Improving Madagascar's Primary Education: A Focus on Schools

Over the last twenty years Madagascar's economy has declined dramatically. The country has gone through a period of adjustment followed by political unrest and -- most recently -- a peaceful transition that has produced a democratically-elected new government. The new government faces many difficult choices with significant political risks if the economy is to recover and grow. Its most significant challenge beyond providing an enabling macro-economic environment for development in agriculture, industry, and tourism is to establish policies and implement changes that will develop the human resources necessary to sustain growth and alleviate poverty. In the short-to-medium term there is an urgent need to stabilize and improve general education. This study, Madagascar: Towards a School-Based Strategy For Improving Primary and Secondary Education examines the quality of primary and secondary education in the context of the development challenges facing Madagascar, and it identifies the elements of a strategy that would focus on the schools to improve the quality of education.

The study combines analyses of quantifiable issues -- economic decline, population growth, the size and internal efficiency of the education system, and education financing -- with more qualitative concerns -- school climate, the teaching/learning process, and the socio-political and cultural context -- in order to capture the multi-faceted reality that will shape the future of primary and secondary education in Madagascar. The focus is on schools. The study examines the factors that determine school effectiveness, and the conditions in schools that help children learn. Central to the study are observational case studies of 12 primary, 12 junior secondary (CEG), and 12 senior secondary (lycée) schools that a Technical Group from the Ministry of Education (MEN) conducted in 1993/94. The results of the primary school cases are compared with a 1991 evaluation of students' achievement and the factors that contribute to that achievement and with a forthcoming study on primary school wastage.
System Performance

Performance indicators at the primary and secondary levels show that the system is deteriorating badly. Enrollments declined at all levels between 1980 and the early 1990s, and most rapidly at the secondary level. The gross enrollment ratio fell from 142 percent at the primary level and 30 percent at the secondary level in 1980 to 95 percent and 20 percent in 1992, respectively, with many schools closing. The net primary enrollment ratio in 1993 was about 70 percent. Additionally, more parents in urban areas are choosing private schools over public ones for their children. By 1992, private schools enrolled 25 percent of all primary school students, 40 percent of junior secondary, and 48 percent of senior secondary. Meanwhile, the quality of public education is under attack. These indicators suggest that the poor are abandoning the schools altogether and that many of those who can afford to are choosing private schools.

The low internal efficiency of the education system reinforces the evidence of the low-quality of the education provided. At the primary level, more than one-third of all students repeat each year; fewer than 40 percent of those who start school reach the fifth (final) grade; and it takes close to three times the number of pupil-years of instruction that it should to produce a graduate. At the secondary level, repetition and dropout rates are lower, approximating the average for the whole of Sub-Saharan Africa. Declining enrollments, poor internal efficiency, and more and more students opting for private schools are all signs that a significant dimension of the crisis in Malagasy education is its poor quality.

Factors Determining the Quality of Primary and Secondary Education

The study investigated the input factors that affect the system (government, parental, and community contributions), the process characteristics that make for good schools (e.g., the capabilities and attitudes of teachers; school infrastructure and equipment; availability of learning materials), and the learning results achieved by children. This analysis of primary school quality in Madagascar identified three key factors affecting school quality: school leadership; community participation, especially for facilities and equipment provision and maintenance; and teachers' guides and textbooks. Figure 1 summarizes the factors analyzed and depicts their estimated relation to each other based on the analysis of research results. The analysis of the 24 secondary school case studies suggests that three main factors determine a secondary school's success: the management by the school's director, the facilities of the school, and the competencies and attitudes of the teachers; learning materials and parental support also appear important. Because these provide the country's only research results on secondary education, additional research is needed before fully adequate policy conclusions as to priorities can be drawn.

Although the school-level analyses suggest that there is not much of a financial contribution by government to the life of the school beyond teachers' salaries, public expenditures on primary and secondary education constitute a significant part of the national budget, especially in the form of teachers' salaries and management of the education system. The report's analysis of current public financing of education looks at three policy-related issues (a) the share of GDP and of total government budgets that go to education; (b) the shares of education budgets that are allocated to primary and secondary education; and (c) expenditure patterns within these sub-sectors of education. Based on this analysis the report concludes that the education sector receives a meager share of GDP (2.3 percent) -- largely because the overall government budget is a relatively small percentage of GDP. Within education, higher education takes a higher percentage than in many other countries, and
over two-thirds of non-salary funding in education is spent for non-instructional administrative purposes.

**Figure 1 Madagascar - Conceptual Framework for a Strategy for the Reform of Primary Education (after Research)**

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<thead>
<tr>
<th>Physical Facility</th>
<th>Teacher Attitudes</th>
<th>Repetition</th>
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<tr>
<td>Community Participation</td>
<td>Equipment</td>
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<tr>
<td>Leadership</td>
<td>Teaching/Learning Process</td>
<td>Academic Results</td>
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<tr>
<td>Government Contribution</td>
<td>Teacher Guides/ Textbooks</td>
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black arrows show relations factors from the research
red arrows are the suggested foci for the government's strategy

**Elements of a Strategy to Improve the Quality of Primary Education**

The study's findings on primary school quality help clarify the elements of a strategy for improving the quality of primary education within the larger economic development framework. These elements include: focusing reform on improving learning outcomes; concentrating implementation on strengthening school leadership, providing more learning materials, and fostering community support; creating and sustaining a positive climate for the reform of education; and shifting recurrent budget allocations towards instructional purposes while investing, through communities, in more and better physical facilities and equipment.

Three factors stand out as strategic foci for improved government support: strengthening school leadership, providing teachers guides and textbooks, and supporting community participation. If the government improves these, improvements in student learning outcomes should follow.

*Strengthen School Leadership.* The research found that school heads are mainly administrators who lack the authority, skills, and motivation to provide strong pedagogic leadership. Current statutory role expectations and incentives discourage school heads from exercising this kind of leadership, and there is minimal support from the Ministry for them as instructional leaders in their schools. In order


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to strengthen their performance as leaders, regulations will need to be changed, incentive systems improved, on-going training and support provided, and selection and preparation requirements clarified and applied. Some elements of this strategy are incorporated in the Ministry's on-going program of education reform. In the future, attention will need to be extended to empowering and rewarding school heads so that they can be educational leaders in their schools and to providing continuous support for their leadership and their professional growth. For example, meaningful budgets for purchasing school materials locally could be allocated to school heads; financial incentive systems and annual honor for heads who undertake teacher development activities could be awarded; and/or local clusters of school heads could be assisted in coming together regularly to discuss school leadership issues and methods.

Provide Teachers Guides and Textbooks. The research results have confirmed the importance of printed materials in determining school quality, even though the absolute level of availability in any school is currently very limited. The on-going program of educational reform has a large textbook component. However, the current program has taken a long time to start; teachers' guides are in inadequate supply, according to Ministry officials; and there is minimal training and support to teachers and school heads in how to use the books, though a method of Auto-Formation Assistée (AFA) for local teachers to support each other in using the books is being tested. The on-going program should be accelerated as much as possible. Future programs should concentrate more on teacher materials than is currently the case and should expand the range of materials provided to include more low-cost student materials produced in Madagascar by printers and by teachers themselves. The goal should be to get more materials into teachers' and students' hands quickly.

Support Community Participation. Perhaps the most striking finding from the quality research study is the centrality of community and parent participation in keeping the schools going. Coupled with the finding on the importance of physical facilities and equipment, the conclusion has been drawn that future investments in school infrastructures should take advantage of the extremely strong role of the community. The strategy should include ways to support, both operationally and materially, management by local communities. At the same time, this support will have to reflect the limited capacity of local governments and of local offices of the Ministry, and fit into whatever plan for overall decentralization of government services is adopted. Examples of alternative mechanisms for providing support include direct subsidies to households, direct grants to school committees, block grants to local government earmarked for primary or secondary education so that they can support communities, or some combination of these, all of them potentially requiring local matching contributions. The research results strongly suggest that government-run construction and equipment supply programs without community participation may destroy the parental and community responsibility for education that holds schools together now. Where this sense of responsibility does not exist, as seems apparent in some of the most isolated parts of the country, mechanisms for stimulating community involvement to bring local people to the level of responsibility that already exists in other places will also need to be developed through outreach efforts by local leaders (including, most importantly, the teacher at the school level) and representatives of the Ministry.

The study simulates high and low scenarios of possible funding needs and resource availability for these elements of a strategy for primary education. According to these simulations, US$8 to 25 million would be needed in the year 2000 to support additional primary school students and to increase significantly the expenditures on instruction. According to the study's projections, the public budget for primary and secondary education could increase by US$40 to 113 million by the year 2000. This magnitude of increase is predicated on the share of the public budget going to education increasing slightly, on the allocation to primary and secondary education within the education budget.
increasing, and on the transfer of some of the funds now spent on administration to instruction. Even if primary education only received half of this increase, the additional funds would provide much of the additional government funding needed to support recurrent expenditures that will improve educational quality.

On the other hand, the simulations of possible resource requirements for construction of new classrooms for additional students and for the rehabilitation of existing schools could cost from US$128 to 191 million between 1993 and 2000. Government funding for infrastructure at this level will not be possible, even if the public in Madagascar continues to contribute at current or higher levels, and donor assistance will be required. This assistance should be used to leverage continued community participation and as an incentive to government to increase its own recurrent funding of learning materials and direct instructional support to improve educational quality.

Besides financing, much of which it seems reasonable to expect will be available, the government will also need to instill a sense of purpose and enthusiasm among educators and parents if the implementation of reform is to be successful. The report recommends that a clear set of objectives for primary education with a simple strategy that concentrates on the factors identified in this study should be communicated widely and backed up by action.