WORKING PAPER NO.33

Childhood poverty, basic services and cumulative disadvantage:

An international comparative analysis

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Preface

This paper is one of a series of working papers published by the Young Lives Project, an innovative longitudinal study of childhood poverty in Ethiopia, India (Andhra Pradesh State), Peru and Vietnam. Between 2002 and 2015, some 2000 children in each country are being tracked and surveyed at 3-4 year intervals from when they are 1 until 14 years of age. Also, 1000 older children in each country are being followed from when they are aged 8 years.

Young Lives is a joint research and policy initiative co-ordinated by an academic consortium (composed of the University of Oxford, the University of Reading, the London School of Hygiene and Tropical Medicine, London South Bank University and the South African Medical Research Council) and Save the Children UK, incorporating both inter-disciplinary and North-South collaboration.

Young Lives seeks to:

- Produce long-term data on children and poverty in the four research countries
- Draw on this data to develop a nuanced and comparative understanding of childhood poverty dynamics to inform national policy agendas
- Trace associations between key macro policy trends and child outcomes and use these findings as a basis to advocate for policy choices at macro and meso levels that facilitate the reduction of childhood poverty
- Actively engage with ongoing work on poverty alleviation and reduction, involving stakeholders who may use or be impacted by the research throughout the research design, data collection and analyses, and dissemination stages
- Foster public concern about, and encourage political motivation to act on, childhood poverty issues through its advocacy and media work at both national and international levels

In its first phase, Young Lives has investigated three key story lines - the effects on child wellbeing of i) access to and use of services, ii) social capital, and iii) household livelihoods. This working paper is one of a series which consider an aspect of each of these story lines in each country. As a working paper, it represents work in progress and the authors welcome comments from readers to contribute to further development of these ideas.

The project receives financial support from the UK Department for International Development and this is gratefully acknowledged.

For further information and to download all our publications, visit www.younglives.org.uk

Contents

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I. Introduction

Although there is a considerable body of research on sector-specific evaluations of basic service delivery (education, health and nutrition, sanitation and water services, etc.) and child outcomes in developing countries (eg Lavy *et al.,* 1996; Gwatkin *et al.*, 2004; Mehrotra, 2004; Harper, 2004), there have been far fewer analyses of inter-sectoral linkages and childhood poverty. However, understanding the cumulative nature of disadvantage and the benefits of inter-sectoral synergies is crucial for any strategy aiming to combat poverty.

> *"A symptom of poor strategy is failure to recognise the inter-relationships between sectors and interventions. For example, health services cannot be effective… where they cannot be used by women because of gender related restrictions. […] Thus, policy design and programming needs to take account of a range of key sectors and recognise the way in which they build upon each other. This should result in integrated service delivery and simultaneous improvements in core sectors" (Harper, 2004: 5).*

The aim of this paper is to explore patterns in access to multiple basic services among children living in poverty by drawing on a sample of over 8,000 children in four developing countries - Ethiopia, India, Peru and Vietnam - participating in the longitudinal *Young Lives* (YL) project on childhood poverty. Our overarching hypothesis is that children denied access to education or health services are more likely to reside in households deprived of other basic infrastructure and therefore likely to suffer from cumulative disadvantages. By examining this question in four countries with distinct historical, social, political and economic development trajectories, we are well-positioned to contribute to debates on the relationship between access to services and breaking poverty cycles. As the World Bank, for example, emphasises:

> *"any children and youth strategy – be it national, regional, or global – needs to be multi-sectoral and multidimensional. […] Interventions should […] address children and youth well-being simultaneously in several sectors, as well as through integrated packages of services and activities specifically tailored to their needs" (World Bank, 2005b).*

Disaggregation of our analysis by sub-national regions, gender, urban-rural location and poverty status allows us to capture some of the complexity that is too often overlooked in discussions about public policy interventions to tackle childhood poverty (eg Harper, 2004).

The paper is divided into five main sections. Section 2 reviews cross-disciplinary literature on the multi-dimensionality of poverty and implications for service delivery. Section 3 outlines the methods used to analyse *Young Lives* data from Ethiopia, India (Andhra Pradesh state), Peru and Vietnam, while Section 4 discusses the multivariate results. The conclusions and related policy implications are presented in Section 5.

2. Literature review: Multi-dimensionality of poverty and implications for service delivery

2.1 The human development approach to poverty

The conventional income/consumption-centred conception of poverty has been criticised, among other issues, for its neglect of the multi-dimensional nature of poverty and the importance of public services for wellbeing (Kanbur and Squire, 1999; Hulme and McKay, 2005). An alternative to narrow monetary definitions of poverty is the human development approach which has its theoretical underpinnings in the work of Sen (1999) and Nussbaum (2000); its best-known practical application is the UNDP's Human Development Index. According to Sen's formulation, poverty can be seen as capability deprivation or the lack of "substantive freedoms people enjoy to lead the kind of life they have reason to value, such as social functioning, better basic education and healthcare, and longevity" (Kanbur and Squire, 1999: 10).

Although not without its critics — particularly regarding the difficulties entailed in measuring multi-dimensional poverty (Hulme and McKay, 2005) — the human development approach's theoretical and conceptual contribution is important because "broadening the definition of poverty changes significantly our thinking about strategies to reduce poverty" (Kanbur and Squire, 1999: 2). A broader definition intuitively broadens the range of policies relevant to poverty reduction and, equally importantly, allows us to take into account the interaction between various aspects of poverty (Kanbur and Squire, 1999; Mehrotra, 2004).

Mehrotra (2004) has argued that maximising synergies among different aspects of wellbeing and different service sectors has been an important factor in the development of countries that have been able to achieve high levels of social development relative to their national income. High achievers include Korea, Cuba, Sri Lanka and the state of Kerala in India. Such synergies are important and can induce a virtuous circle of development because (1) interventions in one sector impact on more than one area of wellbeing; and because (2) people's level of wellbeing in one area positively influences efficiency of services across sectors (Mehrotra, 2004). For example, the impact of educational interventions is greater when children are well-nourished and healthy. Historically, investment in basic education in high achiever countries tended to precede successes in infant mortality reduction. In other words, "[t]he synergies between interventions in health and education are critical to the success of each, and increase the return to investment – and the sequence is important" (*ibid:* 23).

Although evidence of inter-sectoral synergies is not new, different sectors are often treated separately "probably in part due to over-specialisation" (Mehrotra, 2004: 7). Opinions are also mixed regarding how a theoretical understanding of the multi-dimensionality of poverty should be translated into policy recommendations. The *World Development Report 1980,* for example, acknowledges a "seamless

web" of interrelations among social interventions and emphasises that "different elements of human development are key determinants of each other" (quoted in Kanbur and Squire, 1999: 12). However, although acknowledging the importance of human development and the multi-dimensional nature of poverty on a conceptual level, the more recent *World Development Report 2004 Making Services Work for Poor People* (World Bank, 2003) fails to address the issue of synergies among services. Instead, its approach is more focused on agency: the role of the government, private sector and clients themselves in improving access to services.

Social policies may also benefit from inter*generation*al synergies. Mehrotra's (2004) illustration of the life-cycle of an educated girl shows that educated women are more likely to have fewer children and be healthier, better fed and have the benefits of economic activity outside the home, as well as being able to give their children better care and nutrition, seek healthcare for them and send them to school.

Both inter-sectoral and intergenerational synergies are most often recognised when designing services for (young) children. This is due to holistic understandings of children's needs or in the words of Alva (1986) "…a child is born free without barriers. Its needs are integrated and it is we who choose to compartmentalize them into health, nutrition or education" (quoted in Myers, 1992a). However, regardless of the widespread consensus of the multi-dimensional and integrated needs of children and youth, in practice, it is often difficult to define an integrated approach and the kind of organisational strategies required at the implementation level (Myers, 1992a). Furthermore, government agencies responsible for co-ordinating children's strategies tend to be marginalised and under-resourced (Harper, 2004).

2.2 Chronic poverty and multiple disadvantage

Multi-dimensional poverty, including "deprivations related to health, education, isolation, 'voice' and security" (Bird *et al.*, 2002: 4), may be(come) chronic:

> *"when individuals or households are trapped in severe and multidimensional poverty for an extended period of time. This may be five years or may be linked with the inter-generational transmission of poverty, where people who are born in poverty, live in poverty and pass that poverty onto their children." (Bird and Shinyekwa, 2003: 8)*

The interlocking problems of the chronically poor range from domestic violence and household break-up to theft and distrust in the police and justice system. Remoteness and isolation of the poor lead to low levels of access to healthcare services, health information and education, which in turn lead to higher levels of mortality, morbidity and disability among the poor. More vulnerable groups among the poor, such as widows or the elderly, are particularly severely affected by poor access to services (Bird and Shinyekwa, 2003). Furthermore, poor nutrition and lack of access to preventative and curative health care, clean water and sanitation may impact on children and young people in ways that result in irreversible damage, making transient poverty a chronic characteristic (Bird *et al.*, 2002; Harper, 2004). For example, malnutrition in adolescent girls may affect their reproductive capacities and foetal development.

Multi-dimensional deprivation and lack of access to services may be particularly severe in rural areas. In the majority of developing and transition countries, rural rates of poverty are higher than urban deprivation, when measured with both income and other indicators.

> *"The picture that emerges from surveys of social indicators and access to basic services confirms that rural populations experience higher levels deprivation despite general improvements in such indicators over the last 30 years." (Bird et al., 2002: 6).*

This may be due to less political will or urgency to provide services to the rural poor than to urban areas, and the fact that the "construction of physical infrastructure in many remote areas […] can also be technically very difficult" (Bird *et al.*, 2002: 22). Consequently,

> *"[h]uman capital in [remote rural areas] may be lower than elsewhere. […] food security may be erratic, leading to under-nutrition, damaging children's mental and physical development. Government provision of education and health services […] is likely to be poorer that in non-remote areas. Low population densities may make it difficult to supply good quality provision" (ibid: 27).*

They further argue that demographic factors may explain some of the persistence of chronic poverty in remote rural areas. Fertility is high in rural areas, due to *inter alia* low access to family planning services and low levels of education; disability ratios are also high in the absence of adequate health services. In combination with the out-migration of working age adults, these factors contribute to high dependency ratios in rural areas.

Furthermore, disadvantages in many areas of wellbeing tend to accumulate in rural areas during the rainy season before the harvest when workloads are great, lack of food and cash renders people increasingly vulnerable to shocks, and many communities find themselves isolated due to poor road conditions. According to a DFID participatory poverty assessment, financial and geographic barriers to service access (eg lack of cash and time, poor rural road conditions) are exacerbated during the rainy season when disease is also more endemic (Brocklesby, 1998). Tropical seasonality, a factor often ignored by urban-based government and donor officials, causes

> *"many adverse factors for the poor [too] often coincide during the rains – hard agricultural work, shortage of food, scarcity of money, indebtedness, sickness, the late stages of pregnancy and diminished access to services" (Chambers, 1995: 190).*

Similarly, in their study of chronic poverty in rural Uganda, Bird and Shinyekwa (2003) note that investments in rural roads have reduced the distance from markets considerably, and they conclude that complementary policies are now needed to "create an enabling environment for rural enterprise, employment and economic growth" (*ibid:* 32). This is, however, only possible if improvements are made at the household level, such as improvements in the human capital of household members, "which will provide the chronically poor with the tools to benefit from opportunities in their improved environment" (*ibid:* 32).

2.3 Linkages between caregiver education and child wellbeing

The positive impact of maternal educational levels on child wellbeing is well-documented in empirical health and microeconomic literature (Caldwell and McDonald, 1982; Cleland and Van Ginneken, 1988; Barrera, 1990; Thomas *et al.*, 1991; Sastry, 1996; Glewwe, 1999; Christiansen and Alderman, 2001; Escobal *et al.*, 2005).

Maternal education may also increase the positive impact of available public services on child welfare, although the results of empirical studies examining this relationship are mixed. For example, Thomas *et al.* (1991) and Barrera (1990), who study maternal education and child health in Brazil and the Philippines respectively, find that maternal education and sewerage in rural areas are complementary, ie households with better-educated mothers derive greater benefits from toilet connections. In their research, the positive impact of maternal education was due primarily to mothers' increased access to information, which *"suggests that part of the interaction between mother's education and community infrastructure is coming through better information, processed more efficiently by better educated mothers"* (Thomas *et al.*, 1991: 208). In their study of Peru, Escobal *et al.* (2005), in contrast, find that public infrastructure has greater impacts in households with less educated mothers, which leads the authors to conclude that the provision of public services in areas with low levels of maternal education is of crucial importance.

With regard to access to health services, Thomas *et al.* (1991) find that availability of health services seems to be a substitute for maternal education, that is, less educated mothers and their children may derive more benefits from access to clinics or hospitals than mothers who are more educated. Barrera (1990), on the other hand, finds that access to healthcare is most beneficial to a child's wellbeing if their mother is better educated.

Equally importantly, positive externalities from mother's education and access to services are not limited to the individual household. Two studies on the effects of access to services in Peruvian neighbourhoods (Alderman *et al.*, 2003; Escobal *et al.*, 2005) and one study in Ethiopia (Christiansen and Alderman, 2001) all find that the overall level of female education/level of health knowledge in the neighbourhood has a positive impact on the nutritional status of children, regardless of their caregiver's educational status. However, as income levels increase, the importance of community knowledge becomes less substantial (Christiansen and Alderman, 2001). Similarly, access to clean water and sanitation facilities at the community level appear to have a positive impact on children's health, particularly in communities with low levels of access to sanitation (Alderman *et al.*, 2003).

Nevertheless, some analysts suggest that we should be cautious about overstating the positive linkages between caregiver education and child outcomes. Accepting the strong *correlation* between levels of maternal education and indicators of child health, Desai and Alva (1998) argue that there is not necessarily a strong *causal* relationship, and that maternal education is merely a proxy for both the socio-economic status of the family and geographic location. When husband's education, water and sanitation infrastructure and location are controlled for, the impact of maternal education declines considerably.

Moreover, regardless of extensive empirical findings on synergies between maternal education, children's human capital and wellbeing, and community characteristics and infrastructure, there is a dearth of literature on how these linkages could be built on in policy design and implementation. In fact, a recent World Bank programme evaluation argues that, while interventions in other sectors (eg women's education and rural electrification) clearly have positive impacts on maternal and child health and nutrition, "the presence of intersectoral impacts [is] not [to] be confused with the need for multisectoral interventions or overcentralization of sectoral activities" (World Bank, 2005a: 41). The report suggests that this is because the synergistic effects observed had occurred in the absence of co-ordinated inter-sectoral interventions. We will return to this point again in the conclusion.

2.4 Lessons from cross-cutting themes

In contrast to the dearth of empirical literature on the inter-sectoral impacts of public policy interventions on child wellbeing, there is a growing body of analysis on inter-sectoral approaches to poverty reduction, HIV/AIDS prevention and the promotion of gender equality, which potentially offer some important insights.

Poverty Reduction Strategy Papers

The rationale behind the Poverty Reduction Strategy Paper (PRSP) "is based on the principle and merits of the integration of different sectors" (Caillods and Hallik, 2004: 78) and that an inter-sectoral strategic approach is needed for successful reduction of poverty in its multiple dimensions. As O'Malley (2004: 1) argues:

"In the five years since its inception, the PRSP has become a defining document for economic and social policy….The process of producing a strategy can provide significant new opportunities for influencing policy to improve the lives of poor children and their families. For the first time, governments are required to undertake a publicly accessible analysis of poverty in their country – acknowledging the extent of poverty, who is affected and the reasons behind poverty. They must outline ways poverty will be tackled. This requires governments to formulate a coherent plan, linking economic policy and governance measures with new or existing sectoral plans, for example, in education and health, to reduce poverty".

Driscoll and Evans (2005) assess that one of the greatest achievements of the first few years of the PRSP process has been the stronger focus that poverty has received inside governments. Whereas before poverty reduction was considered to be far from "the mainstream of government business, it now appears to be more of a priority concern and one with potential to shape the whole of government activity" (*ibid:* 7). According to the authors, the PRS approach has led to the adoption of plans to reduce poverty that are more overarching and multi-sectoral than before, and more 'pro-poor' spending has been secured in national budgets (*ibid.)*. Furthermore, in African PRSPs, "a clear link between core units charged with poverty planning and Ministries of Finance charged with resource allocation" has secured a stronger correlation between PRS priorities and budget allocations in Ethiopia and Tanzania (*ibid.*).

The cross-cutting rationale of the PRS does not, however, necessarily translate easily into multi-sectoral plans in practice. In their study of the education agenda in PRSPs, Caillods and Hallik (2004: 150) conclude that PRSPs should take a more integrated approach to service delivery, as presently there are few attempts to synchronise efforts in education with other sectors and "the education chapter is developed very much independently from the other chapters and from what is proposed in other sectors." The difficulties in creating a comprehensive and inter-sectoral poverty reduction strategy are partly due a fear within sectoral ministries of losing "control over sector priorities, targets and indicators, as well as reduced share of donor funding if they move projects and programmes onto the national budget" (Driscoll and Evans, 2005: 10). Such incentive problems in sectoral ministries is one of the challenges that the second-generation PRSPs face in their efforts to develop the stronger focus on poverty that has emerged inside governments "into a deeper and more institutionalised form of state commitment to poverty reduction" (*ibid:* 10.)

HIV/AIDS

Inter-linkages between HIV/AIDS and poverty are not one dimensional as "HIV/AIDS leads to poverty and vulnerability, both nationally and individually, but poverty also increases the chances of being infected" (Caillods and Hallik, 2004: 90). The HIV/AIDS epidemic and policy responses to it can be conceptualised in an inter-sectoral framework, and it is, indeed, one of the cross-cutting themes that is dominant in African PRSPs (Thin, Underwood and Gilling, 2001). Interventions in the education sector – referred to as the 'education vaccine' by Vandemoortele (2001) – for example, are crucial in fighting the epidemic in the absence of a medical vaccine.[1] Education increases a person's ability to process relevant information which can result in behavioural change. "The spread of education also changes the family and community environment in which such behavioural changes become socially acceptable – primarily through greater gender equity" (Vandemoortele, 2001: 48). Although Caillods and Hallik's review of African PRSPs found that HIV/AIDS was mainly dealt with in the health section "and it is rarely mentioned in [chapters] on education, employment, rural development, and gender issues" (2004: 92), the Ugandan case offers a model of best practice. Uganda has an AIDS strategic plan, monitored by the Ugandan AIDS commission that "involves the health, social development and education sectors" (*ibid*: 92).

Gender mainstreaming

Thanks to recognition of the inter-connectedness of the determinants of gender inequality at the 1995 UN Fourth World Conference on Women in Beijing, "gender mainstreaming" is now a well-accepted goal in national and international development strategies. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all policy-related activities – eg policy development, research, advocacy / dialogue, legislation, resource allocation, planning, implementation and monitoring of programmes and projects. Illustrative best-practice examples of integrating gender into various sectors are attempts made in Northern and Southern countries to analyse their budgetary commitments from a gender equality perspective. Gender-sensitive budgets "are a mechanism for establishing whether a government's gender equality commitments translate into budgetary commitments" (Sharp and Broomhill, 2002: 26). The pioneering project was the Australian Women's Budget Statement, initiated in the mid-1980s, during which "federal, state and territorial

[1] It is promising that in many African countries, HIV infection rates are decreasing among people who have completed primary education (Thin, Underwood and Gilling, 2001).

governments in the country assessed the impact of their budgets on women and girls over twelve years old between 1984 and 1996" (Budlender and Hewitt, 2003: 8). Most importantly, this initiative covered all government expenditure, not just those 'obviously' related to women and girls' welfare. Examples of gender budget analysis programmes in developing countries that were inspired by the Australian experience are the South African Women's Budget Initiative (WBI), an NGO-parliament initiative, and the Commonwealth Secretariat Initiative which promotes gender budget analysis in response to economic restructuring in Commonwealth countries[2], and is co-ordinated by the ministries of finance in each country (Sharp and Broomhill, 2002; Budlender and Hewitt, 2003).

In sum, although frequently flawed in practice — often due to bureaucratic complexities and inter-agency politics — analyses of policy areas where a cross-cutting model has been adopted suggest that the approach can be fruitful when backed by sufficient political will. We next analyse Young Lives' empirical data on children and their carers' access (or lack thereof) to various basic services, after which we turn to a discussion of international best practices in service provision that could provide insights regarding how to address the multi-dimensional nature of poverty and cumulative disadvantage.

2 Its pilot included Sri Lanka, St. Kitts and Nevis, Fiji Islands, Barbados and South Africa (Sharp and Broomhill, 2002).

3. Methods and results

The data presented in this paper are drawn from the household questionnaires administered during the 2002 baseline survey of Young Lives (YL). In each country, the caregivers of approximately 2,000 one-year-olds were interviewed. Details of the methodology are available in Attawell (2004). Preliminary results from each country and the core questionnaires used are available at www.younglives.org.uk.

3.1 Methods

Eligible households were selected from 20 sites in each country by a strategy which over-represents the poor - further details of the sampling methods are outlined in Wilson and Huttly (2004). In interpreting the following results, it is important to note that the Young Lives samples are not nationally representative and overall figures for a particular country should therefore not be interpreted as national level figures. For ease of presentation, however, the YL samples from each country will be referred to simply by the country's name, for example "in Ethiopia….". Lack of national representativeness, however, does not preclude intra-country comparisons of service use between sub-groups such as wealth quartiles. Thus, more weight should be given to the results which describe the distributions of disadvantage *within*, rather than *between*, each country sample.

Indicators of service disadvantage

We first investigated experiences of 'disadvantage' within specific sectors. In the health sector, we examined lack of any antenatal care for the mother during her pregnancy with the index child and the failure of that child to receive the BCG vaccine. For infrastructure, we looked at households' lack of electricity, piped drinking water/private tubewell, and flush toilet/private pit latrine. For education, the indicator used was whether children of primary school age in the household were enrolled in school. For this indicator, the number of households available for analysis was necessarily restricted to those who had children of primary school age (between 630 and 1,250 per country compared to approximately 2,000 per country for health and infrastructure analyses). Further, this education indicator was based on data about other children in the household, not the index child (who was below primary school age). Information on education access was available for these children but not, for example, indicators of achievement or service quality.[3]

In addition to looking at disadvantage within single sectors, we also explored disadvantage across sectors. We created binary indicators of disadvantage for the health, infrastructure and education sectors – this enabled us to examine co-occurrence of disadvantage in more than one sector.[4] A household was classified as disadvantaged in the health sector if the mother and/or index child had not had access to one or more of the health services listed above (antenatal care and BCG vaccine). Disadvantage in the infrastructure sector was defined by a lack of at least two of the three services

[3] Indicators were chosen on the basis of available data. It should be noted that they do not tap measures of quality of services, which should be the focus for future in-depth qualitative analysis.

[4] It should be noted, however, that because of the binary nature of the indicators employed we were not able to distinguish between different levels of disadvantage and thus results have to be interpreted somewhat cautiously. For example, a person who did not have access to private water facilities but had good access to safe communal water might not consider herself 'disadvantaged' and certainly not as disadvantaged as a person who lacked any access to a safe water source.

cited above (electricity, private water supply and private sanitation facility). A disadvantaged status in the education sector was assigned to those who lived in a household where not all children of primary school age were currently enrolled in school.

Levels of use of services are presented for each of the four Young Lives country samples, disaggregated by:

- region of residence (urban/rural as defined by country-specific criteria);
- relative wealth grouping (see Box 1);
- level of caregiver's education (none, incomplete primary, complete primary);
- region of the country (regional state in Ethiopia, sub-state region in India, coastal/ mountain/jungle in Peru, and province in Vietnam).

Box 1: Relative wealth groupings

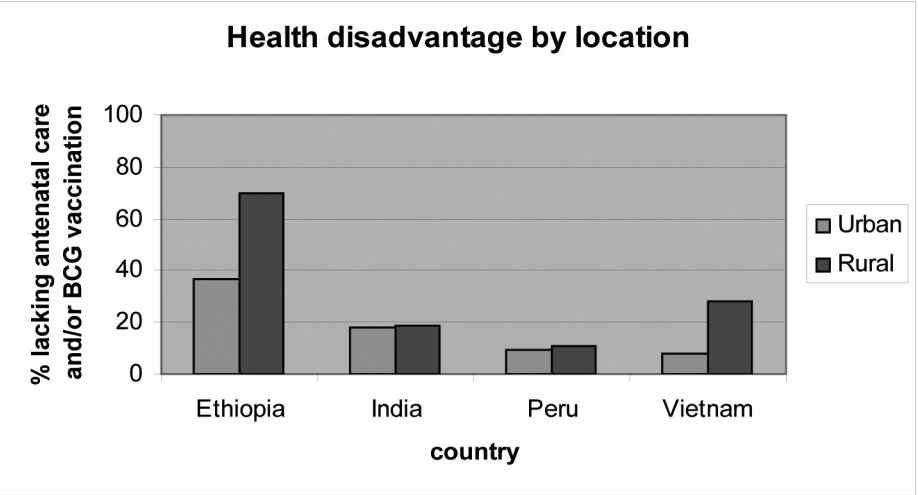
The wealth index used here draws on work undertaken by the World Bank and Macro International. It is a simple average of the following three components: housing quality (the simple average of scaled rooms per person and dummy indicator variables for each of good quality: floor, roof and wall); consumer durables (the scaled sum of consumer durable dummy variables which include items such as radio, fridge, etc.); services (the simple average of drinking water, electricity, toilet and fuel – all of which are 0-1 variables).

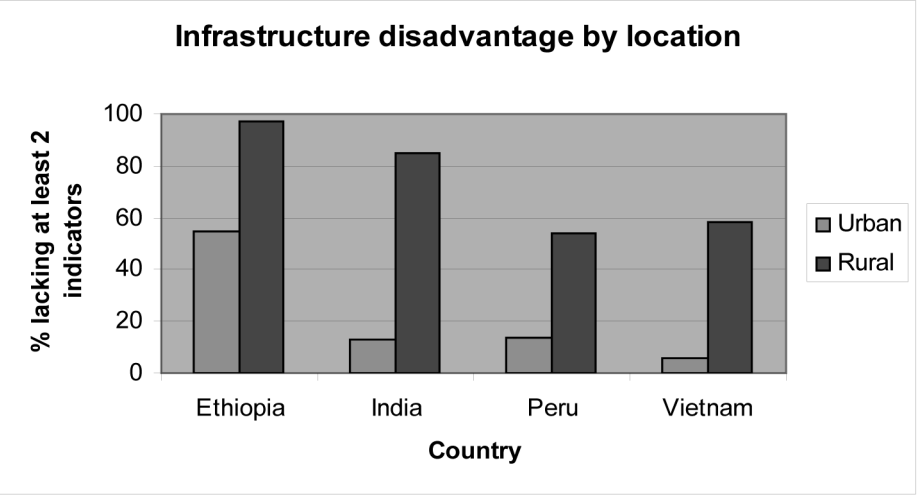
When examining the distribution of infrastructure services (water, sanitation and electricity) between wealth groups, the housing quality index, an individual component of the wealth index, is used instead of the overall wealth index. This is done in order to avoid the inherent correlations that would be present due to the inclusion of the same variables in the "service indicator" and the "wealth indicator" if the composite wealth index were used.

3.2 Results

The following three figures show patterns of service disadvantage according to rural/urban location (Figure 1), wealth group (Figure 2) and caregiver's education (Figure 3) in each country sample.

Figure 1. Service disadvantage by rural/urban




Infrastructure disadvantage by location
% lacking at least 2 indicators
100
80
60
40
20
0
Ethiopia
India
Peru
Vietnam
Country
Urban
Rural

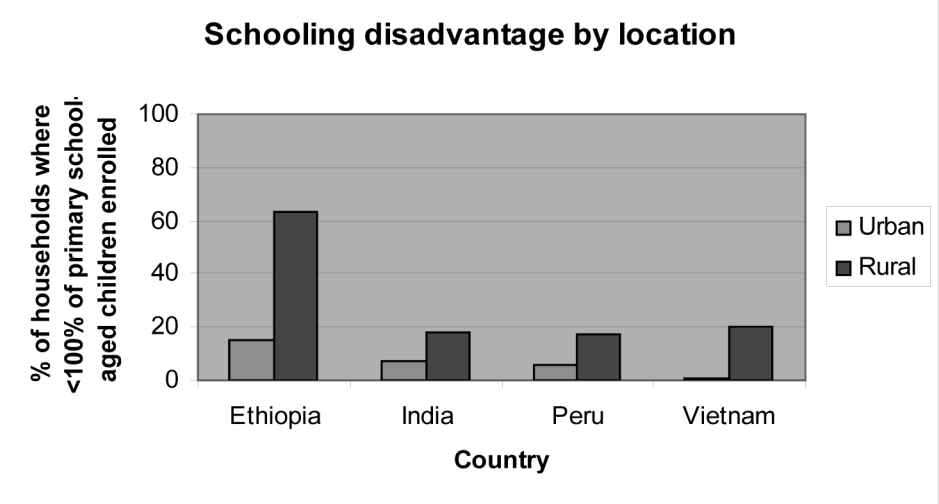
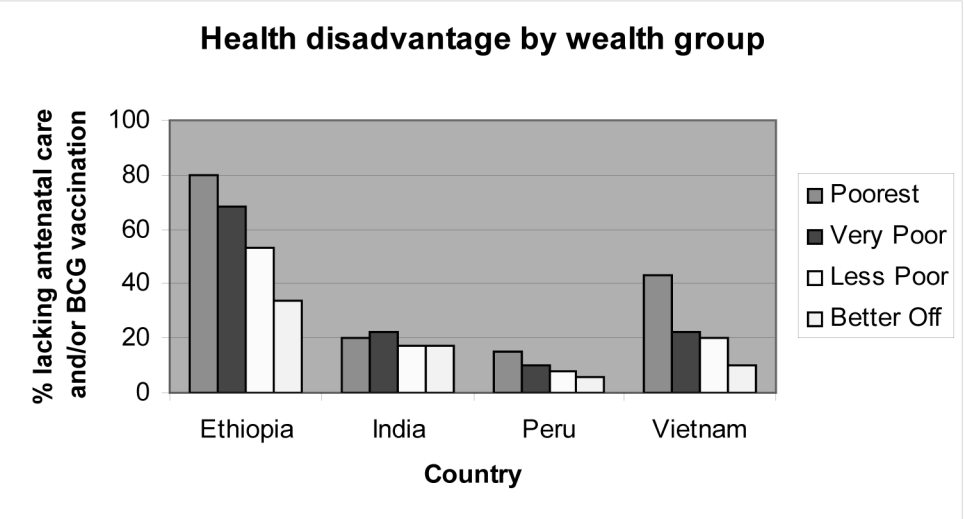
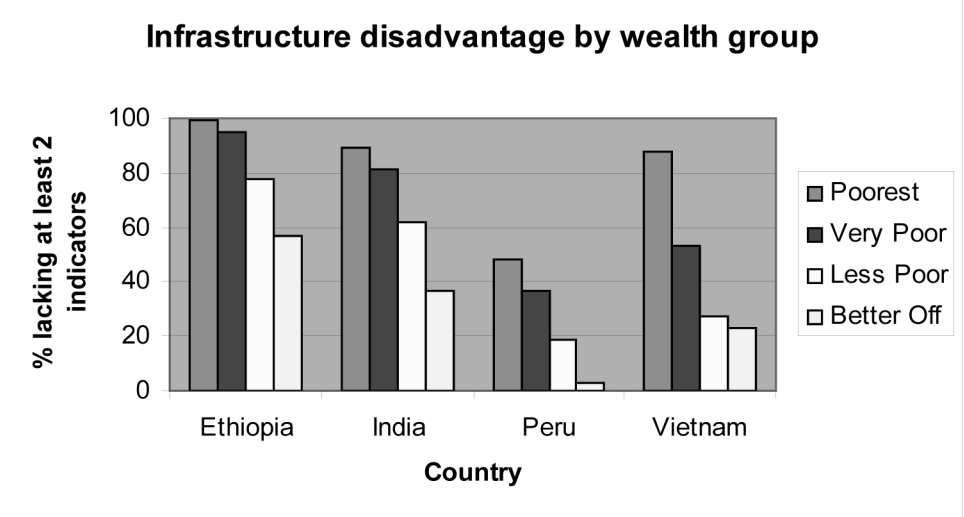

Schooling disadvantage by location
% of households where <100% of primary school-aged children enrolled
100
80
60
40
20
0
Ethiopia
India
Peru
Vietnam
Country
Urban
Rural

Figure 2. Service disadvantage by wealth group





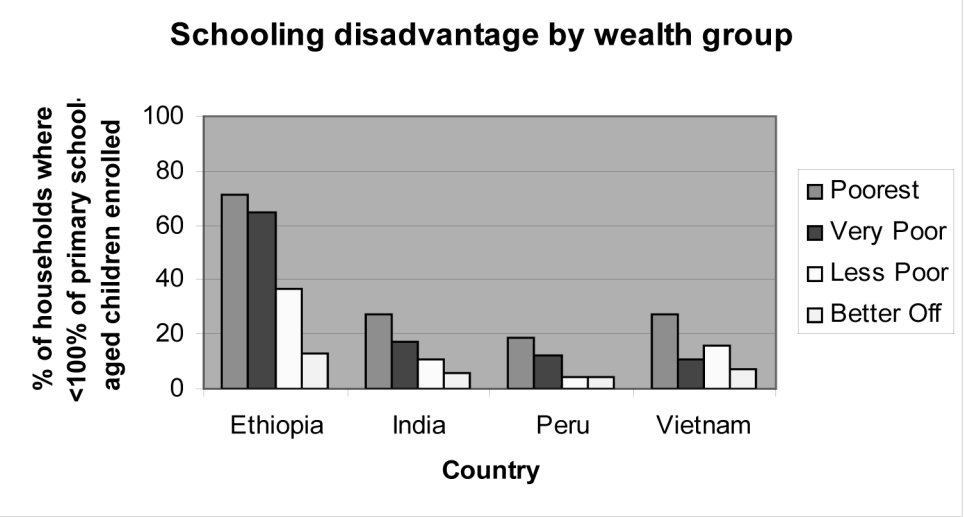
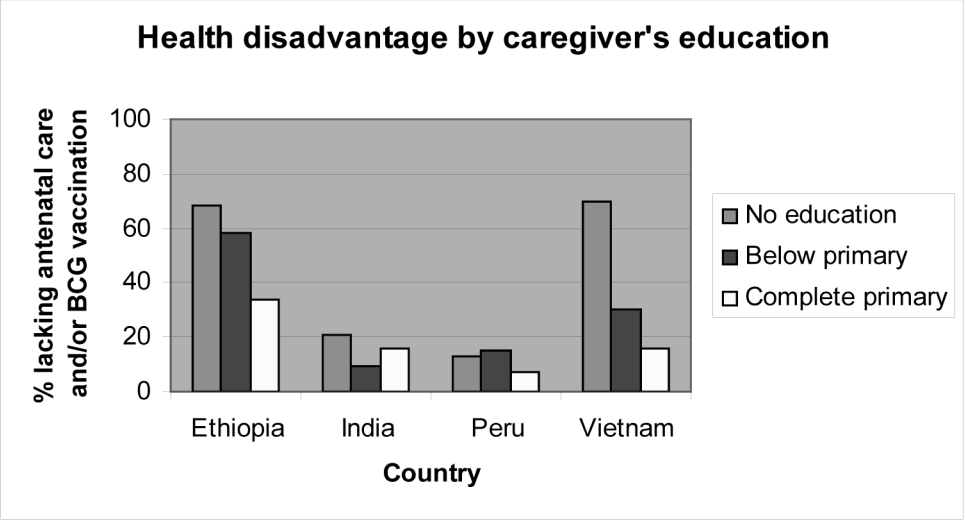
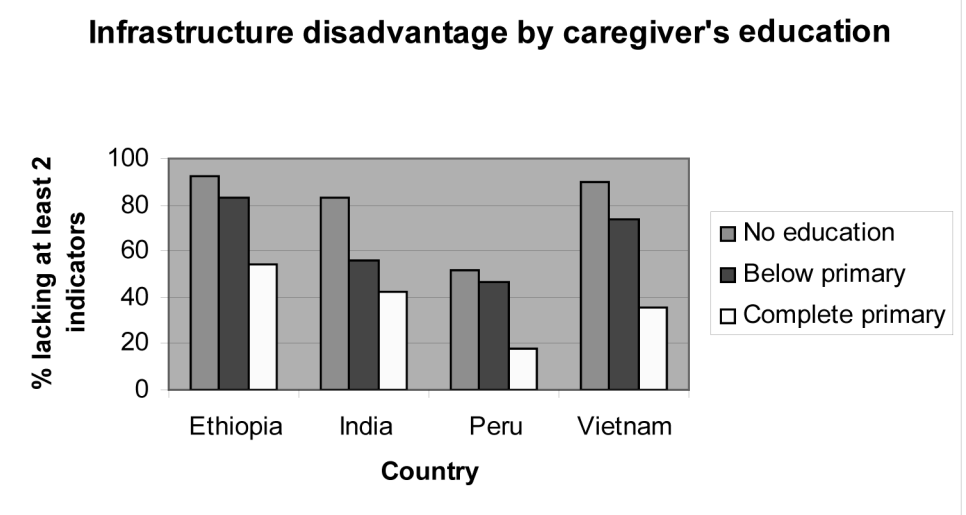
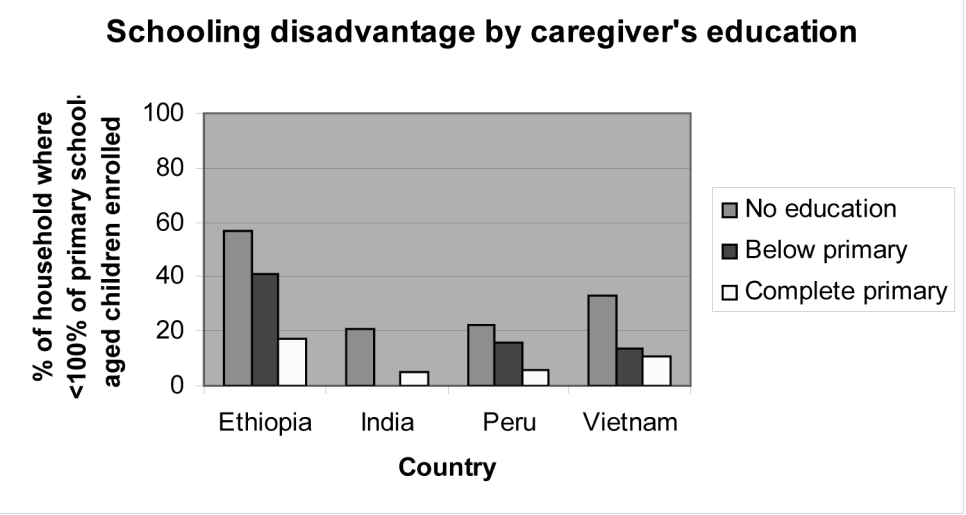


Figure 3. Service disadvantage by caregiver's education



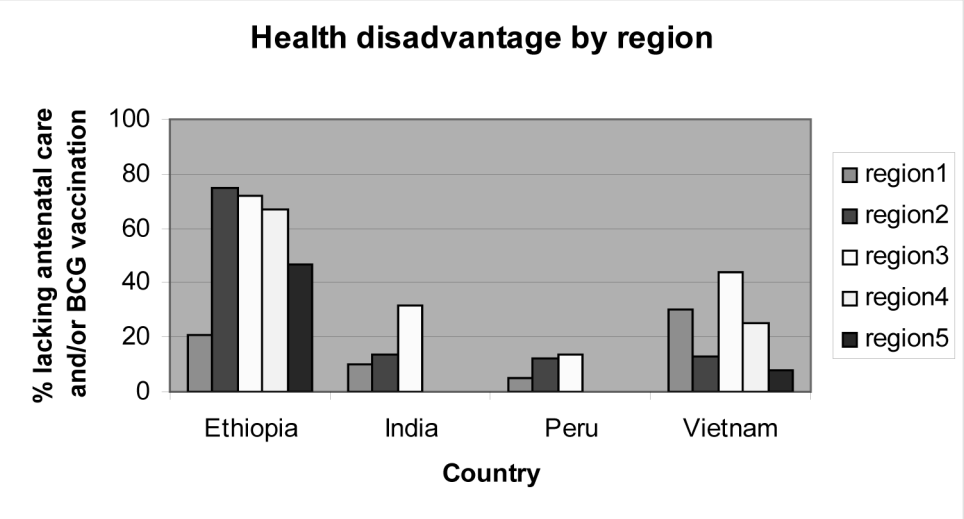




Note that the number of subjects in the "below primary" group in India was too small to be included (n=6).

Rural households, the poorest households and those households where the caregiver had lower levels of education, experienced more disadvantage for health, infrastructure and education in all cases except with respect to health services in Andhra Pradesh and in Peru. Levels of disadvantage were consistently higher in the Ethiopian sample with the greatest disparities between rural and urban groups. Location-related differences are also presented in Figure 4. Regional trends were not identical across all indicators, although in each country, certain regions had marked and consistently lower levels of disadvantage than others. In Ethiopia, the lowest levels of disadvantage were in Addis Ababa; in Andhra Pradesh and Peru, the coastal regions had the highest coverage of services, and in Vietnam, Da Nang, the most urban of the provinces, had the lowest levels of disadvantage.

Figure 4. Service disadvantage by region



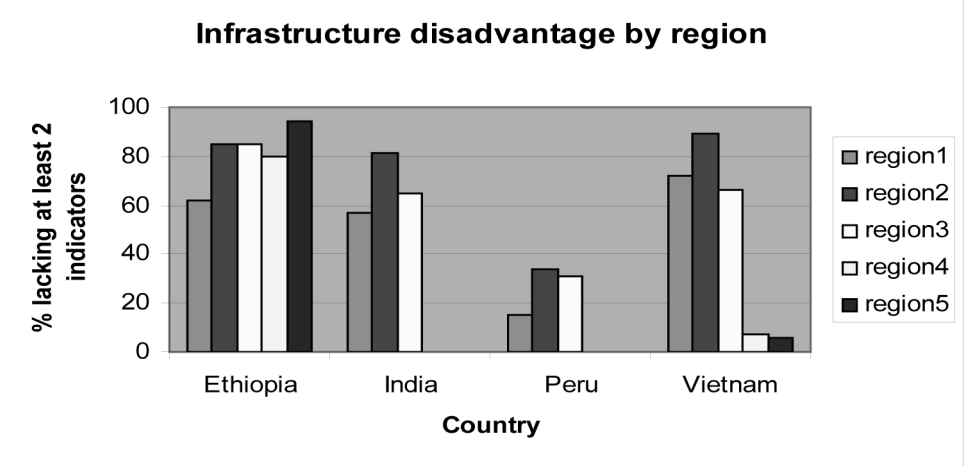
Region coding:

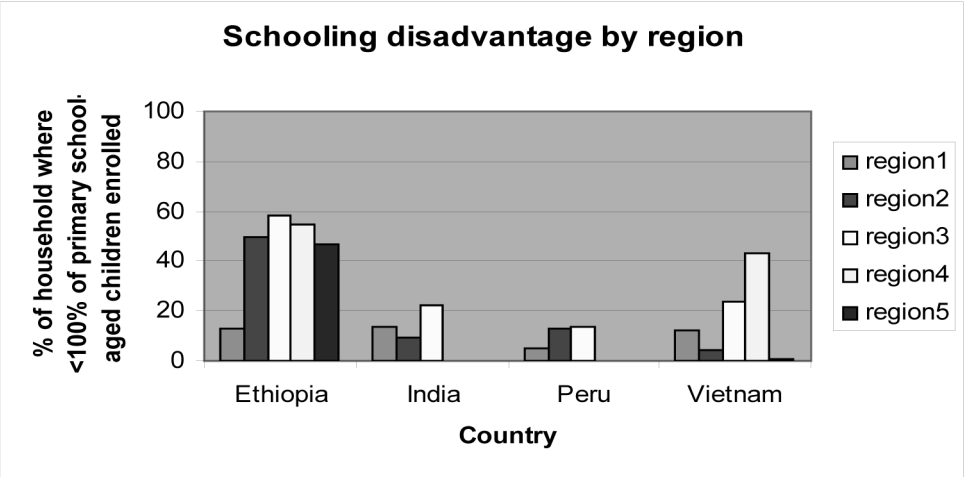
Ethiopia 1 = Addis Ababa
Ethiopia 2 = Amhara
Ethiopia 3 = Oromia
Ethiopía 4 = SNNP
Ethiopia 5 = Tigray

India 1 = Coastal AP
India 2 = Rayalseema
India 3 = Telangana

Peru 1=Coast
Peru 2=Mountain
Peru 3=Jungle

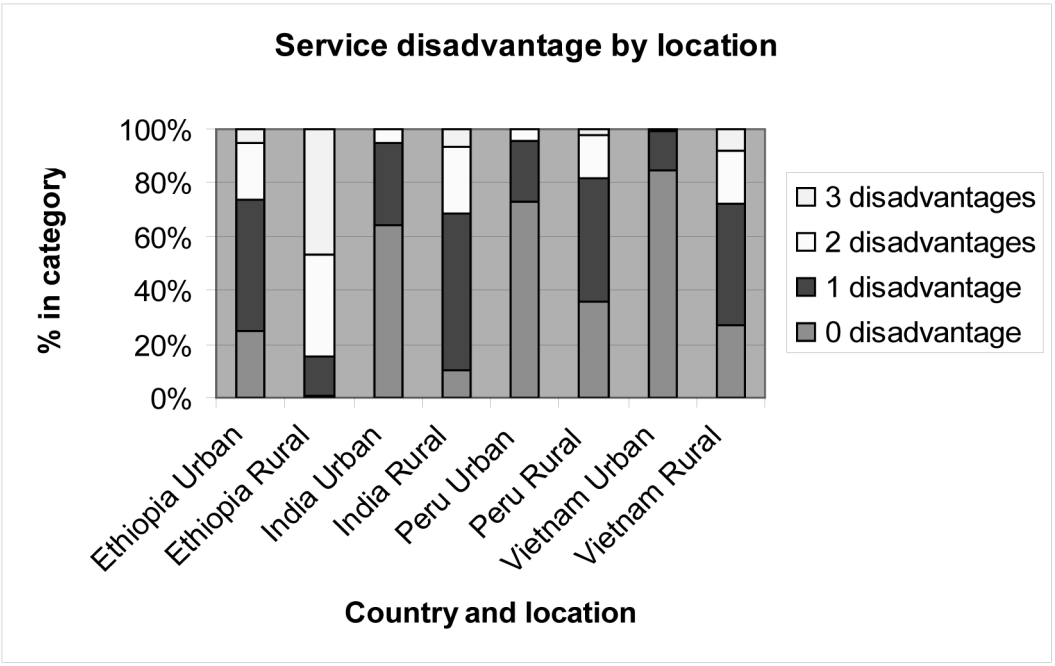
Vietnam 1=Phu Yen
Vietnam2=Ben Tre
Vietnam 3=Lao Cai
Vietnam 4=Hung Yen
Vietnam 5=Da Nang





Figures 5-8 show the distribution of disadvantage across sectors among households in terms of health, infrastructure and education disadvantage. The sample size is smaller because of the inclusion of the latter indicator. For example, Figure 5 illustrates that multiple disadvantage is more common in rural than in urban areas in each country sample. The results suggest that in many situations, those groups without access to any single service are also likely to lack access to other services and that they cope with multiple disadvantages simultaneously. Further analysis showed that in each of the YL country samples, correlations between almost all pairs of indicators of disadvantage were statistically significant at the 0.001 level. This further supports the findings that multiple disadvantages are concentrated in particular sections of the population.

Figure 5. Number of sector disadvantages by rural/urban location



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India 1 = Coastal AP
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Vietnam 1=Phu Yen
Vietnam2=Ben Tre
Vietnam 3=Lao Cai
Vietnam 4=Hung Yen
Vietnam 5=Da Nang

Figure 6. Number of sector disadvantages by wealth group

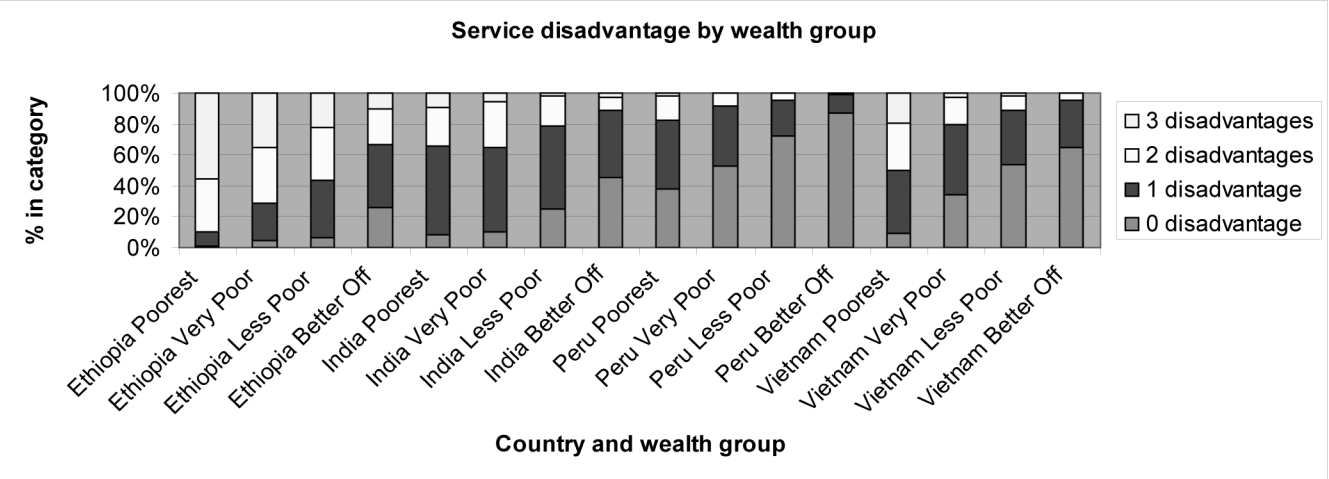
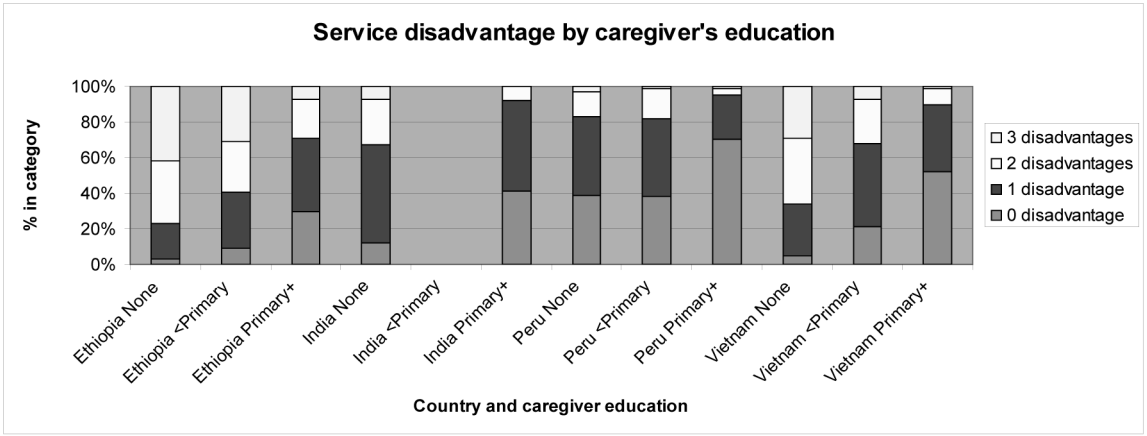
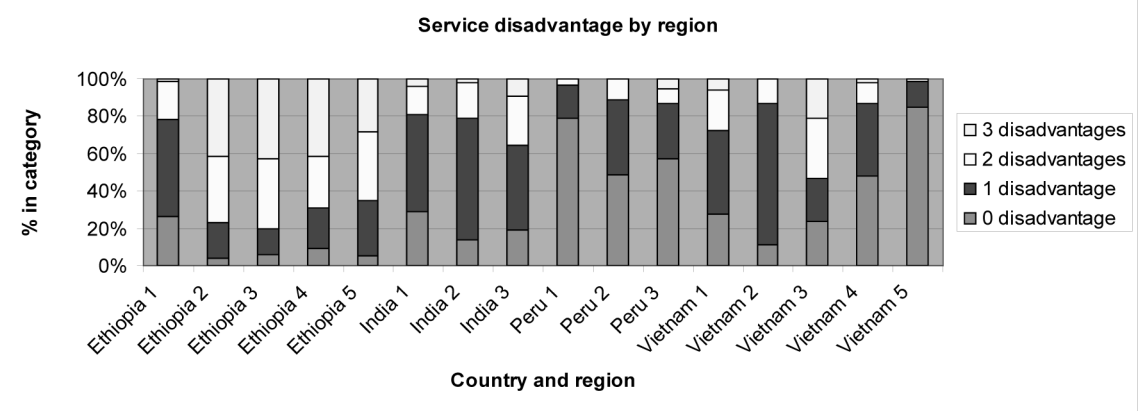


Figure 7. Number of sector disadvantages by caregiver's education



Note: the number of subjects in the "below primary" group in India was too small to be included (n=6)

Figure 8. Number of sector disadvantages by region



Since location (urban/rural) is so strongly associated with multiple disadvantage and with wealth index/caregiver education, we examined these factors conjointly in a logistic regression model (Table 1). Since the levels of multiple disadvantage are very low in some sub-groups, confidence intervals for some estimates are very wide. However, the results emphasise the strong influence of location on the likelihood of disadvantage in at least two sectors. They demonstrate that the data are also consistent with the independent effects of wealth and caregiver education.

Table 1. Adjusted Odds Ratios* for association between caregiver education, household quality quartile and urban/rural location, and experience of disadvantage in 2 or more sectors

	Ethiopia (n=1221)		India (n=632)		Peru (n=1048)		Vietnam (n=616)	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Caregiver education:								
None	1	-	1	-	1	-	1	-
Below primary	0.57	0.40 – 0.83	-	-	1.22	0.68 – 2.19	0.35	0.17 – 0.68
Primary or above	0.35	0.23 – 0.53	0.28	0.15 – 0.51	0.48	0.25 – 0.94	0.11	0.06 – 0.21
Wealth (Housing quality):								
Lowest quartile	1	-	1	-	1	-	1	-
Second quartile	0.51	0.32 – 0.81	1.07	0.68 – 1.69	0.47	0.28 – 0.78	0.51	0.29 – 0.91
Third quartile	0.39	0.24 – 0.63	0.86	0.51 – 1.44	0.40	0.20 – 0.80	0.45	0.23 – 0.88
Highest quartile	0.24	0.15 – 0.39	0.47	0.23 – 0.97	0.056	0.01 – 0.42	0.22	0.09 – 0.54
Urban/rural location:								
Urban	1	-	1	-	1	-	1	-
Rural	7.52	5.37 – 10.52	4.69	1.94 – 11.33	2.18	1.29 – 3.68	24.26	3.25 – 181.14

*Logistic regression model includes all of these exposure variables.

4. Discussion

Using the first round of YL data, we have been able to look at intra-country distributions of disadvantage and identify groups who suffer from multiple disadvantage. Regional and urban/rural disparities emerged as particularly salient, although importantly these differences were not always consistent across all service sectors. Future rounds of YL data will allow us to examine longitudinal trends in these distributions, explore changes in the concentration of disadvantage over time, and look for evidence of entrenchment among those already disadvantaged in the first round.

The inclusion of additional variables (for example, indicators of service quality, access to social protection measures) in future rounds will also allow us to create indicators of disadvantage across a wider range of sectors, and thus provide a more comprehensive picture of multiple disadvantage for a particular point in time.

What preliminary policy lessons can we draw from these findings? First, our results illustrate that disadvantages in service access, especially among rural and poor households, are likely to be overlapping and reinforced by intergenerational transmissions of poverty. This would seem to lend cross-country weight to the importance of conceptualising childhood poverty as a cross-cutting policy theme and investigating multi-dimensional interventions to tackle childhood poverty. International best practices of multi-sectoral interventions to date include carefully targeted child-focused cash transfer programmes, Early Childhood Development (ECD) initiatives and family literacy projects.

Section 4.1 examines the feasibility of considering childhood poverty as a cross-cutting policy theme. Section 4.2 presents some examples of international best practices that have benefited from a cross-sectoral or an intergenerational approach, but also some cautionary evaluations. Finally, Section 4.3 concludes and identifies future research directions for Young Lives regarding cumulative disadvantage in access to basic social services. It highlights ways in which Young Lives could further explore intergenerational synergies and tensions associated with public policy interventions to improve children and women's wellbeing.

4.1 Childhood poverty as a cross-cutting policy theme

Presently, government and donor agencies' approach to the multiple disadvantages of children living in poverty is problematic, as they

> *"either consider children a 'special interest group' or confine attention to the core sectors of health and education. The former results in special 'one off' projects for perceived vulnerable groups such as 'street children' and orphans, while the latter encourages a piecemeal approach to issues of childhood by, for example, aspects of health but not necessarily addressing critical factors such as children's food security or supply of clean water" (Harper, 2004: 3-4).*

A central co-ordinating agency, such as a ministry in charge of children's issues, could enforce an integrated strategy to address childhood poverty because:

- central co-ordination could ease problems at the level of programme implementation when agencies at the local level have weak links with each other and are geographically disperse (Myers, 1992a). Indeed, centralised co-ordination and budgeting has been identified as one of the successful elements of the cash transfer programmes discussed below;
- a central agency could demand analyses of all policy commitments and budgets from a child-sensitive perspective. Adopting a similar approach to the gender mainstreaming and gender budget initiatives discussed in Section 2, an agency responsible for ensuring the fulfilment of children's rights could play a useful watch-dog and liaising role.

Achieving such goals would, however, be dependent on the government agency's commitment to a broad understanding of children's needs and rights, as well as on the agency's power to work with other actors. Unfortunately, to date, children's issues tend to be relegated to marginalised ministries that are responsible for:

> *"a range of perceived 'needy' groups, such as war widows and veterans, orphaned children and the disabled […] These ministries are often marginalised in decision making and resource allocation processes, under-resourced and not engaged with the wider issues which force people into poverty" (Harper, 2004: 4).*

Such disadvantage makes it difficult to take a strategic position on children's policies and budgets and to influence the strategies of other sectors. In fact, the successful gender budget initiatives reviewed above were often co-ordinated by the relatively strong ministries of finance which, however, lacked commitment. Nevertheless, learning from these experiences would allow agencies and their civil society supporters (especially advocates of children's rights) to lobby for more effective institutional designs and monitoring mechanisms to safeguard against potential weaknesses.

Whereas such systematic attempts to establish a government agency with adequate political will, resources and a holistic approach to children's wellbeing have been limited, we can identify international best practices of policy interventions targeted at addressing childhood poverty with a multi-sectoral or an intergenerational approach. We will now turn to a discussion of three of them, namely conditional cash transfers, early childhood education and family literacy programmes, and highlight potential areas for future Young Lives research.

4.2 Policy approaches to overcome disparities in children's access to social services

Conditional cash transfers (CCTs)

Conditional cash transfer programmes are consistent with the multi-dimensional conception of poverty as they aim in the long-term to "eradicate the structural causes of poverty by fostering investment in the next generation's human capital … [and] to alleviate income poverty in the short term through monetary transfers" (Pereznieto, 2004: 20). Rawlings sums up the rationale behind inter-sectoral CCTs:

> *"By focusing on health, nutrition and education, most CCT programs recognize and foster the complementary relationships between these elements of human capital development that are crucial to breaking the inter-generational transmission of poverty. This direct fostering of the synergies between these areas is also a recognition of the evidence concerning the ineffectiveness of certain human capital investments, such as education, without the provision of other basic inputs, such as adequate nutrition" (Rawlings, 2004: 7-8).*

The first large-scale conditional cash transfer programme was Mexico's *Progresa* (now called *Oportunidades*), launched in 1997, the success of which has inspired similar programmes throughout Latin America.[5] As illustrated in more detail in Box 2, *Progresa*, which from the start had a robust monitoring mechanism built into the programme design, has increased children's school enrolment, improved infant nutrition and the overall health of household members, and given women more bargaining power within the household.

Box 2: Progresa

Mexico's Progresa (now Oportunidades) provides cash transfers to poor families conditional on their investment in their children's human capital. Since its inception in 1997, the programme has become an important part of Mexico's poverty reduction agenda, and in 2002, coverage reached 20 per cent of the country's population.

The programme involves a monthly cash transfer to beneficiary households conditional on their children attending school (grades 3-9) and girls' enrolment in secondary school. In addition to covering school costs, there is also a consumption subsidy for households participating in the scheme and a nutrition subsidy for pregnant and lactating mothers and small children, conditional on regular visits to the health centre by all family members. The benefits are directed to the mother with the maximum amount per household being capped in order to discourage higher fertility and reduce dependence.

Evaluations found that Progresa resulted in higher enrolment rates, especially for girls in secondary school. "Improved school attendance is associated with an extra 0.66 years of schooling by the final grade, and an extra 0.72 for girls" (Barrientos and DeJong, 2004: 27). Stunting of children aged 12-36 months was reduced, although supplements were shared within households. Evidence also shows a decrease in illness among adults and children, especially among babies (a 25 per cent reduction) and children between 3 and 5 years (a reduction of 22 per cent). Finally, women reported having greater control over household resources (Morley and Coady, 2003; Barrientos and DeJong, 2004).

The success of *Progresa* and other similar programmes in Latin America notwithstanding, some unresolved concerns persist with cash transfers. Although Morley and Coady (2003: 42) conclude that "in low-income countries such as Nicaragua with tighter budget constraints and greater need for educational resources to address inferior educational outcomes, lower transfers can achieve large impacts on human capital accumulation, especially among the poor." Nigenda and Gozalez-Robledo (2005), in contrast, argue that it is unlikely that CCT programmes will be successful outside Latin America, especially in poorer countries of sub-Saharan Africa.

For example, in African countries such as Malawi, targeting would be more problematic as the most vulnerable groups in society are generally unregistered and have little capacity to travel to a bank or post office to receive payments. There are also concerns about ensuring a smooth transfer of cash because of security problems and the absence of computerisation (Nigenda and Gozalez-Robledo,

5 Similar cash transfer programmes have been implemented (the Red de Proteccion Social implemented in Nicaragua 2001 and Chile Solidario in Chile in 2002). While previous programmes were "based on the view that education deficits, together with deficits in parenting, primary healthcare, and nutrition in early childhood, are the main factors explaining persistent poverty [,] Chile Solidario maintains that poverty is intrinsically multi-dimensional, and regards the household as a whole, and not only the children, as the main agent of change" (Barrientos and DeJong, 2004: 24; Palma and Urzua, 2005).

2005). Although existing cash transfer schemes in sub-Saharan Africa tend to be unconditional (Save the Children UK, HelpAge International and Institute of Development Studies, 2005), there is also a debate about whether conditionality is key to poverty reduction and human capital accumulation. However, detractors counter that it is paternalistic to believe that without conditionality the poor would not respond to services (Nigenda and Gozalez-Robledo, 2005), and that strict conditions tend to penalise households which are most in need of support to overcome poverty (Barrientos and DeJong, 2004).

A further concern regarding the feasibility of implementing cash transfer programmes relates to the fact that to date they have only dealt with the demand side of service delivery; thus, it is often only families in areas with adequate services which can participate (Barrientos and DeJong, 2004; Rawlings, 2004; Britto, 2005; Palma and Urzua, 2005). Furthermore, for cash transfer schemes to have intended effects, existing schools will have to be able to deal with increased enrolment and class sizes, as well as with the needs of children who come from families with less educated parents (Morley and Coady, 2003). In other words, improvements in welfare are unlikely if cash transfers are conditional on the use of poor quality health services and schools (Rawlings, 2004). Morley and Coady (2003: 36) have, nevertheless, suggested that although existing programmes have not included a component to deal with the quality of education, initiatives such as a school voucher component or the role of communities in monitoring programme performance, could address the supply side dimension of CCT programmes.

In the longer term, the impact of greater human capital in poverty reduction cannot be taken for granted as, in addition to the quality of education, it is influenced by "rates of employment, absorption of skilled labor in the economic structure and general rates of return to education" (Britto, 2005: 13; Nigenda and González-Robledo, 2005). In fact, *Oportunidades* has started moving towards the provision of young people with better opportunities of finding employment, while *Chile Solidario* has incorporated pensions and job opportunities in the core of the programme (Nigenda and González-Robledo, 2005).

Our Young Lives findings showed that in households where children were enrolled in school, members also had better access to health and community infrastructure services. This suggests that concerns about the demand side bias of cash transfer programmes need to be addressed in order to effectively tackle child poverty, especially in Ethiopia where access to services is particularly low. It will also be important for Young Lives to evaluate recently introduced cash transfer programmes in Peru and parts of Ethiopia — provided that there is overlap with YL sentinel sites — and their impacts on child poverty outcomes over time.

Early Childhood Development (ECD)

Early Childhood Development (ECD) is an umbrella definition of care and services aimed at preschool-aged children (0-6 years) and, depending on the definition, can include school-, community-, centre-, or home-based childcare; preschool education; supplementary feeding programmes; health programmes and parent support/education (Penn, 2004). ECD is now promoted by the major multilaterals, such as the World Bank, which acknowledge that ECD is important in promoting the physical, cognitive and psycho-social wellbeing and development of vulnerable children and as a means to reducing poverty and inequality and achieving long-term economic prosperity

(Penn, 2004; World Bank, 2005c). An example of an intergenerational ECD programme is the Turkish Mother-Child Education programme, which is presented in Box 3.

Although many ECD programmes are primarily meant to improve children's readiness to start primary school, they can have several other expected outcomes. It is generally hoped that ECDs will also improve children's physical health, provide support for time-poor mothers, rehabilitate disabled children and generally improve children's quality of life (Myers, 1992b). Furthermore, when services in a community are strengthened as a result of an ECD intervention, the community as a whole is likely to benefit. "This point […] is often overlooked, in part because early childhood development programs are defined narrowly as education programs for young children rather than in the broader integrated perspective" (Myers, 1992b: 24).

Box 3: The Turkish Mother-Child Education Programme

This programme addresses the need for intervention programmes that take account of the intersecting needs of women and children. It is based on experiences that suggest that such an approach motivates participation and is more effective than single-purpose programmes (Kagitcibasi et al., 1995). It has its roots in the Early Enrichment Project, which comprised: 1) cognitive training for mothers and 2) mother "enrichment", with bi-weekly group discussion sessions for two years when children were of preschool age.

The impacts of the project were evaluated in a longitudinal study, the results of which, in the fourth year, showed significant positive effects on children's development and school achievement compared to those in the control group. "It thus appears that, working only with the mothers, and the mothers working with their children goes a long way toward contributing to children's development" (Kagitcibasi, 1992). The study also found that the programme had empowering effects on the mothers. Not only were they able to improve their interaction with their children, the project improved their intra-family status vis-à-vis their husbands (ibid). In the follow-up study ten years later, the authors found that 86 per cent of the 13-15-year-old adolescents were still in school, compared to only 67 per cent in the control group (ibid).

Evaluations of existing ECD programmes, however, point to important shortcomings. Many ECD programmes in the South rely on educating parents as a cost-effective means of improving children's wellbeing. "There is an implication that parents may be ignorant of essential tenets of child development, […] and that donors should attempt to provide such knowledge and education. […] What is rarely considered […] is the extent to which poverty distorts parent's ability to support their children in all but the most basic ways, or leads to parents being absent, either because of migration or death" (Penn, 2004: 20).

Furthermore, as many ECD programmes, particularly in the South, depend on home-based care and parental education as cost-effective options, there are possible tensions between mothers' and children's wellbeing. Home-based programmes in Brazil, for example, "are exploitative of poor women who act as caregivers, and serve to reinforce gender stereotypes, while the costing models that are used assume a cheap service whose main effect is to lower the expectations of the poor" (Penn, 2004: 16).

The potential tensions between ECD programmes and reliance on women's unpaid or under-paid labour and time is an important issue that should be explored in future YL surveys and analyses. This will be particularly pertinent in the cases of Andhra Pradesh which has a long-standing programme (Integrated Child Development Service (ICDS)) and Peru, with its well-known *wawa-wasi* (early childcare) programme.

Intergenerational programmes

Widely recognised empirical evidence and conceptual understanding of inter-sectoral and intergenerational linkages (eg Mehrotra, 2004) have encouraged social services planners to introduce parental education programmes that tap into these synergies. Intergenerational programmes may involve *parenting support* where parents and caregivers are provided with information about how to care for their children in order to maximise their development and potential, such as the Turkish Mother-Child Education Programme discussed above. Alternatively, *parent education programmes* include any training activity provided to parents, not necessarily about parenting, that may indirectly enhance the wellbeing of their children (Evans and Stansbery, 1998). Box 4 reviews two examples of parent education programmes in Malaysia and Mali, which highlight the strengths and potential weaknesses of the approach. Key ingredients of success included greater motivation for women to become involved in their children's education, fostering of more egalitarian intra-household dynamics, participatory approaches to programming to ensure relevant content and participants' sense of ownership of the programmes.

Box 4: Adult literacy programmes: strengths and weaknesses

Adult literacy programme in Malaysia

Carried out in a squatter community, this programme was premised on the idea of intergenerational learning and had two components: 1) adult education and 2) parent-child time. Using participatory qualitative methods, Sivasubramaniam's (2005) assessment of the impacts of the programme found that women who participated in the course functioned as teachers for their children, and the course helped them to understand their role in helping their children to learn. The interviewed women expressed new confidence in their ability to teach their own children. The women also reported more instances of using literacy exercises with their children, and an ability to see "instances of emerging literacy" in their children (ibid: 11).

Both women and children enjoyed participating in the programme, and this was identified as a key factor in the success of the programme. Previously, the participants would have linked learning to fear and discipline (Sivasubramaniam, 2005). The intergenerational component also motivated women to attend the programme and overcome obstacles (eg workload, intra-household power imbalances). The programme was designed in participation with the women, which guaranteed that it was more relevant to their lives, "and created a sense of ownership" (ibid: 13). The findings also support the belief that intergenerational programmes have better retention and attendance rates than single focus programmes.

Family literacy in Mali

However, the simple introduction of adult literacy programmes does not automatically translate into intra-household gains. A case study of a largely unsuccessful literacy programme in Mali highlights the importance of concern for the content and mechanisms through which positive benefits will accrue to the family.

According to Puchner's (1997) evaluation of an adult literacy course in rural Mali, run by Save the Children US, development workers and villagers generally believed that women's literacy would be beneficial for their family through an improved ability to take care of their children and husbands, stemming largely from an increase in income-generating opportunities. However, Puchner found almost no evidence of an intra-family transfer of literacy. The few exceptions were women who told her that they had got their children to teach them reading skills, eg during the month of Ramadan, when the adult literacy classes were suspended. Puchner notes that the poor quality of adult literacy classes, their irrelevance to women's lives and few opportunities to utilise the skills outside the classroom, resulted in many women not acquiring even simple skills, regardless of long periods of attendance. This, in turn, may have contributed to lower self-esteem among some women as well as negative perceptions of women's or girls' education in general.

Given that YL analysis has found a positive association between caregiver education levels and child outcomes (especially education, health, nutrition, involvement in work activities) (Escobal *et al.*, 2005; Woldehanna, Jones and Tefera, 2005; Woldehanna, Tefera, Jones and Bayrau, 2005; Mekonnen, Jones, Tefera, 2005), but empirical evaluations point to mixed efficacy of the spill-over effects of adult literacy programmes, it could be interesting for YL to carry out more in-depth qualitative research on intra-household dynamics, social sector programmes and poverty reduction strategies.

4.3 Conclusions and directions for future research

Given the emergence of cumulative disadvantage as an overarching characteristic in the analysis of the preliminary YL data, the longitudinal nature of our research will allow further study of these trends over time. It will be interesting, for example, to see whether lack of access to basic services early in life leads to cumulative disadvantage over time. Longitudinal analysis could include an examination of whether measures of disadvantage across sectors become more or less correlated over time. If disadvantage in one domain were to become more strongly associated with disadvantage in other domains, it would indicate not only a need for policy interventions to take these linkages into account but also the development of more tailored context-appropriate approaches in order to improve child wellbeing.

We will also be able to look at changes in the number of disadvantages experienced over time. It will be interesting to distinguish between changes in the number of people experiencing no disadvantage, and changes in the average number of disadvantages experienced. The former would allow us to see if the number of people experiencing any disadvantage was growing or decreasing. The latter would give us the capacity to look for evidence of 'entrenchment', something which would be demonstrated if the same/fewer individuals became disadvantaged in at least one indicator, but those disadvantaged in at least one indicator, experienced disadvantage across a greater number of indicators.

To be better able to assess the feasibility of the inter-sectoral and intergenerational interventions discussed above, further research is needed. In addition to analysing data about the YL index children and their families, it will be important to evaluate the efficacy of recently introduced cash transfer programmes in Peru and Ethiopia – provided that there is overlap with YL sentinel sites - particularly in order to address the concerns about a demand side bias in cash transfer programmes. Similarly, in terms of Early Childhood Development programmes, there is scope for evaluation of interventions in Andhra Pradesh and Peru, especially in the context of greater decentralisation and the development of community policy and budget monitoring mechanisms.

Finally, analysis of intergenerational synergies in welfare and disadvantage in this paper has been accompanied by attention to the mixed relationship between the welfare of children and their caregivers. For example, potential tensions stemming from reliance on women's unpaid or under-paid labour in ECD programmes should be explored in future YL surveys and analyses of such interventions. Equally importantly, though, synergies between caregiver education and child outcomes merit further study, as does more in-depth qualitative research on intra-household dynamics, social sector programmes and poverty reduction strategies

References

Alderman, H., J. Hentschel, R. Sabates (2003) 'With the help of one's neighbors: externalities in the production of nutrition in Peru', *Social Science and Medicine,* 56, pp. 2019-2031.

Attawell, K. (2004) 'International Longitudinal Research on Childhood Poverty: Practical Guidelines and Lessons Learned from Young Lives', *Young Lives Working Paper Series* No. 11, London: Young Lives.

Barrera, A. (1990) 'The Role of Maternal Schooling and its Interaction with Public Health Programs in Child Health Production', *Journal of Development Economics,* Vol. 32, pp. 69-91.

Barrientos, A. and J. DeJong (2004) 'Child Poverty and Cash Transfers', *CHIP Report* No. 4, London: Childhood Poverty Research and Policy Centre.

Bird, K., D. Hulme, K. Moore and A. Shepherd (2002) 'Chronic poverty and remote rural areas', *CPRC Working Paper* No. 13, Manchester: Chronic Poverty Research Centre.

Bird, K. and I. Shinyekwa (2003) 'Multiple shocks and downward mobility: learning from the life histories of rural Ugandans', *CPRC Working Paper* No. 36, Manchester: Chronic Poverty Research Centre.

Britto, T. (2005) *Recent trends in the development agenda of Latin America: an analysis of conditional cash transfers*, Ministry of Social Development, Brazil.

Brocklesby, M. (1998) *Participatory Poverty Assessments and Public Services: Key Messages From the Poor,* Report commissioned by the Social Development Division, Department for International Development, UK.

Budlender, D. and G. Hewitt (2003) *Engendering Budgets. A Practitioners' Guide to Understanding and Implementing Gender-responsive Budgets,* London: Commonwealth Secretariat.

Caillods, F. and J. Hallak (2004) *Education and PRSPs. Review of experiences*. Paris: International Institute for Educational Planning, UNESCO.

Caldwell, J. and P. McDonald (1982) 'Influence of maternal education on infant and child mortality: levels and causes', *Health Policy and Education,* 2 (3-4), pp. 251-67.

Chambers, R. (1995) 'Poverty and livelihoods: whose reality counts?' *Environment and Urbanization* 7 (1), pp. 173-204.

Chong, A., J. Hentschel and J. Saavedra (2004) 'Bundling of Services and Household Welfare in Developing Countries Using Panel Data: The Case of Peru', *Working Paper* No. 489, Inter-American Development Bank, Research Department, Washington.

Christiansen, L. and H. Alderman (2001) 'Child Malnutrition in Ethiopia: Can Maternal Knowledge Augment the Role of Income?' *Africa Region Working Paper Series* No. 22, Washington: World Bank.

Chronic Poverty Research Centre (2005) *Chronic Poverty Report 2004-05,* Manchester: Chronic Poverty Research Centre.

Cleland, J. and J. Van Ginneken (1988) 'Maternal education and child survival in developing countries: the search for pathways of influence', *Social Science and Medicine* 27 (12), pp. 1357-68.

Morley, S. and D. Coady (2003) *From Social Assistance to Social Development: A Review of Targeted Education Subsidies in Developing Countries*, Washington, DC: International Food Policy Research Institute.

Desai, S. and S. Alva (1998) 'Maternal education and child health: is there a strong causal relationship?' *Demography* 35 (1), pp. 71-81.

Driscoll, R. with A. Evans (2005) 'Second-Generation Poverty Reduction Strategies: New Opportunities and Emerging Issues', *Development Policy Review* 23 (1), pp. 5-25.

Escobal, J. and M. Torero (2005) 'Measuring the impact of asset complementarities: the case of rural Peru', *Cuadernos de Economia,* 42, pp. 1-26.

Escobal, J., J. Saavedra, P. Suarez, S. Huttly, M. Penny, C. Lanata and E. Villar (2005) 'The Interaction of Public Assets, Private Assets and Community Characteristics and its Effect on Early Childhood Height-for-Age in Peru', *Young Lives Working Paper Series* No. 14, London: Young Lives.

Evans, J. and P. Stansbery (1998) *Parenting Programs Designed to Support the Development of Children from Birth to Three Years of Age*, The Consultancy Group on Early Childhood Care and Development.

Glewwe, P. (1999) 'Why does Mother's Schooling Raise Child Health in Developing Countries: Evidence from Morocco', *Journal of Human Resources,* Vol. 34, No. 1, pp. 124-159.

Gwatkin D., A. Bhuiya and C. Victora (2004) 'Making health systems more equitable' *Lancet*, Vol. 364, pp. 1273-80.

Harper, C. (2004) 'Breaking poverty cycles – The importance of action in childhood', *CHIP Policy Briefing* No. 8, London: Childhood Poverty Research and Policy Centre.

Hulme, D. and A. McKay (2005) *Identifying and Understanding Chronic Poverty: Beyond Monetary Measures*, Paper presented at the International Conference, 'The Many Dimensions of Poverty', Brazil.

Kagitcibasi, C. (1993) 'A model of multipurpose non-formal education. The case of the Turkish Early Enrichment Project' in L. Eldering and P. Leseman (eds.) *Early Interventions and Culture. Preparation for Literacy,* UNESCO Publishing, Netherlands National Commission for UNESCO.

Kagitcibasi, C., S. Bekman and A. Göksel (1995) 'A multipurpose model of nonformal education: The mother-child education programme', *Co-ordinators Notebook* No. 17, The Consultative Group on Early Childhood Care and Development, Washington: World Bank.

Kanbur, R. and L. Squire (1999) *The evolution of thinking about poverty: Exploring the interactions*, Mimeo, The World Development Report Office, Washington: World Bank.

Lavy, V., J. Strauss, D. Thomas and P. de Vreyer (1996) 'Quality of health care, survival and health outcomes in Ghana', *Journal of Health Economics,* Vol. 15, pp. 333-357.

Mehrotra, S. (2004) Improving Child Wellbeing in Developing Countries. What Do We Know? What Can Be Done? *CHIP Report* No. 9, London: Childhood Poverty Research and Policy Centre.

Mehrotra, S., J. Vandermoortele and E. Delamonica (2000) *Basic Services for All? Public Spending and the Social Dimensions of Poverty,* Innocenti Publications, Florence: UNICEF Innocenti Research Centre.

Mekonnen, A., N. Jones and B. Tefera (2005) 'Tackling Child Malnutrition in Ethiopia: Do the Sustainable Development Poverty Reduction Programme's underlying policy assumptions reflect local realities?' *Young Lives Working Paper Series* No. 19, London: Young Lives.

Myers, R. (1992a) *The Twelve Who Survive. Strengthening Programs of Early Childhood Development in the Third World,* London: Routledge and Paris: UNESCO.

Myers, R. (1992b) *Investing in Early Childhood Development Programs in Latin America: Toward Definition of an Investment Strategy,* The Consultative Group on Early Childhood Care and Development, Washington: World Bank.

Myers, R. (2000) *Thematic Studies: Early Childhood Care and Development,* Paris: UNESCO.

Nigenda, G. and L. González-Robledo (2005) *Lessons offered by Latin American cash transfer programmes, Mexico's Oportunidades and Nicaragua's SPN. Implications for African countries,* London: DFID Health Systems Resource Centre.

Nussbaum, M. (2000) *Women and Human Development. The Capabilities Approach,* Cambridge: Cambridge University Press.

O'Malley, K. (2004) *Children and Young People Participating in PRSP Processes. Lessons from Save the Children's experiences*, London: Save the Children.

Palma, J. and R. Urzua (2005) 'Anti-poverty Policies and Citizenry: the Chile Solidario Experience', *Management of Social Transformations Policy Papers Series* No. 12, Paris: UNESCO.

Penn, H. (2004) 'Childcare and Early Childhood Development Programmes and Policies: Their relationship to eradicating child poverty', *CHIP Report* No.8, London: Childhood Poverty Research and Policy Centre.

Pereznieto, P. (2004) 'Conditional Cash Transfer Programmes as Policy Mechanisms to Address Intergenerational Transmission of Poverty in Latin America', Unpublished Masters dissertation, London School of Economics.

Puchner, L. (1997) 'Family Literacy in Cultural Context: Lessons from Two Case Studies', *NCAL Technical Report*, University of Pennsylvania.

Rawlings, L. (2004) 'A New Approach to Social Assistance: Latin America's Experience with Conditional Cash Transfer Programs', *Social Protection Discussion Paper Series*, No. 0416, Washington: World Bank.

Santibanez, C. (2003) '"*Chile Solidario" Project. Measuring and Dealing with Human Poverty in Chile: From an "Income" to a "Capability" Approach*', Paper presented at the WIDER Conference on Inequality, Poverty and Human Well-being, Helsinki, 30-31 May.

Sastry, N. (1996) 'Community Characteristics, Individual and Household Attributes and Child Survival in Brazil', *Demography*, Vol. 33, No. 2, pp. 211-229.

Save the Children UK, HelpAge International and Institute of Development Studies (2005) *Making Cash Count. Lessons from cash transfer schemes in east and southern Africa for supporting the most vulnerable children and households,* London and Brighton: Save the Children UK, HelpAge International and Institute of Development Studies.

Sharp, R. and R. Broomhill (2002) 'Budgeting for Equality: The Australian Experience', *Feminist Economics* 8 (1), pp. 25-47.

Sivasubramaniam, M. (2005) *Family literacy and gender: Changing the dominant discourses of practice in a squatter community in Malaysia,* Paper presented at the 8th UKFIET International Conference on Education and Development, September 13-15, Oxford.

Thin, N., M. Underwood and J. Gilling (2001) *Sub-Saharan Africa's Poverty Reduction Strategy Papers from Social Policy and Sustainable Livelihoods Perspectives*, Report commissioned by DFID's Social Development Department and Rural Livelihoods Department, Oxford Policy Management.

Thomas, D., J. Strauss and M. Henriques (1991) 'How Does Mother's Education Affect Child Height?' *The Journal of Human Resources* Vol. 26, No. 2, pp. 183-211.

Vandemoortele, J. (2001) 'Social Policies and Investment in Health', *Development,* Vol. 44, No. 1, pp. 44-50.

Sen, A. (1999) *Development as Freedom.* New York: Knopf.

Wilson, I. and S. Huttly (2003) 'Young Lives: A Case Study of Sample Design for Longitudinal Research', *Young Lives Working Paper Series* No. 10, London: Young Lives.

Woldehanna, T., N. Jones and B. Tefera (2005) 'Children's Educational Completion Rates and Achievement: Implications for Ethiopia's Second Poverty Reduction Strategy (2006-10)', *Young Lives Working Paper Series* No. 18, London: Young Lives.

Woldehanna, T., B. Tefera, N. Jones and A. Bayrau (2005) 'Child Labour, Gender Inequality and Rural/Urban Disparities: how can Ethiopia's national development strategies be revised to address negative spill-over impacts on child education and well-being?' *Young Lives Working Paper Series* No. 20, London: Young Lives.

World Bank, 2003, *World Development Report 2004. Making Services Work for Poor People,* Washington: World Bank.

World Bank (2005a) *Maintaining Momentum to 2015? An Impact Evaluation of Interventions to Improve Maternal and Child Health and Nutrition in Bangladesh,* World Bank Operations Evaluation Department, Washington: World Bank.

World Bank (2005b) 'Children and Youth. Multi-sector approach', Accessed online at www.worldbank.org on 7 November 2005.

World Bank (2005c) *World Development Report 2006. Equity and Development,* Washington: World Bank.

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Young Lives is an international longitudinal study of childhood poverty, taking place in Ethiopia, India, Peru and Vietnam, and funded by DFID. The project aims to improve our understanding of the causes and consequences of childhood poverty in the developing world by following the lives of a group of 8,000 children and their families over a 15-year period. Through the involvement of academic, government and NGO partners in the aforementioned countries, South Africa and the UK, the Young Lives project will highlight ways in which policy can be improved to more effectively tackle child poverty.

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