WORKING PAPER

TEACHER ALLOCATION AND UTILIZATION IN AFRICA MAY 2016





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International Institute for Educational Planning/Pôle de Dakar (IIEP - UNESCO)

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1. Overview of the Issue

Among the many challenges education systems in African countries are confronted with, achieving equitable and efficient teacher allocation to schools is of considerable importance. The issue of teacher allocation is inextricably linked to their actual utilization within schools, the ultimate objective being to ascertain that everything is done to ensure pupils receive the number of contact hours required throughout the school year, in favorable learning conditions.

Sector analyses carried out over recent years in many African countries reveal some serious equity issues regarding teacher allocation. The Country Status Report (CSR) for Chad published in 2014 points to the fact that public primary schools with approximately 600 pupils have between 3 and 15 teachers; similarly, among schools with six teachers, enrollment can vary from 100 to 750 pupils. This situation, which raises questions about teacher deployment and its consequences on the quality of learning, is unfortunately common to several countries and has been persisting for decades.

As regards the actual utilization of teachers allocated to schools, only few teachers succeed in covering the number of yearly pupil contact hours required. In Benin for example, a study of teaching time carried out in 2012 in the primary cycle concluded that due to teacher strikes and other factors disrupting the normal organization of the school year, teachers only managed to deliver 50 percent of the number of contact hours expected of them (CSR Benin, 2012). Another study conducted a few years earlier in 2006/07 on teaching time in Burkina Faso concluded that 40 percent of the statutory number of lower secondary contact hours had not actually been dispensed (Study on the Effectiveness of Academic Year 2006/07 – Monitoring the School Calendar). Furthermore, beyond these figures at the national level, disparities between geographical areas and schools in some cases can be considerable. The frequently criticized "ghost" teacher phenomenon, whereby teachers are theoretically posted to a school but are not there in reality, contributes to a reduction in the effectiveness of teacher allocation and the poor utilization of teachers, the consequence being the inefficient use of public education expenditure.

In a context where the 2030 Agenda for education, in the framework of the Sustainable Development goals (SDGs), sets the goal of "ensuring inclusive, equitable and quality education for all by 2030," it is crucial for teacher deployment to be driven by a quest for equity, effectiveness and efficiency to ensure that no child be deprived of learning opportunities as a result of their area of residence or the school they attend. Moreover, in a context where teachers account for the greatest proportion of recurrent education expenditure (81 percent for primary education and 62 percent for lower secondary education in Africa, on average), and are one of the keys to success of the 2030 Agenda, their equitable and effective deployment seems necessary to limit further recruitment costs while rationalizing public education expenditure.

The aim of this working paper is to outline the current situation with regard to teacher allocation and utilization in the education systems of African countries. It examines current teacher allocation practices (over-allocation, shortages, disparities), procedures currently used by countries to determine teacher needs and the way in which education authorities address them. This paper also looks into the hurdles which prevent the achievement of equitable allocation. Finally, it raises questions worthy of debate so as to provide key information to policy makers, and which are useful to consider when undertaking any attempt to amend teacher allocation procedures.

2. Quantitative Analysis of Teacher Allocation

This section aims to provide an overview of teacher allocation to schools in African countries based on quantitative data on teachers in primary and secondary education (pupils, pedagogical groups and so forth). The analysis takes into account only those teachers who are managed by and allocated to public schools by government authorities. This section contains two parts, one for primary education and the other for secondary education. Due to a lack of data on preprimary education, this sub-sector could not be analyzed.

2.1. Teacher Allocation in Primary Education

Analysis of Pupil-Teacher Ratios (PTR)

Pupil-teacher ratios (PTR) for primary education are obtained by simply dividing the number of pupils in the cycle by the number of teachers working in this cycle.¹

Primary PTRs enable the analysis of at least two facets of teacher allocation:

- i) The first is whether there are a sufficient number of government-managed teachers to meet the demand for public education at the **national level**. Indeed, the calculation of the PTR at the national level enables to determine the number of pupils per teacher in the country at large and to observe whether governments have a sufficient number of teachers relative to national standards. The PTR can of course be analyzed in terms of teacher status, qualifications and preservice training if this data is available.
- ii) Beyond this analysis at the national level (which tends to indicate a country's capacity to address teacher needs on a globally theoretical level), the second facet is to determine at the **deconcentrated** level (by province, district, community and school) whether in view of the average national PTR, teachers are allocated in a relatively equitable way throughout the country, or whether there are major disparities by province, district, community, school and so on. Equity in the distribution of teaching personnel is a crucial factor in the effective use of public expenditure in the education sector.

At the national level, it is possible to see whether the number of government-managed teachers allocated to public schools is sufficient for the country at large in view of education policy targets set by the country's policy makers. If the PTR is lower or equal to the set target, there is a sufficient number of teachers (without taking into consideration teacher qualifications and training). On the other hand, if the PTR is higher than the target set for the education system, there is a lack of teachers and the education system should recruit more staff. Figure 1 presents the average national PTRs in public primary education for some African countries.

¹ Only teachers effectively in class are considered here, generally referred to as "chalk in hand" teachers.

Figure 1: Pupil-Teacher Ratio (Government-Allocated Teachers) in Public Primary Education, Various African Countries, 2014 or MRY



Source: IIEP/Pôle de Dakar indicator database.

Figure 1 shows that the PTR varies considerably from one country to another. Although the ratio is lower than 20 in the Seychelles, Tunisia and Mauritius, it is over 60 in Rwanda and Mali. Not only does this reflect different allocation policies (different PTR targets are set in these countries), but also and above all differences in the capacity to recruit enough teachers to meet pupils need. For guidance purposes, the Fast-Track Initiative framework recommended in its day a reference value of 40 pupils per teacher. Based on this recommendation, it appears that of the 36 countries presented here, 18 countries succeed in recruiting a sufficient number of teachers whereas 17 countries fail to achieve this target². This raises several questions, among which: Have countries set a target? Are the targets countries set realistic? Do countries have the capacity and means to meet the targets set? What difficulties are countries confronted with when recruiting (too few candidates, overly demanding procedures and so on) and deploying teachers? Furthermore, beyond the challenge of providing a sufficient number of teachers and in particular to their qualification and preservice training.³

² It is however worth noting that the figures presented here include all teachers working in public schools, regardless of whether they are government-paid or not. If one took into account only government-paid teachers, that is to say civil servants and other teachers whose salary costs are covered by the government budget, ratios would certainly be higher.

³ Indeed, if a country has a sufficient number of teachers managed and allocated by the government, but the vast majority are not qualified to teach because they have not undergone the required preservice or in-service teacher training, the quality of learning may well suffer as a result. On the other hand, a country where the vast majority of teachers are qualified and with a national PTR over 70 is also at risk of jeopardizing pupils' learning outcomes.

At sub-national level, other disparities in teacher allocation may appear. Indeed, a sufficient number of teachers in the education system does not necessarily mean that their allocation among provinces, districts, communities and schools is equitable. The average PTR at the national level can conceal considerable disparities from one school to another, some schools being over-staffed (with PTRs considerably lower than the national average), while others have a shortage of teachers (with PTRs considerably higher than the national average). It thus suffices to calculate the PTR per geographical area or per school to realize to what extent the values resemble or differ from the national average. Table 1 presents the case of Uganda.

24% of Districts Have a PTR < 50		28% of Districts Have a 50 <= PTR < 60		30% of Districts Have a 60 <= PTR < 70		18% of Districts Have a PTR >= 70	
Kalangala	35	Isingiro	51	Bulambuli	60	Budaka	70
Mbarara	38	Yumbe	51	Adjumani	60	Kumi	72
Wakiso	38	Kasese	51	Soroti	61	Tororo	72
Kabale	39	Ntoroko	51	Katakwi	61	Otuke	72
Rukungiri	39	Kiruhura	52	Sironko	63	Pader	73
Bushenyi	40	Luwero	52	Abim	63	Zombo	73
Sheema	40	Kalungu	52	Ngora	64	Nwoya	74
Kiboga	41	Kween	52	Arua	64	Buvuma	74
Mityana	42	lganga	53	Bugiri	64	Alebtong	74
Kampala	43	Butambala	53	Maracha	65	Butaleja	74
Mitooma	43	Masindi	53	Kibaale	65	Kyegegwa	74
Ibanda	44	Nakaseke	54	Amolatar	65	Kaberamaido	75
Nakasongola	44	Gomba	54	Busia	65	Lamwo	76
Rakai 4		Bududa	55	Mayuge	65	Kibuku	76
Moyo 45		Buikwe	55	Amuria	65	Amuru	79

Table 1: PTR by	v District in Uganda.	Public Primary	Education.	2010
	j Bistrict in Ogunuu,		Laacation	-010

Source: Uganda TTISSA Diagnosis, 2010.

Although the national PTR in public primary education stands at 55 in Uganda, some districts have a PTR under 50 (the lowest being Kalangala with a PTR of 35), whereas others have a PTR of over 70 (the highest being Amuru with a PTR of 79). It can thus be concluded that some districts in Uganda are overendowed in teachers whereas others display a shortage, relative to the average national PTR. In a situation where teachers are allocated equitably among all districts, each district would have approximately the same PTR (or close to the average national PTR). One would expect that considerable differences might also be observed within each district if PTRs were analyzed at the school level.

This analysis at the school level was carried out in Benin in 2011 (see Figure 2 below). In this country, the PTR for public primary schools varies from less than 10 to over 140. This reflects the magnitude of the issue of teacher deployment and clearly points to the fact that teacher allocation practices are far from uniform from one school to another.



Figure 2: Pupil-Teacher Ratio, by Public Primary School, Benin, 2011

Source: Authors' calculations, based on data used in the Benin CSR, 2014.

Analysis of the Degree of Randomness in Teacher Allocation

To analyze randomness in teacher allocation, the R-squared indicator is generally used to define the consistency between the number of teachers allocated to a school and the number of pupils enrolled in this school. In mathematical terms, it is the share of the differences in the number of teachers between schools that is explained by the number of pupils enrolled. This indicator always has a value between 0 and 1 (or 0 percent and 100 percent). The closer it is to 1, the stronger is the relationship between the number of teachers and the number of pupils; that is to say that schools with the same number of pupils have similar (not necessarily equal) numbers of teachers. The logic behind this distributive equity analysis is that the more pupils there are in a school, the more teachers it should have. In other words, and with the aim of maximizing both the efficiency of public education expenditure and its equity, the number of teachers allocated to each school should be proportional to the number of pupils. Indeed, a class with 40 pupils and one teacher and another with 5 pupils and one teacher do not present the same teacher salary cost per pupil (generally speaking, if one assumes that both teachers have the same salary, the salary cost per pupil for the class of 5 pupils will be 8 times higher than the salary cost per pupil for the class of 40 pupils).

Hence, the complementary 1–R-squared represents the degree of randomness in the posting/allocation of teachers, namely the percentage of all the reasons involved in the teacher allocation decision which are not based on a need reflecting the number of pupils actually enrolled (examples include non-statutory class sizes, the lack or inobservance of rules and procedures and so forth). The closer the degree of randomness is to 0, the more equitable and rational teacher allocation is in schools from the standpoint of the number of pupils enrolled. On the other hand, the closer the degree of randomness is to 1, the more inequitable the allocation. The degree of randomness can be calculated at the national level but also at the deconcentrated level (by province, district, community and so on).

Figure 3 presents the correlation between the number of pupils and the number of teachers by public primary school both in Zimbabwe (2014) and Benin (2011).

Figure 3: Correlation between the Number of Pupils and the Number of Teachers, Public Primary Schools, Zimbabwe (2014) and Benin (2011)



Interpretation: Each dot represents a public school.

Source: Benin CSR, 2014; Analysis of Equity and Efficiency of Public Education Expenditure in Zimbabwe, 2016 (to be published).

The analysis of the two graphs reveals that the number of teachers allocated to public primary schools in Zimbabwe in 2014 is relatively proportional to the number of pupils, even though all schools with the same number of pupils do not always have the same number of teachers, of course. In the case of Benin in 2011, it appears that the relationship between the number of pupils and the number of teachers is much less obvious, if not to say virtually inexistent. Indeed, in Zimbabwe, the R-squared indicator stands at 0.92, which means that 92 percent of the variation in the number of teachers allocated to public primary schools is attributable to the number of pupils. This means that only 8 percent of the distribution of teachers among schools is attributable to other factors or reasons. In sector analysis jargon, these factors are quite rightly referred to as random as they are elements which create disturbance in the consistent distribution of teachers. Thus, the degree of randomness in teacher allocation in Zimbabwe in 2014 stands at 8 percent (that is to say 100 percent – 92 percent).

As opposed to what is observed in Zimbabwe, the R² indicator in Benin is 0.48 in 2011, meaning that only 48 percent of the total number of teachers allocated to public primary schools in this country is attributable to the number of pupils. This implies a degree of randomness in teacher allocation to schools of 52 percent (that is to say 100 percent - 48 percent). Thus in Benin, 52 percent of teacher allocations to public primary schools in 2011 were attributable to criteria other than the number of pupils enrolled in these schools. It is thus possible to observe that among schools with the same number of pupils (for example 200), some schools may have 1 teacher whereas others have 11.

The degree of randomness in teacher allocation is high and possibly even preoccupying in many African countries. Very few countries' degree of randomness is relatively satisfactory.



Figure 4: Degree of Randomness in Government Teacher Allocation, Public Primary Schools, Various Countries

Source: IIPE/Pôle de Dakar indicator database.

This graph reveals that countries such as Cape Verde, Zimbabwe, Sao Tomé-and-Principe, or even The Gambia display degrees of randomness which are relatively satisfactory. On the other hand, countries such as South Sudan, Benin, Ghana and many others have degrees of randomness which are too high. Consciously or not, these countries certainly use criteria other than the number of pupils per school when allocating teachers. This raises the question of whether the procedures involved in this allocation process are based on other pedagogical factors, and how legitimate they may be in terms of the equity and effectiveness of resource allocation to schools.

This view of teacher allocation to schools and the degree of randomness in the process at the national level can be refined at the deconcentrated level, as it can be observed that some education systems' local authorities allocate their teachers to schools in an equitable way, whereas others do not. In the case of Benin for example, which has the highest degree of randomness (52 percent), considerable variations both in terms of PTRs and the degree of randomness can be observed from one school district (municipality) to another. Figure 5 presents the situations which may arise as a result.



Figure 5: Degree of Randomness and PTRs for Public Primary Schools, by School District, Benin, 2011

Source: Authors' calculations based on data used in the Benin CSR, 2014.

The dotted lines in Figure 4 show mean values, the vertical line representing the average PTR and the horizontal line representing the average degree of randomness at the national level. These two intersecting lines form four sections A, B, C and D:

- Section A: school districts in this section are better endowed in teachers compared to the national average, but allocate them inequitably and inconsistently.
- Section B: school districts in this section are less well endowed in teachers compared to the national average and also allocate them inequitably and inconsistently.
- Section C: school districts in this section are less well endowed in teachers compared to the national average, but they succeed in allocating them relatively equitably and consistently (compared to the national average).
- Section D: school districts in this section are better endowed in teachers compared to the national average, and they succeed in allocating them relatively equitably and consistently (compared to the national average).

Among the reasons mentioned by officers responsible for teaching staff management in Benin, one explanation directly connected to a situation of inequity and inefficiency is the fact that teacher allocation is not based on the number of pupils but on the existence of a pedagogical group. The primary cycle is organized in such a way that one teacher is responsible for one pedagogical group, meaning that school-level teacher allocation decisions are based on the number of pedagogical groups.⁴ Taking this constraint into account raises a number of questions:

- Is the PTR the most appropriate indicator to assess and appraise teacher allocation?
- Which criteria should determine the creation of pedagogical groups, knowing that this will immediately lead to a teacher requirement?
- How appropriate is it to allocate a teacher to a pedagogical group comprised of a small number of pupils (five pupils for instance)? Would it not be more efficient to regroup several

⁴ A pedagogical group is defined here as being all the pupils taught by a same teacher in a classroom at the same time, regardless of whether these pupils are in the same grade or not.

pedagogical groups with few pupils, so as to create one single class with one single teacher, especially in sparsely populated rural areas?

Addressing the issue of the criteria used to create one class with one teacher based on a pedagogical group takes on even greater importance when it is noted for example that in Chad in 2014, schools with the same number of pupils do not have the same number of pedagogical groups, and thus do not formulate the same teacher requirements.





Source: Chad CSR, 2016 (to be published).

In 2014, among public primary schools in Chad with six pedagogical groups for example, some had 1 teacher whereas others had up to 15 teachers, or more. Furthermore, among schools with five teachers, the number of pedagogical groups varies from 5 to 12. The example of Chad is representative of situations in other countries.

This latest observation, combined with the aforementioned limitations of PTRs, raise the question of how teacher requirements should be determined and how to ensure that the selected procedure does not create inequity and inconsistency in teacher allocation, and thus in the utilization of public education expenditure.

2.2. Teacher Allocation in Secondary Education

Up until now, the discussion has focused on the primary cycle which is most often organized in such a way that one teacher is responsible for one class (or pedagogical group). This is not the case with the other education cycles. In the secondary cycle, a pedagogical group is taught by several teachers, each being responsible for one subject (or sometimes two). It thus becomes relevant to analyze the allocation of teachers per subject; and also to take into consideration the number of teaching hours programmed for each subject and the number of contact hours expected of each teacher. In such a context, the analysis of allocation using pupil-teacher ratios becomes inappropriate, although it is sometimes resorted to.

An approach which seems more appropriate for the analysis of teacher allocation in the secondary cycle is to compare whether the total number of teaching hours that teachers can deliver succeeds in covering the number of contact hours pedagogical groups are entitled to in each subject. Here again, the analysis is often difficult to conduct due to the fact that adequate data is not often collected. At best, it is possible to examine whether the total number of teaching hours covers the total number of contact hours due to pupils (and more precisely to pedagogical groups), all subjects combined. Table 2 illustrates the situation in three countries: Chad, Côte d'Ivoire and Uganda.

Table	2: Ratio betwee	n Theoretically	Available	Teaching	Hours a	and C	Contact	Hours	Due to	o Pupils,
Chad,	Côte d'Ivoire and	l Uganda, 2010	or MRY							

Country	Lower Secondary	Upper Secondary		
Chad (2012)	0.96	1.23		
Côte d'Ivoire (2014)	1.48	1.56		
Uganda (2010)	1.03	2.34		

Source: Côte d'Ivoire CSR, 2016 (to be published), Uganda TTISSA Diagnosis, 2010 and Chad CSR, 2016 (to be published).

Apart from the case of lower secondary in Chad where the theoretical number of teaching hours based on the number of teachers did not suffice to cover pupils' needs, in all other cases it seems that the theoretical number of teaching hours available is higher than the theoretical number of pupil contact hours required. It can thus be concluded that for these levels of education in the countries examined, public education budgets are sufficient to provide the theoretical number of teaching hours required (or indeed more). However, these national-level averages conceal disparities and inefficiencies at deconcentrated levels.

The situation becomes more problematic if an analysis per subject is carried out. Some subjects very often suffer from a lack of teachers (and thus a lack of theoretical teaching hours available), compared to other subjects. Despite a sufficient number of teaching hours in the secondary cycle, problems subsist in several countries due on the one hand to a lack of teachers in some subjects, and on the other to the suboptimal utilization of available teachers. Table 3, published by the Ministry of Education in Uganda in 2012, is quite revealing of how difficult it is to recruit teachers in certain subjects, in particular science subjects.

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Table 2.			Dooruitmoont	of Nour	Taaahawaim	Ilaamdam	Dubling	Cocoodom	Cabaala	2012
Table 5:	Overview	oi the i	Recruitment	or new	reachers in	Ugandan	PUDIIC 3	secondarv	SCHOOIS.	
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Subject	Number of Positions to be Filled	Number of Applications	Number ofNumber ofEligibleApplicantsApplicationsRecruited		Percentage of Positions Filled
Mathematics	70	67	54	39	56%
Chemistry	60	38	34	15	25%
Physics	38	36	33	14	37%
Biology	110	47	43	22	20%
Agriculture	9	300	60	9	100%
English	58	82	66	50	86%
Kiswahili	58	104	84	58	100%
Total	403	674	374	207	51%

Source: Uganda TTISSA Diagnosis, 2010.

In 2012, Uganda published job advertisements for teachers in various subjects. Although the number of positions to be filled per subject varied, a total of 403 positions were to be filled. Having received

applications (674 in total), analyzed these applications to identify eligible candidates (374 in total) and interviewed the latter, only 270 positions could be filled (hence 51 percent). Apart from Agriculture and Kiswahili for which 100 percent of the positions were filled, positions remained vacant in all the other subjects. Although for literary subjects the number of eligible applicants was greater than the number of positions, for science subjects the number of eligible applicants was lower than the number of positions to be filled.

In such a context of teacher scarcity in certain subjects, it is highly likely that disparities will occur in terms of deployment (measured here by the R² between the number of theoretical teaching hours and the number of required pupil contact hours). Figure 7 shows the degree of randomness in teacher allocation in public secondary education in Togo.





Source: Togo CSR, 2014.

The graph shows that lower secondary schools with an identical need in terms of weekly load for pupils (for example 400) are allocated a number of teachers enabling to cover a variable number of theoretical teaching hours (between 200 and 500). In this specific case, the degree of randomness stands at 0.27 which means that 27 percent of teacher allocations in Togolese public lower secondary schools are attributable to factors other than the number of contact hours pupils are due.

In secondary education, where each teacher is responsible for a specific subject, several reasons (dependent on their will or not) may prevent teachers from delivering the number of contact hours expected of them. One of these reasons is that the organization of the school they work in may prevent them from delivering the number of contact hours required. For instance, a philosophy teacher posted in a school with only one Grade 12 class can at most provide six hours of teaching in their subject. What should be done with the remaining time they are required to work for? What does the legislation stipulate in such cases? Analysis carried out using data provided by school headmasters reveals that when the total number of undelivered teaching hours is summed up at the national level, the loss rate is relatively high. In Togo and Burkina Faso, it is estimated that approximately 28 percent of teaching time could not be provided during school years 2011 and 2014, respectively. As is often the case, this national average conceals considerable disparities, some areas being more disadvantaged than others. All these realities contribute to reducing the level of teacher utilization and hence reduce the effectiveness and efficiency of the utilization of public education resources.

3. Highly Variable National Teacher Allocation Practices

With more than 14 years' experience in education sector analysis on the African continent, the IIEP/Pôle de Dakar was able to observe certain differences in teacher allocation practices. In brief, these differences fall into three categories: practices lacking rationality, rational practices and intermediate practices:

- Practices lacking rationality: this is the case of countries where there do not seem to be any clear rules pertaining to the posting of teachers. In other words, the determination of teacher requirements is based on declarations by education officers only. Current monitoring procedures do not question the needs formulated. The drawback here is that this apparent absence of rules means that players act as they see fit. In this way, two education officers faced with the same situation may express different teacher requirements, which inevitably leads to a lack of consistency in teacher allocation.
- Rational practices: this is the case of countries where clear and precise rules and tools exist, and are used and complied with. By applying these rules, anyone can calculate without ambiguity how many teachers a school needs to function according to set standards. In these situations, there is very often a fixed formula which education officers simply apply. Furthermore, the practice is even stricter and cannot be circumvented when a teacher allocation support tool is programmed strictly in compliance with this rule (for example: posting a teacher to School A will not proceed and be approved if the tool does not confirm the need for a teacher in School A).
- Intermediate practices: this is the case of countries who do not fit into either of the previous categories. In other words, rules exist, but their application leaves room for interpretation. Thus, when faced with a same situation, two education officers could express different teacher requirements. Or else, they may interpret the rules in the same way but the management tool still allows the allocation of teachers to schools where they are not needed.

Depending on which of the three situations it finds itself in, each country shall have to take different measures to bolster or correct teacher allocation procedures. When confronted with extreme and widespread laxity, it would be appropriate to place emphasis both on the need to establish rules and procedures which are shared with and understood by all stakeholders, as well as insist on their strict application. If on the other hand rules and procedures exist but are only loosely applied, in-depth analysis of the underlying reasons for these implementation difficulties should be carried out. It is interesting to note the fact that comparisons of teacher allocation situations that should exist considering statutory texts, and the effective allocation situations observed in the field frequently reveal disparities. Figure 8 presents the case of Uganda in 2010.

Figure 8: Distribution of Ugandan Public Primary Schools, by Number of Teachers Theoretically Required, 2010



Source: Uganda TTISSA Diagnosis, 2010.

Although Uganda is a country where clear rules exist, only 17 percent of schools have the theoretically expected number of teachers; there are many schools with an excess or shortage of teachers (37 percent and 46 percent respectively). This observation, which is frequent among countries, raises the following questions:

- Are the rules conveyed in such a way that all stakeholders are aware of them? Awareness should not boil down to awareness of the principle. Indeed, in the aforementioned case, all education players know there is a strict procedure to be followed, but the problem remains.
- ii) What difficulties do players encounter regarding the implementation of these rules, when they do exist?

4. Questions to be Addressed

The findings presented throughout this paper give rise to a set of questions which should be addressed to improve teacher allocation and utilization:

- 1. What represents a situation of suitable teacher allocation?
- 2. Which indicators are appropriate to identify cases where teachers are properly allocated?
- 3. How should data collection systems be set up to provide information about and monitor teacher allocation?
- 4. What measures are taken to ensure that stakeholders are familiar with teacher allocation procedures?
- 5. What criteria can be used to appraise whether teacher allocation procedures may be a source of inequity?
- 6. What tools can be implemented to help systemize teacher postings?
- 7. And so on...