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What Role for Safety Net Transfers in Very Low Income Countries?

W. James Smith and Kalanidhi Subbarao

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Social Safety Net Primer Series

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Social Safety Net Primer Series

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1. Papers may be added or deleted from the series from time to time.

Abstract

Smith and Subbarao consider the vexing question of what role safety net transfers should play in very low income countries where a large share of the population lives in absolute poverty and the state has very limited resources to fund transfers. They explore three fundamental constraints, all of which are accentuated in these countries, the availability of accurate information to identify beneficiaries, the administrative capacity to target them, and the fiscal affordability of transfers and assess the implications for program choice and design.

They conclude that at expected growth rates the number of people living below minimum acceptable consumption levels will remain so high that some form of safety net intervention is justified, but that to minimize the fiscal trade-off, safety net expenditures should be used to simultaneously finance other investments that contribute to long-run poverty reduction (such as roads or irrigation works under public employment schemes). Second, for pure transfers, governments should be selective of very specific groups—such as orphans—to limit costs and engender political support. Third, to improve the impact per dollar spent on transfers, programs should be selected that have a multiplier effect on incomes (examples include vouchers for small fertilizer packs for the poor), or leveraged by using the small amounts of cash to help households reduce risk or diversify economic activity. Fourth, to get around the information constraint, choose programs that are self-targeting, such as public works at a low wage rate or subsidized inferior food goods. Fifth, the judicious timing of transfers is important, for example, during the lean season when the opportunity cost of labor is lowest, or just before planting time. And finally, programs should be kept as simple as possible to fit with the limited administrative capacity, avoiding multiple, overlapping donor programs in favor of one or two simple nationwide programs that are easily implementable, cost-effective, and fiscally sustainable.

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What Role for Safety Net Transfers in Very Low Income Countries?

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I. Introduction

This paper looks at the question of transfer programs for the poor in very low income countries. The fundamental contradiction is obvious: those countries that most need safety nets--with the lowest per capita incomes and very large proportions in absolute poverty--are the ones that can least afford them. Under these circumstances, what is the "right" safety net strategy?

The answer is not obvious. Governments and the international donor community generally want to assist those who are living in abject poverty, but in these countries the competing claims on public expenditure are so great and revenue-raising capacity so limited, that little is available for transfer programs, while the numbers of the very poor are just too large to be able to realistically expect to support them. Furthermore, if poverty is the result of lack of growth and fundamental structural issues, providing transfers to the poor may not be a rational strategy.

The General Characteristics of Very Low Income Countries

We are looking mostly at the very poorest countries: those below about US$300 per capita income annually, countries such as Ethiopia, Nepal, Mali, Chad, Malawi, and Niger. Such countries generally exhibit a number of common characteristics:

- They have very low average incomes
- They are generally not on a growth path that would significantly reduce poverty in the near future
- They have very limited resources to fund transfers to the poor
- They are often in the early stages of transition out of subsistence agriculture.

There are three factors that affect what is possible in terms of safety net interventions: fiscal affordability, the availability of adequate information on beneficiaries, and the

[1] For helpful comments and suggestions, the authors are very grateful to Harold Alderman, Lionel Demery, Margaret Grosh, and participants at three Bank seminars held as the work progressed.

administrative capacity to target programs. In this group of countries all three are often binding constraints, and this has an impact on the choice and design of interventions.

Table 1 provides a list of such countries, and some of the fundamental attributes that characterize them. A second and similar group of countries are those with larger economies and somewhat more robust growth rates, but which nonetheless have very large numbers of the world's' poorest people, often concentrated in particular areas or groups. This group includes countries such as Bangladesh, India, Kenya, Vietnam, and Uganda.

Finally, there is a group of countries that exhibits specialized characteristics that affect the nature of poverty and the approach to safety nets either because they are in a post-conflict situation or because they are going through a process of transition. These include countries such as Angola, Burundi, Mongolia, Sierra Leone, and Tajikistan.

Table 1 – Characteristics of Selected Very Low Income Countries

Country	*Per capita GNP*	*Average growth rate 1977–97 (percent)*	*Growth of per capita income 1977–97 (percent)*	*Percentage of population below poverty line (percent)*	*Percentage of labor force in agriculture (percent)*
Burkina Faso	$ 250	3.4	0.8	n.a.	93
Chad	$ 230	2.0	0.5	64	84
Ethiopia	$ 110	1.7	–1.2	n.a.	86
Malawi	$ 210	3.0	0	54	87
Mali	$ 260	n.a.	n.a.	n.a.	86
Mozambique	$ 210	0.4	–2.2	n.a.	82
Nepal	$ 210	4.3	1.7	42	95
Níger	$ 200	0.6	–2.8	63	91
Nigeria	$ 280	1.0	–1.9	43	43
Tanzania	$ 210	n.a.	n.a.	51	85

Source: World Development Indicators, 2000 and 2001.

For our purposes, safety nets are taken to include any direct transfers to the poor, whether in cash or in kind (e.g., food and fertilizer), with or without a work requirement. Examples include public works programs, food distribution and feeding programs, discount and voucher schemes, and--to a lesser extent in very poor countries--pensions and cash entitlements. We are not including broader schemes designed to raise the incomes of the poor more permanently, such as credit and income-generating programs, which are seen as part of the broader development program.

Our basic premise is that given the fiscal constraints, the scope for spending on safety nets in these countries is extremely limited and, as a point of departure, one wants to be spending the minimum necessary amount on pure transfers. Having said that, there are compelling reasons for still considering some form of safety net transfers in very poor countries, because (i) at expected growth rates there are going to remain very large numbers

of poor, the poorest of whom are living at consumption levels which are unacceptably low; (ii) there are reasons to believe that improving equity through redistributive transfers may be good for growth; and (iii) that such transfers in fact represent an investment in future growth by avoiding the erosion of human capital (for example through malnutrition or disinvestment in assets) that accompanies extreme poverty, especially during short-term crises. The trick is to do this in such a way that it minimizes distortionary incentives. Given the limitations on what is affordable, it is also important that transfers be as selective as possible and that they are engineered in such a way as to lift the constraints to income growth of the poor in the longer run.

Issues examined in this paper include ways of being selective of subgroups and of interventions (to maximize the impact for each dollar spent), of using expenditures on safety net programs to help lift constraints to development and poverty reduction, and to choose program designs that recognize the extremely tight information and administrative constraints in these countries.

Structure of the Paper

Section 2 examines the role of safety nets in a poverty reduction strategy more broadly, both in the context of growth and of income distribution, in very low income countries (VLICs). It examines the limited empirical evidence on the characteristics of poverty in these countries to see what implications there are for the choice of safety nets. Building on this, it looks at the possible objectives a safety net could be expected to serve in very low income economies, and Section 3 considers what is feasible given the administrative and fiscal constraints. Section 4 briefly describes the program choices that might be considered, and Section 5 examines some of the particular social and political characteristics of very poor countries that affect how we think about safety nets.

II. The Role of Transfers in a Poverty Reduction Strategy

Growth and Safety Nets

While it may seem obvious, it is important to emphasize at the outset that safety nets must be located in the context of a wider development strategy. The only lasting solution to poverty in these countries is labor-absorbing growth, and the primary efforts need to be directed towards achieving more rapid and more equitable growth.

The root causes of chronically low incomes, low productivity of labor in subsistence agriculture--the lack of off-farm employment opportunities, failure to diversify cropping, and insufficient education and infrastructure--are not going to be solved by safety net transfers and addressing these needs remain at the center of any poverty reduction strategy.

Having said that, even at the most optimistic growth rates the numbers of absolute poor are not going to decline rapidly enough. Table 2 illustrates the growth rates required to reduce the number of poor in a sample of countries. As can be seen from the table, the growth rates required are substantially higher than those achieved historically. It therefore seems unrealistic to expect that growth alone will adequately improve the incomes of the poor--especially of the poorest--within a reasonable timeframe and that some kind of safety net is therefore justified.

Table 2: Minimum Growth Rates in National Income Needed to Prevent a Rising Number of Poor Under a Distributionally Neutral Growth Scenario – Selected Countries

	Minimum GDP growth required under given population growth (percent)			*Actual growth record (percent)*
Country Population growth rate:	*2.0*	*2.5*	*3.0*	*1990–2000*
Nigeria	3.4	4.3	5.1	3.0
Tanzania	5.2	6.5	7.8	3.5
Kenya	4.2	5.2	6.3	1.9
Malawi	4.7	5.8	7.0	3.9
Mauritania	3.6	4.5	5.4	3.5
Rwanda	3.4	4.2	5.0	2.4
Senegal	4.6	5.8	7.0	3.4
Uganda	4.4	5.5	6.7	6.7
Zimbabwe	4.2	5.3	6.4	2.3

Source: Authors' calculations, actual growth rates from World Bank data.

There are obvious reasons, however, why very poor countries have not operated safety net programs in the past: they cannot afford the cost of pure transfers and the magnitude of the poverty problem is such that policymakers generally despair of affecting it through transfers. There are, however, grounds for thinking that transfers under a safety net may not be incompatible with longer-run income growth for the poor and may in fact contribute to it.

Recent thinking on the relationship between distribution and growth suggests that it may be worth revisiting the traditional view of redistribution as purely a current consumption measure. Work by Bruno, Ravallion and Squire (1998) and others suggests that the level of distribution does matter for growth and that more egalitarian countries may in fact grow faster than less egalitarian ones; therefore, redistributive programs and policies may be good not just for the immediate consumption of the poor, but also for longer-run poverty reduction.

It should be noted, however, that what is more important than the distribution of income is the initial distribution of assets--particularly land, but also education and access to finance. The analysis also found that while the poor generally benefit from growth enhancing policies, the effect of investment is particularly important in determining how much they benefit. Therefore while redistributive programs can potentially help the poor--both immediately and in the longer run--it is critically important they do so in a way that does not reduce the overall level of investment.

The implication, which we will explore in more depth later, is if one is to consider safety net transfers in these countries, it is important that as far as possible they be used to simultaneously finance some form of investment for longer-run propoor growth.

A second strand of thought is to start to think of safety net transfers themselves as an investment in human capital in these countries, rather than as a pure consumption cost. Transfers under circumstances of extreme poverty can represent an investment in

maintaining human productivity in the longer run, among those who would otherwise suffer irreparable damage either physically or economically. Obvious examples include the long-term damage done by severe malnutrition in early childhood, the failure of orphans or street children to attend school, or the sale of household assets such as land or livestock in times of crises, all of which safety nets can be used to protect against. We do not know at this stage analytically what this tells us about how much sense it makes to spend on transfers; but it is an important point to make to decisionmakers that spending on short-term support for the poorest also represents an investment in the future of the country.

How policymakers perceive growth prospects also has an impact on the approach to safety nets. If extreme poverty is seen as a transitional phenomenon, which is likely to be relieved by growth and structural change in the foreseeable future, then this has different implications than if the growth trajectory is such that there appears to be little prospect of reducing widespread poverty within a reasonable timeframe.

The question is then whether there is some way in which growth prospects are fundamentally different among this group of very low income countries. One wants to be wary of generalizing, and there are of course always exceptions, but the historic record suggests that for some set of reasons these economies are following consistently lower growth paths, even than other very poor countries.

Table 3 - Growth in Very Low Income Countries Compared to All Low-Income Economies

(Average GDP growth 1965–97, percent)

VLICs	2.3
All low-income economies	3.8

Note: VLICs average from a sample of 15 countries for which data are available, 1965-97.

Source: World Development Indicators, 2000 and 2001.

There may be reasons these economies are less prone to poverty-reducing growth (for example 11 of the 15 countries in the sample above are landlocked; all suffer from excessive population pressure on very limited resource bases; and they generally have few natural resources and are dependent on agriculture in semi-arid climates.)

If it is true, however, that expected growth is low, then this has some worrying implications. Among other things, it implies that the returns to investment are lower than in other economies, which is counterintuitive in that one would expect greater returns in countries at the bottom of the development curve. This is not trivial because the trade-off between safety net transfers and other growth-inducing expenditures is very much affected by the returns one might expect to them. If poverty is expected to be long term and if the binding constraints to growth are less amenable to public investment the argument for spending on transfers to the poor as a way of alleviating poverty may be greater.

Whether the growth prospects of this group of countries are inherently lower than others is a wider question, which deserves deeper investigation. At a minimum, in evaluating the approach to safety nets, staff should examine realistic growth projections for the country and

the projected number of poor at various growth rates and present this to decisionmakers as a framework for thinking about possible safety net strategies.

Safety Nets and Income Distribution

An important question to ask at the outset is whether a safety net is to support all those who are poor (and if so, how poor?), or only a subgroup of the very poorest. In considering the potential role of safety nets it is worth examining the distribution of income in the very poorest countries and asking if there is some way in which it differs from that in developing countries more generally and whether the shape of the income distribution tells us anything about how we should think about the role of transfers.

In general one would expect the distribution to be flatter in very low income countries (because the average is so low that people living far below the mean would not survive and there is little surplus for a middle class to accumulate). Under these conditions, at least among the poorest 50 percent or so, the distribution of income would be fairly even around a very low mean, and there would not be an easily identifiable group of ultra poor.

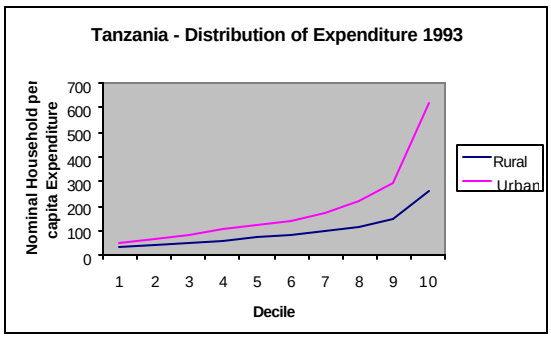
If the distribution of income is very flat, there is less of a case for safety nets as a redistributive mechanism (there are too many possible recipients, and they are too undifferentiated), and it probably makes more sense to focus on measures to reduce poverty generally and to use public safety nets to insure the whole group against particular income shocks (such as drought or seasonal scarcity). If on the other hand there is a clear discontinuity, then the case is greater for a focused transfer in support of the very poorest.

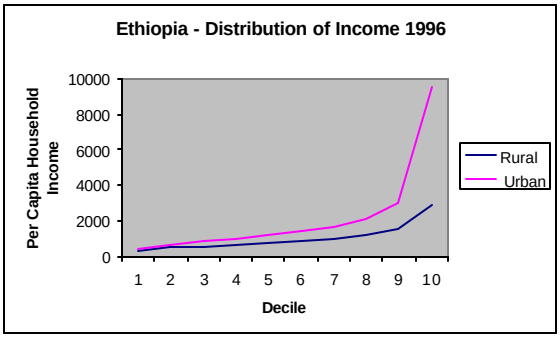
The graphs in Figure 1 show the per capita expenditure or income distribution for three very low income countries. The shapes of the distributions in the figure do not differ greatly from those of low-income countries more broadly. There is, however, evidence that even within these economies those at the bottom end are substantially worse off than the poor generally. As in any society there are those who are extremely poor due to infirmity, disability, and old age, but the evidence suggests that there is a core of very poor that spreads beyond this group. Table 4 shows examples of average incomes in the bottom decile, compared with those in the next-poorest group and the poor generally.

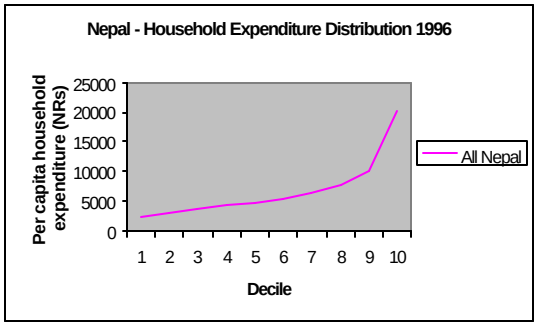
What is striking is that the average incomes among the poorest decile are generally 30 percent-40 percent lower than those of the group in the next poorest decile and typically 40 percent -50 percent of those among the poorest half of the population. In countries with particularly skewed distribution of incomes--such as Malawi and Niger--incomes for the poorest 10 percent are only one-quarter of those among the poor generally. It is possible that some of this differential is due to measurement problems, but generally such large-scale household surveys are accepted to provide a relatively accurate picture of consumption levels, and the fact that the finding is consistent across many countries suggests that it is fairly robust.

Also, closer examination of data often reveals significant discontinuities in other characteristics among the poor. For example, in Malawi and Nepal while landholdings were uniformly small among the poor (averaging about 0.5 ha in the bottom 50 percent of the population), in the bottom decile they dropped precipitously.

Figure 1: Distributions of Income and Expenditure in Several Very Low Income Countries







Source: Country household income/expenditure surveys, various years.

The relevant question for policymakers is whether there exists some group of identifiable "ultra-poor" that is worth targeting with safety net support. The evidence, in terms of distribution of incomes (Table 4) and attributes such as landholding (Table 5), suggests that there is and that when designing safety nets for a given country it is worth examining the data in some depth to determine (i) if there is such as group and (ii) whether there is some measurable attribute that can be used to identify it. Against this needs to be weighed the political costs of being more selective (discussed below) and the administrative cost and feasibility of actually identifying and targeting the households in this group.

It is worth being forewarned that this finding often runs counter to popular perception. Policymakers and politicians in VLICs often do not share the view that there is a group of very poor (apart from obvious groups such as the disabled or elderly infirm) with whom they should be especially concerned. A commonly heard sentiment is that "everyone is poor" at the village level, and even in qualitative poverty surveys people often group a large proportion of rural population--typically one-third or more--as "poor" or "very poor" without distinguishing a smaller subset of the very poorest that the data suggest exist. It is therefore particularly important to examine the distribution of income and characteristics of the poor in order to present a convincing case.

Table 4 - Average Per Capita Expenditure of the Poor and the Poorest – Selected Very Low Income Countries

(Nominal per capita household expenditure in local currency – various survey years)

	Average expenditure of:			*Ratio of poorest decile to:*	
	Poorest 10 percent	*Next 10 percent*	*Bottom 50 percent*	*Next poorest*	*Average bottom 50 percent*
Burkina Faso (1994)	150.9	230.1	270.6	0.69	0.58
Mali (1994)	110.5	180.7	230.9	0.61	0.48
Níger (1995)	50.0	110.6	190.9	0.43	0.25
Tanzania (1993)	290.6	420.1	510.1	0.70	0.58
Ethiopia (1996)	327.0	464.0	549.0	0.70	0.60
Nepal (1996)	2152.0	2987.0	3540.0	0.72	0.61
Malawi (1993)	101.0	246.0	417.0	0.41	0.25

Note: Nominal per capita household expenditure in local currency from year of survey. All rural except Nepal (nationwide) and Malawi (smallholders only); results are not much different for urban sample.

Source: Country household income/expenditure surveys, various years.

Can a Safety Net Program Aim at Protecting a Minimum Level of Consumption? One way to define a safety net strategy is to select, design, and target a program that protects a certain absolute minimum level of consumption. The food poverty line is generally the most obvious candidate. The justification for such an approach is that society as a whole considers it unacceptable for people to be living below the food poverty line owing to the threat of starvation. This approach is closely related to Sen's (1981) entitlements approach: the amount of food he or she can command through a combination of production, sale, or exchange of assets and sale of their labor power, plus transfers from others may not be adequate for survival. When that happens, there is an entitlement failure, calling for public action.[2]

Table 5 - Differences in Landholding among the Poor

Average landholding	*Malawi (ha.)*
All rural population	0.79
Poorest 50 percent	0.53
Poorest 10 percent	0.25

Source: Malawi income/expenditure survey, 1993.

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Can governments of very low income countries afford to defend a critical minimum of food consumption for every citizen? At one time a poor country such as Sri Lanka was spending as much as 5 percent of GDP on food subsidies. Calculations for three very poor countries show that to fill the whole of the food poverty gap, countries need to spend somewhere between 2.5 percent to 15 percent of GDP on safety net transfers alone, excluding the cost of administration (see Table 6). One might legitimately argue that such a high level of expenditure is not an affordable option for poor countries, especially when tax revenues are meager and the scope for redistributive taxation itself is limited.

Table 6 - Fiscal Cost of Closing the Food Poverty Gap: Illustrative Estimates for Three Very Poor Countries[1]

Country/Year	*GNP per capita, 1995 (US$)*	*Fiscal cost as percentage of GDP*
Nepal, 1995	211	15.1
Níger, 1993	200	2.4
Madagascar, 1993–94	225	9–11

[1] Transfer cost only, excluding administrative costs.
Source: Authors' calculations.

Granting that a country does decide to fill the food poverty gap, the issue of potential trade-offs to such a high investment needs to be considered. The trade-off is between the state taking direct responsibility for defending the entitlement of every citizen, versus the state trying to achieve the same objective indirectly via encouraging investment and a higher rate of growth. While conceptually attractive, it is not easy empirically to quantify these trade-offs. Extensive research comparing India's Kerala, Sri Lanka, and China suggests that reliance on the indirect approach may take an unacceptably long period to achieve the levels of longevity that was possible with the direct approach in a short span of time.[4]

Another issue relates to incentives. If the state takes direct responsibility for filling the whole of food poverty gap, would it not discourage poor households from reducing their labor supply in income-earning opportunities? Evidence from Sri Lanka (Sahn and Alderman 1995 and Jamaica (Ezemenari and Subbarao 1999) suggests that even very poor households do respond to transfers, often by reducing their labor supply. As a consequence, the real transfer from a publicly funded program is lower than the nominal transfer. In the case of

[3] Sen argues that starvation is the result of not having enough to eat. It is not the result of there not being enough to eat. While the latter can be a cause of the former, it is but one of several possible causes. See Sen (1981). See also his Coromandel Lecture (Sen 1982).
[4] For details see Dreze and Sen (1989).

Jamaica, for example, a food stamp program, ignoring such behavioral responses, would have provided the poor with an improved food consumption level of 6.8 percent. Factoring in behavioral responses, however, would reduce the change in food consumption by very poor households to only 2.5 percent. It is worth stressing though that such behavioral responses may be highly desirable in themselves; the poorest are the most overworked and a preference for leisure may enhance their well-being. Nevertheless, adverse behavioral responses do mitigate against the policymakers' objective of defending a certain critical minimum level of consumption.

The above discussion suggests that it is justified to provide limited assistance to those who are at acute risk of starvation, though a policy to fill the entire food poverty gap may be problematic if adopted without a careful evaluation of issues of affordability, trade-offs, and adverse incentives.

Safety Nets and Risk Reduction – The Insurance Function of Transfers

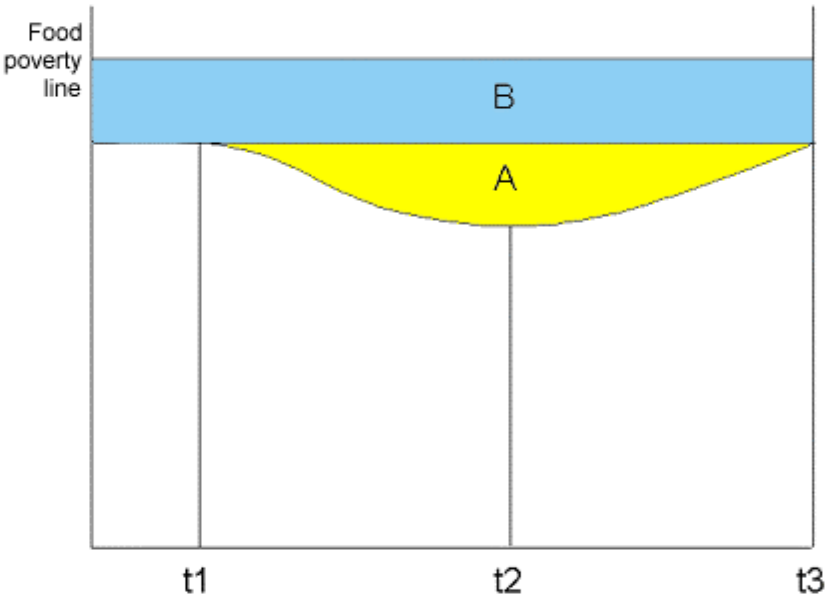
Risk--or more properly, insuring against risk--is increasingly seen as the primary function of public safety nets (Holzmann and Jorgenson 1999). Under this formulation the objective is to protect households against precipitous drops in consumption either by helping them insure themselves against shocks or by allowing them to take on "riskier," but higher return, activities.

If it is not feasible--fiscally, politically, and administratively--to fill the entire food poverty gap, can safety net policy intervention be limited to protecting households against unacceptable drops in (food) consumption? This would mean insurance against risk and implies maintaining a food consumption level around a historically given mean for every household. This policy is contrasted with "filling the food poverty gap" policy in Figure 2. The fiscal implications of filling the food poverty gap (areas A+B in Figure 2) may be much higher than filling only the shortfalls in consumption around a mean (area A).

Approaching the role of safety net from the perspective of risk reduction in VLICs may be questioned on the grounds that poor households in these countries are so poor that they cannot generate adequate incomes to buy food entitlements even during normal times; their landholdings are too small, productivity too low, and off-farm employment opportunities too limited.

Put another way, risk, which essentially amounts to variance of income around the mean, is perhaps less of an issue when the mean is so low that people are close to starvation. One could argue that under these circumstances the objective of a public safety net should be to first bring these people up to an acceptable level of consumption and only secondly to insure against specific shocks.

Figure 2: Filling Food Poverty Gap versus Protecting Shortfalls in Food Consumption



Policy A: Defend a food poverty line. Transfer equals A + B.
Policy B: Defend only precipitous falls in food consumption. Transfer equal to A.

Source: Authors.

Obviously the two are not mutually exclusive, and the very poor also face substantial income risks. It is an empirical question as to whether risk is more or less the defining issue in a particular country and for a particular group, but the balance between chronically low incomes and risk-related consumption drops will have a big influence on what the "right" choice of safety net program will be.

The risks and impacts on the poor can be illustrated as in Table 7. The policy/program responses in each of these cases may vary by the nature of risk and by country. First let us consider covariate risks. In a country where seasonal dips in food availability are rare, a single shock may definitely cause some hardship to poor households, but evidence suggests that they usually bounce back (Lokshin and Ravallion 2000), requiring probably little or no intervention. If such seasonal dips are repeated at frequent intervals, as in Ethiopia or Malawi, then the need for income-smoothing intervention is more urgent. Usually a public workfare program is the preferred choice (Ravallion 1999; Subbarao et al. 1997).

Where a large shock intervenes (drought, flood, macroeconomic adjustment), policy responses may vary by country situation and the nature of shocks. Thus in a country that is predominantly agricultural, growing subsistence crops for self-consumption, a macroeconomic shock may be expected to hurt the urban poor proportionately more than the rural poor, in which case a small scale urban intervention may be the right approach (a subsidy on a food item if it encourages self-selection). In a country with exactly similar characteristics, a drought or flood may have serious consequences throughout the economy, rural and urban, calling for a nationwide intervention. It is best to opt for self-targeted

workfare because the intervention is capable of complementing the growth process via infrastructure building, thus minimizing the trade-off with investments for economic growth. It is worth stressing that even middle-income East Asian economies that were hit by financial crises have resorted to a low wage self-targeted public workfare program (Subbarao 1999).

Table 7 – Risks and Impacts on the Poor

Risks	*Impacts on the poor*
A. Systemic, covariate risks:	
Macroeconomic shocks	Unemployment, staple food price increase
Drought	Food shortages, price increases, unemployment
Seasonal food shortages	Staple food price increases
B. Idiosyncratic risks:	
Age and infirmity	Destitution
Loss of breadwinner (HIV/AIDS)	Destitution, orphaned
Temporary loss of employment	Temporary loss of income earning capacity

Source: Authors.

As for idiosyncratic risks, interventions may once again vary by risk and a country's socioeconomic situation. In the cultural milieu of countries such as India and Nepal, loss of a breadwinner and consequential widowhood may lead to virtual destitution owing to widespread societal discrimination. A social pension targeted on the basis of that particular type of vulnerability may be the right and probably cost-effective intervention, because both inclusion and exclusion errors will likely be minimal and identification of the individual is relatively easy. On the other hand, dealing with idiosyncratic risks such as HIV/AIDS-induced loss of a breadwinner or orphanhood is more difficult. The policy response depends very much on how households are currently coping with such risks. For example, if community initiatives are widespread, strengthening community action, possibly with cash grants, may be the right approach. If, on the other hand, communities are overburdened, an institutional intervention may be necessary. Any intervention needs to be designed only after a careful participatory evaluation and focus group meetings with communities.

There are two compelling reasons for using public transfers to reduce risk: one is that the poor are often more susceptible to variations in income and less able to withstand shocks and the other is that some form of insurance may allow them to take on the greater risk that leads to higher long-term income. (Examples include using purchased inputs such as fertilizer, or diversifying into cash crops; both of which the poorest may be reluctant to do, even though they yield higher returns, because they entail greater potential loss in the event of failure.) The attraction of focusing on risk insurance is that one can have more leverage--in terms of welfare impact--for a given level of expenditure, which is particularly important in tightly fiscally-constrained VLICs.

In very low income countries the poor often face compounding shocks. In most of sub-Saharan Africa, for example, they are affected by the dual threat of periodic drought and of HIV/AIDS, and whereas families (and communities) may be resilient enough to withstand the impact of one or the other of these, they are overwhelmed at having to cope with both

simultaneously. Compounding of risks may have two important policy implications: first, a household's capacity to bounce back may be severely restricted, thus pushing the household to permanent destitution unless aided by a transfer and second, risk compounding may cause permanent damage to human capital (withdrawing children from school, increase in child labor, etc.) Also, public action in this case may be required more quickly than otherwise.

Finally, it is worth noting that many risks may be most effectively protected against not by safety nets, but by other measures. For example, land reforms, investments in irrigation and crop diversification, or financial market development may all have more impact on reducing risk among the poor (and raising their incomes) than any explicit safety net measure.

Cycling In and Out of Poverty. A related question is whether the poor--especially the very poor--are made up of essentially the same people from year to year or consist of different individuals and households that cycle in and out of poverty, with one group being poor one year, but relatively better off the next, while others fall into poverty. If the latter, it argues much more for providing temporary relief to a changing group of households, rather than sustained transfers to a set of consistently poor. In other words, do the chronically poor remain poor regardless of movements or changes in the economy? There is some empirical evidence on this question drawn from India. An early study based on national three-year panel data for India found that for the country as a whole, there was a 50 percent to 60 percent probability that households from the poorest decile remained in the same decile in all three years, whereas the probability of their moving to the next higher decile was only about 30 percent. (Adelman, Subbarao, and Vashishtha 1985). There were of course significant interstate variations in this mobility, the growing states showing a much higher probability of households from the poorest decile moving to the next decile.

Using the International Crops Research Institute for Semi-Arid Tropics (ICRISAT) panel data for seven villages in semi-arid rural India, Gaiha and Deolalikar (1993) confirm the above findings. They conclude, "Of particular concern is the finding that more than a moderate share of the innately poor are likely to remain poor in spite of a redistribution of physical assets (such as land) or changes in household size. Their poverty is in large measure the result of deep-rooted characteristics that cannot be easily changed in the short or medium run, some of which are observed, such as schooling of the household head, and others which are unobserved, such as managerial ability or industriousness. Relief works such as rural public works may help alleviate transitory poverty, but are unlikely to make a dent in persistent poverty."

Seasonality. In most very low income countries where a majority of the population and most of the poor are dependent on their own production of basic food crops (typically rice, maize, or rootcrops) and where there is often a single, short, and unpredictable rainy season, seasonality of food supplies and prices plays a tremendously important role in the determining the welfare of the poor. Typically prices are low immediately after the harvest, when the poor generally sell any short-term surplus they have, they then run out of food and must purchase from the market when prices are highest in the pre-harvest lean season. The price differentials are especially high in these economies, where private markets, trade,

financing, and storage are often underdeveloped. In Africa in particular the swing in prices is substantially higher than would be expected representing a significant tax on the poor. [5]

All of this suggests that counter-cyclical measures that are seasonally targeted, including the possibility of interventions to moderate the variation in prices, can potentially have a major welfare benefit for the poor.

The risk of course is of government interventions that undermine markets or entail substantial fiscal costs. Nonetheless, policymakers should analyze the costs of seasonal food prices on the poor and the potential costs and benefits of smoothing interventions. Obvious examples include the use of seasonally targeted discounts or subsidies for the poor, the use of strategic grain reserves to increase lean season supply, cross-subsidization of publicly marketed foodgrains (from the abundant to the lean season), programs to provide vouchers in the "good" season that can be redeemed at a premium in the lean season, and timing of public works and other transfers to focus on the lean season.

Some Possible Roles for Safety Nets

All of this suggests several possible roles for safety nets in very poor countries:

- To fill in the deepest part of the poverty gap
- To bring all (or many) of the poor up to an acceptable consumption level
- To smooth consumption (e.g., seasonally)
- To protect against major shocks
- To insure against individual risks, either idiosyncratic ones such as income loss, or those that allow the poor to take on riskier, but higher return, activities
- As an investment (to avoid decapitalization and to keep children in school).

The choice will depend on a combination of the nature of poverty, the time-frame decisionmakers are concerned with, and the types of risks faced by the poor.

III. What Is Feasible?

The problem in VLICs is often not so much deciding what is desirable in terms of safety nets, but rather determining what is feasible. Three factors generally constrain the feasibility of safety net programs: (i) the availability of information, (ii) administrative capacity, and (iii) fiscal affordability. Unfortunately, in the countries we are considering all three are often critically binding.

The Information Constraint

To target programs at particular subgroups or individuals requires substantial information, information that is often not available and is extremely expensive to acquire. In most countries transfers are targeted on the basis of criteria such as income, or demographic characteristics such as household size (for example child allowances) or age (e.g., pensions). In the VLICs we are dealing with, however, household incomes consist mostly of own production of foodgrains and are almost never known with any certainty and even the most

[5] See for example Alderman and Shively (1996).

basic attributes such as age, or landholding, are generally not recorded. In Malawi, for example, even though it is well known that there is a strong correlation between poverty and landholding, it proved impossible to target a program designed to provide free fertilizer to the poor on the basis of landholding, because there is no registration of landholdings.

More obvious characteristics, such as female-headed households, orphanhood, or disability, can be used to select those who should benefit, but this presents problems of verification. For example, everyone may suddenly become an orphan, or many households may suddenly become female-headed, if transfers of free food or money are available only to those groups.

One option in cases where income is not known is to derive "proxy" indicators. This can be done by using a household data set to identify other attributes that are highly correlated with poverty. For example household demographic characteristics, educational status, or the type of dwelling have all been used in programs in Armenia, Chile, and Colombia. In Indonesia, family-planning program data on household characteristics was used to target welfare transfers during the recent crisis. Even these attributes may not be known in very poor countries, or (and perhaps more likely) the capacity may not be there to assess them accurately.

One final option is to make entitlements dependent on participation in some other program that is known to be selective of the poor. For example, eligibility for free food or fertilizer distributions may be made dependent on participation in a (self-targeting) public works scheme, or on having a malnourished child in a nutrition program.

There are ultimately three ways around the information constraint: (i) to select programs that are self-targeting, (ii) to use community targeting, and (iii) to opt for universal coverage. Examples of self-targeting programs include public employment at a below-market wage, or the provision of inferior goods that will not generally be purchased by the nonpoor. Community targeting (discussed further in the next section) does not entirely eliminate the information requirements, but pushes them down to the community level, where information is presumably better known, cheaper to collect, and--to the extent that it is undertaken by village leaders--internalizes the costs of targeting and reduces the financial cost to the program. Universal entitlement programs of course eliminate the cost of identifying beneficiaries altogether, but--as discussed below--are generally not affordable in VLICs.

The Administrative Constraint

In general the capacity to manage complex programs is limited in VLICs. Management, accounting, logistical, and financial control systems are all typically weak, and skilled staffers are at a premium in these countries. At the same time, transfer programs, and especially targeted programs are extremely labor-intensive. Where the information base is weak, and there is not a tradition of "playing by the rules," substantial middle-level supervision is needed to avoid leakage, to manage distribution, and to administer targeting. Targeted programs are also intensive in their use of outreach staff and especially of field-level supervisors.

In VLICs, however, workers at all these levels are in short supply. To attract them is expensive (as can be seen from the experience with nongovernmental organization (NGO)

programs) and often not feasible with government salaries. Perhaps more importantly, in countries where the pool of effective service delivery staff is limited, there is also the opportunity cost of diverting them away from other outreach activities-- be they malaria control, education, HIV/AIDS, or rural water supply programs.

What are the policy implications? One is to choose simple program designs that are consistent with the implementation capacity in the countries. As a corollary, programs that involve simple, repetitive steps and are sustained over a long period of time are more likely to be implementable (and implemented effectively) by lower-level unskilled staff. This is a point worth bearing in mind in VLICs, where safety net programs are often driven by donors and sustained only for a few years before being dropped in favor of some other model.

Choosing a few simple nationwide programs, rather than running a plethora of separate programs and sustaining them over a prolonged period, is often more likely to result in successful implementation. Finally, in choosing program designs, decisionmakers should explore the scope for using existing administrative systems. For example, delivering a nutrition program through the existing network of health posts and workers may be preferable to establishing a new system; similarly, using the government's existing rural works and maintenance programs to maximize employment of the poor may be more administratively feasible than establishing a new public works program apparatus. In each case there will be trade-offs (for example the health system may already be overwhelmed, or the Works Ministry may not be sufficiently selective of the poor), but these options need to be evaluated.

One of the most obvious ways around the both the administrative and informational constraints is to consider community targeting. Communities themselves, or representative councils (for example of village elders, religious groups, or NGOs), can be given responsibility for both identifying beneficiaries--subject to a given set of criteria such as landlessness, being orphaned, or destitute--and for delivering benefits to them. The risks of course are of favoritism, the political and social difficulties involved in making decisions on inclusion and exclusion, and the costs and labor-intensity of organizing, training, and supporting a nationwide network of village groups.

There is surprisingly little practical experience of community targeting. Under a program in Rajasthan in the 1970s, communities were allocated funds to transfer to the 10 poorest families in each village and were forced to publicly select (and announce) the households that would receive benefits. The program was successful in targeting the poorest, but ultimately collapsed due to erosion of political support (the very poorest constituting too narrow a political base to be worth supporting on a prolonged basis). In a drought recovery program in Malawi in 1995-1996 a committee was to determine the allocation of free seed and fertilizer to the most needy. In most cases the committee decided to give a small amount to everyone rather than risk difficult and controversial decisions about who should be included and who left out. More recent experiments have been tried in Uzbekistan, targeting child assistance through quasi-religious groups called *mahallahs* and in Armenia, where principals and parent-teacher groups have been used to target school textbook waivers.

The Fiscal Constraint

Perhaps the biggest constraint to safety nets in VLICs is sheer affordability. Total public spending is already very low in these countries, typically averaging about US$50-US$75 per person per year.[6] At the same time the competing claims for essential development investments are overwhelming; the poorest countries are also typically those with critically insufficient education capacity, the least-developed road networks, and the lowest coverage of water supply or essential health services.

Just to illustrate, a safety net program designed to provide a transfer of US$20 per annum (or just $1.67 per month) to each of the poor in a typical VLIC would cost in the neighborhood of 5 percent of GDP, or 21 percent of total public spending,a level that is probably unaffordable.[7]

To put this in perspective, we calculated that in the case of Malawi, the cost of a relatively modest program designed to reach the poorest 15 percent of the population and raise their incomes by just US$ 1 per month would cost the equivalent of the salaries of 40,000 primary school teachers annually, or equal the entire recurrent budget of the Ministry of Health (Smith 2001). Table 8 illustrates the approximate costs for public transfers relative to public spending on priority areas in a sample of these countries.

Table 8 - Costs of Large-Scale Transfer Programs Compared with Existing Health and Education Expenditures

(US$ millions per annum)

	Approximate cost of transferring US$10 per capita annually to		*Approximate total public spending on*	
	All the poor	*Poorest 25 percent*	*Health*	*Education*
Chad	45	18	39	27
Malawi	59	28	65	125
Nepal	97	58	66	162
Níger	63	25	26	46
Tanzania	163	80	87	n.a.

Source: Authors' calculations.

There is in the end no optimum level of spending on safety nets. Obviously there is a continuum of trade-off between spending on safety nets and other growth-enhancing expenditures, and there is no way of defining the "right" mix. One of the issues worth looking at is the efficiency and cost-effectiveness of government spending on other interventions. If the composition of expenditure is bad, or the efficacy of other public spending on, for example, health, education, or infrastructure, is low, then there may be more of an argument for direct transfers, essentially saying we can't do much worse, and possibly

[6] Based on GDP of US$200-US$300 per capita and public expenditure of 25 percent of GDP.

[7] Assumes for illustrative purposes: 40 percent of population in poverty, a US$20 per capita transfer, plus 30 percent administrative costs; GDP of $200 p.c. and public expenditure of 25 percent of GDP.

somewhat better, by putting money directly in the hands of the poor. The same argument may apply to at least some of external aid resources.

Table 9 below summarizes some of the program choice and design criteria that decisionmakers may want to take into account in responding to the three constraints:

Table 9 - Program Design Considerations to Account for Critical Constraints

Information constraint	*Administrative capacity constraints*	*Fiscal constraint*
Use self-targeting programs	Self-targeting	Selective coverage
Try community targeting	Universal programs	Use existing expenditures to affect transfers
Use proxy indicators	Simple program design	Targeted programs
Universal entitlement	Very limited range of programs	"Leverage" expenditures by focusing on risk insurance
	Use of existing capacity/ administrative systems	Use safety net expenditures to achieve other development goals
	Sustain same program procedures over long period	

Source: Authors.

IV. Program Choices

There are a number of comprehensive treatments of the pros and cons of various program choices and criteria that should go into evaluating their selection (see for example, Subbarao et. al. 1997). The analysis in this section focuses only on the special considerations that might apply in very low income countries. Table 10 outlines the range of programs that are typically used in developing countries.

Cash Transfers

Cash transfers are the most common forms of direct transfers and include pensions, unemployment insurance, and social assistance. All, for different reasons, are not particularly suited to VLICs. Pensions are generally not relevant, because information on age is unreliable, or not available at all. (Although there do exist a few examples, the most notable being South Africa, which has run an effectively targeted program to provide pensions to those not covered by earlier wage employment; however, it is not a very low income country and illustrates what is possible when there is (i) some surplus to redistribute and (ii) capable administrative apparatus at the outreach level.) Unemployment insurance, again, is not very meaningful in an environment where half or more of the population are subsistence farmers, and only a very small share of the workforce (and almost none of the poor) is in formal wage employment. Social assistance targeted at the most needy suffers from the dual problems of (i) there being no viable income measure for identifying the poorest and (ii) the pool of potential beneficiaries being so large as to be unaffordable.

Table 10 – Common Safety Net Programs

Category	*Interventions*
Cash transfers	- Child benefits
	- Public works
	- Pensions
	- Unemployment benefits
Food distribution programs	- Free food distribution
	- Food for work
	- Food stamps
	- School feeding
Nutrition	- Child nutrition
	- Micronutrietn supplementation
Subsidies	- Food (targeted or self-targeted)
	- Health (fee waivers)
	- Education (fee waivers)
Agricultural inputs	- Free packs/vouchers
	- Subsidy

Source: Authors.

There may be some scope for tightly targeted cash transfers at very specific groups--for example orphans, widows, and single-parent households--both because these groups are generally accepted as being deserving of support and because there is a demonstrable correlation with poverty status even if income cannot be measured.[8] But even then there are significant problems with identifying the beneficiaries and administering targeting. Furthermore not all orphans or widows are poor, many are included in larger, nonpoor households. As discussed earlier, the only obvious way around this problem is community targeting, but even then the experience has been limited and mixed. Among the limited examples of cash transfers in very poor countries are the GAPVU program in Mozambique (see Box 1). The general inclination of decisionmakers is to prefer transfers in kind in these countries. Even though cash is more efficient, it is generally hard to sell politically; people put a premium on cash (which is generally used more by the nonpoor) such that people will accept distribution of food to the poor much more readily than the distribution of cash. The distribution of vouchers or use of selected, targeted discounts for goods consumed by the poor may be more politically acceptable in these very low income countries

Public works is one of the few self-targeting interventions available and is therefore particularly attractive in VLICs where information and targeting capacity are weak. It has the

[8] For example, in Malawi, it was clearly demonstrated that female-headed households were disproportionately represented among the poor.

added advantage that, if works are well chosen, it can create productive assets. Works programs are especially suited to VLICs where seasonality of poverty is a major issue, because they can be countercyclical, absorbing labor when it is abundant in the nonagricultural dry season, and because they can be expanded in times of crisis (for example during drought or macroeconomic shocks).

The drawbacks are that employment programs are a relatively expensive way of making transfers (typically costing US$2 for every US$1 of wages transferred) and managerially complex compared with pure transfer programs. To justify these costs, it is important that the assets created be carefully selected to contribute to raising the incomes of the poor in the longer run.

Experience has shown that to target the poorest with public works it is critically important to get the wage rate right, meaning that it must be set below the prevailing market wage for unskilled labor, which in these countries will usually be the rate for casual agricultural day-labor. Public employment has been used on a large scale in middle-level developing countries (notable examples include Chile, Mexico, and the Maharastra Employment Guarantee Scheme in India), but less so in very low income countries, where food-for-work has been the most common form, with the growing use of the *Agences d Exécution des Travaux d Intérêt Public* (Executing Agencies for Public Works Employment -- AGETIPs) in recent years in urban areas of West Africa.

Food and Nutrition Programs

Untargeted food transfers or subsidies--whatever the form--have generally proven unsustainable fiscally. Bangladesh, Egypt, India, Pakistan, Sri Lanka, and Tunisia all initiated universal food transfers in the early 1950s. The budgetary cost of the programs gradually increased in all these countries. Thus by the early 1980s, the cost of a universal program was as high as 5 percent of GDP in Sri Lanka and 4 percent in Tunisia. When the program was universal, the share of the transfer benefits of the poor (bottom quintile) was generally low; in many countries the benefits were evenly distributed across quintile groups.

Free food distribution has always enjoyed a special role in the safety net programs of most very poor countries, partly because hunger is such an obvious manifestation of extreme poverty and because these countries are particularly prone to drought, but also because of the predilection on the part of the donor community to provide food aid, and because food distribution is generally politically more acceptable than cash. The drawbacks are that free food programs distort markets, can create dependency, and involve large inclusion errors and leakage to the nonpoor. They are also administratively cumbersome and expensive as they typically involve moving large amounts of grain around the country.

Food distribution programs can substitute for market failures in countries where private foodgrain markets are poorly developed and there is clearly a case for distribution during periods of crop failure or drought. While the fundamental problem is usually insufficiency of incomes among the poor rather than an aggregate shortage of food, in some cases food is just not available at any price, especially in remote areas. We would generally recommend that food distribution programs be restricted to emergency situations (e.g., of periodic drought, or

massive refugee influxes, etc.), but countries are then left with the problem of nonfungibility of food aid provided in nonemergency situations, particularly from the World Food Program (WFP). The preferred option would be to monetize such aid and use it to support other, more optimal safety net programs, but if that is not feasible linking distribution to a work requirement (e.g., food-for-work) or to a national child nutrition program can help ensure targeting; alternately, food could be channeled to community-based transfer schemes supporting the most vulnerable (such as orphans and the disabled) if such programs exist.

Box 1 - Examples of Some Public Safety Net Programs in Very Low Income Countries

Mozambique – The Office for Support to Vulnerable Population Groups (GAPVU) Launched following the civil war to support destitute groups in urban Mozambique, the object of GAPVU was to raise consumption to a modest 1700 calories per day for (i) households with malnourished children under five, (ii) pregnant women exhibiting nutritional risk factors, and (iii) elderly and disabled in households with no one of working age. The transfer amounted to US$1.00 per person per month, enough to raise average consumption by 13 percent among beneficiaries and to lift them, on average, from 80 percent to 91 percent of poverty line consumption. The transfer is in cash, administered by a combination of local officials and agencies. Problems of enforcement of criteria and means testing led to some leakage, and it is estimated that 30 percent of the benefits went to the nonpoor. By 1996 GAPVU was reaching 80,000 households, or about 16 percent of the urban population. Evaluations in general concluded that the program had a positive impact on reducing urban poverty. The drawback of course is that it is exclusively urban, whereas 85 percent of Mozambique's population and the vast majority of the poor live in rural areas.

Malawi – The Starter Pack Initiative Following large price increases for fertilizer as the result of subsidy removal and devaluations, in 1996–97 the government introduced a program to provide small packs of fertilizer and seeds to all rural smallholder farmers (about 2.8 million households, or 90 percent of the population.) The program, justified on the grounds of maintaining national-level maize production and soil fertility in the face of a large drop in fertilizer use, was in essence a pure transfer. The value of the transfer in terms of maize produced was about US$15 per household, or 50 percent higher than the cost to the government of providing the packs (US$10 each). The idea was that each pack would cover about one-tenth of a hectare, enough to produce six weeks of additional maize and thus get families through the worst of the lean season. While there was some leakage and "double-dipping," the program remained fairly well targeted at rural smallholders and has been sustained over a period of three years. The drawbacks were the total cost at US$ 27 million annually, more than Malawi could afford, and the fact that many of those receiving the packs do not need them—they are not among the very poorest and could afford to buy the small amounts of fertilizer themselves. This year (2000) it is being targeted selectively using a combination of geographical and community targeting.

India – The Maharastra Employment Guarantee Scheme (MEGS) One of the largest and longest-running public safety net programs, MEGS was introduced in 1973 to provide employment to the poor in rural Maharastra. The objectives were to reduce the pressure for migration into Bombay and to provide employment especially to women and especially in the slack agricultural season. An innovative characteristic of the scheme was that it provided an guarantee of employment within 5 kilometers of a person's home; this, combined with the fact that it was sustained over a long period, allowed the poor to build its income stream into their expectations, modifying behavior and, among other things, putting upward pressure on very low rural wage rates. At its height MEGS created 100 to 180 million person days of employment each year, at a cost of about US$1.20 per person-day of employment created. It has built rural infrastructure—especially irrigation works—that have had a substantial multiplier effect in terms of contributing to rural incomes. The wage rate was low enough to target the poor until 1988 when the government by fiat doubled the minimum wage (which equaled the program wage); the result was job rationing and erosion of the guarantee element of the scheme, as well as limiting the self-targeting effect.

Source: Subbarao (1997), Smith (2001).

Many countries began to switch from universal to targeted programs. The targeting approach of self-selection was resorted to in Tunisia while Sri Lanka switched to targeted food stamps. Other countries such as Bangladesh, Honduras, Jamaica, Jordan, and Mexico

have also switched from universal programs. Apart from a lowering of budgetary costs, significant gains in targeting efficiency were observed after a switch from universal programs. For example, in Tunisia the share of the poorest quintile increased from 8 percent under a universal regime to 25 percent after switching to a self-targeted food products program, whereas the cost of the program fell from 4 percent to 2 percent of GDP.

School feeding suffers from large inclusion errors, because it is difficult to feed only the poor in a given class and, if universal, is probably unaffordable in VLICs. It was estimated, for example, that to expand a pilot school-feeding program nationwide in Malawi would have cost US$200 million annually, or almost one-third of the national budget. An earlier analysis suggests average costs equivalent to about US$24.38 per student per year (although there is significant variation).[9] If a mid-sized VLIC has 3 million students, this implies expenditures of around US$73 million annually, which is almost certainly unaffordable. The only workable alternative is to target geographically--providing meals only in the poorest areas or at certain types of schools--as has been done in Costa Rica.

School feeding is also administratively cumbersome, disrupting school and classroom management and putting an additional burden on school managers. A less disruptive alternative is "food-for-education," providing free handouts, usually bags of grain, to families whose children attend school regularly, as has been done in Bangladesh, Pakistan, and Malawi. The attraction in both cases of course is that school feeding can be used to attract children to school. However the value in this regard needs to be weighed against other educational interventions, for example, there is little point in attracting children into school if teaching is not effective and, in a very tight fiscal environment, the same resources might better be spent on teacher training and supervision.

The attraction of nutrition programs is that they have a clear targeting criteria. Furthermore, experience suggests that the capacity is there, even in very poor countries, to actually measure malnutrition and to implement targeted child nutrition programs through existing health infrastructure and community workers. They also represent a clear investment in the future by reducing the long-term effects of malnutrition. The drawbacks are that they are administratively relatively complex and may overburden the limited capacity of Ministries of Health. Also they are often donor-dependant and therefore susceptible to stopping and starting, thus undermining the needed long-term impact.

In countries where there are major seasonal food shortages and price spikes, public intervention to smooth consumption--either through managed reserves or seasonal subsidies--is potentially attractive. Examples include operating a national food reserve, buying surpluses during the harvest season and releasing stocks during the lean season; administered or controlled prices of essential foodgrains; and/or explicit seasonal subsidization of prices. Such interventions were previously common in South and East Asia and are now largely confined to parts of Africa, where private markets are less developed.

The drawbacks are that it is difficult to direct such support specifically at the poor. Risks include

- The subsidy being captured by nonpoor consumers, especially the urban population

[9] See Annex table A3 for a sample of school-feeding programs and their costs.

- Buying by intermediaries for resale at the (scarcity-based) market price
- Government often cannot afford to intervene on a large-enough scale to actually affect prices and supply; the result is substantial expenditure on an intervention that is ultimately ineffective
- Continued public intervention will discourage the development of active private markets that will eventually intermediate across seasons.

In general it is recommended that arms-length intervention, affecting aggregate supply and demand by purchases and sales at commercial prices--only on a selected basis and only where private markets are clearly not working--is the preferred approach.

Agricultural Inputs

There is often an inclination to want to subsidize agricultural inputs--especially fertilizer--in very poor countries partly on grounds of helping the poor and partly on productivity grounds. As a transfer, the problem of course is that the subsidy benefits primarily the nonpoor: fertilizer is used in direct proportion to landholding size, it is used more on cash crops, and it is used more often by large commercial farmers than by subsistence farmers. If there were a way of directing fertilizer subsidies at particular farmers or crops it might be part of a safety net strategy, but so far no means has been found.

Free distribution of very small amounts of fertilizer and seed may in fact be preferred to subsidies, in that it is less distorting of agricultural input markets, and may not be attractive to larger farmers. Agricultural input programs for the rural poor are increasingly popular. Among others Zambia, Mexico, Malawi, and Zimbabwe are currently running, or considering such programs. The attraction is the "multiplier" effect, in that the value of benefits is leveraged by the investment of the poor of their own labor and natural inputs of water, sun, etc. (In Malawi for example, we calculated the value of the benefits to the household were on average 1.5 times the cost of the package provided; while evidence from Mexico suggests that the net income effect of a targeted cash injection at the time of planting was between 1.5 and 2.6 times.[10]) Also, such distribution may compensate for market failures where rural input markets do not function effectively and universal subsidies or government marketing systems have been withdrawn suddenly. Some rules of thumb probably apply to minimize the distortionary effects: packages should be kept very small, so they are generally relevant only to the poorest; vouchers in general are preferred to commodity distribution; and targeted distribution is preferable, but there are often problems in identifying beneficiaries.

V. Social and Political Issues: Some Additional Program Design Considerations

Problems of Inclusion and Exclusion in Very Low Income Countries

Any form of targeting presents problems of inclusion, inadvertently providing benefits to those who don't need them, and exclusion, leaving out those who do need them. These are particularly stark in very poor countries where the difference between the poor and the nonpoor (or between the poor and the poorest) will be less pronounced. It is worth

[10] Sadoulet, de Janvry, and Davis (2001).

remembering that in a US$200 per capita income country the average person is living on less than US$0.60 per day and that even people in the 7th income decile (that is, among the wealthiest 30 percent of the population) will be poorer than those who would normally be targeted for public transfers in other, moderately poor countries. (For example, someone in the 7th decile in Nepal will be earning approximately US$180 per annum, which would put them among the poorest 10 percent of the population in Bolivia or the Philippines.[11])

Geographical targeting is the most administratively easy and where poverty data is good can provide a defensible basis for being selective without having to choose individual households. With a tight budget constraint, geographical targeting is often the only easy way of reducing the scale of a program. The drawback is that it can produce huge inclusion and exclusion errors. Put simply, there are many nonpoor people in poor areas (who will receive benefits under a geographically targeted program) and many poor people in nonpoor districts or regions who will be left out. Estimates from Malawi suggest, for example, that focusing on the poorest third of the country would leave out as much as 60 percent of those below the poverty line. [12] Clearly the answer to this lies in how strongly poverty is concentrated in a given area.

One form of geographical targeting that almost always appears to be valid in very poor countries however is rural targeting, i.e., selecting rural over urban areas. While urban poverty is no doubt a serious issue, the evidence is compelling that in this set of countries, the rural population is so much worse off on average that governments cannot go far wrong by selecting programs that concentrate on them.

Table 11 - Urban-Rural Differences in Selected Very Low Income Countries

(Nominal average per capita expenditure – local currency, various survey years)

	Rural		*Urban*
	Poorest 20 percent	*Poorest 60 percent*	*Poorest 20 percent*
Mali(francs)	15	27	47
Niger (francs)	15	35	57
Tanzania (shillings)	36	56	58
Ethiopia (birr)	396	600	550

Source: Country household income/expenditure surveys, various years.

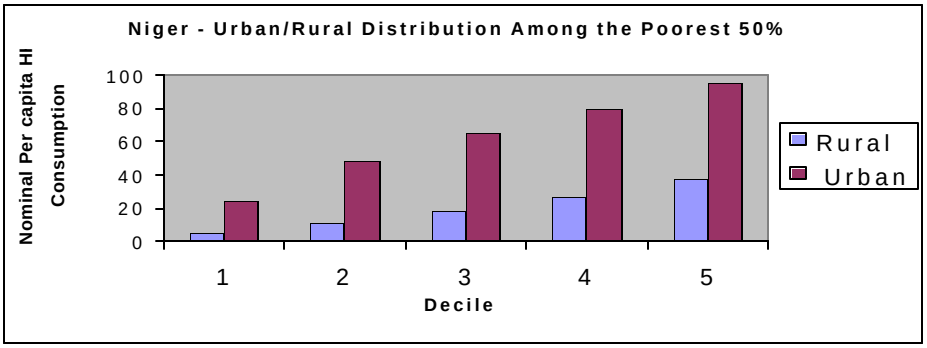
Table 11 illustrates the differences in per capita average expenditures between rural and urban areas for selected VLICs. While these estimates are not all adjusted for the higher costs of living in towns (which can be substantial), they nonetheless show clearly that average consumption for even moderately well-off people in rural areas is less than that of all but the very poorest in urban areas, suggesting that a transfer program that focused on rural areas

[11] These comparisons hold even adjusting for purchasing power parity; for example, the average income in the bottom decile in the Philippines is estimated at US$288 per annum (1997), and US$880 per annum in PPP terms, compared with approximately US$825 per annum in PPP terms for people in the 7th decile in Nepal.

[12] Defined under the Vulnerability Assessment Mapping exercise, based largely on per capita food production. However imperfect, this is often the only type of measure readily available in VLICs.

alone will almost certainly be progressive in poverty reduction terms. Figure 3 below illustrates the same point graphically in the case of Niger.

Figure 3: Urban and Rural Consumption Distributions in Niger, 1995



Source: Niger household income/expenditure survey, 1996.

Community targeting, as discussed earlier, is potentially a way of reducing inclusion and exclusion errors. There is little empirical evidence on how much inclusion--or exclusion--of the poor takes place as a result of community targeting. Recent work by Ravallion and Galasso (1999) on a community-targeted food program in Bangladesh found that on average the poor benefited, but that there was wide variation from community to community, with--somewhat worryingly--more exclusion of the poor in villages that had a wider distribution of income, reflecting the poor's relatively lesser weight in the decisionmaking process. They also found that as the degree of coverage increased, the proportion of the poor receiving benefits increased, while the proportion of the nonpoor did not, suggesting an "early capture" of benefits by the nonpoor. The implication is that wider coverage may result in greater proportional inclusion of the poor under community targeting.[13]

As we've noted, politicians and the population as a whole in very low income countries are often not convinced there is a sufficient distinction between the poor and the nonpoor to support programs that only reach, say, the poorest 10 percent to 30 percent of the population, and therefore prefer universal programs (which are of course much more palatable politically). There is a strong political economy argument in favor of universality; universal programs enjoy wide popular support and, because they deliver benefits to the middle class and the political elite (or at least to their relatives), they tend to be protected when more narrowly focused programs would be cut.[14]

The issues are the degree of the inclusion error and the fiscal cost. If the distribution of income is fairly low and uniform, with the exception of the richest few percent, then inclusion errors will be relatively smaller. (For example in Chad only 27 percent of the benefits of a universal program would go to those with incomes above US$1 per day, whereas in Zimbabwe 64 percent would.) Also, keeping the size of the transfer small will tend to self-target the poor to some extent, as the better-off either can't be bothered to apply

[13] For a recent treatment of the issues and experience with community targeting see Conning and Kevane(1999).
[14] There is also some evidence that total welfare may be higher with universal programs; see Gelbach and Pritchett (2002).

for the benefit or prefer to avoid the stigma of doing so. (Examples include the public pension in Namibia, which was pitched at a level that was unattractive to the white elite; the Starter Pack in Malawi, where a 10 kilogram pack of fertilizer, while useful, was not particularly relevant to large farmers; and the provision of lower-grade broken rice in Sri Lanka, which was not wanted by those who could afford a better grade.)

The problem however is one of cost: universal programs are ultimately unaffordable. Table 12 illustrates the approximate cost of a universal program intended to transfer just US$10 per year (US$0.03 per day) in a range of poor countries.

Table 12 - Annual Cost of a Universal Transfer of US$10 Per Capita – Selected Countries

(US$ millions)

	Universal transfer[a]	*Total public expenditure*
Ethiopia	700	1,500
Malawi	126	600
Nepal	265	830
Niger	115	350

a Assumes 15 percent in distribution and administrative costs.
Source: Author's calculations.

Traditional Social Protection and the Link with Private Transfers

In all societies there is a complex web of private transfers, family and community support, and informal social protection. In very low income countries these mechanisms are both more and less relevant than elsewhere. More relevant historically because the public apparatus has not existed and social insurance and welfare had of necessity to be catered for by private transfers, usually intergenerational, between members of the extended family, but also, for example, between landlords and tenants. However, these systems are increasingly breaking down under the pressure of population growth; rapidly changing relations of production, including changes in land and labor markets; and urbanization and monetization of subsistence economies.

There is also evidence that informal transfers are less relevant in very poor economies. For one thing, where people are universally poor, they have less to share. Also, the counties we are concerned with--in the US$200-300 income range--are typically less urbanized and have less of the population in wage employment than in more moderately-poor countries, so that the phenomenon of transfers from town-dwelling and employed relatives, while still existent, is less important than in, for example, the more developed areas of West Africa or the more commercial parts of South Asia (see Table 13).

Table 13 - Share of the Population in Urban and Agricultural Are as, Selected Very Low and Moderate Income Countries, 1999

(percent)

	Urban	*In agriculture*
Very low income countries		
Burkina Faso	17	93
Etiopía	17	86
Malawi	22	87
Nepal	11	95
Moderately poor countries		
Bolivia	61	46
Egypt	45	30
Ghana	37	60
Zambia	39	70

Source: World Development Indicators, 2001.

Morduch (1999) points out that while transfers are significant in middle-poor countries (e.g., in South Africa, where 40 percent of households received informal transfers, Columbia 46 percent, and the Philippines 89 percent of rural households) in poorer countries they are of relatively minor consequence (e.g., in poorer areas of south India, in Burkina Faso, and in the Sahel after a drought, where informal transfers compensated for less than 3 percent of losses). He also concludes that for a number of reasons the risk of displacing informal transfers is substantially lower in low-income countries because there are fewer migrants and employed and because mechanisms like reciprocal exchange and group insurance work best among slightly better-off and in the absence of large covariate shocks (like drought, or HIV/AIDS).

In the countries we are concerned with, informal social protection may anyway be sub-optimal from a poverty reduction point of view, as the poor engage in behavior that amounts to trading reduced risk for lower average returns (for example by entering into share-cropping or bonded labor arrangements, or eschewing higher-return cash crops).

Whether or not to displace private transfers is an important question that needs careful analysis while designing publicly funded safety net programs. Much depends on the distributional impacts of current private transfers. Evidence suggests that there is much variation in the distributional impacts of private transfers. In the Philippines, for example, most private transfers appear to be from the poor to the poor. By contrast, in Peru, private transfers significantly increase the aggregate consumption of the poorest decile by 14 percent, implying that transfers in this country are distributionally propoor (Cox and Jimenez 1989). Whatever be the impact of private transfers on poverty, one thing appears to be clear: most private transfers seem to dwindle in a situation of a covariate shock such as drought or macroeconomic crisis. Even in the relatively well-off countries of East Asia where informal transfers have historically remained robust, the recent financial crisis has resulted in the elderly inadequately protected by such transfers inasmuch as the poverty incidence among the elderly following the crisis was higher than the national average. Following a drought, in

Namibia too, private transfers seem to diminish (Subbarao 1997). All this seems to suggest that, given the depth and breadth of poverty in very low income countries, safety net programs that address covariate risks (such as public works) seem least likely to crowd out private transfers. As for cash and food transfers, the design of programs needs to be based on a careful empirical analysis of prevailing private transfers.

Aid Dependency and the Role of Donors

Very low income countries tend to be heavily aid-dependent. Often the choice of transfer programs is driven by what is on offer from donors, or the availability of food or relief aid, rather than the "right" choice of intervention. This is to some extent inevitable but can be overcome by governments taking a firm lead in formulating a national safety net strategy into which assistance can be channeled.

A more immediate practical problem is that donor programs tend to stop and start, often not lasting more than a few years--or at most a decade--and then being replaced by some new initiative. As a result efficient, consistent systems are not developed. This is particularly costly in countries where the administrative capacity is weak, as it means that low-level staff and supervisors must learn complex new implementation arrangements every few years, with a predictable loss of efficiency and effectiveness in program delivery. Part of the solution is for donors to commit to long-term support for programs and to maintain basic program design--even if imperfect--unless there is an absolutely compelling reason to change it.

Another problem with having a plethora of discrete donor programs is that the coverage of beneficiaries is not coordinated.[15] Programs designed in isolation by different donors often lack a common definition of whom the beneficiaries should be, or of what the scale or objectives of transfers should be. In the extreme case, this can result in some households or areas benefiting from several programs, while others are not covered at all.

Finally, concern is expressed that governments should not use aid resources to fund transfers. We would suggest that is not really the right question. The issue is what is the "right" safety net program and how much it makes sense to spend out of public resources on transfers to the poor given the specific conditions of that country: the nature of poverty, competing public expenditures, and whether or not there are efficient program instruments available. Once these questions are settled, the source of funding for a safety net program, as part of an overall public expenditure package, should be irrelevant. Parenthetically, it is worth noting that putting money in the hands of the poor can yield very high rates of return, partly because they use their assets so intensively and partly because the cost of falling below a critical consumption level is so great, small amounts can yield a high effective return. So it is quite possible, given the ineffectiveness of many aid expenditures, that--provided that the broad country policy framework is right--financing direct transfers to the poor may be an extremely good use of aid resources.

[15] In Malawi, for example, there were found to be some 15 different public works, feeding, and transfer programs funded by various donors.

VI. Conclusions

Even in the poorest of countries, safety net programs have a role to play. However, there are major problems of affordability and administrative feasibility. How much expenditure is justified, what types of programs are to be floated, and how these are to be designed, depends very much on three factors: (i) the degree of uninsured risk faced by the poor, (ii) the feasibility of identifying the groups that are subjected to high level of uninsured risks (such as orphans), and (iii) the depth and severity of poverty.

The challenge in very low income countries is to find ways in which the choice of programs can both limit total cost and reduce the opportunity cost of other investments foregone. Clearly the requirements of the poor and selection of instruments need to be worked out on a country-by-country basis; however, a number of principles emerge from the analysis in this paper that should apply across most very poor countries:

- Use safety net expenditures to fund investments that lift longer-run impediments to growth. Examples include public works programs that construct roads or irrigation works (although it is important that the right infrastructure be chosen) or fee waiver programs that increase school enrollments and hence the investment in education.
- For pure transfers, be selective: try to identify a sub-group of the ultra-poor or be selective of very distinct groups that everyone can agree are deserving of support. Examples might include the disabled, orphans, or street children. Not only does this limit total costs to a manageable level, but it increases the probability of securing popular support and the likelihood that programs will be sustained.
- Choose transfers that have a multiplier effect. For example, it was found that every dollar spent on the PROCAMPO program in Mexico generated US$1.60 to US$2.40 of income. Similarly, the Starter Pack program in Malawi yielded a consumption increase of about 150 percent of the cost of the fertilizer provided.
- Judicious choice of timing can also optimize the impact of transfers (for example providing funds at planting time, or during the lean season when employment income is unavailable).
- "Leverage" spending on safety nets by using limited injections of cash to insure against risks--for example, limited funding during times of drought or economic crisis may mean that the poor do not have to sell off land or cattle--to allow the poor to diversify their income-earning opportunities (for example by taking on the risk of planting cash crops).
- Use safety net expenditures that simultaneously contribute to human capital development. Examples include child nutrition programs that alleviate the long-run debilitation resulting from acute childhood nutrition, or fee waiver programs that not only provide an immediate transfer to the poor, but also increase the stock of trained personnel in the long run.
- Choose one or two simple program designs and adhere to them over a sustained period.
- Periodic evaluation of programs is absolutely essential. Such evaluation alone can throw light on what is working and what is not and allows for reform and consolidation of programs where needed.

Finally, what further strategic guidance can we provide for very poor countries with respect to striking a balance between investments for growth (roads, water, health, and

education) and transfers, both of which compete for public resources? We suggest that countries decide on the choice and coverage of safety net interventions using the following steps:

(i) Re-examine the main constraints to growth and the role of public investment policy in overcoming these constraints
(ii) Conduct a vulnerability assessment and identify the main risks poor people confront (i.e., systemic such as monsoon failures or idiosyncratic such as illness [HIV/AIDS])
(iii) Identify policy interventions that have the potential for both reducing vulnerability and for enhancing growth prospects at the same time, thus reducing the potential difficult trade-offs between safety net programs and growth-enhancing measures.

An example helps to illustrate the above. A vulnerability assessment for Kenya (Christiaensen and Subbarao 2001) has shown that rural communities exposed to fever/malaria and related sickness and communities living in the hinterland cut off from market centers and lacking basic infrastructural facilities, experience both serious consumption shocks (i.e., shortfalls in mean consumption), as well as substantial variability in consumption. A recent study estimated the current loss of GNP in sub-Saharan Africa due to malaria to be 20 percent. It follows that a policy that controls malaria and related sickness and policy interventions that improve access to rural market centers have great potential for reducing the poor's vulnerability to consumption losses, and thus serve as good safety net interventions. It is also clear that neither intervention requires a targeted approach and as such ideal for countries such as (rural) Kenya where it is so difficult to identify the very poor from those poor who can make do without any intervention. This then is the kind of solution that needs to be found to the dilemma of providing safety nets in very low income countries: ones that reconcile the trade-off between transfers and more orthodox growth-enhancing expenditures, that is built on an analytical understanding of vulnerability, and that minimizes the difficulties of targeting.

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Annex

Table A1 - Infant Mortality by Income Class, 1997-99 – Selected Countries

	Poorest 20 percent	*Middle 20 percent*	*Richest 20 percent*	*Ratio of richest to poorest 20 percent*
Kenya	90	56	45	2.0
Madagascar	128	103	73	1.8
Mali	157	156	98	1.6
Senegal	101	70	47	2.1
Tanzania	116	89	66	1.8

Source: World Development Indicators (various years)

Table A2 - Sample of Public Works Programs – Scale and Costs, Various Countries

Country, year, and program	*Scale of operations (Million person-days p.a.)*	*Total cost (wage and nonwage) per person-day of employment created (US$)*	*Ratio of wage cost to total cost*
Bangladesh 1991-92, FFW	15	1.6	0.5
India 1991-92	850	1.3	0.6
India 1991-92, MEGS	100–180	1.2	0.51
Pakistan 1992, CFW (IGPRA)	5.2	2.8	0.6
Philippines 1990, CFW	0.3	3.2	0.5
Botswana 1992-93, CFW	7	1.7	0.63
Ghana 1988-91	0.5	3.4	0.2
Kenya 1992-93, CFW	0.6	3.0	0.3–0.4
Bolivia 1982-90	8-9	8.0	0.3
Chile 1987, CFW	40-45	0.5	0.4
Honduras 1990-91, CFW	2.5	1.0	0.4
Costa Rice 1991–94, CFW	9	4.0	—

FFW: Food for Work.
CFW: Cash for Work.
JRY: Jawahar Rojgar Yojna, a nationwide program of public works.
MEGS: Maharstra Employment Guarantee Scheme.
IGPRA: Income Generation Program for Refugee Areas supported by United Nations agencies.
Source: Subbarao and others (1997).

Table A3 - Characteristics of Selected School Feeding Programs

	Ration	*Days per year*	*Cost per 1,000 calories/day over 365 days (US$)*	*Number of beneficiaries*	*Estimated annual cost (US$ millions)*
Tamil-Nadu mid-day meal	418	200	67.02	n.a.	n.a.
Guatemala	456	165	19.25	1,099,000	4.3
Gambia	858	196	81.46	376,202	14.1
Nepal 3718 (mix of Maternal and Child Health and Social Fund)	622	293	56.50	377,650	10.7

Source: World Bank data.

Table A4 - Estimated Unit Costs of Various Feeding Programs

(1988 Cost - US$ per 1,000 calories delivered per person per day per year)

Region/program type	*Mean cost (US$)*	*Number of programs*
Asia	91.29	21
Africa	78.95	5
Latin America	87.86	21
Maternal and Child Health (MCH) feeding	85.64	37
School feeding	88.74	11

Source: World Bank data.