBisome is almost as impressive in India, with 97% of eligible patients receiving it as a first-line treatment. In Nepal, 84% of patients received AmBisome, which again is a significant increase from just 17% in 2015.

In the East African countries, AmBisome is used as a second-line treatment in over 90% of eligible cases. This represents a major improvement because AmBisome was not used outside the MSF-run health facilities before 2012. Through financial support from DFID, WHO and KalaCORE were able to conduct on-the-job training to roll out the implementation of AmBisome as the second-line treatment following the first donation by Gilead at the end of 2011. However, these figures are not wholly reliable because little information is available on the number of patients that require AmBisome as a second-line treatment. Currently, the figures are calculated based on an estimate that 15–20% of all VL cases in Africa require AmBisome, but it is not possible to know if the patients treated with AmBisome actually required it. In Ethiopia, AmBisome is being used in 31% of cases, which is up from around 16% in previous years. It is not clear if this represents an overuse of AmBisome, inaccurate projections of need for second-line treatment, or an increased need due to high HIV–VL co-infection or other medical conditions. To improve the data available on this, WHO has developed a set of core variables and indicators based on individual, patient-based information. However, not all countries are keen to shift from aggregate to individual data collection.

Within Ethiopia, there has been good progress in the proportion of VL patients receiving Sodium Stibogluconate and Paromomycin Combination Therapy (SSG-PM) combination therapy as first-line treatment (as compared to the longer treatment of SSG monotherapy62). However, findings from the evaluation of KalaCORE in Sudan indicate that SSG monotherapy is still regularly used. In South Sudan, SSG-PM has been used as first-line treatment since 2010.63

The absolute number of patients being detected and treated in the East African countries is much less than the initial targets set. However, this is thought to be due to MSF providing parallel services for VL in South Sudan and to incidence levels being lower than originally anticipated in Sudan and Ethiopia. Indeed, Ethiopia and Sudan reported 1,829 fewer cases of VL in 2016 than in 2015. Given the difficulty in establishing the disease burden in East Africa and the cyclical patterns in epidemiology, these reasons for reduced treatment numbers appear plausible.

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http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0002720
Overall, these figures demonstrate good progress. While WHO and KalaCORE cannot lay claim to all the results, since there are other actors and organisations that have contributed substantially to these outcomes, this investment will have undoubtedly contributed through the aforementioned case management training (via improved awareness, diagnosis, and use of correct medicines) and improved supply of drugs and diagnostics (via improved drug availability).

Another important contribution made through this investment is the scale-up of facilities providing diagnostic services in endemic districts. An impressive 100% of facilities in endemic areas of Bangladesh provide VL diagnosis, in India there is approximately one facility per block providing VL services, and in Nepal this figure is one per district (% VL service coverage of facilities is not known because not all health facilities in Nepal and India have been mapped). The proportion of health facilities providing diagnostic services in East Africa in 2016 increased to 90% in Sudan, 75% in South Sudan, and 73% in Ethiopia. Ethiopia and South Sudan are behind target largely due to both countries having security issues in certain regions.

This decentralisation of services is important because it represents a move from a few centralised specialist sites to provision of diagnostic and treatment services within endemic communities. This increases geographical access to care, which reduces travel time and costs that can be barriers to seeking treatment. Provision of free drugs and nutritional support through KalaCORE or WHO also helps reduce treatment costs and thus improves financial access. In Ethiopia, some regional health bureaus have gone a step further by waiving inpatient care and admission costs and providing free food for and transport for VL patients. Ultimately this should have an important effect on the number of people seeking treatment and the time taken to receive treatment. Outbreak investigation in East Africa and Fever Camps in South Asia should also have helped reduce treatment delays through identifying cases in communities and referring them for treatment.

Decreasing the time taken to receive treatment not only improves patient outcomes but also reduces the chance of onward disease transmission (thus contributing to reduced prevalence) and improves the timeliness and comprehensiveness of surveillance data (as explained in Section 5.3.1). As such, reducing treatment delays is critical for disease control and reducing the case fatality rate (CFR). Figure 4 shows the baseline treatment delays in selected VL focus countries collected by KalaCORE in 2015.
As can be seen from Figure 4, the majority of treatment delay occurs between care seeking and correct diagnosis, with India and Bangladesh performing worse than Ethiopia and Sudan. While it should be noted that these data are the baseline data for KalaCORE (2015) – i.e. they are from before DFID’s major investment in KalaCORE began implementation (but three years after the start of DFID’s VL investment in WHO-NTD) – qualitative data from 2017 in the Western Tigray region of Ethiopia show wide variability in treatment delays ranging from a few days to several months. These findings tally with respondents’ accounts from the evaluation’s field visit to Ethiopia where the average treatment delay was considered to be three weeks, but with some patients suffering much longer delays of several months. Treatment delays in India were also considered to still be worrying long by several expert interview respondents. Similar delays of around two months have recently been reported in India by various publications and constitute a factor affecting lower castes in India, especially regarding access to care for VL.

Overall, these findings suggest that delays in receiving treatment remain unacceptably long for patients in India, Bangladesh, and Ethiopia. This may also be the case for Nepal and South Sudan but baseline data were not collected in these countries due to sample sizes being too low in Nepal and conflict preventing data collection in South Sudan. Regardless, it is clear that greater attention to reducing treatment delays is required, and the endline data from KalaCORE will provide important information for determining the effectiveness of efforts.

In East Africa, more treatment centres and a wider coverage of services is likely to be needed to provide for more remote populations. This is especially true for migrant workers in agricultural

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65 Coulborn (2017) Barriers to access to visceral leishmaniasis diagnosis and care among mobile workers in Western Tigray, Northern Ethiopia.
areas who are very vulnerable to VL as they move into endemic districts and sleep outdoors, which is when they get bitten by sand flies (the VL vector).

In India, the reason for this delay appears more due to treatment-seeking behaviour than to access to facilities (there is usually one VL treatment centre per block). Patients commonly seek care from traditional medicine or private providers before approaching public health facilities as a last resort. During this process they incur significant and inappropriate treatment costs. KalaCORE and WHO have attempted to address this through multiple BCC activities but people are still delaying seeking care. Therefore, despite some reported progress in community awareness of VL and improved acceptance of control methods, further attention on BCC activities in India is required. In this regard, KalaCORE is now focusing messaging on treatment seeking and diagnosis of VL when patients have a fever for more than 15 days. It is likely that strengthened BCC in other countries will also be important, especially in Ethiopia where slow treatment-seeking behaviour has also been identified.68

Box 3 provides a summary picture of the access to VL treatment in Ethiopia for illustrative purposes. It is important to note that the outcomes presented have been achieved through the combined efforts of WHO-NTD (particularly GLP), KalaCORE, and the WHO Ethiopia Country Office, all in close collaboration with the MoH.

### Box 4: Summary of access to VL treatment in Ethiopia

- Originally there were five endemic regions that were the focus for VL control, but a sixth has recently been added after an outbreak of VL cases was identified. A total of 85% of health facilities in endemic districts are providing diagnostic services. Amhara Region has been most successful due to a committed Regional Health Bureau, while Somali Region is making the slowest progress due to security issues.

- VL detection and treatment is lower than the target but this is thought to be due to lower transmission levels than anticipated (i.e. there are fewer VL patients to detect and treat). A greater proportion of patients are now receiving the optimum medication (SSG-PM combination for most patients, and AmBisome for complicated patients). Treatment delay is on average 41 days, but patients coming from more remote areas take significantly longer to access care.

- Money provided by DFID has ensured that most treatment centres can reportedly maintain a cold chain, as well as provide sufficient staff, food, and beds for VL patients. There are, however, still bed shortages in peak transmission season. Some regional health bureaus have also begun covering the costs of VL patient transport and food and waiving admission/inpatient fees. This will help reduce financial barriers to accessing care.

- However, VL has been emerging in new areas and there are concerns that there are insufficient treatment centres to provide access. If infections occur outside treatment centre catchment areas, patients are unlikely to seek treatment; this leads to treatment delays, adverse health outcomes, a greater chance of transmission, and not detecting or delayed detection of these cases. In these areas, more comprehensive disease mapping is required to determine a clearer picture of disease burden and thereby treatment coverage and access.

### 6.4 Progress toward elimination of VL in South Asia

The WHO-NTD Roadmap target for elimination of VL as a public health problem in South Asia has now been set for the year 2020. The achievement of this target requires less than one case of VL per 10,000 population, at sub-district level in Bangladesh and India and at district level in Nepal.

Nepal achieved this target at district level in 2012 and reached the threshold for elimination in 2015, five years early. In 2016, 99% of sub-districts in Bangladesh achieved the elimination threshold, and in India this figure was 85%. This represents an improvement from 90% and 67% in 2014, and 97% and 82% in 2015, respectively. The expectation is that Bangladesh will achieve

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68 Coulborn (2017) Barriers to access to visceral leishmaniasis diagnosis and care among mobile workers in Western Tigray, Northern Ethiopia.
elimination in the remaining two districts by 2020. India should also meet this target but greater efforts will be required, particularly in Bihar, which hosts 80% of cases in India.

While this represents great and positive progress toward elimination, it should be noted that many other organisations contributed to this effort, and some much earlier than DFID (e.g. BMGF with its support for Care India, as well as WHO-TDR). This is demonstrated by the dramatic fall in incidence between 2012 and 2015 where there was a reduction in reported cases of 67% in Bangladesh, 61% in India, and 46% in Nepal. Although DFID were funding WHO-NTD’s support VL control during this period, the major investment in KalaCORE had not yet been implemented. It is also important to highlight that the natural cycle of kala-azar in South Asia could be to some extent contributing to the decline in the number of cases in addition to the control measures.

Importantly, the CFR has also reduced. In Bangladesh, the CFR reduced from 6% in 2010 to 0.46% in 2015. In 2016 it rose to 1.36% but in absolute numbers this only represents an additional four deaths (due to the low total number of cases). In India, there were no reported fatalities in 2016 but between January 2012 and June 2013 there had been 158 deaths out of 4,925 VL patients in eight districts in Bihar (CFR: 3.2%). In Nepal, two fatalities were reported (CFR: 0.99%). The reduction in the CFR has almost certainly been driven by the increasing use and coverage of single-dose AmBisome.

Nevertheless, it should also be noted that there has been concerns over the validity of the VL data. In all countries except India, if a confirmed VL case dies they are recorded as a VL death in CFR metrics. However, in India if a confirmed VL case dies with any other associated co-morbidities (such as HIV, malnutrition, anaemia, etc.) their death is instead recorded as being caused by the non-VL disease. This is considered to be the reason India currently records no VL-related fatalities. This practice is problematic because it underrepresents the real VL CFR and loses important data on treatment outcomes. The GLP is currently working to make it clear that any VL patient death should be recorded as a VL fatality and that co-morbidities should be shown as associated factors.

Another wider issue relates to the inherent problem of only conducting passive or reactive case finding. VL numbers are based on confirmed VL cases that require a diagnosis. Since current surveillance methods rely on patients seeking diagnosis (passive) or on only conducting case finding in response to a passively identified case (reactive) then it is likely that some VL cases are going undetected and unrecorded. As such, the real incidence of VL is likely to be higher than the figures suggest. Furthermore, patients with PKDL and relapsed patients are not considered as new infections. However, they still suffer from the disease and are an important reservoir for infection. Therefore, by not including them in incidence rates the potential for disease transmission will be underestimated.

As disease incidence decreases further, monitoring and surveillance will be increasingly difficult and vertical programming will become too costly. Nevertheless, strong surveillance systems will be required to monitor and respond to outbreaks of the disease, as have recently occurred in Nepal. There is therefore a need to strengthen national systems so that VL surveillance can be integrated within horizontal programming. The GLP is working toward this by providing training and support to adopt DHIS2 but the general opinion is that national surveillance systems are currently too weak, especially in India. Thus, further work in monitoring and surveillance is likely to be required. A final topic of concern over elimination relates to the sustainability of the control programme after elimination is achieved. Since elimination as a public health problem does not stop transmission, increases in incidence may occur if disease control wanes. However, once elimination is achieved, it is not uncommon for donors and national governments to focus on other higher priority diseases. This may not be a problem in the context of stronger health systems where routine service provision for treatment and prevention is sufficient to keep incidence low but most respondents considered the South Asian countries’ health systems to be too weak to meet this need.

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http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0005150
particularly in the field of vector control and supply chains. Accordingly, there was a strong consensus that sustainability and transition plans needed to be strengthened.

6.5 Effectiveness of VL control in East Africa

As demonstrated in Figure 5, there has not been a sharp decrease in VL burden in Africa like there has been in South Asia. As surveillance has improved, more cases of VL have been identified and the number of known endemic districts has increased. This reinforces the need for improved mapping of VL in endemic countries, particularly Ethiopia, Sudan, and South Sudan. There is no specific target for elimination of VL in Africa but, in general terms, the VL programme scored satisfactorily in the fifth NTD Report and scorecard on the progress of the London Declaration recently published by Uniting to Combat NTDs.70

Figure 5: Trends in the burden of VL in 14 countries, 1998–201571

![Graph showing trends in the burden of VL in 14 countries, 1998–2015](image)

The number of estimated new cases of VL in Ethiopia and Sudan decreased from 2015 to 2016. The number of patients detected and treated in Ethiopia dropped further in 2017 to 1,058, down from 1,648 in 2016. Although this could indicate a reduction in incidence due to control efforts, without better surveillance data it is not possible to determine if the decline was instead due to a decreased number of patients being treated, for instance due to decreased access or insecurity. However, this seems unlikely due to observed increased in availability of treatment in these countries. Alternatively, the decrease could be due to the natural cycle of the disease epidemiology found in East Africa. A reverse of this situation was seen in South Sudan where new cases increased by 23% from 2015 to 2016, probably exacerbated by conflict and migration of people into higher endemic areas. Cross-border transmission of Leishmania infection is also an important issue (for instance when displaced people return from VL-endemic areas) because it has the potential to establish new foci of VL in East Africa, as was seen recently in Kenya.72 Nevertheless, in 2016 the CFR remained below the 3% target in all three countries, which is a considerable achievement.

Overall, it is clear that, despite good outcomes from treatment and improvements in access, further work is needed to consolidate gains and reduce incidence rates in this very challenging and/or insecure environment in many endemic areas. Improving the quality of data on disease burdens

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will be important for understanding the impact of results and ensuring treatment coverage is adequate.

6.6 Integration of treatment and prevention and research needs

WHO-NTD has been very successful at driving the integration agenda for PCT diseases and embodied integration within their activities (see Box 2 above), as well as carrying along sometimes reticent partners and other actors who preferred to work in a more vertical fashion. By contrast, integrating IDM disease control is a nascent area due to the challenges and specificities of the diseases. Nevertheless, as was discussed in Section 5.4, there have been some successes and potential opportunities for greater integration across the implementation cycle.

Integrating IDM treatment has greater limitations than PCT diseases because of requirements for different and complex treatment regimens. However, IDM diseases do have overlapping disease prevention activities that could be better integrated, in terms of outreach, vector control, and behaviour change.

Although vector control has been a core element in prevention of VL in South Asia, DFID’s investments in VL in East Africa have predominantly focused on increasing access to treatment and improving surveillance and response, with some research on vector control. Part of the reason for this is that the vector biology is less well understood in Africa and vector control is more difficult because the sand flies reside in outdoor agricultural settings as opposed to the domestic home settings they inhabit in South Asia. As such, insecticide-treated bed nets and indoor residual spraying, which are commonly used for malaria control, are generally considered to be ineffective at preventing VL in East Africa.

Nevertheless, it is generally recognised that effective vector control will be required to significantly reduce disease burdens in East Africa, especially given the recent finding that animals may act as infection reservoirs for VL. Therefore, further research on vector biology and new vector control methods are needed. Even in South Asia, where vector control is given a greater priority, there have been problems with implementation of indoor residual spraying, with rounds being missed and the use of poor-quality insecticides. As such, further attention in this area is required.

BCC and more active case finding will also be important for increasing service uptake, reducing treatment delays, and teaching communities to protect themselves from being infected. However, progress on these activities has been slow in the East African countries. Future investments should ensure these important preventative areas of disease control are strengthened, well targeted, and are properly monitored to measure their actual impact and cost-effectiveness.

One promising option would be to integrate BCC and active case finding into routine outreach activities. In collaboration with Sustaining and Accelerating Primary Health in Ethiopia, the WHO country office in Ethiopia has developed a Health Extension Worker Pocket Manual that covers all endemic diseases and developed integrated refresher training to support use of this tool. WHO-IDM are also working on an Integrated Management of Skin Diseases strategy that will involve developing simple tools that can be used by outreach workers to identify some common NTDs based on their cutaneous manifestations.73 These innovations represent an important step in the right direction, but currently only a very small proportion of health extension workers in Ethiopia have been trained in BCC and active case detection, and despite active case finding being carried out for polio and guinea worm during MDA rounds, this is not currently done for VL.

There are also opportunities to leverage the support being provided to VL to the benefit of other IDM diseases. When providing clinical training for VL, it is not inconceivable that health workers could also be trained in the diagnosis and treatment of additional diseases. Furthermore, training on disease surveillance, drug stock management, and supply chains could all be easily applied

WHO-NTR support for capacity strengthening and VL programme coordination

across diseases. Indeed, one respondent said that KalaCORE could have worked just as well if it had addressed multiple IDM diseases.

A possible candidate for trialling this approach could be CL in Ethiopia. Although currently outside the scope of current investments, many respondents expressed concern over the lack of attention to CL control. In part this is due to lack of knowledge about the disease, the lack of knowledge of optimum treatment, the complexity of treatment used (SSG in combination with cryotherapy administered by a dermatologist or specially trained physician), and lack of good quality diagnostics being available. Further research on CL is certainly required. Another barrier to integration is that CL incidence does not always overlap with VL incidence, even when they are found in the same country (and in some co-endemic countries CL numbers are quite low). Nevertheless, in Ethiopia CL could still leverage VL investments in the form of strengthened disease control management functions such as surveillance, common platforms for delivering training, and improved drug supply. This would also avoid the current situation where some pentavalent antimonials procured for the treatment of VL patients are diverted to also treat CL but it is not officially recorded. As such, potential health gains may be achievable but much more resources would be needed to procure SSG and develop the necessary evidence base.

VL is not alone in needing a focus beyond diagnosis and treatment and greater integration. As summarised in Box 5, DFID has experience of working across sectors through its One WASH programme in Ethiopia. However, this learning is not being leveraged to the benefit of its Trachoma investments.

**Box 5: Opportunities for cross-sectoral integration of Trachoma control in Ethiopia**

- In Ethiopia, Trachoma and its control methods are addressed by a number of donors that work largely independently.
- The DFID SAFE strategy programme for controlling Trachoma is reportedly struggling to reduce transmission, probably due to less success in the area of WASH and environmental improvement/healthy behaviours. Currently it largely focuses on surgery and MDA. After 11 rounds of MDA, transmission does not seem to be decreasing and the need for surgeries continues despite increasing levels of provision.
- The Carter Centre is a key implementer in Trachoma control that does provide WASH and sanitation messaging. However, there did not seem to be a strong collaboration with DFID.
- DFID’s One WASH programme also operates in Trachoma-endemic areas but largely focuses on diarrhoeal disease, although it is now considering NTD control. One WASH is innovative in that it works across ministries (health, education, water, and finance), so there may be potential learning or leveraging of contacts that could improve coordination for cross-sectoral Trachoma control. However, communication between these DFID projects was not apparent.

Overall, there remains great potential for further integration of NTD treatment and prevention activities, including for some IDM diseases. This would not only help make VL control more sustainable but also potentially more cost-efficient. The key challenges to achieving this do not appear to be with national governments, some of whom have wholeheartedly adopted integration within their NTD masterplans. Indeed, the Ethiopian government is highly proactive in this regard. The main barriers are instead put up by implementing partners, which may be reticent to work in a more coordinated fashion, and funding agencies, which continue to provide disease- or activity-specific funding.

However, it is important to note that while integration should be a long-term goal, the maturity and potential for institutionalisation of vertical programmes do need to be considered carefully. The advantage of vertical programmes is that they maintain a focus on often neglected issues where there is little technical expertise or wider interest, and can respond more quickly to severe situations requiring expedited action. Integration of vertical programmes during critical periods or before wider systems or capacity are established could run the risk of diluting control efforts and making them less effective. For example, the initial vertical approach to VL control is entirely
justifiable. Nevertheless, progressive coordination among parties would always be advantageous and it now seems appropriate to explore opportunities for greater integration of the control of some NTDs.

## 6.7 Conclusions and looking forward

There has been impressive progress toward elimination of VL in the South Asian countries and promising results regarding increased access to VL treatment in the East African countries. The GLP has contributed to this through effective support to building capacity and necessary logistics to increase the numbers of patients on VL treatment. The work of KalaCORE and WHO country offices will also have been vital in delivering these results. However, it is important to note that not all gains can be attributed to these DFID investments: there are several other key organisations that have contributed to improved VL outcomes, many of which were working in the space before the DFID investment (e.g. MSF, BMGF through its support for CARE, DNDi, etc.).

That being said, only DFID has provided the resources required to increase access to Ambisome. Without this support it is unlikely the Gilead donation could have had such an impact. It is possible that others would have provided the necessary resources to increase access to this drug, but the timely support provided by DFID was undoubtedly a smart investment.

Despite improvements, much work remains. Bangladesh and India need to continue working toward elimination, while Nepal must maintain preliminary elimination status through careful surveillance and outbreak response. More importantly, the three South Asian countries must ensure that they fulfil the requirements set by WHO to be officially validated as having eliminated VL. Sudan, South Sudan, and Ethiopia all require further concerted efforts to decrease the burden of VL. Withdrawing support for VL at this stage could result in many gains being lost as it is clear that none of the countries currently has the necessary capacity and health system strength to transition to full country ownership. Two other countries with a high burden of VL in Africa that would particularly benefit from additional investment are Kenya and Somalia. This would not only help reinforce more equitable global disease outcomes but could also reduce the potential for cross-transmission between countries.

Moving forward, future investments should concentrate on reducing treatment delays for more marginalised populations, improving disease burden mapping in East Africa, and strengthening and integrating surveillance and data quality in South Asia.

In East Africa, further research and innovative methods for VL vector control are required, including determining the influence of animal reservoirs. Better diagnostics tailored to the epidemiological profile of VL in East Africa would also make diagnosis and treatment more effective. The current diagnostics are less sensitive in African populations because African people express lower numbers of antibodies in response to VL infection than people in South Asia. In South Asia, efforts need to focus on ensuring sustainable national systems for vector control. It will also be important to improve treatment and cure rates for relapsed patients or those suffering with PKDL to avoid onward transmission. A stronger more targeted focus on BCC would benefit all countries, but it should be a core focus for the East African countries, and further innovative BCC methods may need to be explored in India where delays in seeking care still persist despite significant efforts. WHO-IDM, regional offices, and country offices could have an important role in these efforts but there should be in-depth discussions between donors, WHO, and more traditional implementing partners (such as NGOs and private sector companies) to determine the most appropriate institution for programme delivery.

The initial vertical focus on VL was justified because there was little attention given to the disease and control efforts were relatively new. There is also a need to expedite activities to make the most of the Gilead donation. However, moving forward many of the future priorities may be better addressed through greater integration of treatment and control activities that can also leverage investments for other important but neglected diseases. Integrating support for multiple diseases
will require further coordination and collaboration between and within funders and implementers, as well as with and across national governments. Funding modalities will also have to move from a disease- or activity-specific focus to one that is more flexible and responsive. This will be discussed further in Chapter 9.
7 Progress against the Logframe

A summary of the level of achievement for each logframe indicator is presented in Table 5 below. A more detailed recent analysis can be found in the 2017 Annual Review. In sum, most indicators were achieved or exceeded, three were nearly achieved, and there should be no cause for concern, and one indicator missed the targets in all years, although this particular situation is understandable. The full logframe can be found in Annex F.

The indicator that was missed in all years relates to ‘Number of endemic countries implementing integrated NTD control’. The failure to meet this is understandable because, as was pointed out in the 2016 and 2017 annual reviews, the targets were overly ambitious, with the Year 5 target (2016) being set at 100% of co-endemic countries implementing integrated disease control for at least two tracer PCT diseases. In Year 5, 48 countries implemented integrated disease control for at least two of the tracer diseases and 35 countries implemented integrated control for all tracer diseases. A target of 100% seems highly ambitious given the unstable environment in many co-endemic countries and the fact that some countries are only just beginning to meaningfully address NTD control.

Moreover, the indicator on integration also appears to be flawed because it does not measure integration but rather focuses on controlling multiple NTDs within the same countries. This could conceivably be done by multiple parallel programmes that only address one disease or control method.

As stated previously, the basic concept of integration relates to concurrent MDA for multiple diseases, where possible. However, a more comprehensive interpretation of integration would mean concurrently carrying out other activities of the disease control cycle for multiple NTDs (e.g. planning, monitoring, training, etc.).

The current indicator does not appear to capture either of these interpretations of integration. We recommend refining this indicator but do appreciate that capturing data on the extent of integration within each country will be very difficult and labour intensive. A possible solution would be to supplement the current indicator with one that measures the number of co-endemic countries with an NTD masterplan or strategy for integrated control. This would help determine if multiple disease control is planned and (hopefully) carried out in an integrated manner.

Table 5: Achievement of logframe indicators

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<table>
<thead>
<tr>
<th>Indicator domain</th>
<th>Indicator number</th>
<th>Indicator</th>
<th>Level of achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction in burden of disease due to NTDs</td>
<td>Impact Indicator 1</td>
<td>MDA coverage in four 'tracer' diseases (Schistosomiasis, LF, STH, and Onchocerciasis) in target countries</td>
<td>Largely achieved. Years 3–5 have been slightly under target</td>
</tr>
<tr>
<td></td>
<td>Impact Indicator 2</td>
<td>Prevalence level of Schistosomiasis, STH and LF in selected countries</td>
<td>Achieved or exceeded in all years</td>
</tr>
<tr>
<td></td>
<td>Impact Indicator 3</td>
<td>Reduction of VL CFR in Bangladesh</td>
<td>Exceeded targets in years 1–4 but missed target in Year 5 (&lt;0.5 vs. 1.36%), after an unusual increase in the CFR. Note that total deaths are small (Year 5 = 4)</td>
</tr>
<tr>
<td></td>
<td>Impact Indicator 4</td>
<td>Reduction of VL CFR in East Africa</td>
<td>Exceeded targets in all years</td>
</tr>
<tr>
<td>More effective global response to NTDs</td>
<td>Outcome Indicator 1</td>
<td>Total global resources mobilised (in cash and in kind) for the four tracer diseases from development partners and industry</td>
<td>Exceeded targets in all years</td>
</tr>
<tr>
<td></td>
<td>Outcome Indicator 2</td>
<td>Number of endemic countries implementing integrated NTD control</td>
<td>Missed targets in all years. But indicators overly ambitious and not well designed</td>
</tr>
<tr>
<td>Robust evidence on the VfM of NTD elimination and control</td>
<td>Output indicator 1.1</td>
<td>Review and synthesis of the evidence on the economics of NTD control and its implications for the post-2015 development agenda</td>
<td>Achieved in all years</td>
</tr>
<tr>
<td></td>
<td>Output Indicator 1.2</td>
<td>Number of studies conducted and/or technical assistance missions provided by the Investment for Impact Working Group (cumulative)</td>
<td>Achieved or exceeded in all years</td>
</tr>
<tr>
<td>Drug donations channelled through the WHO-NTD managed efficiently and effectively</td>
<td>Output Indicator 2.1a</td>
<td>Number of countries eligible for preventive chemotherapy that submit a request for at least one preventive chemotherapy medicine</td>
<td>Largely achieved or exceeded in all years</td>
</tr>
<tr>
<td></td>
<td>Output Indicator 2.1b</td>
<td>Number of drug requests submitted by countries</td>
<td>Largely achieved or exceeded in all years</td>
</tr>
<tr>
<td></td>
<td>Output Indicator 2.2</td>
<td>Total number of tablets of donated anthelmintic medicines ordered by WHO for distribution the following year</td>
<td>Exceeded targets in all years</td>
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<tr>
<td></td>
<td>Output Indicator 2.3</td>
<td>% of preventive chemotherapy campaigns carried out as planned</td>
<td>Target achieved in Year 5. Missed target in Year 4 (68% vs. 75%), no data in Year 3</td>
</tr>
<tr>
<td>Strengthened capacity to manage national NTD control</td>
<td>Output Indicator 3.1</td>
<td>Number of national programme managers completing training in implementing control strategies in recipient countries</td>
<td>Exceeded targets in all years</td>
</tr>
<tr>
<td>programmes in priority countries</td>
<td>Output Indicator 3.2</td>
<td>Unit cost per national programme manager training programme delivered (including cost of developing locally appropriate materials)</td>
<td>Achieved or exceeded in all years</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>VL patients in target countries treated with AmBisome</td>
<td>Output Indicator 4.1</td>
<td>% of first-line cases treated with AmBisome in Bangladesh</td>
<td>Exceeded target in years 3–5 and narrowly missed target years 1 and 2</td>
</tr>
<tr>
<td></td>
<td>Output Indicator 4.2</td>
<td>% of second-line cases treated with AmBisome in East Africa</td>
<td>Achieved or exceeded target in all years except Year 3 which was slightly short</td>
</tr>
<tr>
<td></td>
<td>Output Indicator 4.3</td>
<td>Proportion of health facilities in endemic districts that provide diagnostic services for VL</td>
<td>Achieved or nearly achieved in years 4 and 5 (although South Sudan and Ethiopia lower when disaggregated). Years 1 to 3 somewhat below target</td>
</tr>
<tr>
<td></td>
<td>Output Indicator 4.4</td>
<td>Number of healthcare providers trained in VL and PKDL diagnosis and treatment</td>
<td>Greatly exceeded in Year 5. Exceeded in years 2 and 3. Slightly below target in years 1 and 4</td>
</tr>
</tbody>
</table>

Green = target achieved or exceeded, Light Green = target nearly achieved and no cause for concern, Orange = targets missed but little cause for concern, Red = targets missed and cause for concern
8   Financial management

8.1   Background and objectives

WHO-NTD and its activities are financially managed according to WHO regulations, with its DFID grant also managed in accordance with DFID rules, which are evolving toward more frequent provision of financial information. The Business Case for the grant raised staffing within WHO-NTD as a concern: ‘The NTD Department is short-staffed. Of 47 staff, 13 will leave or retire by the end of 2015, and with WHO not recruiting, the remaining cadre is under severe pressure.’

8.2   WHO-NTD general financial management

In 2008, WHO introduced an Oracle-based enterprise resource planning accounting system for both planning and reporting, known as GSM, which has been gradually phased in across the organisation. This GSM system consolidates financial, HR, procurement, and other information at HQ, regional, and country level. It entails matching awards (grants) to workstreams and, as such, it offers traceable and potentially accurate information (depending on the inputs into it). It also works well for invoicing. There have been problems with GSM across WHO, however, although many of these have gradually been addressed through improvements. Those WHO-NTD staff with access to GSM describe it as ‘very general and summarised’. However, it does link spending to the strategy level and generates an activity report – the annual reports to DFID draw on these documents.

A general financial problem for WHO-NTD is that core WHO funding covers only a part of salaries (a contribution to the salary of ‘3 or 4’ of them) and none of WHO-NTD’s activities. The rest comes from voluntary contributions. Some of these, such as Sanofi’s funding, which covers a range of IDM-related activities, is agreed only on an annual basis, providing little certainty for planning. Others have a slightly longer commitment; for example, KalaCORE pays 15% of the two leading IDM staff members. This grant dependence means that a number of professional staff at WHO-NTD must dedicate a lot of their time to fundraising and donor relations, even though this is not an area they have been trained in. This detracts from their operational availability.

WHO-NTD’s headcount is currently 58, with 49 of these on fixed contracts and nine temporary. Between now and 2020, WHO-NTD reports that the only significant expected retirement is that of director Dirk Engels, with replacement in process. One support staffer is expected to leave in 2018. Thus, the concern expressed in the Business Case of impending loss of key staff has not been borne out.

Grants are set in a range of exchange rates, whereas WHO-NTD’s costs are in US$ and in CHF. To reduce exchange rate risk, WHO-NTD sensibly hedges grants when they commence. Accordingly, DFID’s initial grant was hedged at $1.6=£1 and so protected from the subsequent decline in the value of sterling. However, DFID’s grant extension will be at the new reduced exchange rate, therefore meaning reduced purchasing power. Recent years have seen the CHF appreciate against all currencies, making Geneva a more expensive location than ever for WHO’s headquarters.

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75 E.g. only capturing project-based data to a limited extent, so some of the KPIs and other information related to a single piece of work/grant cannot be recorded or tracked; not tracking projects that run over the end of a biennium into the next biennium; project expenditure to be miscoded into GSM by managers; controlled access rights making it hard for managers to access financial information.
The following table shows WHO-NTD’s expenditure for the 2016/17 biennium to date (i.e. almost all as the biennium ends 31 December 2017):

Table 6: WHO-NTD HQ expenditure, 2016/17, US$

<table>
<thead>
<tr>
<th></th>
<th>Actuals* to 10 November 2017</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCT</td>
<td>5,140,000</td>
<td>12%</td>
</tr>
<tr>
<td>IDM</td>
<td>4,100,000</td>
<td>10%</td>
</tr>
<tr>
<td>VEM</td>
<td>4,400,000</td>
<td>11%</td>
</tr>
<tr>
<td>Director’s Office (incl. veterinary)</td>
<td>3,748,000</td>
<td>9%</td>
</tr>
<tr>
<td>‘Staff plan’ (staffing costs)</td>
<td>23,782,109</td>
<td>58%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>41,170,109</strong></td>
<td></td>
</tr>
</tbody>
</table>

Note: The final accounts for 2016/17 are expected around March 2018.

* More precisely: actual spending plus committed spending not yet paid (‘encumbrances and expenditures’)

The staff plan covers all full-time staffing costs, and includes the DFID-supported staff cost, although there may be short-term staff inputs within the other cost categories. This US$ 41.17 million is the HQ part of a total WHO-NTD budget, including the NTD work of regional offices and country offices, of US$ 104 million over the biennium. Around two-thirds of the budget is covered by grants.

Staffing has been the key cost driver to date, understandably given that the WHO is the global lead technical organisation in the field, and the table above shows that at least 59% of the budget (and much of the other four items) is allocated to staff. An estimated 20% of staff cost is for administrative staff. In most organisations, the ratio of administrative staff has fallen sharply with the development of processing and communications technology, but it is not clear whether this has happened as fully in WHO. Overall, around 40% of WHO-NTD expenditure is at HQ level.

8.3 DFID grant

The DFID grant was initially set at £4.8 million to run from 2012 to 2017, with £2 million of this for WHO-NTD and £2.7 million for the coordination costs of the VL programme.

Figure 6: Cost drivers within the DFID grant, 2012–2017*, US$

*Actuals as at early October 2017; Source: data from WHO-NTD
As Figure 6 above shows, staff cost is also the main cost driver here, accounting for around 43% of the total grant value (though 68% in the 2016/17 biennium as the VL-related support declined in relative importance\textsuperscript{76}). Programme Support Cost (PSC) represents the 11% standard administration charge that the WHO levies for handling grants (note that this is not reduced as for ESPEN donations). Direct Financial Cooperation (DFC) refers to agreements for countries to execute part of projects. Contractual services include, for example, external impact studies. Most DFID support for VL (that is channelled through WHO) goes to regional and country offices, with only a small component included in the IDM line in the HQ expenditure table above. Figure 7 below shows the expenditure profile of the grant over time.

**Figure 7: WHO-NTD expenditure of DFID grant, annual totals (US$)**

![WHO-NTD expenditure of DFID grant, annual totals (US$)](image)

Note: 2017 to late September. Actuals may not coincide with plan (flat payments for three years following start-up year) due to procurement delays

The three DFID-funded staff started work during November 2012 to January 2013. The programme manager is on a fixed contract and the other two staff on short-term contracts. The temporary contracts, while standard for WHO, have been problematic, expiring in early 2017, leading to temporary enforced absences from work and a delay during which all benefits (e.g. health coverage and school fees) were suspended before the staff could be reinstated. While remuneration of temporary staff is equivalent to that of fixed staff in direct terms, such disruption and the greater risk of loss of staff (to the offer of a fixed position elsewhere) represent a higher cost to WHO-NTD in terms of long-term productivity, with less assurance that these staff will stay in position.

All WHO staff work in one of 17 grades. Annual base salary in 2018/19 ranges from US$ 65,740 to US$ 191,105. Eleven of the grades have a ‘post adjustment’ (to reflect the cost of living in the expensive environment of Geneva) of an additional 85% on top of their salary. All grades are also subject to employee benefits (for most grades larger than base salary) and a smaller ‘occupancy cost’ payment (made for each staff member by WHO-NTD to WHO centrally), such that total annual remuneration ranges from US$ 108,000 for the lowest grade to US$ 604,000. DFID’s annual budgeted support for the three staff was £176,000 for the health economist and programme manager and £99,200 for the logistician (converted at the WHO rate: US$ 281,600 and US$ 158,720 – though potentially a lower amount for the extension period due to exchange rate change). WHO-NTD’s data suggest actual annual remuneration of US$ 221,500 for the logistician, US$ 274,000 for the health economist and US$ 331,000 for the programme manager (grades P3, 76 US$ 970,000 of US$ 1.4 million.
P4 and P5 respectively). DFID’s budget also covers £200,000 annually for short-term consultants/national program officers and £540,000 annually for VL coordination, mostly in South Asia.

To maintain the capacity element of the grant while new arrangements are made, in May 2017 it was decided to grant a with-cost extension running for the first six months of 2018 for an additional £0.5 million.

Grant and WHO-NTD performance is monitored by partners in several ways, including through representation in the STAG and the Impact Working Group as well as standard DFID programme management, including half-yearly reporting and monthly forecasting. Each donor has their own reporting requirement; for example, Sanofi requires a detailed annual presentation and report but holds the possibility of cancelling further support on an annual basis. There are no significant grant-funded assets to monitor in connection to the DFID grant.

### 8.4 Conclusions and looking forward

WHO-NTD’s financial management has been satisfactory, giving no cause for alarm. The delayed start was unfortunate, reflecting a common occurrence with WHO projects rather than WHO-NTD-specific factors, due in part to a lack of systematic preparation prior to grant commencement. Initial procurement is a key factor within this process, and this can be worsened by country processes.

The low expected staff turnover going forward suggests that the professional replacement concern raised by the Business Case is now not currently an issue. It also suggests that permanent staff at least seem well compensated, as they rarely wish to leave. Instances of rotation from elsewhere within WHO and professional experience outside of WHO are positive, with good evidence of how helpful it is, although given this they could usefully be increased, subject to cost implications. However, having vital staff on temporary contracts and also having salaries so tied to fluctuating donor funds are problems that both reduce effectiveness. Those staff (not funded through the DFID grant) who devote scarce time to continuous fundraising are problems that both reduce effectiveness. Those staff (not funded through the DFID grant) who devote scarce time to continuous fundraising have reduced capacity for their core operational functions. While the three DFID-funded staff appear highly motivated, two of them being on temporary contracts makes their tenure less secure and a potential loss of critical professional staff to the WHO-NTD more likely. This is one of the largest risks to the continued success of WHO-NTD.

Another medium- to longer-term issue is that, while there has been a welcome analysis of the VfM of many NTD interventions for prevention or control, there is not yet a systematic approach by WHO-NTD to analysing its own activities in terms of performance or VfM. For example, effective JAP in-country training is an essential ingredient to getting the most out of the JAP (a platform of great value), especially given widely varying capacity situations between different endemic countries (e.g. strong in Cameroon, but considerably weaker in several others) and unfortunate levels of staff turnover in almost all of them. WHO-NTD uses donor funds to conduct some training, although a recent offer by the Global Schistosomiasis Alliance to provide expanded training was reportedly declined, but there is no sign of the analysis supporting that decision.\(^77\) In general, stakeholder collaboration seems good, but it is important to assure all stakeholders that decisions are taken on the basis of what will achieve most in the fight against NTDs (i.e. good VfM) rather than for any other reason.

We have the following recommendations in relation to the DFID grant:

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\(^77\) E.g. estimates of training quality, coverage (e.g. as measured by remedial work which the donations management team must carry out), and cost (e.g. per JAP trainee in position after 24 months).
• Meet with other key donors and relevant WHO staff to try to find a way to provide medium-term security for key professional staff.

• Review the requirement for all current admin staff in order to seek to reduce the proportion of budget dependent on short-term donor funding.

• Undertake a systematic VfM review of key WHO-NTD activities, especially where there are viable alternatives options (e.g. contracting with other organisations for implementation or training activities). Note that this may require input from the health economist, yet evidence-based decisions are likely to pay for themselves.

• Review how WHO’s GSM accounting system could usefully be further adapted (as other WHO units have done, advice from whom is likely to be available). This would be useful to WHO-NTD (e.g. separating out the costs in its analysis of its own activities) and to grant donors.

• An explicit commitment to more rotation within and from outside WHO, either with permanent staff or via secondments, subject to analysis of the cost implications.

• Review of required programmatic skills within WHO-NTD, and also of the ways in which disease-specific knowledge may be shared between multiple stakeholders with interest in each disease.
9 Sustainability

9.1 Background and objectives

The Business Case to this grant sets ‘Improved and sustainable treatment of NTDs’ as a desired impact, but there are several ways in which the concept of sustainability is relevant to DFID’s support to WHO-NTD. First, the current campaign against NTDs depends largely on funding from a narrow base of donors, if a wider base of medicines contributors (see Chapter 4). A more diversified funding base could be expected to be a more resilient one, including a greater share from endemic countries. The Business Case’s Theory of Change saw increased national and international commitment to NTDs as an output that would contribute to an outcome of stronger government leadership and increased resources.

The Business Case also identifies integrated NTD programmes within endemic countries as an important outcome of the grant, contributing to increased effectiveness in combatting the diseases. As such we can view integration as part of a more sustainable disease response, and integration is measured with an output indicator on the logframe.

Funding to combat NTDs is often described as ‘investment’ rather than mere expenditure. This is reasonable if it is clear how we are moving toward a step change – the elimination of specific NTDs from the roster of mankind’s ills – even as debate may still surround prevalence that is so low that ‘elimination as a public health problem’ is an acceptable description.

9.2 Health financing and resource management

9.2.1 International and domestic funding

Ensuring reliably sufficient resource flows is a key component of sustainability. Much discussion of health financing assumes that domestic funding will be more sustainable than international aid flows. The future evolution of income levels within both donor and endemic countries is key to the extent that this will be true: stagnation in the economies of either type of country makes their funding less sustainable, with political will the other most relevant variable. This applies to both private and public sources of funding, although it may also be that diversifying funding across more sources will increase its resilience. Given current income levels and growth, India might already feasibly finance the elimination of some NTDs as a public health problem among its population, for example, whereas the lowest income and most fragile countries may not be able to within the foreseeable future – although distribution of donated PCT drugs alone is itself a less challenging financial burden. Innovative funding models, such as outcomes-based funding, may stimulate additional resources, as well as allowing flexibility of activity according to what was most suited to the country context compared to a more standardised multi-country approach. However, such models require additional contracting and monitoring skills. WHO-NTD has provided funds to countries that will be matched by country governments (e.g. in Sudan78), as has the World Bank.

9.2.2 UHC and SDGs

The current global focus on UHC and the SDGs offers potential political impetus for fixing NTDs in a more prominent position on the policy agendas of both donor and endemic countries. A recent example of this happening was the Addis Ababa NTD Declaration of 2014 committing 24 African

78 Sudan’s MoF can match international funding and did so after a joint WHO-MoH application for NTD funds for the following amounts: 2015: US$ 0.5 million; 2016: US$ 1.2 million; 2017: US$ 2 million.
health ministers to the 2020 Roadmap\textsuperscript{79} and another was the inclusion of NTDs in SDG 3.3. The inclusion of NTDs in the ALMA scorecards (due to start in 2018) will be a third important case. Stakeholders confirmed that WHO-NTD, and specifically its staff funded under the DFID grant, played key roles in each of these developments. The Governor of Nigeria’s Cross River State, in recently making domestic funding available for NTDs, cited UHC, in addition to the availability of donated drugs (and his family relative having suffered from an NTD).

9.2.3 Non-financial resource mobilisation and management

The NTD medicines provided without charge by pharmaceutical companies are a key component of the fight against these diseases. Without continuity and preferably further growth in this resource stream the current situation will be unsustainable and further progress impossible. The importance of these donations is only gradually being recognised, partly due to historically strained relations between some development partners and the private sector. For the first time, the fourth NTD Report made reference to medicine donations in its introduction by the WHO Director-General. The value of these medicines was not included in the cost calculations that formed the centre-piece of the third Report.

Our KIs sought to understand better what makes pharmaceutical companies donate products. Clearly, good corporate publicity is a driver, together with the satisfaction for executives and other employees of addressing a health need not previously covered. Many interviewees also referred to the rising public profile of NTDs, to personal contact between major influencers (Bill Gates, Jimmy Carter, etc.) and their CEOs, and to the momentum of competition between pharmaceutical companies (including via the Access to Medicines index). Generally, donated products will be relatively cheap to manufacture on a unit basis, although MDA volumes are so large that on occasion factories are needed solely for this. Donated products are also usually already patented, although AmBisome was patented in the US during the initial phase of its donation and is also challenging to manufacture. The key cost to the pharmaceutical company is not always the direct manufacturing and shipping cost but the cost of scarce management time required to address the flow of operational issues that arise across multiple countries.

An important potential benefit to the company can be the flow of information about the outcomes of product utilisation: increasingly, pharmaceutical companies see such data as a resource that helps build competitive advantage that may stretch across into other products, and it can be expensive to collect with a dedicated operation. In the internal struggle for resources that characterises every large organisation such data can represent an important currency. That said, a perception that donated drugs may be wasted (e.g. not delivered where needed in time to avoid expiry, inaccurate forecasting, etc.) works in the other direction.

WHO-NTD holds annual technical meetings with pharmaceutical companies and other stakeholders in which WHO-NTD reports all of its activities and future donated drug plans are made. These are significant events as some (Sanofi, for example) only commit to continued support one year at a time, with the decision being taken following the annual technical meetings. Pharmaceutical company financial support is very useful to WHO-NTD, although significant time is required from WHO-NTD staff to service the relationships. There are also some effective inter-pharmaceutical company collaborations, such as that between GSK, Merck, and Eisai to sponsor RDTs for LF, and for transmission assessment surveys.

There is encouraging evidence that the donation momentum continues to spread, with pharmaceutical companies from Latin America joining northern hemisphere companies in donating

\textsuperscript{79} The Declaration included a commitment to ‘Work to increase our domestic contribution to the implementation of NTD programs through the expansion of government, community and private sector commitments’.
NTD drugs. There is also evidence that donations to other disease programmes may have been inspired by NTD donation publicity (e.g. Janssen’s Bedaquiline to Stop TB Global Drug Facility). Product gaps remain – e.g. first-line drugs for VL in Africa and diagnostics – but WHO-NTD staff have plans to target these. It is less clear that WHO-NTD recognises the importance of data availability to pharmaceutical companies: this could be seen as a (good value) quid pro quo for the donations, as it is likely to lead to improved stakeholder coordination and effectiveness, and that rather than any danger of loss of status/control this could raise WHO’s reputation in the eyes of donors and help strengthen the organisation’s long-term position.

9.3 Integration

There are benefits to vertical programmes in terms of focus and short-term effect, but over the longer term sustainability will require substantial integration. WHO-NTD has already successfully undertaken some integration under the current grant, including the application of the JAP and via the activity of the health economist. Moving to a still more integrated approach to NTDs is likely to be an important ingredient in greater sustainability. Integration can mean many things depending on context. It is often seen as a threat to the independence of disease-specific capacity, in part due to understandable focus on possible funding reduction, when every disease sees itself as the most urgent priority. There can also be legitimate concern over how disease-specific guidelines and M&E can be maintained in a less vertical context, especially in the elimination phase (see below). But integration can deliver better VfM, act as a building block for increased country ownership (countries tend to be more integrated than their development partners), and facilitate learning across the NTDs.

Integration can be defined as coordinated planning and the sharing of assets/inputs where feasible. There are plenty more potential areas for integration than have so far been addressed. Further cross-cutting capacity could be introduced within WHO-NTD, such as resource mobilisation and additional programmatic skills. Operationally, there could be more combined BCC, coordination with other supply chains (such as EPI), and case finding (already beginning to be explored, with some encouraging initial experiences). The IDM, PCT, vector control, and veterinary sectors could become more integrated. The latter two are the most challenging, although there are signs of growing cross-WHO coordination of vector control, led by malaria staff. A more integrated approach to M&E would also likely be a more efficient one, moving beyond the current situation in which much important data is still not routinely shared, e.g. between PCT and IDM.\(^\text{80}\) In many countries, DHIS2 offers itself as a possible nexus of data integration insofar as it can provide online real-time access for all and incorporate data from multiple sources through ‘plug-ins’. Looking further ahead, in organisational terms a ‘major infectious diseases’ approach could group NTDs with HIV, malaria, and TB where this is appropriate. Each of these areas would present its own challenges, however, such as a possible trade-off against country ownership as stakeholders are given greater access to currently restricted data.

Integration requires action on all levels of organisation: at the global/donor, WHO, and country levels. While a national set of performance indicators is likely to be a key lever, a final integrated model could see district health offices responsible for all health services (+WASH). While international development partners can be the most significant obstacles to integration, such as with funding tied to separate budget lines, there can also be a domestic hurdle wherein cooperation between the ministries of health and education (and potentially finance, as well as the body responsible for WASH) is required. Even in the context of growing integration, there will of course also be a need for organisations with particular technical skills to help guide programmes –

\(^{80}\) IDM is proactively advancing its data capacity through an informal WHO ‘DHIS2 user group’, which was started by an individual on their own initiative.
including help in the design of surveillance or M&E, which will be different for the different diseases.

**Box 6: Examples of WHO-NTD involvement in progress to date in NTD integration**

- Use of polio infrastructure to help identify cases of guinea worm disease.
- JAP demonstrates integration across the PCT diseases: LF; Onchocerciasis; Schistosomiasis; and STH.
- Initiatives such as that for skin-related conditions (the most acute NTDs) show some progress is being made with IDM.
- Ethiopia is a leading example, indicating its intention of changing the verticalised approach developed by some implementing partners, becoming well aligned and shifting to horizontal working.
- To an extent, WHO-NTD’s Operations Team (e.g. drug donations/JAP) helps drive integration (e.g. gets NGO information to countries); WHO-NTD drives it by not accepting data if not via MoH but this can result in considerable delays.
- Low prevalence can drive integration, as vertical programmes become increasingly obsolete, although a risk is run of lack of expertise as health workers see fewer cases.
- There are plans for independent evaluation of programmes (with USAID support), which would include integration, country ownership, and access to treatment. Some countries welcome this.
- In Bangladesh, following a WHO-NTD requirement, the government pays for indoor residual spraying activities with funding flowing from the Health Pooled Sector-Wide Approach (DFID/World Bank).

### 9.4 Capacity building

Chapters 5 and 6 of this review have presented the important role that WHO-NTD plays in strengthening the capacity of national governments to implement disease control. However, many governments are not yet able to take on full responsibility; this means continued provision of capacity building from WHO-NTD and other partners will be required.

As was presented in Chapter 5, WHO-NTD is currently managing to provide effective support but the department is becoming increasingly stretched owing to an increasingly broader set of responsibilities, particularly as regards drug donation management, procurement, and distribution. At the same time reforms within WHO have led to restrictions on ordinary recruitment.

DFID’s investment in WHO-NTD therefore represents an important supplement to WHO-NTD’s human resources, without which much of the drug donation and economic evidence activities could not have been achieved. This remains the case, so continuing DFID support for these individuals will be required if such efforts are to continue. However, additional staffing/expertise may also be required. There is evidence that staff providing technical support for VL disease control are also unable to commit sufficient time to capacity-building endeavours because they have to spend so much time backstopping under-resourced regional and country offices. Juggling short-term contracts and searching for funding also reduces the time available for core work. Individuals within WHO and pharmaceutical companies also told us they were keen to see WHO-NTD develop greater programmatic skills to enable it to better interact with industry, expanding partnerships to draw deeper from the resources companies can offer, as well as to provide high-level cross-cutting leadership in areas such as data sharing and communications.

While investment for additional human resources would no doubt help resolve some of these issues, it is entirely possible that more could be done with existing resources, therefore making WHO-NTD less vulnerable to funding fluctuations. Currently, expertise often lies within a few high-performing individuals that have a special ability to drive work forward. When less-effective
individuals occupy nodal positions, this dramatically reduces the quantum of work achieved. Thus, finding ways to transfer skills and competencies and develop individuals as champions at different levels would go a long way to improving efficiency and effectiveness. There also appeared to be untapped opportunities for collaboration between WHO departments such as WHO-TDR (for research) and the Health Systems Cluster, and even within WHO-NTD itself. Sharing of resources and responsibilities, rather than competing for funding and work, could offer greater stability as well as increase the scope of work that could be achieved with existing resources. Finally, ensuring that WHO-NTD only attempts to work in areas that it has a significant advantage in will also ensure that precious resources are retained for areas that can add most value to the global agenda.

Ultimately, though, there needs to be an exit plan for provision of capacity-building support. For many countries this is a long way off, and a global facilitative role is always likely to be needed. Nevertheless, early attention to driving integration will be important for laying the foundations for transition to full government ownership. Currently, vertical programming across diseases and activities is unsustainable for national governments to maintain and thus runs the risk of just treading water, especially where high staff turnover necessitates repeated intervention. In terms of aid architecture, the preponderance of single-disease NGOs is an unhelpful contributing factor to this, despite the hard work they do.

Provision of more flexible and longer-term funding to WHO-NTD and other organisations will be important for enabling integration. However, it may be necessary to also incentivise integration and sustainability efforts. Integrating with government systems, and capacity building more generally, can represent a trade-off between good delivery and good capacity building. Typically, implementers are assessed by disease control outcomes and/or short-term results, so they logically focus on delivery. Effective capacity building and integration could also reduce the share of resources they receive in the future. Therefore, if donors want grantees to focus on capacity development and integration, this needs to be reflected within their contracts and made an explicit and assessed outcome.

National governments also require less tied funding and may be able to carry out some capacity-building work themselves. One option is to consider is the Global Fund model whereby governments are given the funds for training and delivery of services rather than external partners. This promotes government accountability and ownership, contributing to the sustainability of capacity-building provision. However, it may also be reasonable to expect economically better-off countries to invest in their own capacity strengthening, especially where other commodities and services are being provided externally.

9.5 Transition

WHO-NTD and other stakeholders need robust transition strategies that are necessary in two senses: to deal with very low NTD prevalence levels that amount to elimination as a public health problem; and also as some endemic countries develop the resources and political will to progressively take over elimination and control of the NTDs.

9.5.1 Elimination

In recent years WHO has verified Onchocerciasis elimination in Colombia and Ecuador; Trachoma elimination as a public health problem in Mexico, Morocco, and Oman; Guinea worm is ‘slated for eradication’ and restricted to a handful of human cases in three countries; and VL has reached its elimination target in all Nepalese districts and 99% of Bangladeshi sub-districts. At the same time, it should be noted that new diagnostic tools suggest Schistosomiasis elimination remains very challenging.
Many diseases have a distinct definition of 'elimination as a public health problem', underlining the epidemiological differences that exist between diseases, including their degree of localisation, although it is also sometimes the case that the targets and thresholds for elimination as a public health problem are set arbitrarily rather than based on strong evidence. WHO offers a certification process for countries and can help countries with elimination planning. For example, EMRO helped Egypt with a Schistosomiasis elimination plan – noteworthy as being the location where the Schistosomiasis parasite was first identified in 1852 and of the world’s first NTD control programme a century ago. Donor support of US$ 10 million to Egypt together with WHO M&E assistance, more than a decade after declaring Schistosomiasis no longer a public health problem, partially illustrates a key feature of elimination programmes – their significant cost.

As prevalence falls, continuing surveillance responsibility often means that the cost per case rises. Apart from surveillance, training, laboratory, and M&E costs will continue, as will BCC initiatives and possibly active case finding. This effect generally easily outweighs some efficiency increases, such as movement from multiple to a single annual shipment of drugs, as has occurred with AmBisome in SEARO. To give an idea of how patient numbers affect costs, for PCT alone WHO-NTD’s benchmarking study suggests that per patient costs will be significantly above the US$ 0.50 average as MDA programmes need to reach fewer people (i.e. over US$ 10 when around 10,000 people). Such higher costs in turn means that the apparent VfM if measured solely on the basis of cost per case in a single year, particularly of PCT diseases, declines. This is potentially a problem for resource mobilisation. Yet the prospect of elimination and potentially of eradication over time raises the prospect of a step change in the disease range faced in the world and of the resulting potential for full transfer of resources to other activities. Elimination has another value in that its declaration is a major potential political asset and this can be used as an incentive to elicit international and domestic resources and to galvanise political will (visible with VL in South Asia). The strongest example of this is polio, even if not an NTD.

There is a lack of research around elimination of NTDs in terms of the clinical, economic, and political aspects, which is one reason why planning and a definition of roles (e.g. continued transmission assessment and other surveillance) remain unclear. It is not clear that any study of the cost of eradication or elimination has included the cost of the certification process, for example. Also, reference to elimination as a public health problem can create an idea that resources are no longer needed once achieved, whereas unless eradication is achieved some resources will be needed indefinitely. An early statement of elimination can mobilise near-term resources but make it harder to mobilise resources later for continued surveillance, potentially allowing disease resurgence or a halt in progress (e.g. leprosy in India), which itself reduced the credibility of WHO certification. Advance here would constitute a global good with relevance across NTDs and beyond to other infectious diseases such as malaria.

Another factor to keep in mind regarding prevalence levels that decline toward elimination levels is that they may serve a useful function in promoting integration with other diseases as the economic case for doing so becomes ever stronger.

9.5.2 Country ownership

The second dimension of transition involves the transfer of responsibilities – financial, technical, operational, and of leadership – from international to country-based stakeholders. Clearly this is a multi-faceted endeavour, with each country representing a specific case with differentiating factors. One element is interaction between WHO-NTD and WHO regional offices, which have closer contact with country entities, but may not show the same initiative as WHO-NTD toward advocacy for and facilitation of transition. Another related aspect is coordination between all international stakeholders. The three major international donors – DFID, USAID, and BMGF – collaborate well...
and the END Fund works well with many other smaller donors, but as funding and activities become more differentiated by context then there will be a growing challenge in coordination and sharing of evidence and best practice.

Fiscal space is an important enabling factor. The median NTD-endemic country citizen is shifting steadily from being a citizen of a low-income country to that of a middle-income one, where it is legitimate to associate domestic financing with sustainability. The economic evidence on NTDs has meant that, in the words of one interviewee, governments of countries with rising income are ‘pleasantly surprised to find that NTDs are affordable to incorporate into health systems’ – which is especially true of relatively easily scalable PCTs. To build willingness on ability, advocacy may be needed for a focus on the poorest in society, usually the most likely NTD sufferers. Even if evolving benefit packages do not specifically target NTDs, they may be helpful if they do include those interventions most relevant to poor NTD sufferers, such as outreach beyond facilities. WHO-NTD proposes that NTDs serve as a ‘litmus test’ for equity within a UHC approach.

National capacity is another prerequisite, although this is likely to be being addressed by stakeholders beyond NTDs (see Section 9.4). With this the case, integrated approaches will increasingly be more attractive to countries than will a series of distinct vertical programmes.

Different functions may move across to national control at different speeds. Core staffing (though often not training) in many countries is paid for by government and is quite often in place (e.g. NTD coordinator, M&E officer, finance officer, etc.). Such a core team may represent a useful foundation on which to build. Data management and information systems often remains a weak area. Medicines may be the last element to transfer to using government systems. For instance, several Asian governments already pay for all of their NTD programmes except drugs from national budgets. The availability of these donated drugs, and some additional cash payments, acts as an incentive for this domestic support to continue. The vertical management of many medicines by stakeholders acts as an obstacle to transfer to domestic control. But there is also a concern at how few governments are willing to pay for the transport and distribution of these donated drugs, even though such costs would likely represent only 1–3% of national health spending in countries with even the lowest health spending levels. WHO-NTD states that having countries receive and distribute their drugs is ‘a long-term goal’. A key step is for funding to be set within the MoH, and this may require a regional committee for an NTD masterplan as an intermediate step where funding commitment is made. The JAP offers a useful tool for building medicine procurement capacity for PCT medicines.

Pushing the progressive transition to country ownership is a delicate business, requiring gradualism and with a risk of adverse political or domestic health policy reaction if countries are pushed too hard. Regardless, volatility is likely to be a feature (e.g. Nigeria removed the NTD budget line, after increasing its allocation in 2014). Donors may be able to work best by setting gradual schedules of wind-down in countries with capacity and growing incomes, with resources transferred to a winding up of operations in the poorest countries to demonstrate continued global commitment.

Better algorithms are needed to give the clinical skills and tools that districts will need and to build a truly integrated IDM programme. At health centre level, diagnostic capability is needed together with either ability to treat or an effective referral system. IDM also needs a comprehensive logistics underpinning, just as DFID support/JAP has done for PCTs. Progress will involve going beyond national action plans to engage practically with municipalities and individuals – who may have funds they are willing to use – although WHO will need to ally with other stakeholders who have the appropriate links and leverage. Helping residents to upgrade housing and protect themselves from vectors will have a significant upfront cost, but relatively low recurrent costs.
9.6 Conclusion and looking forward

All stakeholders will have to work in a gradual but determined way to increase sustainability. Some suggestions follow:

International and domestic funding

- Collaborative ICFDs (or any similar related initiatives with other development partners, for example) will be vital for moving to more diversified funding from country-based public and private sources, as well as generating and sharing context-specific evidence (discussed in more detail in Chapter 4).

Non-financial resource mobilisation

- Continue the successful development of the donated medicines management and JAP. Future elements could include differential treatment for the most affected countries, in the light of widely varying capacity situations. This could include small co-payments by endemic countries in support of programme costs (e.g., distribution costs) where there is fiscal space to do so, as well as piloting allowing them to order medicines directly.
- Increase data sharing with all major stakeholders to strengthen the sustainability of the donations initiative. This may allay fears that wastage may be even higher than reported. It could extend to all countries or concentrate on those few (5–10) that account for the bulk of donations.
- Pharmaceutical companies should be invited to apply their skills to help address perennial problems such as with inventory management (a core competency within the commercial pharmaceutical sector) and the high churn rate of programme managers (through continuous provision of training). However, the principle that WHO should always lead the relationship with MoHs must always be respected.

Integration

- A key new advocacy theme is that WHO-NTD should seek to demonstrate to donors that its work can be part of health systems strengthening rather than a vertical obstacle to this. The UHC agenda and integrated data systems (especially DHIS2) offer an opportunity to do this. This may be a useful way to bring in new donors, also offering them a chance to enjoy the publicity of being involved with disease elimination at country level for those countries most in need of support. This may involve increased collaboration between WHO-NTD and the WHO Health Systems Cluster.
- Many short-term operational country-level improvements are feasible, ideally within an NTD masterplan. With surveillance, for example, often the same local staff do it repeatedly and separately for different diseases. On the clinical side, it is similarly also often the same person on the country side dealing with different disease programmes (e.g., an NTD manager, who may be required to manage multiple relationships with different WHO-NTD disease lead managers in Geneva). An individual in a village may work for 10 programmes, several of which relate to NTDs, and have 10 different but very similar trainings. Impetus for change may have to come from WHO-NTD.
- At WHO-NTD, PCT and IDM have limited contact on data issues, despite the integrated NTD database initiative. A strategy to change this should be started, together with review of how VEM and veterinary work might also be linked in where appropriate.
• NTD development partners should meet to develop a strategy for reducing the obstacles that they themselves create for integration, within and across infectious diseases. Piloted funding via the elimination plans proposed below (under ‘Transition’) might be one option to discuss.

Capacity building

• The three staff paid for through DFID’s investment are essential for delivering core activities. They also represent good VfM. Therefore, it is recommended that DFID should continue funding their posts.

• Funding of additional staff at decentralised levels of WHO could not only increase localised technical availability but also free up capacity within Geneva, at a considerably cheaper cost rate while allowing each institution to play to its strengths. Short-term contracts should be avoided where possible because they increase staff turnover and make recruitment and retention of high-quality staff more difficult.

• Longer-term investments will reduce the transaction costs associated with funding instability. Making this funding more flexible will also enable more integrated programming. Such investments will contribute toward WHO-NTD’s ability to provide capacity strengthening support but further efficiencies may be found through improved collaboration within WHO.

• To ensure that capacity building is integrated and sustainable, accountability needs to be put on these outcomes. This is most easily addressed through incorporation of relevant indicators in the project logframe. Currently the logframe for this investment does not correctly capture the concept of integration and there are no indicators for sustainability. Suggested indicators include: number of countries with an integrated masterplan; number of countries with a functional multi-partner coordination platform led by the government; number of countries with an allocated budget line for NTD control; and number of countries that play an active role in NTD control, as evidenced by implementation of drug procurement and distribution or disease surveillance and monitoring.

Transition: elimination and country ownership

• This is another key new area for WHO-NTD’s advocacy: to demonstrate to donors that transition (both elimination and the shift to country ownership) is possible. VL in South Asia offers an immediate opportunity for this.

• There is a concerning lack of both research and policy guidelines regarding the elimination of some NTDs. WHO-NTD should begin to address both, in conjunction with other stakeholders, pulling together clinical, economic, organisational, and political economy perspectives.

• One part of this could be the outlining of country-level disease elimination plans, showing a timetable of what could be expected assuming given inputs from various stakeholders. Though linked to the Roadmap, these would be more specific, with costed activities and sub-national results for larger countries. Where inputs fell short of this plan, forecast outcomes could be adjusted, perhaps publicising such adjustments. Even with the inherent uncertainties, such plans would likely offer reassurance to stakeholders including pharmaceutical companies and international development partners. They might also clarify the political opportunity to be associated with progress against a particular disease for country-level decision makers.

• There may be a need for temporary development partner funds to address domestic funding delays, where a commitment has been made but in-country processes cause delays.

• Even apart from the possible elimination plans, donors need to develop more of a differentiated country-based approach of winding down or winding up resources depending on context, which countries can then use a basis to plan around.
M&E of sustainability

- Vital as they are, none of the various aspects of sustainability are subject to easy quantitative measurement via indicators (the existing logframe is discussed in Chapter 7). It may be possible to develop the approach of the Uniting to Combat NTDs Coalition’s ‘traffic light’ scorecarding to incorporate a greater focus on sustainability. This should be discussed in collaboration by all major NTD development partners, and possibly with representatives of those involved with other major infectious diseases.
- If the disease elimination plans detailed above were taken up, then these could be used as a framework for progress indicators down to sub-national level for larger countries. Where confidence developed in terms of capacity and political will, such plans could create a framework for budget support to countries, with the understanding that given results (independently verified) would be achieved.
Annex A  Summary of VL disease characteristics and treatment

Leishmaniasis refers to a treatable and curable group of diseases that affect the poorest and most marginalised communities. The disease has three main forms: 1) VL, also known as kala-azar, which is fatal in 95% of cases if untreated; 2) CL, which is the most common form of the disease resulting in skin lesions and ulcers and permanent scarring or disability; and 3) mucocutaneous leishmanisais, which causes destruction of the upper mucous membranes. Other forms of the disease include PKDL, which is a complication of VL, and patients suffering for relapses in VL post-treatment. These are important forms of VL because such people may serve as infection reservoirs and hence contribute toward VL transmission.

In 2016, updated data from 25 high-burden countries reported 30,758 cases of VL in 2014 and 21,909 cases in 2015 (including new and relapsed cases). Countries with a high burden of CL reported 153,027 cases in 2014 and 138,575 cases in 2015. More than 90% of global VL cases occur in six countries: India, Bangladesh, Sudan, South Sudan, Ethiopia, and Brazil. CL cases are more widely spread. Mortality data are extremely sparse and generally represent hospital-based deaths only. Therefore, calculating CFRs is very difficult. Using an overall CFR of 10%, between 20,000 and 40,000 leishmaniasis deaths per year are tentatively estimated. However, CFR rates in South Asia are now well below 10%, so this may be an overestimate.

Until recently, diagnosis and treatment for VL were painful and toxic. However, new diagnostic tests have been developed that are quicker and easier to use, while highly effective and safer antileishmanial medicines are now available. In South Asia, Ambisome (Liposomal Amphotericin B) is the first-line treatment, and generally only requires a single dose. In East Africa where Ambisome is less effective, SSG-PM combination therapy is the first-line treatment because it requires a shorter treatment regimen that can be administered as an outpatient but requires daily injections while being similarly or more effective than Ambisome. However, multiple high doses of Ambisome are used as a second-line treatment in the event of SSG-PM treatment failure or complex cases.

However, financial and geographical barriers to accessing care, high utilisation of poor-quality providers and delays in receiving appropriate diagnosis and treatment, and unavailability of the best medicines meant many people were dying unnecessarily. The Ambisome donation by Gilead presented an opportunity to increase access and the numbers on effective VL treatment. However, at the time no resources were made available for distributing the drug, ensuring it reached facilities in good condition, and training health workers to administer it effectively. DFID’s investment in KalaCORE, and the associated funding provided to WHO-NTD, met this need.
Annex B  Terms of reference

TERMS OF REFERENCE


External Evaluation

May- July 2017

DFID carries out reviews of all its programmes to assess progress against the objectives contained in the Logical Framework, to see what has been achieved over the duration of the programme and lessons learnt. These TORs provide a framework for the External Evaluation of UK support for WHO Department of NTDs – capacity strengthening and Visceral Leishmaniasis (VL).

The goal of the programme is to contribute to the achievement of the Sustainable Development Goals (SDGs), in particular target 3.3—to ‘end the epidemics of HIV, tuberculosis, malaria and neglected tropical diseases’ by 2030. The total value of the contract is £4.8m. This comprises £2m for core funding to the work plan and budget of the NTD Department of WHO in particular for staffing, £2.7m is for coordination of Visceral Leishmaniasis (VL) programmes in South Asia and East Africa, including managing the donation of AmBisome from Gilead Sciences. The remaining funds are for reviews.

The specific results of the support to the NTD Department of WHO are:

- Increased evidence of the economic impacts, costs and international expenditure and the benefits of NTD control and treatment.
- The efficient and effective management of new resources channelled through the WHO NTD Department (money and products) in order to distribute drug donations efficiently.
- Increased national capacity to support the management of national NTD control programmes in priority countries effectively.

Visceral Leishmaniasis (VL)

- Increase access to effective treatment by replacing the use of less effective treatments.
- Effective management of the drug donation of AmBisome
- Build capacity and the necessary logistics to increase the numbers on treatment, and support improved policy stronger advocacy.

This includes:

- Bangladesh: cold chain and distribution; quality control in case management; national coordination; support to the WHO country office; and support to WHO/NTD and WHO Regional Office for South-East Asia (SEARO).
- East Africa: a similar (but smaller scale) programme of support to the ongoing VL control programmes in Sudan, South Sudan and Ethiopia
WHO-NTR support for capacity strengthening and VL programme coordination

Background

NTDs are a group of parasitic and bacterial infections that thrive in poor settings and affect 1.4 billion of the world's poorest people. They cause disability, disfigurement, and an estimated 170,000 deaths annually. Interventions to tackle NTDs reach the poorest and most marginalised, often beyond the reach of health services. They therefore align with leaving no-one behind. Treatments for some NTDs cost as little as US$0.50 per person making the control and elimination of the most common NTDs a best buy in public health. Most drugs for NTDs are donated, pharmaceutical companies including GSK have pledged drugs valued at US$17.8 billion from 2014 to 2020 for NTDs making this an excellent example of a private public partnership. WHO estimates that the funding gap for NTDs in low and lower middle income countries is US$ 390m per year, assuming 2014 levels for all donors, including UK ($65m).

DFID has an existing and high performing portfolio of programmes that tackle NTDs, these programmes were designed following the high profile London Declaration on NTDs in 2012 where the UK committed an additional £195m. Our support for WHO compliments these programmes. This evaluation is timely in the context of Universal health coverage (UHC) and SDGs, with the transition from international to domestic financing and from disease-specific funding to health system financing.

DFID support to WHO NTD department included funding for its first ever health economist which has been an important part of the support from DFID. The role of the health economist has been to build evidence on the cost and cost-effectiveness of NTD interventions, develop tools for planning and budgeting NTD interventions, set baselines for monitoring NTD financing, and mainstream NTDs within the discussion about UHC and SDG priority-setting and financing. UHC and the increasing focus on domestic resources suggest a possible shift in demand for WHO’s services, with more focus on integrating NTD financing with health system financing and deeper engagement with Ministries of Finance than with international donors.

Objective of the Review

Assess and score the extent and quality of progress since the start of the programme. This will include assessment of progress against the log-frame.

Assess how the programme has been managed including financial management.

Identify and make making recommendations regarding any major issues and problems affecting progress.

Identify priorities for future work.

Specific questions for the review focusing on the areas of DFID support

Health Financing

- Assess the impact of the work done to mobilise resources for NTD programmes and make recommendations on how to further increase sustainability.
- Advise on a strategic plan for WHO’s work in economics/financing for NTDs for the transitional period 2018-2020, and beyond 2020 towards the end of the SDGs in 2030.

National capacity
WHO-NTR support for capacity strengthening and VL programme coordination

- Assess how WHO has strengthened national capacity. Advise on how best to further strengthen this.

Managing drug donation

- Review WHO's management of NTD drug donations and advise on how best to further strengthen this given expanded donations for some diseases.

For the three areas above

- Review technical policies, guidelines and strategic documents developed through this support
- Review WHO coordination of stakeholders and technical expert groups

For VL

- Review the national capacity building efforts including strengthening case management and disease surveillance
- Assess progress towards the elimination target in South Asia by 2020
- Assess the status of the AmBisome donation management (this will be as part of the work above on managing the drug donations)
- Analyse the status of evidence based policy formulation and the research needs

Methodology

The 2015 Annual Review will be carried through a combination of:

- Meeting with WHO NTD department
- Meeting with DFID
- Visits to 1 country including field visits. The countries to be visited will be decided by DFID and WHO (probably Ethiopia).
- Phone discussions with programme managers and other officials in a further 3 countries (Possibly Bangladesh, India, Nigeria)
- Phone discussions with other stakeholders

WHO will be responsible for organising the in-country logistics including organising meetings and site visits. WHO will also be responsible for providing the consultants with contact details and to help make the linkages with NTD programme managers and other stakeholders.

DFID will provide the business case, log frame and all previous annual reviews.

REPORTING

The consultants will produce a draft report within 10 days of returning from the field visits or as agreed with DFID. The final report will be produced within 10 days of receiving comments from DFID and WHO. If needed there can be two rounds of comments from DFID and WHO. The consultants will also present their findings to DFID and WHO at a dissemination meeting which could be VC/phone.

SKILLS

Two consultants who between them have the following skills:
WHO-NTR support for capacity strengthening and VL programme coordination

- Strong Experience of evaluating public health programmes in developing countries.
- Strong knowledge of health financing including health systems financing towards UHC
- Strong management skills
- Prior experience of reviewing WHO programmes would be a strong advantage
- Prior experience of working on DFID reviews/evaluations would be a strong advantage
- Some knowledge or experience of reviewing NTD programmes would be a strong advantage. It is not necessary to be an NTD expert.

TIME REQUIREMENTS

Reading, developing questionnaire for phone interviews - 7 days
Phone interviews, meetings with WHO and DFID – 14 days
Visits to 1 country and report from visit - 6 days
Report writing – 13 days
Addressing comments in draft and dissemination meeting - 8 days

TIMELINES

TBD

Annex 1

Key Documents

Business case and DFID annual reviews
WHO data and documents (global reports, strategies, etc)- Can we list the main ones please
http://www.who.int/neglected_diseases/en/
WHO Technical report series, #949
Kala azar elimination strategic framework, 2011-2015
Kala azar elimination strategic framework, 2016-2020
WHO Global Health Observatory (GHO)
WHO leishmaniasis website (http://www.who.int/leishmaniasis/en/)
WHO weekly epidemiological report (www.who.int/wer/)

Key informants

NTD Programme managers and Departments of Planning and Finance
WHO (HQ, and regional and country office advisors)
DFID
USAID

BMGF

Representatives of pharma

Uniting to Combat NTDs Coalition

DFID NTD Programmes many of whom are members of the UK Coalition against NTDs
Annex C  Approach paper

Approach Paper [DRAFT]


25 March 2017

This approach paper responds to the terms of reference received from DFID on 16 February 2017. It provides an initial outline of the consultant’s proposed inputs, the process necessary to undertake required activities, and the main elements of the work plan and timetable.

Objectives of the assignment

This external evaluation will assess WHO-NTD activities supported by DFID, with reference to the Logical Framework for this support. Following the above ToR, the primary objectives of this Evaluation are to:

1) Assess and score the extent and quality of progress since the start of the programme. This will include assessment of progress against the logframe.

2) Assess how the programme has been managed, including financial management.

3) Identify and make recommendations regarding any major issues and problems affecting progress.

4) Identify priorities for future work.

Scope of the work

A wide range of NTDs exist: at least 17 diseases across 149 countries. Therefore, rather than attempting to carry out comprehensive analysis across all of these conditions and environments, the consultant will:

- use selected examples from the NTDs, with reference where possible to those with greater disease burdens;
- use selected examples affecting the majority of NTD country environments;
- with every issue also focus on VL, which is a priority NTD; and
- where possible search for and apply analysis to issues common across most or all NTDs.

The Evaluation will address a series of questions in relation to all of the relevant NTDs and an additional more restrictive set of issues for VL.

Specific questions across all NTDs

Looking across all NTDs in the manner just described the consultant will address the following specific questions:

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81 Note this version is copy-edited from the actual 25th March version but substantially the same.
Health financing

- Assess the impact of the work done to mobilise resources for NTD programmes and make recommendations on how to further increase sustainability.
- Advise on a strategic plan for WHO’s work in economics/financing for NTDs for the transitional period 2018–2020, and beyond 2020 toward the end of the SDGs in 2030.

National capacity

- Assess how WHO has strengthened national capacity. Advise on how best to further strengthen this, in the light of key health systems challenges to effectively addressing NTDs at country level.

Managing drug donation

- Review WHO’s management of NTD drug donations and advise on how best to further strengthen this given expanded donations for some diseases.

For the three areas above

- Review technical policies, guidelines and strategic documents developed through this support.
- Review WHO coordination of stakeholders and technical expert groups.

Additional questions specifically for VL

- Review the national capacity-building efforts, including strengthening case management and disease surveillance.
- Assess progress toward the elimination target in South Asia by 2020.
- Assess the status of the AmBisome donation management (this will be as part of the work above on managing drug donations).
- Analyse the status of evidence-based policy formulation and the research needs.

Team

We propose that the assignment be carried out using 42 consultant days, ideally shared between two consultants, though one or three could be possible if they bring the right balance of skills.

In addition, two peer reviewers with significant experience of WHO evaluations and of work with DFID on NTDs will provide a total of 4 additional days of inputs into the work. So total input of 46 days.

Deliverables

We propose the following three deliverables for the project:

Inception Report

This report will set expectations on all sides regarding the approach, content, and structure of the final issues report. It will:

- Outline the consultant’s detailed methodology and work plan;

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82 This was later increased by DFID to 48 days.
• Propose a deadline for the Draft Evaluation to be submitted, unless otherwise agreed 10 days after the completion of interviews and field trip;
• Include a table of contents and structure for the following Evaluation Report; and
• Be presented for DFID’s and WHO’s comments and approval.

Draft Evaluation Report

This will follow the contents and structure agreed with the Inception Report, and will have a maximum of 40 pages, excluding any annexed material and references. In addition to input from the two peer reviewers mentioned above, it will also be subject to OPM’s standard quality assurance process.

Final Evaluation Report

This will be developed from the draft Evaluation Report in light of comments from DFID and WHO, and will be produced within five days of receiving the last of such comments. If needed there can be a second round of comments from DFID and WHO, with the revised Final Evaluation Report submitted a further five days after these are received.

It will have a maximum of 50 pages, excluding any annexed material and references. Once again, in addition to input from the two peer reviewers mentioned above it will also be subject to OPM’s standard quality assurance process.

The consultants will also present their findings to DFID and WHO at a dissemination meeting.

Indicative tasks

Rather than allotting time specifically to each of these deliverables, the consultant will use their judgement to make this allocation, including when and in relation to which deliverable to use the peer reviewer days. This section provides an indicative list of tasks and of consultant inputs per task. However, the consultant may agree an alternative approach with DFID and WHO in the Inception Report.
## Indicative tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-reading</strong></td>
<td>See Terms of Reference Annex 1 – Key literature</td>
</tr>
<tr>
<td><strong>Meeting with DFID</strong></td>
<td>Assume in person in London, lasting half day as part of information gathering for Inception Report</td>
</tr>
<tr>
<td><strong>Meetings with WHO HQ</strong></td>
<td>Assume in Geneva with two-night stay (one night previous and return to UK at end of second day)</td>
</tr>
<tr>
<td></td>
<td>Meet e.g. Dirk Engels and Senior Team; VL team; STAG; key Working Groups, including M&amp;E, capacity building, economic); Finance; other programmes where interaction; TDR; DNDi.</td>
</tr>
<tr>
<td><strong>Country visit</strong></td>
<td>Assume Ethiopia (Bangladesh also mentioned as possibility)</td>
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<tr>
<td></td>
<td>Country-relevant pre-reading; meet WHO national leads; relevant MoH leads, re disease and finance; national research bodies; DFID health advisers; NGOs working in NTDs; other donor country offices involved in NTDs; medicine supply chain; data relevant to impact, e.g. DHIS2.</td>
</tr>
<tr>
<td><strong>Interviews</strong></td>
<td>Assume 35 at average rate of five interviews per consultant day. Usually by telephone/Skype. Use range of semi-structured questionnaires, with shared introductory section.</td>
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<tr>
<td></td>
<td>Key informants may be drawn from:</td>
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<tr>
<td></td>
<td>Pharma – Gilead, GSK, Merck; WHO regional leads – SEARO; EMRO; AFRO</td>
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<td></td>
<td>WHO country offices</td>
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<td></td>
<td>MoH leads in countries beyond country visit – NTDs; planning; finance</td>
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<tr>
<td></td>
<td>Donors – USAID; GFATM; BMGF; CDC</td>
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<td></td>
<td>Uniting to Combat NTDs Coalition</td>
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<td></td>
<td>DFID – NTD programmes</td>
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<td></td>
<td>Academics – London SHTM; Liverpool; Imperial; Inst of Tropical Medicine, Antwerp; Asian/African universities</td>
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<tr>
<td></td>
<td>NGOs – CARE; PATH; MSF; Sightsavers.</td>
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<td>Note: also see Terms of Reference Annex 2 DFID-Suggested Key Informants</td>
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Indicative allocation of consultant days

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<th>Sam Franzen</th>
<th>Liz Ollier</th>
<th>Timetable</th>
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</tr>
<tr>
<td>DFID meeting</td>
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<td>0.5</td>
<td></td>
<td>Week beginning Sept 25th</td>
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<tr>
<td>WHO meeting (including preparation)</td>
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<td>3</td>
<td></td>
<td>Week beginning Oct 2nd</td>
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<tr>
<td>Country visit and preparation</td>
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<td>Week beginning Oct 16th</td>
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<td>3.5</td>
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<td>Sept 25th through to Nov 10th</td>
</tr>
<tr>
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<td>5</td>
<td>1</td>
<td>Draft report Nov 17th</td>
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<td>1</td>
<td>Final report Nov 24th</td>
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<td>Week beginning Nov 27th</td>
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<tr>
<td>Peer review</td>
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<td></td>
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<td>Nov 15th</td>
</tr>
<tr>
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<td>17.5 Dan + 1 per review</td>
<td>23.5</td>
<td>3</td>
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</tbody>
</table>

Expenses

The only significant expenses will relate to the country visit; DFID meeting (if consultant not London-based); WHO meeting; and dissemination meeting. Other interviews will be conducted remotely or only in-person opportunistically if in same location as consultant.

Approach to the work

The methodology will involve the tasks and deliverables set out above. As described, it will be developed in more detail in the agreed Inception Report, following the initial meeting with DFID.

WHO will be responsible for organising the in-country logistics including organising meetings and site visits. WHO will also be responsible for providing the consultants with contact details and to help make the linkages with NTD programme managers and other stakeholders.

DFID will provide the business case, logframe and all previous annual reviews. DFID will also provide email introductions to any key informants with which WHO does not have contact.

Indicative work plan/timetable

The work plan and timetable will also be developed in more detail in the agreed Inception Report. Key indicative timetable elements are given in sections 2 and 3 above. Duration will in some cases depend on the team size – e.g. the interviews will be completed more quickly with a team of three than of one. Other aspects will be fixed – e.g. timescales set out in section 2 for writing,
commenting on and revising the Evaluation Report. Timing of e.g. the DFID and WHO meetings will be guided by the availability of staff in both organisations.

Deadlines will be arranged between the consultant, DFID, and WHO in the process of developing the agreed Inception Report, though they may be revised through mutual agreement.
Annex D  List of respondents

DFID
1. Delna Ghandhi, Senior Health Adviser
2. Iain Jones, Economist
3. Paulina Paterson, Deputy Programme Manager
4. Peter Clarke, Policy and Finance Officer
5. Gloria Ngaiza, Health Adviser, DFID, Tanzania (Former Tanzanian Government NTD Focal Point)

WHO – NTDs
6. Gautam Biswas, Director a.i. and Coordinator, PCT
7. Daniel Dagne, Coordinator, IDM (including the leishmaniasis)
8. Christopher Fitzpatrick, Health Economist
9. Albis Gabrielli, Team Leader, Capacity Building (former Regional Adviser, EMRO)
10. Jose Ruiz Postigo, Medical Officer, IDM (the leishmaniasis)
11. Pamela Mbabazi, Medical Epidemiologist (M&E, capacity building)
12. Afework Tekle, Project Manager, PCT (drug distribution)
13. Tuan Le, Technical Officer, PCT (drug distribution)
14. Vaidyanathan Ramakrishnan, Financial Officer
15. Dirk Engels, Director (retired),

WHO-TDR
16. Piero Olliaro, Team Leader, Intervention and implementation research, WHO-TDR
17. Beatrice Halpaap, Portfolio and Programme Manager, WHO-TDR

WHO – Regional offices
18. Maria Rebollo Polo, Team Leader, Expanded Special Project for Elimination of NTDs, AFRO
19. Alexandre Tiendrebeogo, Medical Officer (Neglected Tropical Diseases), AFRO
20. Mohamed Jamsheed, Regional Adviser, SEARO

WHO-NTD STAG members
21. Nilanthi de Silva, STAG Chair
22. Uzoma Nwankwo, Chair of Investment for Impact Working Group
23. Be-nazir Ahmed, Former Director of Disease Control of Bangladesh
24. David Molyneux, Emeritus Professor and Senior Professorial Fellow, Liverpool School of Tropical Medicine

KalaCORE

25. Stephanie Meredith, Programme Director, KalaCORE
26. Lucy Palmer, Project Principal, Mott MacDonald

Pharmaceutical company representatives

27. Johannes Waltz, Merck
28. Mark Bradley, GSK

Other stakeholders

29. Don Bundy, BMGF
30. Ellen Agler, END Fund
31. Emily Wainwright, USAID
32. Koert Ritmeijer, Lead NTDS, MSF
33. Janet Hemingway, Chair in Insect Molecular Biology, Director of Liverpool School of Tropical Medicine
34. Mike Coleman, Reader in Medical Entomology, Liverpool School of Tropical Medicine

Ethiopia respondents

35. Dr Abate M Beshah, Neglected Tropical Diseases Programme Coordinator, WHO, Ethiopia
36. Dr Waltaji, Environmental Health Officer, WHO Ethiopia
37. Dr Henok, Leishmania Officer, WHO Ethiopia
38. Mr Dagnachew, Data Manager, NTD Team, WHO Ethiopia
39. Dr Wassihun, NTD Team, Health Promotion Officer, WHO Ethiopia
40. Dr Cherinet Adera, Deputy Country Programme Manager, KalaCORE
41. Mr Biruck Beyene, Director, Department of Disease Control, Federal MoH
42. Mr Mesfin Sileshi, M&E Officer, NTD Team, Department of Disease Control, Federal MoH
43. Mr Daniel Teferi, Drugs and Supply Chain, NTD Team, Department of Disease Control, Federal MoH
44. Dr Fentahun Tadesse, Technical Adviser for Trachoma and Leishmaniasis, Department of Disease Control, Federal MoH
45. Dr Luwan Teshome Gari, Health Adviser, DFID Ethiopia
46. Dr Martha Solomon, WaSH Adviser, DFID Ethiopia
47. Dr Teshome Gebre, International Trachoma Initiative, Ethiopia
48. Mr Addisu Workineh, NTDs Officer, Amhara Regional Health Bureau, Ethiopia
49. Duty Clinicians; Pharmacists; Laboratory Technicians, Patients at: Leishmaniasis Research and Treatment Centre, Gondar University Hospital, Ethiopia
50. Vice Head, Zonal Health Department, Amhara Region, Ethiopia
51. Zonal NTD Focal Point, Amhara Region, Ethiopia
52. Facility Manager, Pharmacist, Laboratory Clinician, Nurse at: Zonal Health Facility X, Amhara Region, Ethiopia
53. Trachoma Regional Programme Officer, The Carter Centre, Ethiopia
54. Trachoma Eye Surgery Specialists: Zonal Health Facility Y, Amhara Region, Ethiopia
55. Community members, Village Z, Amhara Region, Ethiopia
Annex E  References

http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0002720

doi:10.1371/journal.pntd.0003016.


Coulborn (2017) *Barriers to access to visceral leishmaniasis diagnosis and care among mobile workers in Western Tigray, Northern Ethiopia*. KalaCORE presentation.

http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0005150.


Disease Control Priorities Project (DCP2) (2006). University of Washington, Department of Global Health
http://dcp-3.org/dcp2

doi:10.1371/journal.pntd.0003165.


doi:10.1371/journal.pntd.0005037


Lenk, E., Redekop, W., Luyendijk, M., Fitzpatrick, C., Niessen, L., Stolk, W. et al. (2017. In press) ‘The socioeconomic benefit to individuals of achieving the 2020 targets for neglected tropical diseases controlled or eliminated by innovative and intensified disease management’


UNHCR (2017) South Sudan Situation; Bi Monthly Ethiopia Situational Report. 16-30th September 2017


**Websites and online resources**

[http://alma2030.org/scorecards-and-reports/map](http://alma2030.org/scorecards-and-reports/map)


[http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0004386](http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0004386)

[http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0035671](http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0035671)

[http://spectrumbeta.futuresinstitute.org/](http://spectrumbeta.futuresinstitute.org/) One Health is software designed to help strategic health sector planning in low- and middle-income countries, including through costing and health impact analysis.


WHO-NTR support for capacity strengthening and VL programme coordination

http://unitingtocombatntds.org/reports/5th-report/disease-summaries/
https://healthy.shinyapps.io/benchmark/
https://unstats.un.org/sdgs/indicators/database/?indicator=3.3.5
www.end.org/blogs/engaging-noteworthy-dialogue/2016/05/13/africa-could-save-$52-billion-by-2030-by-ending-neglected-tropical-diseases
www.who.int/gho/neglected_diseases/leishmaniasis/en/
www.who.int/leishmaniasis/burden/endemic-priority-alphabetical/en/
www.who.int/leishmaniasis/resources/wer/en/
www.who.int/leishmaniasis/resources/who_wer9122/en/
www.who.int/leishmaniasis/resources/who_wer9238/en/
www.who.int/neglected_diseases/about/en/
### Annex F  Programme logframe

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>WHO Department of Neglected Tropical Diseases – Support for capacity strengthening and VL programme coordination</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPACT</td>
<td>Reduction in burden of disease due to NTDs</td>
</tr>
<tr>
<td>Impact Indicator 1</td>
<td>MDA coverage in four ‘tracer’ diseases (Schistosomiasis, LF, STH, and Onchocerciasis) in target countries. *</td>
</tr>
<tr>
<td>Planned</td>
<td></td>
</tr>
<tr>
<td>Achieved</td>
<td>30.0% (Planned: 35%)</td>
</tr>
<tr>
<td></td>
<td>33.3% (all countries)</td>
</tr>
<tr>
<td></td>
<td>42.5%</td>
</tr>
<tr>
<td></td>
<td>42.6%</td>
</tr>
<tr>
<td></td>
<td>43.0%</td>
</tr>
<tr>
<td></td>
<td>47.0%</td>
</tr>
<tr>
<td></td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>LF:70%, Oncho: 80%, STH: 55%, SCH(SAC): 40%</td>
</tr>
<tr>
<td>Source</td>
<td>WHO PC databank, published in WHO-NTD reports</td>
</tr>
</tbody>
</table>

<p>| Impact Indicator 2 | Prevalence level of Schistosomiasis, STH and LF in selected countries** |</p>
<table>
<thead>
<tr>
<th>Appointment</th>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone 3 (Year 3)</th>
<th>Milestone 4 (Year 4)</th>
<th>Target (Year 5)</th>
<th>Target (Year 6)</th>
</tr>
</thead>
</table>
| Planned           | A) Two more countries identified for monitoring.  
|                   | B) Elimination targets defined by STAG.  
|                   | C) WHO revises logframe indicator and targets accordingly after STAG meeting.  
|                   | D) Composite country data (Ethiopia and Mozambique) finalised and added to logframe by May 2012. |
|                   | A) Baseline data available for two more countries.  
|                   | B) Monitoring in Ethiopia and Mozambique continues.  
|                   | Evidence of progress toward elimination in some countries.  
|                   | In four target countries (Ghana, Malawi, Tanzania, and Uganda), LF: > 65% of the endemic districts (IUs) <1% prevalence;  
|                   | Schisto: 40% reduction of endemic foci with moderate or high intensity infection.  
|                   | In four target countries (Ghana, Malawi, Tanzania, and Uganda), LF: > 75% of the endemic districts (IUs) <1% prevalence;  
|                   | Oncho: one country stopping MDA; Schisto: 50% reduction of endemic foci with moderate or high intensity infection. |
### Impact Indicator 3

**Reduction of VL CFR in Bangladesh (a)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned</td>
<td>5%</td>
<td>2.5%</td>
<td>1%</td>
<td>&lt;0.5%</td>
<td>&lt;0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieved</td>
<td>6%</td>
<td>0.40%</td>
<td>0.2%</td>
<td>0.4% (3/750)</td>
<td>0.46% (3/656)</td>
<td>1.36%</td>
<td></td>
</tr>
</tbody>
</table>

**Source**

### Impact Indicator 4

**Reduction of VL CFR in East Africa**

<table>
<thead>
<tr>
<th>Achieved</th>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone 3 (Year 3)</th>
<th>Milestone 4 (Year 4)</th>
<th>Target (Year 5)</th>
<th>Target (Year 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned</td>
<td>5%</td>
<td>4.5%</td>
<td>4%</td>
<td>&lt;3.5%</td>
<td>&lt;3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieved</td>
<td>6%</td>
<td>4.8%</td>
<td>4%</td>
<td>3.4% (189/7922)</td>
<td>2.56%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source**
WHO Surveillance reports and annual health reports.

### OUTCOME

**Outcome Indicator 1**

<table>
<thead>
<tr>
<th>Achieved</th>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone 3 (Year 3)</th>
<th>Milestone 4 (Year 4)</th>
<th>Target (Year 5)</th>
<th>Target (Year 6)</th>
</tr>
</thead>
</table>

**Source**
WHO Surveillance reports and Annual Health Reports.
### WHO-NTR support for capacity strengthening and VL programme coordination

**More effective global response to NTDs**

**Total global resources mobilised (in cash and in kind) for the four tracer diseases from development partners and industry**

|----------------------|----------|-----------------|-----------------|-----------------|----------------|----------------|----------------|

**Source**


**Outcome Indicator 2**

<table>
<thead>
<tr>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone (Year 3)</th>
<th>Milestone (Year 4)</th>
<th>Target (Year 5)</th>
<th>Target (Year 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned</td>
<td>29+</td>
<td>40</td>
<td>50</td>
<td>50</td>
<td>65</td>
<td>55</td>
</tr>
<tr>
<td>Achieved</td>
<td>10</td>
<td>29 countries implementing integrated PC, i.e. minimum of two NTDs being treated in coordinated way to same target population.</td>
<td>37</td>
<td>42</td>
<td>42</td>
<td>48</td>
</tr>
</tbody>
</table>

**Source**

WHO-NTD report; Annual Review May 2013, p. 5

#### INPUTS (£)

<table>
<thead>
<tr>
<th>DFID (£)</th>
<th>Govt (£)</th>
<th>Other (£)</th>
<th>Total (£)</th>
<th>DFID SHARE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>£5,200,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**INPUTS (HR)**

Administrator (10% of time) as lead Health Adviser and economist (up to 10%) to support

**OUTPUT 1**

<table>
<thead>
<tr>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone (Year 3)</th>
<th>Milestone (Year 4)</th>
<th>Target (Year 5)</th>
<th>Target (Year 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHO-NTR support for capacity strengthening and VL programme coordination</td>
<td>Planned</td>
<td>Achieved</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robust evidence on the VfM of NTD elimination and control</td>
<td>No WHO report on economics/financing of NTDs and their control</td>
<td>Launch of report on 19 February 2015 in London.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review and synthesis of the evidence on the economics of NTD control and its implications for the post-2015 development agenda</td>
<td>N/A (updated indicator)</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A (updated indicator)</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Publication of the WHO/NTD report on ‘Investing to overcome the global impact of NTDs’.</td>
<td>Launch of two major WHO/WB reports with NTD content: ‘Tracking universal health coverage: first global monitoring report’ and ‘Health in 2015: from MDGs to SDGs’.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Publication of NTD content within WHO reports on the SDGs, including UHC.</td>
<td>SDG-NTD indicator is included and is being monitored (<a href="http://unstats.un.org/sdgs/indicator/database/">http://unstats.un.org/sdgs/indicator/database/</a>). A proposal for an NTD coverage index that can be used to trace equity in UHC is under review by the M&amp;E Working Group (February 2017) and will go for consideration by STAG in March 2017; An NTD tracer for equity in WASH will be</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inclusion of an NTD target and indicator, as well as NTD tracers for UHC and WASH, within the SDG framework.</td>
<td>Convening of an in-country dialogue on NTD financing in the era of the SDGs and UHC including a pledge of increased domestic financing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### WHO-NTR support for capacity strengthening and VL programme coordination

**Source**

WHO-NTD

<table>
<thead>
<tr>
<th>IMPACT WEIGHTING (%)</th>
<th>Output Indicator 1.2</th>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone 3 (Year 3)</th>
<th>Milestone 4 (Year 4)</th>
<th>Target (Year 5)</th>
<th>Target (Year 6)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>Number of studies conducted and/or technical assistance missions provided by the Investment for Impact Working Group (cumulative)</td>
<td>Planned</td>
<td>N/A (updated indicator)</td>
<td>N/A (updated indicator)</td>
<td>3</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Achieved</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
<td>4</td>
<td>11</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source**

WHO-NTD reports; reports of the Investment for Impact Working Group to the NTD STAG

<table>
<thead>
<tr>
<th>INPUTS (£)</th>
<th>DFID (£)</th>
<th>Govt (£)</th>
<th>Other (£)</th>
<th>Total (£)</th>
<th>DFID SHARE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£715,600</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INPUTS (HR)</th>
<th>DFID (FTEs)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>OUTPUT 2</th>
<th>Output Indicator 2.1a</th>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone 3 (Year 3)</th>
<th>Milestone 4 (Year 4)</th>
<th>Target (Year 5)</th>
<th>Target (Year 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug donations channelled through the WHO-NTD</td>
<td>Number of countries eligible for preventive chemotherapy that</td>
<td>Planned</td>
<td>N/A (updated indicator)</td>
<td>N/A (updated indicator)</td>
<td>60</td>
<td>70</td>
<td>72</td>
<td>80</td>
</tr>
<tr>
<td>Achieved</td>
<td>37</td>
<td>55</td>
<td>56</td>
<td>70</td>
<td>68</td>
<td>79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
managed efficiently and effectively. submit a request for at least one preventive chemotherapy medicine.

<table>
<thead>
<tr>
<th>Output Indicator 2.1b</th>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone 3 (Year 3)</th>
<th>Milestone 4 (Year 4)</th>
<th>Target 5 (Year 5)</th>
<th>Target 6 (Year 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of drug requests submitted by countries</td>
<td>Planned</td>
<td>N/A (updated indicator)</td>
<td>N/A (updated indicator)</td>
<td>105</td>
<td>140</td>
<td>150</td>
<td>155</td>
</tr>
<tr>
<td>Achieved</td>
<td>44</td>
<td>90</td>
<td>92</td>
<td>133</td>
<td>138</td>
<td>152</td>
<td></td>
</tr>
</tbody>
</table>

Source: WHO-NTD database

<table>
<thead>
<tr>
<th>Output Indicator 2.2</th>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone 3 (Year 3)</th>
<th>Milestone 4 (Year 4)</th>
<th>Target 5 (Year 5)</th>
<th>Target 6 (Year 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of tablets of donated anthelminthic medicines ordered by WHO for distribution the following year.</td>
<td>Planned</td>
<td>N/A (updated indicator)</td>
<td>N/A (updated indicator)</td>
<td>1,020,000,000</td>
<td>1,500,000,000</td>
<td>1,300,000,000</td>
<td>1,300,000,000</td>
</tr>
<tr>
<td>Achieved</td>
<td>635,000,000</td>
<td>822,000,000</td>
<td>1,002,000,000</td>
<td>1,307,000,000</td>
<td>1,517,000,000</td>
<td>1,330,000,000</td>
<td></td>
</tr>
</tbody>
</table>

Source: WHO-NTD database

<table>
<thead>
<tr>
<th>IMPACT WEIGHTING (%)</th>
<th>Output Indicator 2.3</th>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone 3 (Year 3)</th>
<th>Milestone 4 (Year 4)</th>
<th>Target 5 (Year 5)</th>
<th>Target 6 (Year 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>% of preventive chemotherapy campaigns carried out as planned.***</td>
<td>Planned</td>
<td>N/A (updated indicator)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieved</td>
<td></td>
<td></td>
<td></td>
<td>74%</td>
<td>data being collected</td>
<td>68%</td>
<td>75%</td>
<td></td>
</tr>
</tbody>
</table>

Source: WHO-NTD database

<table>
<thead>
<tr>
<th>INPUTS (£)</th>
<th>DFID (£)</th>
<th>Govt (£)</th>
<th>Other (£)</th>
<th>Total (£)</th>
<th>DFID SHARE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>£1,172,800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INPUTS (HR)</th>
<th>DFID (FTEs)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>OUTPUT 3</th>
<th>Output Indicator 3.1</th>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone 3 (Year 3)</th>
<th>Milestone 4 (Year 4)</th>
<th>Target 5 (Year 5)</th>
<th>Target 6 (Year 6)</th>
</tr>
</thead>
</table>
### WHO-NTR support for capacity strengthening and VL programme coordination

**Strengthened capacity to manage national NTD control programmes in priority countries.**

<table>
<thead>
<tr>
<th>Number of national programme managers completing training in implementing control strategies in recipient countries.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planned</strong></td>
</tr>
<tr>
<td><strong>Achieved</strong></td>
</tr>
</tbody>
</table>

**Source**
WHO-NTD report

#### IMPACT WEIGHTING (%)

**Output Indicator 3.2**

<table>
<thead>
<tr>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone 3 (Year 3)</th>
<th>Milestone 4 (Year 4)</th>
<th>Target (Year 5)</th>
<th>Target (Year 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planned</strong></td>
<td>US$ 9,000</td>
<td>US$ 8,500</td>
<td>US$ 3,000</td>
<td>US$ 2,500</td>
<td>US$ 2,500</td>
<td>US$ 2,500</td>
</tr>
<tr>
<td><strong>Achieved</strong></td>
<td>US$ 10,000</td>
<td>US$ 8,500</td>
<td>US$ 6,000</td>
<td>US$ 3,000</td>
<td>US$ 2,500</td>
<td>US$ 2,500</td>
</tr>
</tbody>
</table>

**Source**
Training programme reports: STAG Working Group on capacity building 2013 and 2014

#### INPUTS (£)

<table>
<thead>
<tr>
<th>DFID (£)</th>
<th>Govt (£)</th>
<th>Other (£)</th>
<th>Total (£)</th>
<th>DFID SHARE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>£611,600</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

#### INPUTS (HR)

<table>
<thead>
<tr>
<th>DFID (FTEs)</th>
<th></th>
</tr>
</thead>
</table>

#### OUTPUT 4

**Output Indicator 4.1**

<table>
<thead>
<tr>
<th>VL patients in target countries treated with AmBisome.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planned</strong></td>
</tr>
<tr>
<td><strong>Achieved</strong></td>
</tr>
</tbody>
</table>

**Source**
HMIS, surveillance reports

**Output Indicator 4.2**

<table>
<thead>
<tr>
<th>% of second-line cases treated with AmBisome in East Africa.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planned</strong></td>
</tr>
<tr>
<td><strong>Achieved</strong></td>
</tr>
</tbody>
</table>

**Source**

<table>
<thead>
<tr>
<th>Output Indicator 4.3</th>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone (Year 3)</th>
<th>Milestone (Year 4)</th>
<th>Target (Year 5)</th>
<th>Target (Year 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of health facilities in endemic districts that provide diagnostic services for VL.</td>
<td>Planned</td>
<td>80%</td>
<td>100%</td>
<td>90%</td>
<td>90%</td>
<td>95%</td>
<td>Bangladesh 100% East Africa 80%</td>
</tr>
<tr>
<td>Achieved</td>
<td>60%</td>
<td>70%</td>
<td>85%</td>
<td>86%</td>
<td>89%</td>
<td>100% in Bangladesh, 79.4% in East Africa</td>
<td></td>
</tr>
</tbody>
</table>

Source: HMIS, surveillance reports, regular project activity reports

<table>
<thead>
<tr>
<th>Output Indicator 4.4</th>
<th>Baseline (2010)</th>
<th>Milestone 1 (Year 1)</th>
<th>Milestone 2 (Year 2)</th>
<th>Milestone (Year 3)</th>
<th>Milestone (Year 4)</th>
<th>Target (Year 5)</th>
<th>Target (Year 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of healthcare providers trained in VL &amp; PKDL diagnosis and treatment.</td>
<td>Planned</td>
<td>200</td>
<td>350</td>
<td>700</td>
<td>1000</td>
<td>1000</td>
<td>1500</td>
</tr>
<tr>
<td>Achieved</td>
<td>140</td>
<td>160</td>
<td>595</td>
<td>725</td>
<td>924</td>
<td>4055*</td>
<td></td>
</tr>
</tbody>
</table>

Source: Annual programme reports, HMIS, surveillance reports

<table>
<thead>
<tr>
<th>INPUTS (£)</th>
<th>DFID (£)</th>
<th>Govt (£)</th>
<th>Other (£)</th>
<th>Total (£)</th>
<th>DFID SHARE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>£2,700,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Notes:

* Impact indicator 1: Coverage will be monitored in: Cote d'Ivoire, Ethiopia, Ghana, Liberia, Malawi, Mozambique, Tanzania, Uganda and Zambia.

** Impact indicator 2: Progress will be monitored against the following indicators: LF: Districts with a level of prevalence (Microfilaraemia) below and above 1%; SCH: District prevalence below 10%, 10% to 50% and above 50%; STH: District prevalence below 20%, 20% to 50% and above 50%.

(a) Impact indicator 3: There were four deaths reported from Bangladesh, which is unusually high and has increased the CFR rate from previous years. The WCO and CDC/MoH are investigating the cause of death.

*** Output indicator 2.3: Countries share their annual implementation plan with WHO, including their request for medicines for organising MDA campaigns. WHO collects every year information on actual implementation of the campaign. The indicator will be number of campaigns planned during a given year divided by the number of campaigns actually carried out during the same year.
WHO-NTR support for capacity strengthening and VL programme coordination

(b) **Output indicator 4.1:** All the 206 VL cases reported from Bangladesh in 2016 were treated with AmBisome.

**** **Output indicator 4.2** For East Africa, information about eligible VL cases treated with AmBisome is not available. WHO estimates that this has been met since 15–20% of cases in East Africa require AmBisome, and 20–23% actually received it. What cannot be confirmed is whether or not these were all eligible cases.

***** **Output indicator 4.3** 100% in Bangladesh, 79.4% in East Africa (90% Sudan, 75% South Sudan, 73% Ethiopia).

*6 **Output indicator 4.4** 4,055 (300 Nepal, 981 Bangladesh, 35 South Sudan, 2,519 India, 220 Ethiopia). Data from Sudan not received. (X) PKDL is a complication of VL, develops in some people following treatment for VL and such people may serve as reservoirs.
Annex G  The current WHO-NTD evaluation in the context of the UK MDR (2016)

DFID published ‘Raising the standard: the Multilateral Development Review 2016’ as a revision to the first Multilateral Aid Review (MAR), which had been carried out in 2011 and updated in 2013. The MDR systematically reviewed the performance of the 38 leading multilateral development institutions the UK funds through DFID, including WHO. The Review assesses risk and VfM for each institution, asking whether they remain relevant for current development challenges.

MDR success criteria

The MDR describes various potential advantages to DFID working in partnership with multilateral organisations: ‘Our best multilateral partners mobilise resources from diverse sources, achieve huge economies of scale and provide a global platform to accelerate action on difficult issues; magnifying the UK’s reach. Organisations … [save] millions of lives with our investment’ (p. 7). It also refers to the resources that such organisations can command through their ‘membership, convening power and expertise’, making them well placed to lead aid efforts (p. 9). While it is one of the largest contributors to multilateral organisations, the MDR sees the UK as also having a ‘duty to our partners to act as a critical friend’, so that it can ‘amplify the UK’s reach and influence on the global stage and make UK taxpayers’ money go further’.

A list of specific benefits to multilateral partnership is also given, in which it is noted that such organisations can:

- expand the UK’s reach;
- offer partnership for DFID on important issues that struggle to attract enough attention;
- be seen as independent and impartial, so can work in ways that bilateral agencies cannot;
- agree and enforce international norms, standards, and regulations;
- provide a platform to accelerate action on difficult issues;
- provide economies of scale and world-class specialist expertise;
- mobilise resources from diverse sources; and
- use innovative funding mechanisms.

Unlike the previous MAR, the MDR also looked at how multilateral agencies work with other organisations. To evaluate the UK’s multilateral partners on a consistent basis, the MDR applies ‘an updated assessment framework, building on previous analysis to target areas where agencies were found to be weaker’. This framework uses two indices. Index 1 registers the fit with DFID objectives – including degree of collaboration other organisations, and whether action is taken ‘to ensure that girls and women benefit from development, and ensures that aid reaches the most vulnerable in society’.

Index 2 looks at organisational strengths. This includes ‘Results and value: whether the agency is clear about the results it is delivering, and taking action to improve its value for money including by driving down its costs, improving efficiency, and managing and deploying its staff effectively’, as well as ‘Risk and assurance’ and ‘Transparency and accountability: whether the agency strives to exceed global aid transparency standards’. The possible overall grades for each of these indices were ‘weak’, ‘adequate’, ‘good’, or ‘very good’.
The MDR assessment of WHO, and consideration of WHO-NTD in light of this

In its review of WHO, the organisation overall scored ‘very good’ for match with DFID objectives but only ‘adequate’ for organisational strength. Only one of the 38 institutions in the MDR scored less than the ‘adequate’ grade for organisational strength, implying that this is an area of concern. That said, it was not unusual to be below ‘very good’ in one of the indices: only three of the 38 scored ‘very good’ for both indices.

The MDR confirmed WHO’s ‘clear mandate to direct and coordinate international action on health’ (p. 24) but it also found that WHO ‘needs to become more effective to do this, urgently implementing a reform plan’. A range of changes are indeed underway WHO-wide, although the process is not yet complete. In large part the areas of intended improvement are organisational. In some cases, accepted metrics are available. For transparency and accountability, DFID promotes adherence to the standards of the International Aid Transparency Initiative, which, for instance, sets standards for the publication of relevant data. The MDR notes that DFID itself publishes and categorises all its expenditures above £500. But the changes the MDR calls for also extend into technical direction. For instance, it notes that ‘results will be hard to sustain unless developing countries have strong national health systems that can fund and deliver services’ (p. 24).

Additional consideration of WHO-NTD in light of the MDR

While the MDR did not look at any specific departments within WHO, such as WHO-NTD, and while also the MDR was not used as an input into the current WHO-NTD review, it is nevertheless clear that there are a number of parallel conclusions to the two reviews. The following table illustrates how some of the findings of the current review fit among the success criteria that the MDR looks for in the UK’s partnerships with multilateral organisations.

<table>
<thead>
<tr>
<th>MDR success criteria</th>
<th>Selected WHO-NTD review finding</th>
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<tbody>
<tr>
<td>Fit with DFID objectives</td>
<td>WHO-NTD’s focus on meeting London Declaration NTD goals means that it works consistently with DFID objectives</td>
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<tr>
<td>Degree of collaboration with other organisations</td>
<td>General improvement in collaboration with pharmaceutical companies</td>
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<tr>
<td>Focus on women, girls, and the most vulnerable</td>
<td>Need for more disaggregated analysis of disease and cost incidence in further WHO-NTD economic analysis</td>
</tr>
<tr>
<td>Results and value</td>
<td>Usefulness of economic analysis of NTDs so far; need for more attention to VfM of WHO-NTD’s own activity</td>
</tr>
<tr>
<td>Risk and assurance</td>
<td>Need for attention to key risks to WHO-NTD: keeping essential staff, maintaining good relationship with pharmaceutical companies and other key donors</td>
</tr>
<tr>
<td>Transparency and accountability</td>
<td>Reasonable accounting for grants, but greater transparency would be helpful</td>
</tr>
<tr>
<td>Expand the UK’s reach</td>
<td>DFID’s investment in WHO-NTD with the current grant has achieved an excellent apparent return, beyond that which could be expected were DFID to be organising the equivalent activity itself</td>
</tr>
<tr>
<td>Partnership for DFID on important issues that struggle to attract enough attention</td>
<td>NTDs were indeed neglected by policy makers and WHO-NTD has been a key partner for DFID in addressing this</td>
</tr>
<tr>
<td>Be seen as independent and impartial, so can work in ways that bilateral agencies cannot</td>
<td>WHO-NTD, including via WHO regional and country offices, has unparalleled access to countries. This was shown with WHO’s implementation work in Sudan for KalaCORE</td>
</tr>
</tbody>
</table>
The MDR concluded in support of the WHO’s mandate to direct and coordinate international action on health, just as this review confirms the desirability of WHO-NTD continuing to fulfil such a role in NTDs, as it has successfully to date. The MDR’s conclusion that ‘results will be hard to sustain unless developing countries have strong national health systems that can fund and deliver services’ supports the call for further integration of WHO-NTD’s activities into health systems strengthening, which the current document also contains.

In addition to its recommendations, it is important to note what the present review does not call for. We support the current status quo of WHO-NTD as lead international organisation with respect to NTDs, playing a directive and coordinating role (thus, for example, leading the ICFDs, which it is hoped that many other development partners will participate in). This would mean that NTDs remains a different case from malaria or HIV, for example, where global public–private partnerships have been created to lead the fight against these specific diseases, to some extent in place of the WHO. With this position, the review coincides with the MDR’s recommendation to that ‘new multilateral organisations should only be created where they add value. Wherever possible, the first step should be to look at ways to improve or adapt existing organisations to meet new challenges’ (p. 26).

The approach of the MDR was that even in a generally highly positive context ‘calling out poor performance can catalyse change’ (p.17). It recognises that with the MDR and allied policies, DFID, in its role of ‘critical friend’, is ‘raising the bar on standards of multilateral effectiveness and value for money that the UK expects’ (p. 32). DFID reviews, including this one, operate with a similar approach.

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83 This is not to negate the important WHO-NTD disease-specific coordinating roles in setting standards, training, and advocacy played by organisations such as Global Alliance to Eliminate Lymphatic Filariasis and International Federation of Leprosy Associations.