aidspan

Asia Pacific Report 2015

Preface

Aidspan (www.aidspan.org) is an international non-governmental organization based in Nairobi, Kenya, whose mission is to reinforce the effectiveness of the Global Fund. Aidspan does this by serving as an independent observer of the Global Fund, and by providing information, services and critical analysis that can benefit all countries wishing to obtain and make effective use of Global Fund financing.

Aidspan publishes news, analysis and commentary articles in its Global Fund Observer (GFO) newsletter1 and on GFO Live.

Aidspan does not receive any funding from the Global Fund and it does not allow its strategic or editorial decision-making to be influenced by the Global Fund or by relationships with funders. The Global Fund and Aidspan's funders bear no responsibility for the contents of any Aidspan publication. We finance our work through grants from governments and foundations and do not accept funding of any kind from the Global Fund.

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Finally, a special note to the Government of Australia, which provided funding for this report. It is a rare opportunity to be able to delve this deeply into issues of public health, to have the opportunity to go to the field and actually see programs as they unfold. Without your generous support, this would not have been possible. We hope that the following report is worthy of your investment and provides a window into the importance of continued support to Global Fund programs to strengthen national health systems in the region as they fight to eradicate AIDS, TB and malaria.

ACTs	Artemisinin-based Combination Therapies
AIDS	Acquired Immunity Deficiency Syndrome
AIDERs	Accelerating Implementation of DOTS Enhancements to Reach Special Populations
ANC	Antenatal Care
API	Annual Parasite Incidence
AR	Artemisinin Resistance
ART	Antiretroviral Therapy
ARVs	Antiretroviral Drugs
ASEAN	Association of South east Asian Nations
ASP	Asia Society of the Philippines
CBOs	Community Based Organizations
CCM	Country Coordinating Mechanism
C-DOTS	Community Direct Observed Tuberculosis Short-course
CENAT	National Center for Tuberculosis Control
CMPE	Center for Malariology, Parasitology and Entomology
CPG	Clinical Practical Guidelines
CSOs	Civil Society Organizations
CSS	Community System Strengthening
DFAT	Department of Foreign Affairs and Trade
DFB	Damien Foundation Belgium
DFID	Department for International Development
DOTs	Directly Observed Treatment short-course
DST	Drug Susceptibility Testing
ERAR	Emergency Response to Artemisinin Resistance
FBOs	Faith-based Organizations
FPM	Fund Portfolio Manager
FSW	Female Sex Workers
GDP	Gross Domestic Product
GMP	Good manufacturing practices
GMS	Greater Mekong Sub-region
HIS	Health Information Systems
HIV	Human Immunodeficiency Virus
HIV-DR	Human Immunodeficiency Virus Drug Resistance
HMIS	Health Management Information Systems
HMM	Home Management of Malaria
HSIP	Health Services Improvement Program
HSS	Health System Strengthening
HTC	HIV Testing and Counseling
IBBS	Integrated Biological and Behavior Surveillance
ICC	Inter-Country Component
IDPs	Internally Displaced Persons
INGO	International Non-Governmental Organization
IOM	International Organization for Migration
JICA	Japan International Cooperation Agency
KAP	Key Affected Populations
KLASS	Kuala Lumpur AIDs Support Services Society
KOICA	Korean International Cooperation Agency
LFA	Local Fund Agent
LGBT	Lesbian, Gay, Bisexual, and Transgender
LGUs	Local Government Units
LLINs	Long-Lasting Insecticidal Nets
LMIS	Logistics Management Information Systems
LQMS	Laboratories meeting the national level standards
M&E	Monitoring and Evaluation
MAC	Malaysian AIDS Council
MDG	Millennium Development Goals
MDR-TB	Multi-Drug-Resistant Tuberculosis
MMPs	Mobile and Migrant Populations
MMRs	Maternal Mortality Ratios
MMT	Methadone Maintenance Therapy
MMW	Migrant Malaria Workers
MNCH	Maternal Neonatal and Child Health
MoF	Ministry of Finance
MoH	Ministry of Health
MoHMS	Ministry of Health and Medical Services
MSM	Men who have Sex with Men
NAC	National AIDS Council
NACS	National AIDS Council Secretariat
NAP	National AIDS Program
NCDs	Non-Communicable Diseases
NCHADS	National Center for HIV/AIDS, Dermatology and STD
NDoH	National Department of Health
NFM	New Funding Model
NGO	Non-Governmental Organization
NMCP	National Malaria Control Program
NSEP	Needle and Syringe Exchange Program
NSP	National Strategic Plan
NTC	National Tuberculosis Center
NTP	National TB Program
ODs	Operational Districts
OIG	Office of the Inspector General
PERDHAKI	Catholic-affiliated Association of Voluntary Health Services of Indonesia
PGK	Pyi Ghi Khin
PICs	Pacific Island Countries
PLWHIV	People Living with HIV
PMTCT	Prevention of Mother to Child Transmission
PNG	Papua New Guinea
PPTCT	Prevention of Parent-to-Child Transmission
PIRMCCM	Pacific Island Regional Multi-Country Coordinating Mechanism
PR	Principal Recipient
PSI	Population Services International
PSM	Procurement and Supply-chain Management
PWID	People Who Inject Drugs
RAI	Regional Artemisinin Resistance Initiative
RAM	Rotarians Against Malaria
RDTs	Rapid Diagnostic Kits
SPC	Secretariat of the Pacific Community
SR	Sub Recipient
SSF	Single Stream Funding
SSR	Sub Sub-Recipient
StC	Save the Children
STI	Sexually Transmitted Infection
TB	Tuberculosis
TES	Therapeutic Efficacy Study
TSR	Treatment Success Rate
U5MR	Under Five Mortality Ratio
UNAIDS	Joint United Nations Program on HIV and AIDS
UNDP	United Nations Development Program
UNOPS	United Nations Office for Project Services
USAID	United States of America International Development
VAAC	Vietnam Administration of HIV/AIDS control
VCCM	Vanuatu Country Coordinating Mechanism
VCCT	Voluntary Confidential Counseling and Testing
VCT	Voluntary Counseling and Testing
VUSTA	Vietnam Union of Science and Technology Associations
WHO	World Health Organization
WTO	World Trade Organization
WTP	Willingness to Pay
XDR	Extensively drug-resistant

Table of Contents

Regional Overview

The Asia Pacific region is as sprawling and diverse as the ocean ecosystem its named after, home to more than three billion people - a multitude of ethnicities, races and economies.

Each country, whether landlocked or archipelago, has its own unique profile based on the demographics, cultural and religious traditions and the political and socio-economic status of its population.

Within the vast region there are smaller sub-regions and varying degrees of interconnectedness via trade routes, exposure to natural disaster and shared histories. There are, equally, some degrees of similarity in how countries respond to the challenges of preventing, treating and controlling AIDS, TB and malaria.

Of the 26 billion dollars disbursed by the Global Fund since 2002, Asia-Pacific countries (including India and China) have benefitted from some 24% of these investments. This includes all of High Impact Asia and South East Asia (as defined by the Global Fund).

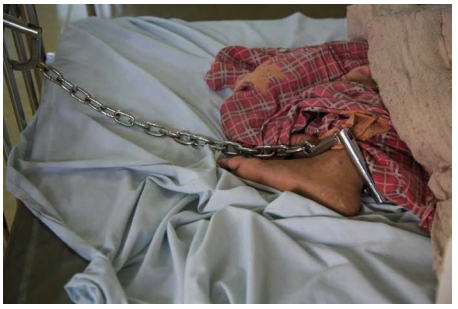
Under the Global Fund's new financing methodology, which is allocating the greatest share of resources to the countries with the least ability to pay, the region saw little change in the overall proportion of investment it was receiving.

The New Funding Model (NFM), rolled out in 2014, is a new way of working for the Global Fund and at country level has had, for the most part, the desired impact: it is ensuring that national targets and priorities are funded to the best level possible, with an emphasis on key populations, the strengthening of health systems and with an eye towards sustainable programs that can be fully owned, and eventually fully funded, by national governments.

While some countries in the region still rely on the Global Fund to support their national responses to AIDS, TB and malaria, others are deliberately weaning themselves off foreign assistance; these countries are transitioning away from being implementers and some, like China, becoming donors to the Global Fund.

For most of the countries, Global Fund resources are catalytic, driving the development of national systems and processes that are strategic and that should be sustainable beyond the life of Global Fund grants. Equally, Global Fund resources are levers to help influence other bilateral donors whose funding footprint may be larger to be more strategic in how they work with countries.

Legal protections and human rights



A HIV positive prisoner who was chained to his bed at the provincial hospital in Dien Bien Phu allegedly to prevent him from committing suicide by jumping out the 3rd story window, Vietnam

As epidemics concentrate among key populations, stronger legal protections are needed to counter the pervasive stigma and discrimination. Studies across both Asia and the Pacific confirm a high level of stigma and discrimination faced by key affected populations on a daily basis. Representatives from these key population groups -- including men who have sex with men, sex workers, people who inject drugs, young people and women -- interviewed in all countries revealed entrenched practices across all aspects of society that present barriers to leading a life with dignity and seeking early diagnosis and treatment. Confidentiality breaches are common. HIV testing is not always voluntary in the workplace and even finding a workplace is a challenge for many, making them even more vulnerable to exploitation and violence.

People living with HIV shared concerns about the decentralization of HIV sites. Counseling was already a challenge when voluntary counseling centers were located in large urban areas and the lack of trained and sympathetic personnel in rural areas exposes them to even more structural barriers to access good and consistent treatment. The trend towards decentralization to community level threatens to reduce confidentiality and increase exposure to stigma.

In many countries, the legislative and policy environments also contribute to stigma and discrimination. Whether it's HIV-positive people being refused the right to work, as in the Philippines, or transgender sex workers being arrested and marched through the streets as in Papua New Guinea, the prevailing culture of denying human rights to the most vulnerable has had consequences throughout the region.

There have also been some notable successes in protecting human rights in the region; anti-discrimination dictates as part of omnibus laws on HIV are enshrined in almost every country in Asia and the South Pacific. The challenge remains, of course, in translating these laws on the books into laws on the streets.

The emerging role of civil society

The consequences of rapid growth are no always advantageous to the majority of the population, and in response civil society is increasingly organizing to make its concerns heard in the national discourse.

There have been successful innovations in many countries for expanding the role of civil society in implementing interventions; in others, however, civil society groups are not being deployed as effectively as they should be by governments. Better collaboration at the implementation level has produced improved governance and oversight within the Global Fund's country coordination mechanisms (CCMs).

These oversight bodies are required to include representatives from civil society, which has helped not only to improve impact but could eventually also mitigate some of the costs associated with program implementation.

Faith-based organizations (FBOs) are a segment of civil society who have yet to be fully tapped for service delivery. Whether it is the Buddhist ethos in Cambodia, or the teachings of Islam in Indonesia, or the Catholic and other Christian churches in Papua New Guinea, religion plays a central role in all of the countries in the Asia Pacific. Yet despite their presence in even the most remote communities, these religious orders are not being called on in a strategic way to facilitate or assist in the delivery of health services or support advocacy and behavior change among the faithful.

There remain unexplored entry points for other subsets of civil society, namely women's groups and youth. In the highly conservative Pacific countries, women's voices are not only silenced, they are absent – a situation echoed in Myanmar.

The executive committee of Friends Frangipani, which works on behalf of sex workers and the LGBTQI community, PNG

Cambodia, however, has a strong history of mainstreaming gender into health discussions in a way that could be a model for other countries.

Youth groups were for the most part included in HIV conversations in Laos, Vietnam and the Philippines, but absent elsewhere.

For country dialogue to be as meaningful as intended, there is a strong need for civil society to be provided with the technical support they need. Many community groups felt they were not really heard because education was a barrier to understand the high-level, extremely technical discussions. Being poor and uneducated meant that many representatives from civil society excluded themselves preemptively from discussions for fear of embarrassing themselves in meetings. So even though village-level or community-level work is the foundation of most of the interventions, those at the village and community levels failed to provide contextual inputs.

Nowhere was this more acute than among key affected populations. Feeling tokenized, or there to only tick boxes, or not heard, or ignored were complaints heard by key population representatives all too frequently.

So they, too, silenced themselves, concerned that if they voiced their needs too much then there was a risk that community strengthening work would be off the table. This sense of frustration is not unique to the region, and speaks to a wider need by the Global Fund itself -- and all of its development partners -- to make greater investments in promoting inclusiveness.

There were some bright spots, however. In Malaysia, due to the representation of key populations on the CCM, there is wider understanding and acknowledgement of their particular needs. In Papua New Guinea, a representative for men who have sex with men (MSM) has replaced the Catholic church service as civil society representative to the CCM. This is an extremely positive development.

Zainuddin, an outreach worker with Insaf Murni, distributes clean needles and information on MMT to injection drug users camped under a highway overpass, Malaysia

Impact of urbanization on disease management

Across all countries, increasing migration to cities and peri-urban areas has made disease management more difficult. Migrant communities are especially vulnerable to infection and lack access to the health care system and health insurance. Crowded informal settlements are vectors for disease, especially TB, a disease for which the regional profile is becoming increasingly urban.

Urbanization is also putting a strain on weak public health infrastructure and exposing the paucity of services available at the community level. Aid posts that are the closest to the communities are staffed with the least competent or well-trained workers, which means that observation and diagnosis can be poor. Patients instead prefer to use central and provincial hospitals.

Community-based workers, trained by non-governmental organizations (NGOs), are being used in ever-greater numbers. In Papua New Guinea, Burnet Institute -- a sub-recipient of Global Fund investments -- is working in the remote East New Britain province to use community-based distributors of malaria diagnosis and treatment, which is having a real impact on case management and saving lives.

Domestic co-financing

With the global financial crisis still reverberating and donors weighing their foreign aid contributions, there is immense concern about the future of many of the interventions, particularly those that are targeting key populations. It is not entirely clear that the Malaysian or Indonesian governments intend to pay for services once they become ineligible for Global Fund support: a fear that was expressed repeatedly about the next allocation period.

By and large there was strong intention among each of the countries to augment their financial commitment to the disease programs as well as to bolster their national health systems in line with the Global Fund's willingness-to-pay requirement. In some countries, like Cambodia, this will be an incremental increase to 20% of the costed national malaria strategic plan by 2017 -- from a low of 5% prior to the NFM.

Myanmar is another example of a country with a dispensation to put its money where its programs are. According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), government spending has increased by more than 100% between 2006 and 2011 on HIV.

Still, despite this increase in domestic Global Funding and other bilateral counterpart contributions from governments including Australia, a significant funding gap remains for each of the national disease programs. More innovative approaches to financing, predicated on the costed national strategic plans that yielded the Global Fund concept notes, must be developed. One area that has yet to be fully explored is public/private partnerships, particularly in countries with vast natural resources that are being exploited by international private sector multinationals.

Health system strengthening priorities

TB lab technician Lucia Lay with sputum samples collected in Liquica district before preparing slides for microscopic analysis in the laboratory at Klibur Domin, Timor Leste

At every level there is a demonstrable awareness of the need to integrate programs into the primary health care system to ensure sustainability of these disease-specific vertical programs and maintain quality of care among public health personnel. But investing in health system strengthening means investment in human resources – a sunk cost that the Global Fund has shown itself increasingly indisposed to bearing.

Investments in health systems include the purchase of laboratory and diagnostic equipment, which will have longer term benefits for the infrastructure of national health systems. Building the capacity and capabilities of laboratories in countries means widening the number of people informed about the epidemiology of disease -- which could hasten the race for a cure and an end to the disease epidemics.

Other investments are trying to improve the collection and management of data, in order to understand where disease hotspots are. This will, in turn, inform budget and human resource priorities long after Global Fund programs conclude.

Thoughts on NFM and the future of the relationship with the Global Fund

Despite widespread grumbling about the time and energy required to complete the NFM process and respond to a seemingly unending stream of requests from the Global Fund for more rigor in data collection and analysis, financial reporting, performance assessments and work-plan development, almost every stakeholder grudgingly conceded that the process was a better one than the rounds-based approach that preceded it.

It is likely that being part of the Global Fund ecosystem will help ministries of health in the long run by promoting discipline, systemization and strategic planning. This will be an enduring impact of the Global Fund long after individual programs are completed.

Knowing their allocations in advance led to more realistic planning by countries and less worrying about how much to ask for.

Budget templates clarified the process, allowing more focus and a more strategic vision. "It was less about how pretty the plate looked and more about what was on the plate," said a stakeholder in Vietnam.

The new format also focuses on high and direct-impact activities, with most indicators striving for maximum impact. This is clearly an advantage for implementers and projects, which can be measured and evaluated with greater ease and more transparency.

The link between performance and funding was also seen as a strength in some countries; it gave an incentive to address the gaps noted in the past.

Strategic thinking and planning were also institutionalized and integrated into policy development under the NFM in a way that had never been done before. This included wide discussions about the continuum of care -- it is no longer enough, countries acknowledge, to focus exclusively on buying and distributing drugs for treatment; it's about prevention and harm reduction, education and outreach programs to not only control the spread of disease but to avoid transmission.

By requiring a costed national strategic plan to be the basis of the concept note, the Global Fund instilled a new way of working in countries around the region that will endure. By emphasizing the need to prioritize interventions that focus on key populations, strive for gender balance and insist on a human rights approach to service delivery, it is also gently but firmly steering health service providers towards a more humane and patient-centered approach to health care delivery.

Ultimately, the Global Fund is a critical and valued contributor to countries in the Asia Pacific region, helping to engage civil society and to focus governments on both strategic and tactical issues. In some countries, it may not be the biggest player in terms of financial footprint but it is a catalyzing one, whose value to the fight against AIDS, TB and malaria across the region goes far beyond the dollars invested in national programs.

A sputum sample at the home of a suspected TB case in Liquica district Timor Leste. Samples like this one are collected by Klibur Domin's mobile teams for testing in the microscopy laboratory on Klibur Domin's campus in Tibar.

Methodology

A word about the methodology Aidspan used to develop country-disease specific financial graphs.

Finance Graphs

Budget lines reflect cumulative amounts approved for grant-funded activities under each Principal Recipient (PR). These data were collected for specific periods: either quarterly or bi-annually. To develop a smooth line graph, Aidspan divides the amounts for each specific period by the number of days in the period, to reach the daily budget apportionment. This is then graphed and amounts aggregated over time.

Disbursement lines represent the cumulative amount of money disbursed for grant-funded activities. Disbursement data are linked to the actual disbursement date. Step graph lines are plotted and points aggregated over time.

Expenditure lines represent cumulative amounts reported by PRs as financing grant-supported activities. These data were collected for specific periods of time: either quarterly or bi-annually. To develop a smooth line graph, Aidspan divided the amounts for each specific period by the number of days in the period to arrive at the daily apportionment for expenditures. This is then graphed and amounts aggregated over time.

Problem areas:

Using the three datasets above, Aidspan has identified five problem areas, each of which is highlighted as relevant in the country-specific graphs. Problems occur when:

1. Cumulative expenditure by the Principal recipient (PR) is less than 75% of the agreed cumulative budget.
2. No disbursements have been made by the Global Fund for at least one year.
3. Cumulative expenditure by the PR is greater than the cumulative disbursements that have been made, meaning the PR is using money from another source to finance Global Fund-supported activities.
4. The PR has not made, or has not reported, any expenditure under this grant for at least one year.
5. The Global Fund has disbursed less than 85% of the agreed budget.

Performance Graphs

The Global Fund uses the performance-based funding model to ensure that funding decisions are based on a transparent assessment of results against time-bound targets. The Fund uses a ratings scale to score grants over reporting periods to detail how well a grant is performing. The ratings scale used is defined as follows:

A - best

B1 - adequate

B2 - inadequate but potential demonstrated

C - unacceptable

*There are extra ratings of A1 and A2 that had been assessed, but these are no longer in use.

Aidspan has assigned weights to these ratings to calculate averages and to allow the tabulation of the ratings on graphs. This weighting is defined below:

A1 - 4

A - 3.5

A2 - 3

B1 - 2

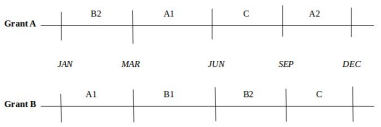
B2 - 1

C - 0

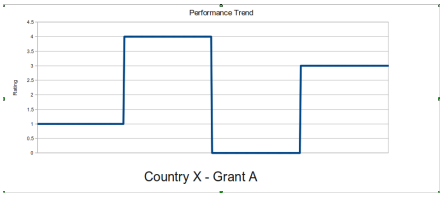
Using this weighting algorithm, one can ideally approximate how well a grant or country is doing over time by plotting the weights on a line graph. The graphs show trends that may help predict potential problems in the lifetime of a grant lifecycle, or review the history of grants or a single grant.

Below is a detailed walkthrough of a fictitious country X's performance to show how the weighted algorithm is used for performance ratings.

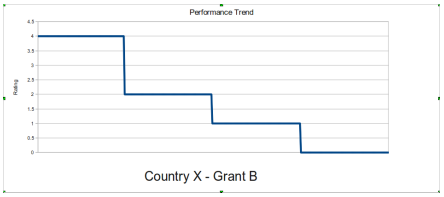
Country X (2010)



Using the weights for the various ratings, the graph for Grant A would end up looking like the image below:



Using the weights for the various ratings, the graph for Grant B would end up looking like the image below:



If the two grants were to be combined and averages generated for the reporting period to determine the pattern/trend for Country X's performance, it would look like this:

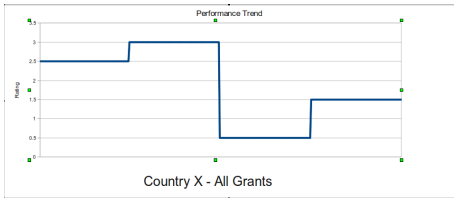
Reporting period 1 (JAN - MAR) = (B2 + A1) / 2 = (1 + 4) / 2 = 2.5

Reporting period 2 (APR - JUN) = (A1 + B1) / 2 = (4 + 2) / 2 = 3

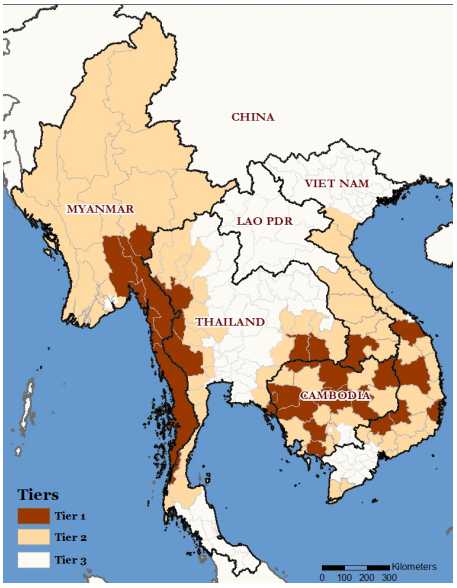
Reporting period 3 (JUL - SEP) = (C + B2) / 2 = (0 + 1) / 2 = 0.5

Reporting period 4 (OCT - DEC) = (A2 + C) / 2 = (3 + 0) / 2 = 1.5

The final graph would then reveal this performance trend:



Regional Artemisinin Resistance Initiative



Ensuring Programmatic Integration of Multicountry Malaria Activities

Recognizing that malaria remains a major cause of death and illness in the Asia Pacific region, and that drug-resistant malaria in the Greater Mekong Sub-region (GMS) is a regional and global public health threat, the Global Fund, in 2012, commissioned a thematic review to help guide its approach to this emergency. The absence of viable treatment alternatives for resistant cases could result in an erosion of the successes of past and current investments in the fight against malaria.

Following recommendations from this review, the Global Fund's Board has set aside US$ 100 Million for a regional grant to support the response to this threat in 5 countries: Myanmar, Cambodia, Thailand, Vietnam and Laos. The Regional Artemisinin Resistance Initiative (RAI) became the first regional application under the NFM, and aims to support a regional response through coordinated effort to address multi-drug resistant malaria in the GMS.

The Spread of Artemisinin Resistance (AR)

Resistance to artemisinin – the main element in combination therapies to treat malaria – was initially discovered in 2007 on Cambodia's border with Thailand, along the labor migration route. It has since been confirmed in three neighboring countries; along international borders. Patients that are artemisinin resistant are not able to clear the parasite load from their system after 3 days of treatment. Today this has begun to have a sizable impact on cure rates with Artemisinin-based Combination Therapies (ACTs), particularly in western Cambodia and along the Thai-Myanmar border: two of the hotspots for both endemicity and artemisinin-resistance.

Failure to control AR could result in a worst-case scenario of resistance being exported to Africa. It is here that P. falciparum parasites found purchase at much higher levels, resulting in a larger burden of falciparum malaria. Should AR hit the continent, a return to high mortality rates from the disease are expected.

Already the pattern is repeating the development of P.falciparum resistance to successive antimalarials over the past six decades, provoking concerns among malaria clinicians and researchers that a currently small problem could multiply exponentially and become a grave danger both within the region and beyond.

These ominous developments brought together consecutive arrays of stakeholders over the years who are affected by this growing threat, starting with the first containment project, the Artemisinin Resistance Containment and Elimination in 2008. A joint assessment of the regional response to AR in 2011 resulted in urgent recommendations for a massive scale up of malaria containment activities, leading to the expansion from two to six countries including China because of its Yunan province border.

In April 2013 WHO launched a new framework to increase coordination, quality and coverage of AR related programming. This framework is the Emergency Response to Artemisinin Resistance (ERAR), partially funded by the Gates Foundation and USAID, and receives $5 million from DFAT. A dedicated regional hub for ERAR was established in Cambodia, with technical teams placed in Myanmar, Thailand, Vietnam and Laos.

The Global Fund allocated $100 million for the five malaria endemic countries in the GMS, inviting them to submit a concept note for RAI with the primary goal of reinforcing the response to the growing problem of artemisinin resistance. What began as one project on the Cambodia-Thailand border expanded to a large regional program between five countries. UNOPS was selected by the Regional Steering Committee as the regional PR of the grant.

Regional Artemisinin Resistance Initiative

RAI has been a catalyst for resource mobilization, particularly from domestic sources. It is a more aggressive, forward-looking platform for the malaria response than routine national-level program activities to keep morbidity and mortality low.

Activities of RAI include:

- Surveillance systems
- Long-lasting insecticide treated nets
- Case management in areas with evidence of delayed response to ACTs or at risk of spread of resistant parasites
- Special focus on migrant populations living and working in border areas
- Helping to halt the marketing of monotherapies and sub-standard antimalarial drugs

The malaria response under RAI is carried out in areas and populations that are typically beyond the reach of the formal health sector, especially where there is evidence of delayed response to ACTs or the risk of spread of resistant parasites. RAI specifically targets the regional challenge of cross-border migration and highly mobile populations who are normally overlooked and often marginalized. Each country has committed to complementary national campaigns targeting these populations.

Disbursements started in early 2014 after some delay which include the normal grant signing process at country level. They have thus far supported purchase of long-lasting impregnated nets, malaria case detection and provision of directly observed antimalarial treatment. Other programming priorities include halting the marketing and sale of monotherapies and sub-standard antimalarial drugs, and improving surveillance systems.

A disease burden and financial gap analysis led funds to be allocated as follows: 15% to the regional or inter-country component (ICC); 15% to Cambodia; 5% to Laos; 40% to Myanmar; 10% to Thailand; and 15% to Vietnam.

The ICC was developed in collaboration with many partners and experts including WHO, academia, organizations on the ground, bilateral organizations such as DFAT and DFID, and the Global Fund. It targets the border areas of Myanmar-Thailand, Thailand-Cambodia, Cambodia-Laos and Cambodia-Vietnam to prevent the spread of AR across Myanmar into the Indian subcontinent and onwards to East Africa. A cross border focus supports the mobile and migrant populations (most at risk and vulnerable group) with activities including surveillance, mapping, information sharing, diagnosis and treatment and follow-up. It includes interventions for monitoring impact, shared surveillance system in collaboration with the ERAR hub and a component aiming at

strengthening the elimination of oral artemisinin monotherapies.

Cambodia

The RAI began in Cambodia in January 2014. Community-level activities aimed at containing artemisinin resistance in targeted Tier 1 operational districts (ODs) plus additional ODs with high level of transmission, and improving access to quality malaria services for hard-to-reach mobile and migrant populations (MMPs).

Vietnam

Artemisinin resistance in Vietnam was first identified in 2009 in Binh Phuoc province, which borders with Cambodia. Since then, it has been discovered in Gia Lai (2011), Dak Nong (2012), Quang Nam (2014), and Khanh Hoa (2014) provinces. These provinces have been classified Tier 1 and, along with neighboring provinces with population flows, are the geographic targets of RAI. Implementation of RAI activities began in September 2014 in Vietnam.

Myanmar

Myanmar bears the highest burden of malaria among GMS countries, with an Annual Parasite Incidence (API) of 7.88, followed by Laos and Cambodia, with API of 7.09 and 2.74, respectively. Signs of *P. falciparum* resistance to artemisinin, characterized by prolonged parasite clearance time, were reported in 2009-10. RAI's engagement here is more aggressive than in the national program; tier 1 areas with high transmission are targeted for universal coverage of insecticide treated bed nets, universal access to quality diagnosis and treatment at public and private health facilities and through mobile malaria workers.

In addition, a concerted effort is being made to find MMPs to provide prevention, diagnosis and treatment; mapping exercises to help understand their movement are currently in the analysis stage. There is an intensive effort at policy and community levels to eliminate availability of artemisinin monotherapies commercially, and to operationalize a rigorous surveillance system. Other activities include operational research on migrant health seeking behavior and work patterns, and refining stratification and surveillance methods.

Laos

RAI funding for Laos, which began in January 2014 and supplements its single-country malaria allocation of $14.5 million, will target specific risk factors in migrant and mobile populations in the southern provinces, with activities including active case detection and investigation, directly observed treatment (DOT), strengthening surveillance systems, and monitoring substandard and counterfeit drugs.

Thailand

Thailand is a special case for being the largest destination regionally for migrant labor, attracting an estimated 3-5 million workers annually through unofficial crossing points[1], 3.5 million of which are from Myanmar alone. Its 2,000-km border with Myanmar is considered one of the epicenters of artemisinin resistance largely due to the massive crossing of economic migrants along porous borders.

Around half of the infections in Thailand are reportedly acquired from across its borders. And re-stratification shows its highest malaria burden provinces to be those bordering Myanmar, Cambodia and Malaysia. Priorities for action here include case management, specifically intensifying screening activity along the target border areas, information exchange and behavior change communication at the border areas, private sector involvement and other collaborative mechanisms. A multicountry memorandum of understanding (MoU) for referral of migrant workers and families is also envisioned.

Thailand's role in RAI, therefore, responds largely to the strategic needs along its borders. Under RAI, it has formed an operational alliance with local groups and village councils to encourage consultation and engagement in activities in the border region, including the recruitment of village Malaria Post Workers. Cross-border collaboration with Myanmar is also being facilitated and resourced with RAI funds, including a series of meetings between local authorities and NGOs on how to improve case referral and follow up.

RAI support in Thailand will also help improve access to community-based diagnosis using Rapid Diagnostic Kits (RDTs), followed by treatment with ACTs. This community- level diagnostic work will incorporate advocacy and education meetings with identified representatives of the migrant community networks, in order to widely disseminate information about malaria signs and symptoms in minority languages.

Looking Forward

One of RAI's successes is its role in upending the top-down model of regional health programming. It brings countries together in a collaborative approach, mobilizing innovative community level responses and bringing those experiences to the region to allow countries to learn from each other, and bringing successful approaches to scale. In parallel and perhaps influenced by these efforts, policy discourse on migrant health issues and transnational health threats have seen momentum at the Association Southeast Asian Nations (ASEAN) level.

But challenges are great for this consortium of partners across governments, development partners, the private sector and civil society. National and regional surveillance systems are weak, the private sector is insufficiently involved, and counterfeit and substandard antimalarials are still present in the region. Pockets of regions and people with the highest malaria incidence in each country are difficult to reach. Migrants, particularly, work and live in remote and hard-to-reach areas far from DOTs and health facilities. In addition, their legal status, language barriers, the constant movement, and the involvement of brokers who control their movement all make it difficult for programming.

Despite delayed startup, where performance against some indicators suffered, achievements were reported by all countries on case management indicators. These achievements can be credited in large part to the co-financing from the Global Fund country grant, government, and other sources.

Additionally, new information on the spread of resistance, previously undetected in many areas, led to increased targets for impact and output indicators this year – in morbidity rates and testing, in geographical coverage, and with corresponding increases in the target populations, except in Thailand. As malaria seems to be decreasing in the static population, the concentration of activities will be re-directed to MMPs.

There is a dire need to step up research to develop new and innovative tools, and efforts here are closely monitored around the world. Earlier this year researchers reported in the Lancet the presence of the K13 molecular marker in parasite samples collected from the western border of Myanmar. It is repeating the path from Southeast Asia to the Indian subcontinent taken by earlier antimalarial resistance, with potentially disastrous public health consequences. But these findings are also followed by more optimistic results from a survey conducted in three villages along the Thailand-Malaria border. Published in Malaria Journal, findings show a dramatic reduction in the prevalence of malaria among the village population after a mass treatment campaign, which may prove to be an effective strategy in eliminating *P. falciparum* in areas with multi-drug resistance. The stakes are high and reach far beyond the GMS. The political commitment is secure; momentum must be maintained and intensified.

Fighting malaria among Kayin's displaced

Situated on the Moei River in the southeastern part of Myanmar is the migration hub of Kayin State. Large numbers of Internally Displaced Persons (IDPs) still live in remote settlements after decades of intermittent conflict between the government and armed ethnic groups like the Kayin (or the Anglicized 'Karen') National Liberation Army (KNLA) that only recently ended in tentative ceasefires.2

Other factors driving migration are natural disruptions such as the annual floods and economic opportunities. Mega projects between countries to facilitate integration of the Association Southeast Asian Nations (ASEAN) has led to major economic potential for the area that is unfortunately tarnished by land grabs, exploitative and illicit economic activity, and drug trafficking. With an estimated 90,000 IDPs, 50,000 outbound migrants, and hundreds of thousands of refugees that return to various points in the country, Kayin's displaced population is placing a massive strain on its outdated infrastructure.

Community Volunteers to Combat Malaria: A Global Fund-supported malaria program in Myanmar provides a stipend to community health workers like Nam Kham Lee, who watch out for villagers showing signs of malaria. When someone complains of a fever, she makes a home visit equipped with a rapid testing kit along with malaria medication and educational materials
The Global Fund / John Rae

Few choices for health care are available for its population of 1.6 million. The public health care system is practically non-existent; people often journey to neighboring Tak Province in Thailand for medical services. But many also simply rely on the questionable quality medicines sold by local merchants or on traditional knowledge. This is the story that greeted Nyein, a NGO mobile lab technician, as she arrived at the screening point.

The deceased was working in the gold mines, and he was convinced that his fever was caused by a curse from the Kayin Nat (spirits). He tried some rituals with a healer first before getting drugs from a local seller. By the time fellow workers brought him to see the Migrant Malaria Workers (MMWs) it was too late. It's not unusual – many believe that malaria is caused by evil spirits, drinking dirty water or even eating bananas[3]. Health education campaigns are important, but Nyein found the logistics of reaching mobile and migrant populations (MMPs) with the range of services they need overwhelming.

Nyein works with an INGO as a mobile clinic lab technician, and this week's schedule placed her team in a gold mining area in Myawaddy Township to provide supportive supervision and supplies to the MMWs. Her phone beeped with a news alert; field staff, especially those with INGOs, must keep a close eye on the ongoing clashes along the border between the army and rebels.

It was a busy week – normal during the monsoon season when the malaria vector is thriving. All seven of Kayin's townships are malaria endemic. They are in a containment tier in the Myanmar Artemisinin Resistance Containment strategy, meaning parasite resistance is suspected within its borders. This targets it for intensified malaria containment programming, which entails scaling up long-lasting insecticidal nets (LLINs) distribution, setting up mobile malaria units, and active case finding.

Nyein is part of a team that sets up and monitors screening points at transit sites where migrants are most likely to pass through – places like bus stations, worksites, forestry camps and plantations. This particular screening point is a long distance from the nearest health post, and people are assessed for malaria regardless of the presence of fever or symptoms. To maximize synergies, the corps of MMWs that Nyein visited this week are also skilled and equipped for counseling and screening for TB and HIV.

But as useful as they are in case finding, screening points don't do a good job of capturing undocumented migrants who avoid high visibility places. These groups are particularly vulnerable to malaria and the spread of resistant parasite strains because of poor living and working conditions that restricts access to or use of mosquito nets. Their work schedules also keep them outdoors through peak mosquito biting time. Like the malaria death reported to Nyein, many will see a traditional healer or purchase medicines from drug sellers before seeking proper care.

The most worrisome is the threat of parasite resistance to the last effective treatment for malaria. History is repeating itself along the Thai-Myanmar border area, first with chloroquine-resistant P. falciparum in the 1950s, followed by sulphadoxine- pyrimethamine and mefloquine resistance, and since 2007 parasite resistance surfaced again in the same area. Already, artesunate- mefloquine is beginning to fail, and the molecular markers for resistant parasites have been identified near the Indian border.

So Nyein takes the mobile lab deep into remote areas on the trail of MMPs, with the goal of finding and treating malaria cases. Tomorrow her team will rent makeshift rafts at dawn to cross the river, then trek on foot through dense forests. They'll reach their destination by dusk if the rains or mudslides haven't wiped out the paths. It's tiring work but necessary, and Nyein finds it fulfilling. A widow with grown kids, even if the compensation isn't very good it's nice to feel useful.

Innovative methods such as Nyein's mobile team and the screening points she set up along key migration corridors are critical in reaching the high risk MMPs. Mobile clinics that conduct intensified case detection now cover over 150 of the 284 priority townships. In addition to her tasks training village and mobile malaria volunteers, Nyein and other mobile teams also collect data for migrant mapping in the containment areas – preliminary data is currently at the analysis stage. And cross border discussions with stakeholders in both countries are being carried out, in the hopes of greater collaboration in ensuring that MMPs are covered whichever side of the border they might be on.

Cambodia

On the road to Malaria elimination in Cambodia

From 2000 to 2010

1M Malaria cases

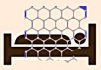
46,062 Severe cases

3,971 Deaths

Key elements of the mission

Use of insecticides

Early diagnosis and effective treatment



Treated nets

Mass Drug Administration (MDA)

Controlling counterfeit drugs

Developing and implementing operational and technical plans for Malaria elimination

Halting the spread of anti-malaria drug resistant parasites

Control (2011-15)

Pre-elimination (2016-20)

Elimination (2021-25)

Budget

US$ 755,318,886

US$ 623,578,643 Total budget gap

US$ 131,740,244 Total budget commited

from 2010 to 2025

Despite a relatively peaceful political transition in 1998 that was the catalyst for surging economic growth, Cambodia's infrastructure bears the scars of 30 years of internal conflict. In the after math of the Vietnam war, the Khmer Rouge regime dismantled a health system that was rebuilt in the 1980s, has undergone reforms from the 1990s, and currently serves a population of 15 million, 68% of whom are under age 30.

As with other countries in the region, economic imperatives have trumped social investment. Rapid growth in the private medical sector is one effect of this government policy, with unregulated curative services rife and often dangerous. Government expenditure for health, while increasing, remains a paltry 1.4% of GDP. Official development assistance represents 15-20% of total health expenditure, while out-of- pocket payments constitute 61%, with large disparities across the population. A push towards universal health care by the Ministry of Health (MoH) is revealing the many challenges the system faces.

Situated in the Indo-China peninsula, Cambodia enjoys relatively few natural disturbances. Its population is fairly homogenous in comparison to its ethnically diverse neighbors, with over 90% identifying as Khmer. Ethnic minorities include Chinese, Vietnamese, Cham and highland people.

Cambodia enjoyed strong economic growth over the past decade, with significant reduction in poverty. It is on the brink of being reclassified a lower middle income country. The health system has been in an extended state of reform since the early 1990s. Substantial gains have been made across health metrics and it is largely on track to meeting its Millennium Development Goals (MDG) targets.

Successes in each of the three disease components demonstrate strong political commitment and leadership, with clear policies, strategies, and guidance ensured by the respective national programs. Yet despite significant infrastructural improvements since 1998, population pressures and rapid urbanization expose the weaknesses in the system, which have mitigated, somewhat, the impact of vertical programming on a reduction in disease burden.

One of the most critical achievements for Cambodia under the NFM is how the platform has provided an opportunity for civil society to mature and expand and begin to play a critical role not only in human rights but also in advocacy for better resource allocation. This may provide an entry point for improved advocacy for state funds as there has not been a commensurate increase in budget allocation to make up the shortfall from a reduced Global Fund contribution across the portfolio.

Human resources for health – motivation and retention as well as recruitment – remains a top challenge for the public health system; the incremental decrease in incentives previously paid for by the Global Fund will only compound this challenge. Yet here too is an opportunity for civil society, to unite and strengthen networks and a support system in order to take its rightful place as part of national decision-making for health. The experiences of implementers of the HIV grant demonstrate that despite a reduction in funding, there are always entry points and opportunities to develop high-impact programs.

Cambodia and the Global Fund

A total of $148.8 million is allocated to Cambodia under the NFM, with a disease funding split agreed following consultations with the Global Fund at $71.84 million to HIV/AIDS, $14.16 million to TB, $46.52 million to Malaria and a further $16.28 million to health systems strengthening (HSS). The HSS grant is scheduled to begin in Oct 2015.

To respond to the new requirements and processes demanded by the NFM, the Country Coordinating Committee (CCC) (the national CCM) had to change its way of working, to ensure that the details needed in grant negotiation, agreement and approval were provided. Such comprehensive changes required a wider involvement of many parties throughout the process: a time-consuming and energy-intensive ordeal.

Generally, however, the long-term impact of the changes was appreciated. Greater involvement of the Fund Portfolio Manager (FPM) and the Global Fund's country team helped make the process smoother and quicker. With allocations known up-front, prioritization exercises, which now had to be aligned with national strategies, were practical and realistic.

HIV/AIDS

HIV emerged in the 1990s, largely through sexual transmission. Early campaigns targeting key populations with prevention messages were supported by universal access to HIV testing and ARVs, alongside an effective prevention of mother-to-child transmission (PMTCT) program, which helped to stem the spread of disease. According to UNAIDS, between 2005 and 2013, new HIV infections dropped by 67% to 1,300, and more than two-thirds of 75,000 PLWHIV have access to Antiretroviral Drugs (ARVs).

Cambodia's HIV program had a rocky transition to the NFM. Due to the new formula for allocating resources globally, Cambodia was informed that the single stream funding (SSF) HIV grant Phase II agreement, initially for the Jan 2014 to Dec

2015 period, was all that would be available until June 2017. This meant that Cambodia was forced to stretch a two- year grant to cover nearly four years of interventions.

The HIV community was suddenly faced with a precipitous decrease in funding, even as they sought to tackle the more challenging task of identifying, testing and treating increasingly hard- to-reach populations. Cambodia already employs creative approaches in its HIV response, but it became imperative to find more cost-effective solutions to reach targets and sustain existing gains.

A WHO UNAIDS conference in Manila in 2014 confirmed the need to retarget testing approaches to reach more of the key and affected population (KAP), validating innovative efforts such as finger prick testing by trained community members.

Affected communities had the most to lose with the reduced funding, so their participation was especially critical to budget prioritization. These groups were further empowered by the NFM's requirements for civil society engagement in the country dialogue and subsequent concept note development, their vote on the CCC and oversight responsibilities.

One of the areas targeted by the HSS component is strengthening the National Health Quality Control laboratory, to achieve and maintain WHO pre-qualification and ISO certifications

TB

Cambodia, one of the world's 22 high TB burden countries, has made some strong progress in mitigating the disease burden – beginning with the achievement, ahead of schedule, of the MDG target to halve mortality and prevalence. Prevalence surveys in 2002 and 2011 show a 45% decrease in bacteriologically positive cases (from 1,497/100,000 population to 820/100,000 in those over 15 years of age). Cure rates are consistently high. According to a WHO Global TB Report, 2014, estimated multi-drug resistant tuberculosis (MDR-TB) incidence was 500 cases, with 1.4% among new cases, and 10.5% among re-treatment cases.

Like the National Center for HIV/ AIDS Dermatology and STDs for HIV (NCHADS), the National Center for Tuberculosis and Leprosy Control (CENAT) began interventions early on. DOTS was initiated in 1994, expanded beyond the hospital based DOTS by 1998 and by 2004 all health centers were implementing the DOTS strategy as it was being rolled out to communities, by engaging the network of pagodas and monks to conduct enhanced case finding at the village level.

Cambodia is one of a handful of countries that bans the commercial import and sale of serological tests for TB as well as anti-TB drugs, to prevent the development of acquired drug resistance.

Innovative case-finding strategies include fast track testing with chest X-ray and GeneXpert, done through collaboration between health center staff and village health volunteers at community and religious events as well as in prisons. Community System Strengthening (CSS) officers and health education messaging are also expanding symptom screening to close the case detection gap.

Loss to follow-up among TB patients is low, largely credited to high-quality messaging at the community level and in affected populations. All health centers have been providing TB testing and DOTS since 2004, monitored and followed-up by village health volunteers.

A TB card is provided that can be used in any public health facility in the country. With the nationwide rollout of the finger prick test, TB clients can also test for HIV in every public health facility without having to refer to specialized (and fewer) Voluntary Confidential Counseling and Testing (VCCT) sites. In addition, a robust information system is being slowly integrated into sector-wide Health Management Information Systems (HMIS).

Yet these successes are being rewarded with declining international donor support. A new strategic plan 2014-20 was finalized with stricter targets, but CENAT faces a larger financial gap within the next six years. The future of the program hinges on greater budget support from the Cambodian government, but even at the current rate of increase, a rising funding gap over the next six years has the CENAT team worried.

In December 2014, the Global Fund signed a TB NFM grant of US$ 16,438,778 to cover activities from 1 January 2015 – 31 December 2017. Interventions will target the high-risk populations of children, the elderly, contact cases, TB-HIV, prisoners and security personnel, and diabetics.

CENAT's significant achievements have attracted attention. In 2014, it was the recipient of both the USAID Achievement Award and the JICA Recognition Award for its outstanding efforts to fight TB. But challenges remain, particularly in increasing access to high-quality timely diagnosis and MDR-TB case finding. In spite of the good work, Cambodia still has one of the highest prevalence rates for TB in the world.

The grant is also used by the National Tuberculosis Program (NTP) for community system strengthening, which will not only benefit the program but also help women and children.

Malaria

Cambodia has the third highest burden of malaria in the GMS.[1] Of its estimated 15 million population, around 8.6 million people inhabit malaria endemic areas. With incidence at 3.09/1000 population and 45 deaths in 2012, malaria is a major public health issue.[2]

Despite a steady decrease in morbidity and mortality over the past decade, Cambodia is still a high-burden country compared to its neighbors. Multi drug-resistant strains of P. falciparum first emerged on the Thailand- Cambodia border around 2007, and have since become common in several provinces. Cambodia responded swiftly to the new threat, working closely with partners such as WHO, the Gates Foundation, USAID and the Global Fund to develop containment strategies.

Cambodia is moving towards pre-elimination of malaria; it has developed and is now revising the Elimination Action Framework for Malaria, 2015-2019.

Priorities under the NFM grant are two program areas containing the highest impact interventions, in line with the National Strategic Plan (NSP): the elimination of artemisinin resistant P.falciparum, and improved access to quality malaria services for mobile and migrant populations not previously reached or difficult to find.

The Global Fund has funded a network of village malaria workers since 2004. This seeks to strengthen the community and health systems, and includes the network of Mobile Malaria Workers that could eventually be deployed in support of community mobilization activities across the sector including HIV, TB

and Maternal Neonatal and Child Health (MNCH) activities. The goal is ultimately for the decrease in Global Fund support to be matched and made-up by state budget resources as the network is integrated into the greater health sector. Procurement and distribution of LLINs also remain part of the Global Fund-supported portfolio, along with updates of the information and surveillance systems, and an SMS-based stock management system.

Government support to the malaria program has increased to more than 20%, exceeding the minimum requirement. It also increased funding for pharmaceuticals and other health products.

NFM disbursements to the malaria program began in July 2015 until 31 Dec 2017 upon signing of the grant agreement between the Global Fund, the PR, UNOPS, and the CCC.

In addition to its single-stream funding grant, Cambodia is included in the Regional Artemisinin Initiative, with an allocation of $15 million for its severe disease burden.

Health System Strengthening

Cambodia will also implement a stand-alone HSS grant, which will target prevailing constraints that have a system-wide impact on mitigation of disease. Technical oversight will be provided to the National Blood Transfusion Center and its provincial branches to produce and supply clean blood components, and improve blood safety. Improvements will be made to the HMIS, Logistics Management Information Systems (LMIS) and the supply chain to ensure adequate quality and quantity of drugs, along with campaigns to promote rational use of drugs.

The application of Clinical Practical Guidelines (CPGs), including infection prevention and control principles, and the hospital package of activities, will be brought to scale to improve the quality of diagnosis and treatment. To increase case detection among antenatal care (ANC) clients, services for ANC will be integrated with the HIV/AIDS, TB and malaria programming, including down to community-level activities.

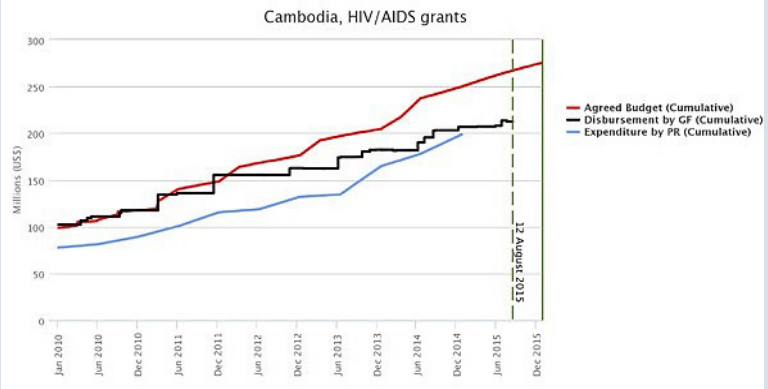
With community involvement critical to the success of efforts in the three diseases and in MNCH, campaigns will be launched to raise awareness of patient rights and the availability of the continuum of services in public health facilities. A comprehensive strategy for integrated community workforce for the three diseases and maternal and child health will be developed to ensure cost effectiveness and long-term sustainability of community service delivery.

Cambodia HIV/AIDS

Cambodia *(2013 statistics)**	
Total population	15,135,169
Male (%)	48.8
Female (%)	51.2
GDP per capita (US$)	1006.8
GNI per capita, Atlas Method (US$)	950
Human Development Index	0.584
Life Expectancy (years)	71.9
Under 5 Mortality (per 1000)	40
HIV prevalence	**0.7**
HIV prevalence, Entertainment Workers	**13.9**
HIV prevalence, MSM	**2.1**
HIV prevalence, PWID	**24.8**
Estimated number of new HIV cases	**1,139**
Number of PLWHIV	**75,000**
Total number of people receiving ART	**50,659**
Number of deaths attributable to HIV/AIDS	**2,200**

Global Fund Finance

Cambodia has been a Global Fund recipient for HIV investments since 2003. Three of four grants implemented between 2010 and 2015 have closed. A total of US$ 217.0 million has been disbursed to date for the HIV response. The NFM HIV allocation is US$ 75.3 million. From 2010, the HIV program Principal recipients (PRs) have been government (Ministry of Health and the National Centre for HIV/AIDS, Dermatology, and STI [NCHADS]).

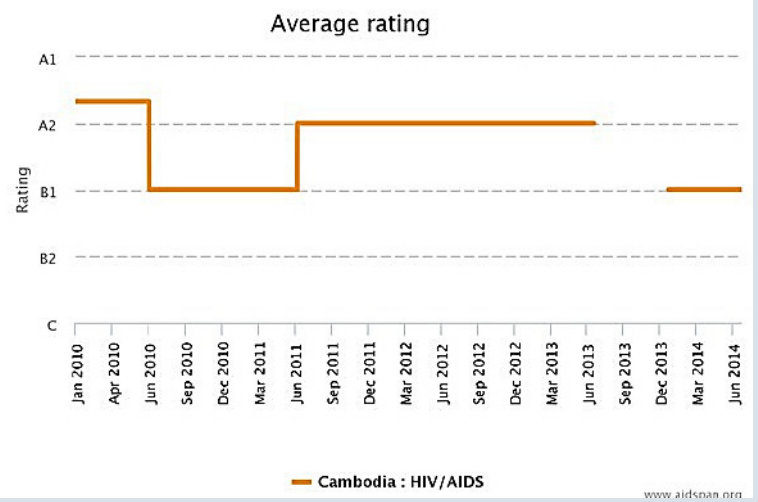


While Global Fund disbursements closely matched the agreed budgets from 2010 to 2011, the cumulative disbursements have lagged behind cumulative budgets from 2012 to present (Figure above). This is despite expenditure by the PRs remaining above 75% of budget. Global Fund reports during this period indicate that disbursements differed from budget due to various adjustments by the LFAs, the most significant being due to the acquisition of pharmaceuticals, diagnostic products, health equipment and other consumables through the Fund's own pooled procurement mechanism.

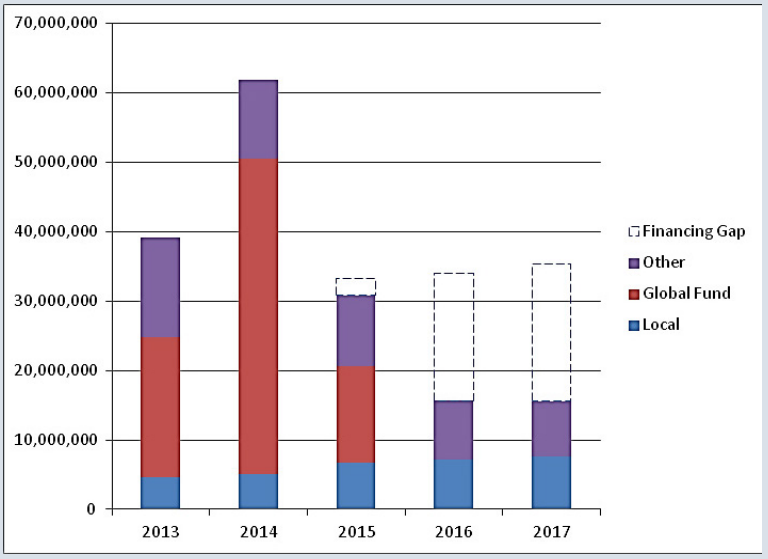
Examination of grant progress reports indicate a large number of management issues, including pending approvals of the Procurement and Supply-chain Management (PSM) plan and significant cash balances with PRs and SRs also contributing to delays in disbursements. The SSF Phase 2 grant that was meant to run from Jan 2014 - Dec 2015 has been stretched to run through to June 2017. This has necessitated a reduction in program implementation activities.

Program performance from 2010 to 2015 has been above average, with grant performance reports indicating the achievement of most indicators. Between July 2010 and June 2011, the grant performance rating was downgraded to B1 as two indicators were not met: number of people who inject drugs (PWID) reached by the needle/syringe program [achievement was 44%], and number of opioid-dependent drug users enrolled on methadone treatment [achievement was 4%]).

While these may not be the only reasons for the downgrading, their mention was cause for concern. In 2012, the HIV grants continued to perform well and reflected an overall grant rating of A1 but due to some management issues, the overall average rating was downgraded to A2. No performance ratings were assessed between July and Dec 2013 as it was the concluding programmatic period for Phase 1. In 2014 the performance of the PR in achieving the targets was rated B1 for top 10 indicators and B1 for all indicators.



Investment in the HIV program



Global Fund investment in the HIV program was US$20 million in 2013, representing 51 % of the total budget. This investment has continued in 2014 and 2015, with Global Fund contributions making up 73% (US$ 45.4 million) and 45% (US$ 13.9 million) of the investments respectively. Local funding of the HIV program has increased from US$ 4.8 million in 2013 to US$ 5.2 million, and US$6.8 million currently. The HIV program receives an average of 2.4% of the Cambodian government's financing on health, with this proportion set to remain below 3% in projected 2016 and 2017 figures. There is a current funding gap of US$2.3 million (2015), with a gap of US$18.4 million and US$ 19.8 million for 2016 and 2017 respectively.

Turning a potentially catastrophic funding slash into opportunity

Cambodia has made headlines with its successful fight against HIV, drawing in large part on two decades' worth of sustained funding from international donors to support HIV prevention, treatment, care and support programs. But with external resources declining, Cambodia is looking to new and cost-effective ways to maintain the gains and make further progress to eliminate new infections.

Early in 2014, the Phase II agreement of the existing Round 9 HIV grant was signed, for funds to cover a period of two years through December 2015. However, under the NFM, the CCC was informed in March 2014 that no additional funding will be available for its HIV component until the end of 2017; Phase II funds must cover almost four years of activities, not two.

The national program and its partners were faced with critical choices in its AIDS response. The concept note for the HIV grant reprogramming was due, critical for ensuring the continuity of prioritized services until end-2017. Initially planned for October 2014, it was finally submitted at the end January 2015.

An invitation was cast sector-wide for a country dialogue from July 2014 – beyond the usual stakeholders in the three diseases – to brainstorm where synergies can be had and how to best allocate resources to last a longer timeframe.

"It was an abrupt decline in available external funding," said Dr. Ouk Vichea, Deputy Director of NCHADS. "There needed to be strict prioritization of services and interventions."

In absence of other new funding, this meant a massive overhaul and downsizing of the complement of interventions that had been celebrated, in a collaboration between NCHADS, CCC members, implementers, civil society, and partners, resulting in tough choices and a lot of disappointment. This also triggered strategic and epidemiological analyses and discussion on 'how to do more with less'.

For one, government has had to increase its own budgetary allocation to HIV. Subsequently, in order to comply with the NFM rules on counterpart financing, the government is now on track for sustained and gradual increase over the life of the NFM grant. In addition to some operational costs, the Government committed an additional $1mil in 2015, $1.2mil in 2016, and $1.5 in 2017 for HIV treatment.

The belt-tightening also prompted closer engagement between NCHADS and civil society, specifically in finding, testing and treating hard-to-reach populations at higher risk of HIV, PWID, MSM, Transgender and people in the sex work industry known as 'entertainment workers', where the epidemic is concentrating. Here, too, is an alignment with the NFM's emphasis on engaging civil society and key populations, which has helped not only to encourage the engagement between government and non-government entities but also give civil society the clout and standing they needed to become equal partners in decision-making. Positive steps were taken in finalizing Cambodia's Harm Reduction Strategic Plan. Yet, challenges remain in relation to the low coverage of prevention services for PWID, and in particular low uptake and retention rates of the methadone program.

Another priority was to find financing synergies, and from the country dialogue came the idea of lining up with the national push for universal coverage and building on the existing Health Equity Fund and other social protection mechanisms. With external funding reduced, the HIV home-based care model had to be redesigned with People Living with HIV (PLWHIV) stabilized on Antiretroviral Therapy (ART) registered to benefit from those broader health and social protection allowances (e.g. for travel, food, care, vocational training, peer support and funeral costs) while most vulnerable PLWHIV will continue to received more dedicated HIV specific care & support. Innovative solutions for Maternal and Child Health and PMTCT services to pregnant women at the community level are also needed.

Ultimately, the experience was an opportune convergence of factors but also an intensive journey to forge national consensus for a more sustainable response. The austerity measures were discussed across the country's coordination mechanisms – a series of mechanisms to ensure that the large amount of Official Development Assistance is aligned with the national strategies. Partners, government and civil society were able to act decisively and quickly, so as to maintain the hard-won momentum in the program even as Cambodia reached a new phase when national funding will have to progressively take over external resources.

Cambodia appears to successfully walk itself back away from the risks of the financial cliff, instituting cost savings and becoming bolder about looking for other sources of funding.

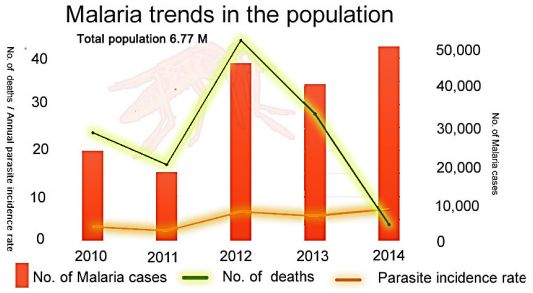
CENAT also worries about its future programming, given steady decreases in its own funding and a funding gap in the next six years.

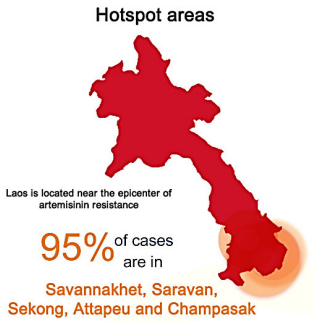
The Manager of CENAT knows his team faces big challenges. "With case finding increasingly difficult, we must also find synergies and other sources of funds."

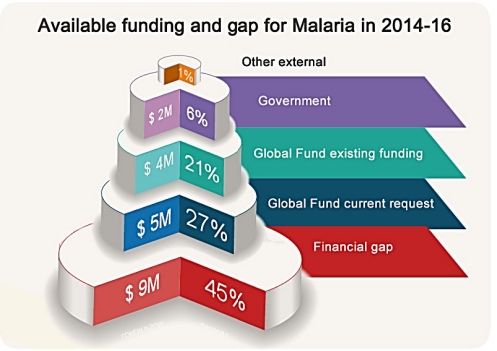
"We get lots of attention for the gains made," he adds, referring to recognition awards received in 2014 from both USAID and JICA. "We cannot afford a resurgence."

The HIV/AIDS and TB community can only hope that the government and development partners will continue funding the national response. In the face of decreasing funding from its largest donors, all parties must work together to ensure continued and sustained progress. The reprogramming was a factor in introducing, scaling up and/or strengthening creative approaches to HIV/AIDS prevention, treatment and care. It united stakeholders in a common goal: sustaining gains and, with less funds, optimizing resources. It triggered new opportunities for integration and efficiencies. In the end a few building blocks were set for a more sustainable future response but as a low-income country with a high disease burden, Cambodia still needs sustained support from donors.

Artemisinin resistance threatens progress against Malaria in Laos







22.2 % patients were not responding to 3 days treatment with artemether-lumefantrine

(From a trial conducted in Champaasack province 2013)

Affected populations in mountainous area

Funding programs aimed at

Prevention of Malaria

Reducing Malaria burden

Sustaining and strengthening Malaria control

Lao PDR, more commonly known as Laos, is a landlocked country bordering Myanmar, Cambodia, China, Thailand, and Vietnam. About 6.8 million people live in its 18 provinces, with most people – 63 percent – still living in rural areas. However, urbanization is occurring at a rate of 4.9 percent each year. The country is largely mountainous, with the most fertile land found along the Mekong plains. The river flows from north to south, forming the border with Thailand for more than 60 percent of its length.

Despite still being a least developed country, Laos has made significant progress in poverty alleviation over the past two decades with poverty rates declining from 46% in 1992 to 27.6% in 2008. The country is on course to achieve the MDG target of halving poverty by 2015, however the challenge now is to ensure that all Laos people benefit from the country's development.

Integration into regional and global economies was accelerated upon membership in ASEAN in 1997 and the World Trade Organization (WTO) in 2013, matched by a 15-year process of reform and negotiation. Exploiting natural resources –hydropower, minerals, forestry, agriculture – is central to the National Development Plan. But despite surging economic growth, Laos remains one of the poorest countries in Asia with significant challenges in health and social metrics.

Communicable diseases drive mortality and morbidity rates. Laos struggles to meet some of the MDGs. In 2013, the under-five mortality ratio (U5MR) was 71/1,000 live births, 44% of under-five children were stunted while 27% were severely underweight, and at 220/100,000 live births it has one of the highest maternal mortality ratios (MMRs) in the region. The health effects of trade are serious concerns.

Large-scale commercial activities generate greater mobility and rapidly changing lifestyles and sexual behavior in border areas. Its landlocked location bordering five countries with comparatively higher financial and political clout and higher disease burdens puts it in a precarious position because of the surge of commercial development over the past two decades, stimulated by aggressive economic reforms in all six countries. Cross-border disease transmission from neighboring Vietnam, Cambodia, Thailand, China and Myanmar pose a serious concern.

Economic migrants – an estimated 200,000 are officially in the country according to the International Organization for Migration – especially have lower access to prevention and treatment services.

Public health is largely provided by the government-owned and -operated system of health centers and hospitals, with the private sector recently growing in urban areas because of increased demand for better services. Numerous challenges confront efforts to respond to the three diseases amid declining external donor support. Service delivery is characterized by a lack of qualified and geographically distributed staff, poor infrastructure, and weak health and logistics information systems. Additionally, the public health system is overburdened by the demographics of an ethnically and linguistically diverse population, 70% of whom live in rural and remote areas.

The government is slowly recognizing that development gains must be accompanied by corresponding investments in human resources and public institutions. It launched its health sector reform (2013-25) with the objective of "affordable, reliable and accessible health services for all".

Laos and the Global Fund

Laos has had Global Fund support since 2003 – with $122.6 million in disbursements across all three disease components and in health systems strengthening (HSS). A new TB grant began in July 2015 to run through December 2017, with the National Tuberculosis Center (NTC) continuing as the primary implementer, overseen by the PR, the Ministry of Health.

Two-year HIV and malaria grants will begin in January 2016, with the Center for HIV/AIDS and STIs and Center of Malariology, Parasitology and Entomology (CMPE) continuing as the respective PRs. A HSS grant is also beginning in January 2016 for a period of two years, with the MoH as PR and the Department of Planning and International Coordination as the main SR. The portfolio split is $12.8 million for HIV/AIDS, $9.1 million for TB, $12.5 million for malaria and US$ 3.7 million for HSS.

In line with commitments under the NFM, the government is increasing its budgetary support, meeting the counterpart financing requirement of 20%, both in cash and in kind. Additionally, the government has pledged $3.5 million to the three disease specific programs to demonstrate its willingness to pay.

Laos had a positive experience meeting the new requirements for Global Fund investments, beginning with a new openness in country dialogue led by an invigorated CCM. Reform of the CCM in 2011 reorganized the membership to promote the participation of civil society and key affected populations. While community networks have long existed, the Global Fund's focus on wider inclusion of civil society has provided a platform to unite their voice.

HIV/AIDS

HIV prevalence in the general population remains low despite an estimated 0.29% prevalence in 2014; up from 0.16% in 2003.

The epidemic is growing by 1,000 new infections annually, but is concentrated to large urban areas in border provinces along the Mekong River, and in key populations. Prevalence is 1.6% among MSM, 1.5% among drug users and 1.4% among female sex workers (FSW). By the end of 2015, Laos will have an estimated 12,000 people living with HIV.

Factors threatening to accelerate this trend include Laos' critical location at a trade juncture bordering high HIV prevalence countries. The International Organization for Migration (IOM) estimates 200,000 migrant workers officially in the country, but with ASEAN integration in 2015 and improved transport and communication systems, anticipated increases in cross-border migration will confront the MoH with complex challenges.

Despite low prevalence, even among key populations, prevention and active case finding remains a national priority. ART coverage must increase from the current coverage of 57.5%. Mapping and peer-led methods for outreach, and the creation of drop-in centers, will be priority activities to increase coverage of the prevention-to-care continuum of services. These include increasing treatment compliance and TB screening for all PLWHIV, and improving the enabling environment for an effective HIV response.

The government has expressed its commitment to addressing issues regarding stigma and discrimination. A recent law on HIV/AIDS control and prevention (2010) is a significant policy achievement aimed at promoting awareness of transmission, prevention and treatment. In addition, the principle of respect for human rights, including eliminating gender inequality, is embedded in the national strategic plan 2016-20.

TB

TB is a significant health problem in Laos, which is in close proximity to globally recognized high-burden countries: Cambodia, China, Vietnam and Myanmar. The National Tuberculosis Center (NTC) was established in 1990, implementing DOTS with support from WHO and the Damien Foundation Belgium (DFB) starting in 1995. Full country coverage to the district hospital level was achieved by 2005, and 98% coverage to the health center level by 2011. Populations most at risk of contracting TB are PLWHIV, prisoners and security personnel, smear negative patients, miners and factory workers, migrants and mobile populations.

The first national TB prevalence survey (2010-11) done with Global Fund and other donor support found prevalence (including HIV+TB) was 514/100,000. This survey also shows Laos meeting its MDG goal of halving TB prevalence in 2015 from 1990, and increasing its detection and cure rates to meet 2015 targets. These successes can be attributed to case-finding strategies such as mobile microscopy/x-rays and increased DOTS in high burden areas, and active case finding in prisons.

But challenges remain, particularly in workforce capacity and the difficulties in accessing health services in remote rural areas. New tools to improve case detection are few: 10 GeneXperts are already in operation, supported by the reprogramming of a previous Global Fund grant, and five more will be procured via the government willingness to pay component. Relying heavily on Global Fund investments, the NTC's network has expanded over the years for case identification, patient tracing to combat loss to follow-up, and treatment programs; these advances must be maintained.

The MDR guidelines were completed in 2011 in collaboration with the DFB and WHO. MDR-TB prevalence is estimated at 5% among first-time TB cases and 23% among previously treated cases.

The new Global Fund TB grant will expand coverage of the TB care and prevention package, increasing TB and TB-HIV awareness in communities and among high risk groups for HIV and TB, and ensuring MDR-TB screening and treatment.

A patient displays drug treatment regimen for TB, Laos (source US News)

Malaria

Of the Greater Mekong Sub region countries, Laos bears 8% of the malaria burden by absolute numbers, with an API of 7.09.4 Malaria is endemic throughout most of the country, but 95% of reported cases occur in the hilly and forested southern provinces of Savannakhet, Saravan, Sekong, Attapeu and Champasak.

Laos saw a steady decrease in confirmed malaria cases since its apex in 2001, when suspected cases per year hit a high of 46.13/1,000 population. Numbers declined substantially in subsequent years, decreasing to 3.5/1,000 in 2009 and 2.76/1,000 by 2011. The MDG target of 2.0/1,000 by 2015 seemed within reach, but that came to an abrupt halt with an outbreak in the southern provinces in 2011 that continues today. The outbreak itself is not remarkable; the country's geography is extremely hospitable to the vector and economic activities in the South attract non-immune laborers and their families. Instead, it's the failure of surveillance systems to detect the outbreak and the subsequent delayed response that highlights the challenges faced not just by malaria authorities struggling to contain the disease, but also of multiple factors across the health sector in ensuring that patients have access to quality health services.

Around 60% of the population is at risk of malaria. This includes ethnic groups who reside in remote locations and economic migrants beyond the reach of current case finding strategies. High-risk groups among settled populations include ethnic villages in remote mountainous areas, military camps, and plantation workers. Among mobile populations, those at high risk are the seasonal laborers, army patrols, settlers at commercial projects and other economic migrants.

Laos' new two-year malaria grant will begin in January 2016, administered by the Center for Malaria Parasitology and Entomology (CMPE) and to include interventions targeting highest risk areas in the south. With 95% of the malaria burden and the location of significant population movement across borders, this region is prioritized in alignment with the 2015-20 National Strategic Plan (NSP).

Interventions will emphasize vector control (procurement and distribution of LLINs) and case management, beginning with a household survey to quantify needs. Given the limited number and quality of microscopy services for malaria diagnosis, capacity building of existing sites will be carried out but there will be no expansion of services. RDTs will be increasingly used to diagnose malaria, with grant support for the procurement and distribution of both RDTs and ACTs.

Laos is located near the epicenter of artemisinin resistance. Artemisinin resistance emerged in southern Laos around 2013, when a trial conducted in Champasack province revealed that 22.2% of patients were not responding three

days after treatment with artemether-lumefantrine. Resistant strains were also found in the parasite population. Cure rates from artemether-lumefantrine have otherwise remained high since 2005. Improving monitoring of the molecular markers and diagnosis of resistance through Therapeutic Efficacy Study (TES) sentinel sites is a top priority in neighboring provinces.

Health System Strengthening

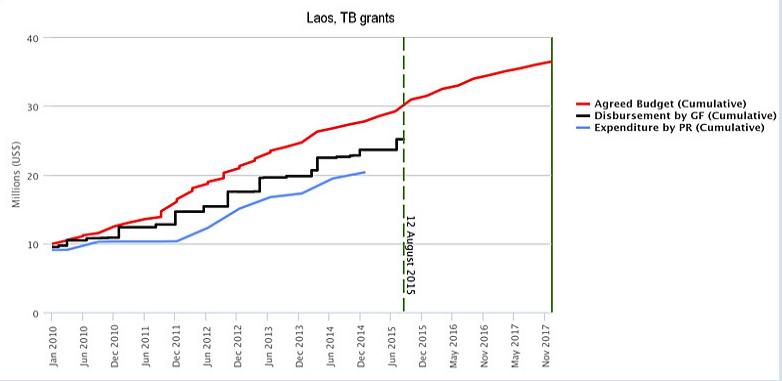
Global Fund allocations from the three disease components are being dedicated to health sector fundamentals. The top priority is to strengthen the overall procurement and supply chain to improve access and use of quality-assured medicines. Training for auditors and inspectors for improved monitoring of pharmaceutical manufacture, distribution and sales to ensure compliance with Association of South east Asian Nations (ASEAN) good manufacturing practices standards is also included in the grant. Improving health information systems and monitoring and evaluation (M&E) will ensure timely, complete and accurate data to inform programming and policy decisions. Health and community workforce capacity building will be ongoing across program management, financial management, and policy and governance.

HSS funds will be made available for two years from January 2016, worth $3.7 million.

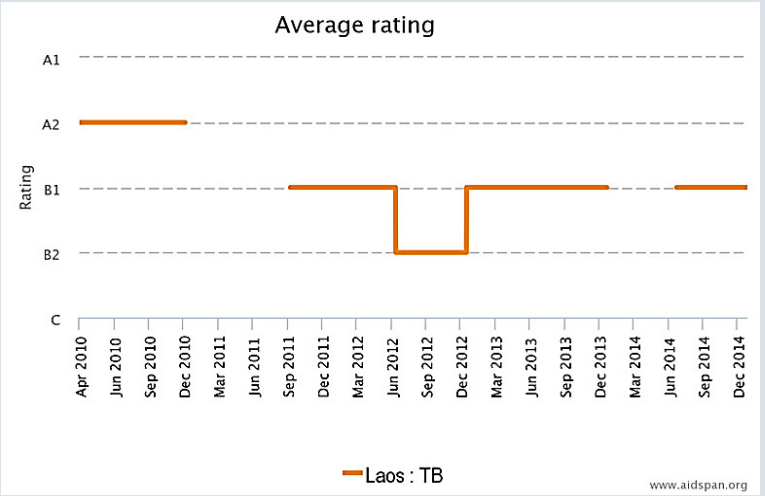
Laos *(2013 statistics)**	
Total population	6,769,727
Male population (%)	49.8
Female population (%)	50.2
GDP per capita (US$)	1660.7
GNI per capita, Atlas Method (US$)	1450
Human Development Index	0.6
Life Expectancy (years)	68.3
Under 5 Mortality (per 1000)	72
New and relapse notified TB cases	4130
Notification rate of new and relapse TB cases	61
Estimated MDR-TB Cases (limits)	220(160-290)
Confirmed MDR-TB Cases	7
TB patients with known HIV Status (%)	**58**
Number of HIV positive TB patients	**267**

Global Fund Finance

Laos has been receiving Global Fund support since 2003 for its TB program with a total of US$ 25.1 million disbursed to date. Between 2010 and 2015, there have been four TB grants, of which one is currently active. The NFM TB allocation is US$10.1 Million.

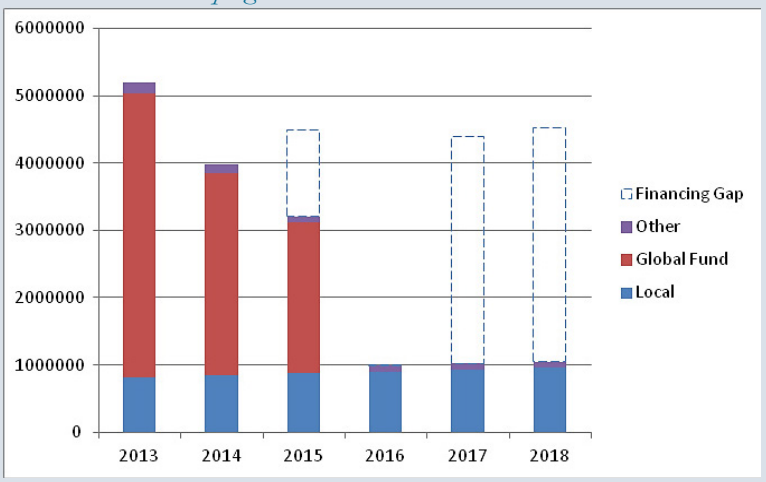


From 2010 the TB program PR has been the Ministry of Health. While program expenditure has remained above 75% of disbursed amounts (Figure above), grant performance reports during this period indicate that disbursements have been lower than the agreed budget due to various adjustments made by the Local Fund Agent (LFA) and country teams. Budget adjustments have been due in large part to Laos' participation in the Fund's own pooled procurement mechanism. Other reasons include unused cash balances carried forward without sufficient supporting documents to allow for use of unspent funds. Grant performance reports from 2011 indicate weak financial oversight by PRs over the sub-recipients (SRs) and sub-sub-recipients (SSRs).



Average grant performance of all Laos TB grants was rated as A2 during 2010. Out of 12 indicators, four had no targets, four had exceeded targets and four indicators had their targets met between 92% and 99%. During this period, the TB program was able to maintain high detection and treatment success rates. Some delays in program implementation were due to delays in the signing of agreements with the Fund, and delays in procurement. TB grants have performed consistently from 2011, with an average rating of mostly B1. This is despite delays in disbursements for some periods and the long period for the PSM plan approval. MDR- TB case detection was seen as a critical issue affecting the achievement of set targets. For the period Jul to Dec 2012, average grant ratings were downgraded from B1 to B2 due to financial management issues and pending conditions. While financial management has been a persistent issue, the program still achieves above 80% for top ten indicators. Another reason for an average rating of B1 from 2013 was due to poor quality of referral data, in order to confirm the number of new smear positive patients who have been successfully treated by collaborating private health facilities or providers. Whilst TB case detection targets for both adults and children were adequately achieved, the program faced challenges in providing TB diagnostic services in remote areas as well as outreach activities.

Investment in the TB program



Global Fund investment in the TB program was US$5.2 million in 2013, representing 81 % of the total budget. This investment has continued in 2014 and 2015, with Global Fund contributions making up 75% and 70% of the investments respectively. Funding of the TB program from local sources was 15% (2013), 21% (2014), and is 28% currently (2015). The TB program receives 0.3-0.4% of the Laos government financing on health, with this proportion set to remain the same in projected 2016-2018 figures. There is a current funding gap of US$1.3 million.

As outbreaks continue, efforts to target hard-to-reach populations intensify

Attapeu, at the southernmost tip of Laos, is a thriving center of commerce, resource extraction and employment. But it's also a region that demonstrates the challenges of reaching highly mobile populations with effective and enduring health messaging and interventions.

A perfect storm of natural disasters in the region culminated in October 2011 with a malaria outbreak that continues even now. Attapeu's verdant forests and wide-open plains jockey for space at the foot of the Phou Saphong and Phou Luang mountains, a lush beauty that is also an unfortunately perfect host to the malaria vector. And, as it sits along an axis of the Development Triangle that also includes Cambodia and Vietnam, Attapeu is also home to a highly itinerant population.

"We were on track to achieve targets set in our national strategy. The 2011 outbreak set us back and we lost a lot of the past gains in controlling malaria," said staff at the Center for Malariology, Parasitology and Entomology (CMPE).

Tens of thousands of economic migrants are attracted by the seasonal and long-term job opportunities in the area that has benefited heavily by the opening of an international border with Vietnam. But these populations are almost always on the move, making it difficult to reach them consistently with health messaging or case finding.

Take someone like Nou, age 22, whose family was forced out of their village to a settlement in the forest because Vietnamese companies in the area won concessions to clear the land for rubber and sugarcane plantations. He works for a Chinese businessman, cutting and trading Siamese Rosewood. On the one hand, it's steady work. On the other, it's dangerous, illegal and unregulated – meaning that Nou is beyond the reach of most public health campaigns. Because the area didn't have priority classification under the current stratification system, Global Fund-supported bed-net campaigns carried out earlier in the year were few. He was away in the forest for days so he was unable to secure a net.

But even if he had received one, it may not have been enough. Most bites in the logging area by the dominant malaria vector, *An Dirus*, happen in the evening before bedtime. It's probably a bite like this that sent Nou to seek testing and treatment in October 2011, after coming back from a logging job with a high fever.

Fortunately for Nou, a health worker talked about malaria in his village years ago. It's rainy season and the roads are in bad shape, so getting to the health center 8km away took hours. Diagnosis was followed by ACT treatment, and now Nou is back to work. He's one of the lucky ones.

Others – poorly educated, and unschooled in the dominant Lao language – are not so lucky. The remoteness and isolation of most of the villages in the area make it difficult for health workers to reach them, even though these villages are considered at highest risk for malaria transmission. Lacking basic disease prevention information and access to medicines, they often rely on traditional methods that delay their ability to seek diagnosis and treatment.

And if they manage to be diagnosed, treatment is not a foregone conclusion. With the existing protocols for epidemic preparedness and response unclear or not in place, the system was unable to shift commodities and supplies to the outbreak area. To top it off, artemisinin resistance has been confirmed in the province.

Even under normal circumstances, Laos' health sector faces many challenges. The outbreak highlighted the constraints in reaching a mostly rural population, where malaria and TB are more prevalent. And it showcases the need for a practical strategy to reach migrant and mobile populations.

"It's difficult to control malaria in these populations because their movements are hard to track and we know very little about them," continued the CMPE staff. "But we must find a way to educate them about malaria."

This is where initiatives such as the Public Private Mix – funded by the Global Fund with technical support from WHO – are critical. With patients increasingly using the private sector, it is part of an ongoing effort by the CMPE to extend its network for malaria services at the community level and to high-risk mobile populations.

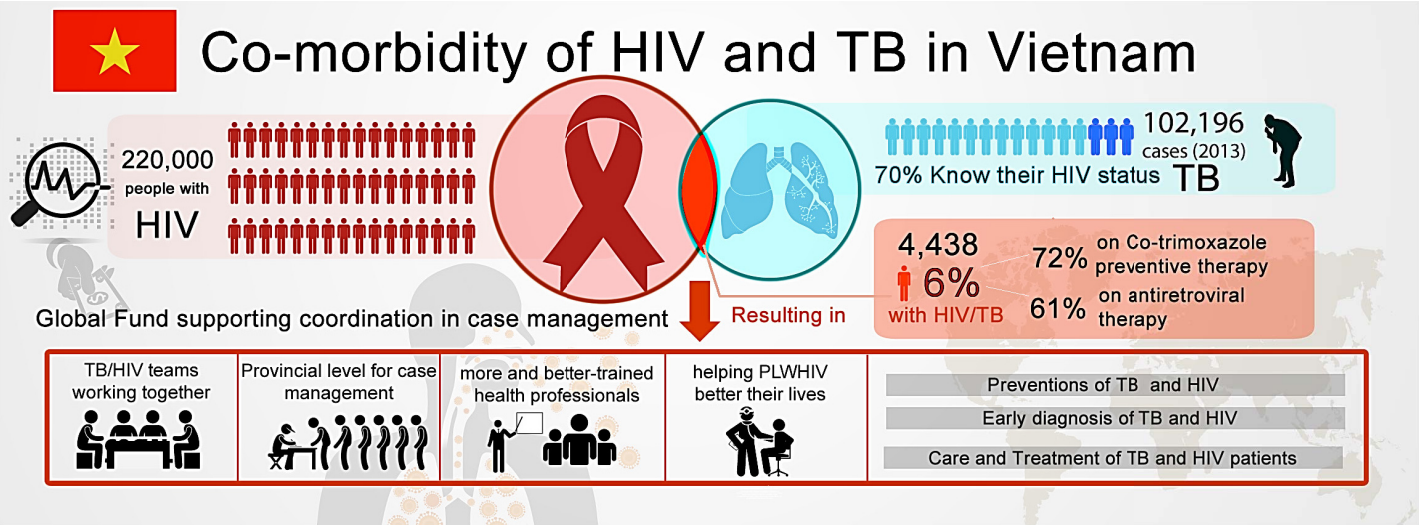
Progress has also been made elsewhere. For one, a consultant was commissioned by CMPE/Global Fund in 2012 to strengthen malaria surveillance and update the stratification of malaria risk. This included updating the Malaria Information System for better security, reliability and accessibility, and establishing an early warning system. To ensure timely distribution of commodities in the highest risk villages, the malaria risk stratification program was updated, with national staff trained in the maintenance of the database and in ongoing annual stratification analysis.

Urgent programming was carried out in 2012-13 in areas identified as high risk. These include intensive campaigns for screening and treating, bed net distribution and health education. The corps of village malaria workers was augmented with new recruits and reactivation of those who were previously trained. And with financial support from the Global Fund, WHO, USAID, the US President's Malaria Initiative and the European Union, the CMPE is strengthening basic functionalities in program management and capacity, case management, vector control, the procurement supply chain management and the HIS.

Though the outbreak continues, the team at CMPE remains optimistic that the program will get back on track. Only four deaths were reported in 2014, down from 44 during the height of the outbreak in 2012 – but API is still climbing (7.35 in 2014 vs 3.53 in 2010). Hard lessons are being learned in the ongoing battle to control the outbreak. But strong collaboration is bearing fruit both between government ministries and with outside stakeholders, and a recently updated national strategy (2015-20) outlines a road map to containment.

"We need to learn more about the migrant and mobile populations, and be able to reach them and remote villages that are high risk," CMPE staff added. "That's one of the key strategies for containing malaria."

Vietnam



One of the world's last remaining communist states, the Socialist Republic of Vietnam is also one of Southeast Asia's fastest growing economies. After three decades of conflict that ended with the unification of North and South in 1975, Vietnam at first organized a centralized agricultural economy. It embarked upon ambitious political and economic reforms in 1986 that decentralized the government, opened its markets, introduced private enterprise and raised the country's GDP from a per-capita income level of $437.10 to $1,077.91 by 2014.

Vietnam is evolving as an attractive destination for foreign investment and is considered a development success story, having eradicated extreme poverty and achieved or surpassed its MDGs in areas including poverty reduction, education and gender equality.

Government health spending as a share of GDP increased from 1.5% in 2005 to 2.8% in 2012, focusing in the short term on equity-oriented reform. Although the level of out-of-pocket spending is still high, its relative share in total health expenditures declined from 68% in 2005 to 49% in 2012.

The country made significant gains in improving the health of its 91.7 million people, who belong to an estimated 54 distinct ethnicities. Life expectancy is 76 years, with a median age of 30. From 1990 to 2009, the infant mortality rate dropped from 44.5% to 16.0%; the under-5 mortality rate dropped from 58.0% to 24.5%; and the maternal mortality ratio declined from 233 to 69 deaths per 100,000 live births.

By 2012, 93% of communes were covered by a health station staffed by trained health workers. The 2012 Demographic and Health Survey found that 86% of women live within five kilometers of a facility offering maternal and child health services, with around 90% of women giving birth in a modern health facility.

Despite these achievements, the health care system faces many challenges. Recent health sector reviews have highlighted issues including the double burden of emerging non-communicable diseases (NCDs) and infectious diseases, a population structure in which dependents (those growing older and no longer working) will soon outnumber the people of working age.

Another system-wide challenge is the urban-rural divide in quality, access and affordability, and inadequate capacity of the health system. While the number of health workers has increased significantly over the past decade, remote mountainous and disadvantaged areas inhabited by over 80 million people still face severe shortages in health services.

Vietnam and the Global Fund

Vietnam's geography and climate make it prone to unpredictable outbreaks of communicable disease, including drug-resistant strains of malaria and TB which are on the rise.

The Ministry of Health was assigned four of the 16 National Target Programs: the government's mechanism for allocating priority budget lines. One is dedicated to HIV/AIDS. Its counterpart financing requirement to the Global Fund is 20%, mostly dedicated to ART for adults, PMTCT, and assorted therapies for injected drug users. The government is expected to increase its contribution in the future.

TB and malaria control are covered under Community Important Interventions, along with dengue and NCDs.

TB financing in 2013 was 59% ($29 million) of the community intervention budget, which reflects a counterpart financing commitment of 76%. It is expected to sustain and increase these contributions by 33% between 2014 and 2017, primarily through provincial funding and through the national health insurance scheme. Through this target program, essential malaria prevention and treatment services are financed with an allocation of $2.7 million in 2014 and $2.9 million in 2015 (the budget for 2016 will be announced in October 2015).

Three new Global Fund grants will be implemented in the period July 2015 – December 2017. The Vietnam Administration of HIV/AIDS Control (VAAC) will continue as the government PR for one HIV grant. The Vietnam Union of Science and Technology Associations (VUSTA) will become a civil society PR for another HIV grant, representing a significant step for civil society involvement in Vietnam's HIV response. It will provide a framework for management and disbursement of funds to civil society organizations (CSOs).

The TB grant will be administered by the National Lung Hospital. The malaria grant will run January 2016 through December 2017, with the National Institute of Malariology, Parasitology & Entomology as the PR. Allocation of Global Fund money during this period is $58.9 million for HIV, $33.8 million for TB and $9.4 million for malaria. There is the possibility of an additional nearly $25 million for TB and malaria from the Global Fund.

Global Fund support represents a significant contribution to disease control efforts, so the national programs feel it plays a major role in the success of the programs. There is general appreciation by the national programs of the Global

Fund's emphasis on high and direct impact activities.

On the other hand, less emphasis on indirect impacts mean less support for equally important activities such as communications and training. Knowledge of specific allocations in advance allowed the teams to prepare practical projects. The new processes are more involved, but as a result the programs achieved clearer orientation for the next period.

HIV/AIDS

HIV prevalence in the general population (15-49 years of age) was estimated by the VAAC at 0.39% (256,000 people) in 2014. The epidemic is concentrated in key populations including MSM, sex workers and injected drug users, and their partners.

2013 Prevalence among PWID was 10.3%[1], where 46% of the estimated 15,603 new infections occurred. Women account for around 14% of estimated new infections. Data from the 2013 HIV sentinel surveillance estimate an average prevalence of 3.7% among MSM, while Integrated Biological and Behavior Surveillance (IBBS) estimates 2.6% prevalence among FSWs in the same year.

Geographically, the HIV epidemic is concentrated in the northernmost and the southernmost provinces, mainly around the two largest cities of Hanoi and Ho Chi Minh City.

While HIV epidemics among key populations have decelerated, challenges remain. The number of new infections is still high, with 12,000 estimated new cases each year that must be identified and treated. The number of PLWHIV who need access to care and treatment was estimated at 250,000[3] in 2013. In addition, transmitted HIV drug resistance (HIV-DR) was explored by a number of studies, with the majority reporting levels of HIV-DR at just under 5% in the major cities.[4]

HIV programming under the NFM, which started in July 2015, will focus on KAP, with geographic priority given to provinces with high (22 provinces) and medium (8) burden of HIV.

To address low service coverage, particularly testing availability for KAP, as well as ART and HIV care, services will be decentralized and integrated to the primary health care system. Early initiation of ART will be a top priority to reduce new infections, promote survival of PLWHIV, and decrease active TB.

In provinces with high incidence of injected drug use, access to sterile injecting equipment is high priority, to be achieved through free distribution and behavior change communication at distribution points. Methadone Maintenance Therapy (MMT) will remain a top harm reduction intervention, with responsibility gradually decentralized to local authorities. Provinces with high density of MSM and FSW will be targeted for key behavioral prevention interventions and social marketing of high quality condoms. To empower vulnerable groups and promote understanding of key information, community networks will be tapped to build awareness and treatment literacy as well as confidence in the health care system.

Coordination between community networks across social, legal and development sectors will be strengthened to increase synergy and improve the community response.

Ethnic Vietnamese women in Muong Ang District, Dien Bien Province were infected with HIV by their husbands, both injection drug users. Since 2011, the Government of Vietnam has been working with partners to expand access to treatment, testing and counseling in remote mountain villages like Muong Ang by simplifying service delivery and integrating with harm reduction measures, including MMT.

TB

Vietnam is ranked 12th of 22 of the world's TB high-burden countries and 14th out of 27 high MDR-TB burden countries. In 2013, TB prevalence (including HIV co-infections) was 209/100,000 population and incidence (including HIV co-infections) was 147/100,000. There is a significant north-south gradient evident in the TB epidemic, with the 2012 notification rate of sputum smear positive TB at 39/100,000 in the north, 48/100,000 in the central area and 81/100,000 in the south. The TB map overlaps with the HIV epidemic in the southern provinces, and somewhat with the northeastern provinces around Hanoi.

A MDR-TB increase is seen in the results of four drug resistance surveys done between 1996 and 2011, with additional resistance to fluoroquinolones in 16.6% of the MDR patients, including 5.6% who are extensively drug-resistant (XDR).

Key populations include the PWID, MSM, FSW and PLWHIV. Additional populations with increased vulnerability include prisoners and those with difficulties accessing health services such as migrants, the elderly, and people living and working in remote and mountainous areas.

TB priorities identified in the new grant from July 2015 include a basic level of activities for TB care and prevention. This covers development of the lab network and augmenting the tools and capacity for active case finding, including expanding and strengthening routine service delivery to improve the case detection rate among key affected populations.

An MDR module focuses on scaling up MDR diagnosis and treatment among the highest risk groups and vulnerable people. This also supports two regimens that were introduced recently: a nine-month regimen for simple MDR TB and the use of new drugs for pre- XDR and XDR patients, alongside pharmacovigilance activities.

The grant further supports strengthening procurement and supply chain management, and routine reporting through the HMIS, M&E systems, and prevalence surveys.

Given the high burden of TB and HIV in Vietnam, the framework approach includes the following four priorities: prevention of active TB among PLWHIV, early diagnosis of co-infection, early treatment of both TB and HIV, and coordination of integrated service delivery for both TB and HIV.

Malaria

Malaria incidence has decreased significantly over the past two decades, from 1.98/1,000 population in 1994 to 0.30/1,000 in 2014. Malaria related mortality is also much improved, from 604 deaths in 1994 to 6 in 2014. Vietnam's "malaria map" is shrinking steadily, increasingly concentrated in 47 of 63 provinces.

Despite these gains, malaria remains a priority health problem, especially in forest and forest fringe ranges and remote border areas, where about 12.5% of the population lives. Further populations at risk include new settlements and camps along large-scale construction projects, and settlements associated with seasonal labor opportunities such as plantations. Mobile populations represent a big challenge, and include the military, seasonal laborers, slash and burn and paddy field farming communities, forest workers, and mobile camps that follow commercial projects.

Artemisinin resistance was first confirmed on the border of Cambodia in 2009, and has since appeared in nearby provinces.

These provinces have been classified as Tier 1 provinces, and targeted by the Regional Artemisinin Initiative (R AI), which covers a period of two years beginning in September 2014.

The two-year national malaria grant, beginning in January 2016, will support the national strategy for reduction of morbidity (below 0.15/1,000 pop) and mortality (below 0.02/1,000 pop).

Big challenges confront malaria control efforts. All four species of human plasmodia occur, with differing habits by season and geographic location. This is coupled with difficulties of access to prevention and treatment services for the myriad populations living in endemic zones, whose livelihoods lead to high risk of transmission. Provinces are at varying program phases, from active control to pre-elimination, so activities are based on a robust prioritization process, focusing on high-impact activities.

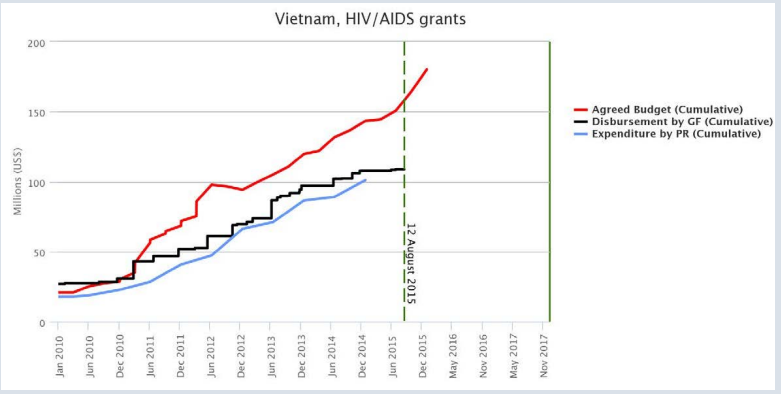
In health facilities, many health staff still rely on clinical symptoms to diagnose malaria due to lack of RDTs and microscopy, and a significant proportion of reported cases are still unconfirmed. High priority areas (Tier 1) are targeted by Global Fund grants for full coverage of microscopes or RDTs. With malaria closely associated with poverty, targeted control efforts are aimed at mobile and migrant populations, and ethnic minority groups who are often marginalized.

Case management activities that are supported under Global Fund grants include the following: building up capacity for facility-based treatment, integrated community case management, active case detection and investigation, awareness creation and behavior change activities, and activities that ensure drug quality. Other interventions include vector control activities such as procurement and continuous distribution of LLINs. Efforts are being made to build up health information systems and M&E, and program management capacities.

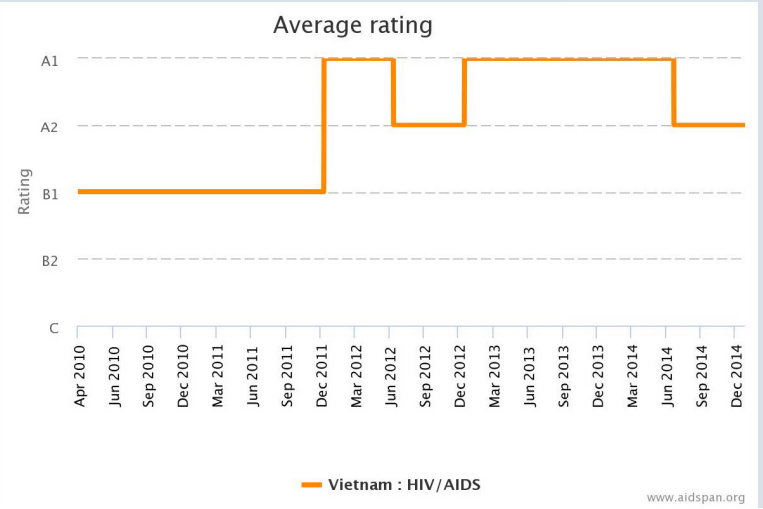
Vietnam *(2013 statistics)**	
Total population (n)	89,708,900
Male population (%)	49.4
Female population (%)	50.6
GDP per capita (US$)	1910.5
GNI per capita, Atlas Method (US$)	1740
Human Development Index	0.6
Life Expectancy (years)	75.9
Under 5 Mortality (per 1000)	23
HIV prevalence	**0.4**
HIV prevalence, Sex Workers	**5.3**
HIV prevalence, MSM	**2.4**
HIV prevalence, IDU	**22**
Estimated number of new HIV cases	**11,567**
Number of PLWHIV	**280,000**
Total number of people receiving ART	**82,642**
Number of deaths attributable to HIV/AIDS	**12,000**

Global Fund Finance

Vietnam has received Global Fund support since 2003 for its HIV/AIDS program. Four grants were implemented between 2011-2015, with three active as of August 2015. The Ministry of Health and the Vietnam Administration of HIV/AIDS Control serve as PRs. A total of US$ 108.8 million has been disbursed to date for the HIV response. The NFM allocation is US$ 67.2 Million.

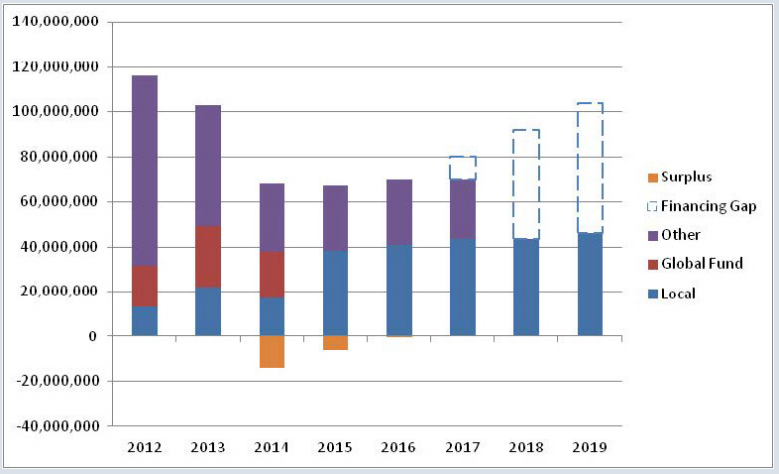


Disbursements matched closely with expenditure. Significant variances from budgets were due to adjustments for cash balances arising from savings under HR and M&E components. There were also deductions from requested disbursements because of 3rd party procurement for some components.



According to Global Fund records, the program achieved a B1 rating in 2010. However, there were no progress reports to explain the rating. In 2011 the PR achieved 13 out of 18 applicable programmatic indicators, of which seven were Top 10 indicators. Some of the fully achieved indicators included those where there were lags in performance. In subsequent periods, the program continued to perform well, achieving ratings of A1 and A2. Management issues that included quality of service, SR management, delays in procurement and the quality of data reporting (both programmatic and financial) were noted as unresolved.

Investment in the HIV program



Government investment in the HIV program has been increasing steadily from US$ 13.6 million in 2012 to US$38.6 million in 2015 with a projected investment of US$ 46.3 million in 2019. Vietnam has a diverse funding base for its HIV program, with significant support coming from other sources. A significant surplus (US$ 13.7 million) in funds was present in 2014. The total funding gap from 2017-2019 is US$ 117 million.

Marking a progression in its HIV landscape, Vietnam chooses a civil society Principal Recipient

Rapid economic progress following major reforms in the 1980s produced complex social changes in Vietnam. With the creation of civil society organizations that sought to represent a wide range of public concerns to the state while helping the government address social issues, civic engagement blossomed.

VUSTA plays a critical role in networking key affected populations, and empowering them by bridging the gap between community action and policy formulation.

But with policymaking firmly under the thumb of the political elite in the Communist Party, the national HIV policy became more about control measures that punished offenders.

Facing hostile conditions, key affected populations sought to find strength in numbers, establishing national networks. The registration in 2005 of the HIV/AIDS Vietnamese Action Group was a catalyst, swiftly followed by the 2007 registration of the Vietnam Civil Society Partnership Platform on AIDS.

Similar arrangements for PLWHIV, sex workers, MSM and transgender people followed, while existing networks for PLWHIV and PWID expanded. These networks developed linkages and relationships with various government agencies and service providers to expand their influence by on policy development and program implementation. They united under the umbrella provided the Vietnam Union of Science and Technology Associations (VUSTA), whose broad mandate is to provide a platform for dialogue among science and technology associations. More recently, VUSTA has shifted to intensifying engagement with key populations affected by HIV and TB in issues affecting their health and medical needs.

Meanwhile over the same period, the rapid spread of both HIV/AIDS and illicit drug use attracted and sustained high-level like attention, prompting policy formulation to gradually take on a more evidence-rights-based orientation. Harm reduction programs syringe and needle exchanges were legalized, and medical insurance policies were amended to cover HIV-related services. These

are great strides but policy inconsistencies remain, particularly the government commitment to rehabilitation centers. makes Human rights violations are rampant, perhaps due to low knowledge of the legal frameworks that protect HIV-related rights. This capacity building of civil society critical, to ensure they are engaged in formulating policies that meet the peoples' needs.

"Discrimination by bureaucratic gridlock is a common experience for all of us," reported one particularly vocal female drug user who represents her community on the CCM. Discrimination is widespread across government programs, so that even if services are available, key affected populations often suffer indignities when they try to avail themselves of services.

This is because sex work, drug use and homosexuality continue to be considered social evils in Vietnam (the former two are illegal). HIV prevention and control policies included mandatory testing and campaigns that effectively stigmatized HIV and the behaviors associated with it.

Any hint of such activities can lead to incarceration in one of the notorious government-run "rehabilitation" centers, where Human Rights Watch has documented inhumane treatment of those detained and forced to undergo hard labor and "treatment".

Increasingly documented brutalities prompted the Global Fund to join UN agencies and other international organizations in 2013 to call for the closure of these compulsory drug treatment centers. But with the government reportedly closing or transforming these centers into more community-oriented treatment facilities recently, a new problem surfaced in the corresponding increase in violence by local police.

Working with its KAP networks, VUSTA leveraged the relationships it developed with policy- and decision-makers, to set up seminars with police to promote health messages and to try to mitigate some of the violent crackdowns on sex workers, drug users and other vulnerable populations.

"This was a tremendous help," continued the female drug user. "It showed us all the power we have when we work together, and have a platform to voice our case."

Under the NFM grant that began in July 2015, VUSTA became Vietnam's first-ever civil society PR. It continues its mission from the previous grant: supporting civil society organizations (CSOs) and community-based organizations (CBOs) to mobilize the HIV response. It engages civil society in efforts to remove legal barriers to services for KAP, and now is expanding the continuum of HIV services for key affected populations from 10 to 15 provinces.

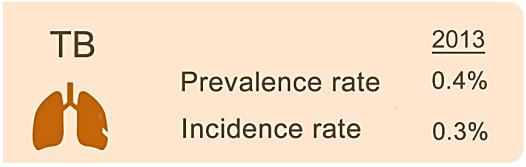
Among the services supported are drop-in centers that are considered by many to be an oasis in an often-unfriendly environment. "This is a safe space for us," declared another drug user at the Coalition of Coming Home Clubs, a gathering place for injecting drug users, female sex workers and MSM. "Opening this place, providing capacity building and providing channels for dialogue allows us to do something about the injustices against us. Without each other and without the platform, we are powerless."

These centers also provide rehab and detoxification support, as well as ARV treatment. They operate mobile VCCT clinics during community events and holidays, in order to try and reach high-risk populations who would otherwise not access STI, HIV or TB services. "Working together and knowing we'll be heard give us dignity and the courage to improve the system," said one sex worker, who is also a CCM member.

Other activities in the centers that are supported by VUSTA include methadone treatment programs, part of a holistic approach to harm reduction that also includes legal support and community-building. Credit services are also made available to members, which are more accessible to people with unstable finances or residence but who are affiliated with networks such as those supported by VUSTA.

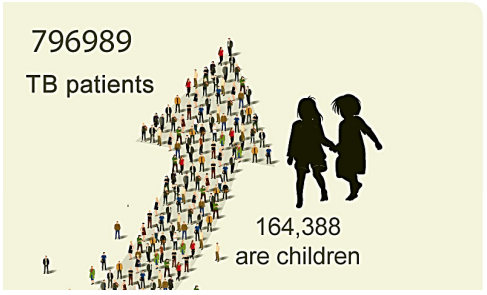
According to one senior officer of the VUSTA project, being engaged in the Global Fund ecology allows CSOs to pool their collective weight to affect the policy landscape. "As international aid funding drops – even prior to collaboration with the Global Fund – key objectives are to assist CSOs in empowering themselves and mobilizing their own resources."

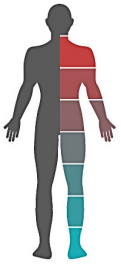
Myanmar fight against MDR-TB



26 out of 100 cases of MDR TB are not detected

MDR-TB among new cases was 5.0% in the country's third drug survey, with an estimated 27.1% among previously treated TB patients





MDR-TB Focus Targets

41.5% of the population.

10 000 MDR-TB cases to be enrolled by end of 2016

In 100 townships

As the largest country in the Southeast Asia mainland, Myanmar also has the lowest population density, with a population of just 51.4 million (2013) growing at an annual rate of about 1%. Over 130 ethnic groups speak more than 100 languages and dialects, with Myanmar as the common, official language.

The first national elections in 20 years installed a government in 2011 that recognized the enormous economic potential of heretofore untapped natural resources, fertile lands, and strategic location at the intersection of China and India. It embarked on ambitious reforms to recover from isolation and integrate into the global system, transitioning to democratic governance and a market-oriented economy in addition to pursuing a peace process after nearly seven decades of internal conflict.

But decades of inattention by the military government, coupled with sanctions blocking support from foreign partners, are apparent in the poor state of the preconditions for investment. Myanmar's health system was ranked as second worst overall in a WHO survey of 191 countries in 2000. Basic service provision is limited by poor infrastructure, shortage of trained health staff, lack of essential drugs and equipment, and weak supply chain and health information systems.

The Department of Health is increasing the production of health professionals to meet the global benchmark of 2.28 per 1,000 population, within two decades; in the meantime, voluntary and community health workers have been recruited, trained and supported for special jobs by vertical programs. Because the majority of the population resides in rural areas, co-investments by local communities – to build health centers, bridges, roads and schools at the peripheries – are common practice, encouraged by a national reform agenda for people-centered development.

Decentralization activities are ongoing, transferring authority and services to the townships, to mixed reception by CSOs. In April 2015 the Department of Health underwent a period of restructuring, the aim of which is to increase efficiency and improve service delivery.

In 2014-15 public spending in the health sector was at a low 0.99% of GDP, resulting in high out-of-pocket payments that are the dominant source of financing for health care (70% of total health expenditure according to the National Health Account for this period).

Myanmar and the Global Fund

HIV/AIDS, TB and malaria have been identified as the top three national priority diseases in Myanmar, with the respective vertical programs generally successful in reaching MDG 6 (HIV/AIDS, malaria and other diseases) targets.[1]

Myanmar has received Global Fund support since 2003, with a five-year break from 2005 due to political developments that interfered with grant activities. It re-entered the country with Myanmar's application under Round 9. Strong safeguards to ensure strict oversight of grant activities implemented in an uncertain yet promising environment include the appointment of UNOPS as the PR on behalf of the government and Save the Children (StC) as the civil society PR.

Myanmar was an NFM early applicant, continuing existing arrangements with UNOPS and StC. Current funding mechanisms that bypass the government raise concerns that an already fragile public health system will further weaken its institutions. With the French 5% Initiative, technical assistance is being provided to the respective programs for transition to government-sector PR in the next grant period. Five focal areas are targeted for capacity building: 1) Program management, 2) Financial management 3) Supply chain management 4) Procurement 5) M&E systems. Underlying themes include human resources, governance arrangements, guiding documents and transferring skills.

Significant challenges undermine the ability of the MOH to manage basic health service delivery. Residual effects of an authoritarian system include a workforce used to obeying mandates, and lack of governance arrangements and corresponding legislative environment. A program support instrument, managed cash flow, strengthened management systems and structured management hierarchy, enabling good planning and budgeting to service delivery possible on national scale in an accountable fashion.

All grants – HIV, TB and malaria – started on 01 January 2013 and end on 31 December 2016, with total funding of $164.2 million, $72.5 million, and $99.6 million, respectively. These figures account for the fact that the country was undergoing Phase 2 at the time of the NFM. In addition to the initial NFM allocation, TB was awarded with additional funding in 2014.

Eager to continue economic progress, the government recognizes that reforms in social and health services must complement progress in the political and economic spheres. Government spending in health increased by more than 100% between 2006 and 2011, with this trend expected to continue. Its counterpart financing share is 10%, meeting the minimum threshold government contribution to disease programming. Also, in 2015-16 the Health Minister

allocated an additional $5 million to cover the gap for ARVs, $1 million for methadone and $4 million for second line TB drugs.

Program staff participating in the country dialogue and concept note development reflect that grant application under the NFM seems more country friendly. The long-term effects of the changes are considered highly positive. Key affected populations appreciate the depth of engagement increasingly facilitated under the NFM, as their priorities can be conveyed directly to the programmatic and policy levels. It is remarkable for the space opened for human rights discussions; with the civil society PR, Save the Children, Global Fund activities are expanded to support the capacity of local organizations through a community systems strengthening component, promoting local ownership and sustainability.

At the CCM level, a key development has been the transition of its role from a country coordinating mechanism overseeing the national response to HIV/AIDS, malaria and tuberculosis. In 2013, with 35 members from different constituencies including the MoH and other ministries, it was formally re-established as the Myanmar Health Sector Coordinating Committee: the main health sector coordination structure, with an expanded oversight of promoting overall sector coordination and development effectiveness.

HIV/AIDS

An outreach worker for the Myanmar Sex Workers Network conducts an education session to teach women how to protect themselves from HIV by advocating for safe sex practices with clients. Begun in 2011, the network has grown to include more than 30 self-help groups and 700 members around the country. The Global Fund / John Rae

Myanmar has the second highest number of HIV-positive people in Southeast Asia. Prevalence declined steadily in the general adult population (aged 15 years and up) from 0.94% in 2000 to a projected 0.54% in 2014[2], in large part due to fewer new infections and AIDS-related deaths before ART became available on a wider scale in 2005. In Myanmar over 200,000 people were living with HIV in 2014, with an estimated 9,028 new infections in the same year, according to the National AIDS Program (NAP).

Infections remain high among key vulnerable populations, where HIV transmission is driven largely by high-risk sexual contact and use of contaminated needles and syringes (female sex workers and MSM, and their clients or partners, PWID and their partners). Latest reported figures by NAP are 23% prevalence among PWID, 6.6% among MSM and 6.3 among FSW.[3]

Challenges are great, particularly the low accessibility of diagnostic services. ART coverage needs to be scaled up, particularly among adolescents and key populations. Counseling services are poor and slow to scale, with losses along the continuum of care. Because of stigma and discrimination, there's anxiety about the decentralization of treatment to local facilities where staff aren't sensitized to appropriate methods in interacting with PLWHIV or maintaining strict confidentiality.

NFM funding is supporting the scale-up in the national response to HIV/AIDS in 45 townships. The highest strategic priorities include comprehensive condom promotion and syndromic management of STI, with associated awareness- raising by AIDS/STI teams. Other high priority activities cover expansion of the continuum of services for key populations, including prevention activities, HIV counseling, and testing (HTC), increasing the availability of ART, PMTCT, and harm reduction activities. HTC is being scaled up in both point-of-care NGO service sites and government settings. Activities for screening for TB among PLWHIV will also be covered under this grant, while screening TB patients for HIV will be addressed under the TB grant under the National Tuberculosis Program (NTP).

TB

Myanmar is ranked among the world's high-burden countries for TB (22 highest burden countries), MDR-TB (27) and TB/HIV (41). Among the high TB burden countries in Asia, Myanmar ranks 2nd after China in the proportion of new TB cases estimated to be multidrug resistant.[4] Those at increased risk for contracting TB include prisoners, PLWHIV, people living in poor urban slums, contact cases, migrants and people residing in states.

Estimates in 2013 of Myanmar's TB epidemic include prevalence at 473/100,000 population, incidence at 373/100,000/year, and mortality at 49/100,000 population. The gap in overall case detection is 26%. MDR-TB among new cases was 5.0% in the country's third drug resistance survey, with an estimated 27.1% among previously treated TB patients. It has a high rate of co-infection with HIV, with about 8.5% of TB patients who knew their HIV status being HIV sero-positive.[5]

The NFM focuses on expanding coverage of DOTS, intensifying active case finding and addressing MDR-TB and TB/HIV activities. The NFM will support priority NTP activities that target TB patients among all subgroups in 330 townships. These include remote townships and border areas, ethnic groups, migrants and mobile populations, prison populations and key affected populations for HIV/AIDS. M&E activities will include the improvement of reporting systems, beginning the move to computerized case-based data entry.

The recent translation and dissemination of the Patient Charter aims to promote each person's right to access the continuum of health services. Particularly with TB efforts requiring intensive grassroots participation, the NFM will also support capacity building of CSOs.

Malaria

Despite steady gains, Myanmar has the highest malaria burden of the GMS countries (79% by absolute number and an API of 7.88).[6] It is one of the priority heath issues in the country, with a morbidity of 10.6/1,000 population and mortality of 1.2/100,000 population in 2011.[7] Around 71% of the population lives in malaria risk areas (29% in high risk areas, 24% in moderate risk areas, 18% in low risk areas), with 80 out of 284 malaria endemic townships considered at high risk of malaria.[8]

Additional populations at risk are subsistence farmers and others living or working in or near forested areas and the foothills, and internal migrants (laborers in development projects, construction and extraction industries such as dams, irrigations, road, mining, logging, rubber plantation). And areas of conflict do not have access to malaria services, or to insecticide treated bed nets. With Global Fund support since 2007, a network of malaria volunteer health workers and malaria mobile teams was established in order to scale-up case detection and improve access to treatment and prevention for these hard-to-reach, high-risk populations.

Climatic and ecological changes, migration and the growth of natural resource extraction keep malaria high on Myanmar's public health priorities and contributes to behavior changes in

malaria vectors. Artemisinin resistance is now established in Myanmar - the Lancet reported in February 2015 of high prevalence of its molecular marker, K13- propeller mutations, just within 25km of the Indian border. Since Myanmar is considered the gateway for artemisinin resistance to spread worldwide, strategies to stop such spread are a high priority.

Myanmar is still in the control stage of its national malaria strategy. There are two active grants that currently support malaria programmes – these are based on the national strategy. A component under the NFM supports the National Malaria Control Program's basic preventive vector control and case management activities in 284 endemic townships, to keep mortality and morbidity low. Capacity building for health information systems, M&E and program management are included in this application.

Health System Strengthening

Health systems strengthening (HSS) activities are at the core of Myanmar's NFM portfolio. And by design the Global Fund investment was such that health systems strengthening was core to the three disease programs and investments were made into them for better service delivery, not necessarily only through an HSS grant. In fact, many components of HSS are best strengthened if done through service delivery to patients e.g. through vertical programs. HSS activities under Global Fund support include the renovation of drug storage facilities and health facilities, and upgrading of diagnostics facilities, strengthening of M&E and information systems. Capacity-building activities of more than 21,000 people were conducted at the national level for management skills, M&E, logistics management, quality assurance of drugs, prevention and case management of the three diseases and financial management. The National Drug Regulatory Authority is also targeted for activities to strengthen pharmaceutical quality control. At the field level, local capacity was increased through training on management skills, M&E, logistics, including strengthening the bottom- up planning and budgeting and case management of the three diseases.

Investment in the HIV program

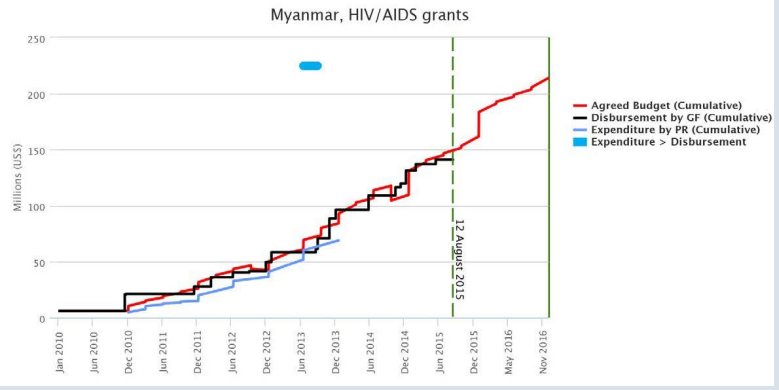
Myanmar was an accelerated early Global Fund applicant and did not complete a financial gap analysis for its HIV program at the time of submission for Global Fund money. Government funding of the HIV program rose from an estimated US$1.5 million in 2013 to a projected estimate of $1.7 million for 2017. Additionally, the Ministry of Health has allocated US$5 million for 2015-2016 to cover a funding gap for ARVs, as well as US$1 million for methadone.

Myanmar *(2013 statistics)**	
Total population (n)	53,259,018
Male population (%)	48.5
Female population (%)	51.5
GDP per capita (US$)	--
GNI per capita, Atlas Method (US$)	--
Human Development Index	0.5
Life Expectancy (years)	65.2
Under 5 Mortality (per 1000)	52
HIV prevalence	**0.5**
HIV prevalence, Sex Workers	**8.1**
HIV prevalence, MSM	**10.4**
HIV prevalence, IDU	**18.7**
Estimated number of new HIV cases	**7,100**
Number of PLWHIV	**190,000**
Total number of people receiving ART	**67,643**
Number of deaths attributable to HIV/AIDS	**11,000**

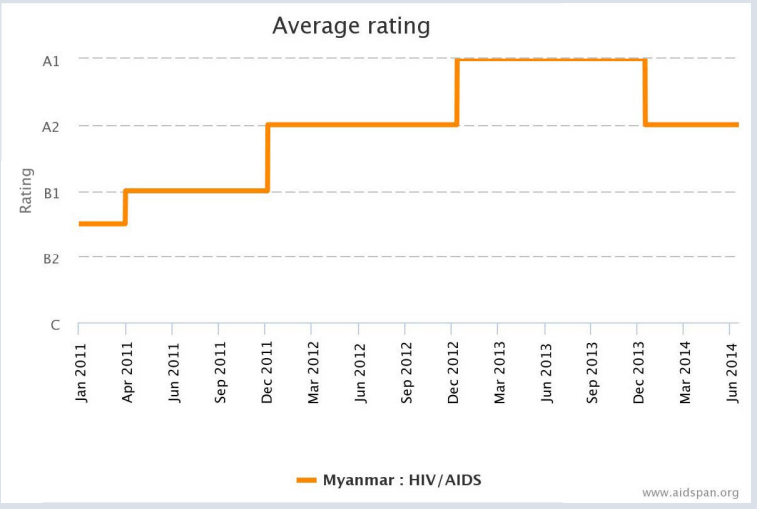
Global Fund Finance

Myanmar has been receiving Global Fund support since 2005 for its HIV program. Two grants have been active since 2010, with UNOPS and Save the Children as PRs. A total of US$ 146.5 million has been disbursed to date for the HIV response. The NFM HIV allocation is US$ 117.6 Million.

Expenditure by the PRs has matched budget and disbursements (Figure below). A lack of data on the most recent expenditure beyond December 2013 makes further analysis difficult.



In the first quarter of 2011 there were delays by the PRs in program implementation. Consequently, many of the indicators were unreported in this period (six out of 11), which included training activities resulting in a B2 rating. The program has subsequently shown good performance, moving from a rating of B2 to ratings of A2 and A1. See figure below.



Stigma and fear keep Myanmar's key populations in the shadows

The Myanmar Anti-Narcotics Association (MANA) works to reduce HIV among injecting drug users by raising awareness of behavioral risks, and by supplying clean needles to avoid needle sharing. MANA also provides basic medical care, testing and counseling,and support for drug users to transition to methadone substitution therapy The Global Fund / John Rae

After decades of repressive policies, civil society is re-emerging in Myanmar. But despite a profoundly evolving environment since opening up in 2011, and promising developments in the national discourse, key affected populations for HIV still face daunting challenges. They are increasingly networked for support, but struggle to make their voices heard.

On top of physical barriers to accessing care and treatment – a dilapidated health sector resulting from decades of inattention – PLWHIV must also contend with the stigma that arises from fear, misinformation and notions of taboo. Recent studies confirm the high level of stigma and discrimination that key affected populations face on a daily basis. Weak governance and lack of legal protections uphold these long-held prejudices.

"Making services available is a tough enough challenge," asserts a member of the Myanmar Positive Group, an organization networked with over 200 self-help groups in the country. It works with the Global Fund PR Save the Children in its efforts to coordinate civil society. "But just because the services are there and staffed, it doesn't mean the discrimination goes away."

"[Significant inputs from] development partners such as the Global Fund, UNAIDS and USAID have helped to trigger small changes in social attitude towards HIV," explains New Zin Win, founder of Pyi Ghi Khin (PGK), an SR in the HIV grant.

For example, the availability of ARVs beginning in 2005 began to stem the tide of stigma and improve attitudes. Community- based education about HIV and AIDS equip people with the knowledge to protect themselves from contracting the virus, but it also plays a key role in reducing stigma and discrimination.

Founded in 1997 on the principles of collective action, representing the marginalized and disadvantaged, PGK is an organization able to leverage its grassroots success for national and international attention. They collect cases of human rights violations from community networks, and have worked with parliament to enact protective laws against discrimination in the workplace and in support of access to health services and education. With access to national platforms via working groups in which Parliament members are represented, PGK serves as a bridge between the community, development partners, and policymakers.

Interviews with members of K AP reveal case upon case of practices across all aspects of society that present barriers to leading a life with dignity and seeking early diagnosis and treatment.

"Confidentiality breaches are common when testing for HIV, not just in the health facilities," lamented one member of the MSM network. "Sometimes people have to quit their jobs when workplaces introduce HIV testing. Even if there's a policy of confidentiality, it isn't enforced. Plus, introducing HIV testing in the workplace is generally seen as a good thing – but it isn't when it's mandatory."

"When drug users get arrested, they get tested," added a representative from the National Drug User Network. "If they test positive, they're sent to the labor camps. If negative, they're sent to rehab."

Other PLWHIV express concern about the decentralization of HIV sites. Counseling was already a challenge with voluntary counseling centers that are located in large urban areas; for example, some have had health staff asking them inappropriate questions during counseling. As a result, many seek out private facilities. Decentralizing services to community level is also believed to reduce confidentiality and increase exposure to stigma. Additionally, given resource scarcity in some areas, drugs may be available but the attendant services will not be.

Another pressing concern for the HIV community is the looming PR transition from UNOPS to the Department of Public Health in the next Global Fund allocations period. One woman from the Sex Worker Network in Myanmar voiced a persistent worry among the community about the move. "What does it mean for our operating environment? How can we ensure that the civic space will be preserved, when the channels for feedback are no longer facilitated by an independent body?"

All K AP networks have mobilized advocacy efforts with key constituents in the legislative landscape for HIV. A national HIV legal review report published in September 2014 gathered evidence of the widespread stigma and discrimination faced by PLWHIV and key affected populations. It documented many outdated laws affecting the rights of PLWHIV, including residual penal codes from the British colonial era that criminalize "unnatural sex" between consenting adult males. Governance reform is urgently needed to create a more enabling environment for the HIV response.

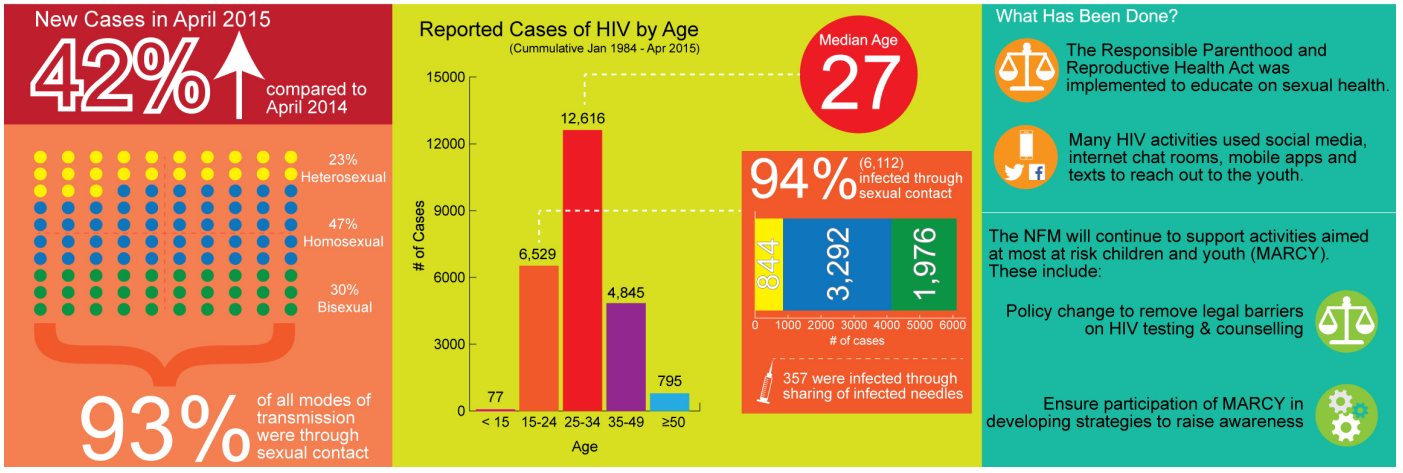
Meanwhile in the short term, basic actions to improve the enabling environment can be achieved. Examples include educating police in public health approaches to HIV, sensitization training for health staff in HIV-related discrimination and confidentiality, and campaigns to educate communities on the rights of HIV-positive pregnant women. Treatment-wise, it includes instructions on universal access to ARVs.

One quick legislative win will be the repeal of a section of the excise law criminalizing possession of needles and syringes and an impending patent bill will contain provision for affordable access to generic medicines.

The recommendations were endorsed by the recently formed Community Network Consortium Committee on Human Rights and HIV, whose mandate is to advocate and initiate changes to laws and policies to improve the national response to HIV.

With a concentrated HIV epidemic that has potential to grow, stronger legal protections are needed to counter the pervasive stigma and discrimination.

Youth are most at risk of contracting HIV in the Philippines



The Philippines is an island nation of 100.6 million people, most of whom inhabit just 11 of over 7,000 islands in the Western Pacific. More than 80 languages and dialects are spoken by the diverse population that has to contend not only with fragile political stability but also the threat of natural disaster including typhoons, tsunamis, volcanic eruptions and earthquakes.

The Philippines ranks among the fastest-growing economies in Southeast Asia. Economically, it is considered a newly industrialized emerging market, transitioning from an economy based on agriculture to one more based on services and manufacturing in areas like electronics, apparel and shipbuilding.

Foreign relations emphasize trade, and remittances from 11 million overseas Filipino workers. Accounting for 10% of the country's GDP, this remittance economy was a factor in the country's resilience through the 2008 global financial crisis.

Universal health care was identified in 2010 as the main goal in the new health sector plan, which aims to increase the number of poor people enrolled in PhilHealth: the national health insurance agency. In 2012 the government passed a sin tax law, which imposed taxes on alcohol and tobacco products. A percentage of the incremental revenue from these taxes are earmarked for expansion of health care coverage under PhilHealth and for disease prevention.

Dramatic improvements in health were achieved over the last 40 years, but disparities can be seen when data are disaggregated by region. For example, there is a 14-year difference in life expectancy between the region that Manila belongs to, the National Capital Region, and the Autonomous Region for Muslim Mindanao, which is plagued by poverty and lack of health care as a result of armed conflict.

Local government units (LGUs) are autonomous and responsible for their own health services, a result of decentralization that began in 1991. A health sector reform program began in 2005 to address management capacities and resource management, so that basic public health and prevention programs and services can be made available in all areas. Because of this autonomy and the fact that health services can be politically influenced, there is high variation in quality across the country. Significant inequities in health care access and outcomes between regions are a problem, such that people are encouraged to mobilize their own community health workforce to address gaps in service delivery.[1]

The Philippines and the Global Fund Under the NFM, an approved funding split was agreed at $14.4 million to HIV/AIDS, $71.7 million to TB, $15.2 million to malaria. The government of the Philippines has met its counterpart financing share. Government contributions to the HIV program will increase annually from around $9 million committed in 2015. Counterpart financing for TB has been met with 51% contribution. There is also a steady increase in estimated domestic contribution over the life of the malaria grant – $8,130,696 in 2015, $7,410,475 in 2016, and $7,482,543 in 2017.

The government also incrementally evolved its financial contributions to programs that had been the exclusive purview of the Global Fund. Starting in January 2015, government will pay for all ARVs; any additional cases detected will be paid for by the Global Fund (buffer stock).

The Global Fund's effect on the Philippines has been greater than its financial support. Where previously the rationales for funding were not necessarily aligned with national priorities, the new approach has meant every request is backed by evidence. The NSP for HIV and STI for 2016-2020 was catalyzed by the proposal- writing process, in direct alignment with national efforts to develop concept notes for HIV, TB and malaria.

Another positive effect of the Global Fund is its systems approach, as opposed to building up vertical mechanisms for specific disease programming. A prime example – not specific to the Philippines – is meaningful involvement of key populations in decision-making around the three diseases, including development of the HIV concept note and ongoing dialogue around resource allocation and budget prioritization. Increasingly, integrated community services across disease and MNCH and improved capacity to mobilize for both service-side gaps and legislative discourse, strengthen communities' resilience and ability to facilitate relevant solutions.

Global Fund support is a significant factor in the Philippines' Blood Safety Program's ability to ensure a disease-free blood supply. A signature component of a 2006 grant, the program established a blood bank information system, procured medical equipment for blood screening, conducted capacity building at the Blood Center and sub-national facilities. It also supported the attendant standards and quality assurance processes.

HIV/AIDS

HIV prevalence in the Philippines is low, with an estimated prevalence of 51 cases per 100,000 in the general population in 2013.[2] But in the period 2001-11 the Philippines was one of nine countries worldwide that recorded a more than 25% increase in new HIV cases, at a time of global decline. Starting in 2006, where there was less than 1 case per day on average, the number of cases has risen steeply, to 24 cases reported per day by March 2015.3 Data from the Philippine HIV and AIDS Registry (Department of Health – National Epidemiology Center) shows a clear evolution from predominantly heterosexual to bi- and homosexual transmission, with sexual contact the main mode of transmission. The median age of those infected is 27.[4]

HIV prevalence reported in the 2013 Integrated HIV Behavioral and Serologic Surveillance (IHBSS) was 2.93%, for MSM, 53% for PWID and 5% for FSWs, with cases concentrated in the three highly urbanized areas of Greater Metro Manila, Metro Cebu, and Davao City.

While remittances from overseas Filipino workers are a boon to the economy, not all that they return with are as welcome. One in five reported HIV cases in 2009 was a returned overseas worker, with an average age of 35. Still, infection rates through local transmission are outpacing the introduced cases, marked by a decline in that rate to 11% in 2013[5]

The Philippines is unlikely to meet its MDG targets for HIV, according to UNAIDS, due in large part to the country's inability to meet the levels of prevention coverage required to contain the epidemic. Testing among key populations is low at an estimated 14% and there are no testing services targeting these vulnerable groups under the age of 18.[6] One contributing factor is that rapid testing is not available except in a few sites in Greater Metro Manila where they are being piloted. Even so, with the current guidelines, results can be released only upon confirmatory testing at a reference laboratory. With a 3-4 week turnaround time, it's a significant barrier for case identification efforts.

The new Global Fund investments supports the wider use of RDTs, with same day testing protocols to be implemented for both on-site and outreach testing.

Other activities that focus on the barriers that prevent vulnerable groups from accessing the continuum of HIV services include innovative strategies such as male-targeted sexual health clinics. These "sundown clinics", so named for operating at the end of the day when working males and students can better access services, will be replicated in other geographic target areas. Other community efforts include popular campaigns such as Red Whistle that use social media to raise awareness of HIV and promote prevention messages.

This grant also includes specific measures to target neglected but high-risk populations and stigma that excludes women who inject drugs, transgender and youth from harm reduction and other services. Advocacy for legal and regulatory barriers to services is similarly targeted and the police and community representatives support the delivery of HIV prevention and testing messages.

The PR for the two-year grant shifted from the National Department of Health (NDoH) to Save the Children, when disbursements began on July 1, 2015.

One of the success stories in Quezon City's HIV response is social hygiene clinics that tailor services and hours to accommodate specific populations, for example young male students and professionals.

TB

TB is the sixth leading cause of death and illness in the Philippines, a high TB and MDR-TB burden country globally. In 2013, there were an estimated 290,000 incident cases and 27,000 deaths.[7] Prevalence is high among high-risk groups such as the elderly, urban poor, smokers and those with compromised immune systems such as people living with HIV, malnutrition and diabetes.

Under the NTP, the country aims to detect 85% of TB patients and successfully treat at least 90% of them. An estimated 65,000 TB cases remain undetected and untreated: a significant impediment to goals of halving TB mortality and prevalence by 2015.[8]

Estimates from 2011 suggest there were 10,600 cases of MDR-TB, a figure likely to be a low estimate due to the high default rate. Mitigation strategies are hampered by a number of factors including stigma, which takes the form of community shunning, as well as discriminatory practices that lead to decreased usage of health services.

Lack of access to community-based care and psychosocial support, limited housing provision and allowances for food and travel are other obstacles to any decline in default rates. To address a human resources deficit in geographically isolated and depressed areas that contributes to high default and poor adherence to treatment, Health AIDERS (Accelerating Implementation of DOTS Enhancements to Reach Special Populations) are deployed. Their role is to support the implementation of better and more effective community direct observed tuberculosis short-course (C-DOTS), in addition to enhancing community health education.

Global Fund disbursements under the new two-year TB grant began in January 2014. The Philippine Business for Social Progress, a non-profit consortium of companies whose mandate is to promote corporate social responsibility, continues as the PR. Other priority activities include building up the TB information system, Programmatic Management of Drug-resistant TB and TB-HIV collaboration initiatives.

Malaria

Malaria is historically a leading cause of morbidity and mortality, affecting 14 million people in mostly mountainous, hard to reach areas of the country where basic health services are relatively inaccessible. Malaria endemic provinces were reduced from 66 of 80 provinces in 2003, to 53 provinces by 2013. Over this same period there was a significant overall reduction in the morbidity rate (51/100,000 pop in 2003 to 4.91/100,000 pop in 2014) and the mortality rate (0.8/100,000 pop in 2003 to 0.008/100,000 pop in 2014). By 2013, 97% of the total malaria cases reported in 2011-13 came from just 47 municipalities in 13 provinces.

Indigenous people, who comprise 24% of the population in endemic provinces (around 20 million people) have been identified as the population most at risk and are targeted for specific interventions.

Geographic isolation means limited access to basic social and health services as well as opportunities for basic economic activities. Where livelihoods are centered around gathering forest products, swidden farming and hunting, exposure to the malaria vector increases. Low education, little access to clean water and poor gender equity further predispose them to poor health and increases their vulnerability.

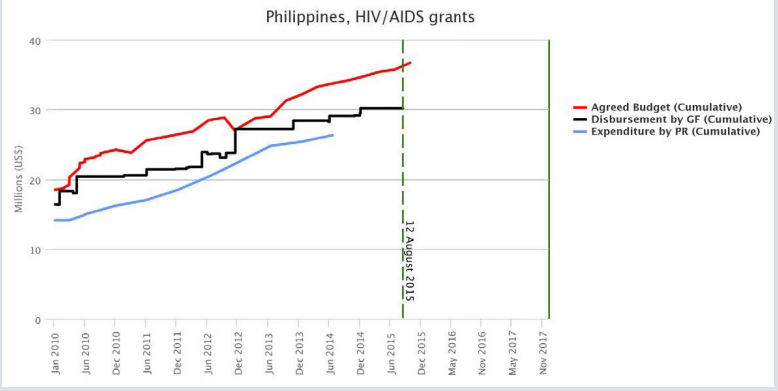
The barriers above pose challenges for the national program to provide preventive, diagnostic and curative services to these high-risk populations, making community efforts the cornerstone for success in shrinking the malaria map. Assuming the role of PR since 2005, the Filipinas Shell Foundation, Inc., the social arm of Shell companies in the Philippines, collaborated with local governments in target provinces in order to strengthen infrastructure and increase the capacity of community networks for malaria control strategies.

Disbursements of the $15.2 allocated for malaria by the Global Fund began in January 2015, for coverage of the 13 highest-burden provinces. The two-year program emphasizes vector control and improved information management and analysis. Other activities include capacity-building at central and provincial levels, emphasizing the skills needed to pursue elimination, implementing proper surveillance systems and maintaining quality across diagnostic, treatment and vector control programming.

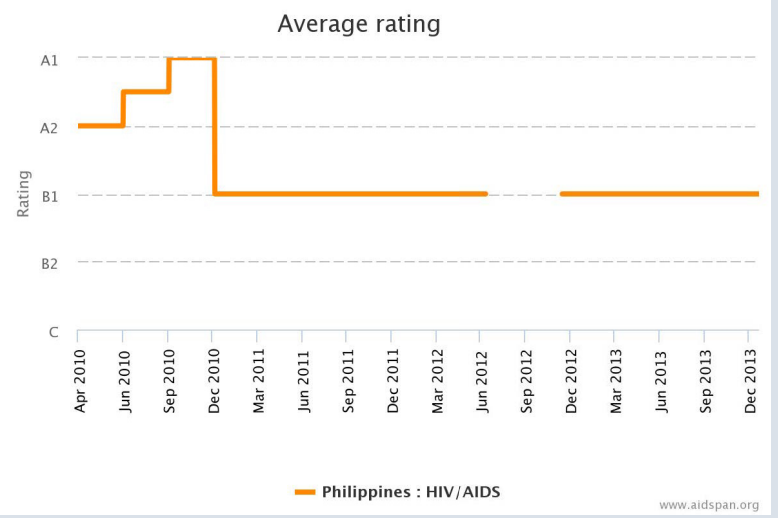
Philippines *(2013 statistics)**	
Total population	98,393,574
Male population (%)	50.1
Female population (%)	49.9
GDP per capita (US$)	2765.1
GNI per capita, Atlas Method (US$)	3270
Human Development Index	0.7
Life Expectancy (years)	68.7
Under 5 Mortality (per 1000)	30
HIV prevalence	**0.1**
HIV prevalence, Sex Workers	**0.1**
HIV prevalence, MSM	**3.5**
HIV prevalence, IDU	**52.3**
Estimated number of new HIV cases	**1,800**
Number of PLWHIV	**28,072**
Total number of people receiving ART	**5,564**
Number of deaths attributable to HIV/AIDS	**338**

Global Fund Finance

The Philippines has been a Global Fund recipient since 2006 for its HIV program. Between 2011 and 2015, there have been two active HIV/AIDS grants. The PR for the two-year grant shifted from the NDoH to Save the Children, when the NFM grant began on July 1, 2015. A total of US$ 32.4 million has been disbursed to date for the HIV response. The NFM HIV allocation is US$ 14.4 Million.



Expenditure has continued to lag behind budget for this grant. Between July and December 2010 there were no disbursement for Phase 1 of the grants because the PR had enough cash on hand to cover the next period's expenditures, including the close-out period. The disbursement for Phase 2 was stretched over 10 months (Dec 2009 to Sep 2010) due to changes in reporting periods. This was to realign the program cycle with the national fiscal year. Other reasons for the large balances were attributed to delayed payments for obligations incurred or activities conducted in prior periods, unimplemented activities, and savings from procurement through the Global Fund's own pooled procurement mechanism.



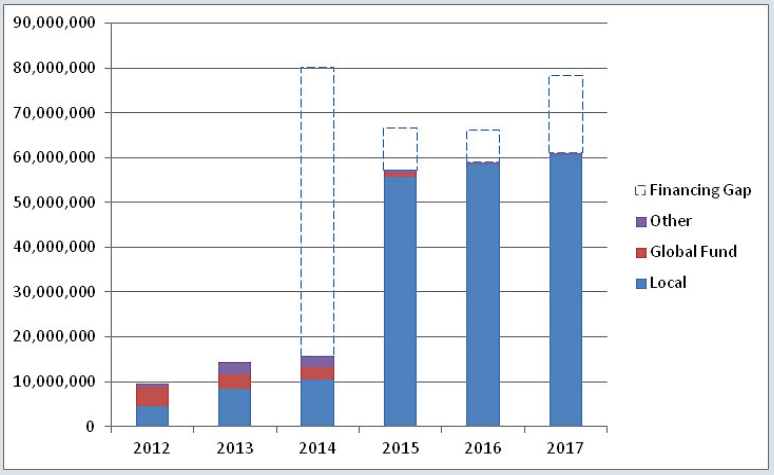
Average program performance in 2010 was good; 12 out of 14 reportable indicators were overachieved.

While performance appeared to exceed expectation, it was noted that the overachievement was based on relatively low targets drawn from a 2007 baseline. Only a single indicator was poorly achieved (45%); ART coverage of HIV-positive women. This was attributed to challenges in reaching pregnant women who were HIV-positive in conservative communities. This underachievement pulled down the overall quantitative rating of the grant from A1 to B1.

In 2013, the main challenge for program performance was partly due to small numbers of MSM and PWID accessing HTC and knowing their results (40%). Poor results in the percentage of PLWHIV picking up their ART on time (52%) along with three other top 10 indicators resulted in lower ratings. Underachievement was also attributed to low data quality, which hindered

proper determination of on-time pick-up of ART medication. Another top 10 indicator "Number of MARCY (young MSMs) reached by HIV/AIDS prevention activities" achieved only 21%. This was due to poor recruitment of peer educators to reach this key population. The PR was advised to complete requisite trainings and recruitments to achieve greater impact.

Investment in the HIV program



The total budget of the Philippines' HIV program has increased dramatically from US$ 6.7 million in 2012 to US$ 80.2 million in 2014, and a projected US$ 78.4 million in 2017. There was an extraordinary financing gap of 80% in 2014. Up to 2014, the HIV program had received US$ 4.7 million (2012), US$ 8.6 million (2013), and US$ 10.7 million (2014) from the government. Global Fund investment in the HIV program was US$ 4.3 million in 2012, representing 45% of the total budget. This investment continued in 2013 and 2014, with Global Fund contributions making up 22% (US$ 3.2 million) and 16% (US$ 2.6 million) of the investments respectively. Other sources of funding have helped make up budget deficits, reaching 18% of the national HIV budget in 2013. Funding of the HIV program from local sources dramatically increased in 2015 to US$ 55.6 million, and is projected to increase to US$ 58.6 million and US$ 60.7 million in 2016 and 2017 respectively. This is 97% of the current budget requirement and will be 99% of the 2016 and 2017 budgets. The Global Fund investment in 2015 is only 1.7% (US$ 967,662) of the current budget. The HIV program received an average of 0.6% of the Philippines' government's financing on health from 2012-2014. This proportion will increase to an average of 2.7% from 2015 to 2017. The HIV program has a 2015 funding gap of US$ 9.3 million (14%), with a gap of US$ 7.2 million (11%) and US$ 17.2 million (22%) for 2016 and 2017 respectively.

In the Philippines, controlling HIV starts with political commitment and innovative strategies

Key to the HIV response in a rapidly intensifying epidemic is active case finding. The Quezon City health department is meeting the challenge of finding hard to reach populations head on with its innovative approaches.

It's a busy Monday night at Klinika Bernardo in Quezon City, Metro Manila. Mylen greets her next client with a kind smile. The medical technologist's friendly manner puts him at ease, as she expertly draws his blood for testing.

The clinic exudes warmth and friendliness; everything from the way staff greet potential clients with welcoming smiles to the color of the couches and artwork hanging on the walls serve one interest: to make people comfortable enough to get tested for HIV. It's all part of Quezon City's efforts to encourage the highest risk populations to come in for a sexual health checkup.

"We do our best to provide a friendly atmosphere for confidential services," said Milton, who manages the clinic's database. He's alluding to the stigma associated with the evolving sexual norms that help spread HIV.

Increasingly risky sexual activities among young people coupled with low knowledge of HIV have produced an alarming spike in HIV incidence and prevalence. The bulk of infections are through heterosexual, homosexual and bisexual contact among young, single and studying or professional males.

Klinika Bernardo is one of the initiatives pioneered by the Quezon City Health Department as part of the country's response to HIV. Opened in 2012 within the Social Health Clinic to high demand for its services, the facility targets two KAP. In the mornings, services are tailored to entertainment industry workers. Then from 3pm to 11pm – a schedule that accommodates working and studying males – the "sundown clinic" serves clients from the MSM and transgender communities. It functions as a treatment and referral center for patients with sexual health related concerns. Shortly after it opened its doors, the alarming rate of the epidemic was quickly evident from the number of positive cases being diagnosed.

Klinika Bernardo is the gold standard in HIV services in the public sector, particularly when measured against other facilities. There are widespread complaints about the lack of confidentiality or exposure to stigma and discrimination at other facilities that deter people from seeking help. This has opened a new market for private-sector clinic models, most of which have seen a spike in demand for their services. Asia Society of the Philippines (ASP) iCon Clinic also opened in 2012, offering the same range of tests for STIs, HIV, TB, viral load and CD4 counts.

"Well-to-do MSM may feel more comfortable going to this clinic (rather than a public health facility). It's less crowded, located on a quiet street and they are assured of the highest level of confidentiality," said a staff member at ASP, a SR for the Global Fund since 2008. Services are provided for a fee, but at a subsidized rate. With revenue from user fees, along with other fundraising activities aimed at community education, the clinic is able to sustain itself and organize awareness-raising programming such as web shows and poetry slams.

The biggest challenge faced by many testing centers is the length of time it takes to receive test results. The Philippines has only recently introduced same-day rapid testing, with support from international donors including the Global Fund, and it is not yet widely available. Since testing is sent to the reference lab once a month, it can take as long to get results.

"Our database flags people who don't return for their test results, to make it easy for peer counselors to follow-up," Milton explain of how Klinika Bernardo deals with defaults. But while mechanisms are in place to mitigate loss to follow-up, the turnaround tim for tests means some clients don't return and as a result aren't aware of their status.

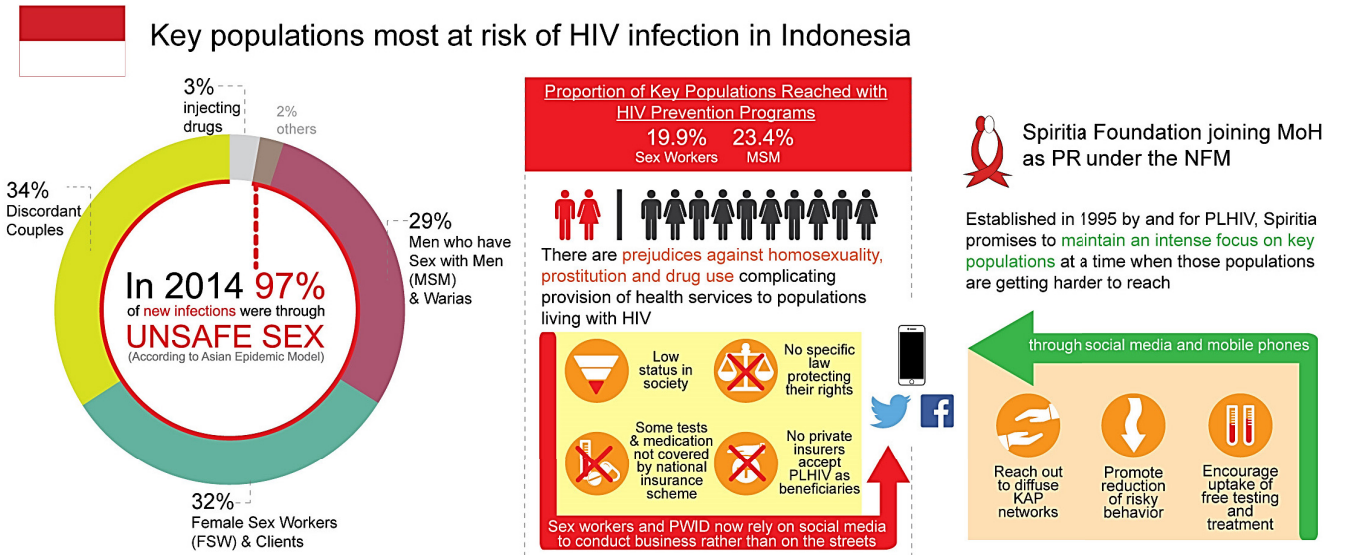
In contrast, private clinics such as ASP iCon Clinic tend to have few to no defaults. "The clientele is different," explains Cecilia, the project coordinator from ASP. "The problem we have here – all of us in the HIV community – is reaching the elite circles of MSM and drug users."

With the highest concentration of Lesbian, Gay, Bisexual, and Transgender (LGBT) culture – specifically social and sexual activity between MSM – in Metro Manila, and Quezon City having the most number of HIV cases, its Health Department has taken a proactive approach to accelerate HIV interventions.

Among the other innovative approaches to the HIV response are provider-initiated HIV services in TB-DOTS centers. The department has engaged a team of young peer educators and uses social media and other social networks to get its tailored messaging across. Allocations from the mayor's funds were used to establish the Quezon City Pride Council. The city has also issued a number of ordinances in both direct and indirect support of the public health response to HIV.

With 748 new HIV cases diagnosed in May 2015 – 51% higher than the same period a year earlier (495) and the highest number of cases ever recorded since 1984 – the Department of Health is recording a whopping 24 new cases per day, up from 9 per day in 2012. The epidemic will only intensify further without continued political commitment and aggressive innovations to accelerate the HIV response and encourage this largely hidden population to seek HIV testing treatment, care and support services.

Indonesia



Spread across a vast archipelago between Asia and Australia, the world's most populous Muslim country, home to over 600 indigenous languages, has a highly decentralized governance system.

Health systems performance depends on coordinated management of the simultaneous, localized epidemics of HIV, TB and malaria. Bolstered by solid economic growth since the 1998 financial crisis, the young democracy is increasingly committed to managing the epidemics without donor assistance. In 2018, Indonesia will become an upper middle-income country, a threat to its future eligibility for Global Fund support. State spending on diagnosis and treatment of all three diseases is rising, the national health budget went up to 5% of total public spending in the 2016 budget and national health care providers increasingly cover out-of-pocket costs (HIV and TB).

Traditional but not fundamentalist, Indonesia nevertheless harbors significant prejudices against homosexuality, prostitution and drug use, complicating the provision of health services to populations living with HIV. TB also carries significant social stigma and patient costs, limiting the resolve of health workers to test or notify patients.

Indonesia's TB burden was recently revealed to be 2.4 times the previous estimate, while its HIV epidemic is one of the few growing HIV epidemics in Asia. According to UNAIDS, new infections increased by more than 25% between 2001 and 2011. Critically lacking trained personnel, the government is seeking further Global Fund support to promote greater alignment of the two national programs – a key priority given that, in Indonesia, as around the world, TB remains the leading killer of people living with HIV, while very few HIV patients are screened for TB. Objectives under the national strategic plan include scaling up the number of GeneXpert machines in ART hospitals, linking HIV and TB health information systems, and combining systems of supply chain management for ARVs and anti-TB drugs.

Indonesia and The Global Fund

Indonesia's relationship with the Global Fund began in 2003 and there have been a range of grants since. A recent Office of the Inspector General (OIG) audit report (2015) showed weak administrative controls and compliance, and varied quality of health services, data, financial management controls, and supply chain management across different regions. These cause gaps in service-provision and follow-up, and significant forecasting, supply chain and distribution problems and subsequently, stock-outs.

The Global Fund also supports equipping primary care facilities, or puskesmas, with the fiscal, infrastructural and human resources needed to provide testing and treatment of HIV and TB, at the same time, from one facility. Success will hinge in part on the government's ability to alleviate the significant socio-economic burden associated with care due to costs of transportation, inability to work, and job loss.

Families of MDR-TB patients face potentially catastrophic expenditures on diagnosis, treatment and treatment monitoring, resulting in low case notification and poor adherence among those notified. Indeed, lack of adequate socio-economic support was the cause of loss-to-follow-up in more than half of TB patients. And though the national health insurance scheme now includes diagnosis and treatment of drug-sensitive TB, no provision mandates coverage of any costs associated with MDR-TB.

Meanwhile, malaria thrives in the poorer districts of Indonesia. Nearly half of its 240 million people are considered at risk for infection. However, it's in five eastern provinces that the problem is greatest: home to just 8% of the population, the area accounts for some 70% of all malaria cases. The disease also poses a significant threat to economic migrants, who face formidable barriers to accessing health care.

HIV/AIDS

HIV prevalence ranges from 0.1% or less in some provinces to more than 3 percent in others. Indonesia's HIV epidemic is concentrated among several key populations, including PWID, female sex workers, transgendered women (Waria), MSM and prison inmates. The country has a longstanding relationship with the Global Fund, having received its first grant for HIV in 2003. As for TB, malaria and health systems, the Ministry of Health has managed the grants as principal recipient with the support of 32 provincial sub- recipients. One of these SRs, the Spiritia Foundation, will join the MoH as PR under the NFM.

As PR, the Spiritia Foundation embodies the inclusive, participatory objectives of the Global Fund. Established in 1995 by and for PLWHIV, Spiritia promises to maintain an intense focus on key populations at a time when those populations are becoming harder to reach. Driven into the shadows, sex workers and PWID now rely on social media and mobile phones to conduct business and acquire drugs, posing new challenges for civil society groups accustomed to providing outreach on the streets.

The same technologies will be used to reach out to increasingly diffuse key population networks, to promote the reduction of risky behaviors and encourage uptake of free testing and treatment.

According to UNAIDS, fewer than 30% of PLWHIV in Indonesia know their status. Though programs targeting PWID are well established, efforts to curb sexual transmission have had less success; according to the Asian Epidemic Model, 97% of new infections in 2014 occurred through unsafe sex compared to just 3% from injecting drug use. Of those new infections due to unsafe sex, an estimated 29% occurred in MSM and Waria; 32% in FSW and their clients; and 34% in discordant couples.

Expanding treatment coverage is a pressing priority. To do this, the government is working to decentralize HIV services from hospitals to an average of five public health centers in each priority district. Currently inadequate TB/HIV collaborative activities will increase from 15 provinces in 2014 to a target of 33 in 2015. In 57 districts, joint TB-HIV working groups will develop a roadmap for educating health workers to increase HIV testing among TB patients. At present, an estimated two percent of TB patients are tested for HIV, suggesting that health workers are hesitant to broach the subject of HIV with patients.

Despite longstanding prejudices in Indonesia against PLWHIV, the government has significantly increased its commitment to fighting the epidemic. The total provincial-level budget for HIV grew to $6.4 million in 2014, just over twice the number budgeted in 2010. District-level spending on HIV meanwhile grew 222 percent between 2012 and 2014 to $7.2 million. The number of state-run health facilities offering diagnosis of sexually transmitted infections (STI) has gone up sharply, from 92 in 2010 to 801 in 2014. And the number of facilities providing ART has grown from 195 to 455 over the same period.

These gains are too little, though, in the face of one of Asia's most rapidly growing HIV epidemics. PLWHIV continue to face significant barriers to treatment due to their low status in society – a status reflected in the fact that Indonesia does not have a specific national law protecting their rights. Though eligible beneficiaries of the national insurance scheme, PLWHIV often find that some tests and medications for HIV are not covered. And despite a Ministry of Health decree that all insurance plans must provide HIV coverage, to date no private insurers accept PLWHIV as beneficiaries. According to the Asian Epidemic Model (AEM), the annual number of new infections will continue to go up unless the coverage and effectiveness of programs targeting MSM is expanded.

New state funding has helped reduce Indonesia's dependence on international financing. However, there is currently no legislation to support a prevention program managed by NGOs or community organizations. It is not guaranteed that the government will fill the vacuum if Indonesia graduates from eligibility for Global Fund investments.

TB

In 2014, a national TB prevalence survey with improved data collection techniques reported 1.6 million cases, giving Indonesia the second largest TB burden on the planet and an overall prevalence rate of 0.3%. The survey also indicated an annual incidence of 15,000 cases of MDR- TB, more than double the previous estimate of 6,800 new cases per year.

The Global Fund budget for 2014-2016 is $107.8 million for TB, and $61.3 million for 2016 and 2017. This includes private contributions from the Tahir Foundation: the largest ever made to the Global Fund by a private foundation in an emerging economy. However, as evidenced by a B2 rating on the TB grant to the MoH, grant management remains a problem. Year after year, Indonesia has absorbed less than 50% of its Global Fund allocation for TB, prompting a reprogramming request. The Global Fund has on several occasions noted its concern about grant management capacity in letters to the PR.

The national TB program has ambitious goals, aiming by end of 2017 to increase the TB case notification rate by a third; to reduce TB mortality by 19%; and to reduce TB prevalence by 22%. Essential TB services will be made available in all 514 districts, while 75 high priority districts will get access to a comprehensive TB package. The latter will include active case finding to identify large numbers of asymptomatic and bacteriologically positive cases; and further strengthening of diagnostic capacity.

Through Global Fund support, the installation in recent years of 41 GeneXpert machines in 36 districts has dramatically reduced diagnostic delays for drug-resistant TB. But that has yet to translate into reduced treatment delays.

A recent NTP analysis showed a mere 30% of MDR cases were put on treatment within seven days of receiving their results. This is not due to lack of appropriate drugs or trained personnel, but due to socio-economic disincentives to accessing care. Faced with a yearlong treatment regimen requiring long hospital stays and months of missed work, many patients choose not to go for treatment. Increased coverage of drug costs by state health providers should help ease the burden on some patients, while efforts to increase localized treatment options will reduce time and transport costs for others.

Domestic funding for the TB program has risen from $27.7 million in 2014 to $53.7 million in 2015. State spending on TB is projected to reach $100.6 million in 2017, a three-fold increase over 2013. Currently, 50% of TB patients pay for TB treatments through out-of-pocket expenditures, a rate which will decline as national health insurance providers step up TB coverage in line with state mandates.

Posyandus, or integrated village health posts, like this one in West Bandung District, are the first line of care for many Indonesians. Health care volunteers known as "kaders" counsel new mothers on everything from cooking healthy meals to preventing TB

Malaria

Endemic across much of the country's poorer east, malaria remains a major public health problem in Indonesia.

Marked variation in malaria incidence, distribution of vectors, and prevalence of drug-resistance has only added to the challenge of controlling the disease across more than 6,000 inhabited islands, an archipelago of immense ethnic, cultural and socio-economic diversity.

The 2009 malaria control strategy by the MoH set out to eliminate malaria by 2030. With Global Fund assistance since 2003, Indonesia has made significant progress toward that goal, particularly on large islands like Sumatra, Kalimantan and Sulawesi.

Faith-based organizations (FBOs) have played a central role in those control efforts, e.g. the Catholic-affiliated Association of Voluntary Health Services of Indonesia, or PERDHAKI. One of two PRs on the malaria grant with the MoH, PERDHAKI maintains a large network of parishes and health facilities in rural areas.

Since the implementation of the grant, those facilities have been equipped with diagnostic tools for microscopic analysis of blood samples, and with anti-malarial drugs to treat those infected.

Under current legislation, the Indonesian Government cannot fund NGOs or FBOs to deliver services on an ongoing basis. This means that the reliance of CSOs on Global Fund has increased.

PERDHAKI affiliated groups provide health education, distribute insecticide-treated nets, and mobilize community members to engage in vector control by eradicating mosquito breeding places. With its strong links to forest- dwelling populations, PERDHAKI has been able to greatly extend the ministry's reach, and the ministry has leveraged the capacity of FBOs like PERDHAKI and its SRs to conduct prevalence surveys among migrant populations.

As part of its NFM proposal, Indonesia has requested continued support from the Global Fund to allow PERDHAKI to shift the focus of its efforts to the eastern provinces. In collaboration with PERDHAKI and other partners, the MoH will endeavor to roll out integrated case management of malaria and other major childhood killers, including diarrhea and pneumonia. Global Fund support is requested for training of health workers on the three diseases as well as for the purchase of LLINs and RDTs. The proposal also requests Global Fund support for activities to enhance data quality and to improve the country's capacity to monitor the efficacy of its anti-malarial arsenal, including ACTs, insecticides and LLINs.

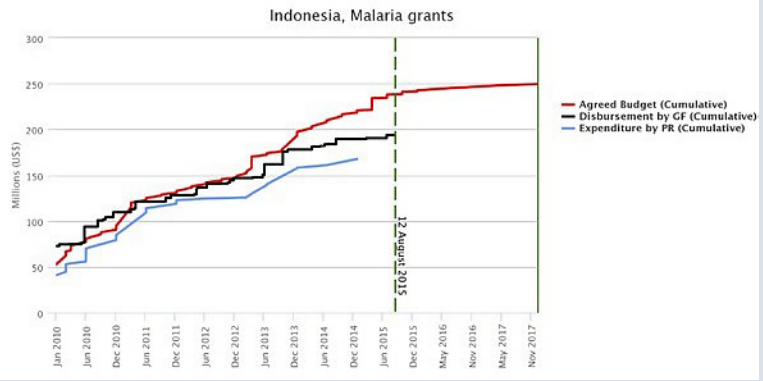
Though artemisinin resistance has emerged in the Mekong region, it has yet to be detected in Indonesia, thanks in part perhaps to a strictly enforced ban on the sale of artemisinin monotherapy. Nevertheless, the threat remains, and Indonesia is requesting assistance from the Fund to develop its own surveillance capacity by upgrading a network of regional laboratories operated by the Indonesian Center for Disease Control and Prevention (CDC).

Indonesia faces a considerable funding gap for malaria control - approximately $100 million for the three-year period between 2015 and the end of 2017. Total funding required by the malaria program for that period is $169 million; total state expenditure is projected at nearly $57 million, while other partners (WHO, UNICEF and USAID) are expected to cover $12 million in assistance. The Fund's disbursements for malaria will amount to approximately $54.8 million, leaving Indonesia with an "unfunded quality demand" of some $37 million.

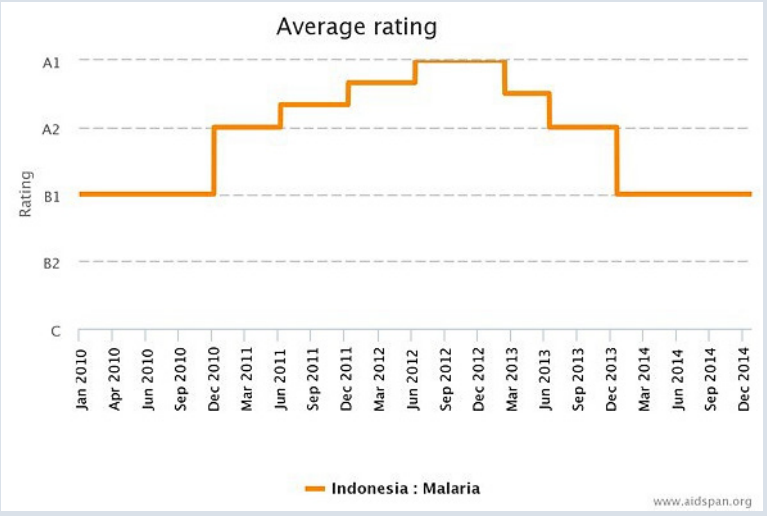
Indonesia *(2013 statistics)**	
Total population	249,865,631
Male population (%)	50.3
Female population (%)	49.7
GDP per capita (US$)	3475.3
GNI per capita, Atlas Method (US$)	3580
Human Development Index	0.7
Life Expectancy (years)	70.8
Under 5 Mortality (per 1000)	31
% of children <5 years who slept under an ITN the previous night (year*)	**3**
Presumed and Confirmed Malaria Cases	**1,833,256**
Malaria Admissions	**--**
Malaria Attributed Deaths	**45**

Global Fund Finance

Indonesia has been receiving Global Fund support for its malaria program since 2003. Between 2011 and 2015, there have been five active malaria grants, two of which remain active. All but one of the grants has been administered by the Ministry of Health as PR; the latest grant also has PERDHAKI – Association of Voluntary Health Services -- as a PR. A total of US$ 194.3 million has been disbursed to date for the malaria response. The NFM allocation for the Malaria is US$ 75.6 million.

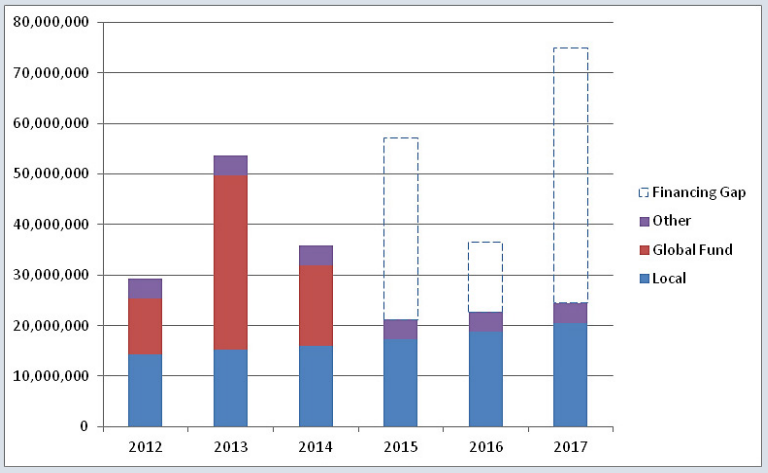


Disbursement, budgeting and expenditure have all complemented one another across the malaria portfolio. The grants have a strong absorption rate, in some instances achieving an over 90% burn rate and good programmatic performance. Differences between PR-requested disbursements and actual disbursements have been mainly due to carry-forward balances and the use of the Global Fund's pooled procurement mechanism for commodity purchases.



The grants managed by the Ministry of Health have shown consistently strong performance. Expenditure absorption, implementation of activities, completion of conditions and program management were noted to be strong. In 2013, there were delays in procurement of LLINs but these were attributed to delays within the pooled procurement mechanism. The PR worked effectively with the Procurement Agent to try to get the earliest possible delivery of the LLINs. In 2014, there was a downgrade in rating from A2 to B1 despite a quantitative indicator of A2 to reflect the continued concern regarding delays in RDT procurement and a number high risk management issues outstanding. Procurement delays through 2011 meant that targets for number of women screened with rapid diagnostics tests were under-achieved. Other targets under-achieved due to procurement delays include the number of LLINs distributed during routine antenatal care. In 2012, the PR achieved 65% of the target for the number and percentage of pregnant women screened (microscopy or RDTs) for malaria infection during ANC visits. This was due to the low level of trained midwives in high- and medium- endemic villages of the low endemic districts, which was not covered in the Phase 1 period.

Investment in the Malaria program



From 2010 to date, the Indonesian government has invested a total of US$ 156 million into its malaria program. This has been an average of 0.2 % of the annual government's financing on health. Total funding required by the malaria program for 2015-2017 is US$ 169 million. The government of Indonesia will be contributing approximately US$ 57 million, which mainly covers procurement of drugs, with other partners contributing US$ 12 million. Of the US$ 100-million financing gap from 2015 to 2017, the Global Fund will support Indonesia with US$ 63 million, leaving an unfunded gap of US$ 37 million. Indonesia has received some US$ 3.9 million annually from other donors since 2012, which should continue through to 2017.

In Jakarta, a Model of Care for MDR TB

Straining to be heard over the sound of a jackhammer, Susilo*, 45, recounted the journey he took to Jakarta from his home in Sumatra, more than 2,000 kilometers to the north, after he first felt the symptoms of MDR-TB.

"The doctor told me, if you want to be cured, you have to go to Persahabatan," he said, referring to the hospital in which he was still recovering, his voice muffled by the mask he has to wear at all times. Squinting as he grinned, Susilo said he had put on more than 12 kilos since the day he arrived at Persahabatan nearly 16 months ago, stick thin and severely ill, with a bloody cough he couldn't shake. "After 7 months, I converted – I no longer needed injections," he said. And now he was feeling just fine, especially since, in just a few weeks' time, he would be reunited with his family. "Yes, I'm very happy for this."

The only hospital in Jakarta with a designated MDR-TB ward, Persahabatan sees some 300 new and returning patients every day, including those like Susilo, who come from far away. If they're to recover, they have to find a way to stay there. That places a significant financial burden on their families, who sometimes fall into poverty due to the steep costs associated with obtaining care.

With Global Fund support, the government of Indonesia has been able to provide TB treatment for free since 2009. However, things like transportation to the capital, housing in or near the hospital, and months of missed work can amount to a year's earnings. If coordinated well, decentralization of TB services to the primary health care, or puskesmas, level is helping alleviate these socio-economic constraints, and that work is well underway. There has also been substantial progress in implementing the country's health insurance scheme. So far, approximately 130 million people have been enrolled, more than half of the country's population, making it one of the largest such programs in the world.

A nurse on the Global Fund-supported MDR-TB ward at Persahabatan Hospital in Jakarta discusses with patients the roughly 20-month drug regimen required to cure the disease

One of the architects of that insurance scheme is Dr. Nafsia Mboi, a former Minister of Health of Indonesia, who completed a two-year term as Chair of the Global Fund in April. "No one should face financial risks," she said several months before stepping down. "We have the responsibility of providing equal access for every citizen." And though there is far to go, she said, "we can only move forward. We can only win." Mboi believes that, per the roadmap guiding the scheme's rollout, the entire population will be covered by 2019. However, better policies are needed to cover the non-poor who are in the informal sector.

While the insurance scheme includes free treatment for regular TB, Indonesia still counts a staggering 680,000 "missing cases" every year, more than two-thirds of the country's total burden. Moreover, the growing number of Indonesians infected with multi- drug resistant strains—an estimated 15,000 new cases annually--require a much costlier, longer lasting, and more toxic second-line regimen not covered by insurance. Of confirmed cases of MDR-TB, an estimated 25% never initiate treatment; of those who do, as many as 40% later default.

With support from the Global Fund and other international partners, Indonesia's Ministry of Health has installed 41 GeneXpert devices in hospitals and clinics in 36 districts around the country. Capable of cutting the time it takes to diagnose MDR from two months to as little as two hours, the Xpert addresses one of the biggest challenges in TB control: a dearth of diagnostic capacity that has fueled the spread of resistant strains, forcing patients to endure prolonged periods of suffering and to risk infecting family members and friends.

Home to the largest respiratory center in the country, Persahabatan has long been at forefront of Indonesia's efforts to combat TB. In addition to a DOTS program and a designated ward for MDR patients, the hospital houses a state-of-the-art negative pressure isolation room as well as a quality-assured laboratory. From morning to night, trained technicians use the lab's Xpert device to process the dozens of sputum samples arriving each day. Meanwhile, masked doctors, like head of pulmonology medicine, Dr. Erlina Burhan, make the rounds on an open-air ward.

"Who is paying your expense here?" Dr. Burhan asked Susilo, the MDR-TB patient from Sumatra who had spent the past 16 months renting a house by the hospital.

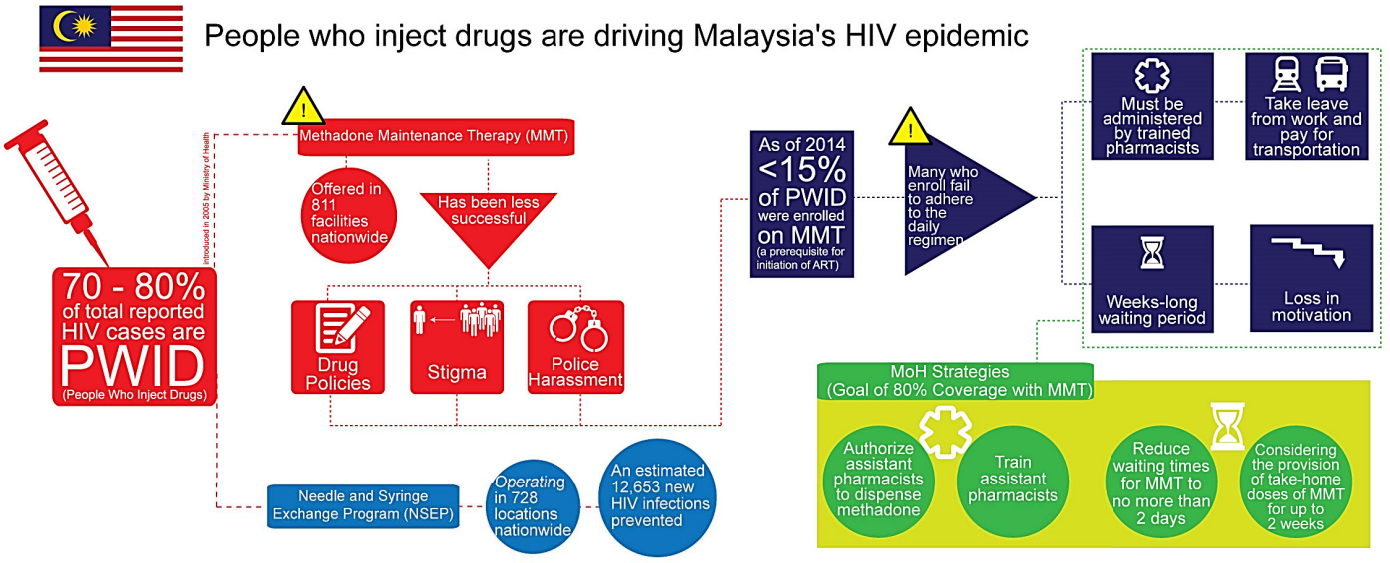
"My wife is paying," he replied.

"Oh, I see, your wife is rich?" she joked.

"Rich!" he said, chuckling. "No, but she is supportive. Jakarta is very expensive. And my son, he is helping me, too. He is a policeman."

With just a few weeks of his treatment left to go, Susilo seemed to have beaten the disease. But Dr. Burhan cautioned him to take care of his health or risk becoming re-infected. She feared he might soon be back. "He didn't say it, but he is also HIV positive," she explained. "So I am worried he will get TB again, because the virus makes him more vulnerable."

**name has been changed*



A multi-ethnic, multi-religious country of 30 million people, Malaysia boasts one of the most vibrant economies in Southeast Asia, high literacy rates, an average lifespan of nearly 75 years, and a well-developed health care system providing universal and comprehensive services.

HIV prevalence in Malaysia is less than 1 percent nationwide. However, screening conducted in the capital, Kuala Lumpur, and the surrounding Klang Valley in 2009 revealed a high burden of disease among at-risk populations, particularly injection drug users (22%); female sex workers (10.5%) and transgender, or Mak Nyah, sex workers (9.3%), prompting the government to apply in 2010 for financing from the Global Fund.

Though the financial burden of Malaysia's national HIV response is borne almost entirely by the government, the bulk of that spending goes toward treatment. (Of those eligible for ARVs (CD4 count less than 350), an estimated 37.5% are enrolled on treatment).

Malaysia and the Global Fund

In May 2011, the Global Fund signed its first grant with the upper-middle-income country to combat the spread of HIV among at-risk populations with a focus on prevention activities. The Malaysian AIDS Council (MAC), an umbrella organization of NGOs and civil society groups working on HIV/AIDS issues, is managing the grant as sole principal recipient.

Of the $10.7 million awarded under the grant, some $2.1 million remains unused, and the country is now weighing whether to submit a reprogramming request to put those savings toward the continuation of HIV prevention activities after the existing grant ends in June 2016. That would allow for the extension activities for an estimated 18 months, namely the continued scale up of a package of prevention services for the most at-risk populations.

HIV/AIDS

Representing 70 – 80% of total reported HIV cases, PWIDs are cited as a main driver of the country's concentrated epidemic, and harm reduction measures have long been the focus of the government's HIV response. In 2005, MAC introduced Methadone Maintenance Therapy (MMT) and a Needle and Syringe Exchange Program (NSEP) to curb the rapid increase in HIV among PWIDs. Initially limited to a handful of sites, these interventions have since been expanded nationwide, with NSEP now operating in 17 locations and MMT offered in 674 facilities, including 292 government-run community health clinics.

Over the past ten years, Malaysia has seen a dramatic reduction in the rate of HIV transmission through needle sharing. A 2013 study estimated that harm reduction had prevented 12,653 new HIV infections since the program started, and showed it to be a highly cost-effective intervention. Less successful have been efforts to enroll PWIDs on MMT, as outreach activities, which are carried out mainly by community-based organizations, continue to be hampered by punitive drug policies, police harassment of PWIDs, and the stigma attached to drug use.

As of 2014, fewer than 15% of PWIDs were enrolled on MMT, a prerequisite for initiation of antiretroviral therapy. Of those who do enroll in MMT programs, many fail to adhere to the daily regimen, which, according to current guidelines, must be administered by trained pharmacists, forcing the patient to take leave from work and pay for transportation to the site. Weeks-long waiting periods are also a significant barrier to MMT in Malaysia, the result in part of mandatory testing to determine whether a patient needs methadone. Long waiting periods are associated with a loss in motivation to undergo treatment, leading in many cases to drop out and ultimately relapse.

Malaysia has set a goal of 80% coverage with MMT. In an effort to facilitate treatment entry, the Ministry of Health has authorized assistant pharmacists to dispense methadone, and trained more assistant pharmacists to make up for a lack of qualified professionals. Responding to calls from technical partners to reduce waiting times for MMT to no more than two days, the Ministry of Health is now revising the MMT guidelines, and is considering, in addition a reduced enrolment period, the provision of take-home doses of MMT for up to two weeks pending a demonstration of good compliance.

As Malaysia prepares to embark on a new 15-year National Strategic Plan on HIV and AIDS, the country confronts a much-changed epidemiological context, one characterized by growing rates of sexual transmission and an increasingly female HIV-infected population; an estimated 21% of newly infected persons are women and girls. While the annual number of new reported HIV cases has declined to roughly half of the peak 6,978 recorded in 2002, sexual transmission now accounts for more new infections than injection drug use.

Transgender persons, or Mak Nyah, and female sex workers shoulder a significant portion of that burden. Although HIV prevalence has decreased to 4.2% among FSW and 5.7% among Mak Nyah, down from a cumulative 10.5% for both as of 2009, reaching these groups has become increasingly difficult. With the recent

closure of all brothels, solicitation has moved off the streets and on to websites, requiring service providers to rely on intermediaries to locate the highly mobile populations and to provide them with condoms, lubricants, educational materials and information about HIV testing and treatment.

A transgender sex worker in Pandan Indah, a commercial center of Kuala Lumpur, talks with a volunteer peer educator from PAMT, which provides counseling on HIV and health products, including condoms and lubricants, to prevent infection.

In view of these challenges, MAC augmented outreach to include peer educators. As PWIDs and sex workers themselves, peer educators have proven to be better able to reach marginalized groups. A community crisis response mechanism designed to provide sex workers and PWIDs with legal assistance upon arrest by the police has also been introduced.

In collaboration with Malaysia's Legal Aid Center, MAC also set up legal workshops to teach PWIDs and sex workers their basic rights. The workshops have ended, but MAC is working to forge stronger links between community- based organizations and legal aid services around the country as part of a larger Global Fund-endorsed effort to enhance an enabling environment for HIV prevention, treatment, care and support.

Particularly worrying is the sharp increase in HIV prevalence among MSM.

An as-yet-unpublished integrated bio-behavioral survey conducted in 2015 found that overall HIV prevalence among MSM was approximately 22%, nearly double that reported by the same survey in 2012. The trend comes as a more conservative interpretation of Islam takes root across the Muslim- majority state, where harsh enforcement of laws against sexual relations between men has generated a climate of fear and intimidation. Homosexuality is highly stigmatized in Malaysia and, consequently, MSM are a largely hidden population; fewer than half of MSM are reached with HIV prevention programs, and some MSM are said to seek treatment in neighboring countries to avoid detection by authorities.

Improving uptake by MSM of HIV services at public community clinics is the objective of one Global Fund-financed pilot program. MSM, PWIDs and transgender and female sex workers have tended to seek care at larger hospitals. As those hospitals grow more congested, an effort to decentralize healthcare has given rise in recent years to hundreds of new government-run community clinics providing free HIV counseling, testing and treatment, including first-line antiretrovirals. However, in spite of the clinics' convenience and comparatively short wait times, MSM in particular have been reluctant to use them.

With Global Fund support, the Kuala Lumpur AIDs Support Services Society (KLASS) endeavors to find out why this is so. Using an innovative, client-centered approach to case management, KLASS employs a single outreach worker to accompany patients through every step of the continuum of care, from confirmatory diagnosis to enrolment on ARVs and treatment adherence, with the end goal of viral load suppression. The pilot also aims to demonstrate the feasibility and effectiveness of collaboration between the NGOs who work with at-risk groups and the government community clinics, and to develop a standard protocol for HIV treatment and care at government-run community clinics around the country. The program currently works with 3 clinics and aims to enroll a total of 810 clients by June 2016.

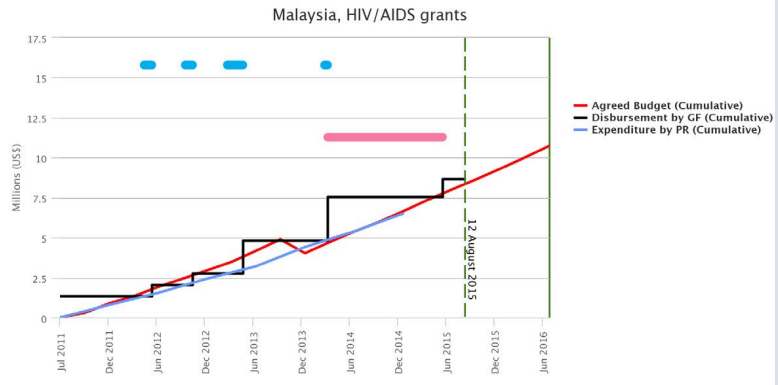
Malaysia has set an ambitious goal of becoming a high-income nation by the year 2020. Given its low disease burden and relatively high GDP, it may well be deemed ineligible for Global Fund support after 2016. This possibility has led to concerns about the fate of programs targeting MSM and transgender and female sex workers at a time when sexual transmission of HIV is increasing. Also worrying is that the country's HIV response has been largely restricted to these at-risk groups. There currently exists no data on the epidemiology of HIV in the client populations – the millions of men who buy sex from transgender and female sex workers – or in the spouses of the many MSM who identify as bi-sexual.

NGOs say that the Global Fund's stringent reporting requirements have helped them become more organized, in part by improving their financial reporting, which can assist in future fundraising, and developing more robust monitoring and evaluation. And by investing in capacity building through, for example, the regular training of outreach workers, the Global Fund has set an example that the government seems to be following; over the past two years, the Ministry of Health has allocated substantial funds for new capacity building programs.

Malaysia *(2013 statistics)**	
Total population	29,716,965
Male population (%)	48.5
Female population (%)	51.5
GDP per capita (US$)	10538.1
GNI per capita, Atlas Method (US$)	10430
Human Development Index	0.8
Life Expectancy (years)	75
Under 5 Mortality (per 1000)	9
HIV prevalence	**0.4**
HIV prevalence, Sex Workers	**4.2**
HIV prevalence, MSM	**12.6**
HIV prevalence, IDU	**18.9**
Estimated number of new HIV cases	**3,393**
Number of PLWHIV	**86,324**
Total number of people receiving ART	**17,369**
Number of deaths attributable to HIV/AIDS	**5,900**

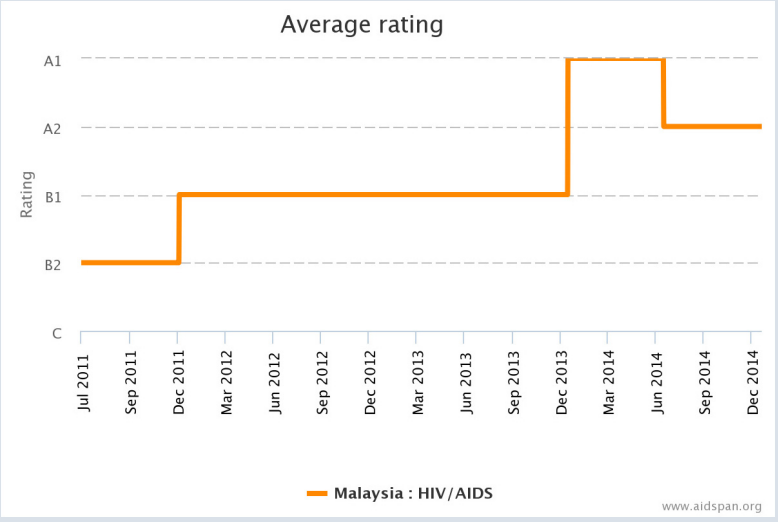
Global Fund Finance

Malaysia has received Global Fund support since 2011 for its HIV program. Between 2011 and 2015, the Malaysian AIDS Council has served as the PR on the active grant. A total of US$ 8.6 million has been disbursed to date for the HIV response. The NFM HIV allocation is US$ 6.8 Million.



Disbursements for this grant have in the most cases exceeded expenditure, even in cases where grant performance was poor. According to Global Fund reports, in the reporting period Jan-Sep 2012, the recommended amount is outside the indicative disbursement range for a B2-rated grant, but in its disbursement decision, the overall context and efforts made by the PR to catch-up and overcome underperformance were acknowledged.

Underperformance was mostly a consequence of poor procurement by the MoH for testing kits. Future disbursements will enable the PR and SRs to continue running the program and catch up with delayed activities, while working in parallel to actively ensure that the gap in the provision of kits is covered.



In the first evaluation period (Jul-Dec 2011), program performance was below expectations, reflecting an all indicators rating of 54% and a rating of B2. According to Global Fund reports, none of the eight indicators with targets for the period achieved their targets. Only a single Top Ten indicator "Number of PWID outreach workers trained" achieved 94% of its target. Two indicators reported an achievement of between 70 - 90% while the remaining five indicators reported an achievement of below 60%: The main reason for underperformance is that during the reporting period no prevention kits specifically targeting the needs of PWID and commercial sex workers (CSW) were made available by the MOH to the PR and SRs and this hampered the implementation of the majority of the activities. Upon clarification, the Global Fund was informed that the budget for the procurement of the kits had been delayed and was finally approved in the 2012 budget. In subsequent periods, program performance continued to improve steadily achieving a B1 rating in 2012 and 2013 further improving to A1 and A2 in the first two quarters of 2014 respectively.

Investment in the HIV program

National investment in the HIV program has increased steadily from US$ 30.7 million in 2010 to US$ 56.7 million in 2013. Because Malaysia is negotiating a differentiated approach to its Global Fund support under the NFM, supporting the development of its HIV national strategic plan, it has yet to develop a financial gap analysis. The NSP draft is expected by the middle of the fourth quarter of 2015.

In Malaysia, Stakeholders Work Together to Fight Addiction

Zainuddin, an outreach worker with Insaf Murni, talks to PWIDs encamped under a highway overpass about safe injecting behavior, VCT and MMT

It was just before noon when Zainuddin, an outreach worker with the non-profit organization Insaf Murni, stopped on the side of the road, a two-lane highway in Selangor state on the outskirts of Kuala Lumpur. As the traffic whizzed by, Zainuddin went around to the trunk and retrieved the supplies: dozens of clean needles and syringes, packs of condoms, brochures on behavior change, and information on free health services, including HIV voluntary counseling and testing (VCT) and MMT.

The intended recipients, a dozen or so men, all PWIDs, were squatting under a bridge on the other side of the tracks that ran along the road. While Zainuddin was packing up the supplies, another outreach worker named Abdul Rahman ran ahead to ask the men for permission to enter the area. After a couple of minutes, Abdul Rahman gave the all-clear, and Zainuddin set off down the tracks, a duffel bag slung over his shoulder.

"There's a misconception that the moment we leave, the police come in—that we're informants," said Joselyn Pang, a project director with the MAC, an umbrella organization of NGOs and civil society groups in Malaysia working on HIV/AIDS issues and PR on the Global Fund grant, who came along for the visit. "That's why we need to be closely engaged with all of the stakeholders, including the police and the state health department. Things are improving, but we still face challenges; the moment a person tests positive for heroin or another opioid, they will be arrested and held for 14 days."

Long the primary driver of Malaysia's HIV epidemic, injection drug use accounts for an estimated 75% of the country's total reported cases. However, nearly a decade after the government and NGO partners introduced two harm reduction interventions—MMT and a NSEP--transmission of HIV via injection drug use has declined sharply. A 2013 study estimated that harm reduction had prevented 12,653 new HIV infections since the programs started, and showed it to be highly cost-effective.

Still, PWIDs remain a vulnerable population. There are an estimated 170,000 injected drug users in Malaysia and as of 2014, just 15% were enrolled on MMT. National guidelines restrict ARV use to those who are no longer actively using injected drugs, which leaves a huge population at risk for transmitting the disease to someone else. Just 23,000 PLWHIV are enrolled in the national ART program, of an estimated 90,000 people living with the disease.

Established in 2006, Insaf Murni (the name translates to "Pure Conviction") is committed to eradicating injection drug use and improving the quality of life of PWIDs by facilitating their access to treatment and rehabilitation services. Malaysia's Global Fund grant supports a volunteer staff of 14, many of them former PWIDs themselves, who fan out to the ports and underpasses where PWIDs tend to congregate. Management is led by medical professionals, and peer educators are often enlisted to dispense needles and engage new clients.

In addition to punitive drug policies and police raids, outreach workers say some of the biggest barriers to enrollment on MMT are homelessness and unemployment. Both make it difficult and dangerous to find clients who are almost always on the move, while also prohibiting clients from presenting daily at a clinic in a fixed location. To help remedy this, Insaf Murni is currently working with the National Drug Agency to provide temporary shelters for homeless PWIDs for 1-3 months.

Another persistent problem is the long lag time between client registration for MMT and treatment initiation. "Loss to follow- up is one thing," says Hairudin Masnin, a program officer with UNAIDS. "But after two or three weeks, they relapse and then they have to start all over again. So we've been pushing for shorter waiting lists at government facilities. When clients come in, they should get the methadone immediately or, at the very latest, the following day." Citing a lack of human resources to dispense MMT -- only pharmacists are authorized to do so -- the government is in the process of revising MMT policy to allow assistant pharmacists to dispense the medication and to permit take-home doses for up to two weeks.

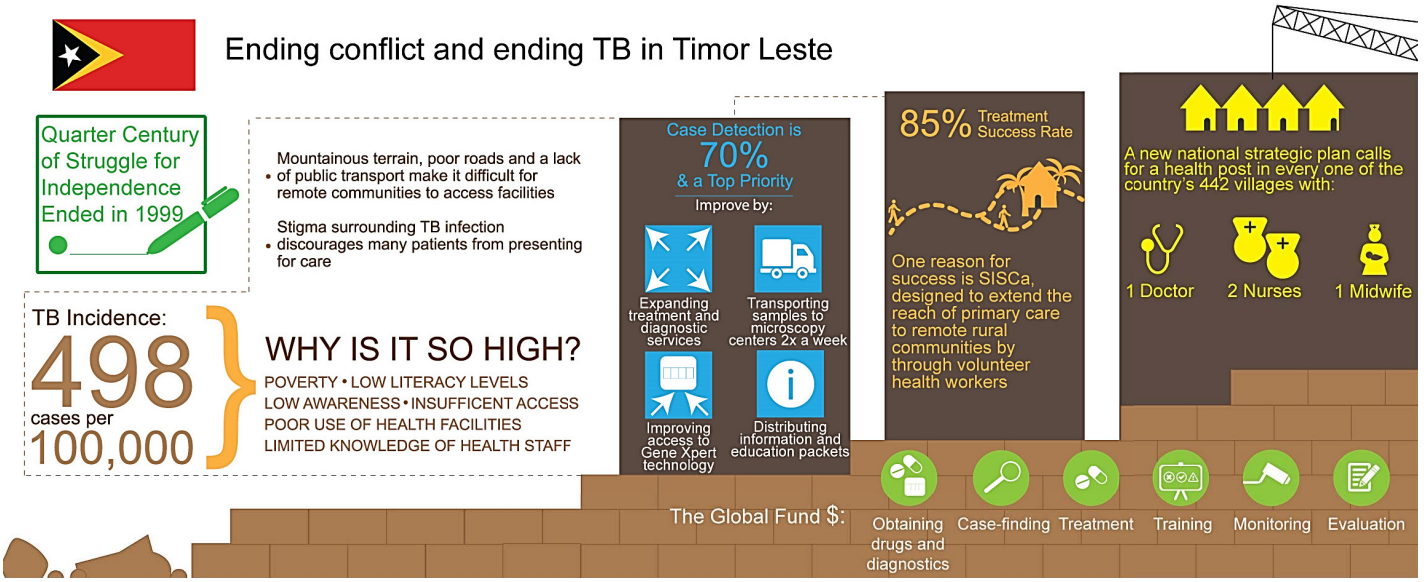
As the men gathered around, some lounging on weatherworn sofas, Zainuddin and Abdul Rahman passed out brochures. They explained why it was important to use clean needles, and how MMT could help free them from addiction to heroin.

"But if I want to go on MMT, I must have an ID card?" one man asked.

"Yes," said Zainuddin. "But you can get an ID card very easily, they will help you."

Zainuddin added, "If you are willing, I can bring you to the clinic myself." The man considered this for a moment, and then nodded. "O.K.," he said. "I am willing." Zainuddin told the man he would make an appointment for him that Friday, and offered to find him a place to stay while he undergoes treatment.

"Thank you," said the man.



Nearly three years after the United Nations ended its peacekeeping mission in Timor- Leste, the island nation of 1.2 million is stable, secure and growing fast.

Though officially classified lower middle-income by the World Bank, approximately 50% of the population lives below the poverty line, and an estimated 45% of children under 5 are malnourished— the legacy of a bloody, quarter-century struggle for independence from neighboring Indonesia. That conflict, which ended in 1999, left the country's infrastructure in ruins, incapable of serving the health needs of a largely rural population.

Now, flush with revenues from vast oil and gas fields found in the Timor Sea, the government is forging ahead with an ambitious decentralization of the health system. A new national strategic plan calls for a health post in every one of the country's 442 villages. Each is to be staffed with one doctor, two nurses, and one midwife and equipped to provide a basic service package, including primary level health services like immunization and obstetric care, as well as testing and treatment of HIV, TB, and malaria. While ambitious, the success of the strategic plan may be hampered by existing weak governance and capacity.

Timor- Leste and the Global Fund

Since its inception, Timor- Leste has relied heavily on support from the Global Fund, receiving its first grant in 2002 to finance a fledgling malaria control program. A major public health issue in Timor- Leste, malaria was long the country's leading cause of morbidity and mortality. But firm political and financial commitment paved the way for success; a decade after the introduction of evidence-based interventions--including quality surveillance, integrated case management, distribution of LLINs to vulnerable populations and targeted vector management -- malaria cases had declined by 97% nationwide.

The challenge for the country now is to maintain that momentum. As Timor- Leste moves toward a malaria pre-elimination phase (5 of the country's 13 districts are now classified as pre-elimination), cross-border migration threatens to undermine hard-won gains. Imperative to continued progress is the collaborative development with Indonesia of systems and processes to prevent the introduction of new cases from West Timor, where malaria is endemic. Also critical to success is improvement of the country's health management information system for rapid response to outbreaks, as well as further integration of malaria diagnosis and treatment into primary health care.

Ensuring long-term financial sustainability is a challenge common to all three disease programs, and the Ministry of Health more broadly, with the impending departure of significant bilateral and multilateral donors from the sector. Due to its low human resource capacity, Timor- Leste spends a significant proportion of the amount allocated to
it by the Global Fund on administrative tasks. Another large slice of the budget goes toward training, and the Global Fund has pressed the Ministry of Health to find ways the many training sessions can be maximized.

HIV/AIDS

The prevalence of HIV in Timor- Leste is believed to be less than .2% of the total population. However, as with TB, estimates of disease burden are informed by weak surveillance and reporting systems. While the country recorded 484 cases, and 52 registered deaths, at the end of 2014, a SPECTRUM analysis conducted by UNAIDS indicated a burden more than twice that size, with an estimated infected population of 1,045 persons. The epidemic is concentrated among several key groups, chiefly men-who-have-sex-with-men and female sex workers. Prisoners, victims of sexual violence and uniformed personnel are also considered to be at high risk of infection.

Access to treatment is the most pressing challenge for Timor- Leste. In 2014, just 176 people living with HIV were enrolled on ARVs. The low number is likely due to a lack of awareness of HIV status, lack of referral and follow-up, and stigma surrounding the disease. The country's 2010 Global Fund grant for HIV, now in Phase 2, supports a program designed to combat stigma by strengthening PLWHIV networks around the country. That program is led by Estrela+, a small non-profit organization and a sub-recipient, which works to ensure that the rights of PLWHIV in Timor- Leste are recognized and respected and that PLWHIV have a voice in decision-making on HIV policy.

The Global Fund also supports the work of Timorese CSOs providing care and support for the most-at-risk populations. The Josepha Clinic, a rest home in Dili run by Catholic nuns, offers free food and housing for PLWHIV, victims of domestic violence and others. One point of concern for CSOs is their relationship with the National AIDS Commission (NAC).

Set up to provide independent advice to the Ministry of Health on all matters related to HIV/ AIDS, the NAC has in some cases, duplicated projects funded under the Global Fund grant, including an outreach program targeting MSM and sex workers and a separate rest home for PLWHIV in an area outside the capital. While there is a need for an additional rest home, CSOs working on HIV worry that

the NAC home, which is designated specifically for PLWHIV and is located far from the city center, will only add to stigma toward the HIV positive community.

TB

TB program manager Alberto Mascarenhas (left) and program officer Miguel Jorge assess the quality of a sputum sample collected at a home in Liquica district

Despite significant gains in recent years, Timor- Leste continues to suffer from endemic tuberculosis, with an estimated incidence of 498 cases per 100,000 persons, among the highest in the world. One challenge is a dearth of quality data to guide control and prevention activities; due to a lack of technical capacity, no empirical studies of disease burden have ever been performed. Though the government would like to conduct a national prevalence survey, spending to date has gone toward more pressing needs, such as treatment and case detection.

Improving the case detection rate, now at an estimated 70%, is a top priority for Timor- Leste. Mountainous terrain, poor roads and a lack of public transport make it difficult for remote communities to access facilities. Meanwhile, stigma surrounding TB infection discourages many patients from presenting for care. The NTP seeks to overcome these obstacles by expanding TB treatment and diagnostic services to health posts. The NTP has also committed to ensuring the transport of sputum samples from health posts to microscopy centers at minimum twice per week, and to improving facilities' access to GeneXpert technology for effective diagnosis of smear negative TB.

Additional interventions aimed at improving the TB case detection rate include annual screening in congregate settings, such as prisons and orphanages, and home visits by health workers to interview the family members of active TB cases. To improve case detection of TB in children, which is believed to be highly under-diagnosed in Timor Leste, the NTP plans to train doctors at all levels of the health care system on management of childhood TB. And with the help of previously cured TB patients, the NTP will disseminate an information and education packet designed to raise the low level of public awareness about TB, also a key impediment to case detection.

There are currently three GeneXpert machines in Timor- Leste – one at the National Hospital in the capital, Dili; one at the Klibur Domin campus in Liquica district; and a second in Dili at the non-profit Bairo Pite clinic, where a full third of all TB cases in the country are diagnosed and managed. The national strategic plan calls for two additional GeneXpert facilities by 2020, as well as a new National TB Reference Laboratory to be built with support from the Korean International Cooperation Agency (KOICA). However, maintaining the machines has been difficult in a country where electricity is inconsistent and technical expertise is lacking. As the GeneXpert at the National Hospital is not functioning, sputum samples are sent instead to Bairo Pite for analysis.

Anticipating greater numbers of MDR-TB cases with increasing diagnostic capacity, the NTP plans to open a second treatment facility at the National Hospital to complement the existing MDR-TB treatment facility at Klibur Domin. While case detection remains a challenge in Timor- Leste, those patients found and enrolled on treatment tend to be cured; treatment success rates in the country consistently exceed the WHO target level of 85%.

One reason for that success is SISCa, the integrated community health services project designed to extend the reach of primary care to remote rural communities by mobilizing cadres of volunteer health workers. When patients with active TB complete a course of treatment, volunteers are awarded a stipend of USD $40. Such performance-based compensation has proved effective in expanding the provision of DOTs to TB patients in hard-to-reach areas. As outlined in the NSP, Timor- Leste has set a goal of increasing the treatment success rate for regular TB to 90%, and for MDR-TB to 70%, by 2020.

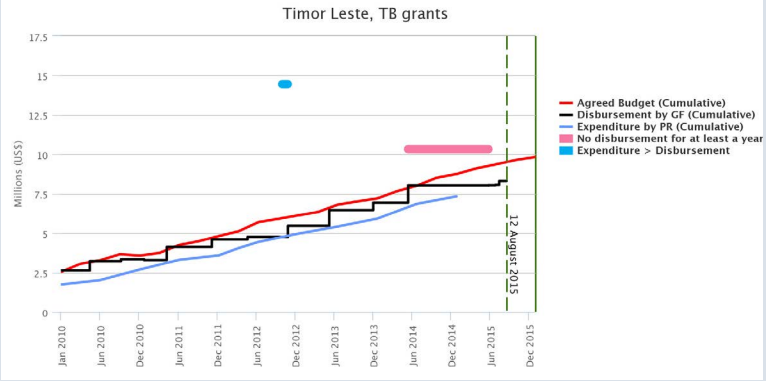
Malaria

With the first phase of a 2010 grant nearing its end, the National Malaria Program has submitted a reprogramming request to extend financing for previously planned activities until 2017. The request coincides with the launch of a new National Malaria Strategy (2015 – 2020), which includes plans to dispatch a force of 30 community health volunteers to carry out malaria control and prevention activities in hard-to-reach, high risk areas along the border. The strategy also calls for the expansions of activities into another district, Manufahi, however bottlenecks in procurement have forced the sub-recipient, HealthNet, to postpone that work. Three months after submitting a request for essential equipment, HealthNet was still waiting for that equipment to be delivered.

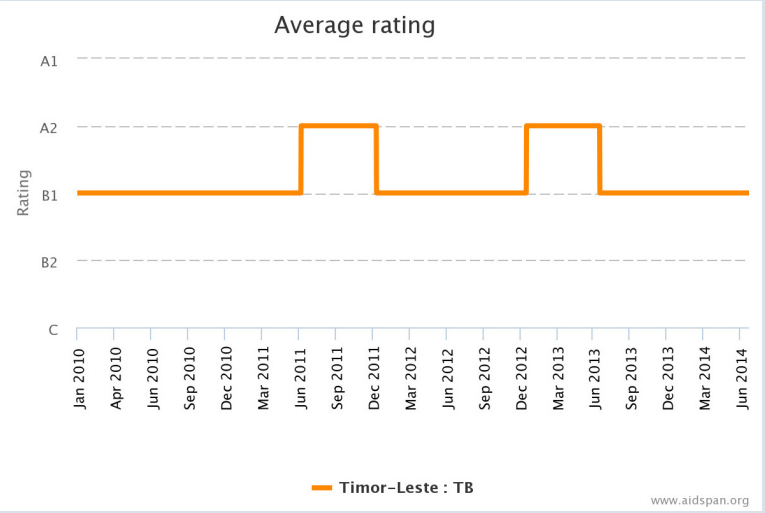
Timor Leste *(2013 statistics)**	
Total population	1,180,069
Male population (%)	50.8
Female population (%)	49.2
GDP per capita (US$)	875.8
GNI per capita, Atlas Method (US$)	3000
Human Development Index	0.6
Life Expectancy (years)	67.5
Under 5 Mortality (per 1000)	57
New and relapse notified TB cases	**3,757**
Notification rate of new and relapse TB cases	**318**
Estimated MDR-TB Cases (limits)	**83(70-96)**
Confirmed MDR-TB Cases	**2**
TB patients with known HIV Status (%)	**41**
Number of HIV positive TB patients	**7**

Global Fund Finance

Timor- Leste has received funding from the Global Fund since 2004 for its TB program. Between 2011 and 2015, there has been one active TB grant with the Ministry of Health as PR. A total of US$ 8.2 million has been disbursed to date for the TB response. Timor- Leste's NFM TB allocation is US$ 5.1 million.

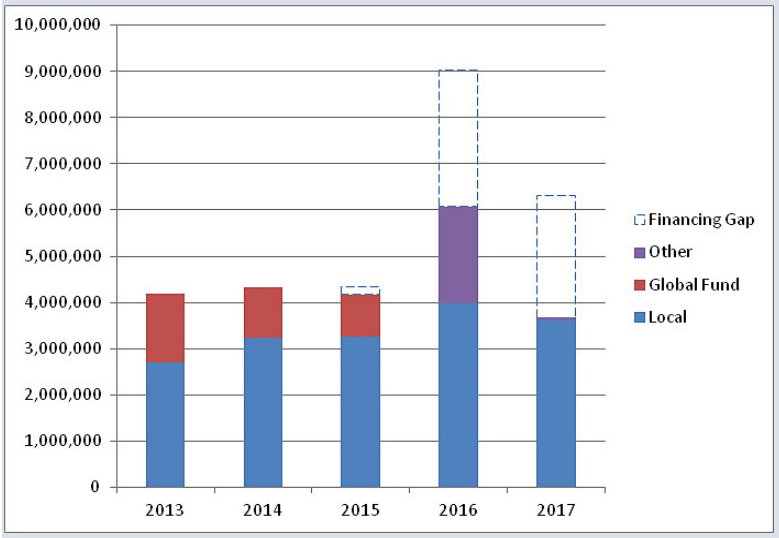


Disbursements have been in close tandem with expenditure and approved budgets. There were instances where expenditure exceeded budget due to shortcomings in calculating the forecasted budget. In the period June 2014 to June 2015, there was no disbursement; analysis of the cumulative figure shows that cumulative disbursements exceeded cumulative expenditure throughout the period indicating a huge carryover of cash balances for reasons unknown.



Global Fund reports show that for the period under review, the program demonstrated sound results overall. Under-achievement on the number of MDR-TB cases receiving culture and sensitivity testing was due to contamination of samples sent for testing. This indicator was a focus of discussion with the PR during the Phase 2 assessment.

Investment in the TB program



The total budget of the Timor- Leste program was similar from 2013 to 2015 (an average of US$ 4.3 million) but is projected to dramatically increase in 2016 to US$ 9 million and US$ 6.3 million in 2017. This huge increase in the budget is resulting in a projected financing gap of US$ 3 million (33%) and US$ 2.6 million (42%) for 2016 and 2017 respectively. Up to 2015, the TB program had received US$ 2.7 million (2013), US$ 3.2 million (2014), and US$ 3.3 million (2015) from the government. The government has been the greatest contributor to the TB program with an average of 5% (2013-2017) of the total health financing going to the TB program. Global Fund investment in the HIV program was US$ 1.4 million in 2012, representing 35% of the total budget. This investment continued in 2014 and 2015, with Global Fund contributions making up 25% (US$ 1.1 million) and 22% (US$ 915,000) of the investments respectively. There have not been any other sources of funding to the TB program. A projected US$ 2.1 million and US$ 65,000 will be provided from other sources in 2016 and 2017 respectively. Funding of the TB program from local sources is set to increase in 2016 and 2017; US$ 4 million and US$ 3.6 million respectively.

As Timor- Leste Battles TB, one NGO Shows the Way Forward

From Dili, the fast-growing capital of Timor Leste, a newly paved road leads past a barren stretch of beach to the village of Tibar, ten miles to the west. There, Klibur Domin, an East Timorese non-profit organization, is working to halt the spread of tuberculosis where the disease has hit hardest – among the poor in remote rural communities largely cut off from quality care.

After decades of violent conflict, Timor Leste emerged in 2002 an independent country forced to reckon with a disease burden far larger than it could handle on its own. Fighting had left its health system in tatters, and some three quarters of its population displaced. Among the many who fled abroad were hundreds of health professionals. Poverty soared and with it malnutrition, creating the conditions for tuberculosis to flourish. And flourish it did.

Nearly 14 years later, this legacy of the conflict can be seen in an estimated TB incidence of close to 500 cases per 100,000 persons: one of the highest in the world. Moreover, those numbers likely underestimate the epidemic's true extent; data generated by the country's weak surveillance system are highly unreliable, making it difficult to ascertain where control efforts should be focused. Stigma, low levels of literacy and a lack of awareness about disease transmission only make matters worse.

"We have a major problem with case detection," says Klibur Domin director Joaquim Soares. "People fear tuberculosis, but they don't know the signs and symptoms or any other basic information about the disease. If someone in the family has a cough, they usually assume that there's a problem with their tradition. So they'll go to a traditional healer to find out what's wrong, and the healer doesn't understand what TB is either. This is one of the biggest challenges we face."

Klibur Domin, which in the local language, Tetum, means Sharing Love, was founded in 2000 by the Ryder-Cheshire Foundation in Australia. Established after the devastating civil conflict that broke out in response to the 1999 referendum on independence, the health facility serves as a refuge for patients from rural areas as they recover from illness or injury after receiving treatment in Dili. More than a rest home, though, Klibur Domin has emerged as a key player in the country's fight against TB, partnering with the government, the Global Fund, and international NGOs to provide care and support for affected communities in two west-central districts.

Joaquim Soares, director of Klibur Domin, displays a TB "postcard" illustrating the signs and symptoms of infection at the home of a patient in East Timor's Liquica district.

Last year, Timor Leste's National Tuberculosis Program set a goal of raising the TB case detection rate from its current 70% to at least 90% by 2020. As part of its effort to reach that target, the NTP plans to scale up Klibur Domin's highly successful model of population screening: a mobile community outreach program that utilizes the country's cadres of community volunteers to support case detection and DOTS in rural villages.

Community volunteers, or promotor saude familia, as they're called, are trained to find and refer suspected cases in their own villages, and to encourage them to provide a sample of sputum for testing. The samples are collected the following day by mobile teams led by Klibur Domin staff in each of the sub-districts where the organization works. The teams prepare slides of the samples on the spot, and then transport them back to the laboratory on Klibur Domin's campus for microscopic analysis.

The volunteers also follow up with patients previously treated for TB to screen family members for infection, and to distribute TB "postcards" with graphics demonstrating how the disease is transmitted and what people can do to stay safe.

Patients who test positive for TB typically spend two months at Klibur Domin while undergoing intensive treatment. Inpatients are provided with medical care, if needed, as well as nutritious food and health education. After patients return home, volunteers monitor their adherence to the remainder of the regimen. When a patient is cured, the volunteer receives a $40 stipend, part of a performance-based compensation scheme paid for by the Global Fund grant.

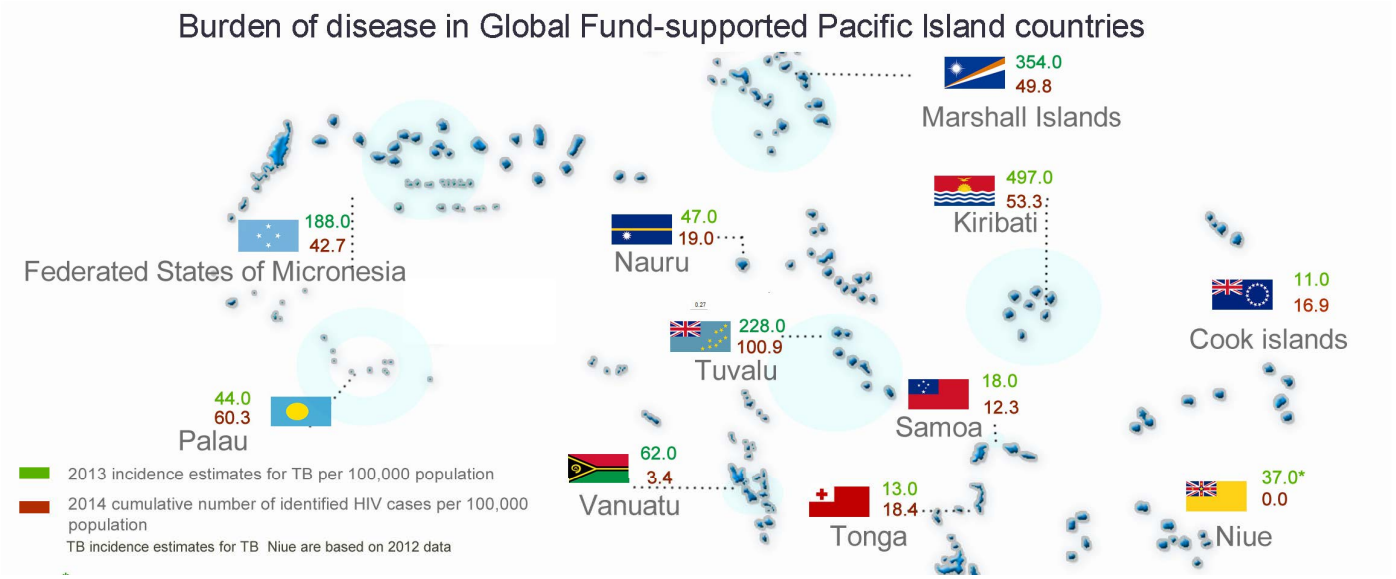
Children, in particular, are often at high-risk of infection due to the low-quality of housing in rural areas. And in Timor Leste, the problem may be far bigger than the numbers reflect. Just over 10% of TB cases detected in the country in 2014 were in children, roughly half the global average. Yet some 45% of the country's total population are children under 15 years of age. Experts believe a heavy reliance on sputum smear diagnosis is likely to blame; young children are typically incapable of expelling enough sputum for microbiological confirmation. Even when they can produce sputum, there may be too few TB bacilli in the sample for an accurate test.

"It's very complicated," says Soares. "In most places, there isn't the capacity to do it."

Here, too, Klibur Domin stands out. The first organization in East Timor to acquire the Gene Xpert technology, Klibur Domin houses one of just three of the diagnostic devices in the entire country. Due to a dearth of functional chest x-ray machines, the NTP is in the process of strengthening facilities' access to the Xpert, which can be used to quickly and accurately diagnose both smear negative TB in children and MDR-TB, a growing problem in East Timor. Home to the country's only MDR-TB facility, Klibur Domin can accommodate four MDR-TB patients.

"If there was no Global Fund support, so many more people would die of TB," says Soares. "The government doesn't have the financial capacity to reach people in remote villages. But with the grant we're able to provide these services, and to prove that it works, and now they're being expanded across the country. So I think there is hope that together we can tackle this problem – that we can stop TB."

Multicountry Western Pacific



Involving 11 countries scattered across a vast expanse of ocean with low health system capacity, minimal human resource and high transaction costs, the Multicountry Western Pacific regional grant supports 11 Pacific Island countries in HIV and TB, representing a challenging opportunity for the Global Fund.

These countries have a low disease burden but they all also have high need for the Global Fund's support to fund innovation and track impact. The primary goal here is to end to the epidemics.

The obstacles to achieving this goal, particularly with a reduced financial footprint, however, are substantial, beginning and ending with the logistics of fitting 11 countries with distinct characteristics, ethnicities and cultures into one grant being administered and overseen remotely.

Investments by the Global Fund represent modest inputs in terms of overall health spending – ranging from 0.3 per cent of total per capita health spending in Samoa, to 4.7 per cent in Tuvalu. Within the specific diseases, however, it is clear that the Global Fund investments are much more significant and therefore critical to the future of those programs – accounting for roughly 52 per cent of regional external spending on the three diseases between 2007 and 2015.

Though they are grouped together, they are decidedly not homogenous; within the group are Micronesia, Polynesian and Melanesian countries, each of which have their own traditions, cultures and ethnicities that risk being sublimated in service to a one-size-should-fit-all approach.

One visible example of this: in Polynesian culture, it is typical for the youngest son in a household without daughters to take on the role of a daughter, helping with cooking and cleaning and other typically gender-segregated tasks. They are a third gender known as Fa'afafine, and are well-accepted in the Polynesian countries such as the Cook Islands, Samoa and Tonga.

Such acceptance does not extend to the Melanesian or Micronesian states, meaning that targeted approaches to transgender populations must be differentiated at country level in a way that perhaps the grants do not account for.

Also, there are a variety of legal challenges and obstacles among the 11 countries that require a differentiated approach. Kiribati, Nauru, Samoa, Tonga and Tuvalu have criminalized same-sex relationships; sex work is illegal in the Marshall Islands, Palau and Federated States of Micronesia (FSM), and the Marshall Islands, Samoa and Tonga, actively ban PLWHIV from entering the country.

By predicating the regional performance on each country's own ability to meet the targets, past grants have set up an inequity that has been damaging; if one country is behind, it is up to the others to make up the difference. Differentiating indicators by country for the HIV and TB targets have been one of the major changes under the new Global Fund financing mechanism that should make a significant difference in achievement.

But by far the biggest change in the new grants is the change in PR away from the Secretariat of the Pacific Community (SPC) to UNDP. It is hoped that this change will inspire new coordination and collaboration in the fight against TB and HIV.

History

The multicountry approach to grant delivery in the Pacific was initiated in 2002, with a five-year grant to support HIV and TB programming across 13 Pacific Island countries, as well as malaria work in Solomon Islands and Vanuatu.

Neither Fiji nor Solomon Islands remains among the group of countries, which is now limited to: Cook Islands, Federated States of Micronesia, Kiribati, Republic of Marshall Islands Nauru, Niue, Palau, Samoa, Tonga, Tuvalu and Vanuatu.

A regional PR was chosen as a way to minimize costs and respond to the low disease burden and limited capacity in most of the countries. Funding was relatively modest until 2008, when the envelope increased five-fold over the 2002 grant. And this is really where the trouble started.

Despite the massive increase in support from July 2008 to June 2013, the increase in PR capacity and size was not enough. PR costs were compounded by an equally high cost of technical staffing and logistics in the region.

For SPC, becoming a PR for the Global Fund in countries where it commanded a great deal of respect and authority because of its role as a regional body representing the oft-ignored needs and agendas of the Pacific Island countries was a great opportunity. But the systems within the organization itself were found very wanting – in part because of the specific cash-based management system demanded by the Global Fund.

When the early, smaller grant was in place, a parallel financial management system worked fine. When the grant size grew, however, the system effectively exploded – both because it wasn't strong enough and

also because of human resource challenges within SPC itself.

The SPC's compassion towards the countries during reporting placed them in a difficult position particularly when country sub-recipients defaulted on their reporting requirements. SPC developed a parallel reporting system that was to ensure that disbursements continued even when noted issues were being addressed.

In some instances, grant reports were accepted by the SPC on how funds had been spent even when the receipts had not yet come in. SPC would issue reports and provide supporting documentation thereafter – meant to give the countries some leeway but instead resulted in weak reporting discipline and a weak accountability system. Better reporting and stronger accountability would have been beneficial to everyone and would have had more discernible impact on the quality of programming.

Fanafo aid post, Vanuatu

Weak systems and low human resources

The reporting challenges represent just one plank in the weakness of the systems in the islands, which are weak more because they are under-resourced and over-stretched than because of a deficit in will or willingness to engage by the country teams themselves.

The system challenges can be illustrated by one country where the deputy health minister was also the only surgeon as well as the anesthetist and the Global Fund focal point. When he passed away, it took eight months for him to be replaced – meaning that most work ground to a halt and delayed achievement towards the targeted indicators. Or by another country where the minister of health is also the minister of transport.

But here again is a missed opportunity in the past Global Fund engagement. While one in three dollars in support was allocated to human resources over the 2007 grant, there was very little done in terms of capacity building and strengthening systems at the SR (country) level. Funds used to recruit staff to strengthen delivery systems in order to deliver expanded programs were spent, but their skills were still wanting. A capacity building plan to improve SR performance was put together in 2014 but it went nowhere due to budget constraints.

This, too, may account for the less-than-optimal performance of the grants – only ever reaching a B2 rating of "inadequate but potential demonstrated". And here, too, is an opportunity for the new PR. Rather than managing from a distance, UNDP intends to recruit locally in each country to oversee program implementation and work directly with the countries and the SRs. It is anticipated that this approach, which will also draw on UNDP's extensive experience with the Global Fund and its global reach, will yield better results.

Governance

Governance and ownership of the Global Fund grant process has proved to be both immensely rewarding and deeply frustrating at the global, regional and national levels. While countries – and the regional CCM – have chafed at the rigorous requirements imposed by the Global Fund for managing existing grants and applying under the NFM process, they recognize that this rigor is mutable and applicable elsewhere in their national health responses. In demanding an evidence base for the NFM applications, the Global Fund has helped countries develop their own national strategic plans – something that was not necessarily possible in the past.

However, there is a sense that the countries' weaknesses in strategic planning meant that the process was more driven by the Global Fund than by countries themselves. This is also an area where the regional coordinating mechanism has a deeper role to play.

The Pacific Island Regional Multi-Country Coordinating Mechanism (PIRMCCM) secretariat and PR are located in Fiji, a non-participating country in the grant. The PIRMCCM members come from the 11 countries and within Fiji's robust community of civil society and key populations. These provide – as far as possible – an inclusive and representative coordination and oversight body.

The oversight working group of the PIRMCCM, Fiji

Still, the magnitude of the logistical challenges facing the region mean that the entire PIRMCCM can meet only once a year. It has been estimated that the costs for just one of these meetings can exceed $100,000 – an unfathomable sum when compared to the ease with which other countries can routinely convene meetings. Ways to develop virtual meetings are being investigated. However, this also relies on an infrastructure that is limited in many of these countries.

A first meeting of an oversight working group convened in June 2015: a recognition that ownership needed to rest with the region and not with the PR or with the Global Fund itself. This is an extremely promising development. Using guidance developed by the Global Fund, the group created a dashboard for management, oversight and accountability that should allow the Pacific Island countries help the Global Fund work better at implementing multi-country grants.

HIV/AIDS

Drawing blood

The conundrum of the islands' low HIV prevalence despite a rampant epidemic of STI infection and significant mobility in populations with low knowledge of HIV, combined with high rate of transactional sex and explosive domestic violence continues to puzzle public health officials at all levels. Part of this may be attributed to the low rate of diagnosis and uniform lack of testing across the countries, which poses a significant, as yet unfinanced question.

In the eight countries that provided data to the development of the HIV concept note, estimated HIV prevalence was 0.1%. In most countries, this means that the number of reported HIV cases can be counted on one – or both – hands. A total 208 cases were identified across those eight countries, with Kiribati recording the largest number and Niue not reporting a single case.

This does not mean that HIV is not present; it just means that it is not reported. These data were based on testing among

pregnant women who consented to take an HIV test as part of their ANC visits, and at VCCT centers. There has been little systematic HIV testing (testing is not compulsory in most centers) and as of 2008, no country had capacity to do so.

It is hoped that funds foreseen under the new HIV grant will support systematic testing to be carried out in at least some of the countries, even among the relatively captive audience of prenatal women. Currently fewer than one in two pregnant women is tested for HIV overall.

Systematic testing has not been done at all among key populations – mostly because key populations had not been identified as a priority until the lead-up to the NFM. Again, data availability is a massive problem.

Disbursements of the $7.7 million in HIV funding to the 11 countries began in July 2015 and takes into consideration funds disbursed for existing programming as well as costs associated with the closure of the grants under SPC.

Emphasis in the grant, in addition to improving data collection and management, will focus on key populations, specifically MSM and transgendered people. There is very little injected drug use in the Pacific Islands, and sex work remains informal and poorly documented.

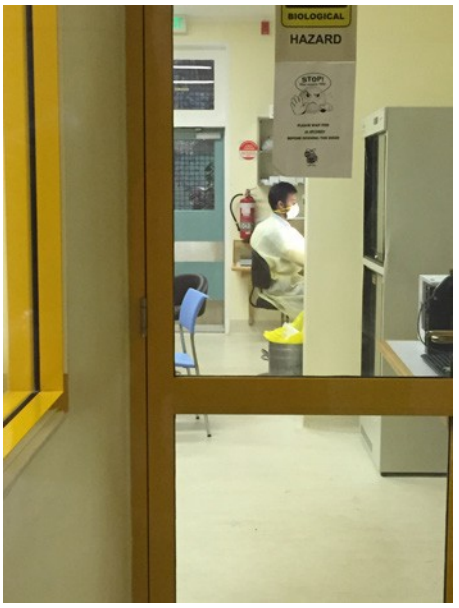
HIV prevention among key populations, including the scaling-up of coverage of HIV testing and counseling, will command the largest share of the Global Fund investment in the 11 countries.

STI treatment and awareness will constitute another plank in the Global Fund-supported HIV response.

Since pregnant woman are a major focus for testing, PMTCT will also be funded by the Global Fund, but to a lesser extent.

There are very few commitments to the HIV programs beyond the Global Fund and most program areas will not be adequately resourced during the allocations period. This is risky, and will most likely perpetuate the vacuum of data and information that could have consequences for the countries in the future.

TB



TB microscopy laboratory, Twomey hospital at Tamavua, Fiji

On average there is high estimated TB incidence, prevalence and notification rates (136 incident TB cases-new and relapse- per 100,000 habitants): higher than both the global average and Western Pacific Region average (125 and 92 respectively).

With transportation and logistics so expensive, and the system capacity so low, diagnosing, treating and hopefully curing TB is a difficult prospect for the region

Based on 2013 revisions in incidence estimates for TB per 100,000, Pacific Island countries comprise 4 high TB incidence countries: Micronesia (188), Kiribati (497), Marshall Islands (354), Tuvalu (228); 4 medium TB incidence countries: Vanuatu (62), Nauru (47), Niue (37-based on 2012 data), Palau (44); and 3 low TB incidence countries: Samoa (18), Tonga (13), and Cook Islands (11).

Countries have endorsed a five-year regional strategic plan for 2015-2019, aimed to end the TB epidemic in the region through improved access to diagnosis and treatment. Ambitious targets have been set that seek to build on the momentum achieved over the last several years – mostly attributable to the financial support provided by the Global Fund. Case detection improved by 15% from 2008-2013, and case notification rate for sputum smear positive patients doubled in that same time period.

There is still much to be done to improve early detection, which is the main focus of the TB grant valued at $7.7 million: the same as the HIV grant. Among the highlighted activities are work within high-risk and hard-to-reach populations, including seafarers, prisoners, and dwellers of peri-urban informal settlements, innovative approaches for doing community direct observed tuberculosis short-course (C-DOTS) and more investment in monitoring and evaluation and data collection.

Global Fund investment in the multicountry TB response is aligned with the five-year strategic plan developed and endorsed by the Pacific Island countries. Funding will be disbursed proportionally among the 11 countries to promote equitable access to quality diagnosis and appropriate treatment, including improved, and accelerated, case-detection.

Emphasis in the Global Fund investment will be in training to improve case-detection, referral and treatment rates, bringing health professionals from across the region together to develop a train-the-trainer model that can then be replicated at national level. Establishing screening programs to target prison populations will also benefit from Global Fund investments, as they have been identified as the highest-risk TB population in the country. Other high-risk groups include diabetics and migrants.

Data collection and management systems will also be supported by the Global Fund investment, as part of a health system strengthening commitment for the remote islands.

Vanuatu

Vanuatu is the only country in the Multicountry Western Pacific portfolio to receive Global Fund support for all three disease components. As the largest of the 11 Pacific Island countries now eligible for support under the TB/HIV grant, it also embodies most of the challenges inherent in administering 11 grants under one rubric.

An archipelago of 82 islands stretching across 1,100 km in the Pacific Ring of Fire, the country is vulnerable to catastrophic weather events such as the March 2015 Cyclone Pam that was the worst natural disaster to ever hit Vanuatu. While loss of life was low, the cyclone tore through the country, destroying many of its buildings and crippling already weak infrastructure. How to build back better with an anemic public budget and low levels of human resources is plaguing decision-makers, who are also trying to manage the expectations and competing agendas of humanitarian and development partners in-country to assist.

Some 250,000 people live in the six provinces that comprise Vanuatu, 76% of whom live in rural areas that are linked to larger towns by a network of dirt roads and towpaths. Accessibility is both extremely complicated and costly, and most public programs put the acquisition of a 4WD vehicle as a top priority in order to navigate even in a small area of operations. Churches have a strong foothold in Vanuatu yet their networks have not yet been effectively explored as conduits for service delivery or delivery of behavior change messaging.

The remoteness and isolation of the population has contributed to low literacy (at just 33% in the adult population), low numeracy, low access to services and domestic violence that contributes to the vulnerability of women and their exposure to STIs. Nearly half of all women interviewed in a 2011 survey admitted to have been the victim of sexual violence; in some provinces this number was as high as 75%. This violence has led to disenfranchisement of women at all levels, meaning they are ill-represented in decision-making about health, education or any socio-economic issues.

There is widespread stigma, discrimination and abuse related to homosexuality, despite surveys that suggest that nearly 6% of men in the country have engaged in sexual acts with other men.

The health system is a web of public, private, non-governmental and faith-based facilities that go down to the aid post level. There are two regional referral hospitals and three provincial hospitals. User fees were introduced to both in- and out-patient services to help run them. Outpatient fees have been renamed to contribution fees, a portion of which is ostensibly supposed to remain with the aid post to improve conditions, but there is little oversight to ensure that those Global Funds are not appropriated by the health workers.

Quality of care beyond these larger facilities can be found wanting due to the extreme staffing shortages that afflict the public system in particular.

Of the total 2,282 positions approved for employment in the Ministry of Health, just 1,216 are filled. The first phase of an exchange program that sent Vanuatu medical students to train as doctors is about to conclude; the problem, however, is that there is neither the money to pay these new doctors nor the facilities to support them on return.

Because of the high rate of dual-citizenship with New Zealand, which is fueled largely by workers being recruited to support that country's agricultural economies, Vanuatu is classified as an Upper Lower Middle Income country: a status that belies the poverty in which

Remote community above Fanafo

Vanuatu and the Global Fund

Vanuatu received its first disbursement of Global Fund money in 2006. The process of engaging with the Global Fund was challenging as the systems that needed to be in place to absorb and respond to the Global Fund's requirements did not yet exist. More time spent developing those systems meant less time available for program implementation, especially because of the low human resource capacity.

To shoulder some of the burden, WHO, using Global Fund money, installed a country team of technical assistants to help Vanuatu navigate Global Fund procedures. That technical assistance is, however, at risk of coming to an end under the NFM due to the reduction in the size of the allocation to Vanuatu and the entire multicountry portfolio.

Vanuatu has had its own CCM since the outset, convening a team in 2005 led by the then-director general of the MoH. Despite the conflict of interest, Vanuatu's CCM was also the SR of the grant administered by SPC due to the weak capacity within the MoH and the finicky governance of the country, which has resulted in frequent reshuffling of senior ministry personnel.

Choosing the CCM as the SR ultimately ensured that, at the time, there was stronger coordination among the various stakeholders in program design, monitoring and implementation. However, the CCM was closed down in 2010 because it was no longer playing a significant role, shifting SR responsibilities to the MoH in 2011. That transition was mishandled and resulted in financial mismanagement that attracted the attention of the Global Fund Secretariat and caused significant delays in grant disbursement.

It was in 2013 that the decision to reconvene the CCM was made, in anticipation of the NFM. Audits that had been conducted retrospectively – and that are still ongoing – found that the financial mismanagement was due largely to poor reporting: a problem that has for the most part been resolved.

The current CCM is representative and inclusive, with partners from across civil society and faith-based institutions around the table alongside international NGOs. This deployment of faith-based institutions as part of the CCM is a valuable one and should be explored further, in terms of service provision to support cost-efficiencies. One of the 12 people in Vanuatu diagnosed with HIV is also a CCM member.

HIV/AIDS

Irene, one of Vanuatu's HIV+ patients, and a CCM member

A total of 12 people have been diagnosed with HIV in Vanuatu, three of whom have died from AIDS-related complications and three within the first six months of 2015. Reported cases appear to be evenly distributed across the country: of the six people currently living with HIV,

two were diagnosed in Port Vila, two in Tanna and two in Santo. While MSM are present in most communities, to date there have been no reported cases among MSM. There are no known cases of HIV transmission among PWID. Sex work is informal in nature in Vanuatu so it is unknown whether the diagnosed cases are among sex workers.

The country has an extremely high STI rate, due to low condom use. Among ANC clients (an accessible sample due to routine screening and wellness visits) 3% of women tested positive for gonorrhea, 5% were found to have syphilis, 11.9% had a hepatitis B infection and 25% had chlamydia.

One in four youth who attend clinics run by the NGO WanSmolBag report STI infection, with gonorrhea the most commonly reported (21%).

Several reasons have been given to explain the high STI rate. With 80% of cases asymptomatic, people continue to engage in risky behavior. This also includes forced sex. The level of forced sex reported by both MSM and transgender people is concerning; two thirds of transgender people (63.4%) and one-third of MSM (35.7%) report having been forced to have sex.

Of the 11 PICs, Vanuatu probably has the best experience with reaching key populations, due to thriving NGO-led programs. WanSmolBag uses theatre, music and community events to engage with youth and promote condom use. They also have a clinic/drop-in center in the capital Port Vila where VCCT is carried out, though on a much lower level than it should be.

Vanuatu Family Health Association also runs clinics. Both NGOs will be able to scale their services under the NFM grant. Wan Smol Bag's sprawling compound is also hosting a new LGBT community-based organization, LGBT Vanuatu.

Wan Smol Bag peer educator

TB

In 2013, Vanuatu reported 123 TB cases with an all form case notification rate of 49/100,000. Case detection has peaked at 78% in the 2010-2012 period, and new targets have been set under the NFM to intensify case finding and sustain improved case-holding. Testing for HIV among TB patients is low at 48%, despite the comparatively higher rate of HIV infection in Vanuatu with respect to the other Pacific Island countries. Higher death rates had been attributed to late diagnosis and to improper differential diagnosis owing to limited diagnostic tools. There have been no reported cases of MDR-TB.

Program challenges center around access: access to diagnosis, access to services and access to follow-up. There is an inadequate referral system for specimens and contact tracing and follow- up among scattered populations is sub-optimal. There is very little engagement by civil society in TB control.

Malaria

Because Solomon Islands opted in 2013 to apply for the NFM as a single country applicant, Vanuatu as the other malaria recipient under the Multicountry Western Pacific (MWP) decided to apply for a reprogramming request.

This timing was auspicious as there have been important changes to the epidemiological pattern of malaria in Vanuatu, to some of the program's strategies and to the Global Funding landscape.

The malaria burden has fallen dramatically in recent years, due in large part to strides made by the National Malaria Control Program (NMCP). API has fallen from 33 in 2010 to just 9 in 2013. The country is moving towards elimination and this remains the long-term goal of the NMCP, contingent on funding.

Bed-net coverage in Vanuatu is at 90%; usage, however, is at barely 50%. As poor populations are most at risk of malaria, the net distribution and awareness strategy aims to take a pro-poor approach.

Reprogramming of the Global Fund grant tops out at $1.9 million, representing just under a third of the cost of the NMSP for 2015-2020. The Australian government is the other major donor to the malaria program, but even with declining support the Global Fund remains the backbone of the malaria program. Vanuatu's government is committing roughly $240,000 annually to malaria control.

For Vanuatu, rebuilding after a cyclone exposes the cracks in the health system

Sometimes, health system strengthening means expanding laboratories, building new facilities, purchasing expensive equipment, hiring personnel and providing better training for the existing staff. Sometimes, it's about a fresh coat of paint.

A young woman and her newborn baby (back left, in pink hat) at the Fanafo Health Center, Vanuatu

Willie Tangis is the nurse practitioner at the Fanafo Health Center, a small town on the island of Santo about 30km from the country's second city, Luganville. Willie's two-room health center is the second step in a four-layered health system in this island nation, just up from an aid post and below a provincial level hospital in Luganville. There is one national referral hospital in the capital, Port Vila: one of the buildings that was damaged when Cyclone Pam whipped through the country in March 2015.

At the health center, Willie does pretty much everything: delivers babies, stitches cuts, sets bones, administers insulin, and treats malaria. He hands out condoms when he has them, reminds children to wear their shoes to avoid getting chiggers, and handles more cases of yaws than he can count. He's never administered an HIV test, and is pretty sure that no one in the community has ever even considered taking one.

Willie's health center has a catchment area of around 4,500 people, the vast majority of whom live more than 5km away, a long walk through thick underbrush and up and over the misty mountains around Fanafo. It is one of nine health centers in all of Santo: the largest island in Sanma province.

It is also the only health center in the province that has a vehicle, donated in March just after the storm by one of the army of humanitarian agencies that swept in to assist and left without making any meaningful contributions to the multitude of challenges that face the country even when it is not brought to its knees by natural disaster.

Willie Tangis, nurse practitioner at Fanafo Health Center

So to reach his community, Willie climbs into the vehicle once a week and traces rings around Fanafo, delivering schedules for ANC visits, meeting village chiefs, inspecting former patients. If he sees a pregnant woman he doesn't recognize, he asks an elder in the village to remind her to come to the clinic. Maternal mortality is high in the region and Willie thinks the nationally reported figure for infant mortality of 2.3% is way too low.

Going 30km round-trip can take about seven hours, and his is often the only vehicle on the road. If he goes on a Sunday, as he usually does, he'll let the children from all of the villages he passes climb into the back of the truck, and deliver them to the lone primary school in that catchment area, saving them the barefoot walk carrying their week's rations wrapped in banana leaves, the eldest among them carrying a machete or spade just in case they see a wild pig or something else to dig up to eat for the week.

Being close to Luganville has its advantages; it's got one of the two microscopy labs in Vanuatu, which means Willie can get sputum samples for testing without much delay, and get patients on treatment quickly if they are diagnosed with TB. Other communities aren't so lucky; on the west coast of Santo, or around the Big Bay on the east coast, best case scenario is 10 days to bring the sample to hospital for testing. And this can be an expensive proposition for a sample that may not even be usable: a boat trip around the Top Peak can cost upwards of $500.

Vanuatu, as one of the 11 countries in the MWP portfolio receiving a share of the joint TB/HIV grant as well as additional Global Funding for malaria, has seen its envelop for TB assessed at $426,000 for the allocations period. For HIV, it is likely to receive significantly less than the $130,000 disbursed in 2013. And the malaria program has asked for $2.7 million to run through 2017.

This leaves very little room for health systems strengthening – especially because there are very few resources devoted to health systems strengthening (HSS) under the MWP.

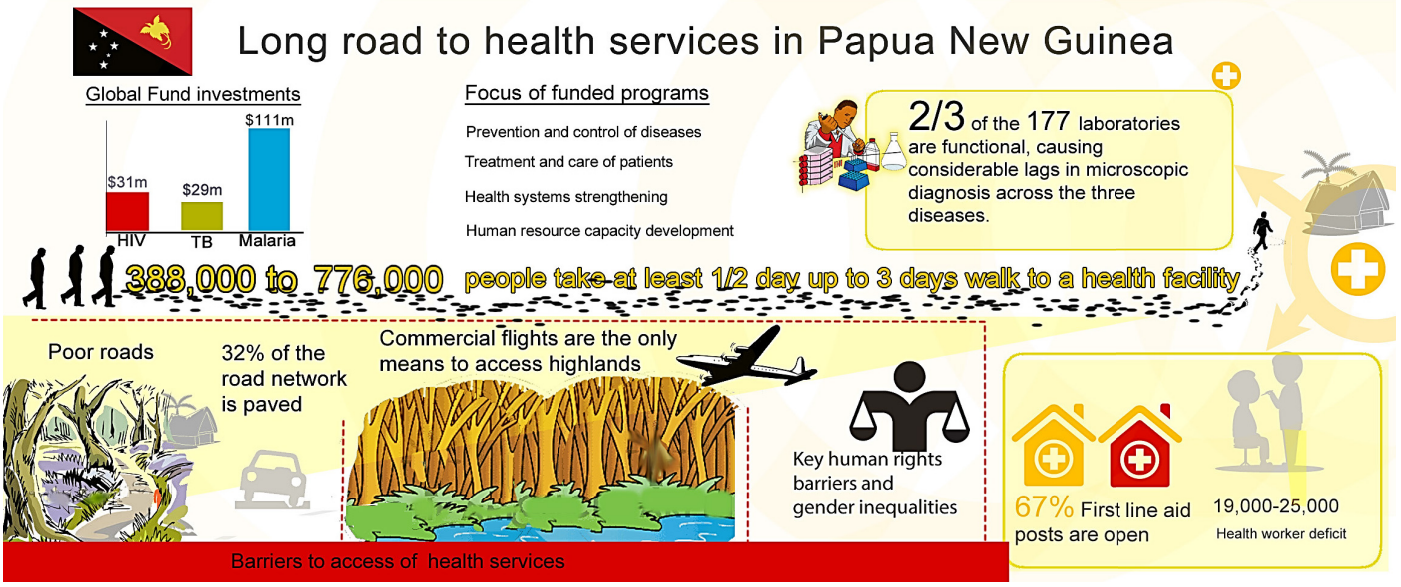
Under the HIV grant, there is an above-allocation request for $970,000 for HSS, to strengthen health information systems and M&E to be shared among all 11 countries.

There are three modules in the TB grant that are HSS-related, based on priority issues identified through country dialogue and program monitoring across all 11 countries, including capacity building for existing technical staff and adding employees to national TB programs; and strengthening reporting, M&E and information to bolster HMIS data systems.

What there isn't, says Willie, is money that will make it to the health centers like his.

"I used to have four beds in the main ward and one bed that I could keep in isolation," he says. "Now I have three beds, and nothing in isolation. What I could really use is a mattress or two."

Papua New Guinea



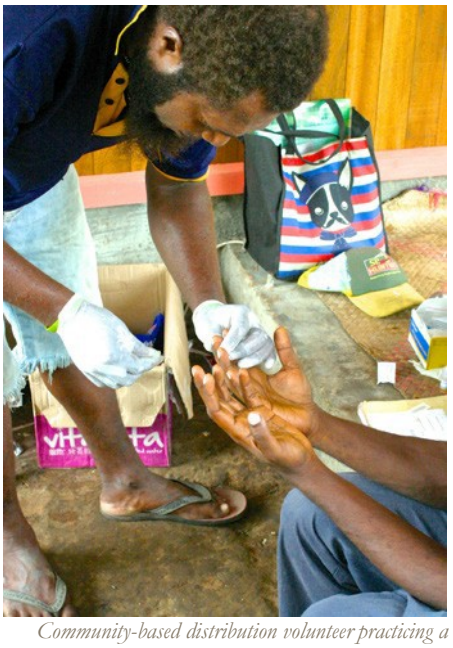
To understand how complex the operating environment in Papua New Guinea is, a richly diverse country of craggy highlands, coastal lowlands, impenetrable jungles and sometimes active volcanoes, one needs only look to language. There are more than 800 languages in regular use among the country's 8 million people, many of whom live side by side in communities that are heterogeneous, fragmented and often acrimonious.

Such fragmentation extends to how public health services are delivered. A federated nation of 22 provinces including the autonomous region of Bougainville and the National Capital District, home to the capital Port Moresby, Papua New Guinea has had a decentralized health system since its independence in 1975. Each province receives a share of the national budget for health, with commodities being purchased centrally, and each province responsible for contributing a share of its internal revenue to support service delivery.

But while the amount spent on health diverges between provinces, there are universal trends that prove worrisome amid rapid population growth, massive urbanization and an entrenched culture of violence, alongside a rising incidence of non-communicable disease such as hypertension and cardiovascular disease as well as diabetes.

Chief among them is the prohibitively high cost of doing business in a country where just 32% of the road network is paved, leaving the economic breadbasket of the highlands provinces accessible only by single-lane pitted roads or by exorbitant commercial flights. Other parts of the country require days in dinghies to deliver services and stocks.

Public infrastructure is weak, leaving between 380,000 and 780,000 people at least a half a day to three days walk from a health facility. And even when they arrive there, it is unlikely that they will be greeted with enough staff: the deficit of nurses and front-line health workers is estimated at between 15,000 and 25,000.



Community-based distribution volunteer practicing a malaria RDT in Kokopo, Papua New Guinea

That there are such wide ranges in these estimates speaks to another chronic crisis: that of data and information management. The existing National Health Information System is robust but outdated, with 80 percent of health facilities regularly reporting using paper-based systems. Surveillance data are minimal and data cleaning or analysis tools and expertise limited even within the NDoH, which is currently facing institutional and other challenges.

Contributing to the institutional challenges is a resounding capacity deficit. Despite huge investments in leadership and governance, systems – and accountability systems in particular— are poor. Part of this can be attributed to the high reliance in the past on technical advisors whose work substituted for, rather than supported, public functionaries. A culture of patronage based on clan and tribal allegiance colloquially known as 'wantok' at all levels of the civil service is also a culprit.

Ironically, one of the areas where Papua New Guinea is not lacking is along its bottom line. There is indigenous wealth generated by government, from taxes and earnings from its wealth of natural resources. Australia also retains enormous strategic as well as industrial, extractive and security interests around the country, and spends an average of US$6,500 per person per year in development assistance.

The private sector, through an array of public-private partnerships, is also involved in development – though not nearly as much as it could be in comparison to the massive profits extracted annually in minerals, oil, gas and timber. Minimal amounts of development aid come from the US government, a fledgling European Union mission and Japan.

Where it all goes, however, is another question that remains unanswered. Another deficit in PNG is the absence of a robust, thriving and engaged civil society to ask these questions and demand accountability from its leaders and its partners. Commendable efforts to push accountability exist, but because of the fragmented nature of the society, there is little in the way of a national culture of engagement on behalf of the people.

Papua New Guinea and the Global Fund

It is against this backdrop that the Global Fund has positioned its strategic engagement in Papua New Guinea, responding to a malaria epidemic with investments that once rivalled those in sub-Saharan Africa; opening space for key affected populations to be reached with HIV interventions in a context where conservative churches deliver some 50% of health services; and exploring where to target resources for a burden of tuberculosis that is an exponentially enlarging threat to the country.

PNG has been a recipient of Global Fund money since 2003, with disbursements totaling $167.3 million prior to 2014.

The country's NFM allocation came to $83.3 million, with the lion's share assigned to malaria, and health system strengthening funds attached to the TB grant. Both the malaria and TB grants were signed in February 2015; the HIV grant worth $14.2 million was signed in June 2015.

The relationship between the Global Fund and the country has not always been harmonious; actors from sub-recipients to technical partners share uncomfortable memories of encounters with the Global Fund including an investigation by the Office of the Inspector General (OIG) in 2010 – an experience they considered disruptive. Even now, the cloud of suspicion engendered by the OIG investigation fosters mistrust within the NDoH and among implementing partners.

The investigation focused on a series of grants: a 2003 malaria grant, a 2004 HIV grant and a 2007 TB grant, for a total of $3.4 million in recoverable assets, according to the OIG. A lot of attention was paid to a net distribution campaign managed by the government that, in its failure to properly report on provincial-level data, fully exploited the capacity deficit in the country. Efforts to develop a paper trail by sifting through boxes of unlogged receipts – worth at last count more than half of what was unaccounted for – were painstaking, stressful and set up a confrontational relationship that has taken five years to repair.

The investigation also resulted in an overhaul of the entire portfolio, shifting responsibility away from government, instituting a zero-cash policy across all three disease components and marshalling new principal recipients with almost no exposure to the Global Fund and its protocols and policies to administer the existing disbursements and prepare for the next round of grants to ensure continuity of service.

That arrangement stands today, making PNG an interesting test case for other countries with weak public institutions. In the Oil Search Health Foundation, the country has one of the Global Fund's only corporate principal recipients. International NGOs manage grants in TB, health system strengthening and malaria, with the nets that are purchased and distributed by Rotarians Against Malaria (RAM) the sole commodities purchased with Global Fund grants.

The NFM experience was a challenging one for PNG, but one that ultimately should provide a roadmap for the country to eventually have its national system resume PR responsibilities. There are, however, entry points for improved collaboration, beginning with the inclusion of key populations in decision making.

Facilitating the integration of partners, national programs and civil society is a high-functioning CCM that has acted alternately as intermediary, ambassador and peacemaker. Also encouraging is the fervent belief shared by all stakeholders that engaging civil society in decision-making is necessary, right and key to the future of this fragmented country.

The leverage for vulnerable populations that the Global Fund provides is supported by demands for transparency and accountability at all levels of programming. Equally, the rigors of the accounting that requires a fiscal discipline to unpack just how much services cost can only inform and enhance the quality of other programs in PNG and serve as a role model for other development actors.

Ultimately, the positive impact of the Global Fund can be felt not only in the successes of the programs it funds but in the way it has helped to transform the development space. Its continued engagement in PNG is critical for the evolution of the health environment and the cementing of gains in each of the disease-specific programs.

HIV/AIDS

Dire prognostications were made about PNG's HIV burden; in a 2002 report from the Center for International Economics, data suggested that there was potential for a massive infection rate to reach as high as 18% among the general population by 2010. This was attributed to the high degree of concurrency in relationships and the extraordinary incidence of sexual violence. Somehow, however, these projections – including a death toll exceeding 98,000 people – failed to materialize.

That the HIV prevalence rate remains at 0.65% nationwide, however, is suspect to many, due in part to the high levels of sexually transmitted infection. This suggests that a greater investment must be made in improving access to diagnosis and helping people to know their status.

Testing in PNG is a problem. Nationwide data suggest that while more than 200,000 HIV tests are being reported annually, there has never been a population-based survey to provide estimates of the number of people aware of their status. Low education about HIV is one contributing factor; stigma, too, inhibits both testing, as well as for adherence to treatment.

Lawes Road clinic, Port Moresby. One of the most popular VCCT sites in PNG

While the country has come a long way from its early response to HIV, which included burying alive community members known to have the disease, there is still pronounced suspicion of the illness and awareness of transmission is low. Fault for low awareness lies with the National AIDS Council Secretariat (NACS) which, despite tens of millions of kina from both the government and donors led by Australia and including the Global Fund, has failed to deliver any effective or enduring behavior change communications campaigns.

No billboards are currently erected in the capital Port Moresby promoting the use of condoms; and while there were some broadcast campaigns in the past, there is nothing in the public sphere to promote safer sex. No events are being held, targeting adolescents aged 10-19 who comprise 23% percent of the population, to promote smarter sexual behavior. This missed opportunity was one of the drivers of the decision to exclude the NACS from the roster of sub-recipients of the NFM grant.

Instead, the NFM grant is investing in outreach to key populations by reimbursing peer educators among sex workers, men who have sex with men and other vulnerable populations.

This model will be extended under the NFM grant for the next allocations

period, worrying some that it will tokenize and benefit a tiny group at the expense of wider community-based work. It has also caused some ripples of frustration among community-based workers in other programs, specifically the community based distributors (CBDs) who carry out critical malaria outreach as volunteers in rural communities.

Still, in reimbursing peer educators who have been stigmatized to the point of being unable to access other paid work, the NFM grant acknowledges that more needs to be done to find, test and empower vulnerable populations about which little is known. As it stands, based on the scarce data available, these key affected groups constitute a tiny proportion of the population.

An IBBS survey to be funded by the Global Fund in 2015/2016 will seek a sample size of 700 people per target population in three main urban areas in the country: Hagen, Lae and Port Moresby. And while the survey is welcomed, there is immense concern that even this target sample size will not be met.

Supply chain management

Not included in the grant are funds for procurement. As part of its commitment under the willingness to pay provision of the grant, the PNG government has assumed all responsibility for purchase and distribution of all commodities related to HIV. This includes everything from gloves to condoms to reagents and other laboratory products, to the rapid diagnostic test kits and ARVs for the 15,000 known and registered people living with HIV in the country. There are an estimated 32,000 people living with HIV in PNG.

Procurement, like everything in PNG, is complicated. The Health Ministry has quarantined 15 million kinas to purchase ARVs and associated commodities, and has built into the system a three-month buffer for its service providers to ensure there are no stock-outs and to rotate the existing stock. This has, for the most part, worked well.

There is no contingency plan built in to the HIV grant to backfill any inability by any of the arms of government to supply and distribute commodities. The Global Fund and its partners would do well to consider developing one.

Any commodity contingency would also have to take into account the protracted negotiations underway with respect to a sought-after recovery of $3.4 million under past grants. PNG was warned that should it fail to repay the Global Funds by a given time, two dollars would be taken from this NFM grant for every dollar that went unrecovered. A deadline of 31 December 2015 was set for the return, and a first tranche towards the full recoverable payment was submitted by the NDoH in June.

Malaria

The malaria program in PNG represents a true success for the Global Fund and demonstrates the impact and value of sustained investment. Over the past five years there has been a 70% reduction in malaria incidence - demonstrating the value of investing in prevention.

Worryingly, however, the near halving of the Global Fund's support for a national distribution campaign plus innovative behavior change work done to reach unreachable communities could undermine or even undo those gains. The country has a tenuous hold on its malaria successes; how things progress over the NFM allocations period will likely shape the epidemiology for the country for the next generation.

Again, there is precedent. In the 1970s, PNG and its partners launched and carried out a highly effective indoor residual spraying program. Over the ten years that the program was in effect, parasitic incidence made measurable declines, to the same levels that are seen today, that were reversed when Global Funding for the program was halted, when WHO called for the integration of primary health care, after the Alma Ata 1978 declaration. It has taken the better part of the last 20 years to return to those levels. Tabulated figures from 2012 show that 1.07 million outpatient cases were reported.

Net coverage has as of 2014 reached every district in the country. Data on LLIN usage, however, is aggregated at the national level to 54.6% of females and 53.3% of males, and children under five years of age at 58.0% as of 2014, in a country where 90.7% of the population lives in high-risk areas of malaria.

LLIN usage is lowest in the New Guinea islands region – which, as the most rural endemic area, also suffers from the lowest access to effective malaria control and treatment interventions. It is in response to the particular needs of these areas that principal recipient Population Services International has launched its Home Management of Malaria (HMM) program. The HMM program trains community health volunteers to serve symptomatic community members with a focus on high-risk groups, including pregnant women and children under five. Traveling by dinghy, canoe or on foot, these trained volunteers carry out malaria diagnosis and are able to administer first-line drugs, as in communities in East New Britain remote from the capital Kokopo.

Linda Chan David (L) is a community malaria volunteer in Kokopo, Papua New Guinea. In late May she diagnosed this woman and her granddaughter with malaria, saving their lives

Health System Strengthening

The health system in PNG is fragmented and inefficient, which means that Global Funds don't always reach their intended destination. There are chronic problems related to reporting, stock management and human resource. Just 67% of the first-line aid posts were reported open in 2012, leaving 30% of the population without access to primary health care. There is one national referral hospital in the capital Port Moresby.

The NDoH has ceded much responsibility as well as devoted significant state budgetary support, for primary health care delivery to the powerful churches in PNG, whose facilities are higher-functioning and are able to retain staff.

Kitchen at Mingende Rural Health Center

This heavy subsidization of church health services has essentially integrated them into the public health system – alongside many of the traditional and cultural values that religious institutions impose, which has left many vulnerable populations exposed and facing structural barriers to access. Facilities that provide VCCT, for example, do not provide condoms for distribution. MNCH services do not include entry points for discussions around the rampant gender-based violence in PNG. There is little community-based care beyond what is supported by NGOs, both secular and religious.

Of the 172 laboratories in the country, 65% are functional, causing considerable lags in microscopic diagnosis across the three diseases.

A joint training plan to improve skills and contribute to staff retention began in 2014 under the Round 10 HIV/ HSS grant. It will continue under NFM for district health managers.

TB

TB, and MDR-TB, are emerging as potentially explosive epidemics, their rise on a parallel track to the rampant and inexorable growth of informal settlements in urban and peri-urban areas.

The country has the second highest burden behind Cambodia in WHO's Western Pacific region, with an incidence of 348 per 100,000 population and prevalence of 541 per 100,000 according to 2013 figures. But due to the poor reporting in the country, these figures constitute what TB principal recipient World Vision fears is a grave underestimation of the disease burden.

As with malaria, Global Fund support has provided enormous support to PNG as it grapples with the spread of TB.

Previous Global Fund support expanded DOTS implementation from two to all but one of the 22 provinces by 2012, which has helped to increase case notifications. One in four cases diagnosed are in the National Capital District surrounding Port Moresby, demonstrating the need to consolidate the program in the capital, using all available clinical means.

TB outdoor clinic at the 9 Mile Clinic in one of Port Moresby's informal settlements

It is in Western Province, on Daru Island just across the Torres Strait from Australia, that the MDR-TB epidemic has its epicenter. Intense community transmission of the virulent resistant disease has increased to 61 cases in 2013. Primary transmission of MDR-TB is substantial: in 2012, 28.8% of those diagnosed with MDR-TB were registered as new cases, a number that increased to 38% in 2013. Most of the financial support to the MDR-TB program, including the construction of a state-of-the-art treatment facility, has come from the Australian Government and not the Global Fund.

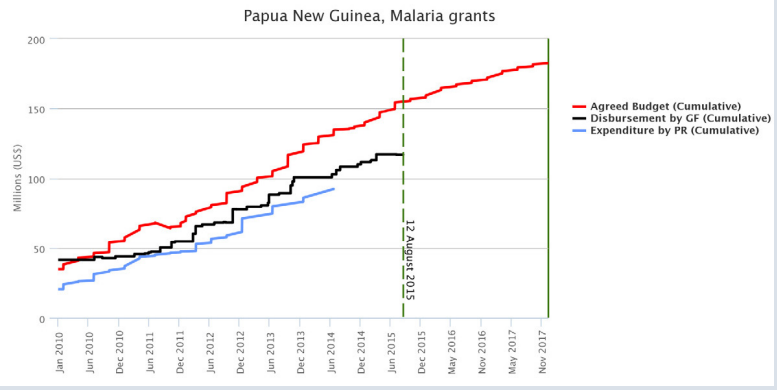
But as with malaria, there are considerable concerns that the progress made in understanding, detecting and treating the disease will be undermined by declining funding. TB is also reporting against 24 indicators in order to be eligible for NFM disbursements, required to present a national picture even though funds are being allocated only to programs being implemented in 11 provinces.

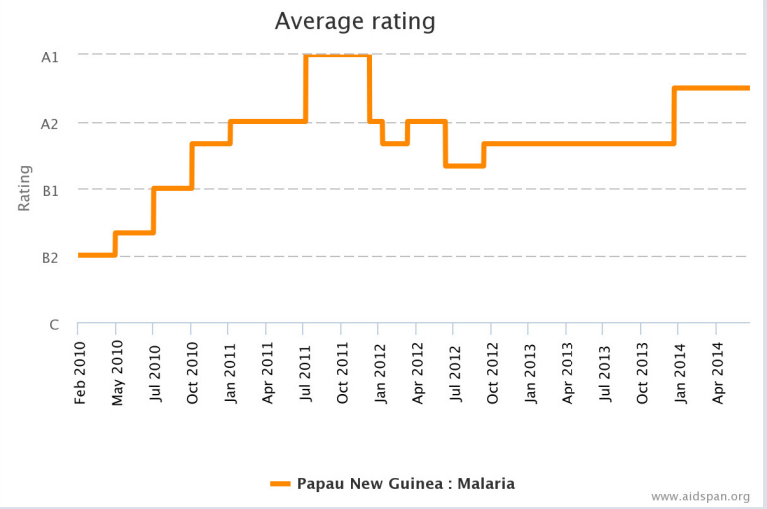
Also of interest in the TB context is the effort to expand the space and voice of civil society, to promote and sustain better community-level work including case management. There have been some imposed community-based programs that have failed to take root because they rely primarily on grant-dependent civil society groups rather than an organic grassroots movement. This has fostered a culture of dependence rather than a culture of engagement among communities – a central tenet of any enduring assistance with treatment and care.

Papua New Guinea *(2013 statistics)**	
Total population (n)	7,321,262
Male population (%)	51.0
Female population (%)	49.0
GDP per capita (US$)	2105.3
GNI per capita, Atlas Method (US$)	2020
Human Development Index	0.5
Life Expectancy (years)	62.4
Under 5 Mortality (per 1000)	63
% of children <5 years who slept under an ITN the previous night	**--**
Presumed and Confirmed Malaria Cases	**1,125,808**
Malaria Admissions	**12,911**
Malaria Attributed Deaths	**307**

Global Fund Finance

Papua New Guinea has received Global Fund support for its malaria program since 2004. Between 2011 and 2015, there have been six active malaria grants. Current active grants have three non-government PRs: Population Services International (PSI), Rotarians Against Malaria (RAM) and the Oil Search Health Foundation. There will be two PRs under the NFM grant worth $44.3 million: PSI and RAM. A total of US$ 116.8 million has been disbursed to date for the malaria response.





Disbursements have trailed budget due to low absorption rates, resulting in nil disbursements or lower disbursements than requested. For example, in 2010, the PR did not disburse funds to carry out training of health staff for the introduction of ACTs and RDTs because of procurement delays. The Global Fund also based the disbursement amounts on existing cash balances and actual cash needs (reprogrammed budgets).

According to Global Funds records, under the NDoH, grant performance was poor in 2010. In the quarter (Feb-Apr 2010), two top 10 indicators related to LLIN distributions had no activities and the indicator related to diagnosis only achieved 26.5% of target. In the following quarter (May-Jul 2010), the results were still not satisfactory; of nine active indicators, the PR overachieved the targets for two indicators, substantially met the targets for three indicators (achievement between 71% and 82%) and failed to meet the targets for the following four indicators (performance ranges from 0% to 23% of achievement):

1. "Number and percentage of laboratories receiving annual quality assurance reviews" – achieved at 0%. due to 1) delays in recruitment of HQ and regional staff and 2) the closure of the Health Services Improvement Program (HSIP) account resulting in the delay in purchasing training slides.

2. "Number and percentage of malaria reported cases confirmed (tested) by microscopy" – achieved at 16%.

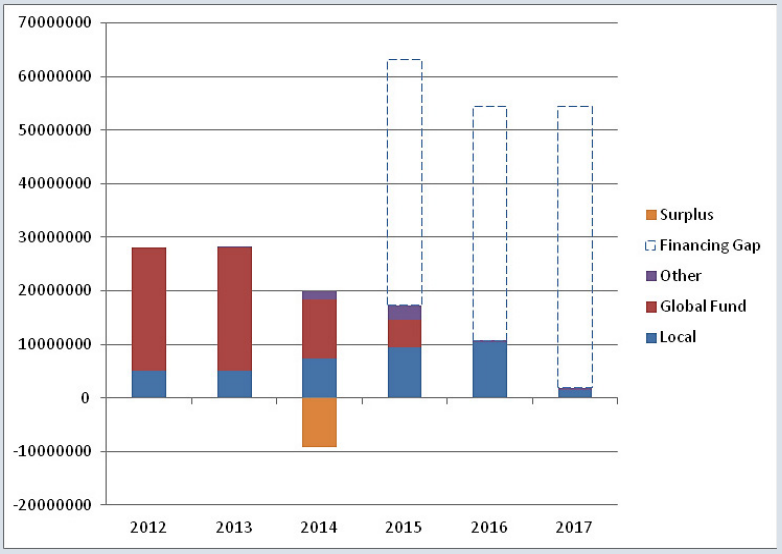
3. "Number of pregnant women who have received LLIN through ANC" – achieved at 23%.

4. "Number of HIV/AIDS patients who receive LLIN through ART centers" – achieved at 3%.

In 2011, the PR made significant improvement in grant implementation. Out of 11 active indicators, five were over-achieved and six were not met. Among these six unmet targets, 2 were top ten indicators related to patients receiving ACTs and LLIN distribution among pregnant women.

The grants administered by PSI demonstrated strong programmatic performance exceeding most of the indicators. The phase 2 component of the RAM grant was relatively simple and straightforward: procurement and distribution of LLINs for the National Malaria Control Program. The average performance of all indicators was strong, resulting in an A1 rating. The Oil Search Health Foundation grant has achieved an average rating of B2 due to a number of issues ranging from financial management issues to the PR's management of programmatic data supporting the reports against the indicator targets.

Investment in the Malaria program



The total budget of the PNG malaria program was similar in 2012 and 2013 at approximately US$28 million. Most of the investment during these two years was provided by the Global Fund with US$ 22.9 million (81%) and US$ 23 million (80%) in 2012 and 2013 respectively. Global Fund support has decreased in 2014 (US$ 11 million) and 2015 (US$ 5.5 million) to 8% of the total investment in the malaria program. The program had a surplus of US$ 9 million in 2014. It is unclear where these funds came from. The program budget substantially increased in 2015 to US$ 63 million and is projected to remain above US$ 50 million through to 2017. Government investment in the malaria program has risen from a low of 4.7% of total health spending in 2012 to 25.5% in 2015 and a projected maximum of 35.6% in 2016. US$ 5.5 million has been provided by other donors from 2013 to 2017. Less than 30% of the malaria program budget for 2015-2017 has been committed. Current funding gaps are US$ 45.8 million (72%), US$ 43.7 million (80%), and US$ 52.4 million (96%) for 2015, 2016, and 2017 respectively.

A divide between urban and rural health care in sprawling Papua New Guinea

A winding gravel road leads to a cement platform fitted with benches and covered with shade roof at the foot of a hill dotted with spotless flowerbeds. Shallow steps lead up to a cheery yellow-painted complex of low-slung buildings, each with a brightly painted sign affixed to the wall: Kitchen. TB ward. Maternity. Pediatrics. This is the Mingende health clinic in Chimbu province, in the highlands of Papua New Guinea.

Mingende, a church-run facility that forms part of the public health system, was in 2003 the first to introduce prevention of parent-to-child transmission (PPTCT) programs. Mingende also conducts VCCT and serves as a primary health facility. Most months at least one woman presents herself at the clinic to be enrolled in the program that now has more than 100 mothers participating, says Erikeve Kiae, the matron of the facility.

They see a counselor in a small but brightly lit room, appointed with a low but sagging couch and covered with posters promoting HIV testing, non-discrimination and healthy motherhood – all of which date back at least a decade.

The 9 Mile Clinic

At the 9 Mile Clinic in one of the emerging informal settlements on the outskirts of the capital Port Moresby, it's a different welcome for the patients who come for treatment or consultation. The facility is gated and guarded, and there is little shade available to the dozens of patients waiting patiently, sitting on what used to be a grass lawn but now is mostly a web of bare spots, pocked with the spittle of the betel nut chewed by those who wait.

Consultation for antenatal care occurs in one of a series of closet-size rooms down a dark and narrow hallway. Potential TB patients are seen at the end of the hallway, under a tarpaulin on worn benches with rickety legs. There is a decent complement of staff – most of them female, all of them approaching retirement – and there are drugs and other commodities packing the shelves and up to the rafters.

It's another story again at the publicly-run Gelagela Health Center, in East New Britain – one of the New Guinean islands off the eastern coast. The facility is clean – but empty. Both of the in-patient wards, for a total of 48 beds, have been closed for lack of staff.

And just as well, because there is nothing left in the facility to support patient care and treatment. One person is available to carry out HIV testing and provide treatment for STI, opportunistic infections – even to distribute condoms. Except that there are never enough stocks and when there are, they are expired. Like the 14 cartons of condoms he received in March that had passed their date of usefulness six months prior.

Roughly 87% of PNG's population lives in rural areas, many of them so isolated that it takes several days to reach them – on foot, in the Papuan highlands, or by boat in the New Guinean islands. This remoteness brings with it significant financial and non-financial barriers to access basic health services. For one, the transport infrastructure is negligible, so getting from place to place over the limited road network takes days. Shared minibuses ply the roads, such as they are, but many villages have even limited access to roads served by these shared transport services. Rural airstrips in most parts of the country are no longer operational.

In rural areas, church-based organizations are responsible for 50% of the services being provided, at rural clinics that are integrated into the national health system and funded at least in part by public funds. As part of the decentralization of the health care system, the NDoH funds public hospitals and provides some centralized funding for church-run facilities, but the main source of funds for rural health is provincial, district and local-level government. Most laboratories in rural areas were established with government funding, but many of them have closed.

This disparity in funding and centralized support leads to a very clear and very wide divergence in the degree and quality of services available – both within facilities in the same province and between provinces.

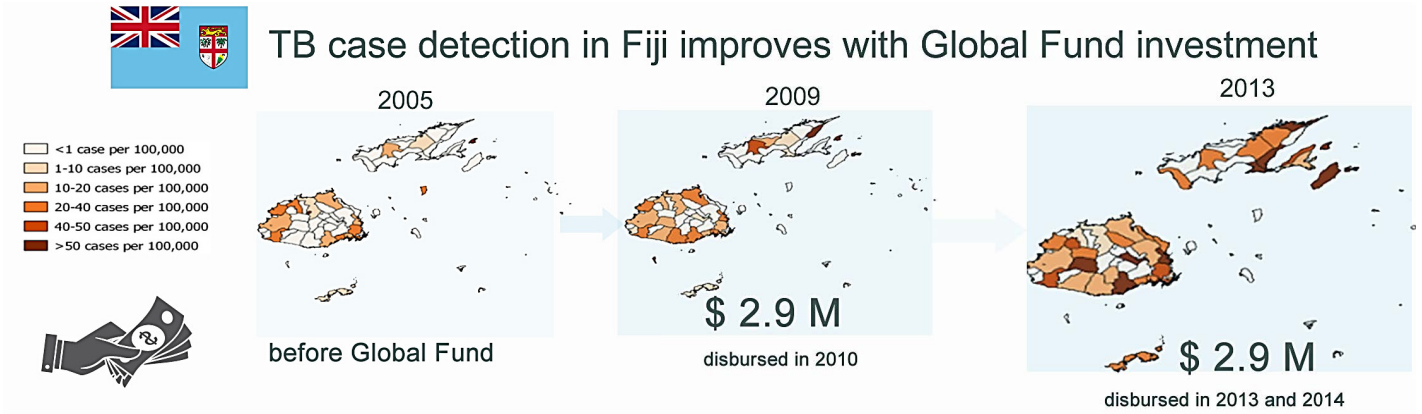
It also helps to foster some of the divergence in the way prevention, treatment and care for AIDS, TB and malaria are handled.

Urban areas in PNG bear the higher burden of TB; according to data from the National TB Program, 70% of all TB cases reported in the last five years came from urban areas. Data like these have driven decisions to identify the urban poor as the main high risk group and key affected population for TB – a legitimate decision based on the information available. But what worries the director of the NTP, Dr. Paul Aia, is what if there is TB in rural areas going undetected, for lack of resources? What if the reporting rate is predicated on availability of diagnostics, rather than size of disease burden?

The same holds true for HIV. The epidemic can best be described as a mixed epidemic, with more populous urban areas with a disproportionately higher rate of infection in key populations identified by the Global Fund: sex workers, MSM and transgender people.

But according to Sister Tarcisia Hunhoff, who runs the PNG Catholic HIV/AIDS Service, this focus on key populations ignores the high rates of infection in rural areas, which are driven by high levels of unprotected heterosexual sex, concurrency and partner turnover. She also believes that it is more likely to find a KAP in an urban area than in rural areas because of the greater degree of acceptance in urban environments than in the highly traditional, deeply conservative rural parts of PNG.

That acceptance has also extended to service availability and accessibility, with respect to VCCT and treatment. If a person feels more confident that she or he can seek health care, that health care will be more available and provided by competent, professionals, noted Maura Eliarpe, one of the most vocal and prominent HIV activists in the country.



Regions identified as high-burden increased from 2 in 2005 to 20 in 2013 thanks to improved case detection

Fiji is among the largest nations, with a robust economy, in the South Pacific. It is a vast archipelago of more than 330 islands, one-third of which are inhabited by an estimated 900,000 people in total. The majority of people, around 87%, lives on two main islands, Viti Levu and Vanua Levu – popularly termed "hard-to-reach". Life expectancy at birth has improved in Fiji for both sexes (2000-2012) and government spending on health has improved (from $160 million in 2012 to $222.5m in 2014). Expectant mothers are high on the government's priority with over $3.85m allocated for various services but it is the focus on hard-to-reach populations that takes precedence.

Considered a low-burden country for TB, Fiji recorded 345 cases in 2014, an increase over the 269 cases registered a year earlier. Case notification has waned over the last decade, reaching its lowest ebb of 12 per 100,000 population in 2007 and increasing to 29 per 100,000 population in 2013. This fluctuation would appear to demonstrate that the TB burden may be higher than currently estimated by WHO, and is driving some of the priority interventions identified in the Global Fund concept note submitted in March 2014 for funding that began in July 2015. As Fiji is classified as an upper- middle income country, and based on GF criteria, this is likely the last grant the country will receive from the Global Fund.

The hard-to-reach areas necessitate an innovative and complicated approach to surveillance, case-finding and community engagement as part of its tuberculosis management strategy. The country is uniting behind a slogan that "TB is curable," in an effort to encourage testing, reduce stigma and reach the unreachable – both in the increasingly crowded peri-urban centers as well as in the far-flung islands reachable only by paddled canoe.

Fiji and the Global Fund

Fiji exited the multicountry portfolio in time to apply successfully for a single-stream grant to respond to its tuberculosis burden in 2008. Global Fund grant money has been administered since 2010 by the Grant Management Unit of the Ministry of Health and Medical Services (MoHMS).

Five sub-recipients, including the World Health Organization as a provider of technical support, will continue through the end of implementation in December 2017.

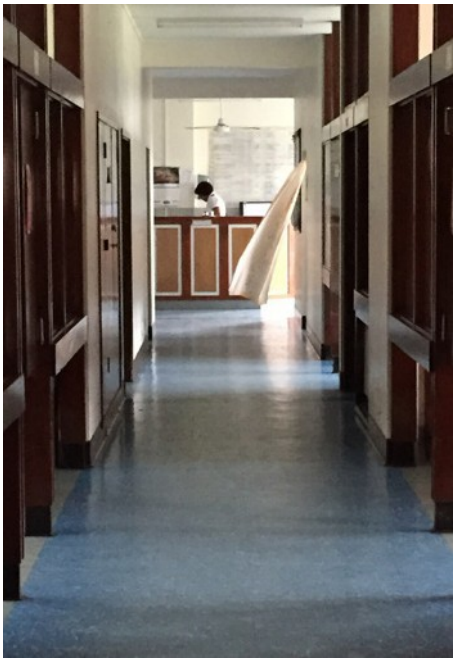
Total Global Fund support to Fiji under the NFM is some $4.1 million: filling 65% of the identified overall funding gap. Cabinet approval was granted in June 2015 for Fiji to increase its contribution to $1.6 million under the willingness-to-pay provisions of the NFM. This represents 30% of the total cost of the NSP and a culmination of efforts to significantly increase domestic investments for TB control since Fiji began receiving single-stream TB funding in 2008.

This leaves a funding gap of less than $1 million over the three years to fully fund the national program; a not-insurmountable figure but a potential worry for the program going forward from 2018 when there may no longer be any Global Fund support. While health is a priority for the Fijian government, the burden of NCDs are so great that it absorbs much of the budget allocated to the health system. One way that the NTP is looking to find cost efficiencies is in expanding its collaboration with the MNCH program. It is also top-loading many capital costs into the grant, devoting 7% of the total budget to one-time investments in procurement of key biomedical equipment including GeneXperts and portable x-ray equipment.

Affected and vulnerable populations

The population concentration in and around the capital, Suva, and other major cities such as Nadi have contributed to a change in the face of TB in Fiji. The disease remains one of poverty but rather than being a disease of the rural and remote, it is becoming increasingly common in the densely populated urban and peri-urban areas. Informal settlements packed with low-income Fijians are at the greatest risk for TB epidemics.

These settlements are considered the "hot spots" for TB, both because of the poor housing conditions and socio-economic status of their inhabitants and the high risk of stigma for those who would consent to diagnosis and treatment. While the inpatient regimen is seen as effective by health care providers, it can also be an inhibitor for patients.



TB ward, Twomey hospital at Tamavua, Fiji

Still, those who live in the most remote areas are also considered vulnerable to infection mostly because of the geographical barriers to access to services.

Co-morbidity with HIV remains low at below 2%, owing in large part to the low HIV prevalence of 0.1% in the adult population.

In-patient care and DOTS

Fiji's TB program was established in 1957 and maintains an archive of hand-written records in the main referral hospital in Suva, the PJ Twomey Hospital at Tamavu, dating back to the country's first patient.

Every TB patient in Fiji's 60-year fight against the disease has their records stored in these filing cabinets

The WHO-recommended DOTS strategy was introduced in 1997, and has been tailored to the national context with an in-patient incubation period of two months to ensure treatment adherence. The hospital in the capital is one of three nationwide with a TB isolation ward and microscopy laboratory.

Estimated MDR-TB prevalence is 1.9% among new cases and among retreatment cases is 13.8% but there has yet to be any reported case of MDR, according to national data. However, this should be treated with caution as there has never been any national drug resistance surveillance.

Fiji is preparing a differentiated community-DOTS strategy to respond to the national context. Recognizing that human resources and logistics are perennial and expensive challenges, the country is testing a number of approaches to maintain treatment adherence once the in-patient incubation period is concluded.

One prong in the approach includes centralized workshops aimed to make community health workers become direct observers for people finishing their course of treatment. The latest workshop took place in June 2015, under the auspices of a program paid for by the Global Fund.

Potential obstacles within this approach relate to the limited human resources for health care that leaves community health workers operating without consistent oversight. Equally, the program does not build in any monitoring and evaluation to judge how effective the training is.

Another problem with this approach is derived from the consistently limited engagement by community systems and civil society in TB decision-making; this includes patients themselves and their families.

To address these obstacles, the NTP will use Global Fund money to recruit a dedicated national TB control officer to coordinate the national response, including the community direct observed tuberculosis short-course (C-DOTS) component. It is hoped that having a dedicated officer as a focal point for community work will promote and sustain engagement at the community level in 20 medical areas across the country. Global Funding attached to the position will also include resources for supervisory visits, communications and small stipends to allow community workers to trace those patients lost to follow-up.

A country in transition

The NFM experience for Fiji was bittersweet, a long and steep journey full of success and not failure as one stakeholder put it. There was relief that instead of spending considerable time and energy on applications without guarantee, the process was more streamlined, more definitive and with full awareness of the size of the envelope on the other end. It may not have been simple, but it was better.

There was also appreciation that in imposing rigorous requirements on reporting, data collection and developing an evidence base to support interventions, the Global Fund has helped inculcate that same kind of discipline within the Fijian heath sector itself – discipline that will be adaptable to other disease responses.

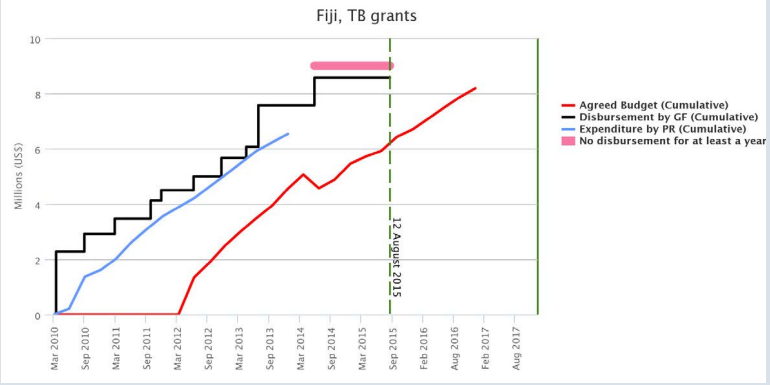
Under the NFM there was not only substantially more guidance provided to the CCM as part of the development of the concept note, there was also more freedom to allow for national input to help tailor the interventions to national priorities. As another stakeholder said: they've tried to respond to us, to change the way they do things as much as they've helped us change the way we carry out our own work.

There are concerns that without the continued demands of Global Fund reporting, discipline will slide. Without a push for meaningful dialogue that involves communities and civil society, these things will no longer be a priority. And, most importantly, without the financial support, the TB program will be found wanting for resources at a time when clear gains are being made.

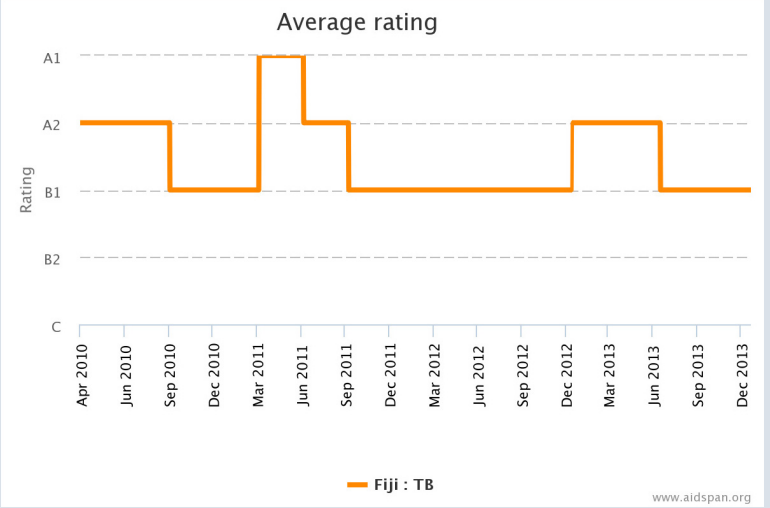
Fiji *(2013 statistics)**	
Total population	881,065
Male population (%)	50.9
Female population (%)	49.1
GDP per capita (US$)	4375.4
GNI per capita, Atlas Method (US$)	4370
Human Development Index	0.7
Life Expectancy (years)	69.8
Under 5 Mortality (per 1000)	22
New and relapse notified TB cases	**254**
Notification rate of new and relapse TB cases	**29**
Estimated MDR-TB Cases (limits)	**0**
Confirmed MDR-TB Cases	**0**
TB patients with known HIV Status (%)	**69**
Number of HIV-positive TB patients	**4**

Global Fund Finance

Fiji has been receiving Global Fund support since 2010 for its TB program. Between 2011 and 2015, the Ministry of Health has been the PR for the active TB grant. A total of US$ 10.0 million has been disbursed to date under the TB component. The NFM allocation for the TB program is US$ 5.3 million.



Global Fund reports show a disparity between budget, expenditure, and disbursements (see graph). However, on further analysis of the grant pages on the Global Fund website, between Apr 2010 and Mar 2012 this grant had a different grant reference number which was later changed when the PR changed its name. The cumulative budget from the earlier named grant was not carried forward to the new grant data. The commitment for this first phase of the grant that is not included in the above graph was US$5.1 million out of which US$3.4 had been disbursed. The grant seems to be carrying forward a large cash balance and hence no disbursement from September 2014. It is not clear from Global Fund records why there was no expenditure from mid-2014.



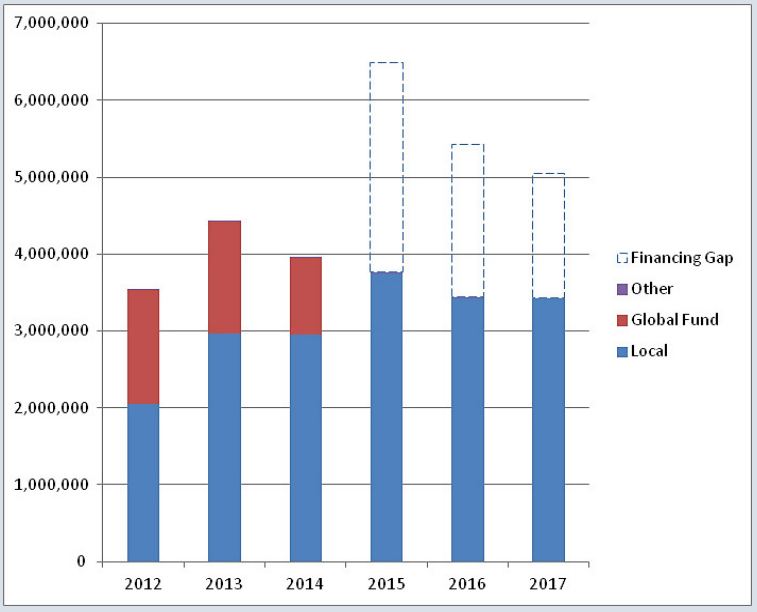
In the progress update periods (Apr-Jun 2010 to Jul-Sept 2010) the grant exceeded targets for most indicators. Only two indictors did not meet their targets: (i)the number of TB cases receiving culture and Drug Susceptibility Testing (DST), and (ii) the number of laboratories meeting the national level standards (LQMS). The grant demonstrated good performance in the areas of testing and treatment, training, and TB awareness outreach. Despite the good performance, the PR was behind target in establishing M&E frameworks. The failure of timely transfer of funds from the Ministry of Finance (MoF) to the Ministry of Health (MoH) raised the concern of the ability of the PR to effectively communicate and coordinate with the MoF. The delay in these transactions is the main reason for downgrading the performance from "A1" to "A2".

The performance of the grant deteriorated in the six-month period from October 2011 to March 2012 with a B1 rating. This is because the PR failed to meet the targets for 6 indicators: (i) the number of TB cases receiving culture and DST, (ii) the number and percentage of private health providers collaborating with the national TB program, (iii) the number of laboratories meeting the LQMS, (iv) the number of health facilities that received annual post-training supervisory visits, (v) the number and proportion of TB laboratories performing regular external quality

assurance for smear microscopy, and (vi) the number and percentage of public health facilities with all tracer medicines in stock on the day of the visit.

The grant performance in subsequent quarters overall continued to be strong with most indicators being met and showing strong performance in the areas of testing and outreach. However, there was a marked weakness in the outcome indicator, "Treatment Success Rate" (TSR), which had an achievement of 67% for the 2010 cohort (reported April 2012). This is very low for a TB program (WHO recommended TSR is 90%).

Investment in the TB program



Most investment in the TB program has been from the government of Fiji, receiving an average of 3.2% of total health finance. Local investment has steadily increased from US$ 2 million in 2012 to US$ 3.7 million in 2015, with a projected total investment of US$ 10.6 million from 2015 to 2017. Global Fund support was approximately US$ 1.5 million per year in 2012 and 2013, with a drop to US$ 1 million in 2014. Funding from sources other than the Global Fund has remained below US$ 20,000 per year over the past four years. The total funding gap from 2015-2017 for this program is US$6.3 million.

Out of retirement and into the field, Fiji's former nurses are on the front lines against TB

Lavinia Padarath, chair of the Retired Nurses Association - Fiji, a Global Fund sub-sub recipient

When Lavinia Padarath became a nurse it was the late 1950s, and tuberculosis was everywhere in Fiji. Wards were overflowing with patients and the cure rate was low for those patients lucky enough to even be released from hospital. Once they got home, they had to hide in their communities for fear of discrimination and stigma.

"We nursed a lot of cases in those days, and there was a lot of neglect," she recalled, her eyes bright with tears. "But we made progress. We got organized, we got knowledgeable and even the young nurses back then were able to do their part. And we thought that we had eliminated TB."

Fast forward 50 years and Lavinia is among the ranks of the retirees, having served not only as a nurse and a nurse matron but as a senior official in the Ministry of Health. And a disease that she thought that she and her colleagues had vanquished returned with a vengeance. And its profile had changed.

"There has been a rise in poverty, and these squatter settlements [around the major cities including the capital, Suva]. There are now around 90,000 people in settlements between Nausori and Suva, and they are all struggling, and all at risk of major disease. Because of that, it's become an urban disease, but there are still challenges at village level, especially in the maritime islands," she said. "And the villages are emptying out, so there is no one there to treat people; all who are left are the elderly, and they are the most vulnerable to infection."

So Lavinia and her friends decided to do something about it. They founded the Retired Nurses Association of Fiji – a sub-sub-recipient of Global Fund grants as an affiliate of the Fiji Nurses Association – and leapt into action.

Each retired nurse in the association who lives in a rural area has an area of operations extending about 10 km from her home; those who live and work in the cities have carved up the settlements and assigned zones of responsibility. The nurses are matched with cases to do daily supervisory visits of those TB patients who have been discharged from the hospital, to make sure that they are taking their drugs, eating properly and not exposed to ancillary infections.

"They take public transport, or drive themselves, and in some places in the islands they have to take a boat from village to village," she said. "I once even had to ride a horse and get on a boat and then walk to meet one of the nurses who needed some extra support."

What's exciting, Lavinia says, is that it's not just TB work that the retired nurses are doing. "That's the benefit of experience; you can see what the other needs are. So we multitask, and treat symptoms of other illness. As a nurse, it's just something that you do."

The modest funds the retired nurses receive as an SSR help to organize the transport to and from the villages and the monthly meetings they hold to discuss particularly tricky cases and share thoughts and experiences in the villages and in the settlements.

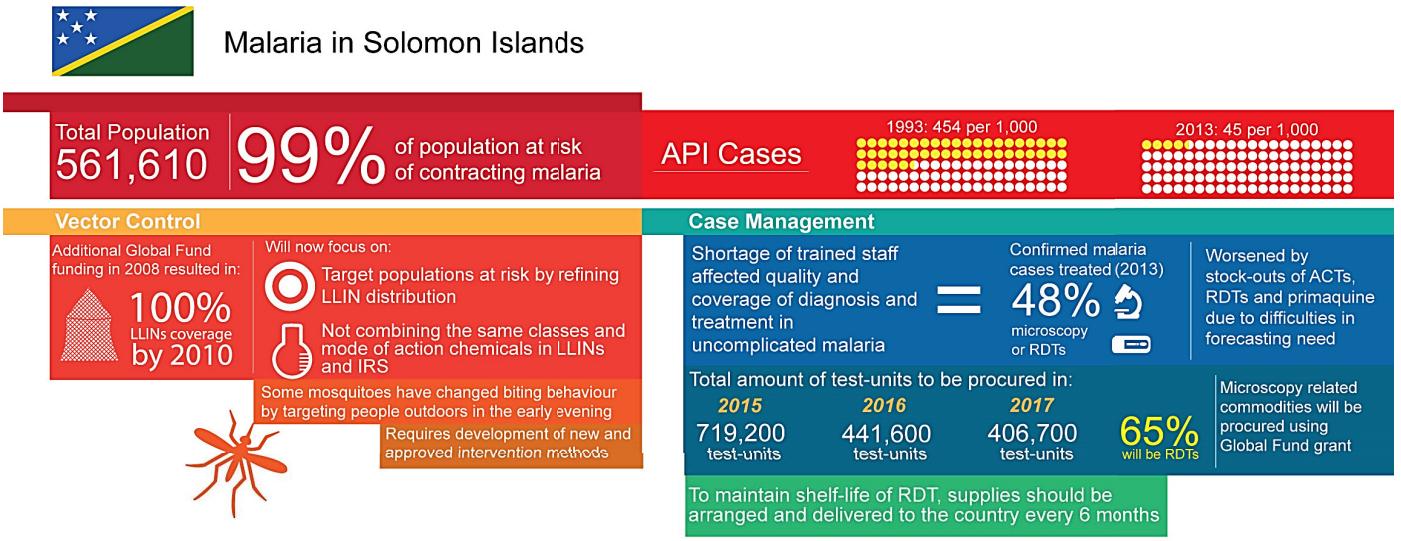
Many of the nurses note that there has been an evolution in the way they, as women, are being treated at the village level. "We're subverting the gender paradigm," laughed Lavinia. "We're professionals, and elders. So we get respect."

Going forward, Lavinia says there are plans to expand the membership of the association, in order to reach every corner of the vast country, even the most remote areas. Under the NFM grant, she says, there may be room for some training and workshops, to integrate the work being done by the retired nurses with more modern approaches to case management.

Eventually, she says, there are plans for the retired nurses to help the MoH tackle some of the other challenges confronting Fijians – specifically NCDs.

"The ministry needs to see resources in us," she said.

Solomon Islands



An archipelago of more than 1000 small islands, and with over 561,000 people, Solomon Islands is one of the least densely populated countries in the world. Most of the population depends on subsistence farming and fishing; industrial infrastructure is weak and there is little transformative industry to bolster state coffers. Solomon Islands also does not have the same reliance on tourism that drives the economies of other Pacific states.

Ethnic tensions in the early 21st century affected the whole country, but especially the capital, Honiara and the surrounding Guadalcanal province, displacing tens of thousands and necessitating the arrival of international peacekeepers.

Squatters settlements continue to crop up around Honiara, increasing the level of urban poverty and limiting access to clean water and sanitation. Major natural disaster and weather events are common, including earthquakes, cyclones, tropical storms and flooding.

The country is categorized as lower-middle income and ranks 143 out of 187 on the UN Human Development Index. This has entrenched poverty in the country, reducing access to literacy, exacerbating gender-based violence and predisposing populations to addictive and risky behaviors. Marijuana and homebrew consumption are rife, provoking gender-based violence and further disempowering women. There is a high level of unwanted pregnancy among young women due to concurrent sexual relationships that are unsafe. STI infection is high and condom usage is low; public health education is also limited by low capacity within the health service and a tiny public budget for health – just 8% of an annual $1 billion GDP.

Logistic hurdles abound in Solomon Islands due to the sizable distances between islands.

The country stretches across an area greater than 1,500 kilometers. This has presented formidable challenges for health service delivery.

Solomon Islands and the Global Fund

Solomon Islands is embarking on a new journey with the Global Fund under the NFM, moving into single-stream funding grants with a small number of indicators in order to achieve the cash on delivery model that effectively incentivizes the primary recipient, in this case the Ministry for Health and Medical Services, to achieve an agreed upon set of annual targets in order to access the full grant amount.

The country portfolio is a total of $8 million for TB and malaria. However, as the only country in the Pacific outside of PNG eligible for incentive funding, it was invited to submit a request to support improved data collection and prevention interventions targeting key populations for HIV. The request was submitted in September 2015, for incentive funding and for inclusion in a special register for quality programming.

Solomon Islands had tried in the past to extract itself from the multicountry grant portfolio, without success. In 2007, Solomon Islands sought to be PR on a single-stream HIV grant and was denied, only to be encouraged to sign on to the multicountry grant for the same complement of activities. In 2008, it sought again to stand as PR on a TB grant but was convinced to stay for one more cycle as part of the regional portfolio.

It was at that same time that Fiji was successful in achieving single-stream funding for TB and provided a window for Solomon Islands to see up close how challenging the process was – especially with a ministry of health with low capacity and without internal control capacity.

The performance-based funding approach taken by the Global Fund makes sense for Solomon Islands, though there is clear need for better integration of all systems – including corporate services and monitoring and evaluation – to streamline processes further. The Ministry's implementation model that utilizes Global Fund's resources for the target disease programs, corresponds well to the national context and will become standard operating procedure, going forward, in planning and budgeting across the health sector, with clear delineation of rules and responsibilities.

Critical to the successful implementation of the two grants will be the strengthening of the provinces to implement the national strategic plans and the alignment of the strategic plan to the annual operational plans at the provincial level. Solomon Islands Ministry of Health and Medical Services will be PR for both grants.

Also important will be continued engagement with the small but vibrant community of civil society groups.

Civil society has played a critical role in the coordination of the NFM process, leading the CCM through the complicated transition - from being part of the multicountry grant to standing alone. There was limited support provided by the Pacific Islands regional coordinating mechanism, making country dialogue ad hoc, and the iterative process drawn out and heavily reliant on the highly effective technical advisors in the country.

Malaria

The vision of Solomon Islands government is to achieve a malaria-free country by 2035; achieving that goal will depend on funding levels and the ability to scale existing already-successful programs with the low levels of human resources available.

A new malaria control and elimination strategic plan (2015-2020) estimates the cost for the entire strategy at around $66 million.

API reached a plateau in 1997 of 140 cases per 1,000 and remained constant until the ethnic tensions. This after fluctuating considerably from its peak of 454 cases per 1,000 people in 1993 and just 45 cases per 1,000 people in 2013.

This contributed to a burden of disease that is among the highest outside sub-Saharan Africa. Ninety-nine per cent of the population are at risk of contracting malaria. Solomon Islands experiences internal movement of people, mainly between the capital Honiara and the other outer islands - people migrate to Honiara to look for employment and education opportunities. So, the API in the capital is usually the highest in the whole country, probably due (in part) to cases coming in from the outer islands.

Disbursements for the period 2015-2017 of $5.6 million to support Solomon Islands malaria control program began in January 2015, supporting interventions in at-risk populations with special emphasis on reaching more remote areas where health services tend to be the weakest and areas that that have a higher disease burden. Commodities will most often be funneled through the Global Fund's own pooled procurement mechanism.

Under the net in Solomon Islands

TB

Solomon Islands has the 2nd highest number of TB cases among the Pacific Island countries, after Papua New Guinea. TB prevalence and incidence in 2014 were estimated respectively at 133 and 86, while TB mortality (excluding HIV-positive cases) was 13, per 100,000 population.

An imported case of multi drug-resistant TB (MDR-TB) from overseas has been identified in the country. However, drug-resistance surveillance has not been conducted to corroborate the reported number of MDR-TB cases. Cases eligible for drug sensitivity testing in Solomon Islands and other selected South Pacific countries are tested by conventional Drug Sensitivity Testing (DST) in Adelaide, Australia by the designate Supra National Reference Laboratory (Solomon Islands).

TB case notifications are higher in the urban and peri-urban areas than in rural areas. The average TB patient is 15-35 years old. There is low incidence of TB in children but the proportion of children with TB (18%) is higher than what is expected based on global figures and epidemiological studies conducted elsewhere. This suggests either an abnormally high burden in children or over diagnosis. Diagnosing TB in children is universally recognized as being difficult.

TB program support from the Global Fund came in 2002 and 2008. These investments have helped to professionalize and standardize the program, marking a pronounced improvement in service delivery at the provincial level and a significant improvement in outcomes and impact.

Two indicators agreed under the NFM grant are: Case notification [rate of TB cases - all forms, new and relapses]; and Treatment success rate.

The NFM grant plans for a targeted increase in detection, which will require better screening for TB using innovative strategies and a shorter diagnostic turnaround time. This warranted the introduction of the GeneXpert in July 2014, an innovative diagnostic technology that allows more rapid diagnosis. The technology is also more sensitive than the current smear microscopy technology and has made it possible for the country to test for Rifampicin Resistance, of which MDR is a sub component. Technical assistance from WHO is expected to help the country achieve the shorter diagnosis turn-around time.

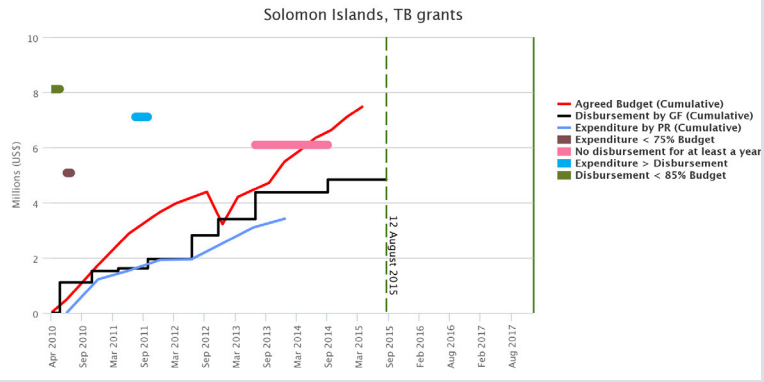
The GeneXpert is based on innovative diagnostic technology that diagnoses cases faster and is more sensitive than the current smear microscopy technology.

A community-based approach is planned to ensure that treatment success rates, currently estimated at 90%, are maintained. The same approach is planned to strengthen contact tracing. Solomon Islands' TB treatment strategy begins with a two-month admission into the main referral hospital in Honiara or the provincial hospital; there are no isolation units in the country. The planned community-DOTS strategy engages at the family or household level to complement the health system.

Solomon Islands *(2013 statistics)**	
Total population	561231
Male population (%)	50.8
Female population (%)	49.2
GDP per capita (US$)	1953.6
GNI per capita, Atlas Method (US$)	1600
Human Development Index	0.5
Life Expectancy (years)	67.7
Under 5 Mortality (per 1000)	31
New and relapse notified TB cases	**360**
Notification rate of new and relapse TB cases	**64**
Estimated MDR-TB Cases (limits)	**11(7-15)**
Confirmed MDR-TB Cases	**0**
TB patients with known HIV Status (%)	**13**
Number of HIV positive TB patients	**0**

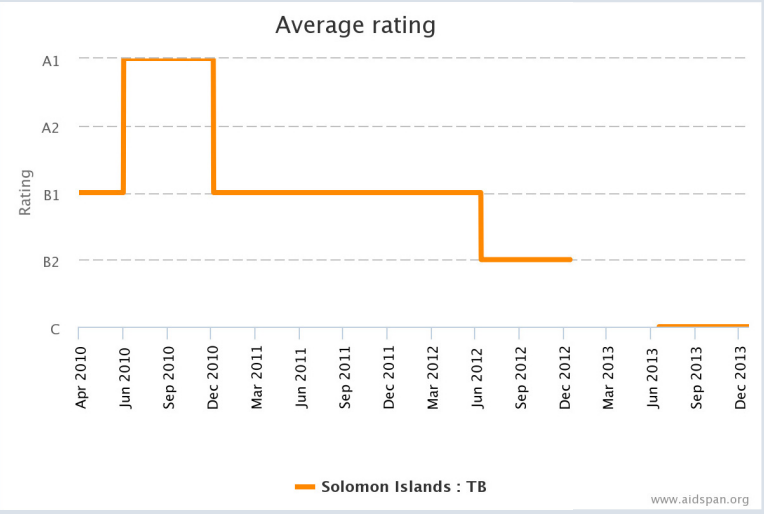
Global Fund Finance

Solomon Islands has been receiving funding from the Global Fund since 2010 for its TB program. Between 2011 and 2015, Solomon Islands was a PR under two Multicountry Western Pacific TB grants with the Secretariat of the Pacific Community. A total of US$ 5.2 million was disbursed. Solomon Islands Ministry of Health and Medical Services will be the PR under the NFM TB grant, which is worth $2.8 million.



As per Global Fund reports, expenditure and disbursements between 2013 and 2012 appear to be significantly less than budget. The PR revised its budgets downwards due to the lower burn rate.

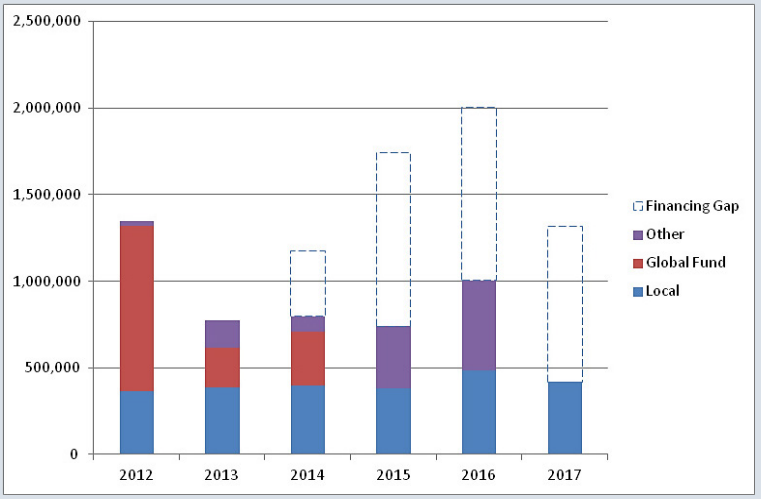
According to Global Fund reports in the period Jan to Jun 2011, the overall performance of the program was strong, particularly taking into consideration the delay of program implementation in period 1 due to delays in signing the R8 TB grant. Strong performance was noted in various areas, particularly diagnostic and case management of TB services, training of health workers and pharmacists, monitoring activities for laboratories and medical stores and conducting awareness programs.



Despite the strong performance, however, the program was behind target in terms of laboratories and second level medical stores meeting or maintaining the basic service capacity standards, the involvement of relevant public and private health care providers in national TB program efforts, and HIV testing of TB patients. The program achieved an average rating of B1 for all the indicators including the top 10 indicators.

In the next evaluation period, program achievement was good (B1) but the Global Fund downgraded the performance to B2 due to weak financial and management systems.

Investment in the TB program



Total investment in the TB program was US$1.4 million in 2012 of which 71% was contributed by the Global Fund. Although Global Fund investment has continued in 2013 and 2014 the percentage has decreased to 30% and 39%. Funding of the TB program from local sources has increased from 27% to 50% over the same period. The TB program receives 1% of Solomon Islands government financing on health. Other donors have increased their investments from 20% in 2013 to a projected high of 51% of the agreements to date (for 2016). The TB program operated with a funding gap of US$ 378,047 in 2014 and is currently operating with a gap of over US$ 1 million.

Chasing malaria elimination in Guadacanal Province

When Albino Bobogare started out as a junior technical officer in the malaria department of Ministry of Health in Solomon Islands back in the late 1980s and early 1990s, he was asked to go out at night, and observe through people's windows in parts of Western and Ysabel provinces, if people were using their mosquito nets.

"I almost got killed a couple of times," chortles the man who since became the head of the malaria team at Solomon Islands National Vector Borne Disease Control Program and the focal point in the MHMS that will oversee the country's first-ever single stream Global Fund grant.

His colleagues and successors in Guadalcanal province are taking a much more sophisticated, and potentially less violent, approach to ensuring coverage at the household level and help put Solomon Islands on the road to elimination.

Francis Otto, program manager of the Guadalcanal Province malaria program

Endemicity of malaria varies within and between the 10 Solomon Islands provinces but is typically highest in Guadalcanal, along the northern coastline area that also includes the capital. More than one in four of the people annually seen in hospital in the province are there for malaria treatment.

The province has been able to nearly halve the number of malaria cases over the past five years, using a febrile case management strategy that included blood testing, indoor residual spraying and wide distribution of nets, particularly in villages with populations of under 200.

The province of 700 communities is divided into zones – six in all, with most of the high incidence communities concentrated in zones 1 and 6: Honiara and the nearby Henderson area, which is home to a highly transient community with a high number of informal settlements.

Health facilities in these communities are linked to the provincial headquarters by CB radio: cheaper and more reliable than mobile phones. Requests for medical stocks are made over the radio and communicated to the provincial office, as well as the routine monthly health information reports. The requests and reports are recorded at the provincial level and then shared with the national units at the MHMS.

The strategy deployed in Guadalcanal aligns with a wider effort in Solomon Islands to scale and maintain coverage in its key interventions. While there have been very few deviations in the cost of vector control through mass distributions of bed nets in the three-year cycles that aim to achieve universal coverage, diagnostic services have become more sophisticated – and also more expensive.

One way that the shift could take place is in greater investment in health promotion work and, to some extent this is on the agenda as part of a MoMHS 'Healthy Village' campaign. But community mobilization and health promotion are not within the responsibilities of the malaria program: an example of the highly fragmented health system in Solomon Islands that speaks to the need for better integration at all levels.

One of the many functions of the malaria program at the national level, is providing refresher training courses for nurses to help reduce presumptive treatment of malaria cases. Funds from the Global Fund will support these training courses.

The next mass net distribution campaign for the country is set for 2016; prior to the distribution, however, the provincial teams will work to close the gap between distribution and usage.

"Nets go out but they don't go up," said Francis Otto, the program manager for the provincial program. "We need to know how people live, so we can help them use the nets in the right way. We know enough how people live to target them [with nets] but it's hard to get them to change their behavior."

Endnotes

Country statistics at the end of each country profile: Data sources used - UNAIDS, Roll Back Malaria (RBM), Stop TB Initiative and submitted Global Fund country concept notes

RAI

1. 2014. Improving access to malaria control services for migrant and mobile populations in the context of the emergency response to artemisinin resistance in the Greater Mekong Sub-region (GMS). WHO.
2. http://www.irrawaddy.org/burma/knu-govt-build-model-village-idps.html estimated ~500,000 IDPs
3. Wharton-Smith, A, and M. Shafique (2014). Qualitative Study to Assess Consumer Preferences and Barriers to Use of Long-Lasting Insecticidal Nets (LLINs) in Myanmar. Malaria Consortium: Yangon, Myanmar.

Cambodia

1. Annear, P.L. et al (2015). The Kingdom of Cambodia Health System Review. Health Systems in Transition, Vol. 5/2 2015.
2. Youth Population statistics (Cambodia) - https://en.wikipedia.org/wiki/Youth_in_Cambodia
3. Presentation by Dr. Mao Tan Eang (CENAT) at TAG-NTP Managers Meeting in Manila Dec 9-12 2014 "TB service and Health Insurance Extending TB benefit package to help mitigate economic burden of TB patients, Cambodia context"
4. Presentation by Faisal Mansoor (UNOPS Myanmar) at the MMV meeting Siem Reap 25 Feb 2015 "Regional Artemisinin Initiative (RAI)"
5. National Strategic Plan for Elimination of Malaria in the Kingdom of Cambodia 2011-2025.

Laos

1. National census 2005 projections and World Bank databank for 2013.
2. 2013 Sector Reform Framework Laos 2013-25. Ministry of Health. Vientiane.
3. 2014 GARP Laos
4. HIV PUDR No. 8
5. Presentation "Regional Artemisinin Initiative (RAI)" by Faisal Mansoor, UNOPS Myanmar, at the MMV meeting Siem Reap 25 Feb 2015.
6. Outdoor Malaria Transmission Network (MOMTN) out door Malaria Transmission in Mekong Countries Meeting 25-28 March 2013 SEAMEO TROPMED Network Office Bangkok, Thailand" presentation by Dr. Simone Nambanya, Deputy Director, Center of Malariology, Parasitology and Entomology, Laos.

Vietnam

1. 2014 Presentation HIV and AIDS in Vietnam, HIV and AIDS Data Hub for Asia Pacific (Evidence to Action) ppt slide 8
2. HIV sentinel surveillance survey 2013 for MSM; Integrated biological and behavioral survey 2013 for FSW (IBBS)
3. 2014 HIV UNAIDS 2014 ppt slide 5
4. TB-HIV NFM CN

Myanmar

1. Saw, Y.M., et al (2013). Taking stock of Myanmar's progress toward the health-related MDGs: current roadblocks, paths ahead. International Journal for Equity in Health 2013,12:78.
2. 2014 NAP Annual Overview ppt slide 4
3. 2014 NAP Annual Overview ppt slide 6
4. 2011 Progress toward universal access to multidrug-resistant tuberculosis diagnosis and treatment in nine countries in Asia (Landscape Report). Written by PATH, commissioned by USAID.
5. 2013 National Tuberculosis Program Annual Report
6. Presentation "Regional Artemisinin Initiative (RAI)" by Faisal Mansoor, UNOPS Myanmar, at the MMV meeting Siem Reap 25 Feb 2015
7. Health in Myanmar, 2011
8. Health Systems in Transition (Myanmar), 2014

The Philippines

1. Espino F, Koops V, Manderson L (2004). Community Participation and Tropical Disease Control in Resource-Poor Settings. Geneva: WHO.
2. 2014 GARP
3. 2005-13 Philippines IHBSS
4. 2014 GARP
5. 2012-2015 Spectrum Projections http://www.unaids.org.ph/index.php?mod=page&type=view&mid=21&rid=0&sid=0&tid=0&pid=6
6. 2013 WHO Estimates of TB and MDR-TB burden
7. 2010 –2016 Philippine Plan of Action to Control TB (PhilPACT)
8. International Work Group for Indigenous Peoples (IGWIA) 2010

Indonesia

1. TB & HIV Concept Note
2. Malaria Concept Note
3. "Faith-based Organizations and the Global Fund" – Friends of the Global Fight http://goo.gl/ROxkOZ
4. Experiences by CSO Partners, Aisyiyah "Community TB Care" Indonesia PPT
5. Kampen SC, et al. Effects of Introducing Xpert MTB/RIF on Diagnosis and Treatment of Drug-Resistant Tuberculosis Patients in Indonesia: A Pre-Post Intervention Study. PLoS 2015 http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0123536
6. Global Fund OIG Audit report (GF-OIG-15-021), Dec 2015.

Malaysia

1. Round 10 GF Proposal – HIV
2. CCM Request for Renewal - HIV (15 April 2013)
3. Malaysia National Strategic Plan on HIV/AIDS - 2011-2015
4. Malaysia National Strategic Plan on HIV/AIDS – 2011-2015 Mid-term Review
5. Global AIDS Response Progress Report 2014 – Malaysia
6. Ibrahim F.H. Needle Syringe Exchange Program in Malaysia Jurnal Antidadah Malaysia
7. Pilot HIV Intervention Programme for MSM in Malaysia – PPT by MAC
8. Malaysia Health System Review – World Health Organization (on behalf of the Asia Pacific Observatory on Health Systems and Policies) http://goo.gl/FTQHPB

Timor Leste

1. CCM Request for Reprogramming – Malaria. Phase 1, Round 10. Timor Leste MoH.
2. Concept Note for HIV in Timor Leste. March 2014.
3. Concept Note for TB in Timor Leste. March 2014.
4. Grant Performance Report – Malaria. Last updated on 16 Jan 2015.
5. Martins N., Trevena LJ. Implementing what works: a case study of integrated primary health care revitalization in Timor-Leste. APFMJ 2014 13:5
6. Heldal E., et al. The case of the Democratic Republic of Timor-Leste. Bulletin of the WHO. 85-8-2006. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2636387/
7. Timor-Leste: Strong malaria control programme cuts cases. http://www.who.int/features/2014/malaria-timor-leste/en/
8. Timor-Leste, OIG Investigation report (Oct, 2015), GF-OIG-15-017

Multicountry Western Pacific

1. Multicountry Western Pacific concept note, HIV, January 2014
2. Multicountry Western Pacific concept note, TB, March 2014
3. Independent rapid analysis: health financing in the Pacific - the potential role of the Global Fund to Fight AIDS, Tuberculosis and Malaria, Health Resource Facility, April 2013
4. Regional Workshop on Consolidation of Gap Analysis for Multi-Country HIV/STI-HSS Concept Note Development for Pacific
5. Island Countries, October 2014
6. Vanuatu council of ministers meeting notes, March 21, 2014
7. Vanuatu CCM governance strengthening exercise, December 3, 2013
8. Vanuatu National Strategic Plan HIV, January 2015
9. Vanuatu Key Affected Populations engagement debrief and presentations, including reports on IBBS, 2014

Papua New Guinea

1. Papua New Guinea concept note, TB, December 2013
2. Papua New Guinea concept note, malaria, March 2014
3. Papua New Guinea concept note, HIV, November 2014
4. Papua New Guinea National Strategic Plan malaria Papua New Guinea National Strategic Plan TB Papua New Guinea National Strategic Plan HIV
5. Socio-Economic Implications of Tuberculosis in Papua New Guinea: An information note for Governors and Provincial Administrators, 2015
6. Tingim Laip Project Completion Report, June 2015
7. UNAIDS Systems and Organizational Audit of Igat Hope Incorporated, December 2011

Fiji

1. Fiji concept note, TB, March 2014
2. Fiji Statistical Profile (2015) - http://www.who.int/gho/countries/fji.pdf?ua=1
3. Fiji Government – Healthcare spending - http://www.fiji.gov.fj/Media-Center/Press-Releases/HEALTHCARE-SPENDS-OVER-$1BILLION.aspx

Solomon Islands

1. World Malaria Report (WHO), Solomon Islands (Western Pacific Region), 2014
2. Solomon Islands concept note, TB, March 2014
3. Solomon Islands concept note, malaria, August 2014
4. Guadacanal Province strategic malaria review and lessons learned, June 2015

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