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MONITORING OF THE EDUCATION SECTOR POST-CRISIS: IMPACT OF THE ABOLISHMENT OF THE PUBLIC SCHOOL TUITION POLICY [i]

Introduction

Due to a dispute on the outcome of presidential elections, Madagascar had been in the grip of a political crisis in the first half of 2002. General strikes and roadblocks hit hard on the economy and social service delivery in Madagascar and therefore on the welfare of people. However, the crisis situation was resolved in the middle of the year and the country is now on the road to recovery.[1]

As primary data on the situation post-crisis are scarce, the Ilo program, in collaboration with INSTAT and FOFIFA, organized a survey in November/December 2002 in 150 communes.[2] The major purpose of the survey was to evaluate the impact of the crisis. The stratified sampling frame was set up in such a way to be representative of the situation at the national and provincial level. Fivondronona were divided in six strata depending on the distance to the capital of the province (close, medium, far) and on the availability of a tarred road. In each strata, one fivondronana was selected for every province. In each fivondronana (36 out of 111 in total), four communes were selected randomly.

In each commune, two public primary schools were surveyed: one in the center of the commune and one remote school that was at least 3 kms away from the center. Given the size of the population in cities, these were treated differently. In Antananarivo, 12 primary schools in the public as well as in the private sector were surveyed. In the provincial capitals, these numbers were reduced to six schools in both sectors. Table 1 gives an overview of the sample. 386 schools were visited in total. They overwhelmingly include public schools (88% of the sample). 20% and 80% of the schools were located in urban and rural areas respectively.

Table 1 : Structure of the sample

Type	Number	Province	Number
Public	326	Antananarivo	72
Private confess.	19	Fianarantsoa	60
Private	23	Toamasina	65
Rural	296	Mahajanga	59
Urban	72	Toliara	56
		Antsiranana	56
Total	368	Total	368

Source: Post-crisis survey, Ilo program, Cornell University, 2002

1. Performance indicators of the 'crisis' school year 2001-2002

a. The passing rate of the official exam at the end of primary school (CEPE) declined significantly compared to a regular year. This is mostly due to the effect of the political crisis.

The passing rate at the end of the school year declined significantly between the year before the crisis (2000-2001) and the year of the crisis (2001-2002). The rate declined by 19% in public rural schools, by 31% in public urban schools and by 9% in private schools. The public urban schools seem to have been affected most by the political crisis: due to the general strikes, these schools were closed down for longer (Ilo program, 2002). However, the private schools were affected as well as shown by their drop.

Table 2 : Passing rate for CEPE

	2000-2001			2001-2002		
	Public urban	Private urban	Public rural	Public urban	Private urban	Public rural
Total	**68**	**82**	**59**	**55**	**75**	**48**
Antananarivo	59	86	70	50	83	52
Fianarantsoa	85	88	71	60	90	48
Toamasina	63	79	48	73	84	59
Mahajanga	88	80	60	45	36	53
Toliara	43	67	46	80	67	59
Antsiranana	85	84	49	22	75	14

Source: Post-crisis survey, Ilo program, Cornell University, 2002

Most of the schools relate the decrease in passing rate to the crisis (Table 3): in 82% of the cases do school staff relate the drop of passing rate due to lack of concentration, lack of courses or other reasons related to the crisis.

Table 3: Perceived reasons for the drop in passing rate

	% of

[1] The government estimates that the crisis caused a decline of BNP of 12% in 2002 compared to 2001.

[2] Out of 1392 communes in total, i.e. more than 10% of the communes.

	schools
Lack of courses due to crisis	18
Lack of concentration due to crisis	48
Other reason related to crisis	16
Reason independent of crisis	18
Total	**100**

Source: Post-crisis survey, Ilo program, Cornell University, 2002

A regional analysis (Table 2) illustrates significant differences by province. The biggest drop is noticed in the province of Antsiranana. Apparently, in most of the province two exams were administered (referred to as the 'Ratsiraka' exam and the 'Ravalomanana' exam). However, only a small minority of the students showed up for the second exam which was held one month into their normal vacation period. The increase in the passing rate in Toamasina is difficult to explain as this province was hit as hard by the crisis as other provinces.

b. The repeater rate is higher than in previous years.

The repeater rate now shows a high increase in public schools compared to data of the 90s. However, we see a small decline for the private schools. Part of the high repeater rate in public schools is clearly related to the crisis as passing rates were lower and as dropout rates were relatively higher last year (Ilo program, 2002).

Table 4: Repeater rate per class and per sector

	1992(a)			1998(a)		
Grade	Total	Public	Private	Total	Public	Private
11^{th}	41	47	20	38	42	20
10^{th}	31	33	20	30	33	18
9^{th}	31	34	19	31	35	20
8^{th}	25	27	19	26	28	18
7^{th}	32	35	20	30	34	20

	2002(b)		
Grade	Total	Public	Private
11^{th}	49	54	20
10^{th}	37	40	15
9^{th}	38	41	19
8^{th}	35	37	17
7^{th}	40	43	17

(a) Source: World Bank, 2002 based on data from MINESEB

(b) Post-crisis survey, Ilo program, Cornell University, 2002

2. Policy interventions post-crisis

a. Tuition fees for pubic schools were abolished post-crisis as the government promised to pay for these. However, these subsidies are not evenly divided in space and in time. While urban schools had mostly been served at the end of November 2002, the more remote rural schools had not received any funds yet at that point. To deal with the delay in the arrival of funds and the subsequent liquidity problem, a significant number of public schools (40%) still asked for tuition fees.

A survey on the impact of the crisis on education (Ilo program, 2002) has shown the difficulty of households to pay for education expenses. Therefore, absenteeism and dropout rates were significantly on the rise. To mitigate the effects of the aftermath of the crisis, the government decided to pay for the cost of the tuition fee. Each student inscription would therefore lead to an extra 10,000 Fmg or 15,000 Fmg - depending on the province – for the school.

One part of this amount, theoretically not higher than 7,500 Fmg, would be used towards the payment of the general costs and inscription costs. The rest of this amount would be used towards the school budget ("Caisse Ecole"), managed by the FAF (Fiarahana ombon'antoka ho Fampandrosoana ny Sekolo). This newly created entity is made up by parents of current students, former students, the director of the school, and other people of the region.

However, the distribution of these funds was not without problems. Most of the public schools did not receive the tuition funds at the beginning of the new school year which caused quite some problems to start up the new school year 2002-2003. At the moment of the survey, only 41% of public primary schools had received all or part of the promised funds (Table 5).

Table 5: % of the public schools that received the contribution of the government in Mid November 2002

Antananarivo	80
Fianarantsoa	20
Toamasina	36
Mahajanga	31
Toliara	45
Antsiranana	28
Total	**41**

Source: Post-crisis survey, Ilo program, Cornell University, 2002

The province of Antananarivo seems to have been first served. 80% of the public schools had received the contribution of the government by the middle of November. The situation was worst in the province of Fianarantsoa as only 20% of the public schools declare that these funds arrived.

Remoteness of the school with respect to the capital of the province seem to be a major determinant of the arrival of funds: 17% of the schools in the most remote areas had received their funds at the end of November 2002 compared to 71% of the schools in the capital of the province. For those schools that received

funds, the average allocation per student was 7,200 Fmg.[3]

While the new policy was announced ahead of time, a significant number of schools still did ask for a tuition fee in the school year 2002-2003. Table 6 shows that while almost all public schools asked for tuition fees in the school year 2001-2002, this number declined to around 40% of the schools in the current school year (Table 6). The schools that did ask for a tuition fee did mostly so to deal with the delay of the arrival of funds and the subsequent liquidity problem. It is unclear with the data at hand if the money will be given back to the parents once the government funds arrive.

The application of the new policy shows significant regional differences. It was most diligently applied in the province of Toamasina as only 18% of the public schools asked for fees during the current school year. It was least well implemented in the provinces of Mahajanga, Antananarivo, and Antsiranana as still around 50% of the public schools asked for a contribution at the beginning of the year.

Table 6: % of public schools that asked for a tuition fee

	School year	
	2001-2002	2002-2003
11th	99	38
10th	98	38
9th	98	39
8th	96	39
7th	94	39
% of 11th grade that ask for school fees		
Antananarivo	98	49
Fianarantsoa	98	35
Toamasina	98	18
Mahajanga	100	55
Toliara	98	24
Antsiranana	100	49

Source: Post-crisis survey, Ilo program, Cornell University, 2002

b. A new type of school calendar was implemented taking into account agricultural and economic constraints.

It has been noticed in rural areas that a significant number of students drop out during the harvest period (to help with agricultural tasks) or during the lean period (because of lack of food or money). Based on the numerous complaints on dropouts during these periods, the Ministry of Education (MINISEB) put in place a new teaching schedule.

It was decided to prolong the Christmas vacation to more than a month (from December 21, 2002 until January 26, 2003). This would have several advantages: 1/ children would not have to go to school during the heavy rainy period in December and January and during the hot season in certain regions, especially in the south of the country; 2/ this period coincides with the lean period in most regions; given the lack of food, students are often absent or if present, they are less concentrated. The objective of the new policy of MINESEB is therefore to take into consideration these agricultural, climatic and economic constraints and boost that way the number of students that finish the current school year.

[3] Moreover, the number of inscriptions has increased after this information was gathered by the Ministry, which caused some wrongs in the allocation of funds.

3. Impact on the school year 2002-2003

3.1. Student evolution

a. A high increase of the number of inscriptions is noticed: it increased by 11% at the start of the new school year 2002-2003. The number of first grade students increased by 15%. However, there is strong variability between provinces, type of school, and grade.

Table 7 shows how the number of inscriptions changed between last and this school year. The number of inscriptions at the national level increased by 11%. The highest increase is noticed in the province of Mahajanga where a change of 15% was noticed. This compares to an increase of 7% in the province of Antsiranana, the lowest of all the provinces.

As expected, the highest increase is seen in public schools where the number of students increased by 13%. While it could have been expected that private schools would have suffered from the aftermath of the crisis as parents would not have enough money due to the economic slowdown because of the crisis, this seemed not to have happened as inscriptions in private schools increased (+4%), although less dramatically than in public schools.

When one compares regions, the highest increase is noticed in rural areas (+14%) compared to 6% in urban areas. Some of this difference can be explained by sample design (no private schools were sampled in rural areas – but then the number of private schools in rural areas is very limited) but this indicates that public schools in urban areas showed less increase than in rural areas, maybe because schooling rates in urban areas were already relatively higher before and there was therefore less potential for growth.

As expected, the increase of students has been highest for the first year (11th grade) with an increase of 15 (mean) to 18 percent (median). This seems normal as this is the level where uneducated children start. However, even in higher years, the increase in the number of

students is significantly above population growth. While relative increases are high in the higher grades, this reflects not that high an absolute increase as in the first year.

Table 7: Number of inscriptions for the school year 2001-2002 and 2002-2003

	Unit	2001-2002	2002-2003	Change (%)*
Total	**Mean**	**304**	**339**	**+11**
	Median	**219**	**242**	**+11**
Urban	Mean	507	538	+6
	Median	434	479	+10
Rural	Mean	244	280	+15
	Median	181	209	+15
Private	Mean	366	380	+4
	Median	320	301	-6
Public	Mean	296	334	+13
	Median	211	230	+9
Antananarivo	Mean	336	375	+12
	Median	243	263	+8
Fianarantsoa	Mean	313	344	+10
	Median	196	215	+10
Toamasina	Mean	328	370	+13
	Median	227	257	+13
Mahajanga	Mean	309	354	+15
	Median	238	265	+11
Toliara	Mean	218	246	+13
	Median	107	128	+20
Antsiranana	Mean	305	328	+7
	Median	256	284	+11
11th grade	Mean	89	103	+15
	Median	66	78	+18
10th grade	Mean	66	71	+9
	Median	46	52	+13
9th grade	Mean	64	69	+6
	Median	44	47	+7
8th grade	Mean	47	53	+13
	Median	31	35	+13
7th grade	Mean	37	42	+13
	Median	22	25	+14
Capital of province*	Mean	647	697	+7
	Median	508	567	+12
Close to capital*	Mean	223	251	+12
	Median	164	189	+15
Medium dist. to capital*	Mean	272	315	+16
	Median	220	249	+13
Far distance from capital*	Mean	235	273	+16
	Median	169	204	+20

Source: Post-crisis survey, Ilo program, Cornell University, 2002
*: public schools only

Moreover, an interesting finding is that schools that are more remote show a higher increase than schools close by (Table 7). A doubling of the distance of the school with respect to the chef-lieu of the commune leads to a 10% higher increase than average. This phenomenon seems to be explained by two factors: remote areas are poorer (Razafindravonona et al., 2001) and poorer people are more responsive to price changes in schooling costs (Glick et al., 2000). Hence, these results might indicate that the reduction of the schooling costs was an effective pro-poor policy, although household level data analysis seems to be called for to confirm this.

b. The major reason for the increase in subscriptions is perceived to be the reduction in school fees. However, this is not the only reason.

To have more insights in the reason for the change in number of students, a perception question was asked to the staff of the school why they thought the change occurred. While the major reason for the increase is linked to the decrease in schooling costs (64% of the schools that noticed an increase), this is not the only reason (Table 8).

Other reasons make up 30% of the explanations. Within this category, extra efforts to explain the utility of schooling to the local population was widely mentioned. Another important reason in the province of Antananarivo and Toamasina was linked with children's birth certificate: while children did have to possess a birth certificate before to be accepted in public schools, this condition was annulated in a significant number of communes post-crisis. Alternatively, communes made sure that enough copies where available this year to ascertain that more children could go to school.

Table 8: Perceived reasons for the increase (as stated by staff of the school)

	Number	%
If decline, most important reason for the decline in inscriptions		
Lack of teachers	8	13
Parents unable to pay for schooling costs	15	24
Parents unable to pay for supplies	6	10
Parents unable to pay for food	7	11
Children have to work	7	11
Other	20	32
Total	63	100
If increase, most important reason for increase in inscriptions		
Lower transport costs	5	2
More teachers	13	5
Reduction schooling costs	176	64
Other	82	30
Total	276	100

Source: Post-crisis survey, Ilo program, Cornell University, 2002

c. However, the perceived nutritional status and the level of equipment of students worsened this year compared to last year.

Table 9 indicates the perceived evolution (by staff of the school) of the status of students this year compared to the same period last year. While the majority of the staff state that the situation of students did not change compared to last year, there are indications that the situation of student worsened rather than improved: 37% of the schools estimate that the nutritional status of the children improved compared to 13% who thought it got better. A similar trend is seen in the school supplies of the students. Concentration of the students appear to have improved on the other hand. This might be related to the distraction caused by the presidential election last year.

Table 9: Perceived evolution of status of students in primary public schools now compared to the same period last year

	Nutritional status	School supplies of students	Level of concentration
A lot better	0	2	4
Better	13	24	30
The same	50	40	46
Worse	33	33	17
A lot worse	4	2	2
Total	100	100	100

Source: Post-crisis survey, Ilo program, Cornell University, 2002

3.2. Supply conditions

a. While a high increase in subscriptions was noticed, this number could even have been higher as 20% of the schools report that they had to refuse students.

Supply problems are becoming a major constraint on higher enrolments in public schools in some regions. 20% of the public schools reported that they had to refuse students this year (the same percentage of last year). This percentage was especially high in the province of Mahajanga though the percentage of schools that refused students declined by 15% to 38% of all public schools (Table 10).[4]

Table 10: % of public schools that refused students due to lack of teachers or class rooms

	School year	
	2001-2002	2002-2003
Antananarivo	12	20
Fianarantsoa	10	18
Toamasina	10	17
Mahajanga	53	38
Toliara	10	16
Antsiranana	26	14
Total	**19**	**20**

Source: Post-crisis survey, Ilo program, Cornell University, 2002

b. Given that the number of teachers did not change, the student – teacher ratio increased significantly. The student load of teachers increased by around 15% in public schools. We are now back to the level of the middle of the '90s.

While a significant effort has been done to improve determinants of demand, it seems that supply parameters are becoming increasingly a constraint. Given that little effort was done to increase the number of teachers post-crisis, the ratio of students over teachers increased significantly, probably leading to reduced quality in teaching.

Table 11 illustrates the current situation, based on averages that were calculated at the school level. The table shows that allocation of teachers is biased towards urban areas. The situation is worst in rural areas in Antsiranana with an average of 84 students per teacher. The more remote the school, the higher the number of students per teacher. This pattern is consistent with the situation of previous years and illustrates the challenge of the state to attract teachers to live in remote areas.

With a higher level of financial resources, the private sector has student-teacher ratios that are significantly lower than in public schools. While the number of students increased in private schools compared to last year, it seems that the number of teachers changed accordingly.

Table 11: Evolution of the student-teacher ratio

	School-year	Public urban	Public rural	Private urban
Antananarivo	97/98*	43	56	30
	01/02**	35	46	30
	02/03**	42	51	30
Fianarantsoa	97/98	44	54	34
	01/02	28	43	19
	02/03	31	47	19
Toamasina	97/98	66	74	33
	01/02	48	51	33
	02/03	53	62	33
Mahajanga	97/98	47	55	39
	01/02	32	59	50
	02/03	38	66	45
Toliara	97/98	45	48	38
	01/02	38	36	36
	02/03	46	45	38
Antsiranana	97/98	57	77	33
	01/02	38	78	44
	02/03	41	84	39
Total	97/98	43	60	34
	01/02	35	52	34
	02/03	42	59	34

Source: **Post-crisis survey, Ilo program, Cornell University, 2002; *Banque Mondiale (2002) based on the school census of 1997-1998 of MINISEB

c. Lack of space and teachers often lead to reduced teaching hours. However, only small changes are seen between last and this school year.

Lack of space or lack of teachers often lead to a reduced number of hours of effective teaching. Due to the significant increase of the number of students, one could expect that schools were obliged to reduce teaching time per class. This does not seem to have happened in general. Table 12 indicates how a high percentage of schools teaches less than 25 hours a week. However, the situation did not change significantly this year with respect to last year.

Table 12: Number of hours taught

Grade	Number of hours	2001/2002 (% of schools)	2002/2003 (% of schools)
11th	<15	5	5
	15-25	33	34

[4] The number of students refused can sometimes be very high. 16 primary schools report that they refused 50 or more students.

	>25	62	61
10th	<15	4	4
	15-25	35	37
	>25	61	60
9th	<15	2	2
	15-25	31	32
	>25	68	67
8th	<15	1	1
	15-25	24	23
	>25	75	76
7th	<15	1	1
	15-25	15	17
	>25	84	82

Source: Post-crisis survey, Ilo program, Cornell University, 2002

d. The distribution of supplies or other services to students is a little worse than last year. However, access to books increased.

Table 13 shows how access to services and supplies changed between last year and this year. Access to school restaurants and potable water changed little. The distribution of 'fer folate' got disrupted while the distribution of vitamins and vermifuges continued. Access to books improved enormously, especially access to the 'serie vola'.[5] This increased from 18% to almost 80% of the public schools. On the other hand, material directly coming from Cisco declined dramatically, maybe because of the budgetary crisis of the new government.

Table 13: Access to services and supplies in public schools

	2001/2002 (% of schools)	2002/2003 (% of schools)
Cantine scolaire	10	9
Access to potable water	30	28
Distribution 'fer folate'	44	28
Distribution vitamins	24	24
Distribution 'vermifuges'	34	32
Material Cisco	61	18
Books serie vola	15	79
Other books	28	54

Source: Post-crisis survey, Ilo program, Cornell University, 2002

3.3. Perceptions at the commune level

a. A logical consequence of the political crisis and the economic havoc it caused is that poverty increased. However, due to the government interventions in the social sector, it is estimated in rural areas that the percentage of the population able to pay for schooling costs did not decrease post-crisis.

In the commune survey where the public schools were located, a subjective question, with a focus group representative of the population of the commune, was asked on the percentage of the population that was completely unable to pay for schooling and health services and the percentage that had problems to pay for these costs. The former category increased from 17% to 21% from the period before the crisis to the period during the crisis (Table 14). This percentage decreased post-crisis again to its level of last year. It seems that the policy interventions of the government in the schooling and health sector, mitigated the effect of the aftermath of the crisis on the use of social services.

Table 14: Evolution of the percentage of the population that can afford health care services and schooling (estimate by communal focus group)

% of the population that…	Nov-Dec 2001	May-June 2001	Nov-Dec 2002
…can easily pay for health care and schooling costs	46	39	45
…has some problems to pay for health care and schooling costs	37	39	37
…are not able at all to pay for health care and schooling costs	17	21	18
Total	100	100	100

Source: Post-crisis survey, Ilo program, Cornell University, 2002

b. Communal focus groups estimate that the schooling status of the children in the commune largely improved compared to the period before the crisis.

To further evaluate how the changes in the education sector had an impact on the schooling status of the population, a question was asked to a focus group of the commune where the schools were located on how they perceived the evolution of the schooling status of the children in the commune post-crisis compared to the situation pre-crisis and during the crisis.

The results show that the majority of focus groups (73% of the communes!) believe that the schooling status of the children in the commune got better compared to the same period last year (Table 15). 19 % estimates that it stayed the same while 8% thinks that it got worse.

[5] Financed by the CRESED program of the World Bank.

Table 15: Perceived evolution of the schooling status of children in the commune (perception by communal focus groups)

	Evolution of the schooling status of the children in this commune post-crisis (Nov/Dec 2002) compared to…	
	Nov/Dec 2001 %	May/June 2002 %
A lot better	17	21
Better	56	54
The same	19	21
Worse	7	2
A lot worse	1	2

Conclusions

The results of the post-crisis survey in the education sector show that, due to government interventions, an expected decrease - due to the aftermath of the political crisis - in the number of students in primary schools could be avoided. In fact, overall enrolment rates in primary schools increased by 11%, significantly above population growth rates. Three quarters of the communes estimate that the schooling status of children improved compared to the same period last year. Supply problems (lack of teachers and schools) are now increasingly becoming a constraint.

This policy brief gives us a brief overview of the education situation post-crisis. More in-depth analysis is planned with this dataset. Additionally, more information is needed on the impact of the new schooling policies, especially on the poor. This analysis is planned by INSTAT, using the new national household dataset collected in the beginning of 2003.

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