

Republic of Madagascar

Mitigating the Impact of the Crisis on Education

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Acronyms and Abbreviations

BEPC	End of lower secondary exam (<i>Brevet d'études du premier cycle du secondaire</i>)
CEPE	End of primary exam (<i>Certificat d'études primaires élémentaires</i>)
CISCO	Education district (<i>Circonscription scolaire</i>)
CSB	Basic healthcare center (<i>Centre de santé de base</i>)
DREN	Regional education directorate (<i>Direction régionale de l'éducation nationale</i>)
EPM	Household survey (<i>Enquête périodique auprès des ménages</i>)
ESY	Education statistical yearbooks
FAF	School management committee
Fokontany	Administrative area (village, sector or part of town)
FRAM	Fikambaba'ny Ray Aman-dreninb'ny Mpianatra (Parent-teacher association)
GDP	Gross Domestic Product
GER	Gross Enrollment Rate
INSTAT	National Statistical Institute (<i>Institut National des Statistiques de Madagascar</i>)
LCF	Local catalytic funds (<i>Fonds catalytiques locaux</i>)
MEN	Ministry of National Education
MFB	Ministry of Finance and Budget
NGO	Non-Governmental Organization
PASEC	International learning outcomes assessment programme (<i>Programme d'analyse des systèmes éducatifs de la CONFEMEN</i>)
PIE	Interim education plan (<i>Plan Intérimaire de l'Éducation</i>)
PPS	Public primary school (including government-aided)
PTR	Pupil-teacher report
SS	South survey carried out in the districts of Amboasary and Betioky
UNICEF	United Nations International Children's Emergency Fund
ZAP	Administrative areas that comprise about ten schools on average

Executive summary

This report reviews the tools and mechanisms which could contribute to offsetting the negative effects of the current crisis on primary school outcomes. In a context of rapid deterioration of key education indicators, including enrollment and survival, key education stakeholders are faced with the challenging task of identifying tools and mechanisms that may contribute to rapidly restoring access to education. While a variety of programs have been implemented in the past, limited evidence exists on their potential impact on key factors influencing school outcomes. In addition, given the limited domestic and international resources at the disposal of policy-makers, priorities need to be established that will focus on the most urgent and important aspects of the current situation. This report aims at providing key stakeholders in the sector with information on existing tools and mechanisms that could potentially be used to put a halt to the rapid decline of the sectors. Both Demand-side and supply-side tools and interventions (respectively targeting households and schools) are reviewed and summarized below.

	Tools	Objective	Mechanism	Prerequisites
HOUSEHOLDS LEVEL	Cash Transfer Programmes to Households	Alleviate pressure on household income and encourage demand for schooling	Conditional or unconditional cash transfers to households	Effective supply of education and reliable mechanism for money transfers to households
	Scholarships		Cash transfers to pupils often conditional on results	Effective supply of education and a financial institution for money transfers
	Education Vouchers		Direct payment of enrollment fees, irrespective of type of school	Existence of a private education system and of a mechanism for money transfers to schools
	Education Loans	Increase access to postprimary education for children from disadvantaged households	Subsidized / unsubsidized loans	Financial institutions prepared to make the loans and supervision by the government
SCHOOL LEVEL	Transfer of Resources to Schools	Finance schools and reduce household education spending	Transfer of money or equipment, or development of infrastructure	Existence of school accounts, school management committees (FAF) and of a system for following-up on spending
	Transfers to Community Teachers	Ensure continuity of supply and reduce household spending	Subsidization of salaries paid to contract teachers (ENF)	Existence of payment channels
	Transfer of Resources to Pupils	Increase access to schooling and reduce household spending	Multiple: distribution of school kits or rations, canteens, healthcare	Existence of distribution channels
	Management Support and Inclusive Education	Enhance effectiveness and equity of the education system	Programmes aiming to improve school management, promote inclusive education, etc...	Multiple

The analysis identifies interventions with a strong potential to offset the effects of the crisis over the short and medium term. Previous analysis pointed out to the financial factors as key determinants of the decline in school enrolments. In particular, higher costs of education and lower households' income appear to be the key drivers to declining school outcomes. In this context, short term interventions can be envisaged that will help stimulate the demand for education. They include: (i) School-fund: Covering basic primary school fees for all children, (ii) Local catalytic funds which provide extra funding targeting impoverished areas, (iii) Subsidies of communities teachers' salaries. Once minimum conditions have been reestablished, other tools - in particular on the demand-side – could potentially have an impact in the medium and long term. They include: (i) conditional transfers to households, especially in rural areas, (ii) education vouchers mostly in urban areas, (iii) Education scorecards: Improvement of quality, in the longer term.

To ensure rapid implementation, available human capital and potential conditionalities must be considered pragmatically, while rigorous evaluation approach should be given the highest priority. Universal approaches may be favored over the short-term to avoid generating an excessive administrative workload in a context of extremely limited capacity. This will also contribute to keeping implementation costs down. A financial simulation of the various intervention options will determine which combination can achieve the best impact on post-crisis education decisions, while remaining financially feasible. Finally, it is crucial that rigorous monitoring of interventions be integrated into the selected interventions, including frequent monitoring and randomized impact evaluation.

Introduction

Since 2009 the Malagasy population has undergone a profound political crisis which has had a significant negative impact on schooling decision and education outcomes. The political crisis of March 2009 was followed by the suspension of most external funding and a drastic drop in domestic financing, especially for the social sectors. The economic crisis, unfolding in parallel over the past four years, has entailed a rapid deterioration of household living conditions, with consequences on children's schooling. A recent analysis reports a rapid decline in key education indicators, including enrollments and survival (World Bank, 2013). Education decisions of households have in particular been impacted by higher direct and indirect costs of schooling as well as lower household incomes as a result of the crisis. Both of these observations serve to highlight the financial cost households need to take into consideration when deciding to enroll their children in school – a cost which has risen considerably since 2009.

The objective of this report is to evaluate the tools and mechanisms which may contribute to offsetting the negative trend observed since the onset of the crisis. The report seeks in particular to provide key decision makers with further elements to help them develop a strategy aiming to reinforce demand for education in the context of the current crisis. The report focuses on issues connected to the crisis itself without focusing on pre-existing structural problems inherent to the Malagasy education system. The main interventions which directly impact the situation of households and influence demand-side factors are summarized in Figure 1.¹ While some of these interventions target schools rather than households or individuals, they have potentially an impact on the demand for education. This presentation aims to provide a practical explanation of each mechanism and to review possible results in terms of access and coverage. It also aims to outline the aspects which enable the initial evaluation of the cost-effectiveness of the tools considered.

Figure 1: Main Tools to Offset the Impact of the Crisis on Education



Source: Authors.

The report makes use of in-depth analysis of available documents and of meetings and workshops held with the key players of the education system. Examining the literature revealed a set of pertinent tools implemented in Madagascar or elsewhere around the world. Meetings and workshops were then held with members of the MEN, heads of various education programmes, international organizations, NGOs and associations working in Madagascar, so as to fathom their views of the pertinence of each tool within the context of present day Madagascar. For each tool considered, a summary table on the coverage, principles and results is presented.

1. INTERVENTIONS TARGETING HOUSEHOLDS

Priority is given to tools which have a direct effect on household spending in order to offset the negative impact that the crisis has had on household income and the cost of education.¹ (i) Cash transfers to households, (ii) scholarships for pupils, (iii) education vouchers and (iv) education loans are tools which aim primarily to influence the demand for education and improve enrollment and dropout rates or encourage reintegration into the school system.

Cash Transfer Programmes for Households

This first category of tools involves payments made directly to households, usually based on certain conditionalities.² The objective is to alleviate the burden on household incomes and to influence decisions regarding education. Including some kind of social contract is now increasingly widespread practice in order to ensure that a certain behavior is adopted in exchange for support. In the context of education, conditions may involve enrollment, school attendance or achievement in exams. Transfers usually vary depending on age, child gender, education cycle, household income as well as the number of dependent children. These programmes are met with increasing interest in both developed and developing countries (Reimers et al., 2006), and have been implemented with success since the 1990s, particularly in Latin America.

Empirical Evidence

MADAGASCAR	
Conditional Cash Transfer for Households <i>Support for out-of-school children who reintegrate the school system, which could also limit the impact of a possible food crisis</i> February to September 2009	
Context	As a result of the cyclones which affected the Analamanga region in 2008, a considerable number of children from disadvantaged backgrounds aged 8 to 14 were out of school.
Objective	Subsidize vulnerable families whose children are out of school, improve enrollment levels and prevent a food crisis which could affect school survival (UNICEF, 2010a).
Location	Analamanga region
Beneficiaries	655 children from 499 families – certain geographical areas were targeted and selected based on income criteria and the marital status of parents.
Nature of the Programme	<ul style="list-style-type: none">– Direct transfer of Ar 40,000 (US\$ 18) per month for eight months, with the following conditions: 40% for schooling, 40% for food and 20% at the discretion of parents; and– Training provided to families (parental training, budget management, hygiene, nutrition, etc.)
Implementation	– The NGOs CDA (<i>Conseil de Développement d'Andohatopenaka</i>) and HARDI

¹ Programmes aiming to increase community awareness and mobilization, improve adult literacy rates, and set up income-generating activities may also have a major impact on the schooling of children. However, these programmes tend to be effective in the longer term and so are not considered in this report as being rapid responses to the crisis.

² A vast number of publications address this issue. See: <http://go.worldbank.org/GMI4UN3QA0>. Appendix A lists non-educational resource transfer programmes for Madagascar.

	<i>(Harmonisation des Actions pour la Réalisation d'un Développement Intégré)</i> hand money over to beneficiary families every month.
Follow-up	<ul style="list-style-type: none"> – On a monthly basis: visits to family homes, interviews with children, parents and teachers check how money is being spent as well as on the attitude of the child at school – a report is then written up for each family.
Results	<ul style="list-style-type: none"> – A significant proportion of the subsidy was used to pay PTA contributions. – 66% of beneficiaries were admitted to the next grade, 32% repeated their school year and 2% dropped out (UNICEF, 2010a). – One year after the end of the programme, most households kept their children enrolled despite subsidies coming to an end, but absenteeism increased.

Source: UNICEF, 2010a.

MADAGASCAR	
Conditional Cash Transfer for Households <i>Pilot cash transfer project for a displaced urban population living mainly from waste at the dump on the banks of the Ikopa river, fokontany of Morondava</i> 2009-10	
Context	Sanitation campaigns in and around Antananarivo in 2005 displaced certain homeless families to the fokontany of Morondava, where they live mainly from collection and sorting of waste in the vicinity of the Andramiarana rubbish dump (ATD Quart Monde Madagascar, 2010).
Objective	Small scale testing of the impact of conditional cash transfer programmes on the birth registration, enrollment and medical care of beneficiaries.
Location	Fokontany of Morondava
Beneficiaries	121 households totaling 570 people, including 223 children under 15, selected via participatory mapping. Almost 70% were not registered with the nearest fokontany and so were not on the civil registry.
Nature of the Programme	<ul style="list-style-type: none"> – Financial transfers to families. – Free schooling for 69 children living at the dump in the nearest public primary school, in exchange for the rehabilitation of a classroom with support from a private donor.
Implementation	Cooperation agreement signed by UNICEF and ATD Quart Monde
Follow-up	NGO ATD Quart-Monde
Results	<ul style="list-style-type: none"> – 33% to 99% increase of registration in population census held by the local authorities; – 22% to 63% increase of attendance rates of children aged 5 to 15 years; and – 28% to 52% increase of medical consultation rates (World Bank, 2011a).
Source: ATD Quart Monde Madagascar, 2010.	

Conditional Cash Transfer Programmes for Households Cambodia, Mexico and Brazil

<p>Japanese Fund for Poverty Reduction - Cambodia (Underway since 2004)</p>	<p><u>Location</u>: Nationwide. <u>Objective</u>: Improve educational performance in terms of transition to secondary education and survival of girls in secondary education. <u>Beneficiaries</u>: Approximately 31,500 girls from 700 junior secondary schools (approximately 15% of nationwide), among the most vulnerable pupils from the most educationally and socially impoverished areas, selected upon application. <u>Nature</u>: Cash transfers to families conditional on enrollment, attendance and beneficiaries progressing to the next grade, for the duration of the whole junior secondary cycle. <u>Results</u>: Enrollment and school attendance by beneficiaries increased by 30 to 43 percentage points, the impact being greatest among the poorest (Filmer and Schady, 2008); no effect on math or vocabulary learning outcomes is demonstrated (Filmer and Schady (2009b); diminishing marginal returns of the amounts transferred (Filmer and Schady, 2009a); and the situation of other children in the household who do not benefit from financial support remains for the most part unchanged (Ferreira et al., 2009).</p>
<p>Progresas/Oportunidades - Mexico (Underway since 1997)</p>	<p><u>Location</u>: Urban and rural communities classified as impoverished. <u>Objective</u>: Support households living in extreme poverty so as to improve their capacities and well-being through the education, health and nutrition of children (Skoufis et al., 1999). <u>Beneficiaries</u>: 4 million pupils in 2002 (almost 40% of the 6-14 year age group). <u>Nature</u>: Cash transfers to families conditional on school enrollment and health checks. Local selection of beneficiaries, renewable after 3 years. Larger sums for pupils in secondary schools and girls. Management by the Ministry of Social Development, with a budget equivalent to 9% of the national education budget in 2004. <u>Results</u>: 1% increase of the net primary enrollment rate (the rate was already 94% before the programme); % increase in secondary school enrollment; and effects on dropout and repetition rates were even greater; but communities located in areas without schools were not included in this programme.</p>
<p>Bolsa Escola/Familia - Brazil (Underway since 2001)</p>	<p><u>Location</u>: Nationwide. <u>Objective</u>: Encourage enrollment of children from poorest households. <u>Beneficiaries</u>: Almost 14 million families in 2012. <u>Nature</u>: Cash transfers to poorest families conditional on official enrollment of children (Bourgignon et al., 2003). An attendance rate of 85% is requested from beneficiary pupils. Participation in the programme is reassessed every three months. Federal government management via municipalities. <u>Results</u>: Beneficiaries are 20% less likely to be absent from school than their peers, 63% less likely to drop out and 24% more likely to continue to the next grade (Veras, 2007).</p>

Source: Filmer and Schady, 2008, 2009a et 2009b; Ferreira et al., 2009; Sadoulet et al., 2002; Skoufias et al., 1999; Bourgignon et al., 2003; Veras et al., 2007.

Results

Conditional cash transfer programmes have proven to have a relatively positive impact on education indicators. Programmes of this kind undertaken in Madagascar which focus on education only have limited coverage; it is thus difficult to draw solid conclusions. On the other hand, a certain number of programmes implemented on an international scale have undergone rigorous impact analyses (Rawlings and Rubio, 2005; Miller et al., 2008). The latter point to a generally positive impact on human development and a significantly positive effect on enrollment, attendance and dropout rates (Saavedra and Garcia, 2012).³

Considerable heterogeneity in the amplitude of effects has been observed depending on countries, programmes, education cycles and targeted populations (World Bank, 2009). Programmes targeting areas and populations least advanced from an educational standpoint, imposing conditionalities in terms of school results, providing sufficiently large sums of money and combining the above with supply-side interventions, on the whole display the best educational results. Furthermore, the average impact on secondary education seems greater than on primary education.

Success and Failure Factors

- (i) *Conditionality*, because some households underestimate the social benefit of education and could well use the money for other expenses. Overall, the analysis of the programmes points to the fact that strict conditions in terms of school achievement are more effective than when attendance is not a prerequisite.
- (ii) *Precise targeting*, in order to limit government investment and optimize programme impact (See Chapter 3).
- (iii) *The administrative costs* of enforcing conditions and targeting beneficiaries may be very high, sometimes exceeding the amounts transferred.
- (iv) *The amounts and frequency of transfers*: meta-analyses show that the more generous programmes are, the greater the impact on the improvement of educational decisions and attitudes (Saavedra and Garcia, 2012). Transfers every two to six months lead to better results than monthly transfers.
- (v) *Range of objectives*, because objectives or conditions with too broad a scope do not usually work in favor of final results.
- (vi) *Partnerships*, these programmes requiring support from the authorities, local communities and more often than not NGOs in order to hand over the transfers to households. This commitment is often lacking in the context of Malagasy programmes, which can limit the extent of their impact (World Bank, 2011a). Success in the educational sector is often heavily reliant on coordination between the MEN and those overseeing the programme.
- (vii) *Availability of education* is an essential pre-requisite without which conditional transfer programmes would be pointless – particular attention should be paid to this in rural areas. Meta-analyses highlight that cash transfer programmes combined with supply-side interventions (support in the form of financing, infrastructure or equipment for schools) have a greater impact.

³ Impact on learning outcomes, quality of teaching, access to employment and definitively ending intergenerational transmission of poverty is difficult to prove (Filmer and Schady, 2009b).

Scholarships

Scholarships are transfers paid directly to learners, conditional on certain behavioral criteria (most often school attendance). Funds aim to cover costs associated with studying (enrollment fees and some indirect costs), in order to lighten the financial burden which may keep children from low-income families out of school. Scholarships may also draw attention to certain vulnerable pupils and show that investment in their human capacities is thought to be worthwhile. Funds are usually made available for a whole educational cycle and can be transferred to the pupil or else serve to pay certain educational expenses directly.

Empirical Evidence

MADAGASCAR	
Scholarships « Ambassador's Girls Scholarship » Programme (AGSP) 2004-09	
Objective	Give disadvantaged children exposed to a high probability of dropout better access to education via scholarships and capacity reinforcement.
Location	22 CISCOS from 8 regions of Madagascar (Analamanga, Bongolava, Itasy, Antsinanana, Vakinankaratra, Amoron'Imania, Haute Matsiatra, Vatovavy Fitovinany) (PACT and SIVE, 2009).
Beneficiaries	2,724 vulnerable young girls aged 6 to 20 years, in 134 schools.
Nature of the Programme	<ul style="list-style-type: none"> – Financial help covering school expenses, school supplies, uniforms and other education expenses (US\$ 10 per month for 10 months); and – Educational programmes to reinforce girls' knowledge and competencies.
Implementation	Financing by USAID; managed by the NGO SIVE in partnership with PACT Madagascar.
Follow-up	Mentoring undertaken by volunteer women who are recruited and trained locally. Mentors are also responsible for managing the scholarship.
Results	<ul style="list-style-type: none"> – 5,000 scholarships awarded in close to 134 primary and secondary schools as well as in vocational training centers; – Promotion and exam pass rates achieved by beneficiaries exceeded national averages by far; and – Dropout rates and absenteeism were considerably reduced.

Source: PACT and SIVE, 2009.

Scholarships**“Jeunes Filles en Action” (JFA) Scholarship**

Underway since 2010

Context	The social status of girls and their household responsibilities mean they leave school earlier than boys.
Objective	Improve gender equity in postprimary education and access to junior secondary cycle, survival and reintegration of girls from disadvantaged backgrounds, by providing financial support to alleviate the burden on household incomes (UNICEF, 2010b and 2011)
Location	The CISCOS of Mampikony, Mandritsara and Antsohihy (currently being extended).
Beneficiaries	Over 2,400 young girls per year, from 68 junior secondary schools, applicants being selected by a local committee. Most girls awarded scholarships have lost at least one parent and come from households which are extremely disadvantaged in terms of wealth or nutrition.
Nature of the Programme	<ul style="list-style-type: none"> – Scholarship programme (unit amount of Ar 150,000 (US\$ 67) covering all enrollment and school fees and some of the costs of accommodation, transportation, clothing, etc.); – A specific sum of money is made available for food expenses during the lean period; – Payments are made via a local microcredit agency, conditional on the learning attitude of beneficiaries, including attendance; plus – A fee-free enrollment fund, women’s empowerment committees, residential schools and school scorecards to improve the achievements of junior secondary schools.
Implementation	UNICEF and SIVE.
Follow-up	Mentoring, follow-up of children and management of scholarships by a local female volunteer who has been trained by the programme.
Results	<ul style="list-style-type: none"> – Low dropout rate among beneficiaries (3.1%, versus national average of 18.7% in 2010/11 - MEN); – Number of repeaters and BEPC pass rates are similar to national averages (UNICEF, 2012a).

Source: UNICEF, 2010b and 2011.**Results**

The Malagasy scholarship programme has led to globally positive effects on schooling and learning outcomes. Given that the scholarships are in the form of cash transfers, the aforementioned meta-analysis results remain valid: scholarships have a positive overall impact on human development and a significantly positive effect on enrollment, attendance and dropout (Saavedra and Garcia, 2012). The aforementioned programmes implemented in Madagascar have a coverage extending up to several thousand children; nonetheless, they remain pilot programmes.

The cost of scholarship programmes may vary a great deal depending on the unit amount paid to beneficiaries and the education cycle targeted, but also depending on associated running costs (training, follow-up, cost of transfers and so forth). These running costs are difficult to determine though, since scholarships are usually associated with programmes aiming to improve supply-side quality.

Success and Failure Factors

- (i) *Targeting* financially vulnerable pupils who are also motivated to learn/study is a key factor to ensure programme effectiveness. Participation of the community in the process and the use selection criteria help to ensure efficient targeting.
- (ii) *Follow-up and accompaniment of children awarded scholarships* proved particularly useful in the case of Madagascar (AGSP and JFA programmes), especially in terms of indirect benefits such as the improvement of learning outcomes.
- (iii) *Conditionalities* are also crucial.

Education vouchers

Education vouchers (or education cheques) cover the enrollment and schooling fees of each beneficiary child, independently of their choice of school. The objectives are usually to improve access to schools for disadvantaged children, but also to let them choose which school they attend, thus encouraging competition.

These vouchers come in a variety of forms. The eligibility of pupils and schools, information availability, how much autonomy schools preserve and implementation modes all vary a great deal. Furthermore, these vouchers may be universal or reserved to certain categories of individuals, such as those from low-income households. They may be valid for all schools or only for those which meet the expectations of the government in terms of cost and quality. They may be financed by the government or by the private sector, via foundations, churches or companies. Finally, they may cover all or part of school fees. As education voucher programmes have yet to be tested in Madagascar, some international examples are presented below.

Empirical Evidence

Although no experience of vouchers has been tried in Madagascar, lessons from other countries can usefully be drawn.

INTERNATIONAL	
Education Vouchers <i>Ivory Coast, Columbia, Chili</i>	
<i>Education Voucher Programme - Ivory Coast (Underway for 15 years)</i>	<p><u>Location</u>: Nationwide.</p> <p><u>Objective</u>: Facilitate the access of poor children to private secondary schools (Sakellariou and Patrinos, 2004).</p> <p><u>Beneficiaries</u>: Approximately 223,000 pupils in 2001, over 40% of private sector enrollment.</p> <p><u>Nature</u>: Enrollment fees covered by the government (fixed amount with a cap on fees); education vouchers paid to certified private schools, whether secular or religious, for each child financed. Beneficiaries are placed in schools depending on their academic performance and the cost of the school.</p> <p><u>Results</u>: The criteria used to attribute education vouchers based on national exam results are not fully transparent. Corruption and embezzlement issues have arisen in some contexts.</p>
<i>Plan de Ampliación</i>	<u>Location</u> : Nationwide.

<p><i>de Cobertura de la Educación Secundaria</i> - <i>Columbia</i> (Underway for 20 years)</p>	<p><u>Objective</u>: Rapid and low-cost improvement of transition rates between primary and secondary schools for the poorest pupils, while addressing the major issue of the lack of school places in public junior secondary schools (King et al., 1997).</p> <p><u>Beneficiaries</u>: Pupils in the last year of public or primary school à vocation sociale, from disadvantaged households, aged under 15 years.</p> <p><u>Nature</u>: Allocation of education vouchers for enrollment of beneficiaries in private junior secondary schools, paid to municipalities. Applications must come with a strategy to promote secondary school education which takes into account the demand for education and the capacity for new enrollment in the private sector. Eligible junior secondary schools need to achieve exam results which are higher than the local average. When the number of eligible candidates exceeds the number of vouchers available, a lottery system is used. The <i>Institute of Educational Credit and Training</i> (IECT) was founded with the aim of managing the programme, coordinating the communication strategy destined to private junior secondary schools and pupils, and undertaking follow/up evaluation.</p> <p><u>Results</u>: Beneficiaries perform better than their peers with regard to exam results, repetition rates, admission to universities and school life expectancy (Angrist et al., 2006).</p>
<p><i>Universal Education Voucher System</i> - <i>Chili</i> (Underway since 1980)</p>	<p><u>Location</u>: Nationwide</p> <p><u>Objective</u>: Increase the enrollment rate and stimulate quality improvement.</p> <p><u>Beneficiaries</u>: All school-aged children.</p> <p><u>Nature</u>: Financing of public and private schools mainly based on the number of children enrolled. Note that all restrictions on the choice of school have been lifted and parents are encouraged to choose schools with the best performance (Gauri, 1998). The management of public and private secondary schools is transferred to municipalities. The Chilean education system is now entirely based on education vouchers. According to a national survey (<i>Sistema de Medición de la Calidad de la Educación</i>), private schools are usually of higher quality than public ones.</p>

Source: Sakellariou and Patrinos, 2004; King et al., 1997; Hsieh and Urquiola, 2003.

Results

Education vouchers targeting disadvantaged pupils seem to have a globally positive impact on schooling in developing countries (Gauri and Vawda, 2003). Education vouchers put the private sector to use in order to rapidly extend education. This is an effective strategy when public school supply displays shortcomings in general or for certain specialized services. No education voucher programme has been implemented in Madagascar so far, and the drop in the number of children attending private schools since the onset of the crisis suggests that the latter may not be operating at full capacity and may be able to enroll more pupils.

The impact of education vouchers in terms of improvement of the quality of education does however seem very heterogeneous (Gauri and Vawda, 2004). Impact studies carried out in Latin America point to significant results for beneficiaries. Other studies suggest increased inequality (New-Zealand, Chili) when programmes are universal (Carnoy and McEwan, 2003).

Success and Failure Factors

- (i) *In terms of education quality*, success very much depends on the context, the measurement of school achievements, diffusion of this information to communities and parents, the competitive management of public schools, as well as the existence of a good quality supply of private education.
- (ii) *Capacity and willingness* of private schools to enroll extra pupils.
- (iii) *The value of the voucher* needs to provide a sufficient incentive for schools.
- (iv) *The location* of private schools could prove to be a limiting factor; most are in urban areas, limiting the potential impact of the vouchers in rural areas.

Education Loans

Education loans are reimbursable transfers for the financing of education. These loans are usually handled by banks or microcredit organizations and are paid directly to households in cash, thus avoiding some of the hurdles associated with loans. Loan programmes vary considerably in terms of size, target population, allocation method, level of subsidy, organizational structure and reimbursement mechanisms. These programmes may receive support from the government (by making money available for the loans, subsidizing interest rates, or acting as guarantor in the event of a default on payment), in which case loans may be offered with preferential rates or conditions; otherwise households have to take out a consumer loan at the usual market rates. Only the latter option has been suggested in Madagascar up to now.

From the point of view of the government, the advantage of this type of loan is the auto-selection of beneficiaries and a multiplier effect on public funds. Since these loans are to be reimbursed, only households in real need will apply, and the amount will be able to benefit several households successively.

Empirical Evidence

MADAGASCAR	
Education Loan <i>« Tous à l'école » Schooling Loan of the Bank of Africa</i>	
Objective	Finance the studies, school supplies and enrollment fees of the children of clients and employees of the bank.
Location	Nationwide
Beneficiaries	(Information not available)
Nature of the Programme	<ul style="list-style-type: none">– Loan (amount of up to twice the monthly salary of the head of household, reimbursable over a maximum of 10 months);– Interest rate of over 10% plus application fee of Ar 12,000 (US\$ 5.4); no bank guarantee required.
Implementation	Implemented directly by the Bank of Africa, without any support from the government.
Follow-up	No justification required regarding how the money is spent.

Source: <http://www.boa.mg/banque-madagascar-prets-scolaire>

Note: Several banks offer this kind of loan in Madagascar.

Education loans**Thailand, China**

<i>Income Contingent and Allowance Loan</i> - <i>Thailand</i> <i>(Underway since 1995)</i>	<p>Objective: Enable pupils from disadvantaged families to gain access to the second cycle of secondary school and to further education.</p> <p>Nature: Financing of enrollment fees and other expenses (Tooley and West, 2000). Funds are paid to schools based on the number of students enrolled. The schools select the loan beneficiaries among a list of applicants (maximum household income of three times the poverty line; reimbursement starts two years after completion of studies; interest rate of 1% per year).</p> <p>Results: This programme was met with considerable success at first but rapidly became a source of budgetary problems for the government. In 2004, the programme was modified so as to switch the objective from social targeting to cost sharing. The allocated budget was then considerably reduced and enrollment fees increased.</p>
<i>Government Subsidized Students Loan Scheme,</i> - <i>China</i> <i>(Underway for 20 years)</i>	<p>Objective: Increase equitable access to further education.</p> <p>Nature: Dual loan system: (i) commercial loans, upon application (Shen and Li, 2003); and (ii) highly subsidized loans for the poorest students (income ceiling adjusted according to local area; reimbursement starts up to two years after completion of studies).</p> <p>Results: Programme coverage is still limited to a small percentage of students, but is being extended. Commercial banks are responsible for managing the loans, so administrative and financial repercussions on the government remain relatively low.</p>

Source: Tooley and West, 2000; Shen and Li, 2003.

Results

Due to the fact that some households find it difficult to gain access to these loans and that associated administrative costs can be relatively high, education loans do not seem to be that appropriate a tool for improving equitable access to basic education. High administrative costs entailed by the management of such programmes and difficult access for vulnerable households are the most important limitations to education loan programmes. Administrative costs associated with management of such programmes can be quite high due to reimbursement occurring over the relatively long term, the small sums of money involved in each loan and complex procedures in the event of payment default. Furthermore, the most vulnerable households do not usually have access to this kind of programme due to difficult access to financial institutions and an underestimation of the benefits associated with education. In addition, when one of the objectives is cost sharing, it is possible to observe a gradual but practically systematic increase of enrollment fees. In this way, loan programmes in this context do not seem to be very effective when it comes to increasing access to basic education for the poorest members of society. On the other hand, this tool can provide considerable added-value in the context of further education and vocational training.

2. INTERVENTIONS TARGETING SCHOOLS

Some tools targeting schools directly also enable to offset the negative effect of a crisis on the demand for education by improving access to schooling, survival, reintegration and the quality of education provided. These interventions *via* schools have the potential to impact both direct and indirect costs, perceptions of the return on investment in education and the opportunity cost for households. This section reviews: (i) resource transfers to schools, (ii) to teachers, (iii) and pupils, as well as (iv) various types of support aimed at management and inclusive education programmes. A certain number of other programmes are not investigated here due to their longer term effects (such as the building of schools) or because they aim to influence factors which have not evolved a great deal as a result of the crisis (such as teacher training). Given that the low demand for education is context-related, explained by higher direct and indirect costs in addition to reduced incomes, programmes at the school level which have budgetary repercussions can have a positive impact on enrollment rates.

Resource Transfers to Schools

Transfers of resources to schools are the main source of finance for schools and usually include those (funds, equipment and infrastructure) which are necessary for them to function. These transfers also include complementary ad hoc support or interventions which provide schools with varying kinds of input (teachers, blackboards, tables and benches, chalk, school books, educational supports, maintenance costs, and so on). Sums allocated usually depend on the number of pupils and general condition of the school, as well as geographical factors. On the one hand, these transfers enable to reduce the amount of money which parents have to pay toward school running costs, thus having a positive impact on access and survival, but they also bolster the quality of education supplied.

Empirical Evidence

MADAGASCAR	
Resource Transfers to Schools <i>School Grants (Caisse-école)</i> Underway since 2003	
Context	Schools lost one of their sources of income in 2003/04 with the abolition of enrollment fees and they have had a tendency to compensate for this loss by using teachers paid by the FRAMs. This in turn led to an increase of FRAM contributions, thus annulling the beneficial effect on households intended by the initial abolition.
Objective	Avoid insufficient household resources being a reason for out-of-school or dropout.
Location	Nationwide.
Beneficiaries	All public and private primary schools, with schools in urban areas receiving higher amounts than those in rural areas.
Nature of the Programme	<ul style="list-style-type: none"> – Allocation of yearly discretionary funds by the MEN to each school to finance expenses, and pay for equipment, maintenance and supplies; – The amount is calculated according to the number of children enrolled the previous year: Ar 2,800 to 3,000 (US\$ 1.3) per pupil (Ar 2,000 to 2,200 in the private sector) in 2008/09 and Ar 924 (US\$ 0.42) per pupil in 2011/12 (the suspending of public and private school funding in 2010 and the decrease since

	then are due to education budget cuts implemented in 2010). Since 2011/2012, per pupil spending has been the same for rural and urban schools.
Implementation	<ul style="list-style-type: none"> – Grants are distributed via DRENs and CISCOs to schools which have a management committee (FAF, composed of local authority representatives, traditional authorities and FRAM) with an operational office and a programme for the use of the school grant. – The school grant is transferred yearly to savings accounts opened for each school with the Malagasy post-office. It is managed by the FAF. –
Follow-up	Difficulties with the follow-up of bank account use have been reported.
Results	Primary enrollment increased from 2.4 million in 2001 to 3.6 million in 2004 and to 4.3 million in 2008, but numbers have stagnated since 2009. This increase in enrollment cannot be attributed to school grant alone, as other interventions were taking place at the same time, such as the distribution of school kits. However, school grants have been reported as being a key contributor to increased demand for education.

Source: MEN.

MADAGASCAR	
Resource Transfers to Schools Local Catalytic Funds for Schools (LCF) Underway since 2008	
Context	LCFs were initially created to support regions which were lagging considerably behind in terms of education and as a complement to the school-fund. As a consequence of the crisis, the LCFs have practically replaced the school-fund.
Objective	Increase access to schooling, improve survival rates and lighten the financial burden of education for households.
Location	10 regions (5,319 schools) in 2008, all public primary schools (PPS) in 18 regions in 2010 and all PPS in 22 regions as of 2011.
Beneficiaries	All PPS (21,601 schools, approximately 3.57 million pupils).
Nature of the Programme	<ul style="list-style-type: none"> – 2008: allocation of a fixed sum of Ar 400,000 per school; – As of 2011/12: allocation of a fixed sum of Ar 400,000 to Ar 500,000 per school (US\$ 180-225), depending on enrollment numbers (UAT, 2011); – Each school prepares a simplified performance plan to a MEN template which provides details of both the school-fund and LCF financing.
Implementation	<ul style="list-style-type: none"> – By the MEN until 2009 with back-up from its Technical Support Department, then by UNICEF over 2010-12 (with EFA-FTI funds); – The FAF treasurer and the director withdraw money from the accounts opened with the Malagasy post-office or a microfinance organization (OTIV). – Amounts allocated to each school are made public and each school is required to report on how LCFs are used.
Follow-up	Performance plans are validated by the ZAP and overseen by the DREN/CISCO.
Results	The procedure is usually adhered to even though some unexpected spending does occur (in particular for sport). In 2010/11, funds were spent on running costs (56%), maintenance of classrooms and classroom furniture (20%) and to a lesser extent on school supplies for disadvantaged children (13%). Almost 10% of LCFs was used to cover travel and food expenses incurred by those responsible for withdrawing the funds.

Source: UAT, 2011.

MADAGASCAR
Resource Transfers to Schools

<i>Fee-Free Enrollment Fund – Pilot (Caisse de gratuité des frais d’inscription)</i> Underway since 2011/12	
<i>Context</i>	Pilot within the framework of the JFA scholarship programme, set up due to the school-fund and LCF only having a partial impact on schooling.
<i>Objective</i>	Avoid numerous cases of programmes being abandoned due to non-payment of general expenses and FRAM contributions (and pressure exerted by schools to compensate for this loss) while enabling schools to gain access to its entire provisional budget.
<i>Location</i>	CISCOs of Mampikony, Mandritsara and Antsohihy.
<i>Beneficiaries</i>	Approximately 700 girls and boys from financially vulnerable households.
<i>Nature of the Programme</i>	<ul style="list-style-type: none"> – Allocation of annual funds to each beneficiary school, to cover all direct expenses (general expenses, FRAM contributions) of eligible pupils. – According to the principle of the school-fund, the total amount depends on the number of pupils enrolled the previous year (Ar 27,000 or US\$ 12 on average per pupil).
<i>Implementation</i>	UNICEF and SIVE A local committee selects beneficiaries depending on available funds and a simplified evaluation based on that used for JFA (Jeunes Filles en Action) scholarships.
<i>Follow-up</i>	Follow-up by NGO and UNICEF
<i>Results</i>	Local communities seem to have a good understanding of the fee-free enrollment fund which appears to have efficiently targeted vulnerable pupils (UNICEF, 2012a). However, no rigorous impact evaluation has been carried out.

Source: UNICEF, 2012a.

Results

Current Resource Transfers to schools are indispensable to maintain education supply, whereas the efficiency of complementary programmes could be improved by better targeting. In the context of the ongoing crisis, transfers such as the school grant are a breath of fresh air for schools. The procedure would seem to be well understood on a local level and by the schools themselves.⁴ Generally speaking, there have been no reports of serious anomalies and directives seem to have been broadly adhered to.

Nevertheless, several issues have arisen with regard to the management of the school-fund:

- (i) *Targeting* in the context of nationwide programmes is de facto inexistent: all schools (and all the pupils in each school) receive this allocation, irrespective of their actual needs.
- (ii) *The amount* is currently fixed (schools in the better-off neighborhoods of the capital receive the same amount as schools in more vulnerable areas). It is based on the number of children enrolled the previous year and usually does not cover all the expenses and contributions demanded of parents.
- (iii) *The transfer process* and its efficiency depend on the follow-up of schools, the quality of local finance agencies and how geographically isolated the school is.

⁴ Feedback from the field is that some schools have not received the school grant for several years. This money is sometimes used by DRENs or CISCOs due to a lack of funds. Although some fictitious schools have been discovered and others have overestimated the number of pupils in order to be allocated more money, these cases do nevertheless seem to remain relatively rare.

Some transfers reach their destination with considerable delays, and some never arrive.

- (iv) *Management* of funds is frequently undertaken by the school director alone, since participation from the community does not always materialize. Transfer procedures voted by the National Assembly are not always abided by, in particular due to lack of supervision by the ZAPs.

Local catalytic funds are an opportunity to provide targeted support to schools which are most in need. With the involvement of management committees (FAF), LCFs have enabled schools to develop and implement their projects. Support provided by LCFs ensures schools can cover their basic needs, especially in the context of the ongoing crisis which has seen government subsidies become smaller and irregular. However, it is of the utmost importance to undertake an impact analysis to validate the effect of the funds on the quality of education supply or on the educational costs incurred by households, in particular since the MEN plans to pursue this programme in the context of its new interim education plan. LCFs clearly have a greater impact when support affects the education system as a whole, from DRENs through to schools, as was the case in 2008.

Resource Transfers to Community Teachers

In order to improve teaching conditions and to reduce the direct cost of studies incurred by parents, some programmes aim to transfer resources to community teachers themselves. In the Malagasy context, parent-teacher associations (FRAM) need to pay the salaries of part of the teachers working in their schools, which tends to lead to increased dropout rates (World Bank, 2013). The very low salaries paid to FRAM teachers may also contribute for loss of motivation and high absenteeism. Financial transfers to community teachers can thus help increase their number, or their salary, while decreasing the educational costs incurred by parents.

Empirical Evidence

MADAGASCAR	
Resource Transfers to Teachers <i>Subsidies for Contract Teachers (ENF)</i> Underway since 2004	
<i>Objective</i>	Reduce dropout caused by the financial burden on households, by subsidizing the salaries of teachers who would otherwise be paid by families.
<i>Location</i>	Nationwide.
<i>Beneficiaries</i>	45,585 teachers in 2011/12 (70% of contract teachers), vs. 36,000 in 2008/09.
<i>Nature of the Programme</i>	<ul style="list-style-type: none"> – State subsidy of part of the salary of some contract teachers. – Subsidy of private school teachers whose enrollment fees are under Ar 800 (suspended since onset of crisis).
<i>Implementation</i>	<ul style="list-style-type: none"> – Total amount of Ar 46.3 billion in 2009/10 (US\$ 22.9 million), of which Ar 18.6 billion came from the EFA catalytic fund (8 months of salary covered by the government and 4 months by the catalytic fund); – Funds are allocated to the DREN and made available to beneficiaries via district tax offices and payment service providers (banks, post-offices, microcredit agencies); – To be eligible, contract teachers must be recruited locally by the FRAM and meet specific criteria in terms of diplomas, morality and experience. They must also present a certificate of service from the FRAM president which is

	signed by the school director; – The CISCO select beneficiaries among the applicants, and allocate subsidies according to quotas determined by the MEN; – Subsidized community teachers must be registered with the CNAPS (social security and workplace insurance).
Follow-up	– Certificates of service must be checked by three different bodies (ZAP, CISCO and DREN) before payment is authorized.
Results	– Delays in payment have been observed, due to unavailability of funds and the lengthy application process, despite the wide variety of payment channels (national treasury, microfinance agencies and banks) – Reduced cost for parents and less absenteeism caused by teachers going to withdraw their salary.

Source: MEN.

Results

The supply of education is often heavily reliant on financing of FRAM teachers, but the efficiency of this form of financing remains to be improved. Malagasy schools depend to a great extent on the personal investment of teaching staff, which is far from being a sustainable situation. Shifting this cost to households would have a significantly negative effect on education-related decisions (World Bank, 2013).

Success and Failure Factors

- (i) *Targeting* of those contract teachers to be subsidized needs to be equitable and transparent, and inclusion criteria agreed upon at the central level need to be scrupulously followed at the regional level.
- (ii) *Follow-up of beneficiary teachers* would bolster teaching practices and reward performance, since accountability of subsidized contract teachers to the FRAM is now limited.

Resource Transfers to Pupils

Transfers to pupils include the distribution of equipment, meals or healthcare, directly or via schools, so as to reduce the financial impact of schooling on parents, encourage enrollment and survival, and improve the quality of the supply of education. Health and nutrition programmes encourage parents to enroll their children in schools, thus reducing the impact of these expenses on the household budget. These programmes may also improve pupil concentration and school results, as well as reduce absenteeism and dropout.

Empirical Evidence

MADAGASCAR	
Resource Transfers to Pupils School Kits 2003/04 – 2009/10 and 2012/13	
Context	After the political crisis in 2002, the government set up mechanisms to reduce schooling costs incurred by parents within the framework of the Education for All policy.
Objective	Reduction of schooling costs for parents, encouragement of school enrollment

	and improvement of learning conditions.
Location	Nationwide.
Beneficiaries	3.7 million children in public primary schools in 2012/13.
Nature of the Programme	<ul style="list-style-type: none"> – Distribution of school kits to primary school children: satchel and supplies (pens, pencils, notebooks, and so on); – Distribution of kits to teachers and schools as from 2012/13.
Implementation	– Funds allocated by the Global Partnership for Education (GPE) and the Kingdom of Norway amounting to a total of US\$ 7.3 million.
Results	Due to education budget cuts in 2010, no school kits were distributed during the 2010/11 academic year. Feedback from interviews on the field point to the fact that kits motivate both children and parents with regard to enrollment. Some problems with distribution logistics have been reported.

Source: MEN.

MADAGASCAR	
Resource Transfers to Pupils School Canteens – Various Programmes Underway	
Objective	Reduce household food spending, encourage enrollment as well as survival, and enhance learning.
PAM	<i>Location:</i> 11 CISCOS in the South <i>Beneficiaries:</i> 215,000 pupils in 1,200 public primary schools <i>Nature:</i> Daily meal during 175 days of school; food is brought in from outside and cooked on location by the communities.
CARE International	<i>Location:</i> Antsinanana region <i>Beneficiaries:</i> 30,000 pupils in 82 schools <i>Nature:</i> Set-up of income-generating activities within schools to either produce food destined to the canteen or to make a profit to buy food locally.
FRAM	<i>Participants:</i> Almost 1,000 schools <i>Nature:</i> Self-managed canteens, with a contribution from parent-teacher associations and school-funds, providing up to one meal per week.
Government	<i>Location:</i> Outskirts of Antananarivo <i>Beneficiaries:</i> 60,000 pupils <i>Nature:</i> Food rations (2011).

Source: MEN – National School Feeding Committee (*Coordination nationale de l'alimentation scolaire*).

MADAGASCAR	
Resource Transfers to Pupils Fortified Rations – Various Programmes Underway	
Objective	Reduce household food expenses, encourage enrollment as well as survival, and enhance learning.
MEN	<i>Beneficiaries:</i> 46,000 pupils in 95 particularly vulnerable public primary schools in urban areas (2011) <i>Nature:</i> Free enriched flour rations (Koba) for 60 days.
SEECALINE	<i>Beneficiaries:</i> 3.3 million school children aged under 14 years. <i>Nature:</i> Vitamin A supplement.
ONN-MEN-Homeopharma	<i>Nature:</i> Fortified rations based on an ananambo derivative.

Source: MEN - National School Feeding Committee (*Coordination nationale de l'alimentation scolaire*).

Note: SEECALINE (*Surveillance et Éducation des Écoles et des Communautés en matière d'Alimentation et de Nutrition Élargie*); ONN (*Office National de Nutrition*).

Resource Transfers to Pupils***School Health – Various Ministry of Health Programmes***

Underway

Objective	Reduce household healthcare expenses, encourage enrollment as well as survival, and enhance learning.
Ocular and oral health	<i>Beneficiaries:</i> 15,000 teachers trained since 1997; awareness programmes in 2,850 schools <i>Nature:</i> Teachers are trained to detect visual impairment and oral disorders at an early stage; preventive programmes targeting both pupils and their parents; awareness programmes; setting up of dental practices in 23 schools.
Deworming	<i>Beneficiaries:</i> All school-aged children, enrolled or not. <i>Nature:</i> Distribution of Mebendazole twice a year; financed by the World Bank via the SEECALINE project. (Other interventions with support from the ONN and UNICEF).
Iron / folic acid	<i>Beneficiaries:</i> All enrolled school children <i>Nature:</i> Distribution of one tablet/pupil/week for 12 weeks via teachers. Hygiene mobilization and education programme, health and nutrition programme, awareness programme targeting parents prior to distribution.

Source: MEN - National School Feeding Committee (*Coordination nationale de l'alimentation scolaire*).

Note: SEECALINE (Surveillance et Éducation des Écoles et des Communautés en matière d'Alimentation et de Nutrition Élargie); ONN (Office National de Nutrition).

Results

Educational benefits derived from transfers to pupils vary depending on the type of intervention and location. Furthermore, potential gains in terms of educational indicators need to be weighed up against high cost of logistics, targeting issues, the need for coordination and lengthy implementation:

- (i) *School canteens* in Amboasary and Betioky had a positive impact on nutritional status, enrollment age and repetition rates, but not on learning outcomes (World Bank, 2012a). Costs are considerable for sponsors but also for schools (classroom time) as well as the community (equipment, preparation time), and are often a barrier to the scaling up of these programmes.
- (ii) *Fortified rations* are a lower cost alternative and do not impact classroom time, but how effective they actually are may be questioned (children sometimes find the taste unpleasant, rations may be sold on, logistical issues). However, the SEECALINE programme would seem to have a significant impact on dropout rates (Glick et al., 2011).

Management Support and Inclusive Education

This last set of tools encompasses support aiming to improve school management and the targeting of specific population groups (reintegration of out-of-school children and inclusive education), as well as various other programmes such as sensitization, encouraging mutual help among peers or fighting child labor. The interventions have several objectives including the improvement of the quality of education, better school management and enhancing the capacities of children who have dropped out. There is also some suggestion of

an impact on demand-side variables linked to the perception households have of the return on education and the opportunity cost of education. Other programmes such as early-childhood development, in-service teacher training or school programme reforms are not dealt with here due to the fact that they are difficult to implement in times of crisis.

Empirical Evidence

MADAGASCAR	
Targeted Access Programmes <i>Various Programmes: ASAMA, SMT, Inclusive Education and others</i> Underway	
<i>Action scolaire d'appoint pour les malgaches adolescents déscolarisés (ASAMA)</i>	<i>Beneficiaries:</i> 1,000 out-of-school children over 11 years, enrolled in 37 ASAMA classes in 2011 <i>Nature:</i> Local nonformal education methods preparing children for the Certificat d'études primaires élémentaires (CEPE) over 12 months <i>Result:</i> 85% pass rate (2011). <i>Cost:</i> High cost (in excess of US\$ 100 per pupil), due among other things to the cost of the school canteen and literacy activities.
<i>Sambatra ny Mahavaky Teny (SMT)</i>	<i>Beneficiaries:</i> 2,000 out-of-school children aged 7 to 13 in central and south-eastern Madagascar <i>Nature:</i> 5-month literacy programme (<i>Heureux ceux qui savent lire</i>) developed by the Mpamafy association with the objective of primary school reintegration if the level achieved is sufficient.
<i>Inclusive Education - UNICEF</i>	<i>Beneficiaries:</i> 61,867 out-of-school children reintegrated into 250 primary schools (2012). <i>Nature:</i> Mobilization of communities around disabled children; incorporation of inclusive education modules in teacher training; support by the MEN for the development of a nationwide strategy.
<i>Various specialized schools</i>	Education of blind children (FOFAJA); schools for children with mental disabilities (Orchidée Blanche); education of deaf children (AKA.MA); vocational training for disabled people (CNFPPSH); programme by Handicap International to regroup certain children in specialized classes within ordinary schools (integrated classes).

Source: UNICEF, 2012b.

MADAGASCAR	
School Management Support Programmes <i>School Success Programme Contract (Contrat Programme pour la Réussite Scolaire - CPRS)</i> Underway since 2006	
<i>Objective</i>	Improve approach to school management adopted by directors and the community in order to encourage access and invest more resources in quality and equity.
<i>Location</i>	35 of the 114 CISCOS in 7 regions of Madagascar.
<i>Beneficiaries</i>	4,964 school directors targeted and trained, corresponding to 836,290 pupils; beneficiaries of the fund include 517 schools and 117,000 pupils (2012).
<i>Nature of the Programme</i>	<ul style="list-style-type: none"> - Support with participative preparation of a scorecard of the school's situation and an action plan, signature of a programme contract; - Allocation of funds by NGOs to schools which have a contract with the CISCO; - Voluntary involvement and commitment by the education community at large to seek local solutions to address education issues in the area; - General assemblies held with the entire community; workshops and training of

	resource people.
Implementation	UNICEF
Follow-up	Appointment of a local follow-up committee: regular evaluation of community commitment and evolution of the school as a whole.
Results	The government had originally decided to gradually include all schools in this programme. The crisis halted buildup of momentum and only UNICEF is currently implementing CPRS.

Source: UNICEF (Various work documents).

MADAGASCAR	
School Management Support Programmes Improved Education Management in Madagascar (Amélioration de la Gestion de l'Éducation à Madagascar - AGEMAD) 2005-07	
Context	Inspired by work undertaken by the AGEPA (<i>Amélioration de la Gestion Éducative pour l'Afrique</i>).
Objective	Improve the efficiency of the education system; improve the attitude of key players (teachers, directors, ZAP managers, CISCO teams) so as to increase enrollment and pupils' performance.
Location	Nationwide.
Beneficiaries	Approximately 15 CISCOs, 89 ZAP managers, 909 school directors, 4,000 teachers and 262,000 pupils.
Nature of the Programme	<ul style="list-style-type: none"> – Set-up in each school of a scorecard displaying resources and educational results via indicators (performance of pupils in the school and of the CISCO, number of pupils and staff) – Ranking of schools according to results obtained.
Implementation	– Developed by the MEN and supported by the World Bank.
Follow-up	Impact analysis based on results of a randomized experiment (World Bank, 2010).
Results	Positive impact on teaching practices and school attendance by pupils, but not on teacher absenteeism or learning outcomes. The programme could not be scaled up due to the relatively high costs involved.

Source: World Bank, 2010.

MADAGASCAR	
Programmes aiming to raise awareness and encourage mutual help among peers Various Programmes: Girl for girl (Fille pour fille), Inclusive Education and DINA Underway	
Objective	Improvement of attendance, survival and in-class motivation via interaction among peers.
Girl for Girl - UNICEF	Beneficiaries: 12,334 new pupils enrolled in primary school (Grade 1 or 2) Nature: Support for beneficiaries to help them overcome the difficulties of their first year at school provided by girls who have more experience (Grade 4 or Grade 5), who in turn emancipate in their role of "models."
Inclusive education - UNICEF	Beneficiaries: 61,867 out-of-school children (See above). Nature: Pupils draw up a community map of out-of-school children and encourage them to return to school.
DINA systems	Participants: Specific communities Nature: Local customs aiming to penalize households who do not enroll one of their children. Penalties (fines or other measures) are used to benefit the

	community.
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Source: UNICEF, 2012b.

MADAGASCAR	
Programmes against the Worst Forms of Child Labor (WFCL)	
Various Programmes: KILONGA, Aide et Action and others	
Underway	
Objective	Protect children against the worse forms of child labor and encourage affected children to stay in school or reintegrate school, in particular by reducing the opportunity cost of schooling.
Kids Saving Initiative for Long-Term Approaches Against Child Labor (KILONGA)	<i>Beneficiaries:</i> 9,000 child victims of WFCL (2008-12). <i>Nature:</i> Payment of direct costs associated with education as well as certain healthcare and nutrition costs; training and awareness-raising. Set up in 2008 by SIVE (Sehatra Ivoaran'ny VEhivavy) and PACT.
Aide et Action project	<i>Beneficiaries:</i> Approximately 1,000 victims of WFCL in the South of the country (2008-09). <i>Nature:</i> Refresher classes, vocational training, sensitization of families and support with the set-up of income-generating activities.
Other projects	Targeting of each WFCL: dangerous work in agriculture or fishing, work in mines or quarries, sexual exploitation, carrying of heavy loads.

Source: Interviews of project managers by the authors.

3. BUILDING BLOCKS OF A RECOVERY STRATEGY

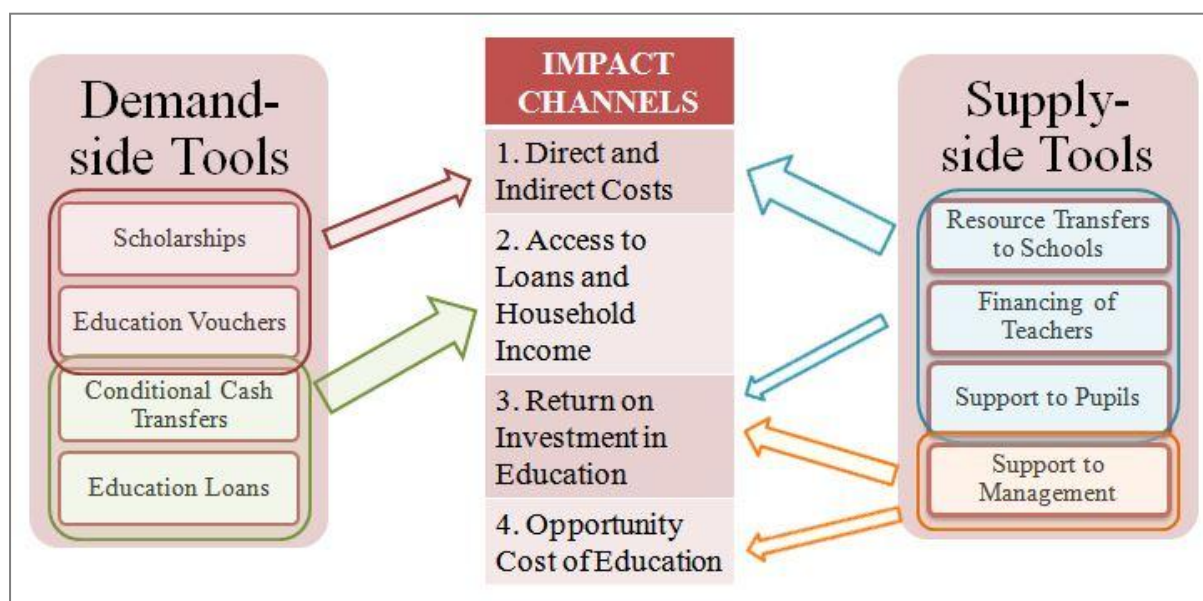
Proposed tools and mechanisms

Recent evidence points to a significant effect of the crisis on education outcomes, and highlights in particular the negative impact of increased financial constraints. The *Madagascar: Education in times of crisis* report (World Bank, 2013), which this study aims to complete, has identified the following channels of impact of the crisis on education: (i) Channel 1: Direct and indirect education costs; (ii) Channel 2: Access to loans and household income; (iii) Channel 3: Return on investment in education; (iv) Channel 4: Opportunity cost of education. The report finds that *“it is highly likely that the negative impact of the crisis on household education behavior is due in great part to the effect of the cost of education (Channel 1) and household income (Channel 2), the effect of the expected return (Channel 3) is difficult to assess with the available data, and the effect of the opportunity cost (Channel 4) is not conclusive. The effect of Channel 2 is furthermore increasing.”* (Banque Mondiale, 2013)

In this context, easing the financial constraints to education appears to be the most urgent strategy in the short term. To compensate the impact of the crisis on education, a short/medium-term strategy should consider the following issues: (i) Cost/Income: the effective costless nature of primary education appears to be primordial and non-repayable transfers also have a significant effect on school attendance, but any initiative aiming to reduce the household education budget (subsidies to community teachers’ salaries, distribution of textbooks or school kits, school feeding programmes, and so on) would probably have an impact in the current context; (ii) when devising a strategy, the costs and ease of implementation should be considered, with existing interventions having the potential to have the most rapid impact.

This report identifies a few possible options that may contribute to the recovery of the sector. Considering the results of the tool review undertaken in this report against the background of the crisis’ channels of impact allows the following observations (see Figure 2): (i) Options available to counter the increased direct and indirect costs of education include scholarships and education vouchers on the demand-side, and transfers to schools, teachers and pupils on the supply-side. (ii) In order to compensate for the effect of reduced income in the context of education sector programmes, options are limited to encouraging demand via transfers to households or education loans. (iii) The entire range of supply-side tools studied here can impact the quality of education provided, and hence improve the perception households have of the value of investing in the education of their children.

Figure 2: Effect of Supply-Side and Demand-Side Tools on the Crisis' Channels of Impact on Education Decisions



Source: Authors.

The analysis of the Malagasy context points to three short-term interventions with strong potential to offset the effects that the crisis has had on the education system. In particular, school grants and local catalytic funds (LCF) probably remain the most effective way of reducing direct education costs, since they reduce the need for the financial participation of parents while simultaneously increasing resources available to schools. As long as execution is transparent and effective, these resources could have a strong and relatively immediate impact on access, equity and possibly quality. In addition, subsidies to community teachers' salaries has also a direct and immediate impact on lowering the cost of education.

These interventions have existed for some time and their continuation would not entail the development of new structures of procedures. Administrative infrastructure and means available have suffered in the context of the crisis. It would thus seem pertinent to resort whenever possible to tools and distribution channels which have been tried and tested – the school grants, LCFs and subsidies to salaries have repeatedly proven their efficiency on a broad scale over the years. Financial procedures and circuits are generally speaking relatively efficient, whether on a central or regional level. These tools have many advantages: easy to implement, quick to execute, increased responsibilities for local communities, low administrative costs and absence of recurring costs.

The main shortcomings of the school grants, the LCF and salaries subsidies stem from the small amounts allocated and inadequate targeting. The review above points to some weaknesses in the design and implementation of the proposed interventions, including a lack of targeting. At this stage though, adjusting amounts to the needs of individual schools is not recommended: priority should be given to implementing selected measures rapidly, limiting the administrative workload as mentioned previously and avoiding costs associated with targeting, given the budgetary restrictions. Due to the fact that schools in rural areas are often perceived as struggling more, it may intuitively seem inequitable for schools in the capital to receive the same amounts as those in rural areas (for an equal number of students). Although their needs may be different, schools in urban areas also have considerable needs. The only

adjustment to be considered at this stage concerns fund allocation criteria - and in particular the appropriateness of maintaining allocations to private schools.

Once minimum conditions have been reestablished, other tools could potentially have an impact in the medium and long term. Once basic and adequate financing of schools has been ensured, it would be interesting to make certain that use of funds is optimized, by introducing some targeting criteria based on performance and equity. All interventions directed at households should be carefully targeted in order to identify vulnerable pupils/households who are likely to reconsider their decision to remain out of school as a result of these incentives. Education vouchers could be an interesting option in urban areas, whereas conditional cash transfers could well be more appropriate in rural areas. Two programmes of this kind have had positive outcomes in Madagascar and should be capitalized on. Similarly, coverage of the School Success Contract Programme (*Contrat Programme pour la Réussite Scolaire - CPRS*) or Improved Education Management in Madagascar (*Amélioration de la Gestion de l'Éducation à Madagascar - AGEMAD*) could gradually be extended.

A mix of untargeted short term interventions and piloting of targeted and medium term programmes could be considered. While some of the medium term interventions have the potential to achieve better results for a lower cost, these tools take longer to implement, in particular due to the administrative follow-up required. It may be both interesting and economical to launch them in parallel to the short-term impact interventions detailed above. Longer term interventions should start off as pilot schemes in order to assess which implementation mechanisms are most appropriate, and to validate assumptions concerning the cost-effectiveness of targeting. In order to optimize expense, the impact evaluation of these pilots will then enable to make necessary adjustments before scaling up coverage.

Lessons learned with Targeted Programmes and Conditionalities

The main arguments in support of targeting are the cost savings and the increased efficiency which ensues. Reducing the size of the population of beneficiaries entails lower costs for the programme. Furthermore, efficiency is boosted by choosing groups of people who really need the programme to change their behavior, or profiles which will benefit most. Some studies suggest that programmes which are implemented in areas which are most impoverished and lagging in terms of education indicators have the greatest effect (World Bank, 2009; Saavedra and Garcia, 2012).

On the other hand, targeting carries numerous costs which can sometimes make a targeted programme more costly than a universal one (See Table 1 and Annex B). Making the choice between a universal or targeted programme needs to take into account the administrative support available for its implementation, poverty levels and the profile of targeted groups as well as levels of social solidarity and discrimination against minorities, since these influence targeting costs (Samson et al., 2010). Targeting can also have an indirect social cost. In a context of widespread poverty with little differences between quintiles, the likelihood of exclusion and inclusion errors can be considerable. In this context, targeted support programmes can also be exposed to equity issues, by inverting the wealth gap between beneficiaries and non-beneficiaries.

Table 1: Benefits and Costs of Targeting

Targeting Benefits	Targeting Costs
<p><i>Savings in terms of resources:</i> Financial savings generated by targeting a proportion of the population</p> <p><i>Enhanced efficiency:</i> more financial support for beneficiaries who are really in need</p>	<p><i>Administrative costs:</i> time, human resources and money required by the programme</p> <p><i>Personal costs:</i> transport, time and documents beneficiaries have to provide to prove their eligibility</p> <p><i>Exclusion and inclusion errors:</i> costs associated with imperfect targeting</p> <p><i>Indirect costs:</i> costs entailed by changes required in order to be eligible for the programme</p> <p><i>Social costs:</i> marginalization and stigmatization of beneficiaries, erosion of social cohesion and of informal mutual help network</p> <p><i>Political costs:</i> absence of support for non-beneficiaries</p>
<i>Source:</i> Samson et al., 2010.	

The evaluation of medium-term targeting opportunities should thus be undertaken by comparing the estimated benefits and costs of each option and could be carried out using financial simulation. Programmes previously implemented in the Malagasy context use a great variety of targeting tools which could help assess the appropriateness and cost-effectiveness of the various options (see Table 2 below). Simulation should be based on data available for out-of-school children, disaggregated to the district level and differentiating between rural and urban areas. Furthermore, the characteristics of children (age, education level, gender, socioeconomic status of the household and so forth) as well as non-enrollment and dropout indicators should be redefined for each group by geographic area, in order to determine the most adequate tools and make the targeting as precise as possible.

Table 2: Previous Experience with Targeted Programmes in Madagascar

Name	Objective	Tools	Beneficiaries	Targeting
Cash Transfer to support out-of-school children who reintegrate the school system, which could also limit the impact of a possible food crisis	Improve level of enrollment of vulnerable children and prevent a possible food crisis	Cash transfer	Vulnerable households with out-of-school children	Registering and selection by the NGO according to geographic targeting, income criteria and marital status of families
Cash Transfer for a displaced urban population living off waste picking	Improve education and sanitary situation of street children	Cash transfer	Families living on the streets displaced during the 2005 sanitation campaigns from Antananarivo to Morondava	Participatory mapping of the studied area undertaken with volunteers from the NGO ATD Quart Monde and a social worker
Jeunes Filles en Action	Increase postprimary enrollment of vulnerable girls	Scholarship, mentoring, women's emancipation committees, residential schools, fee-free enrollment fund	Vulnerable girls with no access to junior secondary school or at high risk of dropout	Questionnaire based community level selection (children and households) as well as teacher observations
« Tous à l'école » Education Loan	Lend households the money	Education loans	Solvent households	Stimulation of demand followed by selection

	necessary for the education of their children			of applicants
Fee-Free Enrollment Fund	Improve the enrollment rates of children from financially vulnerable households	Transfer of funds to schools	Junior secondary schools	Selection of beneficiary pupils by a local committee using a simplified set of criteria
Subsidies for FRAM Teachers	Improve the financial situation of FRAM teachers and reduce fees paid by parents	Transfer of funds to teachers	FRAM teachers	CISCO quotas and local selection
School Canteens	Improve the nutrition of vulnerable pupils	Canteen	Pupils	Geographic targeting of areas with high food insecurity

Conditionalities aim to create further incentives for beneficiaries to change their behavior, to enhance the effect of transfers. Some conditionalities also serve as targeting mechanisms. Certain conditionalities have given rise to a considerably animated and ongoing debate (Samson et al., 2010). Whether it is appropriate to use conditionalities in a programme depends a great deal on the implementation context; they may prove useful when households do not have sufficient information to take certain decisions, such as in the case of households which underestimate the social benefit of their children's education. With regard to these families, conditionalities involve a short-term cost, but will benefit the children and society as a whole in the long run.

The relevance of conditionalities depends on a number of factors, including the nature of the conditionalities, the cost effectiveness of the programme, and the quality of education supply. As is the case with targeting, the cost of conditionalities can come at a considerable cost which may even outweigh the benefits, the greatest expense being the administrative time, human resources and funds required. Personal expenses incurred by beneficiaries in order to show they are respecting the conditions may also be considerable. Meta-analysis shows that in most cases, resource transfer programmes with strict conditions regarding school achievement achieve better results than those which merely require school attendance (Saavedra and Garcia, 2012). On the other hand, international experiments suggest that the pertinence of conditionalities depends on the level of demand for human capital, available education infrastructure, the local poverty profile, public policy and programme design (Samson et al., 2010).

Table 3: Factors For and Against Conditionalities (Samson et al., 2010)

	For Conditionalities	Against Conditionalities
Level of demand for education	Low	High
Quality of supply of education	Low	High
Administrative capacity	High	Low
Beneficiaries prone to change their behavior	High	Low
<i>Source: Samson et al., 2010.</i>		

A broad spectrum of conditionalities has been experimented in Madagascar. Some programmes impose no conditionalities or only very light conditionalities, whereas others go quite far regarding the rules about how money can be spent and the types of behavior expected of beneficiaries. Transfers to pupils and teachers, for instance, are only subject to light conditions, in particular administrative ones. The same applies for the school-fund or subsidies to contract teachers. On the other hand, cash transfers and scholarship programmes tested in the Malagasy context are based on much stricter conditionalities regarding how money is spent but also regarding the expected learning attitudes.

Table 4: Previous Experience with Conditionalities in Madagascar

Programme	Conditionality
Cash Transfer to support children reintegrating the school system which can limit the impact of a possible food crisis	How money is spent
Ambassador's Girls Scholarship Programme	Attendance and how money is spent
Jeunes Filles en Action	Attendance, school results and how money is spent
« Tous à l'école » Education Loan	An account at the BOA, successful application
School-fund	Existence of a FAF with an operational office and a programme for use of the school-fund
Subsidies for Contract Teachers	Qualifications, morality, experience, pay slips, and FRAM membership card
School Kits	None
<i>Source: Authors.</i>	

In view of the costs associated with strict conditionalities and the shortcomings in terms of the administrative means available, it seems appropriate to consider very light conditions over the short term. For school grants in particular, use of funds should not be subject to overly strict supervision, but should serve to implement the strategies put forward by the management committee (FAF) for the development of the school. Regular communication of performance indicators, in particular of the number of children enrolled freely and school results, could also be imposed. In order to ensure that this information remains unbiased, the total amount of funds allocated to a school should not be adjusted according to these results.

Summary of Recommendations

- ❑ **Analysis of the Malagasy context points to three short-term interventions with strong potential to offset the effects that the crisis has had on the education system.**
 - (i) School-fund: Covering basic primary school fees for all children
 - (ii) Local catalytic funds: Extra funding targeting impoverished areas
 - (iii) Financing of teachers: Abolishment of FRAM contributions for poor households
- ❑ In order to keep administrative workload down and avoid costs associated with targeting, reevaluation should be restricted to assessing the pertinence of this support for private schools.
- ❑ **Once minimum conditions have been reestablished, other tools could potentially have an impact in the medium and long term.**
 - (i) Conditional transfers to households: An incentive in rural areas
 - (ii) Education vouchers: An incentive in urban areas
 - (iii) School scorecards: Improvement of quality, in the longer term
- ❑ Any intervention aimed at households should be carefully targeted, to identify the pupils/households whose decision not to enroll would be changed by the extra incentives. Costs and benefits could be tested using pilot projects.
- ❑ A pragmatic evaluation of the human capital available, as well as of conditionalities to be imposed should be made, to control implementation costs and prioritize the speed of implementation.
- ❑ Financial simulation of the various intervention alternatives will help to define which combination would have the best impact on post-crisis educational behavior, for a given budget.
- ❑ Particular emphasis should be placed on the follow-up/evaluation of implemented interventions, irrespective of the definitive strategy, including regular impact evaluations.

ANNEXES

Annex A: Malagasy Resource Transfer Programmes not Targeting Education

Cash for Work

In the Malagasy context, one of the objectives of the FID is to take measures that will have a short-term impact on employment in areas which are most vulnerable to food insecurity (World Bank, 2011b). Paid work during the lean season provides extra income to the most vulnerable populations for the purchase of food. Projects of public interest, which usually aim to improve the country's basic infrastructure, are selected by the authorities and financed with support from the FID. An IDA loan amounting to US\$ 12 million has enabled the implementation of 359 *Cash for Work* projects. It is estimated that these projects have benefited 92,000 individuals, 60% of whom were women (World Bank, 2012b). However, it would seem that only a fraction of the amount transferred was used on spending directly connected to education. The Office National de Nutrition (ONN) has also implemented projects to provide money, food or seeds in exchange for participation in the building or rehabilitating the agricultural, healthcare or energy production infrastructures. However, these projects have been downscaled considerably since 2009 (World Bank, 2011b).

Tsena Mora Programme

The Tsena Mora programme has been in operation since October 2010 and aims to tackle the impact of the food crisis which is affecting vulnerable families in urban areas (Maminirinarivo, 2011). The programme sells staple foods (rice, oil, sugar) below market prices, with the help of government subsidies. It has 172 permanent employees and 600 temporary employees located across the country. The products are put on sale every two weeks, with active logistical participation from the fokontany. Those responsible for the project estimate that the programme has been awarded subsidies amounting to Ar 25 billion (US\$ 11.2 million) and that it has benefited 300,000 families. Beneficiaries are selected locally in collaboration with several NGOs. Priority is given to households with members who work in the informal sector and have a female or unemployed head of household. According to the first results of an impact study which is currently underway, this programme has had a positive impact on consumption and on household spending. However, there have been some concerns with regard to transparency, and there are some cases of suspected embezzlement. Some better-off households may be depriving other highly vulnerable ones of food they are entitled to, by providing payment to those who are responsible for the programme in the fokontany. This programme involves time-consuming as well as costly institutional procedures and its cost-effectiveness is not proven.

Annex B: Targeting Methodologies

Source: Adapted from World Bank, 2011b and 2012.

Many different targeting methods are available, to be used either alone or combined. They each have their own strengths and weaknesses which vary depending on the context and type of programme. Selection based on possessions often yields best results in the case of poor populations, whereas targeting carried out by the community itself often leads to greater satisfaction. In the context of education programmes, it is often advisable to incorporate the educational needs of households and the quality of education supply when evaluating potential beneficiaries.

Income Evaluation

Although considered the reference in terms of targeting (Coady et al., 2004), this method requires the verification of pay slips or other documents. Adoption of this approach would prove complex in a country such as Madagascar where a vast majority of the population works on family-owned land or in other informal sector activities which do not provide any trace of payments made to workers.

Indirect Income Evaluation

Although not yet adopted in Madagascar, some developing countries have tried to overcome the absence of pay slips or other such documents by developing methods which determine eligibility through the analysis of vulnerability, poverty and extreme poverty indicators. These observable household characteristics (possessions, household documents, composition of household and so forth) help identify households living under a specific poverty threshold. These thresholds are usually calculated by running statistical regressions on national household survey data, and the resulting formula serves to select beneficiaries. Since the variables used in the formula stem from observable characteristics, cross-checking by social workers becomes feasible and information can then be transferred to a standard application form. The main disadvantage of this method is the high level of administrative capacity required for data collection and treatment.

Demographic Segmentation

This method consists in selecting households or individuals based on simple demographic characteristics such as size of household, disability of household members, lack of labor force, female heads of household, children under a certain age and so forth. This targeting mechanism is frequently implemented in Madagascar, sometimes in addition to geographic mapping or community-based selection. The characteristics included vary from one programme to another. This method comes with a high risk of committing inclusion or exclusion errors.

Geographic Mapping

This method is also frequently used in Madagascar, with many programmes focusing on specific areas such as the south of the country where poverty and food insecurity is usually more severe. Geographic selection often suffers from shortcomings and tends to be ruled by administrative boundaries. This means that children in neighboring areas may not be included in programmes despite the fact that their needs could be just as high.

Self-Selection

This method is used in Madagascar for public works which are highly labor intensive. Self-selection usually relies on fixing wages at a level which is below the official minimum threshold of the local market, meaning that only the poorest members of society apply. However, wages are rarely a perfect selection method, hence the necessity for complementary methods which often involve some community participation.

Community-Based Selection

Direct targeting undertaken by the community appears to perform less well but does provide higher satisfaction, since the concept of poverty is highly subjective (Alatas et al., 2010). Community-based selection has been used to target beneficiaries in Madagascar, in particular as a complement to self-selection based on wages offered to workers for highly labor-intensive public works projects. Communities are familiar with the characteristics of their members and can play an important role in legitimizing selection decisions. Nevertheless, this targeting method may be undermined by a hoarding of resources by the local elite, or by a tendency of the communities to distribute the benefits of the programme as broadly as possible to avoid having to select beneficiaries. Community-based targeting can be useful but only when implemented together with other methods such as self-selection or indirect income evaluation.

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