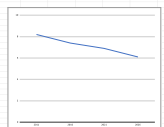


Value																	
Costs (\$m)																	
Fixed costs of program (first 2 years) for a country/region date	\$1.5	Assume fixed costs are around 40% of budget, averaging across Bihar and UP															
Variable costs of program per child reached (first 2 years)	\$0.00025																
Ongoing annual funding needed after initial 2 years, per child reached	\$0.00003	Assume equal to half of the annual cost in the initial two years of the program, and that these costs are all variable															
Additional funding required in Bihar and UP after 2 year pilot (\$m)		\$8.8															
		<i>Implementer suggestion (to cover) - assumes that we will partially implement across the district w full scale operation - implementer has adjusted using (1) report figures</i>															
		<i>Implementer suggestion (to cover) - assumes that we will partially implement across the district w full scale operation - implementer has adjusted using (1) report figures</i>															
Additional implementation locations	Number of years of additional funding required for full transition to government	% of US intervention population reached by program per year	% of intervention population under 5	Total population (m)	Total intervention population (m)	% of intervention population targeted	Number of children reached per region per year	How many regions	Total number of children per year	Health costs indexed to India	Cost (\$m)	Per ROTEC	Annual cost (\$m)				
	4	0.38%	7.2%	1,400	52.8	100%	9,274	16	146,615.0	1.00	\$13.66	9	\$8.4				
	10	0.36%	8.5%	171	68.1	100%	947	22	20,839.0	1.14	\$48.05	9	\$4.8				
	10	0.57%	13.2%	29	13.1	100%	3,208	3	9,893.0	2.30	\$13.09	11	\$1.3				
	10	0.79%	17.7%	304	83.2	65%	14,819	5	35,099.0	1.84	\$29.80	10	\$2.6				
	10	0.40%	14.7%	123	58.9	100%	5,862	6	35,093.0	1.21	\$15.92	1	\$1.6				
	4	1.13%	8.2%	375	116.4	100%	9,739	11	105,128.0	1.36	\$21.45	12	\$8.1				
	10	0.03%	13.1%	54	14.5	100%	5,258	2	10,515.0	1.67	\$7.29	13	\$0.7				
	10	1.42%	15.4%	28	21.4	100%	4,795	7	21,565.0	1.75	\$21.49	8	\$2.5				
	10	1.37%	6.5%	54	7.7	100%	6,956	1	6,956.0	0.90	\$2.08	14	\$0.2				
	10	0.99%	14.6%	218	95.0	100%	9,500	14	112,999.0	1.95	\$13.17	15	\$6.3				
	10	1.17%	12.3%	225	37.6	100%	121,480	2	242,960.0	1.37	\$60.02	10	\$4.0				
	4	1.40%	9.9%	114	63.2	100%	12,321	7	87,649.0	1.91	\$40.90	10	\$7.7				
	4	1.87%	9.5%	69	39.0	100%	9,667	7	69,025.0	2.90	\$41.28	4	\$18.8				
	10	0.92%	16.0%	69	11.0	100%	4,821	10	48,211.0	1.26	\$26.18	7	\$2.6				
	10	1.21%	18.7%	50	29.9	100%	27,296	2	54,591.0	1.09	\$10.17	16	\$1.0				
	10	0.37%	6.9%	99	38.80	100%	3,539	2	7,078.0	1.18	\$8.92	10	\$0.5				
	10	1.54%	13.0%	21	6.25	100%	6,214	2	12,428.0	1.32	\$6.79	14	\$0.7				
Total RFAF (one-off) at all levels of cost effectiveness (\$m)		\$428.000															
Total RFAF (at 112%) (\$m)		\$119.000															
Annual RFAF over 10 years (\$m)		\$11.900															
Total RFAF (at 110%) (\$m)		\$300.000															
Annual RFAF over 10 years (\$m)		\$30.000															
Total RFAF (at 104%) (\$m)		\$133.000															
Annual RFAF over 10 years (\$m)		\$13.300															
Bihar & UP as % of RFAF at 104%		4%															
Bihar & UP as % of RFAF at 84%		3%															

Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*									
Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*		Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*		Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*		Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*		Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	
Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*
Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*	Agri-projektion vom 10/01/2019 bis 09/30/2025 - 2019*



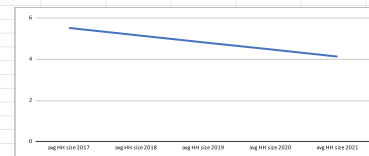
country	calculation based on WHO CSV figures % eligible US HHC receiving TPT	Calculation			Relative Cost-effectiveness Estimation				
		Adjusted for clinic dx	Gap to target		% of intervention pop US (index to India)	Gap w/coverage target (index to India)	Relative impact of \$1 investment (1/cost index)	India CE multiplier	CE Estimate
Bangladesh	27.0%	29.2%	49.8%		1.18	1.25	0.74	110%	9.33
Cameroon	6.5%	5.2%	64.8%		1.83	1.63	0.43	129%	11.00
Democratic Republic of the Congo	49.0%	35.1%	34.9%		2.44	0.88	0.54	117%	9.92
Ethiopia	100.0%	66.4%	3.6%		2.04	0.09	0.83	15%	1.21
India	47.0%	30.2%	39.8%		1.00	1.00	1.00	100%	8.50 [1]
Indonesia	7.1%	3.9%	66.1%		1.13	1.66	0.72	136%	11.53
Kenya	27.0%	15.9%	54.1%		1.81	1.36	0.60	148%	12.56
Mozambique	91.0%	39.1%	30.9%		2.13	0.78	0.57	94%	8.02
Myanmar	11.0%	4.9%	65.1%		0.90	1.64	1.11	164%	13.94
Nigeria	22.0%	17.8%	52.2%		2.02	1.31	0.69	182%	15.46
Pakistan	6.0%	3.1%	66.9%		1.71	1.68	0.78	223%	18.96
Philippines	9.3%	4.4%	65.6%		1.17	1.65	0.52	118%	10.02
South Africa	45.0%	31.3%	28.7%		1.32	0.97	0.35	44%	3.78
Uganda	83.0%	51.9%	18.1%		2.21	0.46	0.79	80%	6.76
United Republic of Tanzania	86.0%	34.2%	35.8%		2.31	0.90	0.92	191%	16.22
Viet Nam	7.3%	5.8%	64.2%		0.96	1.62	0.78	121%	10.31
Zambia	22.0%	15.7%	54.2%		1.79	1.37	0.66	161%	13.69
Source: WHO Global TB data 2022									
* NOTE: Performance for Ethiopia, Mozambique, Uganda & Tanzania are potentially not consistent with observed TPT performance gap									
Ethiopia US TPT coverage was 31% in 2020									
Mozambique's US TPT coverage was ~40% in 2022 as per https://hub.tbiah.org/dashboards/countries/mozambique									

country	year	population	new_ep	new_labconf	new_clindx	ret_rel_labconf	ret_rel_clindx	ret_rel_ep	all new	% EP TB	PTB notify per 100k	All notify per 100k	# lab confirmed P-TB
Bangladesh	2022	171,186,372	62,692	139,138	43,980	7,573	5,874	2,700	261,957	25.0%	115	153	74.6%
Cameroon	2022	27,914,536	2,987	16,064	4,437	1,234			24,722	12.1%	78	89	79.6%
Democratic Rep	2022	99,010,212	43,948	141,230	55,274	3,171	1,814	682	246,119	18.1%	204	249	71.7%
Ethiopia	2022	123,379,924	33,308	49,893	27,018	3,419			113,638	29.3%	65	92	66.4%
India	2022	1,417,173,173	554,114	998,617	596,855	91,911	8,038	6,106	2,255,641	24.8%	120	159	64.3%
Indonesia	2022	275,501,339	52,796	344,212	294,429	11,669	4,910	642	708,658	7.5%	238	257	54.3%
Kenya	2022	54,027,487	10,379	42,828	30,168	3,077	1,974	264	88,690	12.0%	144	164	58.8%
Mozambique	2022	32,969,518	3,471	44,268	58,230	1,428	2,504	183	110,084	3.3%	323	334	42.9%
Myanmar	2022	54,179,306	9,267	43,023	53,740	5,686	6,121	474	118,311	8.2%	200	218	44.9%
Nigeria	2022	218,541,212	3,471	222,279	51,621	3,604	1,153	56	282,184	1.2%	128	129	81.1%
Pakistan	2022	235,824,862	74,736	168,959	168,420	8,860	2,823	768	424,566	17.8%	148	180	50.9%
Philippines	2022	115,559,009	7,851	184,602	187,906	19,227	35,762	542	435,890	1.9%	370	377	47.7%
South Africa	2022	59,893,885	24,146	119,637	53,835	11,618	3,765	1,294	214,295	11.9%	315	358	69.5%
Uganda	2022	47,249,585	3,281	54,302	32,647	2,621	1,494	112	94,457	3.6%	193	200	62.5%
United Republic	2022	65,497,748	16,879	32,135	49,326	876	694	190	100,100	17.1%	127	153	39.8%
Viet Nam	2022	98,186,856	17,001	61,980	17,218	5,304	705	271	102,479	16.9%	87	104	79.0%
Zambia	2022	20,017,675	2,876	22,803	22,271	2,222	3,720	235	54,127	5.7%	255	270	49.1%

Region, subregion, country or area *	Year	Total	0-4	% U5
Bangladesh	2024	174 701	14 649	8.4%
Cameroon	2024	29 394	4 510	15.3%
Democratic Republic of the Congo	2024	105 625	19 199	18.2%
Ethiopia	2024	129 720	18 796	14.5%
India	2024	1 441 720	112 326	7.8%
Indonesia	2024	279 798	21 960	7.8%
Kenya	2024	56 203	7 125	12.7%
Mozambique	2024	34 858	5 567	16.0%
Myanmar	2024	54 965	4 416	8.0%
Nigeria	2024	229 152	36 445	15.9%
Pakistan	2024	245 210	30 237	12.3%
Philippines	2024	119 106	12 143	10.2%
South Africa	2024	61 020	5 687	9.3%
Uganda	2024	49 924	8 153	16.3%
United Republic of Tanzania	2024	69 419	11 187	16.1%
Viet Nam	2024	99 498	7 137	7.2%
Zambia	2024	21 135	3 234	15.3%
Source: 2022 World Population Prospects - Medium variant				

Country	avg HH size 2017	avg HH size 2018	avg HH size 2019	avg HH size 2020	avg HH size 2021	avg HH size 2024
Afghanistan	10.6	11				
Albania	4.09	4.02	3.95	3.88		
Algeria	5.1	5.02	4.94	4.86	4.78	
Angola	6.42	6.44	6.45			
Armenia	4.54	4.54	4.54			
Bangladesh	4.8	4.53	4.26	3.99	3.72	2.91
Bandarban						
Brahmanharia						
Comilla						
Dinajpur						
Gazipur						
Habiganj						
Khagrachari						
Kurigram						
Lalmonirhat						
Moulvibazar						
Mymensingh						
Narsingdi						
Netrokona						
Nilphamari						
Panchagarh						
Rangpur						
Sherpur						
Sunamganj						
Sylhet						
Tangail						
Thakurgaon						
Belarus	2.37	2.36	2.34	2.32	2.31	
Benin	7.44	7.56	7.68	7.79	7.91	
Burundi	5.96	5.96	5.96	5.96		
Cambodia	5.45					
Cameroon	7.68	7.7	7.72	7.75	7.77	7.78
Central African Republic	5.41	5.5	5.59	5.68	5.77	
Chad	6.93	6.45	5.97	5.49	5.02	
China	4.4	4.42				
Colombia	4.39	4.31				
Costa Rica	3.27	3.21	3.15	3.08	3.02	
Cuba	2.8	2.75	2.71	2.67	2.62	
Dominican Republic	3.58	3.34	3.09	2.84	2.6	
DR Congo	5.52	5.17	4.82	4.48	4.13	3.02
Egypt	4.68					
El Salvador	5.27					
Eswatini	3.88					
Ethiopia	5.81	5.79	5.76			5.46
Fiji	4.75	4.62	4.48	4.35	4.22	
Gambia	9.16	8	8.14	8.28	8.42	
Georgia	3.44	3.42	3.4	3.39	3.37	
Ghana	4.7	4.54	4.38	4.22		
Guatemala	7.68	8.49				
Guinea	8.2	8.14	8.08	8.02	7.97	
Guyana	3.62	3.56	3.5	3.44	3.38	
Haiti	5.62	5.57	5.52	5.47		
Honduras	4.33	4.1	3.87	3.64	3.41	
India	5.36	4.9	4.45	4	3.54	
Indonesia	4.75	4.71	4.67	4.64		
Iraq	6.37	6.35	6.33	6.32	6.3	
Ivory Coast	2.99	3.4				
Jordan	5.74	5.63	5.51	5.4		
Kazakhstan	3.44	3.43				
Kenya	5.33					
Kiribati	5.9	5.9	5.9	5.9	5.9	
Kyrgyzstan	4.11	4.05	3.99	3.93	3.86	
Laos	4.7	4.61	4.51	4.42		
Lesotho	4.2	3.73	3.26	2.8	2.33	
Liberia	5.56	5.25	4.95	4.64	4.33	
Madagascar	4.61	4.5	4.39	4.28	4.18	
Malawi	5.24	4.92	4.6	4.28	3.96	
Maldives	7.27	7.14	7.01	6.87		
Mali	7.65	7.73	7.81	7.89	7.96	
Mauritania	5.98	6.08	6.19	6.29	6.39	
Mexico	2.8	1.85	0.9			
Mongolia	3.62	3.63	3.64	3.65	3.65	
Morocco	7.85					
Mozambique	(different source)					
Myanmar	5.34	5.35	5.37			4.4
Nepal	5.17	4.71	4.25	3.79	3.33	
Nigeria	6.79	6.81	6.83	6.84	6.86	
North Macedonia	3.51	3.48	3.45	3.42	3.4	
Pakistan	8.53	8.45	8.37	8.29	8.21	
Palestine	5.25	5.16	5.06	4.96	4.87	
Papua New Guinea	6.45	6.45	6.45	6.45		
Philippines	5.37	5.23	5.1	4.96		
Republic of the Congo	4.22	4.22				
Rwanda	4.92	4.73	4.53	4.33	4.13	
Samoa	6.6	6.6	6.6	6.6	6.6	
Sao Tome and Principe	3.98	4.02	4.06	4.1	4.14	
Senegal	13.5	13.3	12.5	11.6	10.8	
Serbia	2.95	2.9	2.85	2.8	2.75	
Sierra Leone	4.87	5.91	6.94	7.98	9.01	
South Africa	5.12	5.18	5.25			
Sudan	6.02					
Suriname	3.86	3.86	3.86	3.87	3.87	
Tajikistan	7.54	7.47	7.4	7.32		
Tanzania	6.86	6.86				
Thailand	3.21	3.03	2.84	2.66	2.47	
Togo	4.35	3.53	2.7	1.88		
Tonga	5.3	5.3	5.3	5.3	5.3	
Tunisia	3.94	3.89	3.85	3.8	3.76	
Turkmenistan	5.16	5.19	5.22	5.25	5.28	
Turks and Caicos Islands	2.37	2.37	2.37	2.37	2.37	
Tuvalu	6.05	6.05	6.05	6.05	6.05	
Uganda	6.19	6.12	6.06			
Vietnam	3.68	3.62	3.56	3.5	3.44	
Zambia	6.52	6.49	6.47	6.44	6.42	
Zimbabwe	4.78	4.4	4.02	3.64	3.27	

Source: <https://worldpopulationreview.com/country-rankings/family-size-by-country>



4.4 <https://www.arcgis.com/home/item.html?id=1a85d81f5044c1b8cf0abf5e69cf02f#?text=Description,is%204.4%20people%20per%20household>.

[1] Includes cost of procuring 3HP for all targeted districts

See this cell of cost-effectiveness analysis: <https://docs.google.com/spreadsheets/d/1rxsXvePnzCqNUUy9nEQx9af8luq6XKBbDgJvwXnCB3k/edit?gid=2037617589#gid=2037617589&range=B41>

[2] The room for more funding model assumes that the program will be 8.5 times as cost-effective as cash transfers in the Indian states where it could be implemented.

This is based on the estimated cost-effectiveness of the program in Bihar and Uttar Pradesh, which is around 10 times as cost-effective as cash, assuming that it's roughly equally likely that the program is successfully transitioned to government (modeled at 12x cash) or not transitioned to government at all (modeled at 8x cash).

$12x * 50\% + 8x * 50\% = 10x$ cash for Bihar and Uttar Pradesh.

See cost-effectiveness analysis, "Simple CEA" and "Additional Benefits" tabs: <https://docs.google.com/spreadsheets/d/1rxsXvePnzCqNUUy9nEQx9af8luq6XKBbDgJvwXnCB3k/edit?gid=381684057#gid=381684057>

In addition, we assume that the program would be somewhat less cost-effective in other Indian states where it could be implemented, leading to an overall cost-effectiveness estimate of roughly 8.5x cash.