

Midterm Evaluation 2012

Program Oct'07 - Sep'12

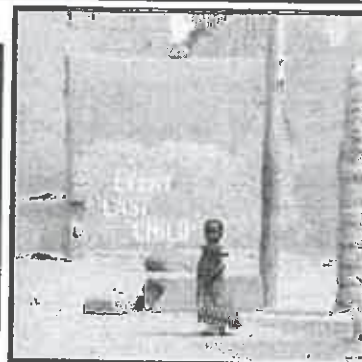


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CORE GROUP POLIO PROJECT IN ANGOLA, ETHIOPIA, and UTTAR PRADESH, INDIA: MID-TERM EVALUATION



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Executive Summary

The Core Group Polio Project (CGPP) is now completing its 13th year of collaboration with the Global Polio Eradication Initiative (GPEI). This mid-term evaluation (MTE) reviews the work of the CGPP in Angola, Ethiopia and Uttar Pradesh, India, in geographic areas having a total population of 82 million people where there is known or suspected poliovirus transmission or where there is a high-risk of reintroduction of wild poliovirus (WPV) into an area where transmission has been interrupted. These are challenging geographic areas because of the dispersion and the nomadic nature of the population (as in Ethiopia) or because of the density and social resistance of the population (as in Uttar Pradesh, India).

The CGPP contracts with US-based private voluntary organizations (PVOs) who are working in these areas, and these PVOs perform the work directly or sub-contract with local non-governmental organizations (NGOs) to train and utilize Community Workers to visit households, meet with groups, and talk with community leaders about the importance of polio eradication, the need to participate in routine immunization (RI) activities and to participate in polio-specific supplemental immunization activities (SIAs) that reach out to every household, and the signs and symptoms of acute flaccid paralysis (AFP) and the need to contact a Community Worker if such a case occurs. In addition, CGPP works with other stakeholders in the GPEI to collect and monitor surveillance data, to provide training and technical support to the Ministry of Health (MOH) and other stakeholders, and to work with local staff in the planning and monitoring of RI activities and SIAs. The work in-country is led by a Secretariat with its own staff.

The MTE covers the period from October 2007 until September 2010. During this time the project spent \$9.5 million at an average cost of \$0.12 per beneficiary. In general, the outreach of the CGPP to the communities and households is impressive, with levels of participation in SIAs being 80% or higher and levels of RI coverage strong but still not at the 80% coverage level thought to be necessary to interrupt WPV transmission – at least in Africa.

The MTE concludes that the CGPP is becoming an increasingly strong and appreciated partner in the GPEI and that community-based surveillance and social mobilization will become increasingly important in high-risk areas during this last “now or never” phase of the GPEI. In order to play the most effective role possible, the report recommends the following:

- Strengthen the organizational linkage to the CORE Group organization since to date funds have been given to World Vision on behalf of the Core Group;
- Strengthen the monitoring and evaluation of CGPP activities;
- Be prepared to expand the scale of CGPP activities in the current countries of operation and elsewhere as the need and the funding opportunity;
- The CORE Group (perhaps apart from the CGPP but in collaboration with it) should look for ways to support the expansion of the scope of activities from immunization only to primary health care more broadly and to the control of specific diseases of epidemiologic priority, including promotion of sanitation and hygiene, hand washing, provision of supplemental zinc to children on an ongoing basis, and surveillance for neonatal tetanus and measles.

- Seek funding for this broader scope of activities with a long-term vision for helping these priority areas achieve the MDGs.

List of Acronyms and Abbreviations

ADP	Area Development Program
ADRA	Adventist Development and Relief Agency International
AFP	Acute flaccid paralysis
ANM	Auxiliary nurse midwife
BCC	Behavior change communications
CARE	Cooperative for Assistance and Relief Everywhere, Inc.
CBO	Community-based organization
CBS	Community-based (AFP) surveillance
CF	Child Fund
CGPP	CORE Group Polio Project (began in FY08)
CMC	Community Mobilization Coordinator
CORE	Collaboration and Resources for Child, Maternal and Community Health
CORE PEI	CORE Group Polio Eradication Initiative (1999-2007)
CRS	Catholic Relief Services
DPT	Diphtheria, pertussis, tetanus vaccine (DPT3 refers to the 3rd dose)
FCHV	Female Community Health Volunteer
GAPS	Geographic assessment of planning and services
HQ	Headquarters
HMIS	Health management information system
HRA	High-risk area
ICC	Inter-agency Coordinating Committee (for Polio Eradication)
IEAG	India Expert Advisory Group
IR	Intermediate Result
IRC	International Rescue Committee
LEAP	Learning through evaluation with accountability and planning
LQAS	Lot quality assurance sampling
M&E	Monitoring and evaluation
MNT	Maternal/neonatal tetanus
MOH	Ministry of Health
MTE	Mid-term evaluation
NGO	Non-governmental organization
NID	National Immunization Day
NPAFP	Non-polio acute flaccid paralysis
NPEV	Non-polio enterovirus
NPSP	National Polio Surveillance Project
NS	National Secretariat
OPV	Oral polio vaccine
OPV-Zero	Oral polio vaccine – 1st dose, provided to newborns within 15 days of birth
PCI	Project Concern International
PEI	Polio Eradication Initiative
PPCC	Polio Partners Coordinating Committee
PVO	Private voluntary organization
RED	Reaching Every District
RI	Routine immunization
SC	Save the Children Federation
SD	Secretariat Director

SIA	Supplemental Immunization Activity (includes NIDs, SNIDs and “mop-up” campaigns)
SMNet	Social Mobilization Network
SNID	Sub-national Immunization Day
SO	Surveillance Officer
TAG	Technical Advisory Group
TCG	Technical Consultative Group
TFI	Task Force on Immunization
UNICEF	United Nations Children’s Fund
UP	Uttar Pradesh
USAID	United States Agency for International Development
WHA	World Health Assembly
WHO	World Health Organization
WPV	Wild Poliovirus
WV	World Vision
WV-US	World Vision United States

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Introduction

Since 1999, the CORE Group has been an active participant in the Global Polio Eradication Initiative (GPEI). From 1999 until 2008, this was called the CORE Group Polio Eradication Initiative (PEI). CORE's involvement arose as a result of the recognition that CORE Group members, who are Private Voluntary Organizations (PVOs) with extensive experience providing community-based interventions in challenging environments around the world, bring a critical expertise that is difficult for Ministries of Health to develop, namely social mobilization and building partnerships with communities in high-risk areas where wild poliovirus (WPV) transmission is still occurring or suspected to be occurring or where surveillance is weak and the risk of transmission is still high.

World Vision, on behalf of the CORE Group, received continuation funding from the Bureau of Global Health of the United States Agency for International Development (USAID) for community-based surveillance and social mobilization to increase immunization coverage among vulnerable children in areas at high-risk for continued polio transmission. Since 1999, World Vision and 14 other PVOs have worked together in polio eradication efforts in high-risk areas of Angola, Bangladesh, Ethiopia, India, Nepal, and Uganda. Bangladesh, Uganda and Nepal have all "graduated." Over that 10-year period the Project spent operated on a total global budget that averaged \$2.5 million per year and had six full-time equivalent (FTE) staff based in-country and 3.2 FTEs based in the US.

The current project, now called the CORE Group Polio Project (CGPP), received funding from USAID for activities in Angola, Ethiopia, and Uttar Pradesh, India. It began in FY 2008 (on 1 October 2007) and will continue for a total of five years. This report is a mid-term evaluation of the project activities since that time, including those carried out with additional financial support from the Gates Foundation.

Global Polio Eradication Initiative Background and Current Status

The World Health Assembly of the World Health Organization launched the GPEI in 1988. Ten years later, in 1998, it was estimated that 350,000 children were still being paralyzed each year from polio and thus there were at least 35 million cases of polio being transmitted annually throughout the world, and 125 countries were considered to have ongoing circulation of indigenous WPV.

A three-pronged strategy has been in place since that time:

- (1) Strengthening of routine immunization services and expansion of coverage, including coverage with at least three doses of oral polio vaccine (OPV)¹;
- (2) Supplemental immunization with OPV in low-coverage areas; and,
- (3) Surveillance for acute flaccid paralysis (AFP).

At present, there has been a 99.9% drop in the annual incidence of the disease globally. One of the three serotypes of WPV – type 2 – was last isolated in 1999 and has probably been eradicated. There are only four countries now in which the disease is known to be endemic: Afghanistan, India, Nigeria, and Pakistan [1-2]. When persons carrying Wild Poliovirus from an endemic area travel to an area with low OPV coverage and poor sanitation, the disease can be quickly reintroduced. In 2010, more than 80 percent of new polio cases occurred in non-endemic countries [1].

Accessing the specific sub-populations at highest risk of under-immunization, such as mobile populations, slum dwellers and religious or ethnic minorities has proven to be a major cause of low coverage of OPV in areas where WPV transmission continues or where re-introduction has occurred. In

¹ In the CGPP countries of Angola, Ethiopia and India, the national policy for routine immunization is four oral polio immunizations.

areas where many years of frequent campaigns combine with social marginalization, community resistance to vaccination has been another obstacle to reaching those populations. Community support for polio eradication is now seen as a critical ingredient for polio eradication in high-risk areas. This has proven difficult to achieve in areas where other health problems are far more pressing and where there is suspicion about the motives of the GPEI and where there is often resentment about lack of access to and effectiveness of government health services. As a consequence, UNICEF and now, more recently, the CORE Group PEI have become key partners along with donors (Rotary International, USAID, the Gates Foundation, and other bilateral donors), the World Health Organization, UNICEF, and the Ministries of Health (MOHs) in the respective countries in the polio eradication efforts in Angola, Ethiopia and Uttar Pradesh, India. By April 2010, 10 billion doses of vaccine had been dispensed and \$8.2 billion spent by the GPEI.

Ellyn Ogden, USAID Worldwide Polio Eradication Coordinator, has stated: "To eradicate polio, we must eliminate the persistent reservoirs of this disease, including insecurity; inconsistent management and ownership by local governments; sub-optimal communication and community mobilization; and reaching newborns, minority, and mobile populations. Because of the need to frequently repeat campaigns, there is often a certain fatigue about seeing yet another vaccination team knocking at the door. Yet these proactive house-to-house campaigns are the only proven way to eliminate polio from a country. And the world being so close to wiping out polio forever, we can't afford to give up or to settle for almost" [3].

The CORE Group Polio Project

The CORE Group (www.coregroup.org) is a US-based non-profit association of US-based PVOs working to improve maternal and child health in developing countries [4]. With financial support from the United States Agency for International Development (USAID), the CORE Group Polio Eradication Initiative began in 1999, initially in Angola and India, later adding Uganda, Bangladesh, Ethiopia and Nepal, to reach high-risk areas with social mobilization down to the household level and to provide technical support for grassroots programming in polio eradication.

During the first decade, the project trained 250,000 mobilizers (including formal community-based workers, other leaders, and lay supporters in the community) to provide essential, culturally relevant information about polio to mothers and caretakers, promote good child immunization practices, follow-up of defaulters, track unimmunized children, mobilize communities to support immunization campaigns, and to correct false information and dispel rumors about immunization campaigns. The evaluation of that first decade concluded that:

"It is becoming clear to many who are working at top, influential levels that there are huge benefits to have collaborating partners located within many small communities, a partner who is trusted, able to take the pulse of communities, learn citizen reaction to program efforts, knows the map of the community, can head off rumors and diminish resistance to vaccines or child health care services" [5].

One of the findings from the evaluation carried out in 2008 was that monitoring and surveillance of project activities were not as strong as they should have been. "The time is right to strengthen community surveillance of AFP cases, develop stronger, simpler record systems at community level, and improve and track timeliness of reporting. Child tracking, and social mapping can be expanded, and results documented and disseminated throughout the larger PVO/NGO community."

The current phase of the project began in September 2007 and is referred to as the CORE Group Polio Project (CGPP), with financial support provided by USAID Bureau of Global Health and

supplemental funding provided by the Gates Foundation. The goal of CGPP is to contribute to polio eradication by increasing population immunity and enhancing the sensitivity of surveillance for AFP. The main objectives of the current project are to:

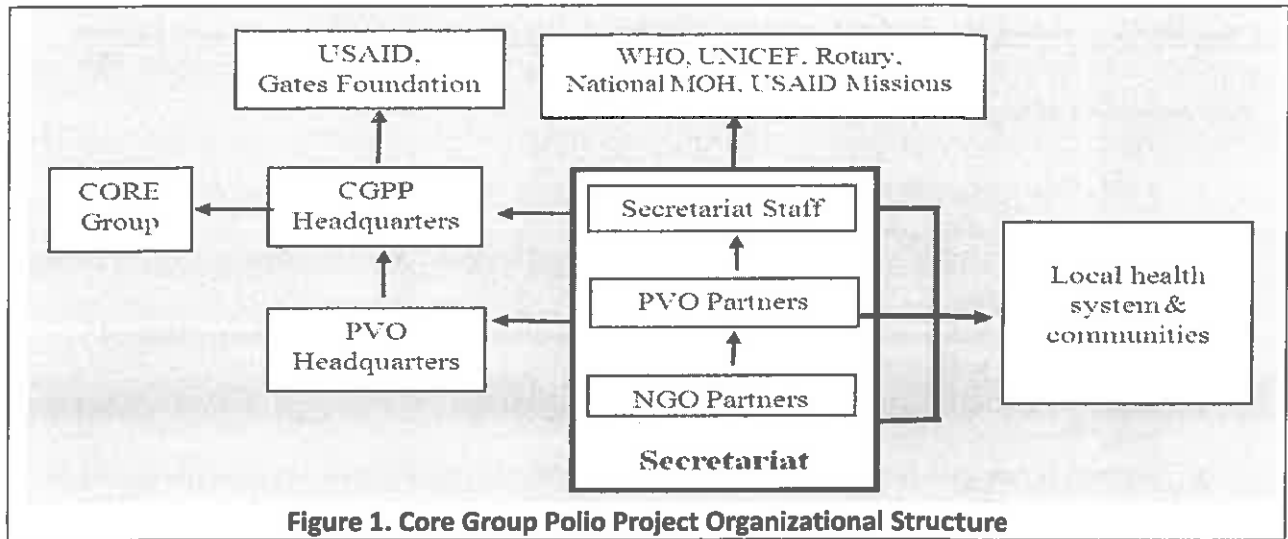
1. Build effective partnerships between PVOs, NGOs and international, national, and regional agencies involved in polio;
2. Support PVO/NGO efforts to strengthen national and regional immunization systems to achieve polio eradication;
3. Support PVO/NGO involvement in national and regional planning and implementation of supplemental polio immunization;
4. Support PVO/NGO efforts to strengthen AFP case detection and reporting (and case detection of other infectious diseases);
5. Support timely documentation and use of information to continuously improve the quality of polio eradication (and other health-related activities); and,
6. Support PVO/NGO participation in either national and/or regional certification activities.

Supplemental funding from the Gates Foundation was provided to the CGPP to support for the following specific objectives:

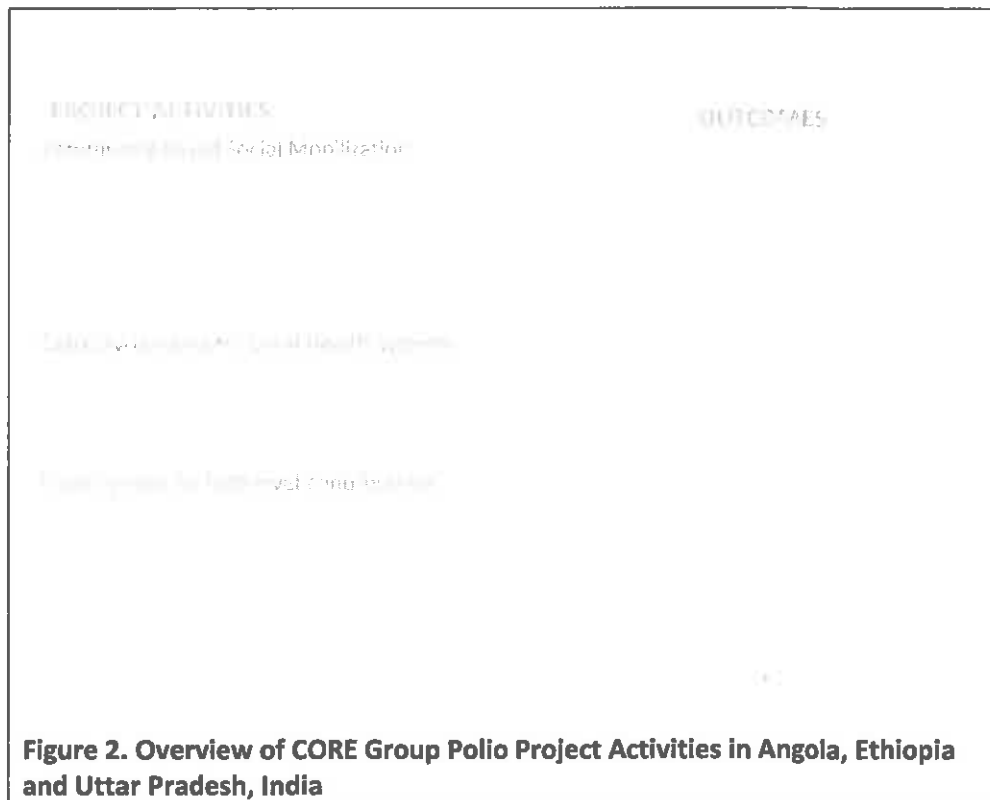
1. To decrease resistance to polio vaccination among caregivers of children 0-59 months of age in Uttar Pradesh, India;
2. To reduce the pool of susceptible or under-immunized children 0-59 months of age in Angola; and,
3. To increase the availability of data to facilitate evidence-based decision-making that will strengthen polio eradication programs in Angola, Ethiopia, and India.

Since 1999, World Vision-US has been the legal entity that has received the funding on behalf of the CORE Group. CARE provides administrative and technical support from the United States, and the Johns Hopkins University provides a small amount of support for monitoring and evaluation. Angola, Ethiopia, and India each have a CORE Group Secretariat that coordinates project activities in country through contracts with CORE Group PVOs already working in-country. When appropriate, these PVOs then contract with local non-governmental organizations² (NGOs) in high-risk areas to carry out social mobilization and other activities that are deemed to be needed to achieve the goals of polio eradication. In addition, the Secretariats in each country provide technical oversight, monitoring and evaluation of country-wide activities, and coordination with the in-country Inter-Agency Coordinating Committee. Figure 1 shows the administrative structure of the CGPP.

² In this document, we will use the term PVO to refer to US-based private voluntary organizations that are members of the CORE Group. The term NGO as used in this document refers to local in-country non-governmental organizations with which PVOs contract to carry out CGPP activities.



CGPP activities at the community level have consisted of social mobilization for campaigns, community-based surveillance, development of registries for children and pregnant women and tracking of children and their immunization status, strengthening the capacity of Ministries of Health at the local level for planning routine immunization (RI) activities and supplemental immunization activities (SIAs), and surveillance (Figure 2).



The districts and segments of districts in which the CGPP works are defined by the PEI technical coordinating committees in each country, and these areas are subject to change on short notice on the basis of a combination of surveillance data, routine immunization coverage, campaign coverage, geographic location, and the presence of special high-risk and/or inaccessible populations. The PVOs that work in a given country with the CGPP are already in-country, carrying out other projects and activities. The CGPP functions are “bundled” onto other ongoing programs. The PVOs do not always have their own programs in the areas where they take responsibility for CGPP community-based programs, but they have the in-country expertise to identify appropriate local NGOs that are operating in these high-risk areas and to provide the technical and administrative support needed. At present, CGPP activities are active in districts or portions of districts in these three countries that contain a total population of roughly 82 million people (with 27.2 million children aged 15 years or less, including 3.8 million in Angola, 2.0 million in Ethiopia, and 21.4 million in Uttar Pradesh, India). During the three-year period covered by this evaluation, the project’s total annual expenditures averaged \$3.2 million per year, ranging from \$1.5 million in the first year to \$4.5 million in the second year. The total average annual expenditure per beneficiary (that is, per child 0-14 years of age) is \$0.12, ranging from \$0.08 in India to \$0.30 in Ethiopia (Table 1).

Period	India	Angola	Ethiopia	Total
FY2008	\$827,801	\$621,213	\$92,830	\$1,541,844
FY2009	\$2,161,837	\$1,292,619	\$1,020,137	\$4,474,593
FY2010	\$1,853,127	\$947,525	\$711,309	\$3,511,961
Total	\$4,842,765	\$2,861,357	\$1,824,276	\$9,528,398
Number of beneficiaries (children <15 years of age)	21.4 million	3.8 million	2.0 million	27.2 million
Average annual cost per project beneficiary	\$0.08	\$0.25	\$0.30	\$0.12

Over the past 25 years, as high levels of polio immunization coverage have led to the elimination of polio from all but a few areas of the world, “pockets” of polio transmission remain where there is a critical mass of children who have consistently remained insufficiently immunized and have provided a reservoir for WPV transmission. In order to completely interrupt transmission, an intensive effort is required to reach every child in these “pockets.” USAID along with other major international donors and technical support groups such as WHO and UNICEF have recognized the critical importance of community-based, data-driven surveillance to identify all potential polio cases³ and social mobilization to increase population coverage of polio immunization (as well as other basic immunizations) in these

³ Potential polio cases are identified through surveillance for acute flaccid paralysis (AFP). In the absence of poliovirus transmission, there is expected to be 1 case of AFP per year in a population of 100,000 children aged less than 15 years. These are cases of acute onset of paralysis or weak limb weakness due to a variety of viral infections. Adequate AFP surveillance requires an identification of at least one AFP case each year per 100,000 children. All identified cases are investigated. Stool specimens are collected and sent for laboratory examination to determine if poliovirus is present.

“pockets” in order to stop polio transmission. Because of the well-recognized capacity of US-based PVOs and their national partners to implement community-based programs in maternal and child health, USAID began to support CORE group member PVOs through World Vision in 1999 to participate in the polio eradication effort. USAID expects a 5% match from the PVOs, usually in the form of parts of salaries, benefits, office rent and so forth.

The Director of the CGPP, who is based in Washington, DC, relates to USAID, World Vision, the CORE Group, US-based PVOs, WHO, UNICEF, CDC offices, and the country Secretariats. The CGPP provides funding for CORE Group PVOs already working in or near high-risk geographic areas (as defined by the in-country WHO, UNICEF and Ministry of Health) who then support local elimination of polio transmission, engaging local NGOs and leadership as appropriate:

- Collaboration with national and international stakeholders;
- Community mobilization and behavior change communications for families and communities;
- Engagement with community leaders and influencers to advocate for immunization participation;
- Defaulter tracing using child registries and maps to improve immunization coverage;
- Training, supervision and capacity-building support for routine immunization (RI) services;
- Community-based approaches to support AFP surveillance; and,
- Capacity building for MOH staff at all levels, for PVOs and local NGO staffs, and for communities.

The Project is designed to be flexible so that PVOs and their local partners can “follow the virus” and respond to changing needs on the ground for support of the PEI as defined by requests from the MOH and other stakeholders. In each of the countries where the CGPP is working, a Secretariat has been established with a small staff to coordinate in-country activities of the CGPP.

One of the key strategies of the CGPP is the recruitment and utilization of Community Workers, who learn to educate mothers and youth about the reasons for eradicating WPV and how transmission of poliovirus can be stopped. In Angola and Ethiopia, the Community Workers are volunteers, while in Uttar Pradesh, India they are paid to work full-time. CGPP Community Workers, PVO and NGO field staffs, and government health workers sit together and study district health data to determine where to canvas households and direct their mobilization efforts. The volunteers in some localities learn to be alert for children with signs of AFP and are trained to make timely reports of suspected AFP cases. NGO staff and volunteers are creative and persistent in putting into practice the commitment to reach every unvaccinated child in communities where there is endemic WPV or very low immunization coverage in order to decrease the build-up of susceptible cases and stop transmission.

Because of the enormous difficulties of implementing community-based PEI activities on such a large scale in socially and geographically challenging areas with a very modest budget, and also because ongoing monitoring, evaluation and surveillance activities are being carried out by other partners (most notably WHO and the MOH), the project has not been able to invest and develop a strong monitoring and evaluation capacity. This was one of the principal findings of the final evaluation of the first 10 years of project funding [5]. Other key findings that arose from that evaluation were the following:

- The CORE PEI made a strong contribution to global polio eradication efforts through its local community presence in high-risk areas, its training of local volunteers to assist in polio eradication efforts, and its participation in polio eradication programming, particularly at the local level. Through its strong field presence, the CORE PEI was able to provide feedback to higher levels regarding the reality on the ground.
- The flexibility of CORE PEI field activities made it possible to quickly shift activities to new locations as the need arose. This greatly enhanced CGPP's effectiveness.
- The CORE PEI was increasingly valued over this period by other partners and stakeholders at the national level in polio eradication activities.
- There is a mismatch between the scope of the project and funding available. As a result, the project has been understaffed and there have arisen issues of quality, documentation of activities, and monitoring and evaluation of project activities.
- The Secretariats need to have a stronger funding base and more authority so that they can provide stronger oversight and technical support for field activities.

Overview of the Current Mid-Term Evaluation

The MTE was designed to answer the following general questions:

- Have there been improvements in the coverage, attitudes and practices related to routine immunization and polio immunization in the CGPP catchment areas as defined by comparing results of baseline knowledge, practice and coverage (KPC) surveys carried out in 2008 and again in 2010?
- Is there any evidence that the CGPP activities carried out by community volunteers have been responsible for improved project outcomes (as defined by KPC surveys)?
- What are the views of the CGPP staff and the staffs of the participating PVOs/NGOs about the effectiveness of current project activities?
- What contributions has the CGPP made to other needs outside of the Polio Eradication Initiative?

In each of the three project countries, an external evaluation consultant was hired to obtain the information needed to answer the above questions. These country-level evaluations also included a standardized household survey in the CGPP catchment areas as well as focus group discussions (FGDs) with mothers. These surveys were also adapted to the programmatic needs of each country. Figure 3 contains details about the surveys in each of the three CGPP countries.

In addition, Dr. Perry was hired as an external consultant to review these findings and write the MTE Report. He carried out a desk review of all appropriate project documents, reviewed additional material related to the Global Polio Eradication Initiative and its activities within Angola, Ethiopia and Uttar Pradesh, India, and interviewed key stakeholders.

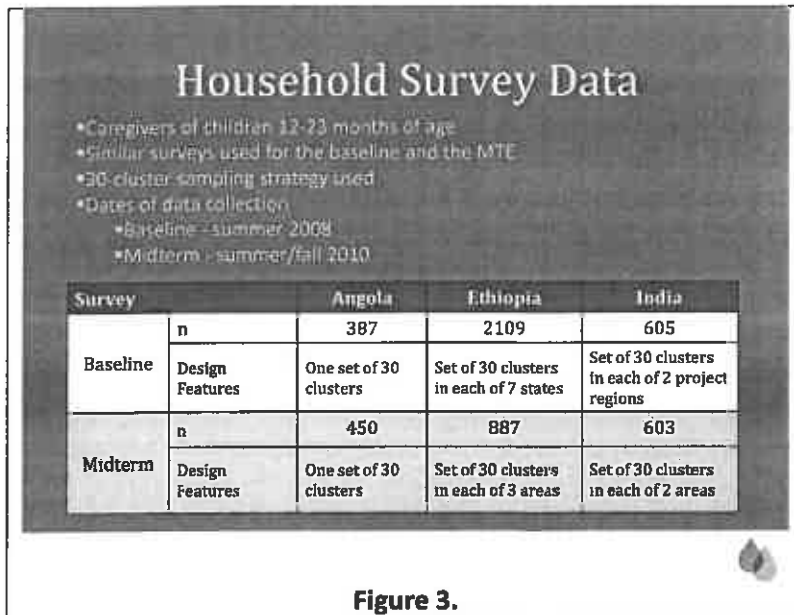


Figure 3.

Household surveys were conducted in each of the countries. In Ethiopia, three separate surveys were conducted at the time of the MTE and in India, two. In Ethiopia, the three surveys were in three areas of the country: an agrarian area, a semi-pastoralist area, and a pastoralist area. In India, the two areas surveyed were two separate regions. The first included the districts of Moradabad and Rampur, and the second survey included all the other districts. Moradabad and Rampur, a quite densely populated

urban area, has been identified as an area of highest risk for continued transmission.

All of the surveys were cluster-sample surveys. In Angola, 15 mothers/caretakers were interviewed in each cluster, while in Ethiopia and India, there were 10 in each cluster. In each case, a mother/caretaker of a child 12-23 months of age was interviewed.

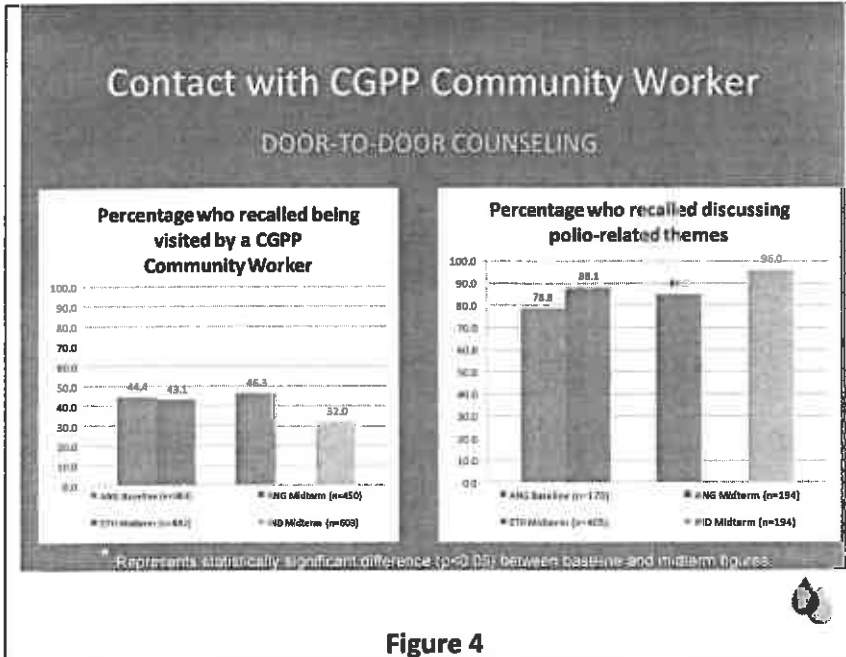


Figure 4

Main Findings

In Figures 4-9, the survey findings for the three CGPP countries are compared for the same variable. The most elementary measure of project effectiveness is the degree to which the CGPP Community Workers are reaching the households in the CGPP catchment areas. As shown in Figure 4, a substantial percentage (32-46%, depending on the country) of respondents reported that a CGPP Community Worker had visited

their home and, in the great majority of cases, the respondent recalled discussing a polio-related theme. The percentage of respondents who recalled participating in a group session (compared to those who received a home visit) with a CGPP Community Worker was slightly less in Angola and Ethiopia (27-36%), but group sessions were rare in India where it was reported by only 6% of the respondents. Again, almost all who attended such sessions recalled a polio-related theme being discussed (Figure 5).

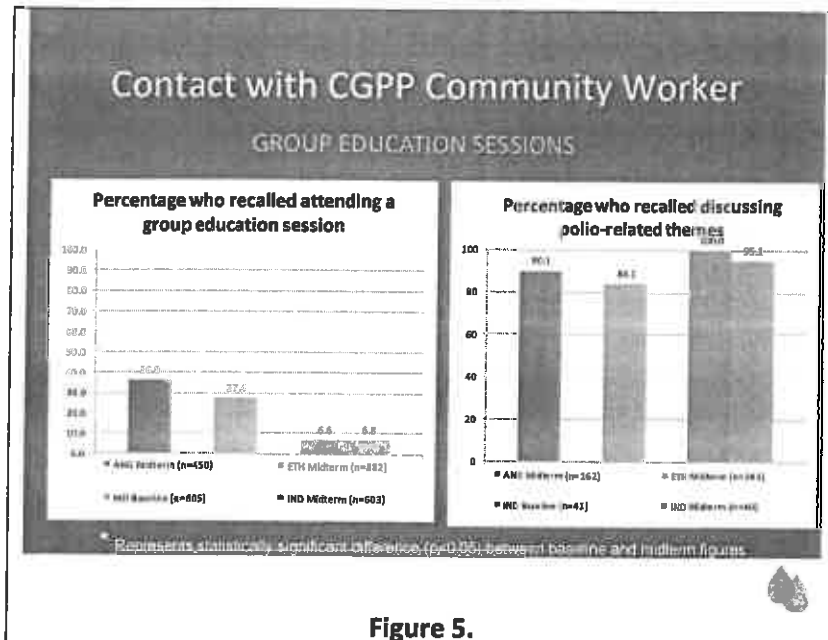


Figure 5.

Baseline information on these variables was collected only in Angola for door-to-door counseling and in India for group counseling. There was no significant increase in door-to-door contact in Angola but there was a significant increase in the percentage who recalled a polio theme being discussed. In India, group sessions showed no significant change between baseline and the MTE.

The percentage of respondents who believed that some children should not receive polio

vaccination or believe that a polio vaccination could produce harm in some children is low in the CGPP catchment areas, and the percentage actually declined significantly in the Angola catchment area, (Figure 6).

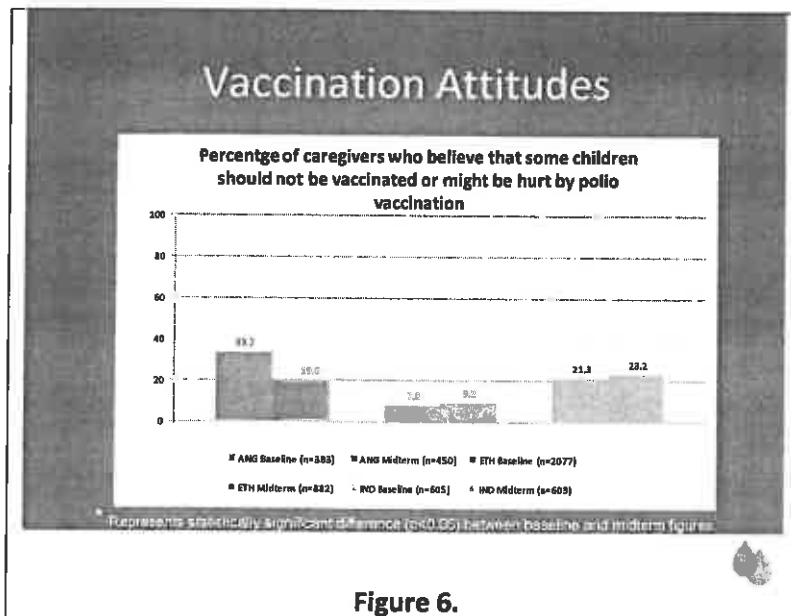


Figure 6.

In terms of participation in the Supplemental Immunization Activities (SIAs), at which time polio vaccine is administered, data are provided in Figure 7 for Angola and India only since SIAs are not carried out in Ethiopia on a national scale. (Because there had been no transmission of poliovirus in Ethiopia since 2008, no National Immunization Days (NIDs) were carried out there between the CGPP baseline and mid-term surveys.) In Angola, there are notable improvements in participation in SIAs and in visitation by vaccinators during the most recent campaign. In

India, very high rates of participation exist had been achieved at baseline and have been maintained since that time. The drop in home visitation in India from 95% to 80% is felt by the staff to represent some kind of error or artifact since the project has good independent surveillance data that the rate of home visits is 95% or higher during SIAs.

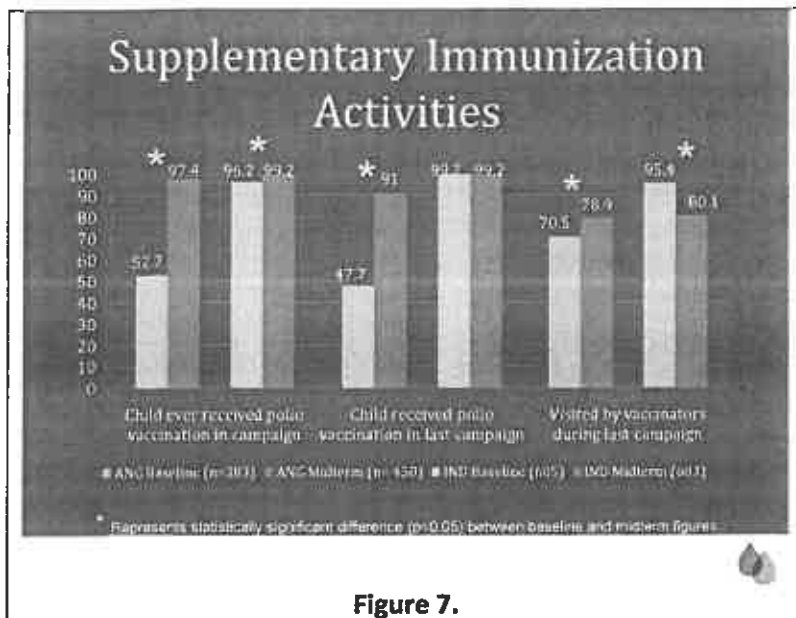


Figure 7.

A recently published study conducted by the CGPP of CGPP SIA coverage in India using surveillance data from 2008-9 compared SIA coverage in CGPP catchment areas with SIA coverage in other parts of the same district that were not considered high-risk areas and where the CGPP was not working, [6]. Although there was considerable variation from district to district, in virtually every case SIA coverage rates were higher in the CGPP catchment areas than in non-catchment areas. Since the CGPP catchment areas are more challenging in geographic and/or social terms, the fact that coverage

levels are actually better than those in less challenging areas provides strong suggestive evidence that the CGPP is having an important impact on participation in SIAs. SIA coverage in Angola has improved notably since baseline, and SIA coverage in India has remained very high – not a small achievement in either context.

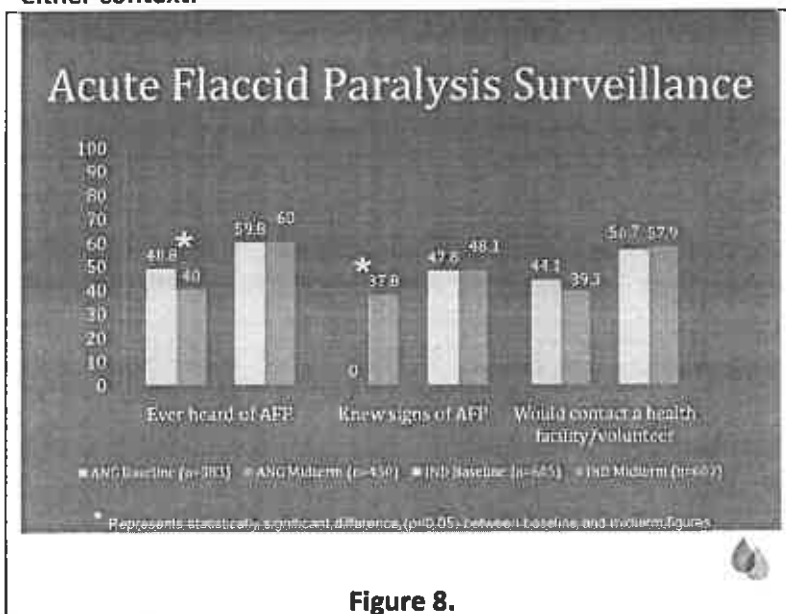


Figure 8.

Survey findings related to AFP surveillance for India and Ethiopia are shown in Figure 8. AFP surveillance in Ethiopia has received lower priority relative to immunization in recent years because the CGPP has been supporting the nationwide focus on improving routine immunization coverage. Awareness of AFP is rather low in Angola and has declined significantly since baseline, but the percentage of respondents who knew what the signs of AFP are increased remarkably from 0% to 38%. In India, knowledge about AFP has remained relatively stable, with no significant change in the finding

that roughly half of the respondents aware and knowledgeable. It is important to note that in India, CGPP Community Workers may choose to include AFP messages in their health education but they are not held accountable for AFP reporting rates. This is because India's National Polio Surveillance Project, run by the Indian Ministry of Health and the CDC, is responsible for AFP surveillance in the country.

In Angola, awareness about AFP surveillance has recently been given renewed emphasis in training and program management in Angola, and in Ethiopia it is now being reemphasized among the

promotional responsibilities of CGPP Community Workers in Ethiopia. Strong AFP surveillance will need to be in place in order for every country to qualify for certification of being free of polio transmission.

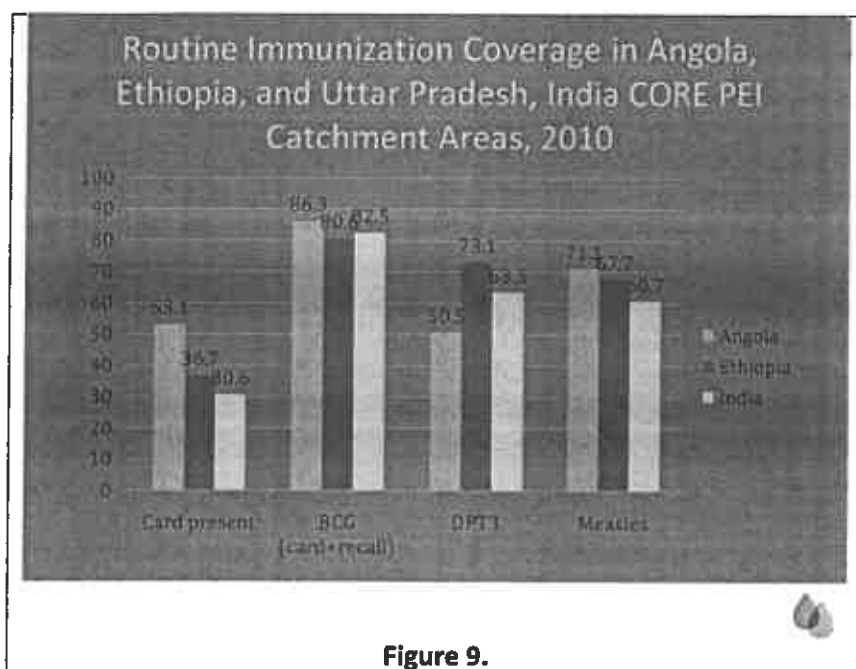


Figure 9.

Figure 9 reports routine immunization coverage, based on a review of cards and caretakers' recall, for the MTE surveys conducted in 2010 in the three project catchment areas. By and large, the results are similar in all three areas although card retention is considerably higher in Angola than in Ethiopia and India. Access to routine immunization services, defined as BCG coverage, is 81-86% in all three project sites. DPT3 coverage is highest in Ethiopia (73%) and lowest in Angola (51%), and measles coverage is in the range of 61% to 71% in all three

project sites.

There are in general signs of modest improvement since the baseline data were collected. In Angola, there were statistically significant improvements in card-verified OPV3 and Penta3 coverage (of 7-8 percentage points), and coverage of all antigens increased, but to a very limited degree. In Ethiopia, there were significant improvements in all antigens in the semi-pastoralist and pastoralist areas but not in the agrarian areas. But again, the range of improvement was modest, around 15-20 percentage points. In India, the coverage improvements were significant for only one antigen – measles. Card-verified coverage of measles immunization increased from 18% at baseline to 23% at the MTE.

As described in more detail in the Appendix for each country, we looked at the relationship between project outputs (visitation of households and mothers/caretakers) and project outcomes (knowledge about AFP and polio immunization and participation in SIAs). Statistically significant positive associations exist between project outputs and project outcomes in all countries. In Angola, there is no significant relationship between project outputs and SIA participation, but there is a significant association with project outputs and AFP knowledge. In Ethiopia, the association is strongest between exposure to group sessions and project outcomes, while in India the association is strong between exposure to all types of interpersonal contact and all project outcomes. These results are preliminary and further analysis is planned as part of a paper to submit for publication to a peer-reviewed journal.

The Appendix contains further details about the MTE activities carried out, a detailed report of the country-specific findings, as well as a report prepared for each country survey containing the entire survey findings.

Additional Country-Specific Findings

Here we will report on a few additional findings of particular relevance to each of the three CGPP countries.

Angola

Based on discussions with staff and review of reports, there is a consensus that the following activities need to occur in FY2011 and 2012:

- Strengthening of the supervision process, including stronger monitoring of supervisory activities;
- Further refinement of the behavior and communication change (BCC) strategy; and,
- Inclusion of high-level advocacy and follow-up actions to ensure improvements in district- and sub-district-level campaign coverage.

Ethiopia

There was a statistically significant decline from the baseline to the MTE in the percentage of respondents who their child participated in the most recent polio SIA: 84% to 73%. There was also a statistically significant decline in the percentage of respondents who said that their child had ever received a polio immunization: 90% to 80%. In most areas of Ethiopia in 2010, the most recent polio campaign occurred several months to over a year ago. Respondents' recall on this indicator could have been inaccurate because of the time lapse. Because campaigns occur infrequently, they are not a central focus of Ethiopia program and should not be considered an accurate gauge of program performance.

The wide variation between regions and populations suggests inconsistent effectiveness within the project's work in Ethiopia. The project should explore the causes of those variations, searching particularly for issues that can be influenced, such as program quality or different approaches to social mobilization that are more appropriate for the local cultural context.

AFP surveillance was a major emphasis of the project in Ethiopia a decade ago. The results of the MTE suggest that the increasing programmatic focus on routine immunization may have reduced the focus on surveillance. The CGPP may want to consider refresher sessions on community-based surveillance and development of new social mobilization techniques to re-energize volunteers and communities around the search for and reporting of cases of AFP.

Finally, there is a need for greater precision in the child tracing system, with greater emphasis on provision of OPV soon after birth through household visits.

India

India has the best monitoring and evaluation capability of the three countries where the CGPP is working, and it also has the most experience in broadening its scope of work in hard-core priority areas to provide primary health care services through health camps, jamborees, and other special events. Gates Foundation support has made this possible.

Since the CGPP Community Workers in India are paid, it is possible to have a more highly developed and systematized child tracking system and monitoring of SIAs. Now is the time to begin to

envision a role for the CGPP Community Workers once polio transmission is stopped and after polio eradication has been certified – hopefully a role that will enable other epidemiological priorities in these high-risk areas to be addressed.

Discussion

The findings reported here and also contained in the Appendix provide strong evidence that the CGPP is actively engaged in reaching out to the entire population of 82 million people in high-risk areas and in seeking participation and collaboration from every household with a child aged less than 15 years of age in order to interrupt poliovirus transmission. Given the modest resources for this effort relative to the target population (\$0.12 per beneficiary per year) as well as the geographical and social barriers faced, the outputs of the project are substantial. The impact of the project is not easily quantified since there are no comparison groups for which we have data. However, there is evidence from Uttar Pradesh, India, and from Angola (as discussed in the Appendix) that immunization coverage levels in the CGPP high-risk areas are similar or even better than in non-high-risk areas. This is strongly suggestive evidence that the CGPP activities are having an impact since they are in more difficult areas that presumably would have lower levels of coverage than in the non-high-risk areas.

In terms of tracking changes between baseline and the time of the MTE, there are several shortcomings that complicate the situation. The first is that baseline data are lacking for a number of indicators. Secondly, the length of time between the baseline and the MTE is only about two years, which is a limited amount of time to expect to see any major change given the type and scale of the work being done. In addition, some of the data collected had to be discarded because of flaws in coding or because of difficulties in translating the question so that it was readily understandable by the respondent.

Conclusions

General

Based on the findings of the MTE derived from the household surveys, reports of focus groups discussions interviews, submitted reports, discussions with project staff, and review of the progress in polio eradication in the three countries where the CGPP has been working from 2008 until 2010, there is every reason to believe that the investments made by USAID and the Gates Foundation are being well-spent and are increasingly necessary for polio eradication to be achieved. Increasing investments in social mobilization and in the CGPP in particular (as an entity with specialized knowledge and experience in the social mobilization aspects of polio eradication) will be required in order to achieve polio eradication.

The evidence is quite strong that the CGPP's interventions are effectively reaching a very high percentage of the population in high-risk areas. The CGPP's effectiveness in programming in the high-risk areas as well as its effectiveness in providing training and technical support for community-based programming is increasingly becoming recognized and valued by other Polio Eradication Initiative (PEI) stakeholders (the MOH, UNICEF, WHO, Rotary, CDC, and the Gates Foundation) in Angola, Ethiopia, and

Uttar Pradesh, India. The skills, resources and capacities that the CGPP brings to polio eradication (for building community partnerships and effective community-based programming) are becoming recognized as increasingly important for this final “do or die” stage of PEI programming.

The process of identifying all households, registering eligible children, and tracking defaulters is a key strategy for the success of the work of the CGPP. Census-based programming will become even more vital in India in the next phase, in which identifying the final 5-10% of households and children who have not participated in polio immunization will be critical for eliminating polio transmission.

Immunization Coverage

Levels of OPV coverage and coverage of routine immunizations are similar in the CGPP catchment areas to levels of coverage in lower-risk areas, and this is a major achievement considering that these areas contain the hardest-to-reach/hardly reached populations (because of their geographic isolation, mobility, and social resistance to repeated polio immunization). However, these levels have remained the same or increased modestly since baseline. So, it is hard to say whether the continuation of similar levels of coverage between baseline and the MTE is a notable achievement or a disappointment. Nonetheless, there are still “hard core” pockets in Uttar Pradesh with 5-10% of children who are still not participating in polio Supplemental Immunization Activities (SIAs), and these children must be identified and immunized in order to interrupt polio transmission. In Angola, coverage with SIAs has improved dramatically (from 48% to 91%), but there will soon likely be “hard core” pockets there as in Uttar Pradesh. Identifying them and concentrating on reaching them will be important as well – but perhaps not to quite the same degree as in India since transmission of WPV does not seem to be as efficient in Ethiopia as it is in India. Thus, there is hope that increasing RI coverage without relying on polio-specific SIAs will halt WPV transmission there.

Monitoring and Evaluation

Throughout the course of the MTE, various deficiencies in the monitoring and evaluation of project activities and in the quality of work performed by contracted firms were identified. These problems include the conceptualization and design of monitoring and evaluation data, timeliness of data collection, the quality of data collected, and the timeliness of submission of reports of data analysis, especially in Angola

In Angola and Ethiopia there is still an inability to identify exactly who is being missed by the SIAs. WHO is directly responsible for identifying high-risk populations and assessing whether they have been reached during the SIAs. However, a stronger monitoring and evaluation capability in these two countries would make it possible for the CGPP to support WHO and other stakeholders by carrying out stronger surveillance and carrying out pilots and/or formative research under chronically under-immunized populations.

In spite of these limitations, it is important to note that major progress has been achieved during this three-year period of evaluation. Both Angola and Ethiopia have created and filled a full-time position in monitoring and evaluation that did not exist previously, and their active participation in the data collection for the MTE as well as with other surveys and monitoring activities since October 2007 have strengthened the monitoring and evaluation capabilities of the CGPP. For instance, two LQAS surveys have been carried out in Angola and Ethiopia each along with baseline and MTE surveys. In the

current phase of the project, the CGPP/Angola has been able to develop a functioning child tracing registry, but progress has been slower in Ethiopia because so many of the Community Workers there lack literacy skills.

Campaign Fatigue and Social Resistance

Repeated SIAs are wearing on both the polio immunization staff and on the population in Uttar Pradesh, India, where SIAs are being conducted almost monthly. At least in that setting, the CGPP Community Workers are paid and working on a full-time basis. However, the resentment that arises in the local community against the program because of the extraordinary effort and attention given to a problem that seems insignificant compared to other health and development problems and the lack of focused attention on what are, from the perspective of the local population, far more pressing problems is one of the important causes of social resistance. Fortunately, campaign fatigue and social resistance arising from frequent immunization campaigns have not surfaced as important issues in Angola (where 3-4 campaigns a year occur) or Ethiopia (where campaigns are much more infrequent).

Organizational Issues

There are chronic organizational issues that have never been resolved that need to be given serious consideration at this critical juncture in the CGPP. Among these are the fact that, although this is a CORE Group project, the CORE Group Executive Director, her staff in Washington, DC, and the CORE Group Board of Directors have minimal involvement in the direction of project activities, and they receive minimal information about project activities and issues in program implementation.

Part of the reason for this is the fact that when the first project began in 1997, the CORE Group did not exist as a legal entity and could not receive funds directly. (World Vision received funds initially and continues to receive funds on behalf of the CGPP.) In addition, the CORE Group Executive Director and her staff did not have the capacity to manage this project, which has had significantly more funding than the entire CORE Group organization. Furthermore, the CORE Group Board more recently was reluctant to take on full responsibility for the CGPP since polio eradication is peripheral to the goals of the CORE Group. Even when the second phase of funding began in FY2008, the CORE Group felt that it did not have the capacity or the interest in taking full responsibility for managing a project of this scale and complexity. The end result of all of this is that the CORE Group leadership and staff in DC have minimal engagement with the CGPP. There are almost no funds budgeted in the project to make this happen either.

At the country level, the Secretariats are "housed" within a PVO or NGO. In Angola, Africare is the PVO that receives the funding on behalf of the Secretariat. In Ethiopia, it is the Christian Relief and Development Association (a local umbrella NGO), and in India it is the PVO Project Concern International (PCI). However, these entities are not really engaged in the activities of the Secretariats, so the Secretariats in a real sense have become free-standing entities in functional terms, without the organizational backup, guidance and supervision that are sometimes needed in-country to guide and support activities.

In one sense, this organizational ambiguity for the Secretariats provides a "neutral space" that enables the CGPP to function and be known as the CORE Group Polio Project without concern about whether one PVO or NGO is getting more credit or recognition than another one. However, it also

means that the Secretariats have a certain flexibility for action that could be misused. In Ethiopia, the Secretariat decided on its own to seek funding in-country from the Global Alliance for Vaccines and Immunizations (GAVI) to support RI and from the Global Fund to support malaria activities. While these activities are laudable and fully within the scope of the CORE Group itself, the CORE Group management in DC was not a part of these discussions and had no oversight of the Secretariat's activities even though it was a CORE Group activity. And, of course, these activities were also outside the purview of the CORE Group Polio Project.

During the development of the CORE Group Strategic Plan, the establishment of CORE Group Secretariats in priority countries was seen by the CORE Group leadership as a desirable strategic goal in the sense that it would enable the CORE Group to play a stronger role in priority countries by coordinating and supporting activities of its members there and providing leadership for resource mobilization within that country from donors that could be used by its members and their national partners.

To date, these organizational issues have been overcome as a result of the commitment of all parties to see the CGPP succeed. However, as CGPP looks to the future, it is now time to resolve these issues so that future programming can be built on a stronger organizational platform.

Recommendations

General

Continued investments by USAID and the Gates Foundation are needed to continue and further strengthen current activities and to expand the scale of work to new priority area (such as South Sudan, where CGPP is now beginning) and also the scope of work to address epidemiological and community health priorities for "hard core" populations (in collaboration with local governments and local health programs). By expanding the scope of work to a broader set of primary health care activities, CGPP will be building stronger community support for polio eradication and laying the groundwork for priority post-eradication activities in priority geographic areas.

Building a Stronger Organization Platform

Given the critical role that the CGPP is likely to play in this final phase of the Polio Eradication Initiative and also thinking beyond polio eradication, it is obvious that the final areas of polio transmission will also be areas of high child and maternal mortality that will continue to need special support, as further discussed below. Thus, it makes sense to begin to plan for the CORE Group to begin to serve as the entity to seek, receive and administer funding for CGPP activities and related community-based primary health care activities. It also makes sense to begin to plan for the existing Secretariats to begin to have a formal structural and perhaps legal linkage to the CORE Group as well. These Secretariats have the potential of helping with the mission of the CORE Group in the countries where the CGPP is now working and perhaps in other countries as well.

Strengthening Monitoring and Evaluation

The CGPP needs to make a stronger investment with financial resources and technical support for monitoring and evaluation at the country level. Given the size of the beneficiary population (especially in India) and the broad geographic scope (particularly in Ethiopia), the capacity to collect high-quality data from a carefully selected sample of beneficiaries, analyze these data quickly, and convert the findings into program strengthening without delay will be critical for maintaining and strengthening program quality. The timely use of data to strengthen programming, and the use of monitoring and surveillance to identify and focus greater attention on the 5-10% of the population in high-risk areas that are escaping participation in PEI activities will be critical in Uttar Pradesh, India, for eliminating polio transmission.

Technical assistance from someone with world-class expertise in this area would make sense over the remainder of the current project funding cycle. Since the CGPP/India has the strongest monitoring and evaluation program and Angola's and Ethiopia's are weaker, then sending technical staff from India to Angola and Ethiopia or vice versa might be another approach that could be beneficial.

Monitoring of CGPP outcome variables in non-CGPP areas that are as similar as possible to the CGPP high-risk areas would give some idea of the degree to which CGPP inputs are responsible for the outcomes observed. There may even be ways in which new CGPP high-risk areas can be brought into the project in a sequential and random fashion to provide a stronger sense of the impact of CGPP interventions. Development of tools that can be completed by non-literate Community Workers in Ethiopia to monitor outcome-related events such as children missed, new births and pregnancies will be an important activity to prioritize in the near future as well.

Narrowing the Geographic Focus through Stronger Surveillance

With stronger surveillance and perhaps the creation of new indicators, it should be possible to begin to reduce the geographical extent of some project activities so that increased efforts can be made to track down those who have been escaping the routine project activities. Perhaps a whole new approach will need to be developed for reaching the hardest of the hard-to-reach. While this is of greater relevance at present in Uttar Pradesh, India, it seems quite likely that this will eventually become of increasing importance in Angola and Ethiopia, especially if interruption of transmission of WPV becomes more difficult than currently expected.

Expanding the Scope of Surveillance

Once the hardest-to-reach of the hard-to-reach are identified, it would make sense to be able to expand the scope of surveillance beyond polio to other diseases and to events of greater epidemiologic importance and of greater community concern. Possible topics include under-5 deaths (all causes), maternal deaths, measles cases, and neonatal tetanus cases. This information could then be used to define local epidemiological priorities, and low-cost programs could be established to mobilize the community to address these problems. This would engage the community and build community support in ways that could benefit polio eradication at the same time.⁴

⁴ In Angola, for instance, one-third (31%) of the mothers/caretakers interviewed stated that one or more children had died, and the average number of deaths reported by this sub-group was 1.8.

Developing the Capability to Respond to Community and Epidemiological Priorities in Hard-Core Resistant Areas

Expanding the focus of CGPP activities beyond polio to epidemiological and community health priorities offers the most promising approach to responding to “campaign fatigue.” Programs for addressing epidemiological priorities and for addressing community-perceived priorities will garner support for PEI activities. These programs can also serve to facilitate post-PEI transitioning once polio is eradicated. Additional funding will be needed to be able to respond to epidemiological and community-perceived priorities in hard-core resistant areas. The CORE Group should begin to actively seek funding to support this broader scope of activities. The current Gates Foundation funding for these activities is an important beginning. The GPEI is beginning to test new approaches in India for building stronger resistance to polio transmission by reducing rates of childhood diarrhea through the promoting sanitation and hygiene, hand washing, and provision of zinc supplements for children. These will be important adjuncts for the CGPP as well.

Final Comments

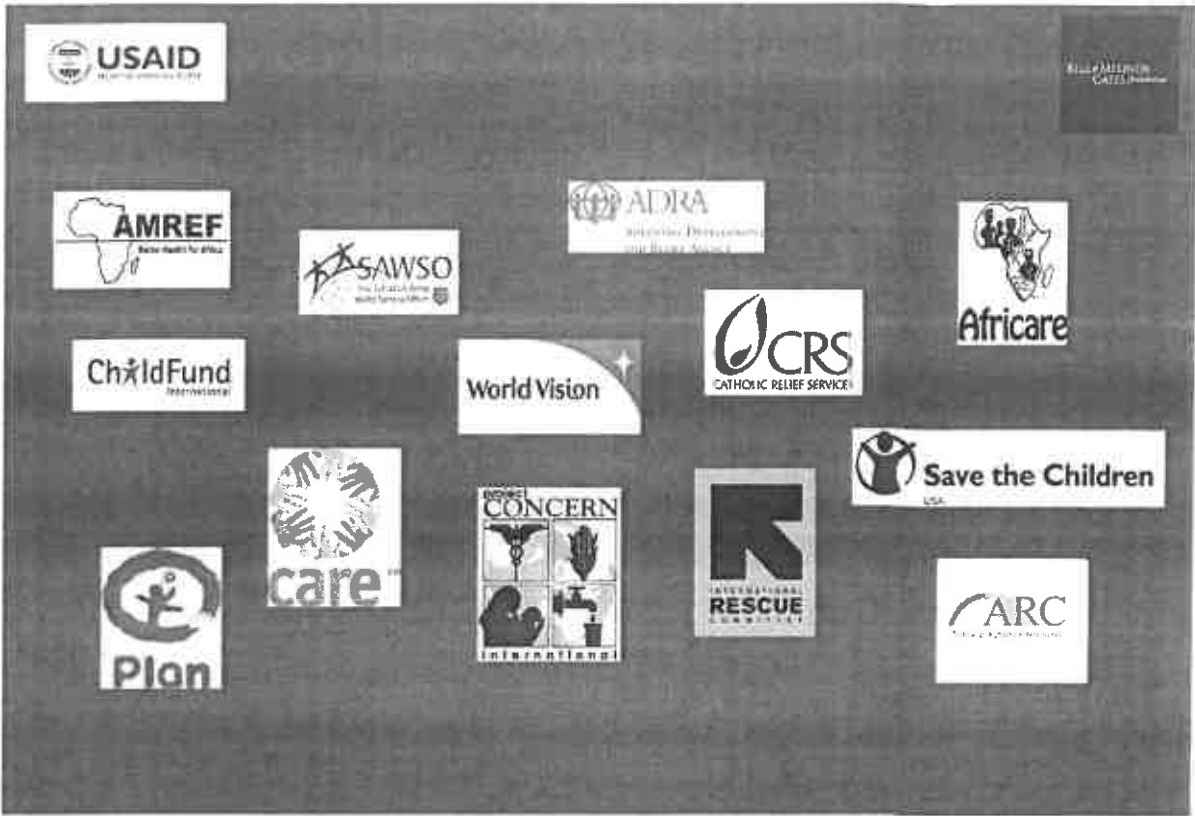
The CGPP now has 13 years of program experience at scale that now reaches a geographic area having a total population of approximately 82 million people. This experience includes social mobilization, local-level programming for strengthening routine immunizations (RI) and supplemental polio immunization activities (SIAs), and technical support for polio eradication in high-risk areas of polio transmission. This experience is becoming increasingly important for the final elimination of poliovirus transmission. CGPP is widely respected by the Polio Eradication Initiative partners in-country, and increasingly CGPP is being asked to expand into new geographic areas as well as to expand into other disease-specific activities apart from polio, such as malaria and tuberculosis.

In all three countries included in this evaluation (Angola, Ethiopia and India), levels of polio immunization are high and levels of RI have shown signs of improvement in the high-risk areas where the CGPP is working. The outreach of CGPP Community Workers into these areas is high. At the time of the most recent SIAs in Angola and Uttar Pradesh, 79% or more of all households were visited. At other times, the CGPP is reaching one-third or more of the caretakers, depending on the country and the manner of contact – either through household visits or through visits with groups of caretakers in education sessions.

Expansion of the scope of work into epidemiological and community health priorities in the final hardest-to-reach areas where polio transmission is still occurring, is suspected of occurring, or where the risk of such transmission is still high provides the opportunity to engage communities in addressing these issues – including polio – and thereby overcoming social resistance and “campaign fatigue” in these priority areas. This would also provide the CORE Group with opportunities for longer-term engagement in some of the highest-mortality areas of the world post-polio eradication where community-based programming will be critical to achieve the health-related MDGs. At the same time, the CORE Group could use this opportunity to begin to advocate for strengthening of health services for the hardest-to-reach of these hardly reached populations.

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