POLIO GLOBAL ERADICATION INITIATIVE

# Financial Resource Requirements 2011-2012

*As of 1 January 2011*


EVERY LAST CHILD

World Health Organization

PARTNERS IN THE GLOBAL POLIO ERADICATION INITIATIVE

unicef

Photo front cover: UNICEF Angola/Leonie Marinovich - Little Georgina Luisa de Deus Nzongo is carried by her brother after being paralysed by polio. For a full story read Polio News no. 36 at http://www.polioeradication.org/Mediaroom/NewsletterPolioNews.aspx

Photo back cover: Global Art Initiative - In Dallas, USA, children painted donated crutches to distribute to polio patients throughout the developing world as part of the Global Art Initiative's (GAIN's) Global Crutch Project, which director Dr Fred Sorrells calls "a beautiful sight - colourful works of art providing mobility for daily life, created in love by American children". For information, go to www.globalartinitiative.org

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# TABLE OF CONTENTS

## ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| AFP | Acute flaccid paralysis |
| bOPV | Bivalent oral polio vaccine |
| CDC | US Centers for Disease Control and Prevention |
| FRR | Financial Resource Requirements |
| GPEI | Global Polio Eradication Initiative |
| mOPV | Monovalent oral polio vaccine |
| NIDs | National Immunization Days |
| OPV | Oral polio vaccine |
| PSC | Programme support costs |
| SIAs | Supplementary Immunization Activities |
| SNIDs | Sub-national Immunization Days |
| tOPV | Trivalent oral polio vaccine |
| UNICEF | United Nations Children's Fund |
| VAPP | Vaccine-associated paralytic polio |
| VDPV | Vaccine-derived poliovirus |
| WHO | World Health Organization |
| WPV | Wild poliovirus |

# 1 | EXECUTIVE SUMMARY

The Financial Resource Requirements series (FRR) accompanies the *Global Polio Eradication Initiative (GPEI) Strategic Plan 2010-2012* and is updated quarterly based on the prevailing epidemiological and financial situation. This is the first issue of 2011, following and replacing the September 2010 issue. Developments since September 2010 are therefore reflected in this issue.

The 95% reduction in polio cases in India and Nigeria in 2010 – historically the most formidable barriers to eradication – has created an ideal but short-lived opportunity to complete this job. Of the 15 countries[1] suffering outbreaks following importation of poliovirus, only one has not stopped transmission. New outbreaks starting in 2010 have been stopped or are on their way to being stopped within six months[2].

This other side of this epidemiological picture is sobering and has catalyzed intense political advocacy and urgent corrective action plans. In polio-endemic Pakistan, cases in 2010 rose by 59% over the number in 2009. With re-established transmission of poliovirus since 2007, Angola continues to report cases, leading to a large and deadly outbreak in the neighbouring Republic of Congo. Response is under way to an explosive outbreak in the Democratic Republic of Congo. The progress in Nigeria can be undone by pockets of circulation in Borno state, affecting the situations in Chad and Mali.

The FRR details the funding – required and currently available – to finance the activities needed by the *GPEI Strategic Plan 2010-2012*, to successfully interrupt wild poliovirus transmission globally and prepare for the post-eradication era.

The 2011-2012 budget for core costs, planned supplementary immunization activities and emergency response, inclusive of WHO/UNICEF programme support costs, is US$ 1.86 billion, an increase of US$ 189 million since September 2010. New contributions for the period of US$ 206 million offset this increase and re-define the funding gap for 2011-2012 as US$ 720 million.

The cost increases are driven notably by India – since the country is self-financing, this has no effect on the global funding gap; and the inclusion – for the first time – of programme support costs for budget lines expected to be covered through WHO and UNICEF to more accurately reflect the complete budget. These two drivers of the increase account for 95% of the increase. The other increases – driven by net increase in outbreak response and operations costss as a result of additional campaigns in several countries – are offset by cost-efficiencies (notably an 11% decrease in the weighted average price of UNICEF-procured vaccine, and reductions in operations costs in several key countries, including Chad and Nigeria).

The four major targets of the new *GPEI Strategic Plan 2010-2012* are to stop wild poliovirus transmission:

- by mid-2010 in all countries with new outbreaks in 2009[3];
- by end-2010 in the countries with re-established transmission[4];
- by end-2011 in two of the four endemic countries[5];
- by end-2012 in the remaining two endemic countries.

1 Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Côte d'Ivoire, Guinea, Kenya, Liberia, Mali, Mauritania, Niger, Sierra Leone, Togo and Uganda.

2 Kazakhstan, Liberia, Mali, Nepal, Niger, Republic of Congo, Russian Federation, Senegal, Tajikistan, Turkmenistan, Uganda.

3 Validated when at least six months have passed without a polio case genetically linked to an importation event from 2009 (i.e. by Q4 2010).

4 Validated when at least 12 months have passed without a polio case genetically linked to the re-established transmission train (i.e. by Q4 2011).

5 Validated when at least 12 months have passed without a polio case genetically linked to an indigenous virus (i.e. by Q4 2012).

At its inaugural session on 21-22 December 2010, the Independent Monitoring Board (IMB) assessed progress towards the milestones and at time of printing, was preparing its first meeting report.

Achieving the milestones will require – in addition to full ownership and engagement of the political leadership at all levels in the remaining polio-infected countries – the continued support of the international development community to rapidly make available the necessary financial resources.

The financial benefits of eradicating polio were estimated in 2010 to reach US$ 40-50 billion[6], not to mention the humanitarian benefits of preventing paralysis for generations of children. But most compelling are the ethical consequences of not completing eradication: failing to protect future generations when the tools are available to do so.

**Table 1 | Summary of external resource requirements by major category activity, 2011-2012**
(all figures in US$ millions)

| CORE COSTS | 2011 | 2012 | 2011-2012 |
|---|---|---|---|
| Emergency Response (OPV, Ops and Soc Mob) | $50 | $39 | $89 |
| Technical Assistance (WHO and UNICEF) | $136.7 | $140.9 | $277.7 |
| Social Mobilization Annual Costs | $6.8 | $6.6 | $13.4 |
| Certification and Containment | $5 | $5 | $10 |
| Product Development for OPV Cessation | $10 | $10 | $20 |
| Post-eradication OPV Stockpile | - | $12.3 | $12.3 |
| **SUPPLEMENTARY IMMUNIZATION ACTIVITIES** | **2011** | **2012** | **2011-2012** |
| Oral Polio Vaccine | $275.1 | $232.1 | $507.2 |
| NIDs/SNIDs Operations | $332.7 | $273.5 | $606.2 |
| Social Mobilization for SIAs | $39.9 | $35.8 | $75.7 |
| Subtotal | $932.4 | $833.7 | $1,766.2 |
| Programme Support Costs (estimated)* | $49.1 | $43.9 | $93.1 |
| GRAND TOTAL | $981.6 | $877.7 | $1,859.4 |
| Contributions | $647.5 | $493.5 | $1,141 |
| Funding Gap | $334.1 | $384.2 | $718.4 |
| Funding Gap (rounded) | $335 | $385 | $720 |

* Assumes no Programme Support Costs applied to national government-funded operations costs; the standard rate for procurement services through UNICEF was applied for governments using their own funds.

6 Tebbens RD, et al. The Economic analysis of the global polio eradication initiative. Vaccine 2010, doi:10.1016/j.vaccine.2010.10.25.

**Figure 1 | Annual expenditure 1988-2010, Contributions and Funding Gap 2011-2012**
(all figures in US$ millions)

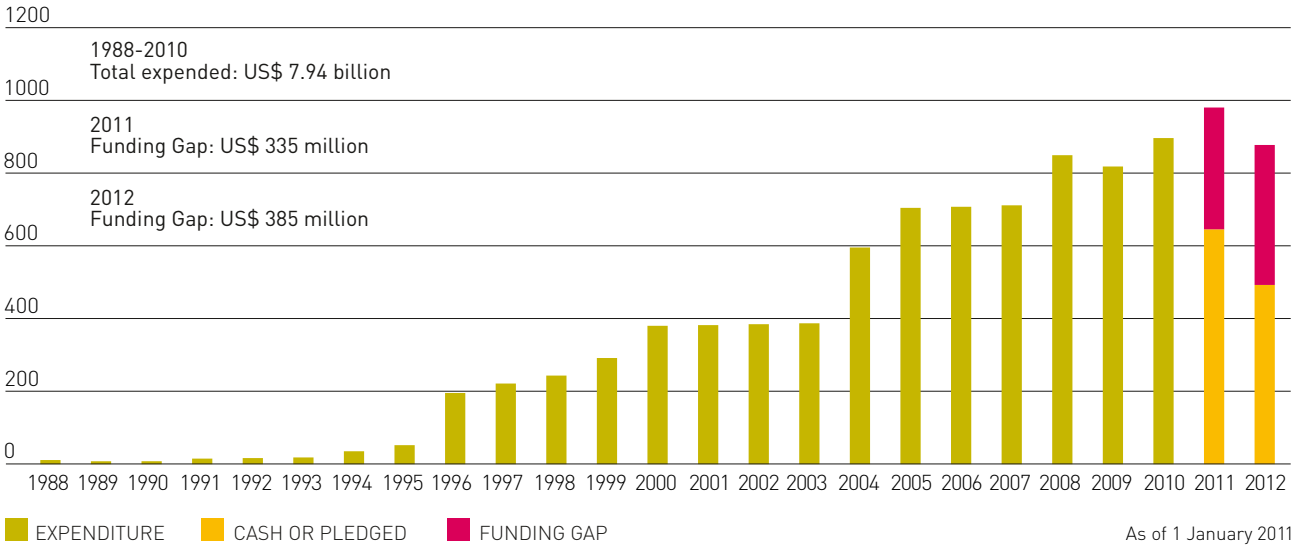
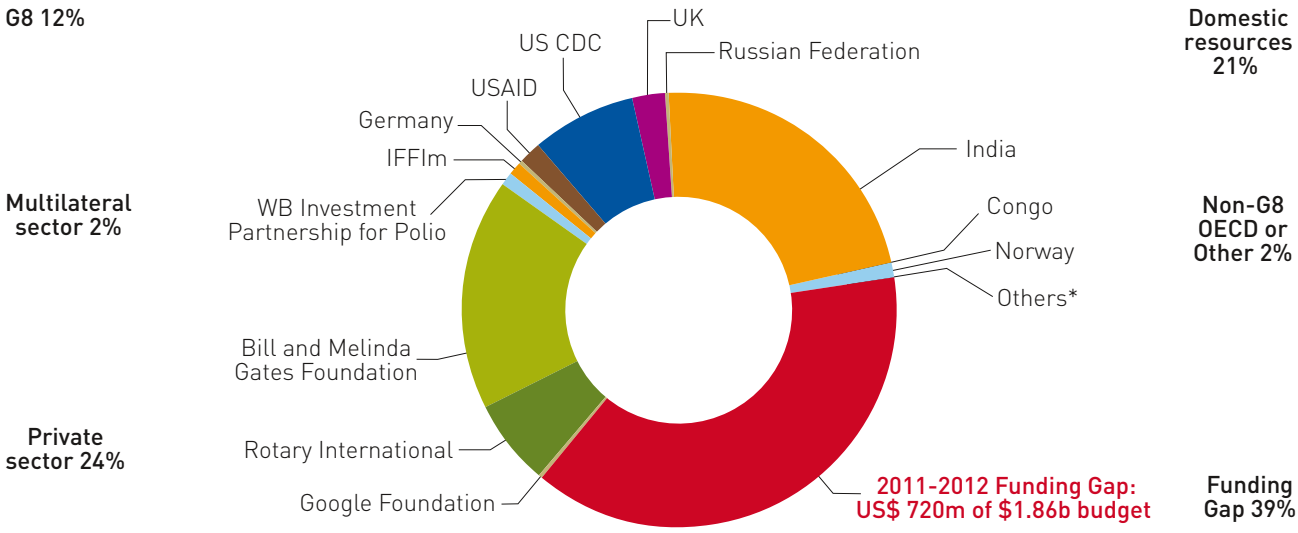



**Figure 2 | Financing 2011 to 2012: US$ 1.14 billion contributions**




* "Others" includes: the Governments of Finland, Portugal, Qatar, Turkey, UNCEF Regular and Other Resources.

# 2 | FINANCIAL RESOURCE REQUIREMENTS 2011-2012

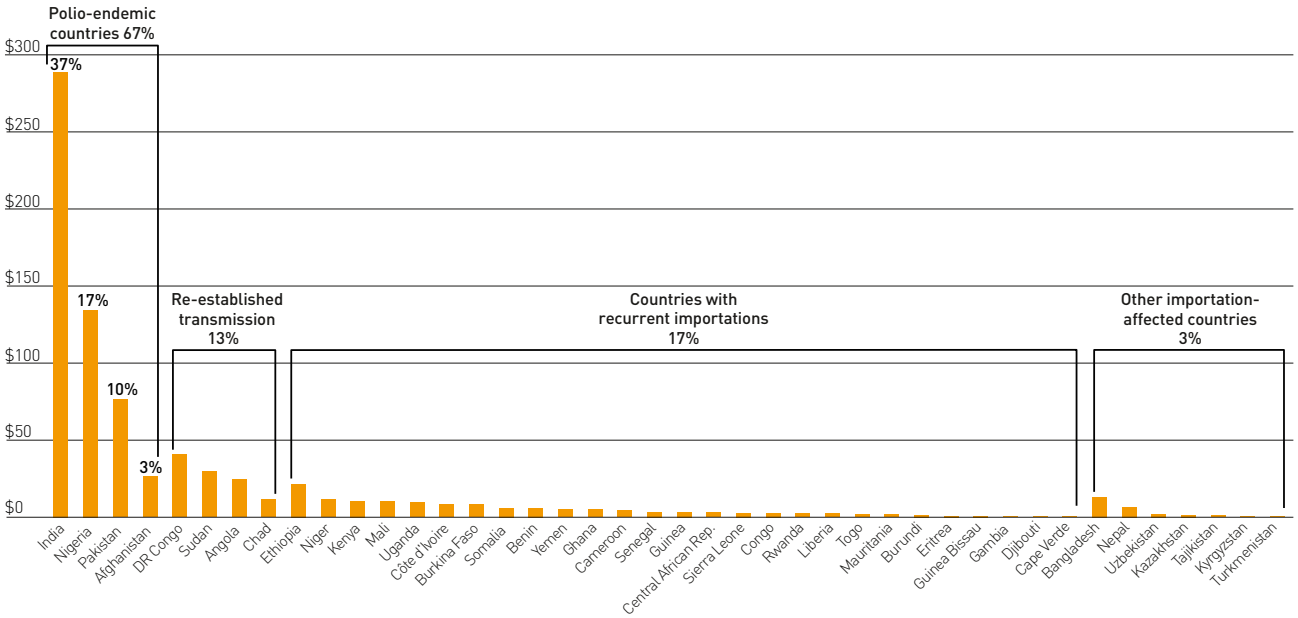
This Financial Resource Requirements (FRR) outlines the budget to implement the core strategies to stop polio and – in keeping with the country-driven *GPEI Strategic Plan 2010-2012* – to institutionalize innovations to improve the quality of intensified SIAs, increase technical assistance to countries with re-established polio transmission, enhance surveillance, systematize the synergies between immunization systems and polio eradication and expand pre-planned vaccination campaigns across the "WPV importation belt" of sub-Saharan Africa. Filling sub-national surveillance gaps, revitalizing surveillance in polio-free Regions and implementing new global surveillance strategies are also costed in the 2011-2012 budget.

The FRR is updated quarterly based on evolving epidemiology; this is the first issue of the year[7]. Financial requirements detailed here represent country requirements and are inclusive of agency (i.e. WHO and UNICEF) overhead costs.

Endemic countries account for 67% of the country budgets; countries with re-established transmission for 13%; and, other importation-affected countries for 20%.

Just as high-cost control of polio transmission is not sustainable, low-cost control is not effective, since depending on routine immunization alone would lead to 200,000 to 250,000 cases per year. Neither scenario is optimal when eradication is feasible[8]. Previous cost-effectiveness studies[9] have demonstrated that US$ 10 billion would be needed over a 20-year period to simply maintain polio cases at current levels, in contrast to the US$ 1.86 billion presented here. Financial modelling in 2010[10] estimated the financial benefits of polio eradication at US$ 40-50 billion. Most of those savings (85%) are expected in low-income countries.

**Figure 3 | Comparison of Country Budgets for 2011** (as a % of country-level costs)




7 While the FRR provides overall budget estimates, detailed budgets are available upon request.

8 Barrett S, Economics of eradication vs control of infectious diseases, Bulletin of the WHO, Volume 82, Number 9, September 2004, 639-718.

9 Thompson KM, Tebbens RJ. Eradication versus control for poliomyelitis: an economic analysis. Lancet. 2007; 369(9570): 1363-71.

10 Tebbens RD, et al. The Economic analysis of the global polio eradication initiative. Vaccine 2010, doi:10.1016/j.vaccine.2010.10.25.

# 3 | ROLES AND RESPONSIBILITIES OF SPEARHEADING PARTNERS

The spearheading partners of the GPEI are the World Health Organization (WHO), Rotary International, the US Centers for Disease Control and Prevention (CDC) and UNICEF. Rotary International is the leading private-sector donor to polio eradication, advocates with governments and communities and provides field-level support in SIA implementation and social mobilization. CDC deploys a wide range of public health assistance in the form of staff and consultants, provides specialized laboratory and diagnostic expertise and contributes funding.

The budgets that underpin the FRR are prepared by WHO, UNICEF and national governments.

The funds to finance polio eradication activities flow from multiple channels, primarily through these stakeholders. The national governments manage polio eradication activities; UNICEF usually takes the lead in procuring vaccine and conducting social mobilization activities and WHO provides technical assistance and supports surveillance. Both UN agencies support the government in the preparation and implementation of SIAs.

# 4 | DEFINITION OF THE GPEI ACTIVITIES AND BUDGET ESTIMATES

A robust system of estimating costs drives the development of the global budget estimates from the micro-level up. A schedule for SIAs is drawn up based on the guidance of national Technical Advisory Groups (TAGs), Ministries of Health and the country offices of WHO and UNICEF. In 2010, for example, more than 2.2 billion doses of OPV were administered to more than 400 million children during 309 polio vaccination campaigns[11].

The recommended schedule of SIAs is used by national governments, working with WHO and UNICEF, to develop budget estimates. These are based on plans drawn up for SIAs at the local level and take into consideration local costs for all elements of an activity – trainings, community meetings, posters, announcements, vaccinator payments, vehicles, fuel, supplies, etc.

## 4.1. COST DRIVERS OF THE GPEI BUDGET

The key cost drivers of the GPEI budget are OPV and SIA operations, followed by surveillance and technical assistance[12] (See Table 1).

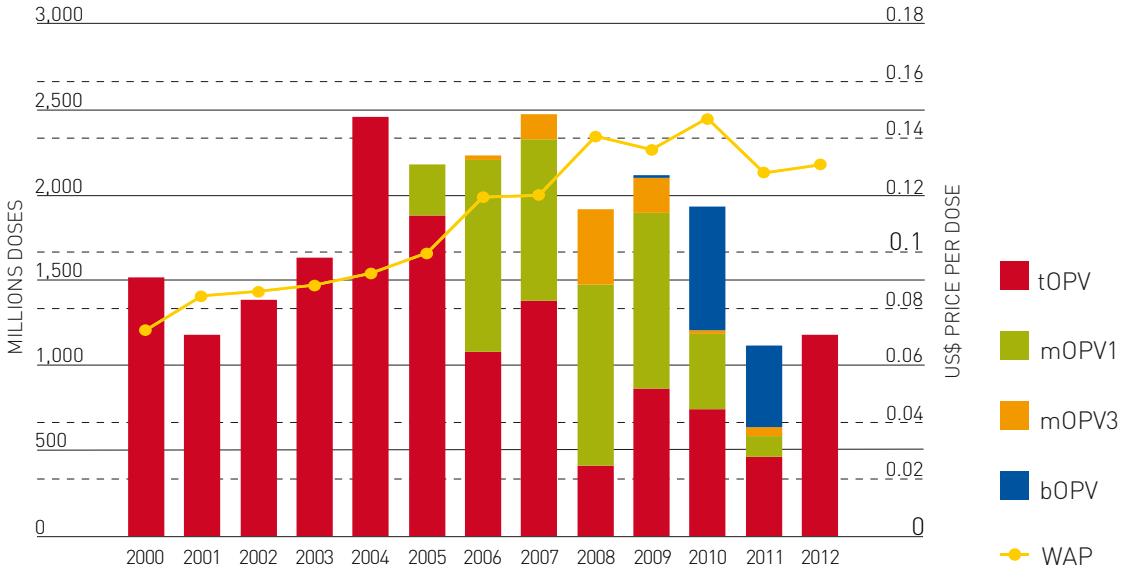
### 4.1.1. Oral polio vaccine

UNICEF procures OPV for the GPEI and in doing so follows the principle of Vaccine Security, the uninterrupted supply of vaccine, of an assured quality, at a price that is both affordable to governments and donors and reasonably covers the minimum needs of manufacturers. This means that awards are made to multiple suppliers in both developed and developing countries.

11 OPV was given during 130 National Immunization Days, 140 Sub-national Immunization Days, 28 mop-up campaigns and 11 Child Health Days. Children may have received more than one dose of OPV.

12 For 2010, for example, OPV accounts for 35% of the budget, operations for 40%, technical assistance for 14% and surveillance for 8%, the remainder being dedicated to laboratories, research activities, etc.

**Figure 4 | OPV Supply & Weighted Average Price, 2000 to 2012**




The supply landscape has become more complex since 2005 with the introduction of two types of monovalent OPV (types 1 and 3) and, in late 2009, bivalent OPV. This contributed to a rise in the weighted average price of OPV from over the period. However, when UNICEF, working with partners, concluded the tender for the period 2011 and 2012 the weighted average price for OPV was reduced by 11% to US$ 0.128 per dose compared to the 2010 weighted average price.

For activities in areas with active poliovirus transmission, more than 1.5 billion doses of OPV will be required in 2011.

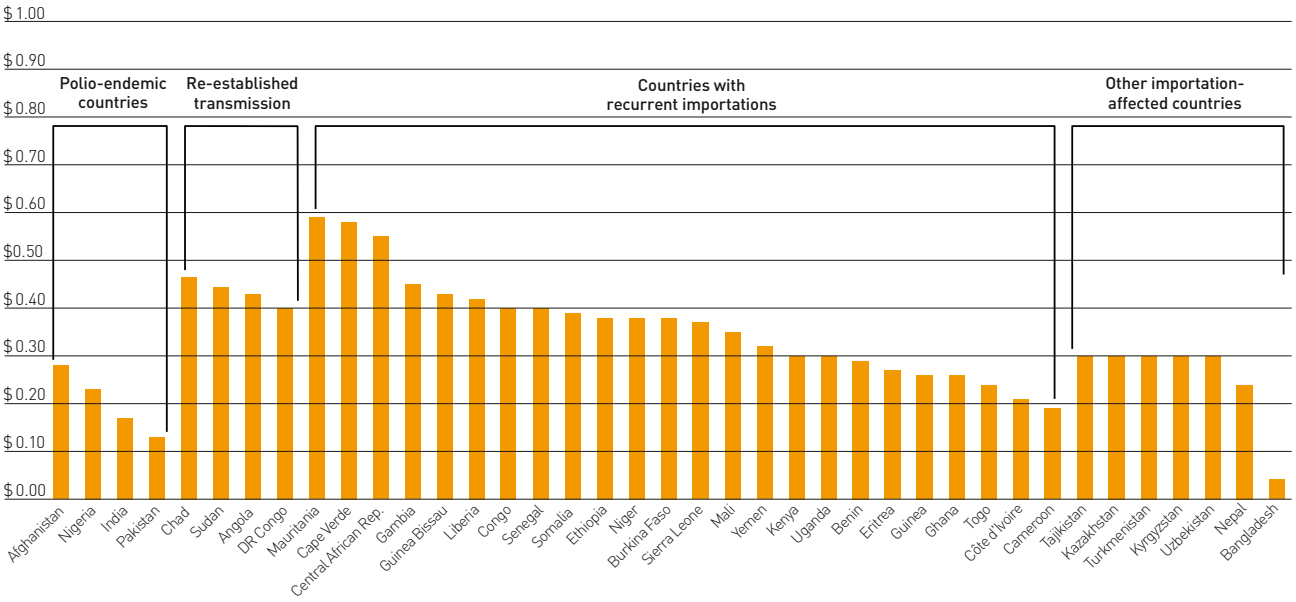
### 4.1.2. Operations costs

SIAs are vast operations to deliver vaccine to every household: micro-plans have to be drawn up or updated for every dwelling in the area to be covered, whether a single district or an entire country. Vaccine has to be delivered to distribution centres throughout the target area. Vaccinators have to be trained to vaccinate children and mark fingers and houses, to document their work, to report their activities, to communicate with families appropriately, and so on. Vaccinators have to visit every household; supervisors and monitors have to scour every street for unvaccinated children.

Major factors affecting operations costs are the relative strength of the local infrastructure – whether it be roads, telecommunications or any of a host of facilities – and the local health system, the local economy, availability of semi-skilled workers, security conditions and population density. In 2009, 1.4 million paid vaccinators worked in SIAs; vaccinator per diems – to cover basic needs such as food and transport – constitute a large portion of operations costs[13].

13 Based on local rates for semi-skilled labour and government remuneration for similar tasks.

**Figure 5 | Operations Costs per Child for SIAs, 2011** (all figures in US$, excluding PSC)




Additionally, communications support for immunization outreach must overcome limitations imposed through geography, literacy and local capacity to engage communities both through health workers and more traditional networks, and especially to target high risk groups who are typically underserved and have less access to health services.

Together, these factors contribute to the differences in operations costs, both between and within countries. In India, where operations costs are among the lowest in the endemic countries (cost per child US$ 0.17 in 2011), high population density allows a single health or communication initiative to reach large swathes of the community. Of note, Chad – while having one of the highest cost-per-child ratios – significantly reduced its operational costs in 2011 (US$ 0.47 in 2011, compared to US$ 0.63 in 2010). While there is variability from one country to another as well as within countries, the average SIA operational costs per round per child has varied little from 2000 to the present (US$ 0.24 per child to $ 0.20 per child, inflation-adjusted).

### 4.1.3. Surveillance

Surveillance budgets cover the detection and reporting of acute flaccid paralysis (AFP) cases, through both an extensive informant network of people who first report cases of AFP and active searches in health facilities for such cases. Subsequent case investigation is followed by collection of two stool samples, transportation to the appropriate laboratory, testing and genetic sequencing, the range of activities related to the management of the information and data generated. The Global Polio Laboratory Network comprises 145 facilities, which in 2009 tested over 150,000 stool samples (from nearly 90,000 cases of AFP and other sources).

Some of the other activities included under surveillance budget lines are the training of personnel to carry out each of the steps outlined above, as well as regular reviews of the surveillance systems and the purchase and maintenance of equipment, from photocopiers to vehicles. In locations where there are security risks for polio staff, items such as armoured vehicles and appropriate communication equipment may be included in the surveillance budgets. The average cost per AFP case reported dropped from a high of more than US$ 1,500 in the year 2000, when there was heavy investment in establishing the infrastructure for AFP surveillance to approximately US$ 581 in 2010. The range among countries in cost per AFP case investigated is based on factors similar to those which affect differences in SIA costs.

**Figure 6 | Surveillance Cost Per AFP Case Analysis, 2010** (all figures in US $)

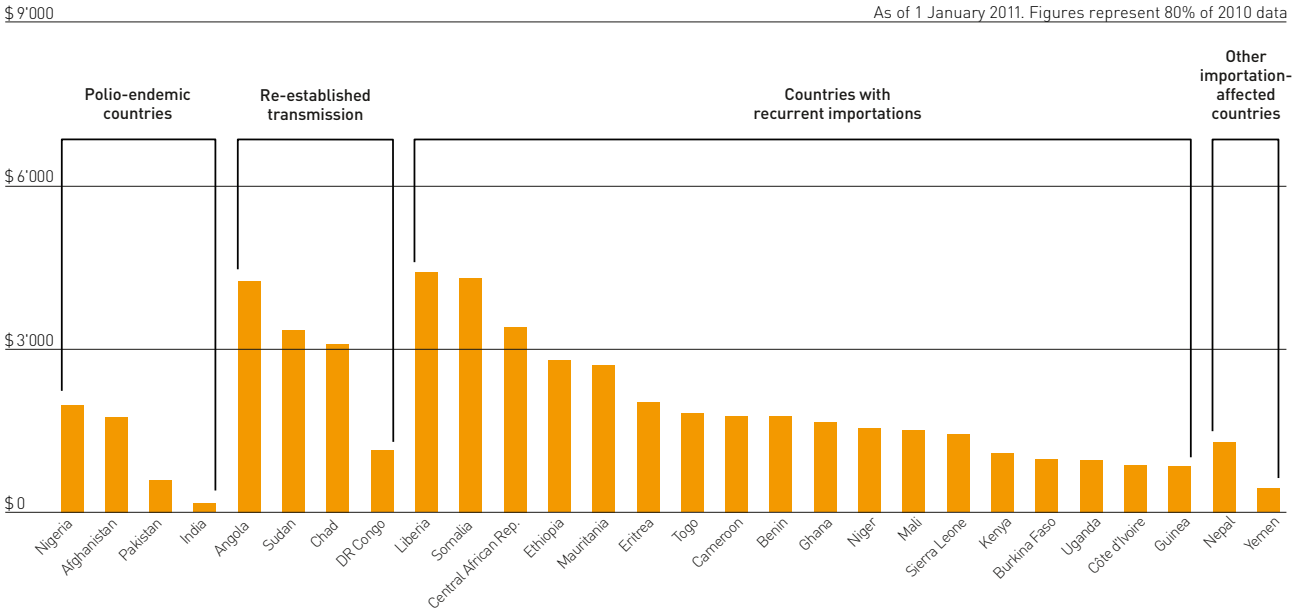
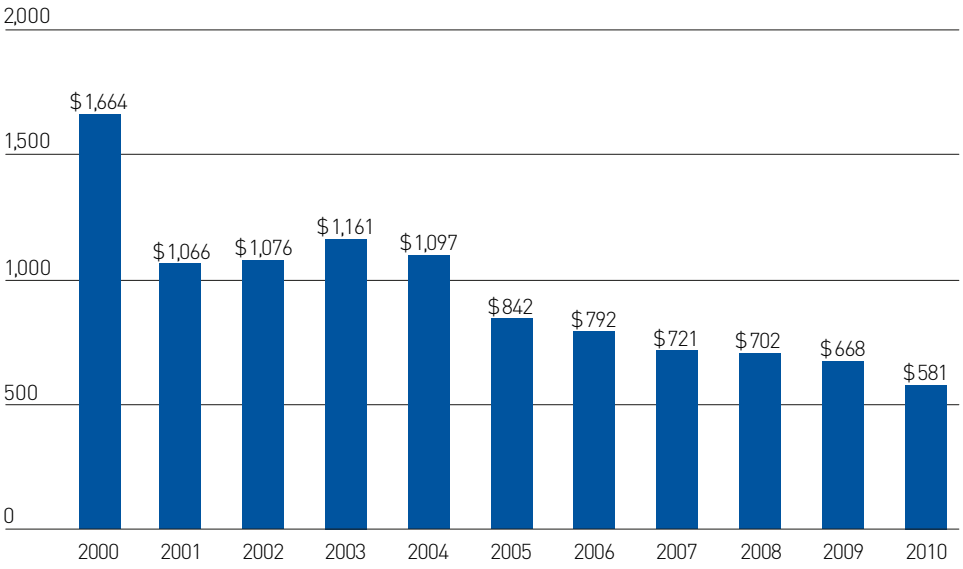



**Figure 7 | Average Cost Per AFP Case Reported (AFR, EMR, SEAR)** (all figures in US $)*




* Adjusted for inflation (2010 US$).

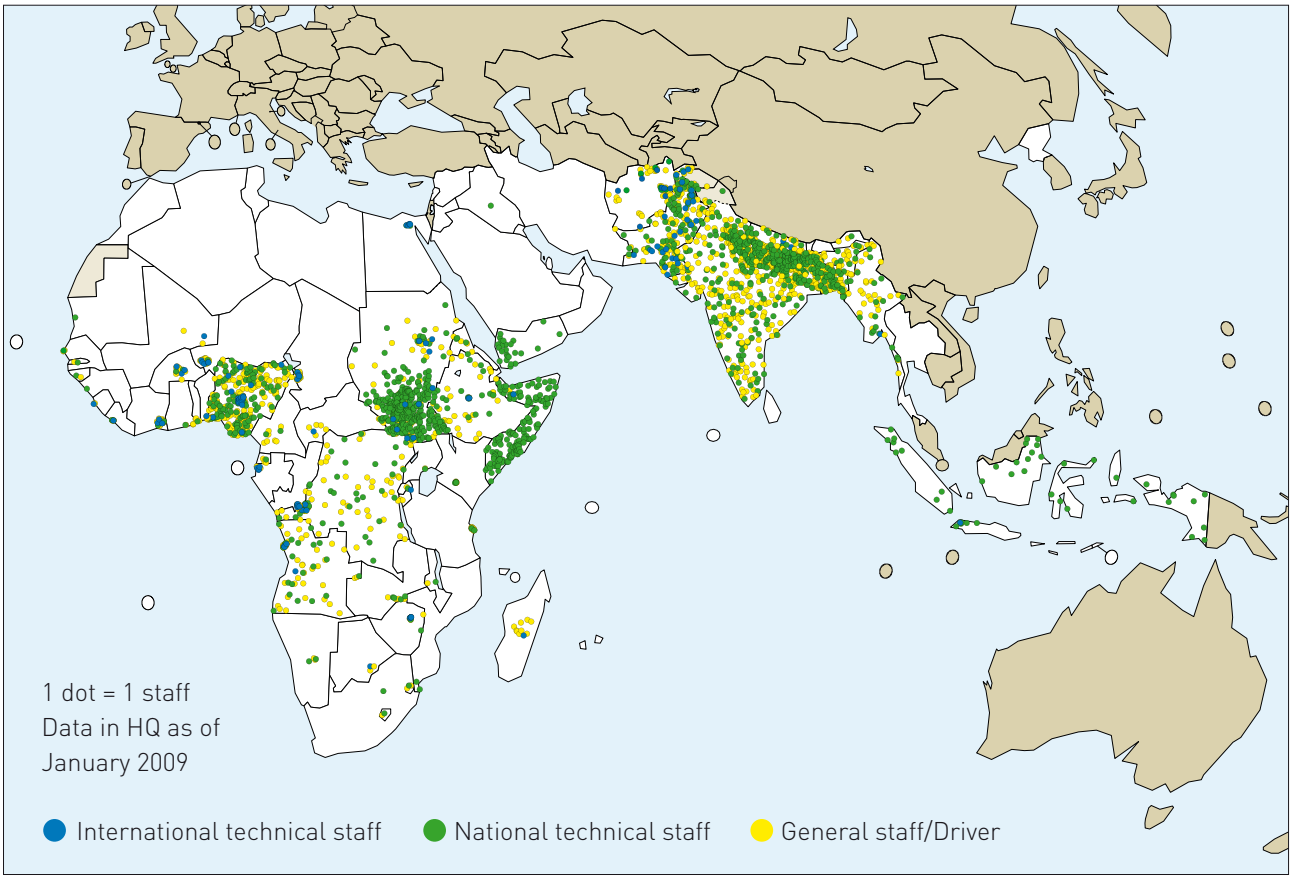
### 4.1.4. Technical Assistance

GPEI-funded technical assistance (staff and consultants) is deployed to fill capacity gaps when relevant skills are not available within a national health system, to build capacity and to facilitate international information exchange. The priorities for technical assistance are therefore driven by the relative strength of health systems in polio-affected countries as well as how critical the country is to global polio eradication. Matched against the number of children under the age of five years (i.e. the "target population"), technical assistance in countries with re-established transmission is on a par with – or even above – that in endemic countries (Figure 8).

In the 2011 budget, technical assistance is heavily weighted towards the polio-endemic countries (48% of cost), with the next concentration of funds in countries with re-established transmission (16% of cost) and recurrent importations areas (12% of cost).[14]

This assistance provides the human resources necessary for immunization campaign planning, including communication and social mobilization strategy development and implementation, micro-planning, logistics, forecasting and supply management. Funding ensures resources are in place for overall communication capacity development, management skills in strategic planning, finance, human resources and social mobilization in a programme that manages some 20 million workers and volunteers, and communication efforts that help

**Figure 8 | Geographic distribution of WHO technical assistance for polio eradication**




14 The remaining 24% is allocated to polio-free regions, Regional Offices and Headquarters.

reach over 360 million children each year multiple times with OPV. Finally, technical assistance maintains the surveillance network, which provides reporting on AFP incidence from every district in the world on a weekly basis.

Technical assistance on this scale is unique in public health and essential to finishing polio eradication. Polio eradication staff now constitute the single largest resource of technical assistance for immunization in low-income countries. For example, in 2009, of the 998 immunization staff in the WHO African Region, 940 (94%) were funded by the polio programme; at national or sub-national level, this proportion sometimes rose to 100%. In each component of a strong immunization system – logistics, service delivery, monitoring and supervision, surveillance and community participation – polio eradication staff have a wealth of experience.

Working to contribute to the objectives of the Global Immunization Vision and Strategy[15], GPEI staff will designate a minimum of 25% of their time to specific 'high impact' tasks and activities to strengthen immunization systems. Capacity-building workshops on the intersections between immunization systems and polio eradication are also part of the *GPEI Strategic Plan 2010-2012*. Priority will be given to areas at highest risk of outbreaks following importations, especially those in sub-Saharan Africa.

**Table 2 | WHO Technical Assistance by category of polio-infected country, 2011** (all figures in US$ millions)*

| CATEGORY | Total Cost | % of Cost | International | National |
|---|---|---|---|---|
| Endemic | $50.8 | 48% | 49.5 | 1,789 |
| Re-Established Transmission | $17.3 | 16% | 26.5 | 670 |
| Recurrent Importations | $12.7 | 12% | 17 | 483 |
| Others (in endemic regions) | $5.4 | 5% | 6 | 372 |
| Polio-Free | $3.2 | 3% | 7 | 0 |
| Regional Offices | $7.5 | 7% | 32 | 49 |
| HQ | $9.1 | 9% | 56 | 0 |
| GRAND TOTAL | $106.2 | | 194 | 3,363 |

*as of January 2011

# 5 | POLIO RESEARCH

In the *GPEI Strategic Plan 2010-2012*, the role of research continues to expand with emphasis on the acceleration of both eradication activities and preparations for post-certification.

The research agenda to accelerate eradication helps identify ways to reach more children and to enhance both humoral and mucosal immunity in targeted populations. The *Independent Evaluation of Major Barriers to Interrupting Poliovirus Transmission* endorsed the programmatic decision to intensify operational research.

Scientific and operational research are guided by the Polio Research Committee, composed of experts in epidemiology, public health communications, virology and immunology.

The use of Geographic Information Systems (GIS) to improve microplan development and implementation, as well as to identify areas for revisits and extensive monitoring, will be scaled up across northern Nigeria and other areas (e.g., Pakistan) in 2011.

15 Global Immunization Vision and Strategy 2006-2015. World Health Organization/UNICEF, 2005.

Going forward, research is expected to play a critical part in evaluating implementation of the new Strategic Plan 2010-2012, and further sensitize tactical approaches. Research will further evaluate the programmatic benefits of bivalent OPV in improving population immunity, assess programme performance, better track the evolving epidemiology of virus transmission, assess and improve the quality of SIAs and related monitoring efforts, and evaluate new tools and strategies to predict and stop outbreaks and limit new international spread of virus.

For post-certification, research is assessing post-eradication risks and facilitating the development of new products and approaches to mitigate those risks (i.e. affordable inactivated poliovirus vaccine – IPV – options, antivirals, new diagnostics).

To develop affordable IPV options, a number of strategies are being pursued, including a schedule reduction (the administration of fewer doses in a routine schedule); a reduction of the antigen dose (i.e., fractional-dose inactivated poliovirus vaccine); the use of adjuvants, resulting in a decreased need for antigen; optimization of production processes (i.e., increasing cell densities, creating new cell lines, or using alternative inactivation agents); and the development of an IPV produced from Sabin strains or further attenuated strains that would be appropriate for production in developing countries.

The goal of these strategies is to achieve a "break-even" IPV price of approximately US$ 0.50 per dose against OPV so that any country can adopt IPV in their routine immunization schedule after eradication.

# 6 | REVIEW OF THE GPEI BUDGETS AND ALLOCATION OF FUNDS

The GPEI budget development is paired with a regular, interactive process of reviewing and reprioritizing activities in light of evolving epidemiology and available resources.

The 2011 budget reflects cost-efficiencies achieved through re-prioritizing surveillance activities, delaying activities in lower-risk countries and areas, reduction in cost of vaccine production, and implementation of consistent budget processes across country and regional teams of WHO and UNICEF.

The GPEI reviews the epidemiology of poliovirus globally and the SIA priorities on an ongoing basis, guided by the advice of national and regional Technical Advisory Groups as well as the Strategic Advisory Group of Experts on Immunization (SAGE). The newly-formed Independent Monitoring Board (IMB) started in December 2010 to evaluate – on a quarterly basis – the progress towards each of the major milestones of the *GPEI Strategic Plan 2010-2012*, determine the impact of any 'mid-course corrections' that are deemed necessary, and advise on additional measures appropriate.

An in-depth weekly epidemiological review is complemented by weekly and bi-weekly teleconference check-ins between WHO and UNICEF headquarters and regional offices which provide opportunities to adjust allocations. The FRR is therefore updated regularly to adapt to the changing epidemiology and priorities.

After a budget review process at the regional office and headquarters levels, funds for country SIAs are released from WHO and UNICEF headquarters to regions and then countries. For staff and surveillance, funds are disbursed on a quarterly or semi-annual basis, depending on the GPEI cash flow. For most countries, funds for OPV are released by UNICEF six to eight weeks before SIAs.

# 7 | THE 2013-2015 PERIOD

Cost estimates for activities in the 2013-2015 period are based on the assumption that the primary milestones of the *GPEI Strategic Plan 2010-2012* will be achieved, high quality surveillance will need to be sustained for the purposes of certification of WPV eradication (and cVDPV detection/response) and areas at highest risk of cVDPV emergency and spread will require at least two SIAs per year.

In terms of activities during the 2013-2015 period, these assumptions translate into maintaining the polio technical assistance and surveillance, conducting two SIAs per year in highest risk countries/areas for cVDPVs and maintaining sufficient outbreak response funds to rapidly address cVDPVs.

The total estimated cost of 2013-2015 activities is estimated at US$ 1.99 billion (US$ 1.59 billion excluding activities in India, which is expected to continue to self-finance).

## 7.1. POST-CERTIFICATION OF ERADICATION

After interruption of wild poliovirus transmission and certification of that achievement, the budget of the GPEI will be driven primarily by the costs of maintaining AFP surveillance and laboratory capacity and outbreak response capacity for circulating vaccine-derived poliovirus. This capacity will be required until and during the cessation of routine OPV use globally and the subsequent verification of the elimination of vaccine-associated paralytic polio (VAPP) and vaccine-derived polioviruses (VDPV).

Consequently, annual financial resource requirements of the GPEI in the post-eradication period will be significantly lower than the (current) costs associated with the intensified polio eradication effort. The annual costs of these activities during the VAPP/VDPV Elimination Phase are estimated to be US$ 200-250 million. The major uncertainty pertaining to GPEI costs during this period is the extent to which low- and low/middle-income countries will use IPV, how they will use it (e.g. fractional doses, reduced dose schedules) and how IPV will be produced at that time.

The costs of the GPEI will stop once VAPP/VDPV elimination is verified. All long-term functions will by that point have been incorporated into existing mechanisms for managing the residual risks associated with eradicated and/or dangerous pathogens (e.g. smallpox) and routine immunization programmes.

**Table 3 | Summary of external resource requirements by major category of activity, 2013-2015**
(all figures in US$ millions)

| CORE COSTS | 2013 | 2014 | 2015 | 2013-2015 |
|---|---|---|---|---|
| Emergency Response (OPV and Operations) | $35 | $25 | $25 | $85 |
| Surveillance and Running Costs | $68.3 | $70.4 | $72.5 | $211.3 |
| Laboratory | $12 | $12.4 | $12.8 | $37.3 |
| Technical Assistance (WHO and UNICEF) | $143.7 | $148 | $152.5 | $444.4 |
| Social Mobilization Annual Costs | $6 | $5.6 | $5.4 | $17.1 |
| Certification and Containment | $5 | $5 | $5 | $15 |
| Product Development for OPV Cessation | $10 | $10 | $10 | $30 |
| Post-eradication OPV Stockpile | - | $24.6 | - | $24.6 |
| **SUPPLEMENTARY IMMUNIZATION ACTIVITIES** | | | | |
| Oral Polio Vaccine | $184 | $176.3 | $103.7 | $464.1 |
| NIDs/SNIDs Operations | $180.1 | $172.5 | $116.8 | $469.5 |
| Social Mobilization for SIAs | $37.1 | $32.7 | $33.1 | $103 |
| Subtotal | $681.7 | $682.8 | $512.1 | $1,876.6 |
| Programme Support Costs (estimated) | $36.2 | $35.8 | $31.7 | $103.8 |
| GRAND TOTAL | $717.9 | $718.6 | $543.9 | $1,980.5 |
| of which, India (government funded) budget: | $165.7 | $170.2 | $51.9 | $387.9 |
| GRAND TOTAL excluding India | $552.2 | $548.3 | $491.9 | $1,592.5 |

**Table 4 | 2013-2015 SIA Calendar** (all activities are expressed in percentages)

| | |
|---|---|
| Countries with poliovirus within the last 6 months | Countries with poliovirus between 6 and 12 months |
| Countries with no poliovirus for more than 12 months | **Categorization includes cVDPVs** |

| | 2013 | | | | | | | | | | | | 2014 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Region/Country** | J | F | M | A | M | J | J | A | S | O | N | D | J | F | M | A | M | J | J | A | S | O | N | D |
| **Endemic countries** | | | | | | | | | | | | | | | | | | | | | | | | |
| Afghanistan | | 100 | 100 | 30 | 30 | | | | | 30 | 30 | | | 100 | 100 | | | | | | | 30 | 30 | |
| India | | 100 | 100 | | | | | | | 40 | 40 | | | 100 | 100 | | | | | | | 40 | 40 | |
| Pakistan | | 100 | 100 | 30 | 30 | | | | | 30 | 30 | | | 100 | 100 | | | | | | | 30 | 30 | |
| Nigeria | | 100 | 100 | | | | | | | 60 | 60 | | | 100 | 100 | | | | | | | 60 | 60 | |
| **Countries with re-established transmission** | | | | | | | | | | | | | | | | | | | | | | | | |
| Angola | | | | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | |
| DR Congo | | | | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | |
| Chad | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Sudan | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| **Countries with recurrent importations** | | | | | | | | | | | | | | | | | | | | | | | | |
| West Africa | | | | | | | | | | | | | | | | | | | | | | | | |
| Mali | | 100 | 100 | | | | | | | | | | | | | | | | | | | | | |
| Liberia | | 100 | 100 | | | | | | | | | | | | | | | | | | | | | |
| Niger | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Sierra Leone | | 100 | 100 | | | | | | | | | | | | | | | | | | | | | |
| Guinea | | 100 | 100 | | | | | | | | | | | | | | | | | | | | | |
| Burkina Faso | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Benin | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Cote d'Ivoire | | 100 | 100 | | | | | | | | | | | | | | | | | | | | | |
| Horn of Africa | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethiopia | | 50 | 50 | | | | | | | | | | | 50 | 50 | | | | | | | | | |
| Somalia | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| **Other importation-affected countries** | | | | | | | | | | | | | | | | | | | | | | | | |
| Southeast Asia | | | | | | | | | | | | | | | | | | | | | | | | |
| Nepal | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Bangladesh | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |

| | 2015 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Region/Country** | J | F | M | A | M | J | J | A | S | O | N | D |
| **Endemic countries** | | | | | | | | | | | | |
| Afghanistan | | 100 | 100 | | | | | | | | | |
| India | | 40 | 40 | | | | | | | | | |
| Pakistan | | 100 | 100 | | | | | | | | | |
| Nigeria | | 100 | 100 | | | | | | | | | |
| **Countries with re-established transmission** | | | | | | | | | | | | |
| Angola | | | | | 100 | 100 | | | | | | |
| DR Congo | | | | | 100 | 100 | | | | | | |
| Chad | | 100 | 100 | | | | | | | | | |
| Sudan | | 100 | 100 | | | | | | | | | |
| **Countries with recurrent importations** | | | | | | | | | | | | |
| West Africa | | | | | | | | | | | | |
| Mali | | | | | | | | | | | | |
| Liberia | | | | | | | | | | | | |
| Niger | | 100 | 100 | | | | | | | | | |
| Sierra Leone | | | | | | | | | | | | |
| Guinea | | | | | | | | | | | | |
| Burkina Faso | | 100 | 100 | | | | | | | | | |
| Benin | | 100 | 100 | | | | | | | | | |
| Cote d'Ivoire | | | | | | | | | | | | |
| Horn of Africa | | | | | | | | | | | | |
| Ethiopia | | 50 | 50 | | | | | | | | | |
| Somalia | | 100 | 100 | | | | | | | | | |
| **Other importation-affected countries** | | | | | | | | | | | | |
| Southeast Asia | | | | | | | | | | | | |
| Nepal | | 100 | 100 | | | | | | | | | |
| Bangladesh | | | | | | | | | | | | |

# 8 | DONORS

Since the 1988 World Health Assembly (WHA) resolution to eradicate polio, funding commitments have totalled US$ 9 billion. In addition to contributions by national governments to their own polio eradication efforts, 45 public and private donors have each given more than US$ 1 million, with 19 of these having given US$ 25 million or more.

Donors to the GPEI include a wide range of donor governments, private foundations (e.g. Rotary International, BMGF, UN Foundation), multilateral organizations, development banks, NGOs and corporate partners. Several of these partners have contributed in excess of US$250 million to the global eradication effort, including the United States of America, Rotary International, India, the United Kingdom, the World Bank, BMGF, Germany, Japan and Canada.

International contributions to national polio eradication efforts have been complemented by domestic resources. Of note, India has largely self-financed for the past several years, and in September 2009 re-affirmed its commitment by setting aside US$ 657 million of its budget for polio eradication in the 2010-2012 period. Nigeria and Pakistan have also provided substantial domestic resources towards eradicating polio. Other contributions from polio-affected countries – including both financial and non-monetary expenditures, and in-kind contributions such as the time spent by volunteers, health workers and others in the planning and implementation of SIAs – are estimated to have a dollar value approximately equal to that of international financial contributions.[16]

**Table 5 | Donor profile for 1985-2012** (contribution in US$ millions)

| Contribution | Public Sector Partners | Development Banks | Private Sector Partners |
|---|---|---|---|
| > 1,000 | United State of America | | Rotary International, Bill & Melinda Gates Foundation |
| 500 - 1,000 | United Kingdom | World Bank | |
| 250 - 499 | Japan, Canada, Germany | | |
| 100 - 249 | European Commission, Netherlands, GAVI/IFFIm, WHO Regular Budget, UNICEF Regular Resources | | |
| 50 - 99 | Norway | | |
| 25 - 49 | Denmark, France, Italy, Sweden, Russian Federation | | United Nations Foundation |
| 5 - 24 | Australia, Ireland, Luxembourg, Spain | | Sanofi Pasteur, IFPMA, UNICEF National Committees, American Red Cross, Oil for Food Program |
| 1 - 4 | Austria, Belgium, Finland, Kuwait, Malaysia, New Zealand, Portugal, Saudi Arabia, Switzerland, United Arab Emirates | Inter-American Development Bank, African Development Bank | Advantage Trust (HK), Central Emergency Response Fund (CERF), De Beers, International Federation of Red Cross and Red Crescent Societies, Pew Charitable Trust, Wyeth, Shinnyo-en, OPEC |
| Updated January 2011 | | | |

16 Aylward R, et al, Politics and practicalities of polio eradication, *Global Public Goods for Health. Health Economic and Public Health Perspectives*, editors Smith R, Beaglehole R, Woodward D, Drager N. Oxford University Press, 2003.

# 9 | ANNEXES

## Annex A | Supplementary immunization activities required for polio eradication, 2011-2012

as of January 2011 (all activities are expressed in percentages)

Countries with poliovirus within the last 6 months | Countries with poliovirus between 6 and 12 months | Countries with no poliovirus for more than 12 months | New/Updated since Sept 2010 FRR publication

| | 2011 | | | | | | | | | | | | 2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Region/Country** | J | F | M | A | M | J | J | A | S | O | N | D | J | F | M | A | M | J | J | A | S | O | N | D |
| **Endemic countries** | | | | | | | | | | | | | | | | | | | | | | | | |
| Afghanistan | | 100 | 100 | 30 | 30 | | | 100 | **100** | 30 | 30 | | | 100 | 100 | 30 | 30 | | | **100** | **100** | 30 | 30 | |
| India | 100 | 100 | 50 | 20 | 50 | 20 | | | 50 | | 20 | | 100 | 100 | | | | | | | 50 | 50 | | |
| Pakistan | 50 | 100 | 50 | **50** | **50** | | | **100** | **100** | 50 | 50 | | | 100 | 100 | 30 | 30 | | | **100** | **100** | 30 | 30 | |
| Nigeria | 100 | 100 | | 60 | **60** | | | | | 60 | 60 | | | 100 | 100 | 60 | **60** | | | | | 60 | 60 | |
| **Countries with re-established transmission** | | | | | | | | | | | | | | | | | | | | | | | | |
| Angola | | | | **50** | 100 | 100 | 100 | | | **50** | **50** | | | | | 50 | 100 | 100 | 50 | | | | | |
| DR Congo | | | | **50** | 100 | 100 | 100 | | | **35** | **35** | | | | | 50 | 100 | 100 | 50 | | | | | |
| Chad | | 100 | 100 | | | | | | | 100 | 100 | | | 100 | 100 | | | | | | | 100 | 100 | |
| Sudan | | 100 | 100 | | | | | | | **50** | 100 | | | 100 | 100 | | | | | | | **50** | **50** | |
| **Countries with recurrent importations** | | | | | | | | | | | | | | | | | | | | | | | | |
| West Africa | | | | | | | | | | | | | | | | | | | | | | | | |
| Mali | | 100 | 100 | | | | | | 100 | **100** | | | | 100 | 100 | | | | | | 100 | | | |
| Liberia | | 100 | 100 | | | | | | 100 | | | | | 100 | 100 | | | | | | 100 | | | |
| Niger | | 100 | 100 | | | | | | 100 | 100 | | | | 100 | 100 | | | | | | 100 | 100 | | |
| Mauritania | | 100 | 100 | | | | | | 100 | | | | | 100 | 100 | | | | | | 100 | | | |
| Sierra Leone | | 100 | 100 | | | | | | 100 | | | | | 100 | 100 | | | | | | 100 | | | |
| Senegal | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Guinea | | 100 | 100 | | | | | | 100 | | | | | 100 | 100 | | | | | | 100 | | | |
| Burkina Faso | 100 | 100 | 100 | | | | | | 100 | | | | | 100 | 100 | | | | | | 100 | | | |
| Benin | | 100 | 100 | | | | | | 100 | 100 | | | | 100 | 100 | | | | | | 100 | 100 | | |
| Cote d'Ivoire | | 100 | 100 | | | | | | 100 | | | | | 100 | 100 | | | | | | 100 | | | |
| Gambia | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Guinea Bissau | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Ghana | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Togo | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Cape Verde | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Horn of Africa | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethiopia | | 10 | 100 | 100 | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Uganda | 37 | **100** | **100** | | | | | | | 35 | 35 | | | **100** | **100** | | | | | | | | | |
| Somalia | | 10 | 100 | | | | | | | 100 | | | | 100 | 100 | | | | | | 100 | | | |
| Kenya | 13 | **100** | **100** | | | | | | | 35 | 35 | | | **100** | **100** | | | | | | | | | |
| Djibouti | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Eritrea | | 100 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Yemen | | | | 100 | | | | | | 100 | | | | 100 | 100 | | | | | | | | | |
| Central Africa | | | | | | | | | | | | | | | | | | | | | | | | |
| Congo | | 100 | 100 | | | | | | | **100** | **100** | | | 100 | 100 | | | | | | | | | |
| Burundi | | | | | | | | | | **100** | **100** | | | | | | | | | | | | | |
| Rwanda | | | | | | | | | | **100** | **100** | | | | | | | | | | | | | |
| Cameroon | | **100** | **100** | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| Central African Republic | | 100 | 100 | | | | | | | 100 | 100 | | | 100 | 100 | | | | | | 100 | 100 | | |
| **Other importation-affected countries** | | | | | | | | | | | | | | | | | | | | | | | | |
| Southeast Asia | | | | | | | | | | | | | | | | | | | | | | | | |
| Nepal | 100 | 100 | | | | | | | | **50** | **50** | | | 100 | 100 | | | | | | | | | |
| Bangladesh | 100 | 100 | | | | | | | | | | | | 100 | 100 | | | | | | | | | |
| **Europe** | | | | | | | | | | | | | | | | | | | | | | | | |
| Tajikistan | | | | | | | | **100** | **100** | | | | | | | | | | | | | | | |
| Kazakhstan | | | | | | | | **100** | **100** | | | | | | | | | | | | | | | |
| Russian Federation* | | **35** | **35** | | | | | | | | | | | | | | | | | | | | | |
| Turkmenistan | | | | | | | | **100** | **100** | | | | | | | | | | | | | | | |
| Uzbekistan | | | | | | | | **100** | **100** | | | | | | | | | | | | | | | |
| Kyrgyzstan | | | | | | | | **100** | **100** | | | | | | | | | | | | | | | |

* Russian Federation is self-financing and not included in the FRR costing

## Annex B | Details of external funding requirements in polio-endemic and highest-risk countries, 2011-2012

(all figures in US$ millions)

| | 2011 | | | | | |
|---|---|---|---|---|---|---|
| Country | AFP Surveillance | Social Moblization | Technical Assistance | OPV | Op Costs | Total Costs 2011 |
| **Endemic Countries** | | | | | | |
| Afghanistan | $2.27 | $1.08 | $4.85 | $6.72 | $11.39 | $26.31 |
| India | $8.50 | $18.43 | $15.11 | $125.41 | $125.18 | $292.63 |
| Pakistan | $2.75 | $7.83 | $7.75 | $38.28 | $19.76 | $76.36 |
| Nigeria | $10.50 | $4.82 | $32.31 | $38.64 | $48.06 | $134.33 |
| **Countries with re-established transmission** | | | | | | |
| Chad | $0.95 | $1.81 | $3.35 | $1.41 | $4.09 | $11.60 |
| Sudan | $1.70 | $2.05 | $6.28 | $5.71 | $14.10 | $29.84 |
| Angola | $1.71 | $1.71 | $5.29 | $4.29 | $11.36 | $24.36 |
| Dem Rep of Congo | $2.38 | $1.06 | $6.40 | $6.50 | $24.50 | $40.83 |
| **Countries with recurrent importations** | | | | | | |
| West Africa | | | | | | |
| Niger | $0.62 | $0.40 | $1.32 | $2.83 | $6.22 | $11.37 |
| Benin | $0.18 | $0.40 | $0.82 | $1.80 | $2.90 | $6.09 |
| Burkina Faso | $0.27 | $0.57 | $0.26 | $2.26 | $4.79 | $8.15 |
| Côte d'Ivoire | $0.29 | $0.57 | $1.11 | $3.21 | $3.27 | $8.43 |
| Sierra Leone | $0.22 | $0.24 | $0.45 | $0.61 | $1.24 | $2.76 |
| Guinea | $0.18 | $0.21 | $0.30 | $1.25 | $1.47 | $3.41 |
| Liberia | $0.23 | $0.11 | $0.47 | $0.43 | $1.06 | $2.29 |
| Mali | $0.25 | $0.61 | $0.44 | $2.96 | $5.92 | $10.17 |
| Mauritania | $0.18 | $0.29 | $0.09 | $0.31 | $0.84 | $1.70 |
| Senegal | $0.31 | $0.26 | $0.72 | $0.71 | $1.49 | $3.50 |
| Guinea Bissau | $0.06 | $0.11 | $0.13 | $0.08 | $0.23 | $0.62 |
| Gambia | $0.05 | $0.22 | $0.05 | $0.13 | $0.12 | $0.57 |
| Cape Verde | $0.04 | $0.03 | $0.05 | $0.02 | $0.05 | $0.19 |
| Togo | $0.13 | $0.21 | $0.40 | $0.51 | $0.61 | $1.87 |
| Ghana | $0.36 | $0.58 | $0.10 | $1.61 | $2.30 | $4.95 |
| Horn of Africa | | | | | | |
| Ethiopia | $2.70 | $0.74 | $3.11 | $4.79 | $10.12 | $21.46 |
| Somalia | $0.60 | $0.42 | $2.00 | $0.96 | $2.17 | $6.15 |
| Kenya | $0.44 | - | $0.95 | $3.17 | $5.92 | $10.48 |
| Uganda | $0.39 | $0.92 | $0.58 | $2.86 | $4.85 | $9.61 |
| Eritrea | $0.13 | $0.07 | $0.11 | $0.30 | $0.26 | $0.87 |
| Yemen | $0.18 | - | $0.23 | $1.61 | $3.08 | $5.10 |
| Djibouti | $0.06 | - | $0.17 | $0.04 | $0.29 | $0.57 |
| Central Africa | | | | | | |
| Cameroon | $0.40 | $0.31 | $0.59 | $1.58 | $1.58 | $4.46 |
| Central African Republic | $0.47 | $0.20 | $0.61 | $0.45 | $1.32 | $3.04 |
| Congo | $0.13 | - | $0.60 | $0.56 | $1.37 | $2.66 |
| Burundi | $0.11 | - | $0.04 | $0.51 | $0.78 | $1.44 |
| Rwanda | $0.13 | $0.04 | $0.66 | $0.51 | $0.97 | $2.30 |
| **Other Importation-Affected Countries** | | | | | | |
| Southeast Asia | | | | | | |
| Bangladesh | $0.81 | - | $1.27 | $7.89 | $3.29 | $13.25 |
| Nepal | $0.65 | $0.21 | $1.35 | $2.39 | $2.06 | $6.65 |
| Europe | | | | | | |
| Tajikistan | $0.12 | - | - | $0.25 | $0.66 | $1.02 |
| Uzbekistan | $0.06 | - | - | $0.77 | $1.38 | $2.21 |
| Kazakhstan | $0.07 | - | - | $0.55 | $1.00 | $1.62 |
| Turkmenistan | $0.08 | - | - | $0.06 | $0.33 | $0.46 |
| Kyrgyzstan | $0.04 | - | - | $0.22 | $0.40 | $0.66 |

**Annex B** (continued)

| 2012 | | | | | | |
|---|---|---|---|---|---|---|
| Country | AFP Surveillance | Social Moblization | Technical Assistance | OPV | Op Costs | Total Costs 2012 |
| **Endemic Countries** | | | | | | |
| Afghanistan | $2.34 | $1.08 | $5.08 | $7.61 | $11.71 | $27.82 |
| India | $8.73 | $15.60 | $15.56 | $94.16 | $94.29 | $228.33 |
| Pakistan | $2.83 | $7.81 | $8.13 | $33.58 | $16.90 | $69.25 |
| Nigeria | $11.00 | $4.94 | $33.15 | $38.80 | $49.50 | $137.39 |
| **Countries with re-established transmission** | | | | | | |
| Chad | $0.98 | $1.78 | $3.41 | $1.54 | $4.24 | $11.95 |
| Sudan | $1.75 | $1.67 | $6.47 | $5.02 | $12.33 | $27.24 |
| Angola | $1.73 | $1.89 | $5.43 | $3.44 | $7.08 | $19.57 |
| Dem Rep of Congo | $2.40 | $1.06 | $6.62 | $7.56 | $17.34 | $34.98 |
| **Countries with recurrent importations** | | | | | | |
| West Africa | | | | | | |
| Niger | $0.63 | $0.40 | $1.35 | $2.95 | $6.41 | $11.74 |
| Benin | $0.18 | $0.42 | $0.60 | $1.45 | $2.99 | $5.64 |
| Burkina Faso | $0.28 | $0.57 | $0.27 | $2.37 | $4.95 | $8.43 |
| Côte d'Ivoire | $0.30 | $0.61 | $1.32 | $3.05 | $3.34 | $8.62 |
| Sierra Leone | $0.23 | $0.24 | $0.46 | $0.64 | $1.36 | $2.94 |
| Guinea | $0.18 | $0.21 | $0.35 | $1.10 | $1.52 | $3.36 |
| Liberia | $0.23 | $0.11 | $0.48 | $0.43 | $1.09 | $2.33 |
| Mali | $0.26 | $0.60 | $0.45 | $2.33 | $6.09 | $9.72 |
| Mauritania | $0.19 | $0.29 | $0.09 | $0.32 | $0.87 | $1.75 |
| Senegal | $0.32 | $0.26 | $0.72 | $0.74 | $1.55 | $3.59 |
| Guinea Bissau | $0.06 | $0.13 | $0.14 | $0.12 | $0.23 | $0.68 |
| Gambia | $0.06 | $0.20 | $0.05 | $0.09 | $0.14 | $0.53 |
| Cape Verde | $0.05 | $0.03 | $0.01 | $0.02 | $0.05 | $0.16 |
| Togo | $0.14 | $0.21 | $0.42 | $0.53 | $0.64 | $1.93 |
| Ghana | $0.37 | $0.60 | $0.11 | $1.69 | $2.37 | $5.13 |
| Horn of Africa | | | | | | |
| Ethiopia | $2.75 | $0.49 | $3.19 | $4.73 | $10.41 | $21.56 |
| Somalia | $0.62 | $0.42 | $2.10 | $1.00 | $2.23 | $6.36 |
| Kenya | $0.45 | - | $0.97 | $0.84 | $1.58 | $3.85 |
| Uganda | $0.41 | - | $0.42 | $0.76 | $1.53 | $3.12 |
| Eritrea | $0.14 | $0.06 | $0.12 | $0.31 | $0.27 | $0.88 |
| Yemen | $0.19 | - | $0.23 | $1.67 | $3.17 | $5.27 |
| Djibouti | $0.07 | - | $0.18 | $0.04 | $0.30 | $0.59 |
| Central Africa | | | | | | |
| Cameroon | $0.42 | $0.37 | $0.63 | $0.82 | $0.64 | $2.87 |
| Central African Republic | $0.48 | $0.20 | $0.63 | $0.47 | $1.36 | $3.14 |
| Congo | $0.14 | - | $0.62 | $0.29 | $0.71 | $1.75 |
| Burundi | $0.09 | - | $0.04 | - | - | $0.13 |
| Rwanda | $0.11 | $0.34 | $0.70 | - | - | $1.15 |
| **Other Importation-Affected Countries** | | | | | | |
| Southeast Asia | | | | | | |
| Bangladesh | $0.83 | - | $1.31 | $8.34 | $2.12 | $12.60 |
| Nepal | $0.65 | $0.22 | $1.41 | $1.65 | $2.19 | $6.12 |
| Europe | | | | | | |
| Tajikistan | $0.12 | - | - | - | - | $0.12 |
| Uzbekistan | $0.06 | - | - | - | - | $0.06 |
| Kazakhstan | $0.08 | - | - | - | - | $0.08 |
| Turkmenistan | $0.08 | - | - | - | - | $0.08 |
| Kyrgyzstan | $0.04 | - | - | - | - | $0.04 |

## Annex B (continued)

| | 2011-2012 | | | | | |
|---|---|---|---|---|---|---|
| Country | Total AFP Surveillance | Total Social Moblization | Total Tech. Assistance | Total OPV | Total Op Costs | Total Costs 2011 - 2012 |
| **Endemic Countries** | | | | | | |
| Afghanistan | $4.61 | $2.16 | $9.93 | $14.33 | $23.10 | $54.13 |
| India | $17.23 | $34.03 | $30.67 | $219.58 | $219.47 | $520.97 |
| Pakistan | $5.58 | $15.64 | $15.88 | $71.86 | $36.65 | $145.61 |
| Nigeria | $21.50 | $9.76 | $65.45 | $77.44 | $97.56 | $271.72 |
| **Countries with re-established transmission** | | | | | | |
| Chad | $1.93 | $3.58 | $6.76 | $2.95 | $8.33 | $23.55 |
| Sudan | $3.45 | $3.72 | $12.75 | $10.73 | $26.43 | $57.08 |
| Angola | $3.44 | $3.60 | $10.72 | $7.74 | $18.44 | $43.93 |
| Dem Rep of Congo | $4.78 | $2.11 | $13.02 | $14.06 | $41.85 | $75.81 |
| **Countries with recurrent importations** | | | | | | |
| West Africa | | | | | | |
| Niger | $1.25 | $0.79 | $2.67 | $5.78 | $12.63 | $23.11 |
| Benin | $0.36 | $0.81 | $1.42 | $3.25 | $5.89 | $11.73 |
| Burkina Faso | $0.54 | $1.14 | $0.53 | $4.63 | $9.75 | $16.59 |
| Côte d'Ivoire | $0.58 | $1.18 | $2.42 | $6.26 | $6.61 | $17.05 |
| Sierra Leone | $0.45 | $0.48 | $0.91 | $1.26 | $2.60 | $5.70 |
| Guinea | $0.36 | $0.42 | $0.65 | $2.35 | $2.98 | $6.77 |
| Liberia | $0.46 | $0.21 | $0.94 | $0.86 | $2.15 | $4.63 |
| Mali | $0.51 | $1.21 | $0.88 | $5.29 | $12.01 | $19.89 |
| Mauritania | $0.36 | $0.58 | $0.17 | $0.62 | $1.72 | $3.46 |
| Senegal | $0.64 | $0.52 | $1.44 | $1.46 | $3.04 | $7.09 |
| Guinea Bissau | $0.13 | $0.24 | $0.27 | $0.20 | $0.46 | $1.30 |
| Gambia | $0.11 | $0.41 | $0.10 | $0.21 | $0.26 | $1.10 |
| Cape Verde | $0.09 | $0.06 | $0.06 | $0.04 | $0.10 | $0.35 |
| Togo | $0.27 | $0.42 | $0.81 | $1.04 | $1.25 | $3.80 |
| Ghana | $0.73 | $1.18 | $0.21 | $3.30 | $4.66 | $10.09 |
| Horn of Africa | | | | | | |
| Ethiopia | $5.45 | $1.23 | $6.29 | $9.52 | $20.53 | $43.01 |
| Somalia | $1.22 | $0.84 | $4.10 | $1.96 | $4.40 | $12.51 |
| Kenya | $0.89 | - | $1.92 | $4.01 | $7.50 | $14.33 |
| Uganda | $0.80 | $0.92 | $1.01 | $3.62 | $6.38 | $12.73 |
| Eritrea | $0.27 | $0.12 | $0.23 | $0.61 | $0.52 | $1.75 |
| Yemen | $0.36 | - | $0.46 | $3.29 | $6.26 | $10.37 |
| Djibouti | $0.13 | - | $0.35 | $0.09 | $0.59 | $1.15 |
| Central Africa | | | | | | |
| Cameroon | $0.82 | $0.68 | $1.22 | $2.39 | $2.22 | $7.33 |
| Central African Republic | $0.94 | $0.40 | $1.23 | $0.92 | $2.68 | $6.18 |
| Congo | $0.27 | - | $1.22 | $0.85 | $2.07 | $4.41 |
| Burundi | $0.20 | - | $0.09 | $0.51 | $0.78 | $1.58 |
| Rwanda | $0.24 | $0.38 | $1.36 | $0.51 | $0.97 | $3.45 |
| **Other Importation-Affected Countries** | | | | | | |
| Southeast Asia | | | | | | |
| Bangladesh | $1.64 | - | $2.58 | $16.23 | $5.41 | $25.85 |
| Nepal | $1.31 | $0.42 | $2.75 | $4.04 | $4.25 | $12.77 |
| Europe | | | | | | |
| Tajikistan | $0.23 | - | - | $0.25 | $0.66 | $1.14 |
| Uzbekistan | $0.12 | - | - | $0.77 | $1.38 | $2.27 |
| Kazakhstan | $0.15 | - | - | $0.55 | $1.00 | $1.70 |
| Turkmenistan | $0.16 | - | - | $0.06 | $0.33 | $0.54 |
| Kyrgyzstan | $0.08 | - | - | $0.22 | $0.40 | $0.70 |

## Annex C | Surveillance and laboratory costs by country and region, 2011

Excluding programme support costs (all figures in US$ millions)

| WHO African Region | 2011 |
|---|---|
| Algeria | $0.03 |
| Angola | $1.71 |
| Benin | $0.18 |
| Botswana | $0.09 |
| Burkina Faso | $0.27 |
| Burundi | $0.09 |
| Cameroon | $0.40 |
| Cape Verde | $0.04 |
| Central African Republic | $0.47 |
| Chad | $0.95 |
| Comoros | $0.04 |
| Congo | $0.13 |
| Côte d'Ivoire | $0.29 |
| Democratic Republic of Congo | $2.38 |
| Equatorial Guinea | $0.04 |
| Eritrea | $0.13 |
| Ethiopia | $2.70 |
| Gabon | $0.09 |
| Gambia | $0.05 |
| Ghana | $0.36 |
| Guinea | $0.18 |
| Guinea-Bissau | $0.06 |
| Kenya | $0.44 |
| Lesotho | $0.04 |
| Liberia | $0.22 |
| Madagascar | $0.30 |
| Malawi | $0.18 |
| Mali | $0.25 |
| Mauritania | $0.18 |
| Mauritius | $0.02 |
| Mozambique | $0.27 |
| Namibia | $0.13 |
| Niger | $0.62 |
| Nigeria | $10.50 |
| Rwanda | $0.11 |
| Sao Tome and Principe | $0.01 |
| Senegal | $0.31 |
| Seychelles | $0.01 |
| Sierra Leone | $0.22 |
| South Africa | $0.27 |
| Swaziland | $0.07 |
| Togo | $0.13 |
| Uganda | $0.39 |
| United Republic of Tanzania | $0.40 |
| Zambia | $0.36 |
| Zimbabwe | $0.25 |
| Regional surveillance and laboratory | $5.09 |
| Subtotal | $31.48 |

| WHO Region of the Americas | 2011 |
|---|---|
| Regional surveillance and laboratory | $0.58 |

| WHO Eastern Mediterranean Region | 2011 |
|---|---|
| Afghanistan | $2.27 |
| Djibouti | $0.06 |
| Egypt | $0.35 |
| Iraq | $0.07 |
| Pakistan | $2.75 |
| Somalia | $0.60 |
| Sudan | $1.70 |
| Yemen | $0.18 |
| Regional surveillance and laboratory | $1.15 |
| Subtotal | $9.12 |

| WHO South-East Asia Region | 2011 |
|---|---|
| Bangladesh | $0.81 |
| India | $8.50 |
| Indonesia | $0.97 |
| Myanmar | $0.16 |
| Nepal | $0.64 |
| Regional surveillance and laboratory | $6.26 |
| Subtotal | $17.33 |

| WHO European Region | 2011 |
|---|---|
| Kazakhstan | $0.07 |
| Kyrgyzstan | $0.04 |
| Tajikistan | $0.12 |
| Turkmenistan | $0.08 |
| Uzbekistan | $0.06 |
| Regional surveillance and laboratory | $1.54 |
| Subtotal | $1.90 |

| WHO Western Pacific Region | 2011 |
|---|---|
| Regional surveillance and laboratory | $1.14 |

| WHO/HQ | 2011 |
|---|---|
| WHO/HQ | $14.51 |

| Global | 2011 |
|---|---|
| Total | $76.06 |

As of January 2011.

## Annex D | Technical assistance, country-level details 2011

Excluding programme support costs (all figures in US$ millions)

| WHO African Region | 2011 |
|---|---|
| Angola | $4.75 |
| Benin | $0.39 |
| Botswana | $0.12 |
| Burkina Faso | $0.20 |
| Burundi | $0.04 |
| Cameroon | $0.48 |
| Central African Republic | $0.61 |
| Chad | $2.18 |
| Congo | $0.45 |
| Côte d'Ivoire | $1.04 |
| Democratic Republic of Congo | $5.03 |
| Equatorial Guinea | $0.12 |
| Eritrea | $0.11 |
| Ethiopia | $2.55 |
| Gabon | $0.32 |
| Gambia | $0.05 |
| Ghana | $0.10 |
| Guinea | $0.05 |
| Guinea-Bissau | $0.12 |
| Kenya | $0.83 |
| Lesotho | $0.07 |
| Liberia | $0.44 |
| Madagascar | $0.12 |
| Malawi | $0.07 |
| Mali | $0.39 |
| Mauritania | $0.07 |
| Mozambique | $0.27 |
| Namibia | $0.13 |
| Niger | $1.27 |
| Nigeria | $27.07 |
| Rwanda | $0.31 |
| Senegal | $0.12 |
| Sierra Leone | $0.40 |
| South Africa | $0.31 |
| Swaziland | $0.09 |
| Togo | $0.19 |
| Uganda | $0.41 |
| United Republic of Tanzania | $0.33 |
| Zambia | $0.57 |
| Zimbabwe | $0.12 |
| IST (Central block)* | $1.20 |
| IST (South/East block)* | $1.26 |
| IST (West block)* | $1.18 |
| Regional Office | $1.36 |
| Subtotal | $57.28 |

| WHO Western Pacific Region | 2011 |
|---|---|
| Cambodia | $0.09 |
| China | $0.27 |
| Fiji | $0.09 |
| Lao PDR | $0.09 |
| Philippines | $0.09 |
| Papua New Guinea | $0.09 |
| Viet Nam | $0.09 |
| Regional Office | $0.63 |
| Subtotal | $1.43 |

| WHO Eastern Mediterranean Region | 2011 |
|---|---|
| Afghanistan | $4.25 |
| Djibouti | $0.01 |
| Egypt | $0.07 |
| Iran | $0.00 |
| Iraq | $0.01 |
| Pakistan | $6.26 |
| Somalia | $1.34 |
| Sudan | $5.35 |
| Yemen | $0.23 |
| Regional Office | $1.27 |
| Subtotal | $18.78 |

| WHO South-East Asia Region | 2011 |
|---|---|
| Bangladesh | $1.27 |
| India | $13.27 |
| Indonesia | $0.79 |
| Myanmar | $0.23 |
| Nepal | $0.75 |
| Regional Office | $1.49 |
| Subtotal | $17.79 |

| WHO European Region | 2011 |
|---|---|
| Regional Office/Countries | $1.78 |
| Subtotal | $1.78 |

| WHO | 2011 |
|---|---|
| WHO/HQ | $9.17 |
| Short Term Tech Assistance | $6.92 |
| Subtotal | $16.09 |

As of January 2011.

*IST= Inter-country Support Team.

## **Annex D** (continued)

| UNICEF | 2011 |
|---|---|
| UNICEF HQ/RO | $4.97 |
| Afghanistan | $0.60 |
| Angola | $0.54 |
| Benin | $0.43 |
| Burkina Faso | $0.07 |
| Cameroon | $0.11 |
| Cape Verde | $0.05 |
| Chad | $1.17 |
| Congo | $0.15 |
| Djibouti | $0.16 |
| Democratic Republic of Congo | $1.38 |
| Ethiopia | $0.56 |
| Guinea | $0.25 |
| Guinea-Bissau | $0.01 |
| India | $1.84 |
| Côte d'Ivoire | $0.07 |
| Kenya | $0.12 |
| Liberia | $0.03 |
| Mali | $0.05 |
| Mauritiana | $0.02 |
| Nepal | $0.59 |
| Niger | $0.04 |
| Nigeria | $5.24 |
| Pakistan | $1.49 |
| Rwanda | $0.35 |
| Senegal | $0.60 |
| Sierra Leone | $0.05 |
| Somalia | $0.66 |
| Sudan | $0.93 |
| Togo | $0.21 |
| Uganda | $0.17 |
| Short Term Tech Assistance | $0.72 |
| Subtotal | $23.61 |

| Global WHO-Unicef | 2011 |
|---|---|
| Total | $136.78 |

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