# Global Polio Eradication Initiative



FINANCIAL RESOURCE REQUIREMENTS 2009-2013

as of September 2009





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## 1. Budget and Financial Resource Requirements 2009-2013

Funding commitments to the GPEI since the World Health Assembly resolution to eradicate polio in 1988 total US\$8.12 billion. In addition to contributions by national governments to their own polio eradication efforts, 47 public and private sector funders have contributed more than US\$1 million to polio eradication, with 20 of these having contributed US\$25 million or more.

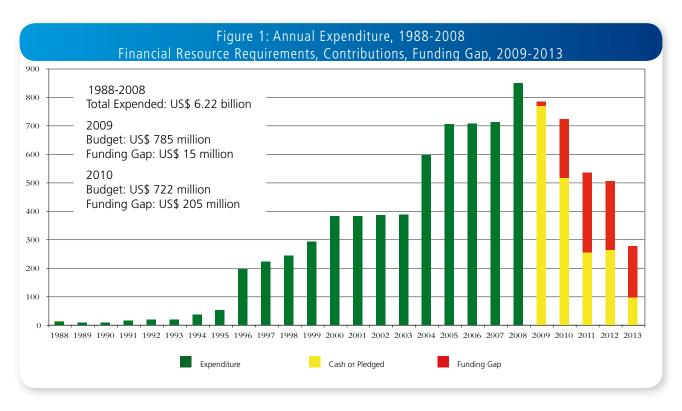
Table 1 highlights contributions/pledges by major donor to the GPEI for the period 1988-2013. Figure 1 presents the Global Polio Eradication Initiative (GPEI) funding chart, highlighting the US\$8.12 billion in financial commitments since 1988 and the 2009-2013 funding gaps.

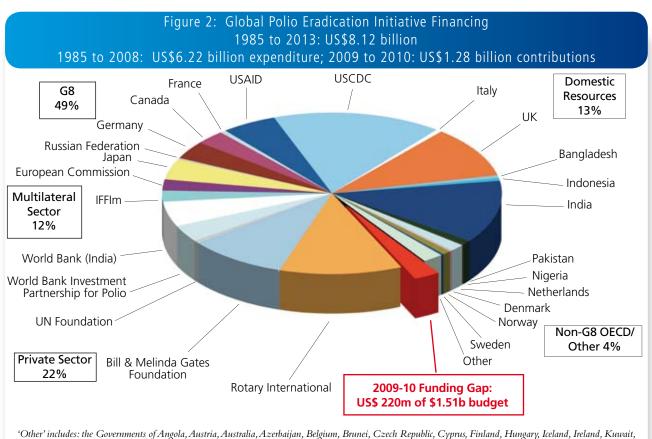
External contributions to national polio eradication efforts have been complemented by in-country resources, including both financial expenditures and non-monetary, in-kind contributions such as the time spent by volunteers, health workers and others in the planning and implementation of SIAs. Funds are expended by governments, the private sector and non-governmental organizations at national, state/province, district and local community levels to cover petrol, social mobilization, training and other costs, and are estimated to have had a dollar value approximately equal to that of international financial contributions. Of note, the Government of India set aside up to US\$226 million in its 2008-2009 budget to support its polio eradication effort. Additionally, the Government of India has set aside US\$657 million in its budget for its polio eradication activities for 2010-2012. In 2008, the Governments of Nigeria and Pakistan contributed US\$22 million and US\$20 million, respectively, to their polio eradication programmes.

#### Table 1: Donor profile for 1988-2013

Contribution (US\$ million)	Public Sector Partners	Development Banks	Private Sector Partners
> 1,000	United States of America		Rotary International
500 - 1,000	United Kingdom	World Bank	Bill and Melinda Gates Foundation
250 - 499	Japan, Canada		
100 - 249	European Commission, Germany, Netherlands, GAVI/IFFIm, WHO Regular Budget		
50 - 99	Norway, UNICEF Regular Resources		
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, Saudi Arabia, Switzerland, United Arab Emirates	Inter-American Development Bank, African Development Bank	Advantage Trust (HK), De Beers, International Federation of Red Cross and Red Crescent Societies, Pew Charitable Trust, Wyeth, Shinnyo-en, OPEC Fund

<sup>1</sup> Aylward R, et al, Politics and practicalities of polio eradication, Global Public Goods for Health. Health Economic and Public Health Perspectives, eds Smith R, Beaglehole R, Woodward D, Drager N, Oxford University Press, 2003.





Liechtenstein, Luxembourg, Malaysia, Mali, Malta, Monaco, Namibia, New Zealand, Oman, Portugal, Qatar, Republic of Korea, Saudi Arabia, Singapore, Spain, Switzerland, Turkey, the United Arab Emirates, Yemen; African Development Bank; AG Fund; American Red Cross; De Beers, Inter-American Development Bank, Central Emergency Response Fund (CERF), International Federation of Red Cross and Red Crossent Societies, Oil for Food Programme, OPEC Fund, Sanofi Pasteur; Saudi Arabian Red Crossent Society, Smith Kline Biologicals, UNICEF National Committees, UNICEF Regular and Other Resources, United Arab

Emirates Red Crescent Society, Shinnyo-en WHO Regular Budget and Wyeth .

GPEI plans and budgets are developed jointly by WHO and UNICEF in close collaboration with Ministries of Health. Polio immunization campaigns are the main cost driver of the eradication effort, accounting for fully 75% of the 2009 budget. In 2009, 124 campaigns are planned, to reach more than 375 million children in 29 countries multiple times with OPV. (See 2009–2013 Supplementary Immunization Schedule, Annex A.)

#### 1.1 Financial Resource Requirements, 2009-2013

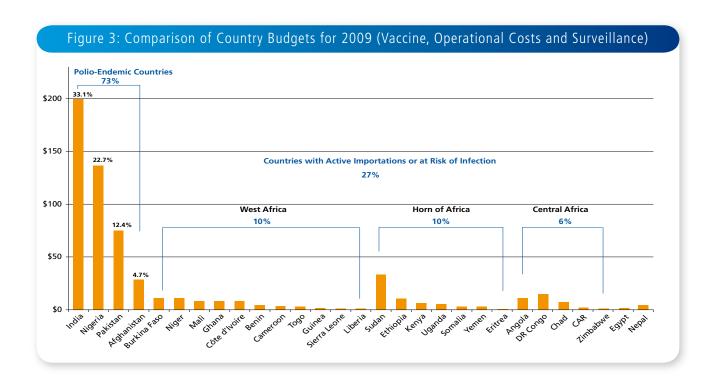
The activities described in the GPEI Programme of work for 2009 are costed at US\$785 million, part of a two-year, US\$1.51 billion budget, against which there is a US\$220 million funding gap. Table 2 summarizes the projected resource requirements by major category of activity for 2009-2013. These five-year budget estimates reflect an increase of 25% over May 2009 budget estimates. The main drivers of this increase are: the strategic decision to institutionalize supplementary immunization activities in the 'wild poliovirus importation belt' in sub-Saharan Africa (see 2009-2013 Supplementary Immunization Schedule, Annex A); the continuation of SIAs in polio-endemic countries through 2013; the introduction and use of bivalent OPV (bOPV); the implementation of tailored strategies in conflict-affected areas; and, enhanced international monitoring and increased technical assistance, in particular for outbreak settings.

Table 2: Summary of external resource requirements by major category of activity, 2009-2013 (all figures in US\$ millions).

Activity Category	2009	2010	2009-2010	2011-2013
Oral polio vaccine	\$257.09	\$236.47	\$493.56	\$385.26
NIDs/SNIDs operations*	\$303.97	\$257.66	\$561.63	\$358.01
Emergency response/ mOPV evaluation	\$25.00	\$45.00	\$70.00	\$85.00
Surveillance	\$64.63	\$61.76	\$126.39	\$144.72
Laboratory	\$8.08	\$8.21	\$16.29	\$19.79
Technical assistance	\$101.60	\$99.91	\$201.51	\$228.84
Certification and containment	\$5.00	\$5.00	\$10.00	\$30.00
Product development for OPV cessation	\$20.00	\$8.45	\$28.45	\$15.00
Vaccine for post-eradication era stockpile (finished product and bulk)	\$-	\$-	\$-	\$49.22
Subtotal	\$785.37	\$722.47	\$1 507.84	\$1 315.84
Contributions	\$769.88	\$516.63	\$1 286.51	\$612.04
Funding gap	\$15.49	\$205.84	\$221.33	\$703.80
Funding gap (rounded)	\$15.00	\$205.00	\$220.00	\$700.00

<sup>\*</sup> Operations costs include manpower and incentives, training and meetings, supplies and equipment, transportation, social mobilization and running costs.

The four polio-endemic countries - India, Nigeria, Pakistan and Afghanistan - account for fully 73% of all countries' budgets.



The programmatic underpinning of the SIA plans and budgets is national governments' targets to stop wild poliovirus transmission by end-2010. Given the challenges to stopping polio transmission, the GPEI has built in contingency plans and budgets should these targets not be met.

## 1.2 Budget implications of delays in interrupting wild poliovirus transmission

Contingency SIAs, which could be needed depending on how the transmission of polio evolves and if current national targets are not met, are highlighted in yellow in the 2009-2013 Supplementary Immunization Schedule, Annex A. Taken together, all of the contingency activities for 2009-2013, excluding India, would cost US\$246 million. India's contingency costs are not included on the assumption that the country would continue to self-finance any additional activities.

Table 3: Cost of 2009-2013 contingency activities presented in the supplementary immunization schedule (all figures in US\$ millions).

	2009	2010	2011	2012	2013	Sub-Total 09-10	Grand Total 09-13
Polio Endemic	\$0	\$5.35	\$21.91	\$22.46	\$49.39	\$5.35	\$99.11
Afghanistan	\$0	\$0	\$2.20	\$2.13	\$0	\$0	\$4.33
Nigeria	\$0	\$5.35	\$13.24	\$13.78	\$0	\$5.35	\$32.37
Pakistan	\$0	\$0	\$6.47	\$6.55	\$0	\$0	\$13.02
India					\$49.39		\$49.39
Sub-Saharan importation Belt - Central Africa	\$4.30	\$34.73	\$38.47	\$14.68	\$47.09	\$39.03	\$139.27
Nepal	\$0	\$0	\$1.44	\$3.07	\$3.15	\$0	\$7.66
Total Contingency Cost of 2009-2013	\$4.30	\$40.08	\$61.82	\$40.21	\$99.63	\$44.38	\$246.04

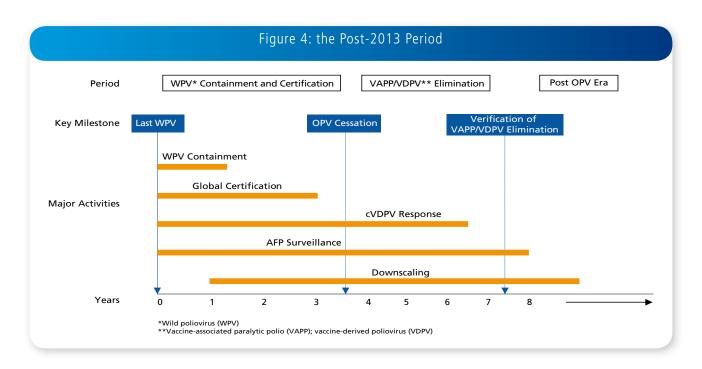
As the GPEI's multi-year Strategic Plan is finalized in the second half of 2009, the indicative plans and budgets presented in Annex A and B, and in table 2, will be refined to reflect new information expected in the second half of 2009, including the recommendations of the Evaluation and the outcomes of the research projects described earlier in the document.

#### 1.3 Planning for the Post-2013 Period

By 2013, wild poliovirus transmission will have been interrupted globally, containment of wild polioviruses will have been completed and the process towards global certification should be in its final stages.

Beyond 2013, the budget of the GPEI will relate primarily to the coordination of OPV cessation internationally (as soon as possible after certification of wild poliovirus eradication), and subsequent verification of VAPP and VDPV elimination. Annual financial resource requirements of the GPEI in the post-2013 period are estimated to be significantly lower than the (current) costs associated with the *intensified polio eradication effort* (eg the post-2013 costs will be approximately one-third of current annual financial resource requirements). The major cost drivers during this period will be maintaining laboratory and surveillance capacity globally to detect and respond to emerging cVDPVs, especially in the three years immediately following OPV cessation. The annual costs of these activities during the VAPP/VDPV Elimination Phase are estimated to be approximately US\$150 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 (eg 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 (eg smallpox) and routine immunization programmes.



### 5. Annexes

ANNEX A: Supplementary immunization activities required for polio eradication, 2009-2013 as of September 2009

Comparison		M A M J J A S	Q Z	Ŧ		o s		A M J	A S	D J F	A M		Q Z	M A M		
10   10   10   10   10   10   10   10	ity 1 (Endemic	countries)														
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Street   Color   Col		00 50 100 50 100 50	001 00	100 100 50	20	00 100 50 50	100 100	30	30 30 30 30					100 100		
A	ity 2 (Active in	nportation at September 2009)														
100   100	Africa															
The color   The		100 100	00	100 100		100 100			100 10		100			100 100		
Tracing   100		100 100	9	100 100		100 100			100 10		100	-		100 100		
100   100		100 100 100	0	100 100			100 100									
The color   The		100	100	100 100			100 100									
100   100	e	100	0 100	100 100			100 100	-								
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Tool	100	100 100 80	0 20	100 100			100 100									
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100   100		35 35 10 25		35 35												
Africa  Africa		100 100	100	100 100		100 100				100	100			100 100		
Active Asia Region  Active	25	100 25 30	02 0	100 100		100 100			100 10		100			100 100		
Africa  15 100 100 100 48 35 50 100 100  on 100 100 100 100 100 100 100 100 100 10		35 100 12	2	35 35												
on 15   100	l Africa															
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Ego 2   27 23 40 31 27 5 30   35 65 56   35 65 56   35 65 56 56   35 65 56 56   35 65 56 56   35 65 56 56 56   35 65 56 56 56 56 56 56 56 56 56 56 56 56		100 100	0 100	100 100		100 100	100 100									
Sec   27   23   40   31   27   25   33   35   35   35   35   35   35																
100   100	ongo 2	27 23 40 31 27			35 65 35 65			35 65 35 65		35	35			_		
V 3 (Areas at risk of infection)	East Asia Regio															
Africa         100         Activity           Additerranean Region         100         Activity           Mediterranean Region         100         Activity           Mediterranean Region         100         Activity           Mediterranean Region         100         Activity           Innumization Plus Days         Activity		100	25	100 100			50 50 50 5	0		100	100			100 100		
Africa         NIDs:         All Actvities are expressed in percentage         Activity           Addictransan Region         100         Activity           Mediterranean Region         100         Activity           Interval         Interval         Activity           Interval	ity 3 (Areas at	risk of infection)														
we         100         All Actvities are expressed in percentage         Activity           'Africa         NIDs: National Immunization Days         SNIDs: Subnational Immunization Days           Mediterranean Region         IPDs: Immunization Plus Days	l Africa															
Africa   100   1	bwe	100						All Act	tvities are express	sed in percenta			/Apply Cities			
100   SNIDs: Subnational Immunization Days   IPDs: Immunization Plus Plus Plus Plus Plus Plus Plus Plus	of Africa							NIDs:	National Immuniz	zation Days			Carl Cilvin	77.11		
Mediterranean Region  100  IPDs: Immunization Plus Days		100						SNIDs	s: Subnational Imm	nunization Days	,-	OFV a	nded to measie	s or reliow rever re	oana	
n Mediterranean Region		100						IPDs: .	Immunization Plus	s Days		Contin	gency Plan***			
8	n Mediterranean	ı Region										Child E	ealth day			
	Egypt 18	100													-	

## ANNEX B: Details of Country-Level Funding Requirements for 2009-2010 (all figures in US\$ millions)

		20	009			20	)10			2009 1	to 2010	
Country	NIDs/ SNIDs: OPV	NIDs/ SNIDs: Op Costs	AFP Surveillance	Total Costs 2009	NIDs/ SNIDs: OPV	NIDs/ SNIDs: Op Costs	AFP Surveillance	Total Costs 2010	NIDs/ SNIDs: OPV	NIDs/ SNIDs: Op Costs	AFP Surveillance	Total Costs 2009 to 2010
Priority 1 P	olio-Ende	mic										
Afghanistan	\$10.89	\$16.56	\$2.54	\$29.99	\$7.79	\$13.55	\$2.54	\$23.88	\$18.69	\$30.12	\$5.08	\$53.88
India	\$106.79	\$81.51	\$7.88	\$196.17	\$133.19	\$92.46	\$8.19	\$233.84	\$239.98	\$173.97	\$16.07	\$430.01
Nigeria	\$50.92	\$79.92	\$9.66	\$140.50	\$32.11	\$63.94	\$9.66	\$105.71	\$83.03	\$143.86	\$19.32	\$246.21
Pakistan	\$41.24	\$26.74	\$2.45	\$70.43	\$34.92	\$27.22	\$2.71	\$64.85	\$76.16	\$53.96	\$5.16	\$135.28
Priority 2 (	Active Im	portation	)									
West Africa												
Benin	\$1.96	\$2.85	\$0.20	\$5.01	\$0.92	\$1.71	\$0.20	\$2.83	\$2.88	\$4.56	\$0.40	\$7.84
Burkina Faso	\$3.65	\$8.57	\$0.34	\$12.56	\$1.53	\$3.84	\$0.34	\$5.71	\$5.18	\$12.40	\$0.68	\$18.27
Côte d'Ivoire	\$5.15	\$6.09	\$0.32	\$11.56	\$2.01	\$1.87	\$0.32	\$4.20	\$7.15	\$7.96	\$0.64	\$15.75
Ghana*	\$2.74	\$4.63	\$0.40	\$7.77	\$1.66	\$3.29	\$0.40	\$5.35	\$4.40	\$7.91	\$0.80	\$13.12
Guinea	\$2.02	\$3.36	\$0.15	\$5.53	\$0.90	\$1.97	\$0.15	\$3.02	\$2.92	\$5.34	\$0.30	\$8.55
Liberia	\$0.47	\$1.29	\$0.30	\$2.06	\$0.23	\$0.68	\$0.30	\$1.22	\$0.71	\$1.97	\$0.60	\$3.28
Mali	\$3.23	\$8.36	\$0.24	\$11.83	\$1.50	\$3.77	\$0.24	\$5.51	\$4.73	\$12.13	\$0.48	\$17.35
Niger	\$3.08	\$8.15	\$0.66	\$11.89	\$2.56	\$5.37	\$0.66	\$8.59	\$5.64	\$13.52	\$1.32	\$20.48
Sierra Leone	\$0.88	\$1.48	\$0.30	\$2.67	\$0.32	\$0.95	\$0.30	\$1.57	\$1.21	\$2.43	\$0.60	\$4.24
Togo	\$1.13	\$1.23	\$0.15	\$2.50	\$0.52	\$0.58	\$0.15	\$1.25	\$1.65	\$1.81	\$0.30	\$3.75
Horn of Afric	ca											
Chad	\$2.16	\$6.56	\$0.70	\$9.43	\$1.83	\$6.04	\$0.70	\$8.57	\$3.99	\$12.60	\$1.40	\$17.99
Kenya	\$1.57	\$4.53	\$0.49	\$6.59	-	-	\$0.49	\$0.49	\$1.57	\$4.53	\$0.98	\$7.08
Uganda	\$2.06	\$4.11	\$0.44	\$6.61	-	-	\$0.44	\$0.44	\$2.06	\$4.11	\$0.88	\$7.05
Ethiopia	\$1.67	\$5.41	\$3.73	\$10.81	\$0.90	\$2.21	\$3.73	\$6.84	\$2.57	\$7.61	\$7.46	\$17.64
Somalia	\$0.67	\$1.40	\$0.76	\$2.82	\$0.65	\$1.76	\$0.76	\$3.17	\$1.32	\$3.16	\$1.52	\$5.99
Sudan	\$8.97	\$20.96	\$2.39	\$32.32	\$6.50	\$13.64	\$2.04	\$22.18	\$15.47	\$34.60	\$4.43	\$54.50
Central Africa	a											
Angola	\$3.72	\$5.09	\$1.80	\$10.60	\$2.69	\$6.18	\$1.80	\$10.67	\$6.41	\$11.26	\$3.60	\$21.27
Cameroon	\$2.69	\$1.39	\$0.44	\$4.52	_	_	\$0.44	\$0.44	\$2.69	\$1.39	\$0.88	\$4.96
Central African Republic	\$0.56	\$1.04	\$0.52	\$2.12	\$0.23	\$0.73	\$0.52	\$1.48	\$0.79	\$1.77	\$1.04	\$3.60
DR Congo	\$3.17	\$7.36	\$2.50	\$13.04	\$1.67	\$4.10	\$2.50	\$8.27	\$4.84	\$11.46	\$5.00	\$21.31
South-East As	sia Region											
Nepal	\$2.01	\$1.95	\$0.61	\$4.58	\$1.62	\$1.26	\$0.61	\$3.49	\$3.63	\$3.22	\$1.22	\$8.07
Priority 3 (A	Areas at ri	sk of Infec	ction)									
Horn of Afric	ca											
Eritrea	\$0.31	\$0.09	\$0.22	\$0.62	-	-	\$0.22	\$0.22	\$0.31	\$0.09	\$0.44	\$0.84
Yemen	\$0.92	\$1.80	\$0.18	\$2.90	-	-	\$0.18	\$0.18	\$0.92	\$1.80	\$0.36	\$3.08
Central Africa	a											
Zimbabwe	\$0.40	\$0.16	\$0.25	\$0.80	-	-	\$0.25	\$0.25	\$0.40	\$0.16	\$0.50	\$1.05
Eastern Medi	terranean R	Region										
Egypt	\$0.55	\$0.45	\$0.37	\$1.37	-	-	\$0.37	\$0.37	\$0.55	\$0.45	\$0.74	\$1.74
*Ghana's most recent ca			1		1	1			1	1	1	

<sup>\*</sup>Ghana's most recent case: November 2008

