

## Burundi ASA (P161127):

### Summary of the Findings of the Four Analytical Studies

#### Background and Objective

The World Bank is re-engaging in the Education Sector in Burundi at a time when the country has launched a major reform of its school education system, including the lengthening of the compulsory basic education cycle to 9 years in line with the Sustainable Development Goals. Due to the withdrawal of many donors from the education sector, after the events of 2015, as well as the general fiscal and economic contraction, the gains achieved in the last decade, especially in primary education, might be rapidly eroded. Consequently, a stock-taking exercise was undertaken by the Bank, focusing on four areas identified at the time of the Concept Note Review. This summary report is based on the four pieces of analytical work and is intended to help the World Bank engage with all stakeholders in order to consolidate the recent gains and move the reform forward. In the next fiscal year, the findings from these studies will be used to engage in a broader dialogue and consensus building with the key stakeholders.

#### Introduction

Despite facing significant challenges, Burundi's education sector is recognized as having several strong attributes – has good student learning achievement in the regional context, is currently in the process of reforming basic education, enjoys strong community engagement in schools (particularly in classroom construction), and has experimented with a promising pilot in education that uses results-based financing.

It is these strengths that the World Bank wished to understand so that, by building upon them, it could support the Ministry of Education, Higher Education and Research (French acronym, MEESRS) moving forward in the implementation of its ongoing reform. The Bank thus commissioned the following four studies:

- a) The current state of progress of Burundi's Education Sector Plan (PSDEF 2012-2020<sup>1</sup>) at the level of basic education;
- b) The quality of Burundi's basic education;
- c) The current state of progress of the PSDEF community-based approach to construction at the basic education level; and,
- d) The feasibility of scaling up a results-based financing approach in education that was piloted in Bubanza province.

This summary brings together the findings of these four studies.

#### Context

**Under Burundi's Education Sector Plan, basic education was to be reformed to be nine years in length** in order to: i) permit all children to complete the first three cycles (Years 1-6)<sup>2</sup> in a good-quality learning environment and ii) allow an increasing number of students to pass into the new fourth cycle of three years. The first changes to the new *École fondamentale*, as it is

called, were put into place in school year 2013-2014 and focused mostly on cycle 4 (Years 7, 8, and 9). These Years were added successively until a new final exam was offered at the end of 2015/16, completing implementation of cycle 4. In 2016/17, the reform continues up into the post-basic level and also loops back to the primary level to begin reforming the first three cycles. To do so, the current school year (2016/17) is being used by the MEESRS as a preparatory year before the reform is implemented in schools.

It is the upcoming reform of these first six years that has been central to the dialogue between the Government and the World Bank.

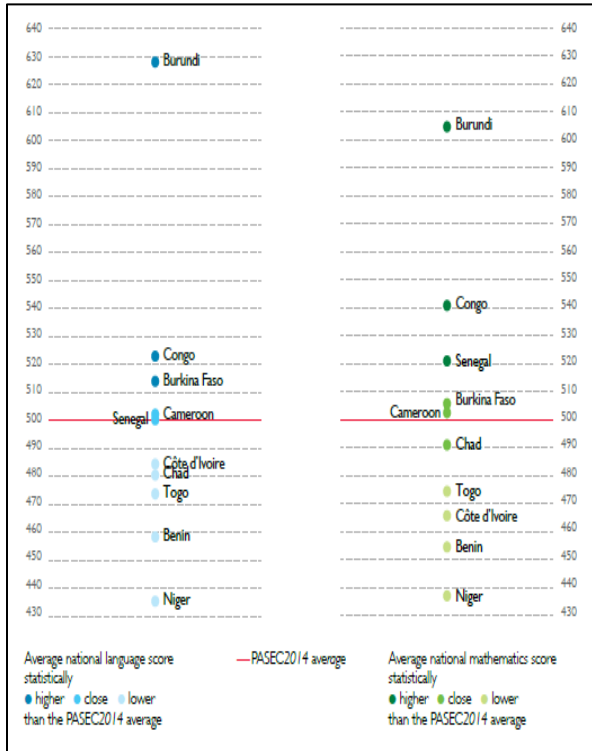
*A strength to be built on: a relatively good quality education.*

**Burundi's results in PASEC<sup>3</sup> 2014 were the best amongst the participating countries, especially in the early grades.** Students in early primary years scored 627.7 in language (Kirundi) and 605 in mathematics, a full hundred points above the average of the ten participating West African francophone countries (Figure 1); this is the equivalent of approximately 4 years of schooling. These results are consistent with the EGRA<sup>4</sup> results carried out in 2011 and 2012, which revealed that 39.7 percent of the primary Year 2 students assessed were independent readers, 39.9 percent could read partially, and 20.4 percent were non-readers.

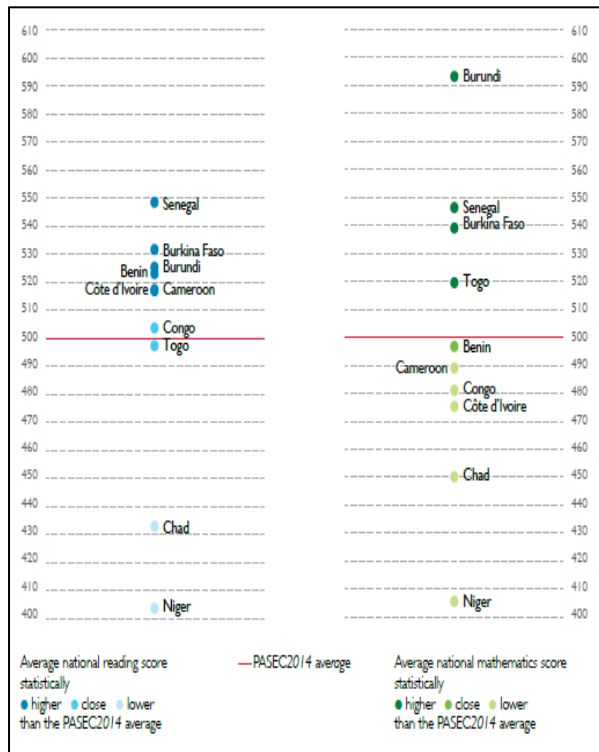
**Moreover, Burundi's overall performance was the most equitable across the PASEC countries.** The gap between the best 10 percent of pupils and the worst was 125.9 points in reading and 168.1 points in mathematics. The next best was Niger, with gaps of 191.7 and 187.2 respectively; while Senegal had the largest equity gaps, at 279.3 and 271.2 respectively. Moreover, in general, most pupil characteristics (such as not having books at home) do not translate in significantly worse performance, in contrast to most other countries (see Annex 2)

**However, Burundi's student results in Year 6 are much closer to the PASEC average in French language, though mathematics performance continues to be strong.** The language of instruction changes from Kirundi to French in Year 5 and this likely explains the relatively poorer performance in the PASEC language test even though Burundi's students remain above average, albeit now in a group of similarly-performing countries rather than out on its own (Figure 1, right panel). The continuing good performance in mathematics is likely due to students getting a good grounding in mathematics in the early grades and are able to build on that learning, even after moving to French as language of instruction. As the PASEC mathematics test does not require a high level of French language comprehension, it may test students' competence in mathematics.

Figure 1: PASEC results (Left Panel, Early Primary; Right Panel, Late Primary)



Source: PASEC 2014 report



**This strong performance takes place despite the learning environment in Burundi's schools being average or below average in comparison to other countries participating in PASEC.** Class size and repetition rates are high, double shifting accounts for 46% of the classrooms, and official schooling time is low (855 hours annually vs 914 in PASEC countries). The classroom and school equipment levels are close to other PASEC countries' average; there is a lack of textbooks in the classroom (5.1% of pupils have their own textbook versus 35.7% in PASEC countries), a lack of books in the schools (5.1% of schools have a library versus 12.4% on average) and, at home, pupils have little opportunities to do homework: 45.7% of Year 3 teachers never give homework (see Annex 3 for more details). Violence is not unknown in and out of schools. In other words, the learning environment is relatively poor in comparison to other countries and so should not be conducive to achievement, and yet Burundi is an exceptional case, as the study on quality suggests. Please see Annex 3 which reveals the number of times Burundi is an exception to the rule.

### **What, then, accounts for these good student results?**

**A significant factor is the language of instruction.** Kirundi is used as the language of instruction in the first four years of primary school (before a transition to using French in Year 5) in conjunction with the following complementary factors: i) Kirundi is a relatively simple language to learn, orthographically-speaking<sup>5</sup>, because of its transparency; ii) the adult population is literate<sup>6</sup> (and so can understand the language of instruction and help their children with school work); and, iii) Burundi is a linguistically homogenous country with 95% of the population speaking Kirundi. So, in the early grades, teaching and learning is facilitated by the fact that the medium of instruction is the home language of teachers and pupils. Interestingly, the PASEC results for language at the end of primary corroborate this: when students are assessed in French, they score just 525, similar to the average score of other participating countries.<sup>7</sup>

Other countries where maternal languages are used do not have Burundi's high performance. In EGRA 2012, for example, just 20.4% of the students tested in Burundi were non-readers but in other countries where a maternal language was the language of instruction, the percentage of non-readers ranged from 35.8% in Uganda that uses Luganda to 88.2% in Zambia where Chitonga is used. This may partly be explained by less consistent implementation of the policy (either through having available materials, teachers who know the language, etc.).

**Other factors such as pre-service training, classroom pedagogy and the curriculum, all of which are amenable to policy change, are suggestive.** These include the pre-service training of teachers (about 70% have had two years of training in comparison to a PASEC average of 38%), the participative instructional strategies employed in the classroom, teacher attitudes about teaching that are generally positive (according the PASEC teacher questionnaire), and the fact that the official curriculum had been in place for some thirty years and which is therefore known and understood. Additionally, amongst schools in Burundi, econometric analysis of PASEC results reveals that results were higher i) where the number of pupils per classroom was smaller than 60, and ii) where four or more pedagogical meetings were held. **Finally, qualitative evidence suggests that high expectations about what students can learn may be relevant:** according to the PASEC 2019 developers who are accepting item suggestions from countries,

Burundi is the only country to have proposed many very complex mathematical items for the end of primary assessment, which, according to curriculum specialists at the University of Liège helping to develop PASEC 2019, would usually be found at middle school.

Despite this relatively better performance, there is a significant proportion of children in grade 2 and early primary grades who do not master reading or basic numeracy skills. **Moreover, these good results are however under threat going forward by the current pressures on the system**, a combination of the increase in the number of students and sudden budget cuts that have caused a slow-down in the implementation of the reform.

#### Initiatives in the PSDEF to improve quality in basic education

**The PSDEF proposed that quality would be improved through the development of a new competence-based curricula for basic education, teacher training (both in-service and pre-service) based on that new curriculum to prepare teachers to teach in the *École Fondamentale*, and textbooks and pedagogical support.** In addition, expansion of physical infrastructure, as we will see in the next section, was intended to improve quality: new classrooms would ease overcrowding and so improve the learning environment, and a reduction in the number of double-shift schools was intended to improve the quality of the learning environment by offering students a normal, not shortened, school day.

**The new curriculum of the *École fondamentale* was approved by the Government in August 2015.** It was developed with the support of the International Center for Educational Studies (French acronym, CIEP) in Paris. The reform of basic education started in the 2013-2014 school year, giving priority to the development of a new curriculum and textbooks for Cycle 4, starting with Year 7. The development of Year 8 and 9 textbooks followed in April 2014 and 2015 respectively. In the development phase, the new program for the first three cycles was inspired by those currently in use in Rwanda, Uganda, Mali, Singapore, France, Belgium and Canada. The present school year, 2016/17, considered a preparatory year, is being used to write textbooks for cycles 1-3. Then, before the implementation of the new program in 2017/18, first-year textbooks will have to be printed in appropriate quantities. Based on the comparable process of printing the 4th cycle textbooks it is estimated that the cost for the 5 books needed in Year 1, with one book for two children, at approximately \$1.25 per book, will be US\$1.83 million.

**In principle, initial teacher training programs should be reworked to conform to the new directions of the PSDEF reform which, among many other things, has identified the need for teachers to be able to teach to the new competencies.** In terms of pre-service training, initial training for primary level teachers occurs in colleges, which prepares teachers to teach all disciplines in cycles 1, 2 and 3 (the D6 qualification). In contrast, teachers qualifying to teach in Years 7, 8 and 9 (cycle 4) are trained at the *Ecole Normale Supérieure* and the University of Burundi. They receive the D7 qualification. This revision of pre-service programs is also justified by the introduction of new disciplines such as Kiswahili and entrepreneurship, and by the versatility needed in cycle IV where teachers (D7) now teach several higher-level disciplines (like middle-school level math with science or languages with history and geography). However, to date, no re-design of the pre-service programs has taken place or is planned.

**As for in-service teacher training, about 15,000 Cycle 4 teachers were trained but this was considered inadequate and even greater challenges exist for teachers for Cycles 1 to 3.** The training of Cycle 4 teachers was an accelerated program of five days, which trained 15,369 between 2012/13 and 2014/15 to introduce the new content, structure and approach.<sup>8</sup> However, it was not considered adequate by many stakeholders (as explained in the study on quality). The design team from the Bureau for Basic Education Programs (BEPEF) carried out the training, with support from experts from CIEP. In Cycles 1 to 3, at the start of 2016/7, the sector had 39,723 teachers, who remain to be trained.

**Ministry officials are considering alternative approaches for training teachers in Cycles 1 to 3.** According to ministry officials, several other approaches were tried during the introduction of cycle 4 – i) a modular self-study program (the Francophone Initiative for Distance Education for Teachers (IFADEM)), ii) the Nderagakura School Radio, and iii) peer-to-peer training in local networks of teachers. It is this last initiative that some are proposing for the in-service training of teachers in cycle 1-3. It was carried out by creating clusters of local schools (usually within a 5km radius); these clusters formed the training network where teachers participated in monthly training sessions. While these took place, other teachers covered their classes during their absence (which was possible because the cycle 4 teachers in question always team teach). Though they have not yet been evaluated, these peer-to-peer training networks seem promising. This approach deserves consideration because i) it favors peer to peer dialogue and the exchange of experiences in a non-threatening environment without the ‘weight’ of authority being present or risking to intervene; and ii) because it requires the mobilization of little additional financial or human resources. The research literature supports this form of training as well.<sup>9</sup> However, generalization would need to be accompanied by careful monitoring and evaluation of the its effectiveness in changing classroom practice.

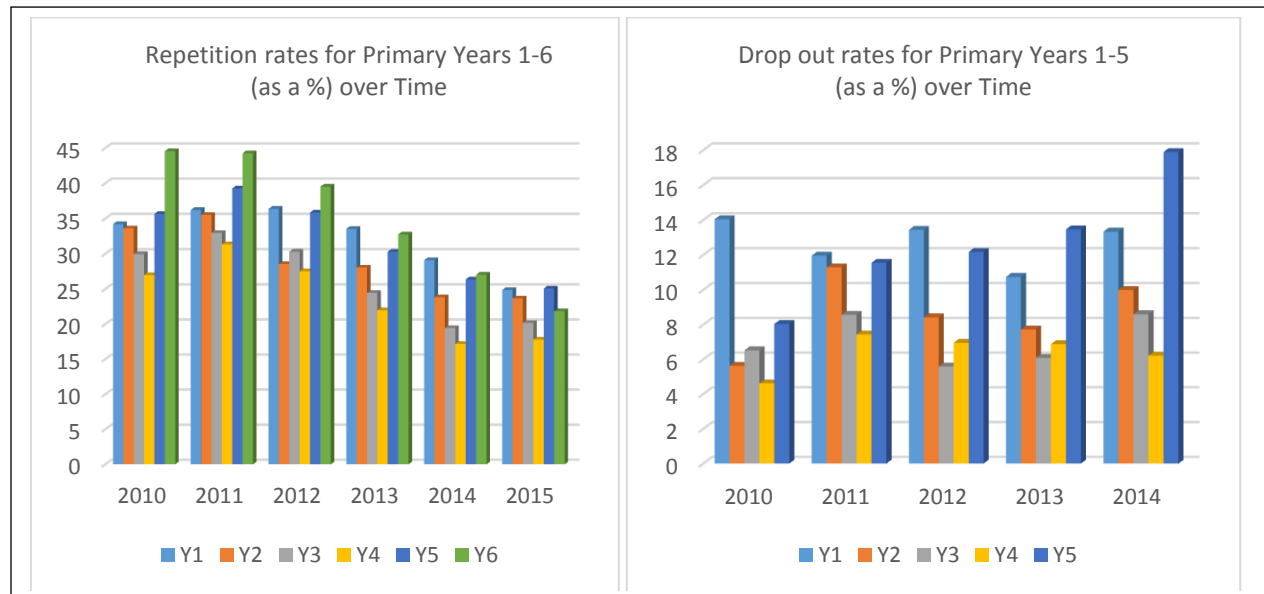
[The challenge of expanding basic education, improving retention and equity.](#)

**The relatively good quality education enjoyed in Burundi is threatened by several factors..** The relatively good performance has been achieved in the context of rapidly increasing enrolment, which is creditable. Nevertheless, rapid enrolment increase and the entry of children of different ages makes it difficult for teachers to teach effectively.. Enrolment in the first year has almost doubled in five years from 264,900 to 492,600 between 2005 and 2010. Almost every child of the relevant age is now in primary education: the NER stands at 95 percent (up from 56 percent in 2005); this is significantly above the weighted SSA average of 71 percent. However, there are still a large number of over-age children: the GER stands at 128 percent<sup>10</sup>: many students start basic education at seven years of age, not the recently introduced official age of six. Most recent data (2014/15) reveals that only 13% of new entrants are the correct age of six, 54.6% are seven, and 28.4% are older.

**Second, repetition rates remain high and remain above the SSA average:** in 2013, repetition stood at 24.7 percent, though repetition rates have been dropping over time from 2010 to 2015 (Figure 2). In each year, the trend seems to be comparable: rates tend to drop from Y1 to Y4 but rise in Y5. On the other hand, dropout rates show no trend over time from 2010 to 2014 (2015 data not available), but within years a trend is, once again, discernible: students tend to drop out significantly in the first year, a phenomenon that drops over the next three years until it peaks

again in Year 5. It seems likely that both repetition and drop-out patterns are caused by the introduction of French in Year 5 or students' lack of readiness for the former Y6 exam which served as a gateway to further schooling.

**Figure 2 Repetition and Drop-Out Rates over time**



Source: UNESCO UIS. Note: Year 6 drop-out rates not available.

**Initiatives in the PSDEF to improve Access and Retention**

In order to address these concerns and so improve universal completion in Years 1-6, the PSDEF developed a strategy of five pillars, including: i) construction; ii) a reduction in double-shift schools; iii) reducing repetition; iv) improved teacher use and deployment; and v) support to schools. Progress against each of these four pillars is now considered.

**Pillar 1: Construction.** The objective of this pillar is to i) reduce overcrowding and ii) allow a reduction in the number of double-shift schools.

PSDEF Indicator	Target for 2014/15	Achievement 2014/15	Comment
Number of new classrooms using community construction	4769	1608	Approximately 24.7%
Gross enrollment rate in Year 1	118	127.1	Target not met
Student/teacher ratio in cycles 1, 2 and 3	??	53	Original indicator was 'Average number of students in classes for cycles 1, 2 and 3'

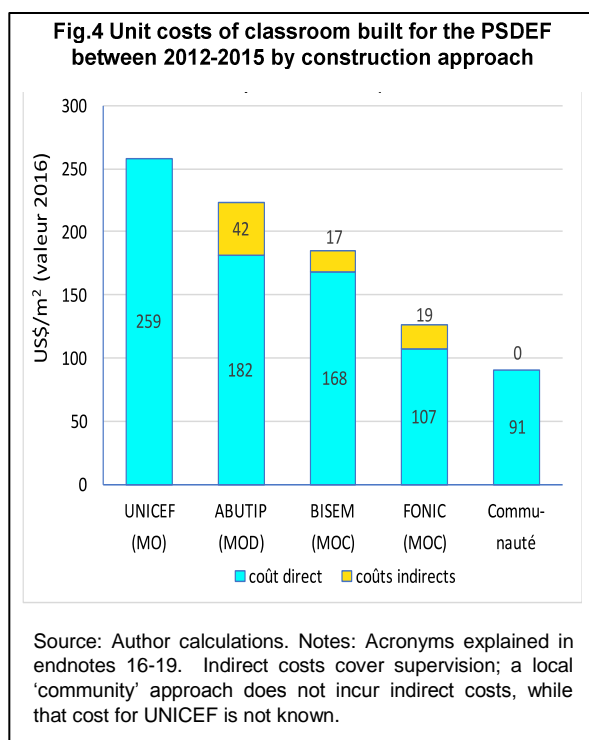
**Between 2012-2015, the donor partners built 1,608 classrooms of good quality, while the FONIC built 2,012 and the communities built 2,884 rooms, both of lesser quality and at lesser cost, (for a total of 6,504).** The target was for 4,769 classrooms to be built, using a community-based approach, in the first three years of implementation (2012-2015) for the first three cycles (Years 1-6) of basic education, to which would also be added the renovation of dilapidated classrooms.<sup>11</sup> Over this period, 6504 classrooms were completed, of which 1608 were built by donors in the context of the pooled funding that supported the PSDEF (what constitutes “community-based” construction is discussed below).

**The two output indicators to evaluate overcrowding were not met.** The first was “gross enrolment rate (GER) in Year 1,” with the idea being that as construction of rooms proceeds and measures to contain repetition are put in place, overcrowding is reduced and so the GER would (theoretically) drop. The figures reveal that the GER remained more or less the same but has not reached the anticipated targets. The second indicator to be used -- the ‘average number of students in classes (*groupe pédagogique*) for cycles 1,2,3’ -- was dropped in favor of student/teacher ratio (STR) in cycles 1,2,3. While the baseline value for this in 2010/11 was 49, the STR has actually increased: in 2012/3, it was 45, in 2013/4, it was 46, and in 2014/5, it was 53.

**A strength to be built on: community involvement in construction.**

It is probably best to take the figure of 1608 rooms built by donors as the total completed under the PSDEF<sup>12</sup>, as the construction study explains, yet exactly how many employed a ‘community-based approach’ is unclear. On the other hand, what is clear is that while the FONIC-financed and ‘community-based’ approaches were community approaches they were not part of the PSDEF plan (that is, construction of classrooms under these initiatives would have continued with or without the implementation of the PSDEF).

The many construction initiatives can be grouped into three sets: those from donor partners (under the common-pooled funding arrangement (the FCE)), those from National Communal Investment Funds (FONIC<sup>13</sup>), and those from local communities.<sup>14</sup> The quality of construction depends heavily on the approach adopted. UNICEF construction, that uses its own standard building plan like other donor partners, is of good quality. While the standardized building plan, currently implemented by the Ministry and used by ABUTIP<sup>15</sup>, BISEM<sup>16</sup>, and FONIC, is of high quality, the quality of workmanship is uneven. ABUTIP work is at the upper end of the quality spectrum, while the other two are of a lower quality due to the lack of monitoring and control of technicians or the





municipalities. The work of the communities is at the lowest end of the quality spectrum, with average to poor quality provided the walls are made of fire-baked bricks and very poor quality and durability when the bricks are of raw clay. Unit costs also vary considerably, with UNICEF construction being much the highest, while unit costs of community-built schools are only one-third of UNICEF costs (Figure 4).

**Given the large demand for new classrooms but the limited national budget, the challenge moving forward therefore is to increase the quality of community construction, while retaining an acceptable unit cost per classroom.** A large number of schools and classrooms will need to be built over the next several years. It is very unlikely that donor-funded construction funds will be able to contribute in a major way given the high unit costs. There are three options to move the community-based construction of classrooms forward:

- *Option 1: Delegated authority to communities ('collines').* Communes could formally delegate the necessary project management authority to communities ('collines') for the construction of classrooms. In such cases, the local communities act as delegated contracting authorities (MOD) on behalf of the commune. Evidence from many countries shows that local communities can successfully play the role of MOD for the management of small-scale construction of low complexity and cost - such as building classrooms or school sanitation facilities. This community led initiative would need to incorporate technical oversight, perhaps provided by delegated technicians, in order to improve the quality of construction.
- *Option 2: The integration of a construction component into the RBF approach.* As mentioned earlier, Burundi has just completed a pilot project that adopted a results-based approach to financing. The experience proved successful and, as discussed in study 3, might be expanded. If this were the case, empowering communities to build their own school - as described in option 1 - could fit perfectly well into such a RBF approach.
- *Option 3: Aligning the Common Pooled Fund for Education (FCE), if it were reinstated, with FONIC resources.* One way in which donors could help to channel resources more swiftly to communities would be by using FONIC procedures, which are currently in operation, understood, and can target the community level in question. However, the FCE is currently not operational due to the withdrawal of donors.

The first option, or the first two options together, are considered most promising. In either case, it would be desirable that the MEESRS develop a National Strategy for School Construction that would take stock of the situation in 2017, reset priorities in this context, provide a long-term vision, and prepare a multi-annual school construction program.

The study on Construction provides further details.

#### *Pillar 2: A reduction in double-shift schools.*

PSDEF Indicator	Target for 2014/15	Achievement 2014/15	Comment
% of double shift	41 %	34.6 %	Target exceeded

schools in government schools			
-------------------------------	--	--	--

**The target for reducing double-shift schools was achieved.**

The second pillar focuses on reducing double-shift schools, through: a) eliminating double shifts 'linked to the teacher' (see Box 1); b) reducing by two thirds the number of double-shift situations 'linked to the room'; and, c) modifying the regulations governing the length of classes in double-shift schools. The target for 2014/15 of reducing the proportion of double-shifting in the public sector to 41% was exceeded with the actual value reached being 34.6%.

**Box 1. Two kinds of double-shifts in Burundi.** These are commonly referred to as double-shift 'linked to the teacher' and double-shift 'linked to the classroom'. Double-shift 'linked to the teacher,' refers to a situation where a teacher teaches two different classes (or groups) of students in two shifts, one in the morning, one in the afternoon. These shifts, of usually 4 hours each, are two shorter 'school days.' In comparison to a teacher who teaches a typical school day of 5 or so hours, the teacher who does two consecutive shifts is over-employed. Double-shift 'linked to the room' refers to two different classes of students, taught by two different teachers, one teaching in the morning, one teaching in the afternoon, who share the same room. Again, each child has only 4

**Going forward it is likely that trade-offs between reducing class size and reducing double-shifting will have to be considered.**

Addressing the double priority of reducing class size (which, as we saw earlier, has not moved) and eliminating double-shifts entails significant challenges, especially if the third priority of reducing situations where teachers are underemployed is also desired (in situations where they are employed in double-shifting linked to the room (see box 1)). In the current state of budgetary constraints, there will be trade-offs to be made. It may be that in earlier cycles, where overcrowding is greatest, recourse to double-shifting should remain temporarily in place, in order to reduce class sizes (to a maximum of 60 as PASEC analysis suggests), while in later cycles where overcrowding is less prevalent, double-shifting linked to the room could be reduced (thereby allowing the redeployment of underused teachers). This approach makes sense also because learning outcomes of students in double-shift schools *seems* no worse than in standard classes, though this fact deserves more investigation<sup>17</sup>. A revised strategy and action plan should be developed, perhaps by province, to address this issue for the coming 5 to 10 years.

*Pillar 3: Repetition*

PSDEF Indicator	Target for 2014/15	Achievement 2014/15	Comment
Repetition rate in cycle 1	14 %	24.3 %	Not met, but down from 31.5 % in 2012/13
Repetition rate in cycle 2	17 %	19.1 %	Not met, but down from 23.8 % in 2012/13
Repetition rate in cycle	20 %	23.7 %	Not met, but down from

3			31.7 % in 2012/13
---	--	--	-------------------

**The quantitative targets for this pillar have not been met, despite good progress.** In Burundi, high repetition rates have traditionally been seen as a sign of a quality education, an aspect of the school system associated with rigor. And it is true that Burundi has been able to avoid the outcomes found in most other countries that a student who repeats a grade is less likely to pass the second time around: there is no significant gap in performance on PASEC for those who repeat for either reading or mathematics, in stark contrast to very high differences in every other participating country (except Niger). However, high repetition rates create congestion in cycles and increase the cost per student completing the cycle. Hence, the third pillar aims to reduce repetition rates through a series of policy measures<sup>18</sup>, the most important of which is the adoption of new policy stipulating that no more than 5% of students in the first year of each of the first three cycles and no more than 15% of students in the second year of each of those same cycles may repeat. Progress has been made in reducing repetition rates though targets for cycles 1-3 have not yet been met. In cycle 1, repetition stood at 31.5% in 2012/3, 26.8 in 2013/4, and 24.3, for 2014/5 while the target for 2015 was 14%; in cycle 2 repetition stood at 23.8% in 2012/3, 18.5% in 2013/4, and 19.1% for 2014/5 while the target for 2015 was 17%; and in cycle 3 repetition stood at 31.7% in 2012/3, 27 in 2013/4, and 23.7, for 2014/5 while the target for 2015 was 20%.

*Pillar 4: Improved teacher use and deployment.*

PSDEF Indicator	Target for 2014/15	Achievement 2014/15	Comment
Variance in teacher allocation	20 %	25 %	No

**There has been no overall progress under this pillar.** The fourth pillar focuses on improving the use and deployment of teachers. This was to be carried out in two ways: first, by reducing the number of situations in which double-shifting ‘linked to the room’ takes place and by increasing the number of hours in double-shift schools, both of which would have the effect of reducing the number of teachers who are under-used (see box 1). And, secondly, through the redeployment of teachers, a measure that was initiated in 2010 at the national level, to improve teacher allocation on a nationwide scale. This has now been continued at a decentralized level (provincially) since the introduction of the PSDEF, which is also expected to further rationalize their use as it will address local teacher needs *locally*. However, for the moment, the variance in the allocation of teacher deployment, the indicator to track progress in the PSDEF, has not improved: it stood at 25% in 2012/3, rose to 30% in 2013/4 before descending again to 25% for 2014/5 while the target for 2015 was 20%.

*Pillar 5: Support to Schools.*

**Progress under this pillar has been minimal.** Actions under this pillar include: a) supporting school feeding in zones of food insecurity; b) the implementation of specific support to

disadvantaged and out of school children; and, c) a ban on excluding students from school who lack school supplies, uniform or school fees.

**In terms of school feeding, the MEESRS has recently formed (in 2016) a school canteen unit, which now works closely with the World Food Program that had been until then working in the country in its own way.** The challenges of food insecurity in the country have repercussions for learning: children in some areas are not attending school because they are too hungry to walk to school, or if they do make it, are often too tired to study effectively. Students from different catchment areas have also been reported attempting to attend schools with school canteens, which is creating inequitable situations of under- and over-crowding<sup>19</sup>. For these reasons, support to the school canteen unit and expanding access to school feeding programs would be important in the context of a lending project.

**In terms of specific support offered to students, an initiative for special needs rather than disadvantaged students has been started.** An inventory of their needs was carried out in 2015/2016 with about 8,000 students being identified. In May 2016, the MEESRS established an Inclusive Education Unit (*Cellule Education Inclusive*) within the Ministry, with a mandate that includes nine initiatives. There are six pilot schools, three in the capital and three in Gitega, with Notre Dame de la Sagesse in Gitega offering cycle 4 of basic education to special needs students. However, very little funding has been made available (approximately 1,000,000 BIF), hardly enough to cover the needs of one school, let alone them all or the requirements of the nine initiatives. In addition, the new staff of the Inclusive Education Unit requires training.

**Finally, the net enrollment rate now stands at 95% (2015), indicating that a small proportion of young children are still out of school.** This is due in part to children starting their first year late in Burundi, very often at 7 years, yet also due to other serious factors. Analysis shows that being out-of-school affects poor children living in particular rural areas, especially children from the Kirundo, Ngozi, Cibitoke and Ruyigi regions, and boys a little more than girls. The main reasons cited by families to explain this phenomenon are that children are too young to attend (45%), the high cost of schooling despite being free (34%), and the distance from school (8%). Overcoming these constraints is not easy, but the Results Based Financing pilot in Bubanza stipulated that the school was responsible for seeing that all children of school-going age were in school (which in Bubanza meant all 7 year olds) and significant gains in enrollment were seen in a short period of time. See discussion of pilot below.

**As for the ban on a student's exclusion from school for want of a uniform or other basic items, it seems that few stakeholders know of the ban** even at the Ministry, which suggests that the policy has not been well communicated and is very probably not known in schools.<sup>20</sup> The ban on excluding students is expected to help the disadvantaged.

**On balance, progress has been mixed in reforming Basic Education in the PSDEF.** Of the 29 indicators in the PSDEF, 8 targets have been achieved, 4 have not reached their target but progress has been made, 9 have not been achieved and there is no progress towards the target, while against 8 indicators, data have not or could not be collected. A summary table of these indicators is found in Annex 2. That said, many of the targets that have indeed been reached stem directly from straightforward policy decisions, like the introduction of a new curriculum or

the improvement in transition rates into cycle 4 (from the cut-off point for those transitioning being lowered), while those indicators meant to reflect progress towards the major objectives of the PSDEF reform have not been reached. More students have access to the first cycles of Basic Education but the objective of universal completion of cycles 1-3 is not yet achieved. . The primary completion rate stand at 62%. In other words, policy decisions have brought reform to Basic Education but this has not yet brought the kind of change desired in terms of improved retention, progression, and completion rates, which require action at the school level..

#### *The challenges to Piloting and Managing the PSDEF Reform*

In order for the PSDEF reform to succeed, a) the necessary financial resources had to be made available; and, b) the necessary institutional capacity needed to be strengthened including the capacity of the Ministry to monitor the reform.

#### *Financing.*

**The budget for the reform rose significantly until 2013, doubling in absolute terms from 2008, but then fell dramatically in 2015.**<sup>21</sup> Resources allocated to the sector increased significantly from 112 billion BIF (72.0 million USD) in 2008 to 207.8 billion BIF (133.6 million USD) in 2013. The budget in absolute terms almost doubled in this period, as well as an increase in relative terms of total government expenditure (from 24.1% in 2008 to 29.1% in 2013). Donors also contributed through the Common Fund for Education (French acronym, FCE) or directly. The contribution accounted for 38.2% of the education sector budget in 2015, a record amount for external support to the sector, but then dropped to 5.3% in 2016. FCE expenditures supported both investment and recurring expenditures during the period, although the portion devoted to current expenditures declined over time.

**Progress on the reform has been hampered by factors arising from the country context with funding falling and the need for new projections.** The most significant factor has been the Electoral Crisis of 2015 which led to EU donors withdrawing funding. This resulted in a drop of approximately 86% in external funding. The Ministry has made adjustments to its plans, principally by leaving the construction of funding to other sources such as FONIC.<sup>22</sup> However, even if progress were to have been made as planned, the plans themselves may now be out of date. This is because with hindsight it turns out that the PSDEF reference scenario and projections (Annex 7.3 of the PSDEF) are inaccurate. The scenario forecasts a population of 9.29 million in 2015. However, the ISTEERU has already revised this figure year on year - to 9.82 million (5.5% more) and the United Nations to 11.17 million (20.5% more).

#### *Capacity-building.*

**At the central and decentralized level, funding was initially planned and made available for capacity-strengthening, but the effect of that funding on the ministry today is not apparent.** Directors mention that inadequate funding is prevalent and training needs are pressing. The capacity of the Ministry to monitor the reform was also to be strengthened, the indicator used to assess progress being the annual production of indicator reports. Progress has been made on this count as statistical yearbooks have been produced, though whether the 2015/16 yearbook will be made available is unclear, after that school year was disturbed. The Ministry currently works with the yearbook from 2014/15; some new data from 2016/17 is slowly

becoming available. The yearbooks are produced as a result of a labor intensive process starting with paper-and-pencil surveys being completed each fall at all schools. These are then sent to the Ministry where they are entered, by hand, into the database. Finally, in this context, a word is needed about a communication strategy. The PSDEF reform continues to be poorly understood by stakeholders, both in its broader strokes by the general public and in its finer details by central and decentralized ministry officials and those on the front lines, at the school level. This is hampering reform efforts and so needs to be addressed quickly and effectively. For the reform to succeed, it needs, first and foremost, to be understood.

[A strength to be built on: the pilot in Bubanza testing a results-based financing approach.](#)

One interesting initiative in this context is the two-year pilot using a results-based financing approach in the province of Bubanza. The objective of study 4 was to determine the feasibility of scaling up of this approach. It includes three sub-studies: a) a descriptive study of the education pilot project in the province of Bubanza; b) a descriptive study of the RBF healthcare project in Burundi; and c) a rapid assessment of the governance structure and the monitoring and evaluation capacity of the education sector.

**The pilot project in education was launched in 81 schools in the province of Bubanza in 2014 and has shown initial promising results.** The project was primarily funded by Cordaid, a Netherlands-based development aid organization, and lasted two years, from 2014 to 2016. Designed as an output (opposed to input) focused program, the service providers (schools) outlined an action plan and corresponding indicators, and were compensated based on the results they achieved. The greater the results, the more funding they were able to access. This instilled an entrepreneurial mindset in the stakeholders.

**The pilot included six key characteristics that have been identified in the RBF literature as crucial to the success of this approach:** autonomy, establishment of contracts, transparency, government buy-in, monitoring and evaluation system, and definition, separation and decentralization of roles. Some aspects were stronger than others: the autonomy and establishment of contracts was one. Empowerment (of school management committees) to make decisions instilled an openness to ask questions and develop localized solutions to problems, while contracts and action plans ensured understanding by all stakeholders. Transparency, government buy-in and role definition and separation were relatively strong as well. A transparent environment encouraged participation from the community, teachers, administrators and government officials. The government's support and integration of RBF into the National Strategic Plan portrayed its commitment to improving the education system, and the separation of roles ensured accountability of each actor. The last component, monitoring and evaluation system, is in need of the most improvement: its data collection system was inefficient, requires the restructuring of roles, and needs updated M&E tools.

**The project was in existence for only two years with one year dedicated to initial set up, and the identified weaknesses may be a sign of early implementation rather than fundamental problems.** In addition, there existed overarching challenges to program implementation, including economic constraints of schools and students, remote school

geographies and adverse weather, and insufficient infrastructure, teachers and resources. Program implementation deficiencies observed included inefficient payment mechanisms, questions of cost efficiency and sustainability, effective stakeholder motivation mechanisms, and data collection methodology.

**Initial statistics, provided by Cordaid, indicate improvements in teacher attendance, teacher performance, quality and content of education, and school-parent relationships in the pilot schools.**<sup>23</sup> No independent evaluation of the program has been undertaken and the Bank team has also not been able to access the databased. However, due to the limited two-year lifespan of the pilot, this study cannot provide insight into program impact or draw causal links between educational outcomes in Bubanza and the program. Further analysis needs to be done on the indicators – with a special focus on the quality indicators – and on the costs and sustainability of the initiative. The amount of data collection and reporting at the school and other levels also needs to be assessed.

**RBF in health is now a national program, having taken a pilot project to scale.** A RBF healthcare project in Burundi was also primarily funded by Cordaid, beginning as a health project in three provinces in Burundi in 2006 (Bubanza, Cankuzo and Gitega). With consensus from donor partners and the GoB, it was scaled up to be a *program* at the national level in 2010. It was also adopted into the 2005-2015 National Health Policy. The healthcare program separates four main roles: purchasing, regulation, verification and service provision. Since the establishment of the program, the country has seen extraordinary improvements in health outcomes. The rate of consultations for children under five years rose five-fold; births attended by skilled personnel rose from 30% in 2005 to 73% in 2015; and the percentage of students vaccinated increased to over 90%. In addition, the rate of completion and promptness of data collected through the use of verification increased, and the quality of services provided in health centers improved. In contrast to the education system, the health management information system in Burundi is very well established, facilitating the review of performance indicators, comprehensive M&E tools, and a multi-step validation system to ensure the reliability of the data. The one drawback of the system is that it may be seen as costly<sup>24</sup> and requires the involvement of many RBF actors. The payment process has multiple actors involved in the approval of payments for increased security but is completed within 50 working days of the end of the reporting period (this is one of the performance indicators).

**The assessment of the governance structure and the M&E capacity of the education sector provides insight into the feasibility of scaling up the RBF education project.** It was observed that both the governance and M&E structure in education were not sufficiently strengthened during the brief pilot project. The M&E system is currently disjointed; data are collected at different levels (municipal, provincial and national) and are not integrated. The M&E capacity in the education sector would need to be strengthened prior to scaling up the RBF pilot. In terms of governance, the basic education sector has a three-tiered governance system with autonomous community-based schools comparable to that of the health sector (national, provincial, communal)..

**The primary weaknesses observed in both the RBF health program and the education pilot were associated with funding streams (from both the donor and government) and sustainability of the program in the long-run.** Cost efficiency is the largest concern in scaling up RBF in education and, given that the health sector already identifies consistent funding as an issue, this could lead to competing demands for funds, especially from the national government. That said, there are cost efficiencies that could be drawn from the pre-existence of the RBF health program in Burundi, such as M&E tools (survey instruments, software, technical expertise, etc.) and institutional groundwork (pre-existing buy-in of the national government as a result of successes observed in health).

## Conclusion

There are several strong points to Burundi's education sector, as the four studies have made very clear, which suggest ways in which the World Bank could support Burundi's ongoing PSDEF reform of Basic Education.

In terms of sustaining the relatively good **quality** of Basic Education, the focus should be on mastery of early literacy and numeracy by all children in the early years. This would require helping teachers to teach reading and mathematics efficiently, with provision of adequate textbooks, reading materials and assessment tools. The Bank should consider supporting the teacher training networks started under the reform of cycle 4, in order to ensure that cycle 1-3 teachers also benefit from the advantages of having support from other teachers on an ongoing basis when faced with the new curriculum that they must master. The relatively weaker performance of students once French becomes the language of instruction in Year 5 needs addressing.

In terms of improving **access and reducing overcrowding**, the WB should promote a strategic approach to construction that leverages the dynamism of the locally-led community-based approaches that are currently practiced across the country, but with the technical quality of the construction improved through third-party oversight and a strengthened and agreed-upon standardized building plan. A strategy is also needed which sets criteria for school construction, balancing progress against double-shift schools (of both types) and reducing student-teacher ratios.

In terms of improving **progression**, especially in the early years, a multi-pronged approach will be called for. First, parents should be mobilized to send children to school at the right age. Second, student attendance should be monitored regularly and those at risk of dropping out should be identified and actions taken at the school level in cooperation with parents. In regions of high food insecurity, school feeding programs could be considered. Reduction in the repetition rates can be brought about through focused action at the school level, concentrating on the one hand on improving attendance, and on the other hand, by improving learning so that children can cope with the curriculum in the next grade.



In terms of improved **management**, the WB should consider expanding the RBF pilot to strengthen service delivery in schools and management capacity in decentralized education units, such as the provincial and communal level education authorities and inspectorates. In addition, central level departments, most notably the Planning and Statistics department, must be strengthened so that they may play the part required of them in this scale-up.

These issues will be discussed with the Ministry of Education as well as other stakeholders and partners as part of the on-going preparation of the new project focused on improving learning and student progression in the early grades.

## Annex 1: School Construction Projects between 2006 and 2016 (by classroom)

Financement	Management du projet/du financement	Mise en oeuvre	Nb sdc	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	PSDEF				Nb sdc
				2006	2007	2008	2009	2010	2011	2012	2013/14 2013	2014/15 2014	2015/16 2015	2016/17 2016	
PTTE	Plan triennal	MEN/Provinces	1000	500	500										1000
IDA	PARSEB	MOD-ABUTIP	231		39	39	39	39	39	39					1010
	PRADECS(3)	MOC	652		109	109	109	109	109	109					
	PTPGU(8)	MOD-ABUTIP	127					25	25	25		25	25		
BAD	PAPCE	MOC	60				12	12	12	12		12		60	
UNICEF	UNICEF	Communautés	30									10	10	10	327
	UNICEF(4)	MO-UNICEF	297		42	102	36	54				21	21	21	
FADL	PADLPC/CTB(9)	MOC-communes	150							50		50	50	150	
FCE	CTB	MOD-ABUTIP	210					53	53			53	53	1,456	
	CTB	MOD-ABUTIP	270								90	90	90		
	CTB	MOC-communes	657								219	219	219		
	CTB	MOD-UNICEF	162								54	54	54		
	UNICEF/PACEF	MOD-UNICEF	157									79	79		
Total PTF			3503	500	647	189	261	221	291	287	534	522	473	79	3,503
GdB	FONIC	(1)(5)	2460		90	90	90	90	90	0		0	150	152	1710
Travaux Communautaires			5381							1018		1230	930	724	1479
Reste					629	1759	1084	1839	1652	-509		253	-417	-2551	-4470
Burundi				2230	1366	2038	1435	2149	2033	796		2017	1185	-1202	-1202
Total Fondamentales Publiques 1ère-6ème année				17402	18768	20806	22241	24390	26423	27219	29236	30421	29219	28017	

To be noted:

1. The circled figures represent the total number of classes built by donors during the three years of the first phase of the PSDEF for a total over the period of **1608**. The total of 79 for 2016 is also included in this figure as these classes were begun in the timeframe in question. Above the circled totals are the total number of classrooms (in light blue) by any donor for the period.
2. Directly below the circled figures are the totals for construction financed by the FONIC (in yellow).
3. Below that are the totals for construction carried out by communities (also in yellow).

## Annex 2

Piliers	Sous objectifs	Statut de l'indicateur	Résultats attendus/ Objectifs	Indicateurs	Année de base	Valeurs attendues							Moyen de vérification	Responsable	Date de production	
						2010-11	2012/3 Cible	2012/3 Réalisé	2013/4 Cible	2013/4 Réalisé	2014/5 Cible	2014/5 Réalisé				2015/6 Réalisé
ACCÈS	Améliorer l'accès et l'achèvement	Objectif non-atteint.	Taux brut d'accès en 1 <sup>er</sup> année	TBA	126,4	124	134.8	120	136.8	118	127.1	ND	110	Annuaire	BPSE	Mai
		Objectif non-atteint.	Taux brut d'accès en 1 <sup>er</sup> année pour les filles	TBA filles	121,4	120	130.8	118	133.3	116	125.1	ND	110	Annuaire	BPSE	Mai
		Objectif non-atteint.	Le taux d'achèvement augmente	TAP	56%	66%	68.0	70%	71.2	78%	61.4	N.D	94%	Annuaire	BPSE	Mai
		Objectif non-atteint.	Le taux d'achèvement des filles augmente	TAP filles	50	62	69.6	68	74.2	76	65.4	N.D	92	Annuaire	BPSE	Mai
		Objectif non-atteint, mais progrès fait	Les taux de redoublement au fondamental baissent	Taux de redoublement cycle 1	33%	24	31.5	19	26.8	14	24.3	N.D	5	Annuaire	BPSE	Mai
		Objectif non-atteint, valeur fluctue		Taux de redoublement cycle 2	30%	23	23.8	20	18.5	17	19.1	N.D	10	Annuaire	BPSE	Mai
		Objectif non-atteint, mais progrès fait		Taux de redoublement cycle 3	40%	30	31.7	25	27	20	23.7	N.D	10	Annuaire	BPSE	Mai
		Objectif non-atteint et la valeur reste stable	La proportion de groupes pédagogiques en double vacation diminue dans le public	La proportion de groupes pédagogiques en double vacation	57	49	52.9	45	52.6	41	51.5	N.D	20	Annuaire	BPSE	Mai
	Aucune valeur enregistrée.	L'aide aux familles défavorisées et aux enfants à besoins spéciaux augmente	% d'élèves aidés	0%	0%	0	5%	0	5%	0	N.D	5%	Rapport ONG	ONG	Mai	
	Améliorer l'accès au Fondamental 4 <sup>e</sup> cycle	Objectif atteint	La transition entre la 6 <sup>ème</sup> et la 7 <sup>ème</sup> année augmente	Taux de transition entre la 6 <sup>ème</sup> et la 7 <sup>ème</sup> année	40%	52%	50.0	58%	57.8	64%	64.1	N.D	80%	Résultats du concours	BPSE	Juin
		Objectif non-atteint	Les internats au niveau du fondamental ferment progressivement	% d'élèves internes	4%	2%	2.5	1%	0	1%	1.0	N.D	0%	Etat financier des subsides	DES	Décembre

		Objectif atteint	Les taux de redoublement au fondamental 4 est maîtrisé	Taux de redoublement cycle 4	29%	26%	22.1	16%	22.2	11%	8.7	ND	8%	Annuaire	BPSE	Mai
Piliers	Sous objectifs	Statut	Résultats attendus/ Objectifs	Indicateurs	An	Valeurs attendues							Moyen de vérification	Responsable	Date de production	
					année de base	2010-11	2012/3 Cible	2012/3 Réalisé	2013/4 Cible	2013/4 Réalisé	2014/5 Cible	2014/5 Réalisé				2015/6 Réalisé
QUALITÉ	Améliorer la qualité de l'enseignement fondamental	Indicateur abandonné ; remplacé par nombre d'enseignants sortant des lycées pédagogiques et des Ecoles Normales Supérieures	Le recrutement de nouveaux enseignants est plus axé sur les titulaires d'un D7	% de D7 dans les nouveaux recrutements	0	--		100%		--				Rapport	DGBP	Décembre
		Objectif non-atteint	La taille de groupes pédagogiques diminue dans le public	Nombre d'élèves par groupe pédagogiques pour les cycles 1,2, & 3	55	53	52	53	53	52	53		50	Annuaire	BPSE	Mai
		Objectif non-atteint mais progrès	La part allouée aux dépenses pédagogiques et de support dans les dépenses courantes augmente	% dépenses pédagogiques et de support dans les dépenses courantes totale au niveau des cycles 1,2, & 3	7%	8%	5.2%	9%	Non-dispon.	10%	9%		15%	Rapport sur dépenses éducation dans la loi de finances	BPSE	Février
		Objectif non-atteint	La part allouée aux dépenses pédagogiques et de support dans les dépenses courantes augmente	% dépenses pédagogiques et de support dans les dépenses courantes totale au niveau du cycle 4	3%	6%	Non-dispon.	8%	Non-dispon.	10%	8%		20%	Rapport sur dépenses éducation dans la loi de finances	BPSE	Février
		Aucune valeur car aucune évaluation entreprise après 2012	Les scores en kirundi-lecture et en mathématiques s'améliorent	% de non-lecteurs en 2 <sup>e</sup> année	11.9%	--	Non-dispon.	--	--	9%	--		5%	Rapport évaluation des acquis/PASEC	Bureau évaluations	Novembre

		Aucune valeur car aucune évaluation entreprise après 2012		% de lecteurs partiels en 2 <sup>e</sup> année	55.3%	--	Non-dispon.	--	--	50%	--		40%	Rapport évaluation des acquis/PASEC	Bureau évaluations	Novembre
Piliers	Sous objectifs	Statut	Résultats attendus/ Objectifs	Indicateurs	Année de base	Valeurs attendues							Moyen de vérification	Responsable	Date de production	
						2010-11	2012/3 Cible	2012/3 Réalisé	2013/4 Cible	2013/4 Réalisé	2014/5 Cible	2014/5 Réalisé				2015/6 Réalisé
QUALITÉ	Améliorer la qualité de l'enseignement fondamental	Aucune valeur car aucune évaluation entreprise après 2012	Les scores en kirundi-lecture et en mathématiques s'améliorent	% de lecteurs autonomes en 2 <sup>e</sup> année	32.8%	--	Non-dispon.	--	--	41%	--		55%	Rapport évaluation des acquis/PASEC	Bureau évaluations	Novembre
		Aucune valeur car aucune évaluation entreprise après 2012		% de réussite en math 2e	53.9%	--	Non-dispon.	--	--	55%	--		65%	Rapport évaluation des acquis/PASEC	Bureau évaluations	Novembre
		Aucune valeur car aucune évaluation entreprise après 2012		% de réussite en math 5e	44.4%	--	Non-dispon.	--	--	46%	--		60%	Rapport évaluation des acquis/PASEC	Bureau évaluations	Novembre
GESTION et PILOTAGE	Améliorer la décentralisation et la déconcentration	Nombre de salles et non pas % de salles donné.	Les communes construisent par délégation de maîtrise d'ouvrage X% des salles de classes	% des salles de classes construites par les communes	--	% <sup>1</sup>	Non-dispon.	%	180	%	200	%	Rapport sur les constructions scolaires du FCE	DGF	Janvier	

<sup>1</sup> No values given here in PSDE Annex

		Valeurs non-collectées	% des dépenses courantes hors masse salariale sont alloués aux structures déconcentrées	% des dépenses courantes alloués aux structures déconcentrées hors masse salariale	--	% <sup>2</sup>	Non-dispon	%	Non-dispon	%	Non-dispon	%	Rapport sur dépenses éducation dans la loi de finances	BPSE	Février
	Améliorer la gestion des ressources humaines	Objectif non-atteint ; valeur fluctue	Le taux d'aléa dans l'allocation des enseignants est réduit	taux d'aléa dans l'allocation des enseignants	44	30	25	25	30	20	25	10	Annuaire	BPSE	Mai
Piliers	Sous objectifs	Statut	Résultats attendus/ Objectifs	Indicateurs	An née de base	Valeurs attendues							Moyen de vérification	Respon sable	Date de produ ction
					2010-11	2012/3 Cible	2012/3 Réalisé	2013/4 Cible	2013/4 Réalisé	2014/5 Cible	2014/5 Réalisé	2015/6 Réalisé			
GESTION et PILOTAGE	Améliorer la gestion pédagogique	Objectif atteint	Les curricula et les supports pédagogiques sont disponibles en fonction du calendrier de la réforme des curricula	Les profils de sortie sont disponibles		oui	oui	?	oui	?	Non-dispon		Texte réglementaire examen	DGBP	Décembre
		Objectif atteint		Le plan d'action de l'élaboration et de la mise en œuvre de la réforme des curricula est disponible		oui	oui	?	oui	?	Non-dispon		Plan d'action	DGBP	Décembre
		Objectif atteint		Les programmes sont disponibles progressivement		7AF révisé, support 7AF, 8AF et support 8AF	8AF en cours de finalisation	9AF, support 9AF, 3AS, supports, mise en cohérence 1AF & 6AF	7AF révisé, Support 7AF, 8AF et support 8AF	2AS, 1AS, Ecoles normales, IIAP	9AF, Support 9AF, 3AS, supports, mise en cohérence 1AF à 6AF	Mise en œuvre 100% de la réforme curriculaire	Rapport de la DGBP et de l'IGE sur la réforme curriculaire	DGBP	Juin
	Améliorer le Pilotage	Objectif atteint en 2015	Annuaire produit annuellement au mois de mai	Données statistiques disponibles annuellement au mois de mai		oui	non	oui	non	oui	oui	oui	Données disponibles	BPSE	Mai

<sup>2</sup> No values given here in PSDE Annex

		Objectif atteint en 2015	Environ 30% des ressources courantes de l'Etat hors DT sont alloués annuellement au secteur de l'éducation	% des ressources courantes de l'Etat alloués annuellement au secteur	29.3%	29.3%	34.7%	29.3%	Non - dipon.	29.3%	29%		29.3%	Rapport sur dépenses éducation dans la loi des finances	BPSE	Février
--	--	--------------------------	--	--	-------	-------	-------	-------	--------------	-------	-----	--	-------	---	------	---------

Annex 3 : School and pupil characteristics (PASEC data)

Factor	Burundi	PASEC average	PASEC high	PASEC low	Comments
Class size (early primary)	56.2	55.8	79.8 (Burkina Faso)	44.7 (Côte d'Ivoire)	
Class size (late primary)	44.1	46.7	68.3 (Burkina Faso)	35.5 (Benin)	
% of pupils with one textbook per pupil (early primary)	3.9	55.6	61.7 (Senegal)	3.9 (Burundi)	Difference between own textbook and sharing between three or more pupils was significant in language and mathematics in all countries, <b>except for Burundi</b> (and one other country).
% of pupils with one mathematics textbook per pupil (late primary)	17.8	Average not reported	81.0 (Togo)	1.4 (Burkina Faso)	Difference between owning textbook and sharing between three or more pupils was significant in language in all countries, <b>except for Burundi</b> .
% of pupils with one reading textbook per pupil (late primary)	5.2	Average not reported	65.8 (Burkina Faso and Côte d'Ivoire)	5.2 (Burundi)	Difference between owning textbook and sharing between three or more pupils was significant in mathematics in all countries, <b>except for Burundi</b> (and one other country).
Repetition rate in Grade 2 (early primary)	26.6	13.4	26.6 (Burundi)	4.5 (Niger)	Repetition reduces performance in language in four countries, <b>but not Burundi</b> ; and in mathematics in 5 countries, including Burundi (though Burundi's gap was the lowest)
% of pupils who never repeated (late primary)	17.8	42.5	64.2 (Senegal)	17.8 (Burundi)	Repeating once reduces performance in language in all countries <b>except Burundi</b> and Niger; and in mathematics in all countries, <b>except Burundi</b> and two others.



Presence of double-shift schools (early primary)	46.8	11.9	46.8 (Burundi)	0.0 (Togo)	No general pattern of impact across sample countries. For Burundi, performance in double shift schools is higher in language in early primary; no other gaps are significant.
Presence of double-shift schools (late primary)	24.1	8.6	24.1 (Burundi)	.02 (Burkina Faso)	
% of pupils with parents who can both read (early primary)	51.2	27.2	51.8 (Congo)	15.6 (Niger)	Having both parents who can read significantly improves performance compared to having two parents who can read in language and mathematics for almost all countries, <b>except for Burundi</b> where performance actually (and paradoxically) is lower.
% of pupils with parents who can both read (late primary)	49.8	39.0	70.0 (Congo)	21.3 (Niger)	Having both parents who can read significantly improves performance compared to having two parents who can read in language and mathematics for almost all countries, <b>except for Burundi</b> where performance is not difference.
% of pupils without books at home (early primary)	59.3	58.7	79.5 (Chad)	39.2 (Senegal)	Possession of books significantly improves performance in language and mathematics compared to having no books for all countries <b>except Burundi</b>
% of pupils without books at home (late primary)	68.2	46.8	69.8 (Chad)	27.5 (Cameroon)	Possession of books significantly improves performance compared to having no books or few books in language for all countries <b>except Burundi</b> ; and in mathematics for six countries, <b>but not Burundi.</b>
% of pupils who engage	81.8	65.9	81.8 (Burundi)	51.5 (Congo)	Participation significantly reduces performance in

in agricultural work (late primary)					language in all countries and in mathematics for all countries <b>except Burundi</b> and Chad.
% of pupils who engage in petty commerce (late primary)	42.3	49.5	63.6 (Cameroon)	32.7 (Niger)	Participation significantly reduces performance in language in all countries, except Chad and Togo, and in mathematics for all countries, except Chad and Burkina Faso.
% of pupils attending pre-primary (early primary)	23.0	27.1	49.9 (Cameroon)	10.9 (Burkina Faso)	Participation significantly improves performance in language in all countries <b>except Burundi</b> and Burkina Faso; and in 6 countries in mathematics, <b>but not Burundi</b>
% of pupils attending pre-primary (early primary)	20.5	28.2	43.7 (Senegal)	12.0 (Burkina Faso)	Participation significantly improves performance in language in all countries except Chad; and in 7 countries in mathematics, <b>but not Burundi</b>
% of pupils in rural areas (early primary)	86.5	60.2	86.5 (Burundi)	42.5 (Senegal)	Reduces performance in all countries for language and, <b>except for Burundi</b> , in mathematics.
% of pupils in rural areas (late primary)	82.2	58.3	82.2 (Burundi)	42.0 (Congo)	Reduces performance in all countries for language and, <b>except for Burundi</b> and Chad, in mathematics.
Average infrastructure index (late primary)	45.8	50.0	58.0 (Senegal)	41.2 (Niger)	Better infrastructure significantly increases performance in language and in mathematics in all countries except Chad.
Average class equipment index (early primary)	50.5	50.0	55.9 (Benin)	36.7 (Chad)	Better equipment significantly increases performance in language and in mathematics in 5 countries <b>but not Burundi</b> .
Average class equipment index (late primary)	49.2	50.0	60.0 (Benin)	38.0 (Chad)	Better equipment significantly increases performance in language and in mathematics in all countries except Togo.

primary)					
% of pupils with teachers with secondary level academic achievement (early primary)	86.1	76.6	93.3 (Niger)	39.0 (Burkina Faso)	Other teachers almost all had university level achievement
% of pupils with teachers with secondary level academic achievement (early primary)	74.2	61.1	76.8 (Benin)	38.1 (Burkina Faso)	Other teachers almost all had university level achievement
% of pupils with teachers with 2 years or more of pre-service training (early primary)	72.7	36.3	72.7 (Burundi)	2.0 (Togo)	Burundi has highest figures.
% of pupils with teachers with 2 years or more of pre-service training (late primary)	68.2	42.2	68.2 (Burundi)	6.3 (Senegal)	Burundi has highest figures
% of pupils with teachers with no in-service training (early primary)	63.0	22.9	63.0 (Burundi)	2.2 (Cameroon)	Burundi has highest figures
% of pupils with teachers with no in-	41.8	16.9	41.8 (Burundi)	4.5 (Senegal)	Burundi also has highest figures!

service training (late primary)					
% of pupils by teachers' perception of the quality of school management as very good (early primary)	25.5	10.6	25.5 (Burundi)	3.0 (Chad)	Burundi has highest figures
% of pupils by teachers' perception of the quality of school management as very good (late primary)	26.2	8.8	26.2 (Burundi)	1.2 (Chad)	Burundi has highest figures
% of pupils by teachers' perception of relationships with colleagues as very good (early primary)	80.1	44.8	80.1 (Burundi)	20.0 (Burkina Faso)	Burundi has highest figures
% of pupils by teachers' perception of relationships with colleagues as very good (late primary)	77.9	43.3	77.9 (Burundi)	21.7 (Benin)	Burundi has highest figures
% of pupils by teachers' perception of relationships	62.6	26.5	62.6 (Burundi)	4.9 (Burkina Faso)	Burundi has highest figures

with the community as very good (early primary)					
% of pupils by teachers' perception of relationships with the community as very good (late primary)	8.9	4.6	8.9 (Burundi)	1.3 (Benin)	

## Notes

---

<sup>1</sup> *Plan sectoriel de développement de l'éducation et de la formation 2012-2020*

<sup>2</sup> Cycle 1 includes years 1 and 2; cycle 2 is years 3 and 4; cycle 3 is years 5 and 6; cycle 4 years is 7, 8 and 9.

<sup>3</sup> PASEC stands for the *Programme d'analyse des systèmes éducatifs de la CONFEMEN* (Conférence des Ministres de l'Éducation des États des Gouvernements de la Francophonie)

<sup>4</sup> EGRA stands for "Early Grade Reading Assessment"

<sup>5</sup> Henry Niedzielski, "Teaching English in Francophone Africa" in [http://spellingsociety.org/uploaded\\_misc/c1981-misc.pdf](http://spellingsociety.org/uploaded_misc/c1981-misc.pdf)

<sup>6</sup> The literacy rate for 15-24 year olds is 87.6% (UNESCO UIS 2015), one of the highest in SSA.

<sup>7</sup> It cannot be excluded, given high dropout rates, that only the best students get through to year 5 to do year 5 PASEC evaluations. If this kind of selection bias is indeed at play, this would lessen the emphasis we should place on what might appear to be good results in year 5. The results in year 2 remain less troubled by this phenomenon.

<sup>8</sup> 5644 were trained in 18 days in 2012/3; 4367 were trained in 11 days in 2013/4; and 5358 were trained in 3 days in 2014/5.

<sup>9</sup> The research literature suggests that in-service teacher training which focuses on classroom management, content and/or specific pedagogical techniques (rather than general pedagogy) and contained regular follow-up, lead to highest gains. Interestingly, providing textbooks alongside training was also associated with test score gains. An analysis of PASEC results from Burundi corroborate these findings. For instance, test scores improved in those schools in Burundi where 4 or more regular pedagogical meetings took place (RESEN 2016, p.85). See, for instance, Anna Popova, David K. Evans, Violeta Arancibia. 2016. "Training Teachers on the Job: What Works and How to Measure It." World Bank Policy Research Working Papers 7834.

<sup>10</sup> The primary Gross Enrollment Ratio (GER) grew by about 49 percentage points between 2005 and 2014 (from 79 to 128 percent), while the primary Net Enrollment Ratio (NER) grew about 39 percentage points from 56 percent to 95 percent. Increases in secondary GERs were also significant (now standing at 40 percent), though pre-primary and tertiary increases were much less spectacular.

<sup>11</sup> See PSDEF, p. 23, footnote 14

<sup>12</sup> The reported progress for the indicator established to track community based construction in the PSDEF shows just 380 classrooms built between 2012-2015, but how this total has been calculated is unclear and so should probably be disregarded. See Annex 3 of Study 1.

<sup>13</sup> *Fonds National d'Investissement Communal*

<sup>14</sup> To better understand what a 'community-based approach' means in Burundi, it is important to distinguish between the terms 'community' and 'commune.' Local communities, basically villages, (called in Burundi 'colline') make up the smallest identifiable municipal grouping in the country. 'Communes,' on the other hand, are the most decentralized level of government, after province. In a commune, there are typically several communities. With this in mind, there are three community-level approaches to construction currently in operation. First, local communities, through school management committees, play an active role in their local school, not only in contributions to running costs but also in contributions for the construction and rehabilitation of classrooms. Recognizing the need for a new classroom, for instance, parents are willing to pay for materials such as baked bricks and to contribute their labor to build a modest classroom. This, they do on their own. They may take advantage of a national initiative to request that a roof, which is identifiable by its blue color, be provided by the Presidency. Secondly, as part of a long tradition of "community work," communities, organized by communes, are expected to go out one day a month and work together on projects deemed of importance, like building roads, ditches, and sometimes schools. These events have become politicized. Thirdly, each of Burundi's 128 communes receives a set amount of funding from the central government as a part of its decentralization initiative. These FONIC payments may be used for any number of recognized communal projects – health centers, stadiums, roads, and so on. If chosen, schoolrooms may also be built.

<sup>15</sup> ABUTIP (*Agence Burundaise pour la Réalisation des Travaux d'Intérêt Public*) is a UN agency for construction

<sup>16</sup> *Bureau d'Infrastructure Scolaire du Ministère de l'Éducation*

<sup>17</sup> See, for instance, table B4.19 (page 197) of the 2014 PASEC report

---

18 including: a) establishing criteria for evaluating students and for their transition to the next year through collective decision making in schools; b) prohibiting requests from families for voluntary repetition; c) establishing measures to help reduce what was judged to be the excessively demanding expectations of teachers vis-à-vis repetition (that is, teachers used it often expecting it would lead to having a remedial effect – which is not necessarily the case); d) promoting information campaigns about repetition with families and schools; e) putting into place automatic transition within cycles 1, 2, and 3; f) implementing a performance-based grant for schools that reach targets for improved repetition rates

<sup>19</sup> drawn from a report that the WFP shared with the WB in March 2017

<sup>20</sup> We do not know currently the extent of the use of this ban. This issue deserves greater research.

<sup>21</sup> According to UNICEF (UNICEF, 2016)

<sup>22</sup> The question is how the MEESRS can redress the situation. Firstly, it should be recalled that the reform is still accompanied by the former FCE funding (about US\$20M), although it is currently managed directly by UNICEF and continue to fund the three main areas of the reform: access, quality, and piloting and management of the reform. Nevertheless, means are lacking and so given the limited room for maneuver, the MEESRS has had to identify certain priorities: for example, it has decided to leave the financing of school construction to other sources, such as the *National Funds for Communal Investment* (FONIC) even if these funds are used to finance various communal needs, like roads, ditches, classrooms, and so on, depending on needs). MEESRS also counts on donors to continue to take part in the reform. So, for instance, the CTB, though retired from the FCE, continues to work at the post-basic level. The MEESRS also appealed to the Pôle de Dakar. Normally the Pole does not accept to help produce a State Report on the National Educational System (RESEN) based on older data. However, even though the 2015/16 school year was too disturbed to produce a statistical yearbook, the Pole agreed to accompany the MEESRS in the drafting of a 2016 version of the RESEN, given the situation, though in this case a three-year transitional plan to help the sector emerge from the crisis will be developed.

<sup>23</sup> Unfortunately, no data is available in other schools so no comparisons can be made.

<sup>24</sup> The cost of the education pilot in 81 schools in Bubanza for two years was 948,000,000BIF (approximately US\$550,000).