

## **FAILING TO ASSESS RISKS TO CHILDREN**

### **A Case Study on the Second National Water Development Project in Malawi, funded in part by the International Development Association**



Image of prepaid water meter installed with IDA funds

“There are two other important economic-political advantages that these meters have for private water companies, manufacturers, and local government: PPMs provide a steady and reliable revenue stream, and they help evade politically explosive public water cutoffs. The cutoffs are invisible with PPMs since they occur silently, inside the homes of the poor.”

–Ebrahim Harvey, *Managing the Poor by Remote Control: Johannesburg’s Experiments with Prepaid Water Meters*, in *The Age of Commodity: Water Privatization in South Africa*, eds. David McDonald and Greg Ruiters pg. 121 (2005).

**Bank Information Center  
Citizens for Justice, Malawi**

## **EXECUTIVE SUMMARY**

The World Bank is currently funding a project that involves installing prepaid water meters (PPMs) in people's homes in Mzuzu, Malawi. The purpose of the project is to increase access to a sustainable water supply for the city's residents, but the project poses many risks for people that already struggle to pay for water, including children in communities that are especially vulnerable to changes in water delivery services. Both Bank and borrower have largely ignored these risks, which could seriously undermine the project and serve to further entrench the cycle of poverty in Malawi.

Although the World Bank clearly considered the benefits to water service providers associated with PPMs, it has failed to consider the potential impacts on communities—and especially children—when payment for water is charged up front rather than provided on credit. A child's growing body and developing mind can be directly affected when access to water is compromised. Girls in particular can also be indirectly affected when they are forced to miss school to collect water or face sexual violence in the process of collecting water for themselves and their families. Proper due diligence and meaningful consultations that could have uncovered these risks and informed a proper mitigation plan were not carried out in this case. As a result, the project design suffered and there has been little to no ownership of the project by the communities. Rather, many affected people have actively fought the implementation and roll out of the project, including by filing a complaint with the World Bank Inspection Panel.

Despite the World Bank's own research on the importance of avoiding deprivations in childhood to end extreme poverty, its current safeguard policies do not include specific protections for children to prevent harm from World Bank projects. The Bank should therefore update its policies to require, at a minimum, assessments of a project's potential unique direct and indirect impacts on children. The ongoing safeguards review is an important opportunity to incorporate such measures into mandatory policies in order to ensure that future Bank projects avoid mistakes like those made by the Malawi water project, and instead contribute to truly sustainable poverty reduction.

## BACKGROUND

Prepaid water metering is, most basically, a system in which people have to pay for service before use. Users of conventional meters, on the other hand, are billed at the end of each month for services used during the month. Generally, such “postpaid” metering systems include substantial administrative justice safeguards against unreasonable or unfair disconnection. For example, customers are allowed to challenge the inaccuracy of bills to avoid disconnections. In addition, socially disadvantaged people can use water for a certain period of time in credit mode. Prepaid water meters (PPMs), on the other hand, cut off automatically when credit runs out.

Supporters of PPMs insist that they can address problems related to the sustainability and reliability of water delivery systems by guaranteeing payment to the service provider for water that is used. Improving revenue collection for the provider, supporters argue, leads to increased profits that could be reinvested in building more water connections and better infrastructure. Other benefits include reduced meter-reading errors by removing human error as a factor. In response to a draft of this case study, the GOM stated that consumers “tend to overuse” water in a postpaid system, which it described as “wasteful.”<sup>1</sup> The Bank’s response echoed this sentiment, touting the prepaid system for its ability to “heighten awareness of consumption and spending on water.”<sup>2</sup>

Critics of PPMs have a very different view. They claim promoters confuse willingness to pay with ability to pay, and that the system has detrimental effects on communities by magnifying inequality, exacerbating gender inequality, and potentially violating the right to water. The primary cause for concern with PPMs is that people will not have the resources to pay for water up front, leading them to “self-disconnect” and turn to other water sources that may not be safe for human consumption, leading to the spread of water-borne diseases. This happens whether the cost of water actually rises or people simply perceive that the cost has increased under the new system.

Following an outbreak of dysentery in 1992, caused by water cutoffs, the British government banned the use of PPMs because of the related risks they posed to public health. Similarly, in 2000, the people of KwaZulu-Natal, South Africa, endured a cholera epidemic shortly after PPMs were installed. In that case, self-disconnections as well as malfunctioning PPMs resulted in many households being denied access to a clean water supply. Such barriers to access increased the vulnerability of communities to water borne diseases, and over 100,000 people were infected with cholera. 259 people died between August 2000 and February 2002, whereas

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<sup>1</sup> GOM Response on file with the author.

<sup>2</sup> Bank Response on file with the author.

only 78 people had died of cholera in the preceding two decades. Research confirmed that the increased incidence of cholera was mainly a result of the installation of PPMs.<sup>3</sup>

## **WORLD BANK PROJECT**

Malawi is facing serious challenges in its efforts to achieve the Millennium Development Goals (MDGs), including sustainable access to safe drinking water and basic sanitation. Mzuzu city, located in the northern region of Malawi, is one of the largest cities in the country with a population of about 128,432. Over 30 percent of the population of Mzuzu lives below the poverty line of \$2 per day, and most people live in informal settlements.

The Northern Region Water Board (NRWB) is responsible for the water supply in Mzuzu city and the entire northern region of Malawi. Currently, water supply is unevenly distributed because of the informal settlements in Mzuzu city. NRWB has introduced a prepaid metering water system as part of a larger World Bank loan to the Government of Malawi (GOM), known as the Second National Water Development Project (SNWDP). According to World Bank documents, the SNWDP's stated objectives include increasing access to a sustainable water supply and improving water resources management.<sup>4</sup> One of the primary obstacles to achieving these goals, according to the Bank, is low cost recovery which prevents water boards from reinvesting in necessary infrastructure to allow more connections to be made.<sup>5</sup> Thus, an important component of the project is improving revenue collection of all regional water boards in order to ultimately increase access. PPMs appear to have been chosen in order to overcome this obstacle. The pilot began in high and middle income areas, including Chimaliro, Fairclough, Old and New Katoto including Upper and Lower Chasefu, and is expected to ultimately expand to the whole country.

A case was brought to the Inspection Panel that detailed negative social impacts the community expected to result from the installation of PPMs. The Panel declined to register the complaint because the project had not yet been rolled out to low income communities, and there appeared to be sufficient time for Bank management to carry out the necessary assessments and other mitigation measures to ensure potential harms did not occur. However, the rollout of the project has continued without significant revisions to the original, inadequate assessments or meaningful consultations with affected communities, and local residents have already begun to experience negative impacts associated with PPMs.

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<sup>3</sup> For more about this case, *see* Hamed Deedat and Eddie Cottle, "Cost Recovery and Prepaid Water Meters and the Cholera Outbreak in KwaZulu-Natal" (2002).

<sup>4</sup> Project Information Document pg. 2 (2011), *available at* [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2005/10/17/000104615\\_20051018114902/Rendered/PDF/MWI.NWDP.PIDSep05.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2005/10/17/000104615_20051018114902/Rendered/PDF/MWI.NWDP.PIDSep05.pdf).

<sup>5</sup> *See* World Bank, Project Appraisal Document, pg. 3-4 (April 27, 2007), *available at* [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/05/07/000020953\\_20070507133948/Rendered/PDF/38457.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/05/07/000020953_20070507133948/Rendered/PDF/38457.pdf).

## **CASE STUDY: PURPOSE/METHODOLOGY**

The purpose of this case study was to identify risks associated with PPMs to local communities, with a particular emphasis on the potential impacts on children. This case study is based on a survey that assessed public acceptance and awareness of PPMs that were being installed by NRW in pilot areas of Mzuzu city. In addition, the study included Nkhatabay, Mzimba, Karonga, and Rumphu districts where the technology will roll out upon successful implementation in the pilot areas. The survey included 2,729 households that have postpaid meters, and 33 households that have the newly installed PPMs. Most households interviewed (over 40%) have an average monthly income of less than \$3 per day. This study summarizes the opinion data collected through the survey.

## **STUDY FINDINGS**

Three major conclusions were drawn from the analysis of the survey data: 1) the social assessment in this case was inadequate in its treatment of potential impacts of PPMs on children; 2) affected communities were not properly consulted; and 3) few if any appropriate measures to mitigate negative impacts resulting from the project were implemented at the time the pilot project began.<sup>6</sup>

### *Inadequate Social Assessment*

Although the Bank's project documents reference the importance of increased revenue collection for water providers,<sup>7</sup> they do not consider the potential risks to people in the communities when the actual or perceived cost of water rises. A proper assessment would have considered direct and indirect impacts of the project, including those related to health, education, and social disruption that uniquely affect children, and girls in particular, and can seriously threaten development progress—thereby undermining the Bank's goal of poverty reduction. Nevertheless, the assessment ignored completely the particular risks to children posed by the project, and was never updated or improved to include such analysis despite the complaint made to the Inspection Panel.

### Direct Impacts

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<sup>6</sup> While NRW has instituted some mitigation measures following the Inspection Panel complaint, discussed later in the study, such measures should have been part of the project from the beginning as part of a systematic assessment and mitigation process.

<sup>7</sup> See e.g., World Bank, Project Appraisal Document, pg. 14, 26, 28, 29, 30 (April 27, 2007), available at [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/05/07/000020953\\_20070507133948/Rendered/PDF/38457.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/05/07/000020953_20070507133948/Rendered/PDF/38457.pdf).

Transitioning to PPMs from postpaid meters means that people will have to change how they pay for water. Most of the people in Mzuzu city (over 40%) live on less than US\$3 per day, and even if the actual cost of water does not increase drastically, any change to regular living expenses can have devastating effects—particularly when it comes to a vital resource such as water. In this case, more than half of the residents that had PPMs installed stated that they believed the new system was more expensive than the postpaid system. Several respondents also noted that, whether or not the actual cost of water increased, their transport costs could also potentially increase because paying in advance would likely require more trips to increase credit on their PPM cards as well as more trips to obtain smaller amounts of water. Under the postpaid system, billed monthly, individuals could obtain larger amounts of water in fewer trips. Some of the respondents also reported that within two weeks of using the prepaid system they had already spent more money than they used to pay per month under the postpaid system. Similar reports indicate the cost per kiloliter of water had increased when the PPMs were installed (by about US\$.06), and that residents were charged an additional daily service fee.

### Indirect Impacts

The related impacts from the real or perceived increase in the cost of water or are particularly significant for children as they are at a time in their lives when any deprivation—particularly lack of access to health services or education—can lead to devastating, and life-long effects. Having to pay for water ahead of time is a major change to the system currently in place, which allows some flexibility in terms of payment. For individuals that have irregular or no income, this flexibility can mean that they do not have to choose between purchasing drinking water for their child today or paying their child’s school fees. Because water is such a vital resource, however, rigid payment requirements inherent in the prepaid system will force many parents to make this difficult choice. The risks to girls are especially concerning.

#### a) Health Impacts

One of the most important risks to assess when making changes to a water delivery system are those related to health. In addition to the possibility of dehydration, the lack of access to water increases a child’s vulnerability to disease. When water becomes too expensive, families are forced to decrease their consumption and/or use water from unprotected sources, which can be unsafe and un-potable for human consumption, resulting in higher rates of diseases such as cholera, dysentery, typhoid, and diarrhea. In this case, families that have been unable to access water due to their inability to prepay have had to resort to other sources of water, including the nearest boreholes, wells and rivers.

Using water from unsafe sources is particularly dangerous for children, whose immune systems and detoxification mechanisms are less developed than adults, making them less able to respond

to water-related diseases. Their lower body mass also makes them more vulnerable to water borne chemicals than adults.<sup>8</sup>

A child's health is also particularly at risk from malnutrition. As the price of water increases, families are forced to make difficult tradeoffs between water and food. The effects of malnutrition are devastating for children, including cognitive delays and other lifelong problems that keep them from reaching their full potential.

When water is scarce, children—and particularly girls—are often responsible for searching for and collecting water, meaning some form of domestic child labor will likely be encouraged. Women and girls are the primary water collectors in 72% of households worldwide.<sup>9</sup> Collecting water from distant sources puts girls at risk of physical attack and rape, and can lead to injuries when carrying heavy loads. In addition to collecting water for consumption or use in the home, girls without water supplies or toilets in their homes and schools are at risk of physical attack and rape when traveling to public facilities or when they have to defecate in the open in the absence of any amenities.<sup>10</sup> Such attacks have lifelong negative impacts on girls in terms of their psychological and physical health.

#### b) Education-Related Impacts

Barriers to accessing water can have significant impacts on a child's ability to obtain a quality education. The time spent collecting water leaves many children, and particularly girls, little time to attend school. Families that face higher water bills are often forced to make difficult tradeoffs between paying school fees and purchasing water. School fees for boys as opposed to girls would likely be prioritized in parents' tighter budgets—particularly given girls' traditional roles as water carriers for their families. In Chasefu, one of the communities where PPMs were installed in this case, parents have already begun pulling their girls out of school to assist with water collection.

Even when they have time and money to pay for school fees, many girls may have to drop out of school due to the lack of toilets with privacy and facilities for menstrual hygiene. In this case, current sanitation structures operate in the old system, and schools are already often unable to pay their monthly bills. The prepaid system could therefore be too expensive or onerous for schools to maintain.

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<sup>8</sup> WHO, *Right to Water* (2003), available at [http://www.who.int/water\\_sanitation\\_health/en/righttowater.pdf](http://www.who.int/water_sanitation_health/en/righttowater.pdf).

<sup>9</sup> WHO, *Swimming upstream: why sanitation, hygiene and water are so important to mothers and their daughters* (2010), available at <http://www.who.int/bulletin/volumes/88/7/10-080077/en/>

<sup>10</sup> Shirley Lennon, *Fear and Anger: Perceptions of Risks Related to Sexual Violence Against Women Linked to Water and Sanitation in Delhi, India* (2011), available at [http://www.shareresearch.org/LocalResources/VAW\\_India.pdf](http://www.shareresearch.org/LocalResources/VAW_India.pdf).

### c) Social Disruption

The recent progress made in Malawi on gender equality will likely be undermined by higher water costs that lead to girls dropping out of school and resuming traditional work in the home. Girls may become more vulnerable to child marriage because they are considered old enough to get married as long as they are able to do chores around the home—such as fetching water. And because they no longer have an education to rely on, they may become dependent on a man for financial support, or be forced to beg for water.

The community at large also suffers when people are forced to restrict their use of water. People may no longer give away water to their neighbors or others in need, such as orphaned children, when the cost of water increases. Crime rates may increase for young boys and girls who have no choice but to steal water from others. Conflicts in communities can increase as PPMs put an end to communal sharing of scarce resources, and it becomes more difficult to celebrate or share in social and cultural events such as weddings and funerals. Additionally, the need to prepay for water can cause serious problems in cases where there is an emergency need for water, such as in the case of fire.

Social relations can seriously erode when communities that traditionally share the burden of providing water access to everyone are forced to suddenly adjust to an individualized system. Traditional methods of coping can be entrenched in the community and the way individuals interact with one another and order their lives. A major change to the water delivery system will force individuals to interact and order their lives in different ways, leading to potential fractures in social relations.

#### *Lack of Consultation*

According to the Bank's own consultation guidelines, consultations can build capacity among affected communities, foster ownership of the project, and identify risks posed by a project.<sup>11</sup> In the project documents for SNWDP, the Bank states stakeholder consultations are “important for the success, sustainability and to ensure a sense of ownership” of the project.<sup>12</sup> Consultations are also a key method of information gathering for task teams and borrowers that can identify problems before they arise, and prevent disputes with affected communities, leading to cost savings for the Bank and borrower.

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<sup>11</sup> Stakeholder Consultations in Investment Operations, Guidance Note, World Bank, pg. 8 (2011), *available at* [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/02/26/000386194\\_20120226233951/Rendered/PDF/671210WP00PUBL0ultations0Note0web20.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/02/26/000386194_20120226233951/Rendered/PDF/671210WP00PUBL0ultations0Note0web20.pdf).

<sup>12</sup> World Bank, Project Appraisal Document, pg. 51 (April 27, 2007), *available at* [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/05/07/000020953\\_20070507133948/Rendered/PDF/38457.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/05/07/000020953_20070507133948/Rendered/PDF/38457.pdf).

In this case, communities were not consulted before the installation of PPMs. Despite the Bank's claims that the project was "voluntary," many people had no prior knowledge of the project at all. Most respondents (more than 60%) were totally unaware that PPMs were being installed, and almost 80% of those that had PPMs installed had no idea whether they could opt out of the new system or not. Many of the people that received a prepaid meter knew nothing about it until they received a congratulatory letter in the mail about being chosen to participate—no details about how the meter worked or where to get help if it failed were provided. Only two respondents indicated they were given an option to decline the new meter, while the remaining households believed they were not given an option to decline, or were not sure.

The survey also demonstrated a lack of understanding about the project. Almost 25% of the respondents had no idea how to operate the PPMs that were installed in their homes. More than half of the respondents with PPMs believed the prepaid system to be more expensive than the postpaid system, whereas over 25% of the respondents from the same group thought it was cheaper. The survey revealed a clear preference among all respondents for the postpaid system over the prepaid system (65% to 35%), even though the majority of respondents had no experience with the prepaid system.

To this day, the Bank maintains that the pilot program was voluntary, yet the evidence on the ground indicates otherwise. Members of the community claim that they returned from their daily work or businesses only to find a new PPM installed in their homes, or were simply given notices informing them of the change. Later, after complaints arose regarding the voluntariness of the project, the NRW claimed that people could have their old post-paid meters back if they chose. However, when people asked for their old meters, NRW claimed they no longer had them, and that they should continue using the PPMs until the old meters could be located.

The GOM recently stated that, "[t]o date the Ministry is yet to receive any formal complaint from those community members that are fighting the Pilot Pre-paid meter project." Yet, this is unsurprising given the GOM's failure to provide a complaint mechanism associated with the project or even a space for meaningful dialogue between NRW and affected communities. According to local activists, the NRW and GOM cancelled a number of meetings the community had requested.

### *Lack of Appropriate Mitigation Measures*

At the time the case study was originally prepared, there was no public documentation of any planned mitigation measures to be taken by NRW in implementing the PPM portion of the project. In response to an early draft of this study, the Bank claimed that special measures were in fact in place to mitigate inconvenience and hardship when prepaid credit was exhausted,

including reserved units at each meter for after-hours purchase or when a consumer did not have immediate cash. In addition, the Bank claimed the PPMs had a "fire mode" that customers could activate in case of emergency. Community members continue to refute these claims, which are also suspect given that residents have had to resort to other, dangerous sources of water. If sufficient safe water was available to them through the PPMs, there would be no need to seek out alternative sources.

While the mitigation measures cited by the Bank would likely be welcome at this point, it is important to note that even if they are implemented, the deprivations already experienced by the children in these communities may be irreversible.

## **RECOMMENDATIONS**

The assumption by the Bank and GOM in this case—that the Bank or the government knows better than the people themselves how much or how frequently they should access water—is troubling at best. In addition, assuming that people living in a water scarce country with limited incomes are “wasteful” or unaware of their consumption and/or spending on water is demeaning. Cost recovery may be an important goal and could contribute to the sustainability of water delivery services, but the needs of the individual residents that will be affected by this project must also be respected and considered throughout the project cycle. Water is a vital resource, and in a water scarce country, changes to access and delivery methods must be informed by thorough assessments that include analysis of risks posed to children, and meaningful consultation with potentially affected communities that are inclusive of children.

### *Assess Risks to Children*

Because access to water is essential—not only for survival but also for the enjoyment of other rights that can allow children to lift themselves out of poverty—the Bank should consider impacts on children before engaging in projects that affect the supply of water for vulnerable communities. A thorough assessment of the risks associated with the shift to PPMs, including potential impacts on children, would enable the Bank and the borrower to avoid negative impacts on children.

In response to a draft of this study, the GOM noted that the Ministry conducted an audit which indicated all NWDP projects were in compliance with the Bank’s current environmental and social safeguards, and the Bank agreed with this assertion in its comments to the study. However, the current World Bank safeguard policy on environmental and social assessment does not require analysis of potential impacts on children. As a result, social assessments generally do not include information that could be helpful to the Bank and borrower in designing a project that avoids negative impacts on children. This case was no different. The current World Bank

safeguards review is an opportunity to incorporate lessons learned from this project and others, and update the policy to reflect the Bank’s own research on the importance of investing in children for sustainable development.

### *Conduct Consultations in Good Faith and Include Children*

The Bank should assist the Government of Malawi to design a detailed plan for consultations that can bridge the current information gap between those carrying out the project and the affected communities. Although the Bank often delegates the responsibility for carrying out consultations to the borrower, the Bank task team retains responsibility for oversight and providing advice and guidance based on international good practice.<sup>13</sup> A project held out to be voluntary should never be conducted in the way it was done in this case—providing little to no notice of the change in metering systems and forcing those with PPMs to remain on the new system until their old meters could be “found.”

Consultations should also be inclusive of children in ways that are appropriate according to their age, maturity, gender, differing abilities, and context. In response to a draft of this case study, GOM stated that while it is “sympathetic” to suggest that the “voices of children” be included in community consultations, the focus should remain on mothers, who are most affected. However, including children in the consultation process is not simply a “sympathetic” suggestion, and simply consulting their mothers would be insufficient. According to UNICEF, children not only have the potential to “enrich decision-making processes,” they also “have the right to express their views in all matters affecting them.”<sup>14</sup> The participation of children contributes greatly to their own well-being as well as to the sustainable development of their communities. The inclusion of children in community consultations can also build their capacity to participate as active and responsible citizens, foster their ownership of the project, and identify unique risks to children that are posed by a project. Children themselves must be included in the consultation process.

To make the consultation process as effective and inclusive as possible, the Bank should ensure that information is provided to all community members, including children, on how consultations will be carried out and how communities can be involved at every stage of the project cycle. In addition, grievance mechanisms should be implemented and publicized to the communities. Training should also be provided for the operators of the water delivery system on how to target information campaigns and how to carry out consultations with affected communities, including specific training and guidance on how to safely and effectively consult with children.

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<sup>13</sup> Id.

<sup>14</sup> See UNICEF, *Every Child’s Right to be Heard* (2011) available at [http://www.unicef.org/adolescence/files/Every\\_Childs\\_Right\\_to\\_be\\_Heard.pdf](http://www.unicef.org/adolescence/files/Every_Childs_Right_to_be_Heard.pdf).

Consultations should also include training and information sessions for community members on how communities, businesses, and public services (e.g. schools and hospitals) will be impacted by changes in water delivery and whether the delivery of those services will change as a result. They should also include information on the quality of the water, cost of the service, and proposed changes to the service that are easy for both adults and children to understand.

### *Mitigate Risks through Informed Project Design*

In comments submitted to a draft of this case study, the World Bank stated that, “the purpose of piloting is to test, adapt, refine and improve.” However, neither the Bank nor GOM should be permitted to test potentially harmful new systems for accessing water without considering the risks to the community or involving it in the process to mitigate detrimental impacts. Rather, both the Bank and the borrower should use the information from a proper social assessment, one that includes an assessment of the unique direct and indirect impacts of the project on children, and inclusive consultations to design the project in such a way as to minimize negative impacts—particularly on children. In this case, some of the risks and impacts of PPMs could be addressed by mitigation measures such as subsidization schemes that are inclusive of orphaned children and child-headed households, training for the service providers, and effective dispute mechanisms.

Providing support directly to households could address the primary risks associated with the installation of PPMs. In order to avoid or mitigate the risks of contracting devastating water-borne diseases, similar to past instances in Great Britain and South Africa, the system should include a way to smooth expenditures, especially connection payments or usage fees, so that poor households with volatile incomes can spread payments overtime. Cash transfers or direct subsidies—that are inclusive of child-headed households, children with disabilities, and others that are often overlooked or excluded—could also be provided for those with little or no income. The World Bank commented on a draft of this case study, citing the potential for prepaid systems to help target subsidies which could be loaded to smartcards automatically each month. However, such subsidization schemes have not yet been implemented, even though the pilot project began in early 2013.

Service providers must also be provided adequate training and support. The Bank should work with the service provider to set appropriate tariff rates, and avoid setting tariffs too high or changing the structure of the tariffs such that consumers perceive them as too high. In addition to preventing individuals from accessing water, high tariffs (or the perception that they are too high) can hurt the profitability of the operator by restricting consumption, thereby undermining the ultimate goal of expanding water connections. It is also important for service providers to know and understand the importance of clean water to poor communities, and the consequences of water cutoffs for individuals living in poverty. The project will be less sustainable and fail to

meet its development objectives if a dysentery outbreak or a cholera epidemic occurs due to water cutoffs or self-disconnections.

Going forward, the Bank should encourage the creation of professional associations to train and provide accreditation for consultants who design networks or provide expertise to water operators on community issues. This could lead to more jobs in the area, and fewer people having to make tradeoffs between buying water and food, medicine or schools fees for their children. Training must also be provided for all parties involved in the distribution of water—public and private—to understand their obligations toward one another as well as the community.

Finally, the Bank must continue to monitor and audit the project and mitigation measures to ensure the needs of the community, and particularly its most vulnerable members such as children, are met. Effective dispute mechanisms must be in place to address problems as they arise that are inclusive of children.

## **CONCLUSION**

Although NRW has made some changes to the project since the complaint to the Inspection Panel was raised, the risks posed to children by this project should have been identified and mitigated before the pilot began. Some of the potential impacts outlined in this study have already been experienced by children—impacts that can be devastating to a child’s development and her potential to lift herself out of poverty. The lack of due diligence and failure to conduct adequate consultations with children or adults, or to design proper mitigation measures ahead of the pilot program, seriously risk undermining the achievement of the World Bank’s goals of reducing extreme poverty and boosting shared prosperity.

To ensure that these oversights are not repeated in another project, the Bank should require all assessments to include an analysis of a project’s potential impacts on children. The NRW’s response to this case study—that it is in full compliance with World Bank safeguard policies—is a clear indication that the Bank’s safeguards are inadequate in their current form to address the issues raised in this study. In order to enhance development outcomes and avoid community opposition to its projects, the World Bank should explicitly require that environmental and social impact assessments specifically analyze a project’s expected impacts, both direct and indirect, on children. In this case, an adequate assessment coupled with inclusive consultations could have identified risks to children in the affected communities, and provided the necessary information to incorporate appropriate mitigation measures in the design of the project.