

Consultancy to Conduct Formative Evaluation of the 2010-2015 TB REACH Initiative

Evaluation Report

10 October 2016





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Glossary

ACF Active Case Finding

BNMT Britain Nepal Medical Trust
CDR Centre Development Region

CNR Case Notification Rate

DOTS Directly Observed Treatment Short Course

FAITH Friends Affected and Infected Together in Hand

FHI Family Health International

GF Global Fund to Fight Aids, Tuberculosis and Malaria
HERD Health Research and Social Development Forum

HIV Human Immunodeficiency Virus

IDUs Injecting Drug Users

PLHIV People Living with HIV/AIDS

IOM International Organization for Migration

JANTRA Japan-Nepal Health and Tuberculosis Research Association

LHL Norwegian Association of Heart and Lung Patients

MOH Ministry of Health

NSP National Strategic Plan

NTC National Tuberculosis Centre

NTP National Tuberculosis Programme

PPM Public Private Mix

RFP Request for Proposals
PR Principle Recipient

PRC (TBR) Proposal Review Committee

RTC Regional Tuberculosis Centre

R/DTLO Regional/District Tuberculosis/Leprosy Officer

SS+ Sputum positive TB SS- Sputum negative TB

TB Tuberculosis

TBCN TB Control Network

TBR TB REACH

Union International Union Against Tuberculosis and Lung Disease

WHO World Health Organisation

1 Executive Summary

1.1 Background to TB REACH

TB REACH (TBR) is an initiative of the Stop TB Partnership, initially funded by Global Affairs Canada, its biggest donor, and later also by UNITAID. TBR was created to test innovative solutions to improve tuberculosis (TB) case detection and reporting. Recognising the gaps in existing support to addressing this deadly disease, the programme places testing innovative strategies and technologies centre stage in its approach to increase the number of people diagnosed and treated for TB. TBR's main objective is to increase case detection of TB, detect the disease as early as possible, and ensure timely treatment which will result in improved treatment success rates. TB REACH focuses on reaching people with limited or no access to TB services and looking for innovative ways to do this.

1.2 Objectives of the Evaluation

TB REACH has been running for five years and the next five year phase has recently started in 2016. Atos Consulting was commissioned in May 2016 to review the implementation of the first five-year cycle of funding in order to inform decision-making regarding the next five-year cycle of funding. There is also an accountability objective in terms of accounting for aid expenditures to stakeholders and tax payers.

More specifically this evaluation is intended to:

- Assess the effectiveness of the programme
- Assess the relevance and sustainability of programme results
- Provide findings, conclusions, recommendations and lessons for future implementation

1.3 Evaluation Approach

Conclusions and recommendations in this report have been based on extensive information gathered, through interviews, an electronic survey and portfolio analysis, from a range of stakeholders including TBR grantees, programme donors, and international and national partners. Interviews were also held with the TBR Secretariat and the TBR M&E agency.

To enable a detailed understanding of programming, four country field missions were conducted. From an initial list of eight countries, four were selected for field visits: Ethiopia, India, Nepal and South Africa.

Field mission locations were selected in consultation with the Secretariat based on the following criteria:

- Mix of geographical regions
- Focus on high burden countries (HBC) with some coverage of countries which are not ranked as high burden – three out of four of the selected countries are classified as HBC with Nepal providing a different perspective on the programme as a non-HBC.
- Coverage of four Waves of TB REACH funding.

• Exclusion of the four countries visited during the midterm evaluation of TB REACH (Cambodia, Kenya, Nigeria and Uganda).

The objectives of these missions were to:

- Obtain deep insights into TBR projects in a mix of regions and countries in order to better understand the innovations, results and sustainability and scale up of the interventions on the ground.
- Collect granular evidence on the reality of the projects and how they are making a difference in the global fight against TB.

1.4 Structure of this Report

This evaluation report is structured as follows:

- **Section 2** presents the evaluation methodology and data collection methods in addition to caveats and limitations of the research.
- **Section 3** outlines the TBR portfolio in terms of key dimensions and also includes a summary of the results of the programme.
- Section 4 details the evaluation findings by evaluation question.
- **Section 5** outlines the key conclusions from the evaluation.
- **Section 6** presents the recommendations of the evaluation team to TBR.

1.5 Eligibility and Selection Criteria

The TB REACH programme is applicant led. An independent panel, the Proposal Review Committee (PRC), is responsible for recommending grantees for selection. The final selection of grantees is based on a combination of eligibility criteria and a range of other factors, including: the quality of the proposal received, the sustainability of proposed innovations, and agreed likelihood for success.

In order to be considered for funding, proposals to TB REACH must meet a range of criteria. The criteria include, but are not limited to, a focus on Gross National Income (GNI) and TB rate.

Regarding HBC: It was agreed that the list of 22 HBC countries, as defined by the WHO throughout the period 2002-2015, would be applied to this evaluation's analysis.

Regarding GNI: According to the TB REACH Wave-4 Eligible Countries specification, TBR GNI country categories are specified as follows:

- Eligible without any restriction. Countries with a Gross National Income (GNI) per capita of US \$2000 (as determined by 2010 World Bank Development data), with at least 70% of grants active in countries with a GNI less than US \$1000.¹ (Henceforth referred to as Category I).
- Eligible countries with restrictions. Countries with GNI per capita between \$2000-3000, with a specific focus on sub-national population/areas that are poor (poverty pockets).² (Henceforth referred to as Category II).
- Remaining high burden countries that are eligible with restrictions. High burden countries whose GNI may fall outside the parameters mentioned above, but with populations demonstrated to be economically poor, and deemed to have limited access to services and a low TB case detection rate.³ (Henceforth referred to as Category III).

¹ Annex A, Agreement with Canada

² TB REACH Wave-4 Eligible Countries

³ TB REACH Wave-4 Eligible Countries

1.6 Portfolio Analysis

This evaluation's portfolio analysis looked at the financial distribution of TBRs grants, including the relationship of financial disbursements to GNI and HBC.

It should be noted above all that the TBR grant process is an applicant driven one. This portfolio analysis is intended as a snapshot of the distribution of TBR grants and is meant to provide an overview of grant distribution. It does not imply that the TBR Secretariat or any associated body in the selection process (such as the Proposal Review Committee) actively control nor influence grant distribution. The grant distribution is reflective of the selection process as highlighted in Section 1.5 above.

The first cycle of the TB REACH initiative consisted of four Waves of funding over 5 years. It funded 144 projects across 46 countries, covering all TB HBC except three: China, Russia and the Philippines. Of these projects, 39 were extended for an additional year.

A total of \$89,770,743 was disbursed to grantees⁴:

- It was found that 47% of TBR's grant spend during this evaluation period was disbursed to projects in Africa, 13% to the Eastern Mediterranean, 13% to South East Asia, 11% to Europe, 9% to the Americas and 6% to the Western Pacific.⁵
- TBR spent approximately \$22.7m in Wave 1, increasing this to \$36.3m in Wave 2. Subsequent Waves spent fewer amounts, with Wave 3 spending \$20.9m and Wave 4 spending \$15.3m.
- While Wave 3 spent a comparatively similar amount to Wave 1, it funded 5 more countries and 7 additional projects.
- The peak in both spending and number of projects was observed in Wave 2 where \$36.3m was spent on 60 projects across 29 countries.

A total of \$8.2m worth of TB diagnostics and drugs were centrally procured by TB REACH for the grantees using funds from Global Affairs Canada and additional funding was provided for Xpert diagnostics by UNITAID for Waves 3 and 4.

Gross National Income (GNI)

This evaluation's analysis indicates that the disbursement pattern across the different countries correspondingly reflects the eligibility criteria for funding. Our analysis revealed that:

- TBR funded projects in 38 of the 59 countries listed as having a GNI equal or less than \$2000 (Category I).⁶
- Approximately \$75.6m the equivalent of 84% of total programme spend was spent on Category I countries, making these countries the primary recipients of TBR grants.

TB HBC

This evaluation's analysis indicates that TBR is successfully balancing its support globally across its varied eligibility criteria.

When comparing within GNI Category I ('eligible without any restriction'), where countries have similar TB incidence rates, these countries were found to receive

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 $^{^4}$ TB REACH Initiative of the Stop TB Partnership - Grant Disbursements Waves 1 to 4

⁵ List of Member States by WHO region and mortality stratum http://www.who.int/whr/2003/en/member states 182-184 en.pdf

⁶ TB REACH Wave-4 Eligible Countries

comparatively similar amounts of funding from TBR. One example includes the comparison of Zimbabwe to Tanzania.

TB/HIV HBC

Countries that are considered HBC for TB/HIV have been provided support by TBR. Examples include the DRC, Uganda, Kenya and Zimbabwe.

However, there is opportunity to potentially extend support to countries that have a significant incidence rate of TB/HIV, such as Haiti. Recognising that the grant application process is applicant led and selections must correspond to the eligibility criteria previously described), support could come in terms of help in improving the quality of applications from vulnerable countries.

1.7 Summary Findings, Conclusions and Recommendations

Key findings & conclusions from this evaluation are presented below, accompanied by associated recommendations. These are grouped according to the evaluation criteria.

Relevance

TBR's design meets the needs of grantees and is addressing a gap in innovation funding.

TBR provides funding for testing innovative strategies and technologies aimed at increasing the number of people diagnosed and treated for TB, decreasing the time to appropriate treatment and improving treatment success rates.

Over time it is observed that TBR's mandate has evolved, which has contributed to stakeholder differences in understanding. While this distinction may appear subtle, this feedback is indicative of the differences in understanding that exist within the stakeholder community.

TBR supported innovative approaches in Active Case Finding (ACF) strategies in target countries. They also supported projects aimed at improving the quality of diagnostic services such as animated sputum production videos to enhance specimen quality, LED microscopy, GeneXpert technology and computer aided reading software for chest x-ray. TBR also supported new IT technology that enabled linking patients with diagnostic or treatment services or facilitated TB recording and reporting processes such as mobile phone based (mHealth) screening.

TBR is an appropriate mechanism for funding innovation in TB prevention and care, specifically in improving case detection. The programme is perceived as having a comparatively higher appetite for risk given its willingness to support innovative approaches that would not necessarily secure funding from other donor sources.

TBR combines fast-track results-based, financing and rigorous external monitoring and evaluation (M&E) to produce results, so other donor agencies and/or national governments can scale-up successful approaches and maximise their own investments.

TBR-funded projects have provided data and information on different approaches, adding on to the base of evidence for effectiveness. As such, this has helped international donors in identifying potential projects/approaches, consequently improving value for money.

There was consensus during Wave 1 that the duration of the grants was too short⁷. To rectify this, TBR included a six month preparation period to enable procurement of equipment, training of personnel and / or set up agreements with local TB authorities.

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⁷ CEPA programme review report

Re-articulating TBR's mandate and objectives in a mission statement document will continue to extend TBR's success and further inform programming decisions around strategy, funding and duration.

Recommendation 1 - At the start of the next phase of the programme TBR should consider re-articulating its mandate and objectives in a mission statement document, to further inform decisions around programming strategy, funding and duration.

Recommendation 2 - Provision of clarity on the scope of what is meant by innovation would strengthen programming.

Effectiveness

TBR is effectively strengthening health care systems in TB prevention and care.

Specifically TBR projects have helped to strengthen TB prevention and care systems by:

- Introducing community based approaches to identify TB cases
 - TBR projects built the capacity of community and health workers (by developing training curricula and organising training activities) mainly during the preparatory phase of the projects.
- Introducing new technologies, including diagnostics, to TB care and prevention
 - TBR was one of the main funders of Xpert technology. This technology strengthened diagnostic facilities and helped to increase the ability to identify TB drug sensitive and resistant cases. TBR grantees contributed to the global learning of Xpert added value for routine case finding approaches.
 - Other new IT technologies introduced included: computer aided reading software for chest x-rays (CAD4TB), mobile phone based screening, animated sputum production videos to enhance specimen quality.
 - TBR also procured a significant amount of equipment to implement new approaches.
- Raising awareness about TB as a major public health issue and advocating for the rights of high risk groups
 - TB projects raised awareness among the general public, target population groups and the community and health workers on the diseases and the services provided for its diagnosis and treatment. Organisations that worked with high risk groups such as HIV and Injecting Drug Users (IDUs) played an important role in advocating for their clients to access and utilise the services.
- Highlighting the need to work with all care providers, including the private sector
 - Some TB REACH grantees have engaged the private-sector in countries such as Pakistan and Nepal.
 - Projects that collaborated with the private sector provided insight and lessons learned that can contribute to strengthening the collaboration between the public and private sectors.
- Identifying gaps in health systems & systems strengthening
 - TBR projects collaborated with NTPs on how to implement case finding activities in hard to reach populations.

TBR projects exposed issues such as weaknesses or inflexibility of the drug procurement system to cope with increased demand for TB medicines, custom clearance and stigma, amongst others.

TBR has created a wealth of information and data on several active case finding approaches in different settings and countries. This information and data will be extremely valuable to all stakeholders engaged in TB prevention and care and should be shared as widely as possible to enhance learning within the stakeholder community.

In addition it was found that TBR's focus on active case detection and improving diagnosis was an effective complement to the passive case finding approach of the NTPs. However, the evaluation revealed that more could be done to support health coordination between TBR projects and the NTPs.

Recommendation 1 - TBR should continue to lead on meta-analyses of the various approaches that the programme has funded. These can be in identified themes of interest, based on project available data.

Recommendation 2 - TBR should consider the various modalities for improving cooperation with the NTPs, where possible.

Lessons - Documentation & Dissemination

Lessons learned have been documented in terms of internal project reports, M&E reports, scientific articles and project communication products (brochures, web articles, etc.).

Both grantees and stakeholders at sub-national levels shared very positive feedback on their relationship and how TBR projects have shed new light on how to approach ACF locally.

Nationally, while some TBR grantees have reported that they do not have much avenues nor platforms to exchange lessons learned, some others elsewhere however reported that they still had opportunities to do so. At national level, there was evidence of a missed opportunity in ensuring lessons learning in larger countries visited, such as India and South Africa.

TBR programmes - 144 projects initiated or delivered over 5 years, across 6 regions - provides a rich potential source for lesson learning and information sharing.

Recommendation 1 - Information on TBR projects should be presented on relevant websites and platforms nationally. This could include the grantee working together with the NTP to publish on their website (in line with the NTP communication policy).

Recommendation 2 - Lessons learning to include the 'good and bad' – grantees wish to learn which approaches have worked best, and why. Discussions should include examples of projects and approach which have succeeded, or not, so that best practice can be extracted.

International Contribution

TBR was instrumental in contributing to the evidence of the need for changing WHO guidelines on TB recording and reporting system as a result of introducing GeneXpert technology.

Additionally TBR will, in September 2016, be the largest contributor to a WHO scoping meeting on computer automated screening of Chest X-rays – TBR has already published research on this.

The large number of peer reviewed papers generated by TBR and grantees is testimony to the potential influence the programme has on international policy and thinking on TB prevention and care. 40 such papers are presently in the preparation pipeline and some 25 have already been published, including six in the Union and three articles in BMC infectious disease journals

Grantees at country level have used their **policy influencing opportunities to contribute to international stakeholder discussions** on the fight to end TB; for example in South Africa some TBR grantees contributed to a health policy brief that the SA Health Minister prepared for key global health stakeholders, as well as the sharing of lessons with neighbouring countries facing similar problems with TB detection and ACF target populations.

Feedback from the results of the electronic survey indicates that there is large consensus that TBR contributed to change in national policies and strategies, national guidelines and advocacy goals within the international TB Community.

Stop TB Partnership is widely seen by the international TB stakeholder community to have a strong position in advocacy on TB issues on the international stage.

No recommendations related to international contributions of TBR.

Unexpected Results and Learning

There have been positive unexpected results and learning from TBR projects.

TBR projects were found to have been effective in addressing the issue of stigma associated with TB and dispelling myths about the disease. This has largely been possible through proactive community engagement with vulnerable and hard to reach groups.

TBR projects have helped hard to reach communities better understand that TB is not 'incurable,' that one does not need to be isolated for treatment, and that the cost of treatment is not necessarily prohibitively high.

TBR programming has also generated more information on, and a better understanding of, the success and limitations of household contact tracing.

In addition, the use of mobile applications (particularly in South Africa and Pakistan) provided government officials with a much greater awareness of the flexibility and potential of open source software and materials. TBR grantees also found it useful to disseminate project findings through open source journals.

Recommendation 1 - Education on TB facts (focused on dispelling myths and addressing stigmas) could be factored into project design.

Recommendation 2 - Future grantees, with encouragement from TBR Secretariat, should explore the use of free open-source materials (such as software and journals) throughout the design and delivery of projects.

Cost Effectiveness

The cost per additional case notification varied considerably from project to project and country to country, and that TBR's benchmark budget of \$350 was determined to have been set too low for many projects.

Analysis indicated that the cost per additional case notification is⁸:

- TB (All Forms) = \$1225
- SS+/B+ = \$1604

Many TBR grantees in the four countries visited during this evaluation were found to be more familiar with the cost per case identified, than the cost per additional case notified.

As agreed with their donors, TBR set the benchmark for budgeting TBR projects during phase 1 at \$ 350 per additional case. Analysis indicated that this figure is in need of revision as the range of cost per additional SS+/Bac+ TB case varied widely. The lower range included costs from US \$215 (Pakistan / Bangladesh), US \$486 (Nicaragua) and US \$555 (Ethiopia) while the upper range included costs from US \$23269 (Ghana), US \$14907 (Brazil) and US \$8857 (Gambia). It has to be noted that as projects often tested unproven approaches, there were a number of projects that failed to achieve any additionality – thus driving up the overall cost per additional case.

Stakeholders provided feedback that they would like the cost effectiveness indicator to capture the positive results and benefits of projects, such as the positive benefits of raising community awareness or reducing stigma associated with the disease. In addition, it was also noted that estimates for cost per additional case or cost per detected case do not take into account the infrastructure and human resources cost, which are usually covered by the national governments. The indicator also does not take into account the total cost (cost to the patient and to the health system) of TB case detection. For many projects including those that had higher cost per additional case, other important and useful learning resulted from the interventions.

Recommendation 1 – TBR should revise the method used for estimating project budgets.

Recommendation 2 - The TBR Secretariat, together with the M&E Agency, should continue to provide clarity and guidance to the grantees on how to monitor the revised cost effectiveness indicator.

Sustainability (Adoption and Scale-Up)

The level of emphasis on adoption and scale up of TB REACH project innovations has grown as the programme has matured. Sustainability and scale up is now firmly embedded in the thinking of the programme as it moves into the next funding cycle.

Data limitations mean that it is *not* possible to provide a comprehensive overview on the number of TBR project approaches that have been adopted or scaled up. While feedback from consultations with stakeholders consistently reported the view that the majority of TBR projects had not been scaled up, the feedback from the four countries

⁸ This analysis excludes Yemen, as the evaluation team did not have a complete data set / breakdown for Yemen. In addition, it should be noted the calculation was based on the total additional case per country and not per project, except for the ARD Pakistan / Bangladesh project which was included as an additional line item.

visited was more positive (see Table 4). Three out of four of the countries visited (India was the exception) have succeeded in accessing Global Fund support for scale up of TBR projects.

Overall this evaluation found that TBR has had some success in the adoption and scale up of approaches implemented by the projects.

Stakeholders and grantees reported the desire to further harvest the fruits of the innovations supported during the first phase of funding, by supporting the adoption, mainstreaming and roll out of successes during the next funding cycle.

Technology projects were found to be more amenable to scale up and replication, and generally easier to generate demonstrable evidence on cost effectiveness. However, the scalability of community based approaches was found to be highly dependent on local context and contextualisation.

Recommendation 1 – Grantees, with encouragement from the TBR Secretariat, should consider exploring private funding sources as part of their project planning to assist with scale-up.

Recommendation 2– Grantees, with encouragement from the TBR Secretariat, need to consider sustainability at the design stage of project planning.

Gender Equality

TBR has a growing interest in gender equality driven by momentum from Global Affairs Canada, its biggest donor.

Distinct differences were identified in relation to gender in TB prevention and care. Women and men face different and specific barriers.

Specific barriers for women included mobility and cultural norms (such as issues associated with the inability to leave home without a male guardian and making alternative arrangements for childcare). Specific barriers for men included the difficulties of taking a day off work without compensation while under treatment or seeking treatment.

It was noted that while women and men both face stigma with regard to TB, it was reported that typically women faced greater stigma. Patient centred approaches, such as with messaging, were found to be an effective means of addressing gender based inequalities.

Country visits and results of the electronic survey indicated that future rounds of TBR funding could incorporate and mainstream activities to support gender equality in future projects via the following means:

- Including an M&E indicator to capture gender equality
- Conducting further research to understand gender dynamics in TB prevention and care
- Including a gender plan to explore gender-based inequalities

Recommendation 1- Going forward all TBR grantees should be rigorous in collecting data on results (case notifications) disaggregated by gender.

Recommendation 2 –TBR grantees need to explore the gender dynamics of TB prevention and care and how the projects are addressing the different gender related barriers through a gender analysis.

Recommendation 3 - TBR should emphasise gender in their call for proposals and in project design, such as requiring grantees to include at least one indicator on gender equality in their M&E plans and a gender plan that will indicate how their project will address gender inequalities.

Recommendation 4 - Patient centred approaches (including messaging) are an effective means of addressing gender based inequalities and should be applied going forward.

Recommendation 5 - TBR could also encourage future grantees to work with organisations with greater expertise of gender in public health.

Added Value

There was consensus among TBR stakeholders that there was significant additional value resulting from TBR interventions compared to what could have been achieved by other donors and national Governments.

The majority of grantees felt that there would be consequences of stopping or withdrawing TBR support. It was particularly noted that grantees believed greater funding gaps would emerge in active case finding at the grass roots level. Since TBR's focus is on innovative approaches to finding new and not previously accessed TB cases in vulnerable groups, without TBR funding, stakeholders expressed concern that the coverage of TB detection for these vulnerable groups would be reduced even further.

Country visits and results of the electronic survey both confirmed that TBR's added value as a programme is extensive in its encouragement of innovation in active case finding approaches and technologies. TBR is seen to have raised the profile of TB in the global health environment, and is viewed as a valuable mechanism for building the capacity of local organisations and community health workers.

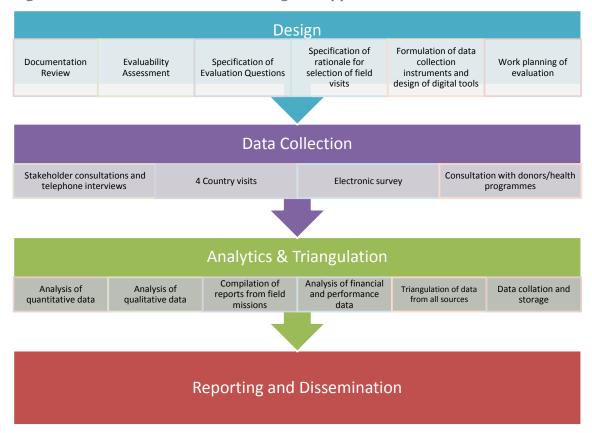
No recommendations related to the additional value.

2 Methodology

2.1 Evaluation Approach

An overview of the methodological approach is presented below.

Figure 1 Overview of the Methodological Approach



Our methodology for this formative evaluation was rooted in a **mixed-methods approach** using a combination of quantitative data collection and evidence gathering exercises, complemented by qualitative data collection to evidence our assessment. A description of these methods is provided below (Section 2.2).

During the design stage we reviewed documentation on the TB REACH Initiative and grant portfolio as well as reports of the Independent M&E Agency. We worked closely with the TB REACH Secretariat in devising the list of 14 Evaluation Questions which were framed against six evaluation criteria (broadly based on The DAC Principles for the Evaluation of Development Assistance, OECD (1991), with important criteria added on gender equality and the added value of the programme).

Figure 2 List of Evaluation Questions, Grouped by Evaluation Criteria

Evaluation Criteria & Evaluation Questions					
Relevance	 Is TB REACH an appropriate mechanism for funding innovation in TB prevention and care programmes (i.e. the design of TB REACH meets the needs of grantees, addresses gaps in funding provision, promotes scale up of new approaches)? 				
Effectiveness	2. Has TB REACH contributed to strengthening TB prevention and				

	care activities in low income and developing countries and enhanced coordination between tuberculosis control entities?	
	Have the lessons learned by the Stop TB Partnership Secretariat and TB REACH grantees in implementing this initiative been documented and widely disseminated?	
	4. Has the TB REACH Initiative contributed to a change in international policy, guidelines and/or advocacy goals within the international TB Community?	
	5. What are the main factors influencing the achievement or non-achievement of expected immediate outcomes?	
	6. Have there been any unexpected results or learning from TB REACH projects?	
Cost Effectiveness	7. What cost per additional case notification was TB REACH able to effectively deliver?	
Sustainability	8. Have approaches implemented by TB REACH projects subsequently been adopted and scaled-up with investments from domestic governments and/or other international donor agencies?	
	9. What are the main factors influencing the linkage of successful strategies or technologies implemented by TB REACH projects with other sources of TB funding?	
Gender Equality	10. How have the results achieved for women and girls compared to those achieved for men and boys?	
	11. Has TB REACH reduced gender based inequalities in access to TB care services?	
	12. How can future rounds of funding better incorporate /mainstream gender equality?	
Added Value 13. What is the additional added value resulting from TE interventions compared to what could have been achieved donors/National Governments etc.		
	14. What would be the most likely consequences of stopping or withdrawing TB REACH support?	

Our **evaluability assessment** focused on an examination of the intervention logic underpinning the programme, and the sources of data needed to respond to the key evaluation questions. Four countries supported by TBR grants were selected for in-depth investigation. We devised data collection templates and tools for all data collection activities. The design phase was closed following submission and approval of a detailed work-plan for the evaluation in early June 2016.

Following analysis of secondary data on the programme's financial disbursements and the results of the projects and collection of primary data from three main sources⁹, the evaluation team conducted an intensive **two day workshop** to analyse and triangulate the findings, distil conclusions and propose robust and useful recommendations. Further detail on evaluation methods employed in this evaluation are provided below.

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⁹ Stakeholders and donor community interviews, consultations in the four selected countries and an electronic survey of grantees and National TB Programme (NTP) Managers

2.2 Evaluation Methods

We adopted a mixed method approach which involved collection of both quantitative and qualitative data, from primary and secondary data sources. A short summary on each of the data collection methods used is presented below.

2.2.1 Portfolio Analysis

Using secondary data sourced from the reports of the M&E Agency and data provided by TB REACH Secretariat we profiled the portfolio of grants supported by the programme across key dimensions such as by funding Wave, country and region

2.2.2 Stakeholder Consultations

Using structured questionnaires, the evaluation team interviewed a range of stakeholders including Stop TB Partnership, TBR Secretariat, Independent M&E Agency and stakeholders and donors (including Global Affairs Canada, Gates Foundation, WHO, etc.). The objective of these consultations was to gain insights from a wide variety of partners and donors, and the international TB community to feed into the evaluation evidence base. The focus was on gathering rich qualitative insights into the programme from key stakeholders and partners in the TB community. These interviews were conducted in some cases face to face (f2f) and in cases by teleconference.

In addition the evaluation team leader and TB evaluation expert attended a Partners' Consultation meeting in Geneva (June 6 and 7, 2016) which was organised by the Stop TB Partnership and TB REACH Secretariat to provide future direction to the initiative by considering the shape and priorities of the programme going forward. This meeting provided an excellent opportunity to obtain feedback from a range of partners (donors, NTPs, grantees, TB stakeholder community, etc.) on their views on the programme going forward and priority areas of focus.

See Annex A.1 for a list of those interviewed. Annex A.3 provides the topic guides used for these consultations.

2.2.3 Electronic Survey

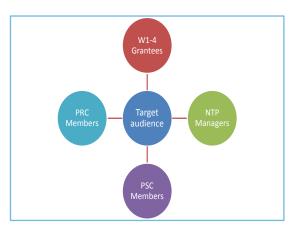
The evaluation team deployed an electronic survey to reach a broader pool of stakeholders than was possible through interviews. The survey solicited views on the

14 agreed evaluation questions in order to extend the pool of quantitative evidence to underpin the evaluation's findings, as well as obtain qualitative feedback through openended questions included in the questionnaire.

The questionnaire was sent to the following target audiences:

- Waves 1-4 grantees
- Members (past and present) of the Programme Steering Committee
- Members (past and present) of the Proposal Review Committee
- National TB Programme Managers.

Figure 3 Electronic Survey Target Audience



Annex A.2 presents the electronic survey questionnaire survey.

In total, there were 51 respondents to the survey. The biggest group of respondents were TBR grantees from Wave 4 and Wave 3. In addition, seven NTP managers responded to the survey. The breakdown of total respondents can be seen in the pie chart below:

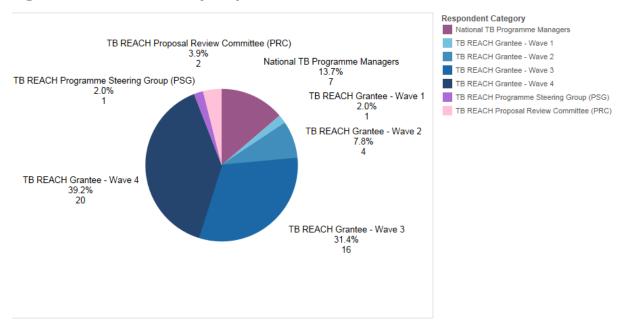


Figure 4 Electronic survey response rate

2.2.4 Country Visits

Four country visits were conducted by the evaluation team with the objectives of:

- Obtaining deep insights into TBR projects in a mix of regions and countries in order to really understand the innovations, results and sustainability and scale up of the interventions on the ground.
- Collecting granular evidence on the reality of the projects and how they are making a difference in the global fight against TB.

The **country selection criteria** were as follows:

- Mix of geographical regions.
- Focus on high burden countries (HBC) with some coverage of countries which are not ranked as High Burden.
- Coverage of four Waves of TB REACH funding.
- Exclusion of the four countries visited during the mid-term evaluation of TB REACH (Cambodia, Kenya, Nigeria and Uganda).

From an initial longlist of eight countries (South Africa, Ethiopia, India, Pakistan, Afghanistan, Nepal, Vietnam and Cambodia), four countries were selected for field visits. The four countries selected were **Ethiopia, India, Nepal** and **South Africa.** Three out of 4 of the selected countries are classified as HBC, with Nepal providing a different perspective on the programme as a non-HBC.

We structured the country visits around three main activities:

- Structured interviews with TB REACH grantees in country.
- Structured interviews and consultations with a range of TB stakeholders including with the following: National TB programmes, Global Fund (CCM), WHO TB Medical Officers, other donors and donor projects supporting the fight to end TB.
- Focus group discussions with poor, vulnerable and hard-to-reach communities and people with and affected by TB (TB Patients Groups).

Tailored interview and focus group discussion guides were developed to guide the consultation process and ensure focus of the key areas of evaluative inquiry. Each mission was conducted by an international expert for 5 working days and a local expert for 7 working days. All missions took place on the week commencing 20 June. Four country mission reports were submitted to TBR Secretariat and key findings and recommendations were discussed at teleconference sessions between TBR Secretariat and the evaluation team during July /August 2016.

2.3 Caveats

Every evaluation is carried out under certain constraints or limitations. While every effort has been made to collect good quality evidence, some limitations are unavoidable and are not atypical for evaluations of this nature. Some limitations of this evaluation are set out below:

- **Consultation bias**: Consultations have served as an important evidence source for this evaluation. Invariably the selection of consultees and their responses to our evaluation questions contain an element of bias/ subjectivity. We have sought to reduce the impact of this by reaching out to the various stakeholder groups and triangulating findings where possible e.g. Information is compared against official documents and reports.
- Short duration of the evaluation: Two major evaluation constraints are typically time and cost. This evaluation was conducted over a four month period which invariably limited what was possible in terms of extensiveness of the data collection exercises. While the evaluation team gathered a rich pool of evidence and data from multiple sources, a longer duration and greater resources for the evaluation would have allowed more data collection activities for example coverage of more countries via field missions which would have expanded the pool of evidence generated for analysis and triangulations.
- The recommendations proposed by the evaluation team reflect our understanding of the programme. We have proposed recommendations that are (1) to the best of our knowledge applicable across all countries supported by TBR (2) based on our understanding of the grant agreement with Global Affairs Canada.
- **Efficiency** is not covered in this evaluation of the programme since this criterion was removed from the list of evaluation criteria pre start-up of the evaluation. Therefore we have not covered an assessment of the grant application, proposal review and selection processes, programme management and governance arrangements.
- **Data limitations:** For our review of the performance of the grants we drew on the reports of the Independent M&E Agency and the available data provided.
- **Epidemiological impact:** This is an evaluation of the TB REACH programme *as a whole* rather than the epidemiological impact of the individual grants. The achievements/results of the grants reported according to the evidence of TBR's M&E Agency Reports) are presented in section 3.2. The focus of this evaluation was on the 14 Evaluation Questions agreed with TBR Secretariat during the design phase of the evaluation.

3 Portfolio Analysis

3.1 Summary of TBR projects

This portfolio analysis will focus on the first cycle of the TB REACH initiative which consisted of four Waves over 5 years. It funded a total of 144 projects across 46 countries, covering all TB High Burden Countries (HBC) bar three, China, Russia and Philippines. Of these projects 39 were extended for an additional year. A total of \$89,770,743 was disbursed to grantees. 10

All grant disbursement and additionality data is taken from the Monitoring and Evaluation reports of the TB REACH Initiative. Please note that the following analysis is to be descriptive and evaluate the portfolio as a whole and not that of individual projects.

3.1.1 TB REACH Eligibility and Selection Criteria

The TB REACH programme is applicant led. An independent panel, the Proposal Review Committee (PRC), is responsible for recommending grantees for selection which are then approved by the Executive Committee of the Coordinating Board of the Partnership. The final selection of grantees is based on a combination of eligibility criteria and a range of other factors, including: the quality of the proposal received, the sustainability of proposed innovations, and agreed likelihood for success.

In order to be considered for funding, proposals to TB REACH must meet a range of criteria. The criteria include a focus on gross national income and TB burden rate.

According to the TB REACH Wave-4 Eligible countries specification, gross national income categories are specified as:

- Eligible countries without any restriction: Countries with a Gross National Income (GNI) per capita of US \$2000 (as determined by 2010 World Bank Development data), with at least 70% of grants active in countries with a GNI less than US \$1000. (For the purposes of this analysis henceforth we refer to this as Category I). ¹¹
- **Eligible countries with restrictions**: Countries with GNI per capita between 2000-3000 can also apply, with a specific focus on sub-national population/areas that are poor (poverty pockets). (For the purposes of this analysis henceforth we refer to this as Category II). 12
- Remaining high burden countries that are eligible with restrictions: High burden countries whose GNI may fall outside the parameters mentioned above, but with populations demonstrated to be economically poor, and deemed to have limited access to services and a low TB case detection rate. (For the purposes of this analysis henceforth we refer to this as Category III). 13

 $^{^{\}rm 10}\,{\rm TB}$ REACH Initiative of the Stop TB Partnership - Grant Disbursements Waves 1 to 4

¹¹ Annex A, Agreement with Canada

¹² TB REACH Wave-4 Eligible Countries

¹³ TB REACH Wave-4 Eligible Countries

3.1.2 Financial Distribution of TBR grants

Analysis of the financial distribution of TBR grants globally revealed the following:

- It was found that 47%of TBR's grant spend during this evaluation period was disbursed to projects in Africa, 13% to the Eastern Mediterranean, 13% to South East Asia, 11% to Europe, 9% to the Americas and 6% to the Western Pacific.¹⁴
- TBR spent approximately \$22.7m in Wave 1, increasing this to \$36.3m in Wave 2. Subsequent Waves spent fewer amounts, with Wave 3 spending \$20.9m and Wave 4 spending \$15.3m.
- While Wave 3 spent a comparatively similar amount to Wave 1, it funded 5 more countries and 7 additional projects.
- The peak in both spending and number of projects was observed in Wave 2 where \$36.3m was spent on 60 projects across 29 countries.

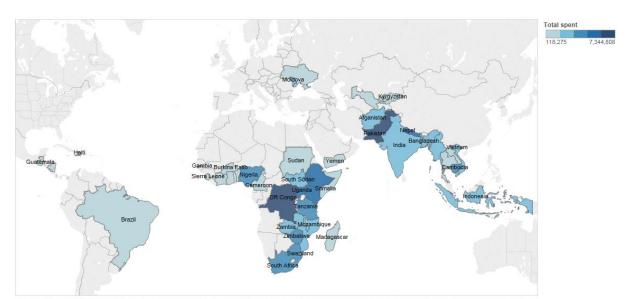


Figure 5 Level of grant disbursements for each country funded¹⁵

Map based on Longitude (generated) and Latitude (generated). Color shows sum of FINAL Spent. The marks are labeled by Country. The view is filtered on Country, which excludes Losotho, Pakistan/Bangladesh and Tajikstan.

 15 TB REACH Initiative of the Stop TB Partnership - Grant Disbursements Waves 1 to 4

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¹⁴ List of Member States by WHO region and mortality stratum, http://www.who.int/whr/2003/en/member states 182-184 en.pdf

The figure below shows TBR's level of grant allocation by Wave.

TBR began by spending approximately \$22.68m in Wave 1, increasing this to \$36.27m in Wave 2. Subsequent Waves spent fewer amounts, with Wave 3 spending \$20.92m and the most recent Wave 4 spending \$15.25m.

Interestingly, although Wave 3 spent a comparatively similar amount as Wave 1, it funded 5 more countries and 7 more projects than Wave 1. The peak in both spending and number of projects were observed in Wave 2 where the \$36.27m were spent in 60 projects across 29 countries.

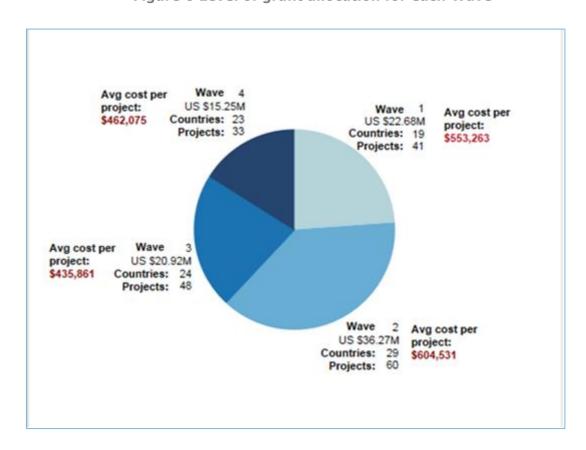


Figure 6 Level of grant allocation for each Wave¹⁶

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 $^{^{\}rm 16}$ TB REACH Initiative of the Stop TB Partnership - Grant Disbursements Waves 1 to 4

Figure 7 below shows the total grant disbursements by Wave and by country.

The levels of disbursement by countries are shown to vary widely.

Six countries received funding throughout all 4 Waves: Ethiopia, Nepal, Nigeria, Pakistan, Uganda and Zimbabwe.

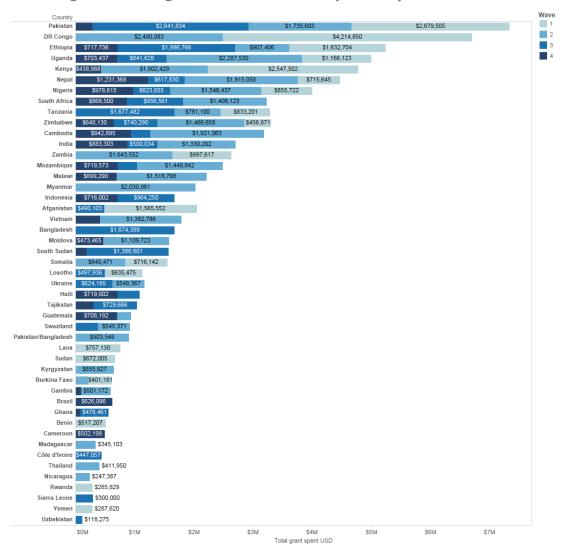


Figure 7 Total grant disbursements by country and Wave¹⁷

In Figure 8 below, out of a total of \$95.1m initially allocated to grantees, the net spent amount (after taking into consideration withheld amount, returned savings, direct procurement and other costs e.g. M&E) stood at \$89.7m. It should also be noted that TBR has a systematic, rigid and transparent reporting system. If TBR grantees do not abide by the regulations and responsibilities as stipulated in the grant disbursement contract, TBR exercises its right to withhold parts of the grants.

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 $^{^{\}rm 17}$ TB REACH Initiative of the Stop TB Partnership - Grant Disbursements Waves 1 to 4

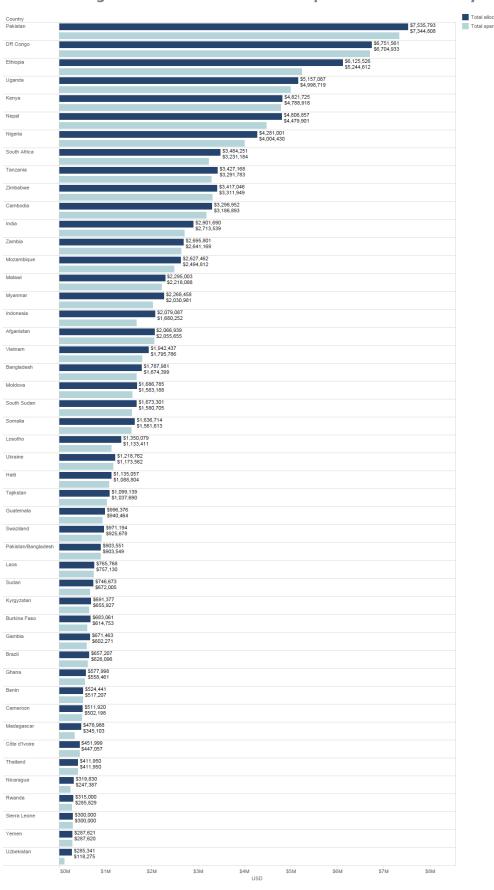


Figure 8 Grant allocation and spend for each country¹⁸

 $^{^{\}rm 18}$ TB REACH Initiative of the Stop TB Partnership - Grant Disbursements Waves 1 to 4

TBR has funded a variety of project sizes. In Wave 4, while there was a floor for funding at \$200, 000, a small proposals track was introduced. The variety of project sizes can be seen in figures 9 and 10.

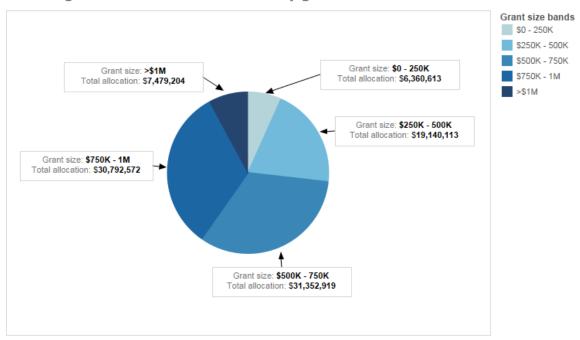


Figure 9 Grant disbursements by grant size¹⁹

It is also noted that:

- TBR disbursed more grants valued between \$250, 000 and \$1m, than grants valued below \$250, 000 or above \$1m.
- Pakistan and DR Congo have received the highest number of grants greater than \$750,000 (five each), while India received the highest number of grants less than \$250,000 (this is a result of the abovementioned small proposals track).

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 $^{^{\}rm 19}$ TB REACH Initiative of the Stop TB Partnership - Grant Disbursements Waves 1 to 4

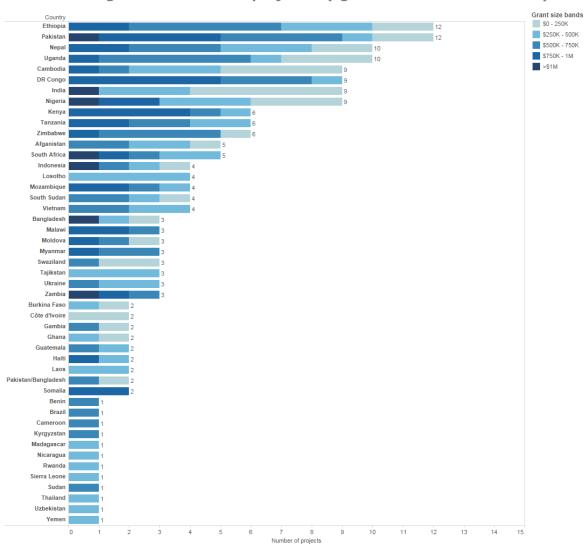


Figure 10 Number of projects by grant size band and country²⁰

 $^{^{\}rm 20}$ TB REACH Initiative of the Stop TB Partnership - Grant Disbursements Waves 1 to 4

3.1.3 Correlation of financial disbursements to Gross National Income (GNI) and High Burden Countries

As mentioned in section 1.5, in order to be considered for funding, proposals to TB REACH must meet a range of eligibility criteria. The criteria include a focus on country gross national income and TB burden rate.

3.1.3.1 GNI

This evaluation's analysis indicates that distribution of disbursement and spend against GNI requirements correspondingly reflect the eligibility criteria.

As mentioned previously, TB REACH is an applicant-led process. Grants are awarded following review and selection by an independent, external, Proposal Review Committee (PRC).

Our analysis reveals that TBR has funded projects in 38 out of 59 countries listed in Category I (GNI equal or less than \$2000). In total, \$75,618,967 was spent on Category I countries, comprising 84% of programme spend, making these countries the main recipients of TBR grants.

Two Category II countries (GNI between \$2000 -\$3000) received \$2,508,866 or 3% of programme spend: Moldova and Swaziland.

Category III countries (remaining HBC eligible with restrictions) received \$5,949,482 or 7% of total programme spend.

3.1.3.2 TB High Burden Countries

Figure 11 shows the amount of funding spent on projects in TB High Burden and non-High Burden Countries (HBC).

It can be observed that South Africa, with the highest prevalence and incidence rates of TB in 2014, applied for and received 40% as much funding as Pakistan, a country with comparatively lower TB incidence rate. However, in terms of grant the eligibility criterion that has been previously described, Pakistan is considered 'eligible without any restriction,' while South Africa is considered 'eligible with restrictions' due to GNI.²¹

It should be noted, comparing within GNI category I ('eligible without any restriction'), such as Zimbabwe and Tanzania, these countries have comparatively similar TB incidences rates and also receive comparatively similar amounts of funding from TBR.

This analysis shows that taking into account the eligibility criteria and the applicant-led nature of the grant process, countries applying and receiving grants are reflective of criteria such as HBC.

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²¹ TB REACH Wave-4 Eligible Countries

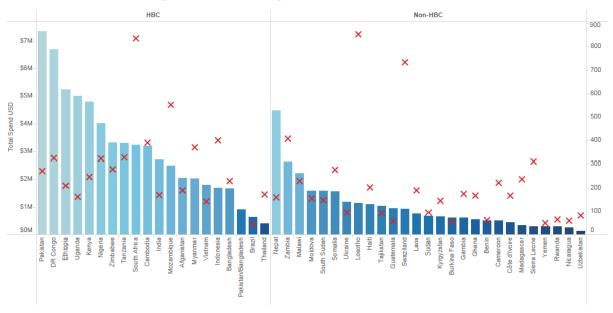


Figure 11 Grant spend for TB HBC and non-HBC²²

Please note that the bars represent total grant disbursed and the red crosses represent TB incidence rate per 100,000 population.

3.1.3.3 TB/HIV High Burden Countries

Countries such as the DRC, Ethiopia, India, Indonesia, Myanmar, Nigeria, and South Africa are considered by the WHO to be High Burden Countries not only in terms of TB, but also with regards to TB/HIV co-infection and Multi Drug Resistant (MDR) TB.

Figure 12 below shows that countries that are considered HBC for TB/HIV have been applied for and provided support by TBR. Examples include the DRC, Uganda, Kenya and Zimbabwe.

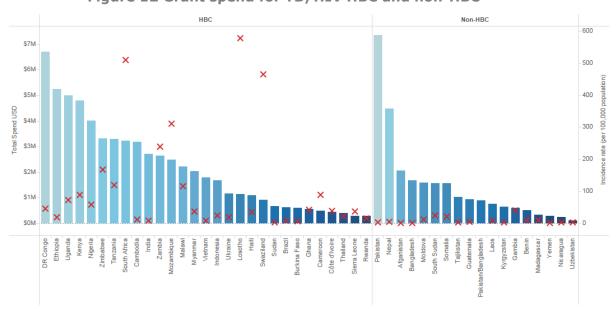


Figure 12 Grant spend for TB/HIV HBC and non-HBC²³

Please note that the bars represent total grants disbursed and the red crosses represent TB / $\rm HIV$ incidence rate per 100,000 population.

 23 TB REACH Initiative of the Stop TB Partnership - Grant Disbursement Waves 1 to 4.

²² Global TB report 2015, World Health Organisation

3.2 Results of TBR projects

3.2.1 Additionality

The projects that were funded showed varying results. Trend adjusted additionality (additional case notifications) has been used to measure the effectiveness of each project. The additionality has been calculated in the externally prepared M&E Reports (for Waves 1-4) for the TB REACH. The table below indicates both positive and negative additionality; on several occasions, SS+/B+ results outperformed those of the all forms TB additionality. It should be noted that most figures have been trend adjusted. Please see the attached Excel data file for figures that were not trend adjusted.

TB REACH projects funded in Pakistan and Ethiopia achieved strong performance in terms of AF as well as SS+/B+ case notifications. A particular project worth mentioning "Improving diagnosis, reporting and treatment of TB in private laboratories" carried out by Interactive Research and Development (IRD) in two countries Pakistan and Bangladesh achieved a large number of additional case notifications.

Table 1 Average SS+/B+ and AF additionality per country²⁵

Country	Sum of AF Additionality	Sum of SS+/B+ Additionality
Pakistan	24289	11086
Ethiopia	15532	9448
Pakistan/Bangladesh	10781	4195
Cambodia	6036	610
Afghanistan	4423	1957
Myanmar	3704	2747
DR Congo	3086	4607
Mozambique	2875	1495
Nigeria	2504	3158
Tanzania	2409	1850
Vietnam	2211	1557
South Sudan	1917	423
Bangladesh	1733	-530
Sudan	1605	706
Zimbabwe	1310	1406
Côte d'Ivoire	1176	660
India	891	726
Nepal	747	806
Kyrgyzstan	620	168
Benin	567	459
Tajikistan	552	917
Laos	413	533
Cameroon	348	307
Zambia	312	1261

²⁵ TB REACH Initiative of the Stop TB Partnership M&E Report – Summary of Findings (for Waves 1 to 4)

Madagascar	216	-13
Gambia	183	68
Guatemala	162	160
Ghana	151	24
Sierra Leone	136	148
Malawi	132	814
Brazil	120	42
Uzbekistan	45	-9
Yemen	0	0
Somalia	-1	1761
Moldova	-16	-3
Rwanda	-115	-90
Ukraine	-138	-98
Burkina Faso	-171	65
Nicaragua	-177	509
Haiti	-261	253
Thailand	-270	-465
Kenya	-306	2462
Swaziland	-460	361
Uganda	-1601	1903
Lesotho	-2753	-46
Indonesia	-4480	-864
South Africa	-7404	-1751
Total	73032	55781

While negative additionality could indicate a less than effective intervention, it could also reveal weaknesses in national data collection systems. For example, South Africa suffered from the worst TB prevalence and incidence rates in 2014, yet South Africa TB REACH projects have reported the highest negative additionality. This was due to a lack of available NTP data. For example, one project reported an additionality of -6100 while two other projects did not provide any figures. It should be noted that TB REACH is aware that these figures suffer from the lack of available NTP data.

It should be noted that for 13 TB REACH interventions across the portfolio, the M&E agency reports did not include data on additional notifications and are therefore not included in this analysis.

Figure 13 shows the number of All Forms (AF) additionality against the total amount spent by each project for all countries and Waves. There should be a strong correlation between the two variables. Projects should aim to move from lower left hand corner to upper right hand corner to gain as much additionality and as low costs as possible.

Countries with negative or no additionality have been omitted from this graph.

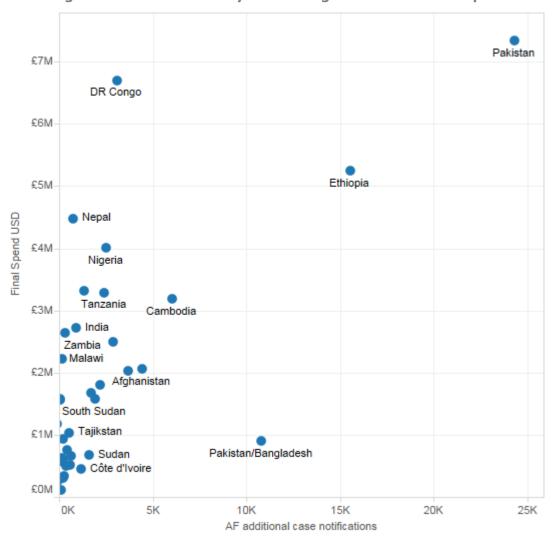


Figure 13 AF additionality and total grant disbursement per country²⁶ ²⁷

 $^{^{\}rm 26}$ TB REACH Initiative of the Stop TB Partnership – Grant Disbursements Waves 1 to 4

²⁷ TB REACH Initiative of the Stop TB Partnership M&E Report – Summary of Findings (for Waves 1 to 4)

4 Findings

4.1 Relevance

EQ 1 - Is TB REACH an appropriate mechanism for **funding innovation** in TB prevention and care programmes (i.e. the design of TB REACH meets the needs of grantees, addresses gaps in funding provision, promotes scale up of new approaches).

Interviews and review of documents (programme and government reports) revealed that TBR is an appropriate mechanism for funding innovation in TB prevention and care

From reviewing documents and interviewing key stakeholders we understand TB REACH (TBR) to be a multilateral grants platform. TBR provides funding for testing innovative strategies and technologies aimed at increasing the number of people diagnosed and treated for TB, decreasing the time to appropriate treatment and improving treatment success rates. TBR combines fast-track results-based, financing and rigorous external monitoring and evaluation (M&E) to produce results, so other donor agencies and/or national governments can scale-up successful approaches and maximise their own investments.

4.1.1 TBR's Mandate

Interviews with TBR stakeholders revealed differences in their understanding of TBR's mandate.

The original programme objective, as stated in the March 2009 grant agreement between the Government of Canada and the World Health Organisation (WHO), was to: Build capacity and strengthen systems in TB control. Programme activities were to include: Community health staff training, rehabilitating TB labs or replacing microscopes, and improving TB drug supply or improving treatment practices.²⁸

However, at the TBR M&E Grantee workshop help in Tbilisi, Georgia, in June 2014, the stated objective was "to promote early and increased case detection of tuberculosis (TB) and ensure timely treatment, while maintaining high cure rates. It encourages the development and application of ground breaking and efficient approaches, interventions, and activities that result in increased detection, reduced transmission and prevention of the emergence of drug resistant forms."

Over time it is observed that TBR's mandate has evolved, which has contributed to stakeholder differences in understanding. For example, funding and testing of innovation are deemed to be inseparable functions by the TBR Secretariat and core to their programme mandate. However, some stakeholders thought that the emphasis of TBR was on funding innovation, while few thought that the programme mandate focused on testing innovation. While this distinction may appear subtle, this feedback is indicative of the differences in understanding that exist within the stakeholder community.

At the start of the next phase of the programme it would be helpful if TBR clarified in a mission statement document, its mandate and objectives, to further inform decisions around programming strategy, funding and duration.

²⁸ March 2009 grant agreement between the Government of Canada and the World Health Organisation (WHO)

4.1.2 Global Funding Gaps in TB Prevention and Care

As it helps to narrow the global funding gap in innovation, TBR is relevant to TB prevention, diagnosis and treatment activities. TBR targets countries that are in need of international funding, particularly for TB activities.

According to the 2015 Global TB Report, the funding required for a full response to the global TB epidemic in low and middle income countries is estimated to be about US \$8 billion per year (excluding research and development for new TB diagnostics, drugs and vaccines). Based on this self-reporting by countries, funding for TB prevention, diagnosis and treatment reached US\$ 6.6 billion in 2015. This leaves a gap of approximately US \$1.4 billion²⁹.

Overall, 87% (US\$ 5.8 billion) of the US\$ 6.6 billion available in 2015 is from domestic sources³⁰. International donor funding has increased since 2006, reaching US\$ 0.8 billion in 2015. Lower middle income countries account for the largest reported funding gaps. Of the US \$0.8 billion funding gap reported by NTPs in 2015, US \$0.64 billion is for drug-susceptible TB and US \$0.14 billion is for MDR-TB. Relative to total funding needs, the funding gap is larger for drug-susceptible TB.

Funding provided from domestic sources conceals enormous variation among individual countries as well as country groups. Domestic funding dominates (93–94% of the total funding available in 2015) in three (not mutually exclusive) groups: Brazil, the Russian Federation, India, China and South Africa (BRICS); upper middle-income countries; and regions outside Africa and Asia.

International donor funding dominates in the group of 17 High Burden Countries (HBCs) outside BRICS (72% of the total funding available in 2015) and in low-income countries (81% of the total funding available in 2015). At the individual country level, international donor funding remains absolutely critical in most of the 22 HBCs.

TBR-funded projects have provided data and information on different approaches, adding on to the base of evidence for effectiveness. As such, this has helped international donors in identifying potential projects/approaches, consequently improving value for money.

4.1.3 Improvements in Case Detection

In 2014 the case detection rate (CDR) for all forms of TB globally was estimated to be approximately 63%, which is lower than the target of 70%.

In 2014, the CDR for HBCs ranged from $58-66\%^{31}$. The treatment success rate for the 5.4 million new and relapse cases that were treated in the 2013 cohort was 86% and has been sustained at a high level. Most of the 22 HBCs have reached or exceeded the target treatment success rate of 85%.

The need to improve case detection is more obvious than the need to improve treatment outcome. With its focus on improving case detection and target countries, TBR demonstrates its relevance to TB prevention, diagnosis and care activities.

^{29 2015} Global TB Report. http://www.who.int/tb/publications/global_report/en/

³⁰ Idem.

³¹ Idem.

4.1.4 Support for Innovations in TB prevention and care

Country visits by the evaluation teams revealed that TBR was perceived as a strong support to TB prevention, diagnosis and care activities. In Nepal this support was evident at the national level, while in countries such as India and South Africa TBR support was visible at the state or province level.

The evaluation team carried out a number of interviews with programme stakeholders, grantees and the TBR secretariat. All respondents agreed that TBR is an appropriate mechanism for funding innovation in TB prevention and care. Finding missing TB cases necessitates innovation because a change in mind-set is needed to complement the passive case finding approach implemented through the DOTS strategy.

TBR supported innovative approaches in Active Case Finding (ACF) strategies in target countries. They also supported projects aimed at improving the quality of diagnostic services such as animated sputum production videos to enhance specimen quality, LED microscopy, GeneXpert technology and computer aided reading software for chest x-ray. TBR also supported new IT technology that enabled linking patients with diagnostic or treatment services or facilitated TB recording and reporting processes such as mobile phone based (mHealth) screening.

In Nepal, TBR supported ACF approaches were already included in the TB National Strategic Plan (NSP) 2010 – 2015. In South Africa, TBR was perceived as particularly relevant in ACF for remote and mobile communities which the national health system was unable to reach.

TBR also introduced to Nepal new technologies, such as GeneXpert MTB/RIF, that were not included in the NSP which was developed before WHO endorsed the technology in December 2010. These diagnostic technologies are instrumental in increasing case detection through improving the effectiveness of diagnostic facilities.

In South Africa, TBR grantees made innovative use of open source mobile applications.

However, there were diverse views about what constituted innovations. There seemed to be some consensus that innovation, as related to TBR, is defined as active case finding approaches in new geographical or population contexts, or introducing new diagnostic or IT technology to a country or a region of a country. As the program starts its second phase, provision of clarity on the scope of what is meant by innovation would be welcome and would further strengthen TBR programming.

4.1.5 Risk Appetite

Programme stakeholders stated that TBR has a high risk appetite for funding innovation and supports approaches that would otherwise not secure funding from other sources. TB REACH funds partners never before involved in TB prevention and care. Some thought that other donors hide behind proven evidence based interventions while TB

REACH does not. However, this underscores other donors' role in funding new approaches in TB activities. Donors such as USAID and Global Fund will provide funding for new approaches, but, most probably, will not fund experimental trials to test new approaches or technology

"TB REACH is the only funding source that allows you to innovate without restrictions."

-TBR stakeholder

through their mainstream funding modalities. TBR was able to take this risk because of its ability to fund small grants. As such, TBR has a comparatively high risk appetite. In addition, TBR addresses a gap in funding small grants focused on applying new approaches and technologies.

4.1.6 Programme Design: Duration of Grants

There was consensus during Wave 1 that the duration of the grants was too short³². To rectify this, TBR included a six month preparation period to enable procurement of equipment, training of personnel and / or set up agreements with local TB authorities.

In Ethiopia, all grantees had considerable appreciation of the support TB REACH provided throughout the preparatory and delivery stages, particularly in facilitating the procurement of equipment. However, a number of grantees expressed concern about the duration of the GeneXpert procurement process, which was delayed mainly due to in-country administrative and logistical issues (custom clearance, etc.). We understand that in Ethiopia the procurement process took circa 5 months, which seems somewhat disproportionate for a 12 month project averaging US \$680,614.

TBR confirmed that the median time interval between procurement service requested by TB REACH grantees to the placement of order with suppliers by TB REACH was 9 working days (range 4-20 days) for Xpert instruments and 9 working days (range 4-19 days) for Xpert cartridges. Delivery time varied greatly.

TBR has acted fast and flexibly to address the delays in procurement, by adjusting grant duration. As of Wave 3, a six month preparatory period was added to the grant duration.

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³² CEPA programme review report

4.2 Effectiveness

EQ 2 -Has TB REACH contributed to **strengthening TB prevention and care** activities in low income and developing countries and **enhanced coordination** between tuberculosis control entities?

TBR has strengthened health systems, but more could be done to support the health coordination between TBR projects and National TB Programmes (NTPs).

In countries where TBR operates, projects are designed to work with, and complement, the existing public health system in an integrated way. This is mainly due to the fact that identified cases have to be treated, largely, in government health facilities. There was no doubt among TBR grantees, partners and NTPs, about the positive contributions that TBR projects have made to TB prevention and care activities. TBR projects helped with case notification in 46 countries. This has strengthened TB prevention and care in low income and developing countries. In addition, TBR projects have helped to strengthen TB prevention and care systems in six broad areas, detailed below.

4.2.1 Introduction of community based approaches to identify TB cases

"TBR has made a major influence on international practice in ACF" - Stakeholder Many TBR projects focused on Active Case Finding (ACF) through community based approaches. They facilitated TB detection in hard to reach or marginalised population groups.

TBR projects built the capacity of community and health workers (by developing training curricula and organising training activities) mainly during the preparatory phase of the projects. Some examples of these activities include:

In India TBR strengthened TB prevention & care systems by implementing ACF approaches in underserved areas, which bridged gaps in the existing TB infrastructure. Several TBR projects focused on contact tracing and provided valuable lessons to the NTP at national and local levels.

In Ethiopia TBR worked with health extension workers to identify TB suspects, collect sputum, fix slides and transport slides to TB labs.

In Nepal, BNMT worked with Female Community Health Volunteers in rural districts to carry out household contact tracing of TB patients. In addition to contact tracing, BNMT was the first in Nepal to carry out mobile microscopy camps in hard to reach areas. While BNMT focused on rural districts, Japan-Nepal Health and Tuberculosis Research Association (JANTRA) worked with community volunteers in the urban areas and targeted high risk and marginalised groups such as slum dwellers and garbage collectors.

In South Africa TBR recruited and trained community health workers and linked them to health facilities to carry out outreach activities. Facility health workers were more informed of the benefits of utilising every contact with the patients at health centres for TB screening. They are also re-trained on procedures such as correct sputum collection as well as data collection on results and referrals. In the Mine-TB project, project staff and district health staff exchanged lessons learned on better ways of collecting, marking and testing sputum.

While the impact of these projects was more evident at the district and state level in India, South Africa and Ethiopia, grantees in Nepal engaged with the NTP and were

instrumental in including these approaches in the development of the TB National Strategic Plan (NSP) 2016 – 2021.

While these approaches were overall successful in identifying TB cases, in Ethiopia concerns were raised on the quality of performance and cost effectiveness of using non health care workers to carry out health activities such as fixing sputum slides (which may lead to inefficient TB microscopy performance). In India a concern was also raised on the merits of diverting the attention of community health workers to focus on one disease instead of working in an integrated approach to address all diseases and public health problems.

4.2.2 Introduction of new technologies, including diagnostics, to TB care and prevention

Perhaps the most significant achievement of TBR in some countries was the introduction of GeneXpert technology. TBR was one of the main funders of Xpert technology. This technology strengthened diagnostic facilities and helped to increase the ability to identify TB drug sensitive and resistant cases. TBR grantees contributed to the global learning of Xpert added value for routine case finding approaches.

Other new IT technologies introduced included: computer aided reading software for chest x-rays (CAD4TB), mobile phone based screening, animated sputum production videos to enhance specimen quality.

TBR also procured a significant amount of equipment to implement new approaches. For example:

In Nepal IOM introduced the GeneXpert technology. They installed ten systems over two Waves of TBR funding. IOM provided technical support to NTP and others to expand the technology across the country. IOM trained lab technicians and contributed to the development of the national GeneXpert guidelines. HERD modified two vans into mobile TB labs equipped with GeneXpert systems and LED microscopes. These vans are considered to be the first of their kind in the country and the experience of their modification is of great value to the national programme or any other entities working to reach the remote parts of the country with effective TB testing facilities. Now Nepal has 30 GeneXpert systems.

In Nepal, some of the GeneXpert systems procured remained in use in IOM labs, others are now used in government labs and HERD's GeneXpert system is kept for use, rather at a smaller scale, by an organisation servicing the private sector. **The continued use**

of these equipment contribute to the strengthening of TB care and prevention.

The Sisonke project, in South Africa, reduced the time between diagnosis and treatment through the introduction of the GeneXpert technology. In drug susceptible TB patients in Sisonke, the average time from sputum collection to starting TB treatment decreased from 9.2 days to 4 days. In patients with rifampicin resistance, the time from sputum collection to initiation of multidrug resistant TB treatment decreased from 4.5 months to 1 week³³. These remarkable reductions in time waiting for results or treatment have unmistakeably strengthened the system.

In India Project Light was instrumental in the introduction of LED microscopy initially in 200

"Before TB REACH developed the video to guide TB suspects on how to cough out the sputum, our health officials were supposed to conduct supervised sputum collection, where patients cough out the sputum until the right specimen is produced. However, this has been impossible because of the workload we experience in our health centres. [Through the project] TB suspects are therefore simply given the sputum collection bottle to either take home or outside the facility and try to produce the specimen on their own"

- FGD participant in South Africa

³³ Individual communication with health workers in South Africa.

designated microscopy centres in medical colleges with the objective to increase effectiveness and efficiency of TB case diagnosis. 200 LED microscopes were procured and remained to be used by the medical colleges after the end of the Project. LED microscopy was adopted as a policy of NTP with 2,500 microscopes purchased with Government of India funding to function as the primary method for diagnosing pulmonary tuberculosis.

The E-Health project in Andhra Pradesh introduced an innovative digitalised approach to registration of TB suspects and patients which is now in use by half the state. There were plans to digitalise all 611 DMT Centres by July 2016. Many commented that technology focused projects had significant systems strengthening potential at national level.

In South Africa, through the Mine TB project, the use of mobile apps in collating patient data makes for better data management – a vast improvement from the previous approach of having paper carbon copies. The OpenMRS system allowed data validations and checks to be put in place, minimising the potential impact of missing or inconsistent data. Any inconsistencies in data were also tallied against NTP data or clinic registers.

There was some concern about the sustainability of the equipment after the end of TBR projects, due to maintenance and supply problems. **TBR may be advised to enquire during the application process about the grantee's strategy on use of any equipment funded through TBR after the end of the projects.**

4.2.3 Raising awareness about TB as a major public health issue and advocating for the rights of high risk groups

Channelling funds to TB projects raised awareness among the general public, target population groups and the community and health workers on the diseases and the services provided for its diagnosis and treatment. Organisations that worked with high risk groups such as HIV and Injecting Drug Users (IDUs) played an important role in advocating for their clients to access and utilise the services. NayaGoreto, in Nepal, which has extensive experience working with IUDs targeted this high risk and vulnerable group. NayaGoreto advocated strongly and effectively to eliminate stigma which limited their diagnosis with TB through the health system. The organisation raised their awareness on the diseases and the free diagnosis and treatment services available in the public sector. TBR projects provided valuable experience in childhood TB cases detection and managed to reach communities that NTP could not reach.

4.2.4 Highlighting the need to work with all care providers, including the private sector

While TB REACH does not fund for-profit organisations, some TB REACH grantees have engaged the private-sector in countries such as Pakistan and Nepal. In Nepal, one organisation worked with the drug suppliers and private labs, while another worked with private practitioners.

Projects that collaborated with the private sector provided insight and lessons learned that can contribute to strengthening the collaboration between the public and private sectors.

4.2.5 Helping identifying gaps in health systems and system strengthening

TBR projects helped to expose gaps or structural problems in the health system that negatively impact TB prevention, diagnosis and care efforts. For example:

- TBR projects in Pakistan and Uganda exposed weaknesses or inflexibility of the drug procurement system to cope with increased demand for TB medicines as a result of TBR projects.
- In Ethiopia, GeneXpert introduction to the country was impacted by procurement delays, custom clearance problems, maintenance difficulties and unavailability of cartridges.
- In Nepal, focus group discussions revealed that TBR projects exposed the stigma attached to the disease within the health services.

In addition, TBR projects contributed to health system strengthening. The implementation of TBR projects:

- Provided guidance to NTPs on how to implement case finding activities in hard to reach populations
- Addressed operational constraints in the rolling out of new technologies, such as GeneXpert and LED microscopy, in India.
- Created a wealth of information and data on several ACF approaches in different settings and countries to provide recommendations to TB practitioners and policy makers on the successes and shortcomings of TB prevention, diagnosis and care in the future.

It is advisable that TBR continue to lead on meta-analyses of the various approaches that the programme has funded. These can be in identified themes of interest, based on available project data.

"Before TB REACH developed the video to guide TB suspects on how to cough out the sputum, our health officials were supposed to conduct supervised sputum collection, where patients cough out the sputum until the right specimen is produced. However, this has been impossible because of the workload we experience in our health centres. [Through the project] TB suspects are therefore simply given the sputum collection bottle to either take home or outside the facility and try to produce the specimen on their own"

- FGD participant in South Africa

4.2.6 Strengthening learning of M&E approaches of Active Case Finding interventions

TBR commissioned HLSP (London) and KIT (Amsterdam) to function as the independent Monitoring and Evaluation (M&E) Agency for the TB REACH initiative following its launch in 2010. The M&E agency used 'additional notification' as its main metric, measuring the number of identified TB patients enrolled in treatment and notified to National TB Programmes that would have remained undetected/ untreated/ unreported in the absence of the intervention within the time frame under consideration.

The M&E agency developed a scientifically sound methodology to measure this indicator. The application of this method was successful in the early Waves of TBR funding. However, as the Waves progressed, applying the method became more challenging. For example, Nepal has received substantial support since TB REACH was launched in 2010. By the time Wave 3 was launched, there was overlap between the project evaluation populations and the approaches of the different grantees. This created a major challenge to the M&E agency measuring the success of the individual projects. The M&E considered the feasibility of a country-wide evaluation framework. This would have created another challenge proportioning the additional cases to each project.

Another challenge that the M&E agency faced was how to test the success of a particular approach as many of the TBR projects included more than one approach, all contributing to the same indicator of increased case detection. With increasing numbers of projects and approaches being implemented by TBR in different country contexts, it is becoming increasingly challenging for TBR's M&E methodology.

Through implementing the M&E methodology, TBR contributed to the learning on M&E framework of ACF/ TB screen interventions.

4.2.7 TB REACH and TB co-ordination entities

TBR projects need good co-operation with NTP local structures to refer identified cases to treatment facilities and to obtain TB M&E data to report on their activities as required by TBR. NTPs in some countries were TBR grantees, aside from their role as the national TB co-ordinating body. The relationship between TBR grantees and the NTPs and co-ordinating bodies varied significantly between projects and between countries but overall, feedback has been positive.

The relationship between TBR grantees and NTPs started at the proposal stage. At the initial proposal stage, the National TB Programme's involvement in TBR projects was in signing a letter of endorsement. The quality of involvement on the content of proposals varies depending on the availability of the NTP. This can be further complicated given the number of TBR applications from each country.

In Nepal, TBR grantees enjoyed a cordial relation with the NTP at the national level. Grantees in India, Ethiopia and South Africa focused on NTP structures at the district and state level.

In Ethiopia, TBR grantees were focusing on implementing their projects to the degree that they did not know about other TBR projects in the country.

In South Africa, while the grantees worked well with the Department of Health at district level, they had less involvement with the NTP at the national level. The NTP pointed out that they welcomed the sharing of reports and findings from the TBR projects. They participated in several of the events organised by the project. The National Health Laboratories had worked from the very beginning of the project in Sisonke – resulting in faster delivery of test results. In all cases patients were referred for treatment upon result and with neither excessive time nor bureaucratic lag. However, TBR stakeholders seemed less informed of TBR activities. The World Health Organisation (WHO) was only aware of one project while South African National AIDS Council (SANAC) did not know of any projects. This suggests an area for improvement for all stakeholders involved in TBR

In Nepal, TBR grantees benefited from NTP co-ordination efforts and participated in the two main co-ordination bodies in the country. Recognising the relevance of TBR in Nepal, at the start of Wave 4, the NTP formed a TBR proposal review committee, with the participation of WHO and Norwegian Association of Heart and Lung Patients (LHL) that provided feedback to applicants on their proposals. Grantees referred cases for treatment in NTP DOTS facilities. NTP facilitated setting up agreements with the district TB officers (DTOs) and intervened when necessary.

On the other hand, some of the grantees spent more time and effort than expected in their attempts to establish strong working relationship with the Regional and/ or District TB/ Leprosy Officers (R/DTLO).

While providing performance based payments in services related to TB care may be needed in some circumstances, it was not as preferred in either Nepal or India. On the other hand, financial incentives in South Africa and Pakistan were regularly adjusted and fine-tuned in order to generate results.

It may be difficult to set up a co-operation model with NTPs that will satisfy all parties involved. While on one hand, the neutrality and involvement of NTP in the application process is "There was a short time frame between the obtaining the letter of intent and submitting proposals...I know that the NTP say they were not consulted enough during call proposals and grant implementation. The thing is that getting a meeting with the NTP is a challenge. Waiting for the NTP to be part of a discussion ... could result in delays to submit."

-TBR grantee

important, on the other, an NTP may be one of applicants and may have limited time and resources to further engage all parties.

NTPs have an undeniably essential role to contribute to TBR programme success at different fronts such as national co-ordination and problems solving, health system strengthening and sustainability and scale up. **TBR should consider the various possible modalities for improving cooperation with the NTPs, recognising the NTPs country by country variation in approach and engagement.**

4.3 Lessons - Documentation and Dissemination

EQ 3 –Have the **lessons learned** by the Stop TB Partnership Secretariat and TB REACH grantees in implementing this initiative been documented and widely disseminated?

TBR programmes - 144 projects initiated or delivered over 5 years, across 6 regions - provides a rich potential source for lesson learning and information sharing.

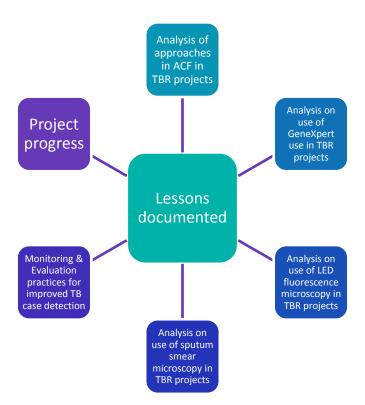
Lessons learned by the Stop TB Partnership Secretariat and TBR grantees have been well documented and widely disseminated. There are however, differences in the quality of dissemination between sub-national and national levels. At international level, publications in journals and the information on projects funded (available on the TBR website) are evidences of good practices in lessons learning and dissemination.

Lessons learned have been documented in terms of internal project reports, M&E reports, scientific articles and project communication products (brochures, web articles, etc.). Dissemination then took place through meetings with stakeholders such as district/regional/national/international health officials, other projects involved in TB (including other TBR grantees) and participation in international conferences (including with the Secretariat).

However, while some TBR grantees have called for more methodical and concerted efforts in lesson learning and dissemination, this evaluation found that considering the various topics that have been documented and the variety of media through which dissemination has taken place, what requires further clarity before considering further actions on lesson learning and dissemination are the **objectives of lesson learning**, **the target audience** and **the reality of constraints in resources and funding**.

This evaluation conducted interviews with the Secretariat, TBR grantees and stakeholders. The evaluation also conducted a review of materials available on the TBR website. A non-exhaustive review shows that the below are the most common topics that have been documented:

Figure 14



Dissemination took place largely through the following media:

Figure 15



4.3.1 Dissemination at local/district/regional level

This evaluation found that lessons learned have been well disseminated at local/district/regional level (i.e. sub-national level). TBR projects have worked extremely well with the sub-national health authorities in mutually sharing lessons learned and good practices. Both grantees and stakeholders at sub-national levels shared very positive feedback on their relationship and how TBR projects have shed new light on how to approach ACF locally.

Working closely on the ground, TBR projects developed strong collaboration with subnational health authorities. Regular contacts such as coordination meetings and feedback on ACF facilitated deep and constructive lessons learning and dissemination opportunities.

4.3.2 Dissemination at national/international level

At national level, there was evidence of a missed opportunity in ensuring lessons learning in larger countries visited, such as India and South Africa. While some TBR grantees have reported that they do not have much avenues nor platforms to exchange lessons learned, some others elsewhere however reported that they still had opportunities to do so. This difference can be in part attributed to the geopolitical background of TBR countries: Smaller countries with a higher concentration of TBR grantees in the capital, such as Nepal, had fewer problems in sharing at the national level. However, geographically large countries such as India or South Africa faced different situations.

TBR has a focus on improving case findings amongst populations who are hard to reach. When this population is located in **geographically remote areas** (as opposed to urban populations with less access to health services), **TBR grantees would tend to be based further away from the capitals**, making it hard to spontaneously take part in dissemination activities. **In these cases**, **a more methodical and organised dissemination strategy should be considered and pursued**.

At international level, as seen from Figure 15 above, participation in conferences and publications in journals stand out as the most widely used method for dissemination. A review of the list of publications in journals as listed on the TBR website shows a total of 25 articles to date.

The set of project summaries available on the TBR website are **excellent means for spotlighting innovation and the variety of interventions globally**. They are well designed and presented, making it easy for the public and donors to grasp the level of innovation and thought that TBR grantees delivered in TB prevention and care.

4.3.3 Lesson learning and dissemination: which aim & strategy for TBR?

A number of TBR grantees have asked for greater support in lesson learning and dissemination at national and international level. Some, if not many, of these requests would require further financial and resource support. However, in order to determine the best options ahead, it would be useful for TBR to review what the aims and strategy are for lesson learning and consequently,

"The thing is that TBR funding rolls over so fast (one year) that we cannot take the learnings of the one year into the next Wave of funding. It is like every Wave we are starting from scratch, without having taken lessons from the previous Wave" - TBR Grantee

considering the constraints at hand, determine which strategy is best suited for a funding programme such as TBR.

This could be in the form of a bottom up approach (across grantees working together / grantee initiated approaches) or top down approach (initiated by NTP and TBR) in lessons learning.

As TBR has a dedicated, hard-working, but small team (comprised of 3.5 full time resources), it is advisable to appoint a knowledge manager to promote learning and sharing of information between projects and with national stakeholders. This will help promote scaling up successful new approaches.

4.3.3.1 What is the aim of lesson learning & dissemination?

Several reasons could be cited to support lesson learning & dissemination:

- Support towards sustainability/scaling up
- Dissemination and replication of best practices
- Adaptation and mitigation in project implementation
- Advocacy for TB (role of innovation, increasing efforts to stop TB)

While they are not mutually exclusive, it is important to distinguish them as these aims would have an impact on the approaches to be documented, the products/materials developed and finally, the target audience for dissemination. TBR grantees across all countries currently do not have a nuanced understanding of the objectives lessons learning and dissemination, sometimes confusing learning from best practices with fear of someone else using their ideas (in which case, a subsequent application to TBR would be rejected as it would no longer be "innovative").

4.3.3.2 Gaps in Lessons Learning

Based on further clarification of the objectives of lesson learning, TBR can subsequently then identify the gaps in the lessons learning documented. For example, while TBR grantees have done well to document lessons learned in approaches, there are gaps that can be potentially addressed in other core areas, such as:

- Project management experiences
- Imperfect project design (e.g. problematic sites)
- Sub-optimal processes affecting impact (monitoring processes, financial management, procurement)
- Operational experiences (mobilisation)
- Engagement/Advocacy with health authorities
- Experience in use of incentives

Essentially, lesson learning has to address "unfavourable" lessons as well. In fact, given the rich experiences TBR grantees face in the field, it would be amiss not to address problems faced, particularly when it comes to project management, design and procurement issues. Generic lessons can have a potentially broader application effect. However, specific lessons learning can provide greater detail in terms of context.

4.4 International Contribution of TB REACH

EQ 4 –Has the TB REACH Initiative contributed to a **change in international policy,** guidelines and/or advocacy goals within the international TB Community?

TB REACH's international contribution is marked by its influence on ACF strategies and guidance on GeneXpert.

Stop TB Partnership is widely seen by the international TB stakeholder community to have a strong position in advocacy on TB issues on the international stage.

TBR has given momentum to ACF and raised the profile on ACF at the country level. The programme has influenced strategies on ACF and has made an invaluable contribution to understanding what works by supporting innovation on active case detection in different settings and contexts. As such, the programme has played a role in helping inform and shape ACF as a TB prevention and care policy.

The increased focus and funding of international funding agencies on ACF can be *partially* attributed to TBR success in raising its profile ACF internationally; Challenge TB (USAID) is including ACF for the first time and Global Fund is now supporting catalytic funding on missing cases.

TBR has, through the implementation of its grants across 46 countries (including the 22 high burden countries), made a strong contribution on innovations in implementation models for ACF. Given that influencing policy takes time; stakeholders noted the need to demonstrate results on a large scale as well as cost effectiveness; TBR's international contribution is therefore likely to grow as the programme moves through the next funding cycle.

TBR has made an important contribution concerning guidance on **GeneXpert technology**; as the programme supported the rollout of GeneXpert, TBR was instrumental in contributing to the evidence of the need for changing WHO guidelines on TB recording and reporting system as a result of introducing GeneXpert technology.

Crucially, TBR evidence has been used in the framework of numerous systematic reviews. **The large number of peer reviewed papers** generated by TBR and grantees is testimony to the potential influence the programme has on international policy and thinking on TB prevention and care. We understand that 40 such papers are presently in the preparation pipeline and some 25³⁴ have already been published, including six in the Union and three articles in BMC infectious disease journals – highly reputable authorities on TB prevention and care. Many of these materials are open source enhancing their capacity as influencers of international TB stakeholders and policy-makers. Going forward TBR's Programme Steering Group has suggested that the programme should **broaden their menu of products/publications**/dissemination materials to better serve policy makers, as well as continue their engagement with the scientific community through more traditional "peer reviewed" publications.

Additionally TBR will, in September 2016, be the largest contributor to a WHO scoping meeting on computer automated screening of Chest X-rays – TBR has already published research on this.

TBR has been fairly influential at **national policy level**; for example the programme has influenced the adoption and roll-out of innovative technologies in many countries, preparation of the National TB Strategies (e.g. in Nepal - National TB Strategic Plan 2016-2021) and the dynamics of cooperation and coordination between TB control entities. Grantees at country level have used their **policy influencing opportunities**

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³⁴ Source: TBR website.

to contribute to international stakeholder discussions on the fight to end TB; for example in South Africa some TBR grantees contributed to a health policy brief that the SA Health Minister prepared for key global health stakeholders, as well as the sharing of lessons with neighbouring countries facing similar problems with TB detection and ACF target populations. The sharing of lessons on TBR innovative approaches and technologies through **Union conferences** was rated as a powerful means of influencing the international TB community and influencing changes in thinking and practice on TB prevention and care.

Feedback from the results of the electronic survey indicates that there is large consensus that TBR contributed to change in national policies and strategies, national guidelines and advocacy goals within the international TB Community.

4.5 Factors driving immediate outcomes

EQ 5 - What are the main factors influencing the **achievement or non-achievement** of expected immediate outcomes?

The expected **immediate outcomes** of TB REACH are:

- Increased capacity to diagnose and treat tuberculosis patients in under-serviced areas;
- Enhanced coordination between TB control entities.

Factors which worked to promote or limit success are summarised below. It is the evaluation team's recommendation that grantees should conduct a preliminary assessment during the design stage of their project on issues that could adversely affect their intervention approaches, and determine mitigation measures.

Factors influencing achievement or non-achievement

The following factors contributed to achievement or non-achievement of expected immediate outcomes:

- Degree and quality of cooperation between TBR and NTPs, at different administrative levels
- Implementation by TBR grantees of innovative and 'out of the box' thinking and ideas in the TB prevention and care space
- Application of new technology that directly boosts capacity to diagnose and treat TB patients
- Commitment of the grantees and the TBR Secretariat to making sure that the projects continuously adjust to challenges
- Availability of infrastructure (such as electricity and power) to support diagnosis and treatment sites
- External factors (earthquake in Nepal, state division Andra Pradesh)
- Capacity of some organisations in operations and project management (ex: ability to adapt to decisions to change interventions sites)
- Degree and quality of communication between control entities and grantees (ex: WHO TB officer in South Africa was unaware of 4 out of 5 TBR projects underway)
- Level of community engagement and understanding of needs

- Gender inequalities affect the ability to detect and treat cases
- Cost effectiveness of active case finding approaches

"TBR M&E fantastic in terms of robustness... Yet to see better M&E than this" -TBR Grantee "We did not create a parallel system to the NTP but addressed its weaknesses" - TBR Grantee

4.6 Unexpected Results / Learning

EQ6 -Have there been any **unexpected results or learning** from TB REACH projects?

Through several Waves, TBR projects have tested innovative, experimental or pilot projects that bring TB detection and treatment to vulnerable or hard to reach populations. Over time, much has been documented based on the effectiveness of projects and approaches. However, unexpected results or learning have also emerged, mainly on the evolving changes in profile and attitude of communities and stakeholders, potentially affecting future project design and impact. Examples include:

- Through active community engagement with vulnerable and hard to reach groups, TBR projects have achieved success in addressing the issue of stigma.
- TBR projects have been effective in **dispelling myths** about TB particularly within hard to reach communities, such as: many thought that TB was incurable, isolation was needed and cost of treatment was high.
- TBR programming has generated more information on, and a better
 understanding of, the success and limitations of household contact
 tracing (HCT), for example, how evolving household profiles can have an
 impact on the effectiveness of HCT (secondary residences for certain
 groups e.g. migrants, miners).
- The use of **mobile apps** (particularly in South Africa and Pakistan) has provided government officials greater awareness of the flexibility and potential of open source codes.
- Realisation of the important role that the private sector can play in finding and treating TB patients, particularly in dealing with groups who face stigma.
- Low rate of case finding among TB suspects in some projects, leading to increased understanding of residential and socialisation patterns (such as in mining communities having dual residences).

4.7 Cost Effectiveness

EQ 7 -What **cost per additional case notification** was TB REACH able to effectively deliver?

The evaluation revealed that cost per additional case notification varied considerably from project to project and country to country, and that TBR's benchmark budget of \$350 was determined to have been set too low for many projects.

Analysis indicated that the cost per additional case notification is³⁵:

- TB (All Forms) = \$1225
- SS+/B+ = \$1604

Many TBR grantees in the four countries visited during this evaluation were unable to immediately tell the evaluation teams the estimated number of additional cases they have identified, and subsequently, the cost per additional case notified. They were, however, more familiar with the cost per case identified.

4.7.1 Methodology to measure cost effectiveness

TB REACH's M&E methodology measures **additional TB case notifications.** The concept of an additional TB case can be defined as a case which would not have been notified in the absence of the intervention³⁶.

By comparing intervention data (before and after) with routine tuberculosis data for a control population and adjusting for trends TBR's M&E Agency estimate additional cases notified during the intervention period for each project.

A benchmark for budgeting for cost per additional case notification of \$350 was used as the basis for calculation of grant allocations, with TBR grant allocations set as follows: 350×10^{-2} target number of additional case notifications = grant allocation.

4.7.2 Findings

It was noted that the TBR grantees in the four countries assessed during the country visits were unable to tell the evaluation teams the *estimated number of additional cases* they had identified (and subsequently the cost per additional case notified). However, organisations in the four countries assessed did monitor the cost per case identified.

A Baseline Validation Review of a project in Nepal revised down the proposed targets and as a result increased the cost per additional case notified from \$348, as was original proposed, to \$1,742. The Project Annual Review (PAR) showed that the cost per (not time trend adjusted) additional case was \$ 2,167 and cost per (time trend adjusted) additional case was \$ 1,463. This is markedly different from the proposed \$ 348. Some applicants had inflated their target, which is the basis for calculating their budget, to get as much funds as possible. Expenditure per case diagnosed was \$ 698. The cost per additional case of another project in the same country was \$ 1,239 in as estimate from an Annual Project Review of Wave 2. In India, one stakeholder suggested that a "needs"

³⁵ This analysis excludes Yemen, as the evaluation team did not have a complete data set / breakdown for Yemen. In addition, it should be noted the calculation was based on the total additional case per country and not per project, except for the ARD Pakistan / Bangladesh project which was included as an additional line item.

³⁶ A pragmatic approach to measuring, monitoring and evaluating interventions for improved tuberculosis case detection", L. Blok, J. Creswell et al, Int Health 2014, Volume 6, 181-188.

based" calculations of the grant allocations would be preferable, allowing different costs in different contexts, countries, etc.

In India, grantees reported that the additional case notification indicator was not used as key indicator of performance in later Waves. One project which was funded in Wave 4 had a low case notification levels (circa 40) but was granted a no cost extension of their work, in reflection of their highly innovative work on household contract tracing.

Grantees of the community based projects in India reported that case detection costs increased significantly when "hard to reach" groups are the target of TBR interventions. Some grantees reported additional case notification cost figures of in excess of \$600 or even as much as \$2,000 when the true costs are taken into consideration.

At the other extreme, one of the technology based projects - Project Light - reported costs per case notification of circa \$50 based on additional case notifications of 8,500 during the project period³⁷. **Demonstrating cost effectiveness was viewed as an important lever in promoting the wider use of LED microscopy to the Government of India.**

In India one of the grantees interviewed commented that the cost effectiveness indicator (e.g. cost per additional case notification) used by TBR does not capture *all* the results/benefits of projects – for example one project put 250 children on chemoprophylaxis but this was not captured by the indicator. Other benefits which

"Every dollar spent is worth it if we find a patient with TB" "Non-monetised benefits are not taken into account in cost effectiveness data" -TBR grantees

are not captured by this measure include positive benefits of raising community awareness and engagement on TB detection, capacity building costs, a benefit that will remain beyond the lifespan of the project, reduction of stigma associated with the disease and increased advocacy on TB prevention and care at the community level. While there was recognition that some measure of cost effectiveness was needed as a guide to the performance of TBR projects, there was also recognition that since TBR projects aimed at testing innovations, other measures of success and cost effectiveness should also be applied.

We understand that TBR has commissioned a research to examine the actual cost per additional case notified.

Although TBR promotes itself in much of its documentation as a result based financing mechanism, it applies a milestone approach to dispersing funds to its grantees.

In Nepal all organisations were satisfied with the milestone approach for dispersing funds by TBR secretariat. They described TBR financial management as flexible and efficient.

Organisations in Nepal were generally satisfied with the financial monitoring done by TBR secretariat. One of those organisations, which received funding in Wave 4, reported that the Letter of Agreement stipulated that the grantees would not exceed 10% of a budget line without prior approval of TBR secretariat. This stipulation was strictly adhered to.

A few of the TBR grantees in Nepal, reported that they started the project in line with proposed work plan. The majority of the organisations needed more time to prepare for project execution. For example, one project needed more time to purchase and modify two vans which worked as mobile labs. All other organizations spent a significant amount of time preparing arrangements with R/DTLOs, train health or community workers or recruit staff needed to implement the project. Almost all the organisations did not finish the projects as planned and requested a no-cost time extension.

³⁷ Calculated by the grantee on the basis of before and after and noting there were no other interventions taking place at the same time. There was no control population for this project (Project Light).

Subsequently, a 3-6 month extension was granted. Some of the organisations experienced delays in project implementation due to unexpected factors such as political upheavals in some districts and the 2015 earthquake.

Referencing the table below, in terms of the cost per AF additionality, Pakistan achieved the lowest amount of \$302 per additional case notification and Malawi achieved the highest at \$16,804. The average cost per AF additionality was at \$1,225 per AF.³⁸

In terms of cost per SS+/B+ additionality, the lower range included Nicaragua (\$486), Pakistan (\$663) and Ivory Coast (\$677) while the higher range included Ghana (\$23,514), Brazil (\$14,806) and Gambia (\$8853). The average was reported at \$1,604.

Table 2 Total grant disbursement, AF additionality and cost per additionality for each country⁴⁰

	Total Grant Disbursement (USD \$) ⁴¹	All Forms Additionality	Cost per All Forms Additionality (USD \$)	SS+/B+ Additionality	Cost per SS+/ B+ Additionality (USD \$)
Afghanistan	2,055,655	4,423	465	1,957	1,051
Bangladesh	1,674,399	1,733	966	-530	-
Benin	517,207	567	912	459	1,127
Brazil	626,096	120	5,213	42	14,806
Burkina Faso	614,753	-171	-	65	9,458
Cambodia	3,186,893	6,036	528	610	5,223
Cameroon	502,198	348	1,445	307	1,633
Côte d'Ivoire	447,057	1,176	380	660	677
DR Congo	6,704,933	3,086	2,173	4,607	1,455
Ethiopia	5,244,612	15,532	338	9,448	555
Gambia	602,271	183	3,288	68	8,853
Ghana	558,461	151	3,706	24	23,514
Guatemala	940,464	162	5,813	160	5,883
Haiti	1,088,804	- 261	-	253	4,302
India	2,713,539	891	3,045	726	3,738
Indonesia	1,680,252	-4,480	-	-864	-
Kenya	4,788,918	- 306	-	2,462	1,945
Kyrgyzstan	655,927	620	1,058	168	3,904
Laos	757,130	413	1,833	533	1,421
Lesotho	1,133,411	-2,753	-	-46	-
Madagascar	345,103	216	1,598	-13	-
Malawi	2,218,088	132	16,804	814	2,725
Moldova	1,583,188	-16	-	-3	-
Mozambique	2,494,812	2,875	868	1,495	1,669
Myanmar	2,030,981	3,704	548	2,747	739
Nepal	4,479,901	747	5,997	806	5,559

³⁸ This average excludes Yemen because of a lack of data breakdown.

³⁹ This average excludes Yemen because of a lack of data breakdown.

⁴⁰ M&E Reports of the TB REACH Initiative of the Stop TB Partnership – Summary of Findings (for Waves 1 to 4)

⁴¹ As of August 2016, please note that TBR was still making payments against audited expenditure at time this report was drafted.

Nicaragua	247,387	-177	-	509	486
Nigeria	4,004,430	2,504	1,599	3,158	1,268
Pakistan	7,344,808	24,289	302	11,086	663
Pakistan/Bangladesh	903,549	10,781	84	4,195	215
Rwanda	285,829	-115	-	-90	-
Sierra Leone	300,000	136	2,206	148	2,027
Somalia	1,561,613	-1	-	1,761	887
South Africa	3,231,184	-7,404	-	-1,751	-
South Sudan	1,580,705	1,917	825	423	3,741
Sudan	672,005	1,605	419	706	952
Swaziland	925,678	-460	-	361	2,564
Tajikistan	1,037,690	552	1,881	917	1,132
Tanzania	3,291,783	2,409	1,366	1,850	1,780
Thailand	411,950	-270	-	-465	_
Uganda	4,998,719	-1,601	-	1,903	2,627
Ukraine	1,173,562	-138	-	-98	-
Uzbekistan	118,275	45	2,628	-9	-
Vietnam	1,795,786	2,211	812	1,557	1,153
Yemen	287,620	-	-	-	-
Zambia	2,641,169	312	8,465	1,261	2,095
Zimbabwe	3,311,949	1,310	2,528	1,406	2,356
Overall	89,770,743	73,032	1,225*	55,781	1,604*

^{*}These figures exclude Yemen because of a lack of data breakdown in both categories.

Table 3 shows the total number of projects against those with cost per SS+/B+ additional case notification higher than the \$350 benchmark set for each country. The majority of projects exceeded this benchmark. Hence, the benchmark is in need of revision.

This calculation excludes projects with negative or 0 additionality.

Table 3 Number of projects with cost per additionality of more than \$350⁴²

Country	Number of projects	Number of projects with cost per additionality of more than 350
Afghanistan	5	3
Bangladesh	3	0
Benin	1	1
Brazil	1	1
Burkina Faso	2	1
Cambodia	9	6
Cameroon	1	1
Côte d'Ivoire	2	2

⁴² M&E Reports of the TB REACH Initiative of the Stop TB Partnership – Summary of Findings (for Waves 1 to 4)

DR Congo	9	7
Ethiopia	12	8
Gambia	2	1
Ghana	2	1
Guatemala	2	2
Haiti	2	2
India	9	7
Indonesia	4	2
Kenya	6	3
Kyrgyzstan	1	1
Laos	2	2
Lesotho	4	1
Madagascar	1	0
Malawi	3	2
Moldova	3	1
Mozambique	4	3
Myanmar	3	2
Nepal	10	5
Nicaragua	1	1
Nigeria	9	6
Pakistan	12	7
Pakistan/Bangladesh	2	0
Rwanda	1	0
Sierra Leone	1	1
Somalia	2	2
South Africa	5	2
South Sudan	4	2
Sudan	1	1
Swaziland	3	1
Tajikistan	3	3
Tanzania	6	6
Thailand	1	0
Uganda	10	7
Ukraine	3	1
Uzbekistan	1	0
Vietnam	4	3
Yemen	1	0
Zambia	3	3
Zimbabwe	6	4

4.8 Sustainability

4.8.1 Adoption and Scale-up

EQ 8 - Have approaches implemented by TB REACH projects subsequently been **adopted and scaled-up** with investments from domestic governments and/or other international donor agencies?

Overall, TBR has had some success in the adoption and scale up of approaches implemented by the projects. But more needs to be done, going forward in the next funding cycle, to drive scale-up of successful approaches. TBR needs to harvest the fruits of the innovations of the last cycle of funding through wider adoption and scale up of approaches.

The level of emphasis on adoption and scale up of TB REACH project innovations has grown as the programme has matured. Greater focus is now shone on sustainability and scale up in the programme as it moves into the next phase. Stakeholders and grantees reported a need to harvest the fruits of the innovations supported during the first phase of funding, by supporting the adoption, mainstreaming and roll out of successes during the next funding cycle.

Data limitations mean that it is *not* possible to provide a comprehensive overview on the number of TBR project approaches that have been adopted or scaled up. While feedback from consultations with stakeholders consistently reported the view that the majority of TBR projects had not been scaled up, the feedback from the four countries visited was more positive and is summarised below. Three out of four of the countries visited (India was the exception) have succeeded in accessing Global Fund support for scale up of TBR projects.

Table 4 Adoption and Scale observed during country missions

	Country Missions and Adoption and Scale up					
India	The approaches used by six out of the eight TBR projects in India are <i>likely</i> to be sustainable, at least in the short term. Three projects (Project Light, e-health and Reach) are rated as likely to be sustainable in the longer term and have/are likely to be scaled up. NTP funding has supported scale-up, in addition to potential USAID funding for one of the three projects.					
South Africa	TBR projects in South Africa demonstrated strong signs of likely sustainability – three of the four projects have impacts/results that are likely to be sustainable. Global Fund support					
Nepal	TBR grantees participated in the development of the strategic plan of TB 2016-2021; this has paved the way for accessing funding from other international donors or the domestic government. Of particular note is the inclusion of Active case finding approaches in the TB National Strategic Plan 2016 - 2021 which may attract donors' funds. The use of GeneXpert systems may continue through government support, Global Fund support or payments from the private sector (assuming agreement is reached on continued subsidisation of GeneXpert's cartridges and maintenance).					
Ethiopia	LSTM projects – provision of 4 rounds of TBR projects was					

successful in promoting wider scale up via accessing GF.

It is observed that projects which have had significant success in being adopted and scaled up benefit from close interaction with the NTP, are generally easier to generate demonstrable evidence on their cost effectiveness and epidemiological impact, can be replicated.

The **importance of contextualisation** in ACF was emphasised repeatedly by those consulted. Respondents noted that this makes TBR CB projects 'niche'. To find the missing cases with TB in hard to reach communities, proactive tailored approaches to engagement and provision of TB prevention and care services are essential for each specific vulnerable group/target communities. In recognition of the multitude of CB approaches implemented by TBR, an investigation or meta-analysis of these approaches is suggested, in order to draw out the core elements that are amenable to cost effective scale up, so the wider adoption of these approaches can be promoted, while respecting also the need for specificity.

An important system strengthening dimension of TBR projects has been in the development of the **capacity of Community Health Workers** (CHW) in TB prevention and care. Going forward, this capacity strengthening bring about sustainable benefit to the TB control infrastructure in the countries, given that these health workers continue to support communities in their health care needs.

Interviews with other projects which used incentives revealed that context is an important dimension. The use of types of different incentives can be used to motivate CHWs and achieve better results. For example, in some cases, such as in Ethiopia, CHWs were incentivised by political motivations – they were involved in political parties and public health work forms part of their activities. In other instances, financial incentives in South Africa and Pakistan were regularly adjusted and fine-tuned in order to generate results. Fundamentally, performance based incentives remain one of several tools to be used and should be explored in the context of the environment of intervention.

In terms of the technology-focused interventions, specific challenges to sustainability included coverage of maintenance costs (GeneXpert cartridges, electricity and power issues, particularly in rural areas).

The programme has achieved **some notable successes** in adoption and scale-up of TBR approaches from the portfolio of grants, including those summarised in the table below.

Table 5 Successes in adoption and scale up

Notable successes in adoption and scale up – selected country examples

India

Project Light a good example of sustainability and scale up. The equipment procured by the TBR project was successfully put into use by 200 medical colleges. 2,500 LED microscopes were additionally bought by RNTCP following the project based on the success of the TBR project – indicating that the country had adopted this technology as a result of TBR support.

The e-Health project in Andhra Pradesh (AP) introduced a digitalised system for registration and follow-up of TB patients and suspects. There are 211 digitised TB testing centres in the State already and all 611 will be digitised by July 2016 thanks to the intervention of TBR grant and the roll out of this intervention across the State of AP. As well as strengthening the TB prevention and care system in AP State, this project has potential in terms of roll out across India. The Central level TB Division, RNTCP sent a delegation in May 2016 to AP to explore the roll out potential of this digitised approach in other States in India.

In the case of the **Reach project in Chennai** the application of learning concerning household contact tracing of index patients will result in significant strengthening of the city's TB prevention and care system, should the planned USAID project proceed to be implemented (\$5m over 4 years). South Three projects in South Africa used mobile apps as part of their Africa interventions. The apps were used for data collection and monitoring of project screening, sputum collection/submission, laboratory test results, case notification and treatment outcomes. The apps also enabled grantees to systematically screen the population. They featured a stepby-step process for screening. Patients' details are carefully collected and tagged. This facilitated data management of the TB treatment and care pathway. The use of mobile screening tools (from the Mine-TB project in Ugu and eThekwini), is being discussed for adoption. One major advantage from this project is that the grantee was able to exploit the use of free open source codes to develop the mobile app, further improving cost-efficiency. GeneXpert in Nepal Nepal GeneXpert technology was introduced in Nepal through TBR funding and was first scaled up by IOM with Wave 2 funding and HERD through Wave 3 funding. In Nepal, NTP was cognisant of TBR projects and was in the process of scaling up one of the approaches which focused on mobile labs equipped with LED microscopes and GeneXpert systems. TBR assisted scaling up of GeneXpert technology by providing funds over two Waves to IOM who spearhead this technology in the country. **Ethiopia** Global Funding for 4 innovative projects supported by TBR (LSTM) **Pakistan** 5 projects piloted and now funded by Global Fund Karachi: TB free city, chest camps In Pakistan IRD TBR supported project were successful not only in scale up at the national level but they also extended their remit internationally. IRD mHealth approach was extended to cover 10 countries including South Africa where IRD implemented a similar project to their project in Pakistan.

Some respondents reported the need for scalability to be part of the case for the grant (at application stage); many respondents wanted the design/preparatory stages of projects to explore these issues, while a few noted that innovation may be constrained by a focus too early on scale up. They also reported a **greater need to understand what "scale-up" actually means**. This includes the need to examine the feasibility for scale-up

- within countries
- across with other countries, as well as,
- across other disease areas

TBR Secretariat has reported an intention to include a funding track (in the next cycle) dedicated to supporting scale up of successful approaches and technologies during the next funding round; feedback received during this evaluation indicates that this will be positively received and will be valued by applicants by addressing the funding challenge their face in this area.

4.9 Accessing other sources of funding for scale-up

EQ 9 -What are the main factors influencing the **linkage of successful strategies or technologies** implemented by TB REACH projects with other sources of TB funding?

There are a range of factors driving linkages of TB projects to other sources of funding; linkages with the NTPs, political willingness and effective communication of robust evidence on results and achievements were rated as important drivers.

A multitude of factors were reported by stakeholders and those consulted in the framework of the country missions as the key factors influencing the linkage of successful strategies or technologies implemented by TBR projects with other sources of funding. These are shown below in Figure 17.

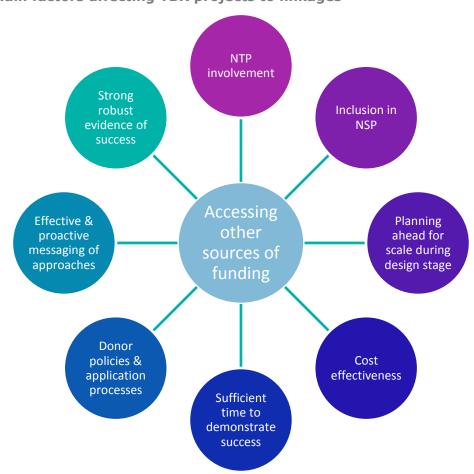


Figure 17 Main factors affecting TBR projects to linkages

• NTP involvement /Inclusion in NSP; When the NTP was closely involved in TBR projects and felt greater responsibility of the projects, the probability of accessing further funding from domestic governments was greatly increased. Alignment of TBR projects with the National Strategic Plan (NSP) was emphasised particularly in Nepal, in view of the necessity that domestic and donor support to TB are based on NSP priorities. TBR projects were encouraged to explore co-financing of future projects. It was noted that some projects

already benefited from in-kind co-financing, through use of Community Health Workers or use of public laboratories for diagnostic testing. In South Africa, an interesting point was made that grantees should engage governments when they are preparing the policy and budget for the subsequent year (so that future scaling up/adoption can be planned).

- **Evidence base**: Accessing further funding necessitates strong robust evidence on project approaches and successes, as well as the cost effectiveness of these approaches. Some respondents noted that scientific journals were seen as reputable means to demonstrate the worth of TBR projects and that use of internationally recognised indicators of performance was important. Others noted that evidence on one approach alone was *not* enough; a justification in comparison with other options could further strengthen the evidence.
- **Cost effectiveness** is a key consideration in promoting scale up to national governments in particular. Some respondents that TBR projects are short in duration (1 year implementation typically) and longer timelines are needed to generate the requisite body of evidence to secure follow on funding. In South Africa the relatively no/low cost of adopting a communication tool which helped improve testing (through improved sputum sample) was reported as a factor in influencing adoption decision. Similarly in India, the evidence on cost effectiveness of LED microscopes was an important factor in the Revised National TB Control Programme (RNTCP) purchasing an additional 2, 500 LED microscopes in the aftermath of the TBR project (Project Light) which had procured LED microscopes for 200 medical colleges.
- **Proactive communication of results**. Relationships with donors, NTPs, private sector contributors are all important drivers to leverage funding from these sources. Using all available opportunities to communicate results and achievements from projects is also highly important. Thanks to its effective communication of its work, a project in Chennai successfully linked with a consortium to implement the USAID-funded TB free Chennai, providing it with a valuable opportunity in the future to implement its learning on household contact tracing more widely in area. For small grantees, particularly NGOs, there are challenges in terms of linkages with other donors and funding sources, in particular, understanding donor requirements in order to promote scale up of their successes. Mechanisms to address these barriers to scale up need to be considered going forward, be it through information dissemination to grantees on

"Success in scale-up is about political communication of the project's results" - TBR Grantee relevant funding sources in country or through active planning and research on follow on funding sources during the preparatory stages of their projects.

- Political willingness and appetite. There is political economy around TB.
 There have been issues in some countries concerning the increase in TB
 detection rates driven by TBR project successes. Projects need to engage at the
 political level to explain the achievements of their work and to advocate for
 continuation/mainstreaming funding. With health funding in many low income
 and developing countries facing multiple demands and competition for the
 limited resources, TBR projects need to proactively communicate and advocate
 for support for their important work.
- Thinking about scale-up in advance: As mentioned earlier, many of those consulted recognised the importance of scale up that it should be an activity that begins not at the end of the project, but at the beginning. Scaling up small scale interventions requires consideration and part of the testing of the innovations should be on assessment of its feasibility for scale up and wider roll out.

• **Donor policies and application processes**: Grantees, in efforts to secure funding for scale up, need to be familiar with donors' policies and funding for TB and their priority areas of focus. Familiarity with application processes is also

important in order to adequately prepare robust cases and evidence. Stop TB Partnership's and TBR's strong relationship and interaction via regular meetings in Geneva and information sharing with the Global Fund are worthy of note and places the programme in a strong position to strengthen funding access for successful TBR approaches and technologies.

"Need to have discussions early on at design stage on scale up and include the Ministry of Health, donors etc. Donors and funders set their plans in action over a year in advance. Ask donors what they need by way of evidence on scale up."

- Stakeholder

The results of the electronic survey corroborated what was learned from the country visits. Key factors highlighted by the survey as driving linkages of TB projects to other sources of funding include:

- Involvement / cooperation with the National TB Programme (86.27% from survey)
- Thinking about scale up in advance (e.g. at planning stage of projects) (70.59% from survey)
- Effective communication of successful approaches and results of TB REACH projects (62.75% from survey)

4.10 Gender Equality

EQ 10 - How have the **results achieved** for women and girls compared to those achieved for men and boys?

TBR have a growing interest in gender equality driven by momentum from Global Affairs Canada.

This increased emphasis is positive given TB is one of the top five killers of women aged 20-59 years. In 2014, 480, 000 women died from TB (including 140 000 deaths among women who were HIV-positive). Among mothers, TB is associated with a six-fold increase in perinatal deaths and a two-fold risk of premature birth and low birth-weight. 44

The vast majority of TB deaths are in developing countries where gender inequity is common. ⁴⁴ In most countries, TB case notification is twice as high in men as in women. ⁴⁴ There is evidence that socioeconomic and cultural factors have, particularly in developing countries, led to barriers in women accessing health care which may have caused their under representation. ⁴³ Stigma and discrimination in some settings can mean women with TB are ostracised by their families and communities. ⁴⁴ Anecdotally, this is a particular issue in India and Nepal where TB cases may be undetected.

Out of the 144 projects, there were 41 occasions (projects and/or project extensions) where disaggregated data by gender and age was not reported.

⁴³ http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1000199

⁴⁴ http://www.who.int/tb/publications/tb_women_factsheet_251013.pdf

Of note is the project, 'Increased detection of children, women and elderly individuals with smear-positive TB in Yemen,' led by the Liverpool School of Tropical Medicine (LSTM), which actively targeted women. There were also other initiatives - especially those that were using contact tracing – that supported women and girls in accessing diagnosis and treatment.

47% of respondents to the electronic survey agreed that similar results were achieved for both males and females, however 53% either disagreed or had no view, which questions whether projects capture enough gender disaggregated data to demonstrate this. Several respondents commented 'we have not done such analysis.' Additionally, another respondent stated: 'There is no bias in terms of TB screening, providing support and care.'

The average male to female ratio over the four Waves was calculated to be 1.60 (i.e. for every 1 female case notification, there were 1.6 male case notifications). This is relatively in line with global figures. Figure 18 presents gender ratios per Wave 4 country with female noted by pink and male noted by blue.

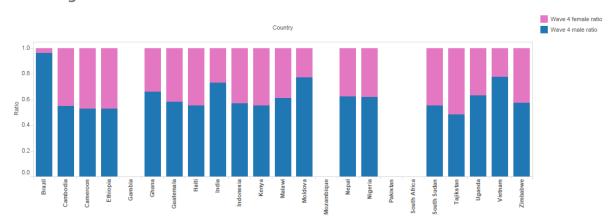


Figure 18 Male to female ratio for TB REACH funded countries ⁴⁵

Figure 18 above shows the average male to female ratio of projects that were funded by TB REACH by country by Wave. In Wave 4, a significant spike is noted for Brazil, which saw a large disparity between the male and female case notifications: notifications were 27 times more likely in males than females. **However, it should be noted that the project in Brazil targeted prison inmates which were almost exclusively male.**

In the table below, during Waves 2 and 4, Vietnam and Moldova showed a high gender ratio of 3 or more.

Countries including Ethiopia, Swaziland, Haiti, Nigeria and Tajikistan demonstrated relatively gender equal results of a near 1 ratio during at least one Wave between 2010 to 2015.

Table 6 Average male to female ratio by TB REACH funded countries

Country	Wave 1	Wave 2	Wave 3	Wave 4
Afghanistan	0.54		0.27	
Bangladesh			1.60	
Benin				
Brazil				26.75

 $^{^{}m 45}$ Stop TB Partnership – TB REACH - TBR Notifications - Age and Gender statistics

Burkina Faso	2.73	2.80		
Cambodia		1.23	1.20	1.21
Cameroon				1.12
Côte d'Ivoire			1.73	
DR Congo	1.38	1.37		
Ethiopia	1.02	1.30	1.12	1.12
Gambia		2.10		
Ghana			3.16	1.97
Guatemala		1.19		1.40
Haiti			1.18	1.23
India		2.76	2.97	2.73
Indonesia			1.45	1.33
Kenya	1.62	1.45		1.25
Kyrgyzstan		1.58		
Laos				
Lesotho	1.35		1.38	
Madagascar		1.62		
Malawi		1.37		1.58
Moldova		3.00		3.39
Mozambique				
Myanmar		1.90		
Nepal		1.99	1.71	1.67
Nicaragua		1.52		
Nigeria		1.84	1.00	1.63
Pakistan	1.10	1.05	1.08	
Pakistan/Bangladesh		0.94		
Rwanda				
Sierra Leone			1.60	
Somalia		2.29		
South Africa		1.28		
South Sudan			1.59	1.24
Sudan				
Swaziland		0.91	1.20	
Tajikistan			1.22	0.94
Tanzania		1.04	1.72	
Thailand				
Uganda	2.04	1.70	1.73	1.73

Ukraine	2.86		
Uzbekistan		1.28	
Vietnam	3.17		3.50
Yemen			
Zambia	1.90		
Zimbabwe	1.28	1.43	1.35

There are shortcomings to data sets used, both the projects' and WHO's national figures on case notifications disaggregated by gender demonstrated gaps in the data for various projects and countries. In terms of Wave 4 projects, the records of notification by gender in countries such as Gambia, Mozambique, Pakistan and South Africa were not available. To ensure compatibility, Wave 4 gender ratios are compared against national gender ratios from 2014. However, national gender ratios for countries such as Cameroon, Gambia, Madagascar and South Sudan were not available from WHO.

Further mention should be made that as the TB REACH notification by age and gender data did not have unique project titles, there were several cases where there was more than one record for the same project presumably because these were for two years or records split for sub-projects. Where this has occurred, the results for the second project has been used for Year 2. There were occasions where there were duplicate rows for one project without any funding extensions e.g. Project HOPE in Malawi, these rows were added together. Furthermore, where there should be more than one record of gender ratios for sub projects, the gender ratio was split by the number of subprojects to make calculations easier.

4.11 Gender Equality

EQ 11-Has TB REACH reduced **gender based inequalities** in access to TB care services?

There are clear gender differences in TB prevention and care. For this reason this evaluation has found that **patient-centred approaches** are particularly effective in communicating critical messages.

Women and men face different, and specific, barriers. Country visits highlighted consistencies in the issues faced by women, such as mobility. Often women have inadequate access to transportation, childcare responsibilities in their home that they cannot leave to others, and in many cultures women need to be accompanied by a male family member before they can leave the house.

While **stigma** exists for both men and women in relation to TB, it was found that women tend to face an increased level of stigma. For example, it was reported that some families believed that TB can pose risks for the personal reputation of the females in their family, and therefore limit their marriage prospects because of the myths surrounding the disease. For these reasons women in India were found to be more likely to access private medical care in order to hide the disease better, which has exacerbated the issue of under-reporting of TB cases by the private sector. It was found that females are more likely to disappear in the system as a leaked case.

However, once in treatment, females were found to be more likely to adhere to their treatment plan than men, in order to protect their children and household from further infection.

For men, a key barrier was found to be in relation to taking a day off of work for diagnosis or to attend treatments. In many cases the man's wage is the sole income and source of support to an entire family. Taking a day off work without compensation for many is not an option. The benefits of diagnosis and treatment are not seen to outweigh the cost.

TB REACH's approach to gender is still being reinforced. As a result, there is insufficient evidence captured by M&E to address this issue. None of the projects did any gender analysis. However, 60% of respondents to the electronic survey believe that TB REACH reduced gender based inequalities in access to TB prevention and care services while only 14% disagreed. A significant portion of respondents (25%) had no view, which may suggest that not enough is known about this area.

Gender issues are of particular interest as high levels of gender inequality and inequity are present in TB burdened countries. Both socioeconomic and cultural factors contribute to the hurdles that women face in accessing the TB care and treatment they need. Given the importance of this topic, it is worth TBR considering the commissioning of research or **gender analysis** on the gender dynamics of TB prevention and care, which could then be shared with grantees to inform their programming. 69% of respondents to the electronic survey indicated they would welcome further research on gender dynamics.

Female community health workers have enabled improved access for women to care and services and patient centred approaches (including messaging) are an effective means of addressing gender based inequalities, and should be applied going forward. TB REACH should aim to generate and promote gender-sensitive services for TB prevention, diagnosis, treatment, care and support as well as tackle the underlying stigma and discrimination. There should be measures put in place to directly monitor and measure project performance for both genders.

TB REACH should continue, as part of its commendable M&E reporting, to encourage grantees to report on case notifications aggregated by gender and age. Recognising the challenges in this due to global practices, more WHO and country reporting guidance is needed.

TB REACH should also continue to monitor the progress end-to-end care pathway from initial screening to full completion of treatment. This will also allow M&E to address the issue that men are less likely to adherence to the treatment plan. TB REACH should consider encourage or support grantees to promote treatment regime adherence.

4.12 Gender Equality

EQ 12 - How can future rounds of funding better **incorporate /mainstream** gender equality?

To support mainstreaming of gender equality TBR should consider **emphasising gender as a key focus area in their call for proposals**. This will help to promote gender sensitive innovation in proposals that are received from prospective grantees. In addition, it is suggested that TBR grantees should be able to demonstrate in their proposals (and subsequently throughout project delivery) that they have explored the

gender dynamics at play in their particular country, and that they are trying to address the gender related barriers that emerged within their programming.

It was noted during country visits that some TBR projects did not actively seek advice or guidance from other organisations that may have more experience in to tackling gender issues in programming. TBR may wish to encourage future grantees to **leverage organisations in country with greater expertise of gender issues in public health**. This will support capacity building in gender issues.

The gender lens needs to be better defined as part of TB REACH's wider mandate to promote gender equality. With regard to project design it will be valuable to include a **gender plan** in project design to demonstrate how gender inequalities that emerge from gender analysis will be addressed during project delivery. This will help to ensure that gender sensitivity and related issues are factored in the project throughout delivery. Part of this plan should include reference to the establishment of at least one **gender related indicator**, for project monitoring and evaluation purposes. 78%of the respondents to the electronic survey agreed there should be an indicator to address gender equality. Disaggregated data on gender will help to inform gender policy and will support planning and mainstreaming.

Lessons can then be drawn from across TBR programming with regard to what works and what doesn't work. This will help to bolster TBR's overall gender programming and will inform a gender policy.

It has been noted that the Stop TB Partnership along with UNAIDS have developed a TB/HIV Gender Assessment Tool. Such a tool will greatly assist with gender mainstreaming. The intentions around the rollout of this tool will need to be further explored.

4.13 Added Value of TB REACH

EQ 13 - What is the additional **added value** resulting from TB REACH Intervention compared to what could have been achieved by other donors/National Governments etc.

This evaluation has found that the there is significant additional added value that has resulted from the TBR programme and its interventions.

- TBR encourages innovation in case finding techniques and 'thinking outside the box' in active case finding approaches and technologies. This feedback was also validated by 86% of the electronic survey respondents.
- TBR is willing to try new ideas and take calculated risks, by supporting initiatives
 that enable projects to reach populations often considered unreachable. Funding
 innovation is traditionally a challenge for governments, who may not be able to
 fund untested methods. However, TBR has used community based approaches,
 to engage hard to reach populations, such as tribal groups, slum dwellers, and
 industrial workers.
- TBR has raised the profile of TB in the global health environment and enabled capacity building within existing health care structures.
- TBR's projects are building and sharing knowledge on ACF in intervention countries and internationally.
- TBR are willing to explore and test the use of new diagnostic tools (such as the use of Xpert globally and LED fluorescence microscopy in India) in TB prevention and care.

• TBR has proven itself to be a valuable mechanism for supporting innovation via grassroots NGOs, and for building the capacity of grass roots organisations through the training of community health workers on innovative techniques. This point was also validated by 55% of the electronic survey respondents.

In addition, respondents to the electronic survey indicated that TBR's added value included:

- Providing support to address gaps in National TB Programmes (72.6%)
- Providing flexible funding for TB prevention and care (58.8%)

EQ 14 - What would be the most likely consequences of **stopping or withdrawing** TB REACH support?

If funding for TBR programming was to be withdrawn, evidence indicates that there would be greater funding gaps in innovation and in active case finding at the grass roots level.

As discussed throughout this report, the TBR pprogramme pays a lot of attention to innovative approaches to finding new or not previously accessed TB cases in vulnerable groups. Without TBR, it is believed that funding TB detection, and reaching out to vulnerable groups, would be reduced.

"Many community base activities focusing on case findings [have] not been supported by national government but by TB REACH. These case finding activities are very crucial and lead to early detection of many cases. The absence of TB support would therefore mean that many cases will not be detected early or if they will be detected at all"

- TBR Grantees

Field missions to India and South

Africa revealed that interviewees would be disappointed if the TBR programme were to be withdrawn from their countries – they expressed the importance of continued support in the search for innovation in TB prevention and care.

Fundamentally it is believed that slowing down or reducing funding for TBR programming would eliminate aspects of communication around the issue of TB overall, which is a critical aspect in the fight against this disease.

Feedback from the electronic survey revealed that 82% of respondents agreed or strongly agreed that there would be negative effects if TBR support was stopped or withdrawn. Some commented that 'the void [would be] unlikely to be filled other (traditional) funders.'

5 Conclusions

Relevance

Is TBR an appropriate mechanism for <u>funding innovation</u> in TB prevention and care programmes? (i.e. the design of TBR meets the needs of grantees, addresses gaps in funding provision, promotes scale up of new approaches)

There was consensus from all consulted that TBR is an appropriate mechanism for funding innovation in TB prevention and care.

- TBR is addressing a funding gap in innovation in TB prevention and care and is the only global mechanism concentrating on this gap.
- Based on evidence gathered from stakeholder interviews, there appears to be a lack of clarity in the TBR mandate. Reference: the original agreement with STOP TB Partnership and Global Affairs Canada (2009) focuses on building capacity and strengthening systems in TB prevention and care (additional cases successfully treated), while discussions with stakeholders indicated they viewed the focus to be on funding or testing innovation.
- TBR's primary niche is in innovation in improving case detection. However greater clarity on what is meant by innovation would be welcome.
- TBR has a comparatively high risk appetite for funding innovation and supporting approaches that would otherwise not necessarily secure funding from other sources.
- In relation to the design of TBR, fast application and grant allocation processes assists grantees with short-term projects, however there was almost unanimous consensus that the duration of grants was too short. One of the top three recommendations by grantees gathered from the electronic survey was for a longer period of funding or project duration.
- With increasing numbers of projects and approaches being implemented by TBR in different country contexts, it is becoming increasingly challenging for TBR's M&E methodology.

Effectiveness

Has TBR contributed to <u>strengthening TB prevention and care</u> activities in low income and developing countries and <u>enhanced</u> <u>coordination</u> between tuberculosis control entities?

TBR is effectively strengthening health care systems in TB prevention and care. Its focus on active case detection and improving diagnosis is effectively complementing the passive case finding approach of the NTPs. However, it was assessed that more could be done to support health coordination between TBR projects and the NTPs.

Specifically TBR projects have helped to strengthen TB prevention and care systems in the following five areas:

- Introduction of community based approaches to identify TB cases
- Introduction of new technologies, including diagnostics, to TB care and prevention
- Raising awareness about TB as a major public health issue and advocating for the rights of high risk groups

- Highlighting the need to work with all care providers, including the private sector
- Gaps in health systems

TBR created a wealth of information and data on several ACF approaches in different settings and countries. The rich potential of this information and data could be better exploited.

Lessons Learning

Documentation and Dissemination of Learning: Have the <u>lessons</u> <u>learned</u> by the Stop TB Partnership Secretariat and TBR grantees in implementing this initiative been documented and widely disseminated?

The 144 projects that the TBR programme has initiated or delivered over 5 years, and across 6 regions, provide a rich potential source for lesson learning and information sharing.

- The evaluation found there was a good dissemination of lessons learned through workshops and regular meetings at district and regional levels, particularly within India, South Africa and Ethiopia.
- There was some evidence of strong dissemination at the international level, particularly with regard to the promising use of international journals to communicate findings and participation in international conferences.
- In larger countries there was evidence of a lack of formal mechanisms and platforms to support lessons learning at the national level between grantees, NTPs, and TBR, which was observed particularly within India and South Africa. However, smaller countries with a higher concentration of TBR grantees in the capital, such as Nepal, had fewer problems in sharing at the national level.

International Contribution of TBR

Has the TBR initiative contributed to a <u>change in international</u> <u>policy</u>, guidelines and / or advocacy goals within the international TB community?

TBR's international contribution is tied to its influence on active case finding (ACF) strategies and guidance on GeneXpert and CAD4TB.

- TBR has effectively given momentum to ACF and raised the profile of ACF at the country level.
- TBRs large number of peer reviewed papers and their sharing of lessons at Union conferences have strongly enhanced TBRs capacity to influence the international TB community and stakeholders.
- TBR has made an important contribution concerning international guidance on GeneXpert technology. TBR was instrumental in contributing to the evidence for the need of changing WHO guidelines on TB recording and reporting as a result of introducing GeneXpert technology.

Factors Driving Outcomes

What are the main factors influencing the <u>achievement or non-achievement</u> of expected immediate outcomes?

The following factors were determined to have influenced the achievement or non-achievement of TBRs expected immediate outcomes:

- The degree and quality of cooperation between TBR and NTPs, at different administrative levels (local, district and national)
- The implementation by TBR grantees of innovative and 'out of the box' thinking and ideas in the TB prevention and care space
- The application of new technology that directly boosts capacity to diagnose and treat TB patients
- The commitment of the grantees and the TBR Secretariat to making sure that the projects continuously adjust to challenges
- The availability of infrastructure (such as electricity and power) to support diagnosis and treatment sites
- The external factors (earthquake in Nepal, state division Andra Pradesh)
- The capacity of organisations in operations and project management (example: agile response of IRD to adapt to decisions to change interventions sites in South Africa)
- The degree and quality of communication and coordination between TB control entities and grantees (example: a WHO TB officer in South Africa was unaware of 4 out of 5 TBR projects underway)
- The level of community engagement and understanding of needs
- Gender inequalities, which can affect the ability to detect and treat cases
- The cost effectiveness of active case finding approaches

Unexpected Results

Have there been any <u>unexpected results or learning</u> from TBR projects?

This evaluation found there have been largely positive unexpected results or learning from TBR projects. These included:

- Through proactive community engagement with vulnerable and hard to reach groups, TBR projects have addressed the issue of stigma.
- TBR projects, in some countries, contributed to dispelling myths about TB particularly within hard to reach communities, such as: it's 'incurable,' that one needs to be isolated for treatment or that the cost of treatment is prohibitively high.
- TBR programming has generated more information on, and a better understanding of, the success and limitations of household contact tracing.
- The use of mobile apps (particularly in South Africa and Pakistan) has provided government officials greater awareness of the flexibility and potential of open source software and materials.

Cost Effectiveness What cost per additional case notification was TBR able to effectively deliver?

The evaluation revealed that cost per additional case notification varied considerably from project to project and country to country, and that TBR's benchmark budget of \$350 was determined to have been set too low for many projects.

Analysis indicated that the cost per additional case notification is:

- TB (All Forms) = \$1225
- SS+/B+ = \$1604

Sustainability (Adoption & Scale-Up)

Have approaches implemented by TBR projects subsequently been adopted and scaled-up with investments from domestic governments and / or other international donor agencies?

The evaluation found that the level of emphasis on adoption and scale up of TB REACH project innovations has grown as the programme has matured. As such, TBR has had some success in the adoption and scale up of approaches implemented by their projects, but more needs to be done to build off on their achievements to date.

- Sustainability and scale up is now firmly embedded in the thinking of the programme as it moves into the next funding cycle.
- Stakeholders and grantees reported a need to harvest the fruits of the innovations supported during the first phase of funding through support of wider adoption and scale up.
- Technological projects were found to be more amenable to scale up, replication and are generally easier to generate demonstrable evidence on cost effectiveness.
- The scalability of community based approaches is highly dependent on local context and contextualisation.

It should be noted that in this evaluation data limitations meant that it was *not* possible to provide a comprehensive overview on the number of TBR project approaches that have been adopted or scaled up.

Accessing Other Sources of Funding for Scale-Up What are the main factors influencing the <u>linkage of successful</u> <u>strategies or technologies</u> implemented by TBR projects with other sources of TB funding?

There are a range of factors driving linkages between TBR projects and other sources of funding. Key factors, as identified by country visits and verified by survey results, include:

- Involvement and cooperation with the National TB Programme (86% of survey respondents agree)
- Thinking about scale up in advance (e.g. at planning stage of projects) (71% of survey respondents agree)
- Effective communication of successful approaches and results of TB REACH projects (63% of survey respondents agree)

 Robust evidence on the results and achievements of the projects (53% of survey respondents agree)

Gender Equality

How have the results achieved for women & girls compared to those achieved for men and boys?

- TBR has a growing interest in gender equality driven by momentum from Global Affairs Canada.
- Out of the 144 projects implemented by TBR, there were 41 occasions (projects and/or project extensions) where disaggregated data by gender and age was not reported.

Gender Equality

Has TBR reduced gender based inequalities in access to TB care services?

There was insufficient data to determine to what extent TBR has reduced genderbased inequalities in access to TB care services. Discussion with TBR grantees in the countries visited revealed the following:

There are clear gender differences in access to TB care services. Women and men face different and specific barriers.

- Specific barriers for women included mobility, cultural norms with regard to leaving the home without a male guardian and alternative arrangements for childcare.
- Specific barriers to men included the difficulties of taking a day off work without compensation while under treatment or seeking treatment.

Other findings include:

- While women and men both face stigma with regard to TB, it was reported that typically women faced greater stigma.
- Women are found to be more likely to adhere to TB treatment plans
- In Asia women are more likely to access private medical care for TB, increasing the potential that they will fall outside national registration (linked to under-reporting by the private sector).
- Female community health workers enable improved access for women to care and services.
- Patient centred approaches, such as with messaging, were found to be an effective means of addressing gender based inequalities.

Gender Equality

How can future rounds of funding better <u>incorporate /</u> mainstream gender equality?

Country visits and results of the electronic survey indicated that future rounds of TBR funding could better incorporate and mainstream activities to support gender equality in future projects by:

- Including an M&E indicator to capture gender equality (78% of survey respondents agreed)
- Conducting further research to understand gender dynamics in TB prevention and care (69% of survey respondents agreed)
- Including a gender plan to explore gender-based inequalities (57% of survey respondents agreed)

Added Value

What is the additional added value resulting from TBR intervention compared to what could have been achieved by other donors / National Governments, etc.

There was consensus among TBR stakeholders that there was significant additional value resulting from TBR interventions compared to what could have been achieved by other donors and National Governments. Country visits and responses to the electronic survey indicated the additional added value to be that TBR:

- Encourages innovation in active case finding approaches (such as the use of community based approaches to access hard to reach populations e.g. tribal groups or slum dwellers) and technologies (mobile applications and GeneXpert).
- Has raised the profile of ACF in the global health environment.
- Serves as a valuable mechanism for building the capacity of grass root organisations through the training of community health workers on innovative techniques.

Added Value

What would be the most likely consequences of stopping or withdrawing TBR support?

The majority of grantees felt that there would be consequences of stopping or withdrawing TBR support:

- Grantees believed greater funding gaps would emerge in ACF at the grass roots level.
- Since TBR's focus is on innovative approaches to finding new TB cases in vulnerable groups, without TBR funding the coverage of TB detection in these vulnerable groups would be reduced even further.



Recommendations

Theme:	Recommendation:	Expected Impact:	Addressed to:
Relevance	 At the start of the next phase of the programme TBR should consider re-articulating its mandate and objectives in a mission statement document, to further inform decisions around programming strategy, funding and duration. Provide clarity on the scope of what is meant by innovation. 	 This will help to inform decisions around programming strategy, funding and duration. This will strengthen programming and could also assist with TBR's grant application / selection process and strategy. 	TBR Secretariat
Effectiveness	 TBR should continue to lead on meta-analyses of the various approaches that the programme has funded. These can be in identified themes of interest, based on available project data. TBR should consider the various modalities for improving cooperation with the NTPs, where possible. 	 This analysis will help distil transferable good practice to TBR projects and TB practitioners and policy makers on the successes and failures of TB prevention, diagnosis and care in the future. This will strengthen TB prevention and care health systems and will enhance coordination between TB care entities. 	TBR Secretariat



- Lessons Learning 1. TBR should devise and communicate a lesson learning strategy. This could be in the form of a bottom up approach (with grantees working together / grantee initiated approaches) or via a top down approach (with NTPs and TBR) through ring fenced funding for lessons learning and dissemination.
 - 2. Information on TBR projects should be presented on relevant websites and platforms nationally. This could include the grantee working together with the NTP to publish on their website (in line with the NTP communication policy).
 - 3. Lessons learning to include the 'good and bad' - grantees wish to learn which approaches have worked best, and why. Discussions should include examples of projects and approach which have succeeded, or not, so that best practice can be extracted.
 - 4. TBR Secretariat could consider adding the position of Knowledge Manager to their workforce to own the lessons learning and

- 1. This will enable consistency in approach to lesson learning across TBR projects.
- 2. This could enable wider dissemination at national level, given there was a notable lack of formal mechanisms and platforms to support lessons learning at the national level between Grantees, NTPs and TBR in some countries (India and South Africa particularly noted).
- 3. Lesson learning is hugely important for sustainability, scale up and innovation.
- 4. Improved oversight and understanding of TBR's global programming, lessons, impacts and results.

TBR Secretariat



Factors influencing achievement or non- achievement of immediate outcomes	dissemination work stream (in addition to managing credentials and communicating results). 1. Grantees should conduct a preliminary assessment during the design stage of their project on issues that could adversely affect their intervention approaches, and determine mitigation measures.	Assessing and seeking to mitigate risks aligns with good programme management practices.	Grantees and TBR Secretariat
Unexpected Results and Learning	 Future grantees, with encouragement from the TBR Secretariat, should explore the use of free open-source materials (such as software and journals) throughout the design and delivery of projects. Education on TB facts (focused on dispelling myths and addressing stigmas) could be factored into project design. 	 The use of mobile apps (particularly in South Africa and Pakistan) has provided government officials greater awareness of the flexibility and potential of open source software. Exploring the use of free open source materials will help support cost effectiveness for projects and access to the widest audience possible (by way of publication of findings in open journals). This will continue to help dispel the ongoing myths and stigma associated with TB that still exists particularly in hard to reach communities (myths include: 'it's incurable,' that one needs to be isolated for treatment or that the cost of treatment is prohibitively high). 	Grantees



Cost Effectiveness	 TBR should revise the method used for estimating project budgets. Clarity and additional guidance is required by grantees on the current approach to measuring cost effectiveness. The TBR Secretariat and M&E Agency should work together to achieve this. 	 Cost per additional case notification varied considerably from project to project and country to country. Applying an updated measure will enable TBR to robustly measure cost effectiveness across countries and projects globally. With greater guidance, more TBR grantees will be able to provide improved data on the estimated number of additional cases they have identified, and subsequently the cost per additional case notified. 	TBR Secretariat and M&E Agency
Sustainability (Adoption and Scale-Up)	 Grantees, with encouragement from the TBR Secretariat, should consider exploring private funding sources as part of their project planning to assist with scale-up. 	 To support successful scale-up of TBR approaches and diversification of partnerships. In order to consider options beyond the duration of the project. 	Grantees



	2. Grantees, with encouragement of the TBR Secretariat, need to consider sustainability at design stage of project planning.		
Gender – Results Achieved	Going forward all TBR grantees should be rigorous in collecting data on results (case notifications) disaggregated by gender.	Comprehensive disaggregated data by gender on all TBR projects in future will help further inform results achieved.	Grantees and TBR M&E
Gender – Reducing Inequalities	 TBR grantees need to explore the gender dynamics of TB prevention and care and how the projects are addressing the different gender related barriers through a gender analysis. Patient centred approaches (including messaging) are an effective means of addressing gender based inequalities, and should be applied going forward. 	 Women and men face specific and different barriers. Specific barriers for women can include: mobility and access to transportation; need to be accompanied by men to clinics. Specific barriers for men can include: losing a day of work without compensation. Patient centred approaches, such as with a focus on gender, will improve access for women to care and services and will improve overall TB case detection. 	Grantees
Gender – Future Funding	 TBR should emphasise gender in their call for proposals and in project design. Grantees should be required to include at least one indicator on 	 This will promote gender sensitive innovation in TB prevention and care. More data on gender will help inform gender policy and will support planning and mainstreaming. 	Grantees and TBR



- gender equality in their M&E plans
- 3. TBR grantees need to explore the gender dynamics of TB prevention and care and how the projects are addressing the different gender related barriers through commissioning research or results achieved for women and men in previously projects.
- 4. TBR could also encourage future grantees to work with organisations with greater expertise of gender in public health.
- 5. Inclusion of a gender plan in projects to address gender inequalities that emerge from gender analysis.

- 3. Understanding gender related barriers will help inform gender programming and policy.
- 4. This will support capacity building in gender issues.
- 5. To ensure gender related issues and understanding are factored in the project from the design stage through implementation.



A.1 List of consultations conducted

Name	Organisation	Contact Details			
Stakeholders Consulted F2F or via Telephone Conference					
Becky Bartlein	Gates Foundation	becky.bartlein@gatesfoundation.org			
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A.2 Electronic Survey



TB REACH Initiative (2010-2015)

Welcome to the TB REACH Initiative (2010-2015) Evaluation Survey

This annex presents the e-survey that was used for the evaluation.

Thank you very much for agreeing to take part in this survey to evaluate the TB REACH initiative.

Stop TB Partnership appointed Atos Consulting to carry out an independent evaluation of the TB REACH initiative Waves 1-4 (2010-2015). Your feedback is welcome and highly valuable to inform the next five-year cycle of funding. This survey is designed to collect evidence on the performance of the TB REACH programme (and not that of the individual grantee projects).

All Stop TB Partnership stakeholders are invited to participate in this survey. The survey should take no longer than <u>15 minutes</u> to complete. There are a mixture of multiple choice and open-ended questions. We welcome any comments, suggestions or examples to explain your ratings.

We would be grateful if you could complete the survey by **Friday 12 August 2016**. All responses will be treated in confidence and presented anonymously.

We thank you for your participation.

*	1. Contact Details		
	Name		
	Organisation		
	Job Title		
	Country		
	Email Address		
*	Respondent Categor	ory	
			\$
	Other (please specify)		_
	I		I

donors.				
Strongly Agree	Agree	No View	Disagree	Strongly Disagree
Comments				
4. TB REACH should cor	ntinue to support to	echnological innovations	3	
Strongly Agree	Agree	No View	Disagree	Strongly Disagree
		\bigcirc		\bigcirc
Comments				
Comments				
5. TB REACH should cor				
Strongly Agree	Agree	No View	Disagree	Strongly Disagree
\bigcirc	\circ	O	\bigcirc	0
Comments				
6. TB REACH promotes	scale up of new in	novative approaches.		
Strongly Agree	Agree	No View	Disagree	Strongly Disagree
Comments				
7 What key areas in TP	provention and ea	uro chould TP DEACH n	rioritico?	
7. What key areas in TB	prevention and Ca	TE SHOULD TO NEACH P	HOHUSE!	

3. TB REACH funds innovative approaches in TB case detection that would not have been funded by other

8. TB REACH contributed to strengthening TB prevention and care activities.						
Strongly Agree	Agree	No View	Disagree	Strongly Disagree		
Comments						
9. TB REACH enhanced	co-ordination be	tween tuberculosis conf	rol entities.			
Strongly Agree	Agree	No View	Disagree	Strongly Disagree		
Comments						
10. Lessons learned by th	ne Stop TB Partne	ership Secretariat and T	B REACH grantees	in implementing this		
initiative has been docum e	ented.					
Strongly Agree	Agree	No View	Disagree	Strongly Disagree		
Strongly Agree		No View	Disagree	Strongly Disagree		
Strongly Agree Comments		No View	Disagree	Strongly Disagree		
\circ		No View	Disagree	Strongly Disagree		
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Comments 11. Lessons learned by the initiative have been dissessed. Locally Nationally Internationally No Dissemination	Agree	ership Secretariat and T	B REACH grantees			

12.	The TB REACH Initiative contributed to a change in (please tick all that apply):					
	International policies/strategies					
	International guidelines					
	Advocacy goals within the international TB Community					
	National policies/strategies					
	National guidelines					
	Other (please specify)					
	What are the main factors influencing the achievement of TB REACH's objectives? (5 most important - ast important)					
00	Innovative solution (e.g. using new technology)					
0.0	finnovative approach (e.g. community based approach to active case finding)					
0.0	Adequate and timely funding					
0.0	Sufficient project duration					
0.0	Understanding context and community needs					
0.0	Previous experience working with TB REACH					
00	\$\displaysquare\$ Support from TB REACH Secretariat, including TB REACH M&E					
0.0	Support and cooperation from National TB Programme					
0.0	Cost effectiveness of active case finding approaches					
00	♦ Other					

14. What are the main factors influencing the non -	-achievement of TB REACH's objectives? (5
most important- 1 least important)	

00	\$	Leakage of cases			
00		Maintenance costs for technology or equipment			
00	\$	Limited funding			
00	•	Demanding performance indicate	ators		
00	\$	Restrictive TB REACH procedu	ures		
00	\$	Insufficient baseline data and e	evidence of achievement		
00	\$	Lack of information/lessons lead	rned sharing		
00	\$	Lack of project methodology tra	aining		
00	•	Unexpected problems and exte	ernal factors		
00	\$	Other			
15. Y	Were there a Yes No Please specify	iny unexpected results or l	earning from TB REAC	H projects?	
16. '	"Cost per add	ditional case notification" is	s a good measure of pro	oject cost-effectivene Disagree	ess. Strongly Disagree
	Ottoligiy Agree	Agree	O	Disagree	Ottorigiy Disagree
Pleas	se suggest a be	tter alternative measure of cost-	effectiveness, if any:		

17. A target cost of \$350 per a	additional case notification	is:	
Too low	Adequate	Too high	N/A
Please suggest a more feasible "Cos	st per additional case notification	n", if any:	
18. Approaches implemented investments from (please tick		ave subsequently been ado	pted with
Domestic Government			
International Donor Agencies			
Private Funding			
Other (please specify)			
19. Approaches implemented investments from (please tick		ave subsequently been scal	ed-up with
Domestic Government			
International Donor Agencies			
Private Funding			
Other (please specify)			

	hat are the main facto REACH projects with o	<u>-</u>	•	•	ologies implemented
Ef	fective communication of su	ccessful approaches an	d results of TB REACH	projects	
Ro	obust evidence on the result	s and achievements of	the projects		
Th	ninking about scale up in adv	/ance (e.g. at planning	stage of projects)		
In	volvement/Cooperation with	the National TB Progra	mme		
Co	ost effectiveness of the appr	oaches/technologies us	ed		
Ot	hers (please specify)				
21. Th	e results achieved for	women and girls ar	e similar to those a	chieved for men and	boys.
	trongly Agree	Agree	No View	Disagree	Strongly Disagree
22. TE	REACH reduced ge n	nder based inequa	lities in access to T	B prevention and ca	ıre services.
S	trongly Agree	Agree	No View	Disagree	Strongly Disagree
	\bigcirc	\bigcirc	\bigcirc		\circ
Comme	ents				
23. Ho	ow can future rounds of	f funding betterince	rporate gender ed	quality? (please tick	all that apply)
Inc	clusion of a gender plan to e	explore gender-based in	equalities		
Inc	clusion of an indicator to cap	oture gender equality			
Co	onduct further research to ur	nderstand gender dynan	nics in TB prevention ar	nd care	
Ot	her (please specify)				



24.	TB REACH adds valu	ue by (please tick a	all that apply):		
	Encouraging innovation	in TB prevention and c	care		
	Providing flexible funding	g for TB prevention and	I care		
	Emphasising active case	e finding			
	Supporting grass roots of	organisations			
	Providing support to add	ress gaps in National T	ΓB Programmes		
	Other (please specify)				
25	There would be nega	ative effects if TR R	REACH support is stoppe	ed or withdrawn.	
20.	THERE WOULD BE HEGE				
25.	Strongly Agree	Agree	No View	Disagree	Strongly
23.					Strongly
23.	Strongly Agree				Strongly
	Strongly Agree Disagree				Strongly
	Strongly Agree Disagree Comments	Agree		Disagree	
	Strongly Agree Disagree Comments	Agree	No View	Disagree	
26.	Strongly Agree Disagree Comments	Agree	No View	Disagree	
26.	Strongly Agree Disagree Comments	Agree	No View	Disagree	

Thank you for completing this survey.



A.3 Topic guides

To be provided separately.



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