

Helpdesk Research Report: Evidence for the Development Impact of Inclusive Service Delivery

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Query: What is the evidence (with examples) to show that making service delivery more inclusive (i.e. by extending services to under-served groups) brings development returns? Focus on outcomes relating to the millennium development goals and growth and focus on the education, health and WASH sectors. Please comment on the robustness/scope of the evidence.

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1. Overview

It is widely stated that expanding inclusive service delivery is critical to making further progress on the MDGs, for broadening the inclusiveness of growth, and for tackling persistent poverty and inequality (see ADB 2008, Kabeer 2010, UNICEF 2010, UN 2011). Various reports stress continuing disparities in MDG progress between different regions (especially between core and peripheral regions, urban and rural areas, and conflict-affected and peaceful regions). Within these under-served regions, various marginalised groups are persistently disadvantaged: women, certain minority ethnic or religious groups, and people with disabilities (see UN 2008, UN 2011, UNICEF 2010, Kabeer 2010).

This paper assesses the evidence of the human development and economic impacts of measures to make services more inclusive. These efforts mostly involve extending access to under-served groups, but in cases where under-served groups already have access to services, they may also focus on improving utilisation or the quality of services delivered to marginalised groups.

Attribution issues hamper examination of the contribution of efforts to make service delivery more inclusive. As many of the country case studies below demonstrate, improvements in access to

services are normally dependent on a range of factors, and successes cannot be attributed solely to efforts to expand service delivery. The impact on some MDGs is more clear-cut in some cases than in others. For example, progress on improving rates of primary school enrolment (MDG 2) and reducing the proportion of people who lack access to safe drinking water (MDG 7C) is easier to demonstrate and explain than progress towards a decline in childhood mortality (MDG 4) or maternal mortality (MDG 5). The ability to measure progress for some MDG goals is constrained by a lack of **data** (Sumner & Lawo 2010). Furthermore, donors often do not measure the wider developmental impacts of their interventions (IEG 2010). The evidence base on basic services in conflict-affected countries and fragile states is particularly weak (Carpenter et al 2012).

Key Findings

A large number of qualitative country case studies provide detailed, long-term assessments of efforts to make services more inclusive and improve progress towards the MDGs. The majority of these studies demonstrate a strong positive effect of these efforts, although some highlight shortcomings. Most of the case studies acknowledge that success has been underpinned by broader improvements in governance and in social and economic development, and that the improvements cannot be attributed entirely to efforts to make services more inclusive. These findings are generally supported by impact evaluations of specific programmes to improve access to basic services. Some of these evaluations, however, find that these programmes did not create broader health or economic benefits, and that lack of impact was usually the result of poor implementation.

More systematic analysis of the evidence has been conducted in the field of health. Two systematic reviews suggest that the evidence for most mechanisms for improving access is generally of poor quality and that where the evidence is good (as in the case of conditional cash transfers (CCTs), success is often underpinned by contextual factors (such as the existence of a functioning health system).

Economic Growth: While few case studies examine the links between extending basic services and improvements in economic growth, the broader quantitative literature provides some comparative evidence to suggest that extending services may boost growth. A cross-country quantitative study by Grimm (2011) finds strong evidence that health inequality dampens economic growth. Evidence from India suggests that higher starting rates of human capital can lead to more rapid rates of economic growth and poverty reduction (Ravallion & Datt 2002). Research on India finds that government investments in education have a modest impact on poverty and productivity, but that investments in rural roads and agricultural research are more effective in this respect (Fan et al 2000). A similar study on China finds that government expenditure on education had the largest impact in reducing rural poverty and regional inequality and significant impact on production growth (Fan et al 2002). This finding that investing in human capital is more likely to drive poverty reduction and balanced growth than investment in physical capital is supported by a number of other studies on China (Hare & West 1999, Heckman 2005, Fleischer et al 2008). Several studies estimate that extending basic services in poor countries can deliver large growth benefits, and that the return on investment associated with this expansion is good compared to other avenues of spending (Hutton et al 2006, Frontier Economics 2012). These estimates should however be treated with caution.

Education: Several country case studies show a clear link between efforts to extend education to rural areas and improvements in school enrolment rates (MDG 2). Case studies on Cambodia (Engel & Rose 2011), Benin (Engel & Cossou 2011) and Ethiopia (Engel 2011) describe how targeted investments in rural education have contributed to rapid improvements in enrolment rates and more

equitable service provision. These case studies find that these successes cannot be attributed entirely to programmes to extend services – they have also been assisted by broader improvements in governance and in social and economic development. They also stress that rapid increases in access levels have tended to be accompanied by a decline in quality.

A small number of studies have examined the broader economic benefits of extending education to people with disabilities. These studies (from Nepal, the US, South Africa, Bangladesh and Vietnam) find that extending education to people with disabilities has significant economic benefits, by increasing subsequent levels of employment and income (Lamichhane & Sawada 2009, Abetemarco et al no date). They also stress that inclusive education is more cost-effective than specialist provision for people with disabilities.

Health: Two systematic reviews provide a solid basis for understanding the evidence on the impact of various mechanisms for improving health service delivery. The report finds that there is ‘good quality evidence of the effects of conditional cash transfers (CCTs) in Latin America’, though it notes that ‘their applicability, sustainability and desirability in more deprived settings is uncertain’ (Alliance for Health Policy and Systems Research 2006, 12 and 18). The evidence on other key mechanisms was found to be generally poor. Another systematic review on health voucher programmes finds robust evidence that health voucher programmes can increase the use of health goods/services and modest evidence that they can effectively target specific populations and improve service quality.

Another study based on impact evaluations from Latin America, Africa, Asia and the Middle East finds that CCTs are effective at increasing the utilisation of key health services, but that results are mixed with respect to nutrition and health outcomes (Gaarder et al 2010, 6).

A case study of Bangladesh shows that improvements in targeting rural populations (Rodriguez Peres & Samuel 2011) have led to rapid falls in child mortality (MDG 4). This study acknowledges that success in achieving these outcomes has also been underpinned by broader factors such as economic growth and cultural homogeneity. A programme-level impact evaluation in Ethiopia presents evidence that extending preventive and basic curative health services to previously underserved areas has led to an increase in the proportion of children vaccinated, but that the effect on preventive maternal care was limited and there was no broader decline in diarrhoea and cough diseases among children (Admassie et al 2005).

Water, Sanitation and Hygiene: A study comparing the impact of Dutch assistance on water and sanitation programmes in a number of countries finds that rural water programmes are broadly beneficial to poor communities and that the poorest people usually enjoy the benefits of improved water supplies. It also finds, however, that the very poorest and most marginalised communities typically have less access to these programmes and benefit less from them (MFA Netherlands 2012). A few studies have estimated that there are considerable economic benefits associated with improving access to water and sanitation (Hutton et al 2006, Frontier Research 2012).

An impact evaluation study shows that two water supply and sanitation projects in rural Pakistan improved households’ access to water supply and improved school attendance among high-school-age girls. However, the projects had no significant impact on the incidence and intensity of diarrhoea and on increasing labour force participation and hours available for work (Rauniyar et al 2011). Several other case studies (Uganda, Ghana, and Ethiopia) show that targeted efforts to improve rural water and sanitation have been successful (MDG 7C), though these studies do not examine broader impacts of these interventions on health outcomes, poverty reduction, or economic growth.

Integrated Programmes: The strongest evidence on the impact of promoting inclusive services relates to integrated CCT programmes. A number of studies have assessed the wider and long-term impacts of Mexico's PROGRESA/*Oportunidades*, although with mixed findings about the broader health and poverty reduction outcomes. Studies on CCTs in Brazil and Chile have shown that these programmes have contributed to reductions in poverty levels, and a rise in school enrolment rates.

2. Education

Economic Growth

Several studies examine the broader links between extending education to peripheral regions and economic growth. Ravallion and Datt (2002) compare economic growth in Indian states and find that non-farm growth is more pro-poor in states with initial higher literacy, higher farm productivity, higher rural living standards and lower infant mortality. This demonstrates that improvements in human resource development can have a further impact by promoting higher rates of poverty reduction and growth that is more pro-poor. More broadly, they note that low basic educational attainment is a key source of income inequality and may suppress labour productivity.

Fan et al (2000) use a simultaneous equation model to estimate the direct and indirect effects of different types of government expenditure on rural poverty and productivity growth in rural **India**. They find that investments in rural roads and agricultural research had the largest poverty impacts and productivity gains. They found that government spending on education had the third highest impact on rural poverty and productivity, while spending on health had only modest impacts.

There is a considerable literature on the relationship between human capital, growth and inequality in **China**. (Human capital refers to the population's skills and knowledge and is closely related to education.) Fan et al (2002) use provincial-level data for 1970-1997 to estimate the effects of different types of government expenditure across China. They find that government expenditure on education had the largest impact in reducing rural poverty and regional inequality and significant impact on production growth. The second most impactful type of expenditure was spending on agricultural research and development. The study also found a 'striking' lack of impact of specifically-targeted anti-poverty loans.

Hare and West (1999) argue that improving human capital (especially through investments in education) and physical infrastructure in interior provinces is more effective at closing regional income gaps than efforts to promote enterprise growth, for example by providing credit to interior businesses. Heckman (2005) argues that the imbalance in investment in human capital compared to physical capital in China thwarts physical investment initiatives designed to foster growth in interior China. He argues that a more balanced portfolio of investment will promote economic growth and reduce inequality in the long run. This perspective is supported by Fleisher et al (2008) who conduct a cost-benefit analysis of various policies in China. They conclude that investing in human capital is a more effective policy to reduce regional gaps in China than investing in physical capital. They also find that it provides an efficient means to promote economic growth.

Country Case studies

A study on **Cambodia's** progress in basic education finds that there had been substantial progress during the post-war period. 'Almost all children are now entering school, and far more than before are completing primary. The gender gap in primary and lower secondary has effectively been closed. The rate of improvement has been most notable among girls, in rural and remote areas and among lower income quintiles'. This success is attributed to the government's sector-wide administration and planning, and supply-side investments in services. The report also highlights the role of several innovative NGOs in working with the most marginalised to improve the quality and relevance of education. The primary school enrolment rate is approaching 100%. Secondary school enrolment has almost doubled over 10 years to 32% in 2009/10. Educational provision has become more equitable – with substantial reductions in the gaps between rural and urban areas, boys and girls, and socio-economic levels. Despite this progress, however, high levels of corruption and low levels of institutional capacity are constraining further progress in education. Dropout rates remain high and low quality education remains a problem (Engel & Rose 2011).

Another ODI study examines the rapid growth in primary school enrolment rates in **Benin** since the 1990s, and a rapid decline in gender disparities in education. Disparities in access to education across regions and socio-economic groups have declined significantly over the same period. Despite progress, however, low quality education remains a problem. The study argues that key factors in this story 'included the political support to prioritise improved access to education, supported by substantial increases in government and donor funding, and highly effective outreach campaigns to increase public perceptions of the value of education'. The report notes that '[p]rogress in education is likely to have contributed to, and in part been supported by, improvements in other areas of social and economic development. Enrolment rates are correlated with improvements in child and maternal health, infant mortality and morbidity rates and, particularly rates of malnutrition, which can significantly undermine learning abilities' (Engel & Cossou 2011, 14).

A third ODI study examines **Ethiopia's** rapid and equitable expansion of access to education. Following the end of the civil war in 1991, primary enrolment grew rapidly – from 3 million in 1994/5 to 15.5 million by 2008/9. Secondary school enrolment grew fivefold during the same period, but education quality suffered badly, and large regional inequalities remain. Access to education has become more equitable in terms of gender, however, with the gender parity index in education rising from 0.66 to 0.88. There has also been a slight decline in the degree to which income inequality correlated with years of schooling. Key factors behind the expansion of access included a sustained government-led effort to reduce poverty and expand the public education system equitably. This was backed by large increases in education expenditure and aid to the sector, as well as improved planning and implementation capacity at all levels (Engel 2011).

The long-term impacts of **Bangladesh's** primary education stipend (PES) programme have been examined in a longitudinal study spanning the years 2000 to 2006. Using covariate matching and difference-in-difference methods, the programme is shown to have negligible impacts on school enrolments, household expenditures, calorie consumption, and protein consumption. At the individual level, the PES has a negative impact on grade progression, especially among boys from poor households who are ineligible to receive stipends at the secondary level. The study finds that the programme does lead to improvements in height-for-age among girls and body mass index among boys, but argues that 'the impacts...are remarkably small for a programme of its size'. The study suggests that '[p]oor targeting, particularly limited coverage and lack of geographical targeting, plus

the declining real value of the stipend, are the most plausible reasons for this lack of impact' (Baulch 2011, v).

A programme to achieve universal primary education in **China** since 1996, which focused on compulsory education for children living in poverty, successfully achieved its aim. Over five years, schools were renovated in provincial areas, teachers were trained, and equipment provided for west and central regions. Fees were eliminated for rural students in 2007 (National Centre for Education and Development Research 2008).

Following independence in 1946, **Jordan** decided to build the knowledge-based sectors by improving basic education, and adopted a strong focus on rural areas. The country currently has a primary enrolment rate of 99% for both boys and girls, and a secondary enrolment rate of 85% (Roggemann & Shuki 2010).

Extending education to people with disabilities

A small number of studies have examined the broader economic benefits of extending education to people with disabilities. A study on the wage returns to investment in education for disabled people in Nepal finds that the estimated rate of return was very high amongst this group – ranging from 19.4 to 33.2 per cent (Lamichhane & Sawada 2009). The study also finds that years-of-schooling had a strong positive effect on the probability of employment. A study from the US finds that disabled children in mainstream schools had an employment rate of 73 per cent, compared with a rate of 53 per cent for those in segregated schools (Abetemarco et al no date).

Hasan (2006) assesses inclusive education programmes in four countries (South Africa, Bangladesh, Vietnam and Nepal). He finds that education at special schools was far more costly than inclusive education, focused on vocational, rather than academic subjects and tended to isolate disabled children from society and society from disabled children. Despite the obvious benefits of inclusive education, there was little evidence in these countries that an inclusive approach had been applied.

3. Health

Grimm (2011) uses a panel data set covering 62 low and middle income countries over the period 1985 to 2007 to examine the effects of inequality in health on economic growth. He finds 'substantial and relatively robust negative effect of health inequality on income levels and income growth controlling for life expectancy, country and time fixed-effects and a large number of other effects that have been shown to matter for growth' (Grimm 2011, 448). He recommends that 'reducing inequality in the access to health care and to health-related information can make a substantial contribution to economic growth' (Grimm 2011, 448).

The 2011 MDG progress report claims that 'targeted interventions' in health have succeeded in reducing child mortality, with the number of deaths of children under the age of five having declined from 12.4 million in 1990 to 8.1 million in 2009, although no detail is provided about how this calculation was made (UN 2011).

Systematic reviews and impact evaluations

A systematic review on the evidence on child and maternal health (Alliance for Health Policy and Systems Research 2006) examines five mechanisms to improve access to rural or underserved areas:

- The introduction, removal or change in the level of user fees; risk protection mechanisms, including
- Community-based insurance
- Social insurance
- Contracting out and other forms of privatization or use of private sector providers to improve access to care
- Demand-side interventions such as vouchers or conditional cash transfers (CCT).

The report concludes that 'there remain substantial evidence gaps in the field of health financing', and calls for 'more high quality impact evaluations...particularly for insurance mechanisms and contracting out'. It finds that there is 'good quality evidence of the effects of **CCTs** in Latin America' (p.12). 'CCT programmes have effectively increased the uptake of preventive services, encouraged particular preventive behaviours, and had positive effects on health status. However their applicability, sustainability and desirability in more deprived settings is uncertain' (p.18). It notes that 'the use of [CCTs] seems only relevant in settings where there is a functional primary health care system. There is also need for substantial management capacity in order to run CCT schemes' (p.42).

The same study finds the evidence on the effects of **user fees** on utilisation and on broader health or socio-economic outcomes to be of low quality. There was also little evidence of the effects of **community-based health insurance** (CBI), social health insurance (SHI) or **contracting out** of services to the private sector. Contracting, although widely used, was found to have been poorly evaluated and to need further assessment and evaluation (Alliance for Health Policy and Systems Research 2006).

Another systematic review by Meyer et al (2011) assesses and synthesises evidence on **health voucher programmes**. It finds robust evidence that health voucher programmes can increase the use of health goods/services and modest evidence that they can effectively target specific populations and improve service quality. Overall, the evidence indicates that voucher programmes do not affect the health of populations. However, this conclusion was identified as unstable by a sensitivity analysis: one additional positive outcome variable would change the conclusion to robust evidence. There is modest evidence that voucher programmes can effectively target specific populations and can improve the quality of services but the subsequent link that voucher programmes improve the health of the population is 'not evident in the data analysed in this review'.

Gaarder et al (2010, 6) examine **CCTs** that include health and nutrition components, drawing on evaluations from Latin America, Africa, Asia and the Middle East. Their study finds that 'CCT impact evaluations provide unambiguous evidence that financial incentives work to increase utilisation of those key health services by the poor upon which the cash transfer is conditioned, if the beneficiaries have knowledge of this condition. However, results are mixed with respect to nutrition and health outcomes, suggesting that encouraging utilisation when the pertinence of services is unknown or of poor quality may not produce the expected effects. Incipient results from Mexico indicate, however, that service quality is not necessarily exogenous to the programme, but may be positively affected by giving the poor women skills, information, and social support to negotiate better care from healthcare

providers. Findings from Mexico indicate that there are direct routes by which the cash transfers affect health, outside of the health sector interactions. In particular, the poverty alleviation achieved with the cash transfers may affect the mental health of beneficiaries, as well as their lifestyle choices’.

Country case studies

An ODI study examines **Bangladesh**’s impressive progress in the health sector. Infant and child mortality rates have reduced dramatically, immunisation coverage has rocketed and life expectancy has risen steadily. Increases in life expectancy are closely linked with performance in the field of immunisation and its impact on child mortality. Child mortality rates have fallen across all socio-economic groups, and have fallen more rapidly amongst girls and those living in rural areas. The report describes how innovative practices and approaches for targeting and empowering the most vulnerable, together with effective partnerships with non-governmental organisations (NGOs), have contributed to these successes. The report notes that NGOs have also played a key role in developing novel approaches and practices as well as in delivering services to under-served groups. Donor assistance has also played an important role in bringing about these changes as have underlying factors such as high levels of cultural homogeneity and social solidarity (Rodriguez Pose & Samuel 2011).

Another ODI paper examines the sharp improvements in health provision in **Rwanda** since the civil war and genocide in the mid-1990s. Although poverty remains high, Rwanda has made ‘remarkable improvements in the health status of its population, particularly among the most vulnerable, related to life expectancy; infant and child mortality; immunisation; family planning; HIV; malaria; and infrastructure’ (Rodriguez Pose & Samuels 2011a, 4). These improvements are attributed to a range of factors including ‘the introduction of a community health insurance scheme that contributed to the removal of barriers to access to health services while at the same time transforming health-seeking behaviour; the provision of quality health services boosted by staff incentives and performance-based financing (PBF) schemes; strong leadership, commitment and vision leading to innovative reforms ...and the decentralisation of the health sector’ (p.4). Under five and infant mortality have halved in a 13-year period since 1994. The maternal mortality ratio has declined by 30% between 2000 and 2005.

The **Ethiopia** Health Services Extension Programme was started in 2003 to improve delivery of preventive and basic curative health services. An impact evaluation applies propensity score matching and regression adjustment techniques to evaluate the short-term and intermediate-term impacts of the programme on child and maternal health indicators in programme villages. The results indicate that the programme has significantly increased the proportion of children vaccinated against tuberculosis, polio, diphtheria–pertussis–tetanus, and measles. The study finds heterogeneity in childhood immunisation coverage and the effect of the programme on preventive maternal care to be rather limited. The evaluation finds that the programme has not reduced diarrhoea and cough diseases among under-five children (Admassie et al 2009).

A number of other country case studies describe how targeted efforts to extend health service provision can lead to long-term improvements in health outcomes. Since its independence in 1948, **Sri Lanka** has focused on primary health, especially maternal and child health in rural areas, ensuring free provision of basic services and supporting community-based initiatives. High levels of funding and equal distribution of resources have resulted in the best indicators for child and maternal health and access to primary health care in South Asia (Levine 2004). In the 1980s and 1990s, large investments in health services led to increased equity in health for various **East Asian countries** including Korea, Singapore and Taiwan. Wagstaff (2005) argues that these investments laid the

foundation for rapid economic advancement in later decades. In **China**, there have been substantial reductions in maternal mortality in the poorer, rural western provinces as a result of targeted government interventions (Liang et al 2010). Yazbeck (2009) provides a number of additional case studies of how extending health services has led to improvements in health outcomes in Brazil, Cambodia, Colombia, India, Indonesia, Kenya, Kyrgyzstan, Mexico, Nepal, Rwanda, Tanzania.

4. Water, Sanitation and Hygiene (WASH)

A 2012 study comparing the impact of Dutch assistance on water and sanitation programmes in a number of countries finds that rural water programmes are broadly beneficial to poor communities and that the poorest people usually enjoy the benefits of improved water supplies. The study finds, however, that the very poorest and most marginalised communities typically have less access to these programmes and benefit less from them. Latrine construction and sewer connections mostly benefit wealthier households or communities. The programme of BRAC in Bangladesh provides an example of a specific focus on poverty by providing small loans to poorer households and subsidies to the poorest to combat this bias. The report notes that improved access to safe water supplies has beneficial effects for women and girls, who enjoy time savings and sometimes a reduced work load, but that these changes only achieve limited benefits in terms of increased income. 'Only in Benin did these studies find a substantial proportion of households (35 %) reporting that women were able to spend more time on income generating activities' (MFA Netherlands 2012). A World Bank evaluation of its rural water and sanitation programmes generates similar findings (IEG 2010).

Few studies have empirically measured the economic impact of water and sanitation programmes, or of making service provision in the WASH sector more inclusive. A study by Frontier Economics (2012) estimates that many African countries could gain an additional 5% of annual GDP growth as a result of achieving the MDGs in water and sanitation. A study by Hutton et al (2006) calculates that failure to implement MDG water and sanitation targets at a global level would cost in the region of \$36 billion per year and that 92% of this value relates to sanitation. These costs largely stem from higher rates of mortality and morbidity. Hutton et al (2006) estimates a return on investment of \$9 for every \$1 spent in low-income countries. A WaterAid (2007) discussion paper adds some caveats to these calculations, suggesting that they may ignore some unmeasured factors, and argues that sanitation is necessary but not sufficient for growth.

Country case studies

An impact evaluation examines the impact of two water supply and sanitation projects in rural **Pakistan**. The impact was estimated using treatment effects based on a control-function approach. Overall findings show that the projects improved households' access to water supply and improved attendance of high-school-age girls in schools. However, the projects had no significant impact on the incidence and intensity of diarrhoea and on increasing labour force participation and hours available for work (Rauniyar et al 2011).

An ODI study on the rural water supply in **Uganda** highlights major progress since the early 1990s when more than 60% of the rural population lacked access to safe drinking water. The report finds that Uganda has made notable progress in rural water sector coordination and performance, and has increased rural access to improved water sources. A number of factors are responsible for these improvements including 'a strengthened sector policy and institutional framework; shifting aid modalities and improved development cooperation; development financing and enhanced resource

allocation; and national leadership and political support, particularly up to the mid-2000s' (O'Meally 2011). The report notes that there are some discrepancies in the data coverage for Uganda.

A World Bank study by Lane (2004) examines the broader health and economic impacts of extending access to water and sanitation to under-served rural areas in Ghana, South Africa and Lesotho. In the 1990s, **Ghana** reduced urban-rural disparities in access to improved water through a water reform programme that targeted villages and made them partners in water management along with local governments. Coverage in water and sanitation was below the average for Sub-Saharan Africa, but by the 2000s was increasing at a rate of 200,000 (or 1% of the population) per year. Similarly in **Lesotho**, sanitation coverage has increased from 15% to 50% over a 20 year period. There has been a large reduction in the incidence of sanitation-related diseases in areas where water and sanitation projects had been implemented. Lane (2004, 2) states that few studies have examined the broader health and social impacts of extending water and sanitation, but notes that other studies 'have shown that provision of safe water and basic sanitation accompanied by hygiene promotion can reduce the incidence of diarrheal diseases by as much as 25%'. He also notes that '[t]here is considerable evidence that improved water and sanitation generate substantial economic benefits, mainly through saving large amounts of people's time and energy' (Lane 2004, 2-3). The case studies of Ghana and Lesotho discuss the fact that rural sanitation programmes create jobs, but do not quantify these benefits.

In 2003, the **Ethiopian** government began a programme to improve sanitation in rural areas in the Amhara region, where service provision was very poor (90,000 children under 5 died annually in the region from diseases related to water and sanitation). The programme was successful in increasing sanitation coverage in the region. At the start of the project period 100 latrines constructed per year. In 2005, 26,400 latrines were constructed. If progress continues at the current rate, the MDG target could be reached by 2009 (WHO 2006).

5. Integrated Programmes

Lack of access to one service can affect uptake of another. For example, Kabeer (2010) describes how in Brazil utilisation of maternity services was related to education levels. As a result, many programmes to increase access to and uptake of services in under-served areas adopt an integrated approach. Three CCT programmes that target the poorest communities have demonstrated some success in improving school enrolment rates and health outcomes amongst the very poor:

Mexico's *PROGRESA/Oportunidades* programme is a CCT programme founded in 1997 (and re-launched as *Oportunidades* in 2002). Its transfers are conditional on children attending schools and families attending preventive health care clinics. It has led to improved nutrition and preventive care. *PROGRESA/Oportunidades* children have fewer illnesses than non-*PROGRESA/Oportunidades* children from infancy to age five. There was a 16% increase in the annual growth rate of children in their first 12 to 36 months, and a 20 to 25% reduction in the incidence of illness among children from infancy to age 5. Adults in programme households have 17% fewer incapacitating days of illness than non-*PROGRESA/Oportunidades* adults. The programme also expanded enrolment of boys and girls at both primary and secondary levels. At the primary level, where enrolment was high at the outset, the programme boosted the rates by 1.07% for boys and 1.45% for girls. At the secondary level, enrolment grew by 8% for boys and 14% for girls. The increase in educational attainment for both boys and girls was an estimated 10%. The students within the programme were found to begin school younger, repeat fewer grades, and drop out less frequently. Although the programme has increased

the number of children staying in school, any impact it may have had on performance at school is hard to quantify. Employment of both boys and girls in salaried and non-salaried jobs fell because more were staying in school in PROGRESA/*Oportunidades* villages (Yazbeck 2009).

A number of studies examine the wider and long-term impacts of the PROGRESA/*Oportunidades* programme, though they generate mixed findings. One study finds that *PROGRESA* had no or even a negative impact on child nutrition (due largely to the fact that not all children registered to the programme received nutritional supplements). Those who did receive the supplements experienced much lower levels of stunting, which it was predicted would translate into a 2.9% increase in lifetime earnings (Behrman & Hoddinott 2005). Behrman and Parker (2011) examine the health impacts on older beneficiaries and find that the programme significantly improves health outcomes, but that the impacts are concentrated on women. Given its large size, *Oportunidades* is expected to have large indirect and second-round effects on the economy, but a research programme that seeks to measure these benefits has not yet published its results (IFPRI 2011).

Brazil introduced Bolsa Família in 2003 by bringing together four existing federal schemes to boost school attendance, improve maternal nutrition, fight child labour and provide a cooking gas subsidy. The programme targeted the very poor and the poor. The very poor also received a flat payment regardless of household composition, which was conditional on children enrolling in school, health visit requirements and pregnant women undergoing medical check-ups. The programme has successfully increased consumption, reduced poverty and raised poor children's attendance at school. However, the selection method has often been criticised on the grounds that it can lead to patronage and leakage. Although the programme has been successful in raising enrolment rates, the quality of education has declined. There has not been been a significant impact on the vaccination of children (OECD 2011).

Chile introduced the *Solidario* programme in 2002, to tackle poverty amongst indigent families. The programme took families as the unit for action and provided psychosocial support, cash benefits conditional on a contract with the family, guaranteed cash subsidies, and access to skills training. By 2006, enrolment rates were about 20% amongst the poorest 10% of the population. Fifty-five% of the benefits went to the poorest 20% of the population. The government later integrated a complementary child development programme into *Solidario*. In both urban and rural areas, preventive visits among children in *Solidario* households were significantly higher than among those in non-participating households. In rural areas, check-ups for pregnant women were significantly higher (Yazbeck 2009).

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7. Additional Information

Key Websites:

IFPRI <http://www.ifpri.org/>

ODI Development Progress <http://www.developmentprogress.org/>

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