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Schooling Put to the Test of Performance-Based Financing in Cameroon: A Contribution to the Understanding of the Model Applied in the Kadei Division

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Abstract:- This article aims to make a diagnosis of the impact of performance-based financing on the difficulties of schooling in rural areas. It is inspired by the conditions of the quality of education highlighted by the World Education Forum in Dakar in 2000, to identify the shortcomings that hinder the optimal functioning of education. The methodology used is propensity score matching which consists of comparing the results of two groups of pilot and control schools to analyse the impact by estimation.

Keywords:- *Performance-based financing, quality of education, schooling, new public management.*

I. INTRODUCTION

Educational systems have long represented the standard and undisputed model of regulation, both for market economies and for planned economies. But, for about twenty years, they have been confronted with internal and external shocks, both qualitative and quantitative: internal performance often deemed weak [1], faced with the phenomenon of dropouts [2], external performance called into question by the existence of shortages and surpluses or challenged by the problem of one-upmanship in education or downgrading [3]. Moreover, placed in competition, in difficult economic, technological and health contexts (COVID-19 pandemic), with other social needs, in particular those of social protection, public education systems are the subject of much criticism and are faced with the turmoil of reform. Faced with the dynamics of the evolution of economies and the urgency of competitiveness of human resources, the authorities therefore face the various constraints of modernization and globalization of education systems. These must imperatively adapt to the requirements of the productive sectors requiring skilled labour. It is therefore a global dynamic in which all the countries of the world are engaged with or without the consent of the authorities.

In Africa, from 1961 to 2002, numerous meetings at the highest level were devoted to the future and development of education systems. Since then, decision-makers have consistently maintained that education and training must play a key role in the development of their young nations [4]. Even today, faced with the many challenges posed to the world, Africa would benefit from taking into account education which, according to [5],*"…plays anincreasingly central role to the success of nations and people"* in general and to their economic, social and cultural development in particular. The World Education Forum held in Dakar in 2000 not only stressed the need to achieve education for all (EFA), but also recommended "improving *in all its aspects the quality in education and ensure its excellence so as to obtain recognized and quantifiable learning outcomes for all (…)".* This forum emphasizes that the quality of education is subject to eight conditions:healthy, well-nourished and motivated students;well-trained teachers and active learning methods;appropriate teaching facilities and materials;adopted curricula that can be taught in a local language and that build on the knowledge and experience of teachers and learners;an environment that not only encourages learning, but is welcoming, healthy and safe; takes gender into account;a clear definition a precise assessment of the expected learning outcomes, particularly in terms of knowledge, practical skills, abilities and values;participatory governance and management;respect for local communities and culture and a desire to partner with them.

In the light of the criteria of the quality of education raised, this concept could remain a wishful thinking for a good number of countries in Africa south of the Sahara. Indeed, the dynamics of the practice of the quality of education in its entirety comes up against many pitfalls which can take on a socio-political aspect, but above all a macroeconomic one.

II. CONTEXT AND PROBLEM STATEMENT

The training of human capital is the raison d'être of education. Indeed, the human resource that the State needs to achieve its various objectives requires knowledge and skills that are backed by quality education. The positive relationship between education and development, endorsed by classical thought, has been invoked by the promoters of human capital theory to persuade that the dissimilarities in economic growth between countries lie in the heterogeneous divergences of human capital. Education being an element of the latter, the disparities in the performance of the education systems of the States are mainly justified by the disparities in the accumulation of human capital. The human capital theory of [6] ,[7] and [8] began to gain momentum in the 1960s and represents the legitimate modern approach to discussing educational

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issues. The outcome of this paradigm is that it highlights the impact of the accumulation of human capital on the productivity of workers and their remuneration. Education and training are perceived there as investments that the individual must rationally make to represent a productive capital consubstantial with his person. This means that education is the very keystone of a nation's growth and development. Its financing at a cost of hundreds of billions sufficiently reflects its importance. In Cameroon, education is mainly financed by the state and households. There is also external funding from development partners, the most important of which is the Global Partnership for Education (GPE). During the years 2007 and 2017, for example, the GPE contributed financially in the education sector to the tune of 100.7 million dollars.

The budgetary resources provided for by the education sector strategy (ESS) 2013-2020 have increased normally to the point of reaching the bar of 20% of the total budget in 2020. On the other hand, a light shed on the previous years indicates an abyssal gap between achievements and objectives. During the last twenty years, we have been able to observe an increase in public expenditure on education in value terms. In 2017, the education sector benefited from an amount of 608.8 billion FCFA. However, the share of education in the public budget has not increased. The latter rather fell over the period 2009-2016, dropping from 20% to 13.1%. Between 2003 and 2017, education spending represented a relatively stable share of GDP. This policy of budgetary reduction of financing is greatly opposed to that of developed countries which devote large resources to education expenditure (schools, teaching materials, teachers, infrastructures etc.), even though we do not have enough information on the real effect of education expenditure on students' academic performance and the development of their skills.

Admittedly, some studies believe that the effect of education expenditure on school performance is proven, but the relationship between education expenditure and school efficiency is not always positive in studies related to the financing of education. Indeed, the results of several studies are, to say the least, contradictory and unconvincing on the direct relationship between expenditure and performance. When schools do not transform resources into performance in a real way, educational policy becomes more complex. This is why reservations are expressed regarding the relevance of school resources in the education production function ([9];[10]). However,[11] are opposed to work that relies on aggregated data on school resources. They think that these works are more oriented to justify the positive link between the resources of schools and performance with regard to the level of aggregation used. In reality, the level of funding for educational institutions is generally conditioned by the determinants that directly influence educational performance. Consequently, it is not easy to separate the effects of spending on school performance.

If the financing of education presents itself at a given time as a panacea for improving the quality of education, the fact remains that the model for managing funds in this sector seems problematic with regard to the imbalance noted in the distribution of resources which does not always take into account the substantial specificities of the different regions. Indeed, the distribution key for traditional education expenditure harbours several weaknesses that may relate to issues of school governance in the Kadei divisionin particular. We see in practice that this distribution is backed by inequalities that hinder the process of public financing of education which is already a priori unfavourable to ZEPs (North, Far North, Adamaoua, East...). Allocations to non-teacher primary schools per student are very low compared to other regions. However, the problems posed at the operational level are sometimes more expressive in ZEPs than in urban areas. It is therefore obvious that public policies that are too centralized in the direction of educationseem to be deficient at several levels and do not always make it possible to achieve the expected objectives. As a result, there is a decline in quantity and quality indicators which is reflected in the drop in academic performance, multifaceted complaints from actors at the forefront of education (teachers, students, parents, etc.), lightness in monitoring and evaluation of public expenditure on education.

Almost all of the schools in the Kadéi divisionare characterized by problems of pedagogical management which run counter to the requirements of the quality of education. Indeed, the pupil/teacher ratio in this locality is 108 pupils for one teacher [12]. The relationship that binds the teacher to the student should be sacred, especially in a context where the two actors are in a situation of education. At least the provisions in terms of respecting the numbers are taken to guarantee the sanctity of the sanctuary that is the classroom. To this end, Article 14 of Joint Order n^{0}120/B1/1464/AC/MINEDUB/MINESEC of August 19, 2022 sets the numbers at 60 students per class for one teacher. This number is already difficult to respect even in the big cities of the country where the conditions of education are more favourable.

Thanks to free public primary education in Cameroon in 2000, the enrolment rate in primary schools in the Kadeidivision has increased. Parents who were unable to pay school fees for their offspring had a smile on their face. However, there is a remarkable increase in the number of pupils at the start of each school year. Towards the end of the same term, a good part gives up. The parents explain this phenomenon by the high cost of the PTA (parent teacher association) fees, in addition to the poverty that forces them to devote themselves to income-generating activities (agriculture and gold panning) taking their children with them. (Girls of school age and in school). The enrolment rate in the schools in this division is strongly influenced by early school leaving. It transpires precisely that more than half of the schools in the division are accustomed to this phenomenon. The consumption of narcotics, juvenile prostitution, and the lack of a social model are, among other things, the factors that keep young people away from school.

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Logistical problems are not left out. They also arise with acuity in several schools of the same division. While in some schools the tablebenches are insufficient [12], in others they simply do not exist. Students copy their lessons on tree trunks or on their thighs. Though some students succeed in making results in deleterious educational conditions, the fact remains that these remain the exception that proves the rule.

The state of infrastructure is not left out. As in several schools in Cameroon, this issue is still considered one of the factors limiting the production of satisfactory school results. Indeed, the equipment is revealing in more ways than one of the quality of education. Most of the public primary schools in this locality should not be called as such. The classrooms, sometimes built without roofs in certain villages using local and temporary materials, house two or three levels. This situation exposes teachers and students to bad weather of all kinds; distancing them even from the objective which is teaching. It should also be noted in passing that the precarious conditions in which the learning takes place do not favour the fluidity of communication between the pupil/teacher couple insofar as the deafening din of the children stifles the hearing. This necessarily calls into question the quality of the teaching provided. [13], show that school infrastructures explain 16% of the variation in the academic success of pupils in primary education. Especially since these same infrastructures considerably influence the quality of the management of the top management of educational establishments insofar as the conditions for implementing the decisions taken at the strategic level are not met at the operational level.

Quality indicators (enrolment, school dropout, infrastructure, class size, parity between girls and boys, school results, etc.) sufficiently illustrate this situation. However, several actions by governments and international partners have been taken to improve it and fight against “non-quality”. It is, among other things, the legal arsenal which postulates the constitutional consecration of education as a fundamental mission of the State (preamble to law n°96/06 of January 18, 1996), the legitimization of education as a major national priority since the orientation law of April 14, 1998, the compulsory nature of primary education and the cancellation of school fees in public primary education since the year 2000, the permanent monitoring of the contribution of private educational establishments with the missions of education with the law of July 22, 2004 or the consideration of children with special educational needs, thanks to the law of April 13, 2010 on the protection and promotion of disabled people, not forgetting the law n°2004/017 of orientation of the decentralization which transfers competences of management of education and training to the decentralized administrative divisions.

Alongside this normative framework, ambitious initiatives have emerged. This is the case ofEducation and Training Sector Strategy Document (DSSEF), the Project for the Improvement of Equity and Quality of Education (PAEQUE) whose main mission has been to reduce disparities in the education system in priority education areas, PASEC which is responsible for analysing and finding solutions to the shortcomings of the local education sub-systems. More recently, the Support Program for the Reform of Education in Cameroon (PAREC) set up by the International Development Association (IDA), has set itself the objective, like the others, of achieving quality education. This objective is part of the logic of correcting the problems of pedagogical equity which is struggling to take shape. Thus, it proposes Performance-Based Financing (PBF) as a solution likely to achieve the objective of quality education, even though this model has been tested in several establishments in the Kadeidivision since 2012.

PBF is an approach implemented in the education sector appears as a financing strategy materialized by a contractual relationship between the various actors, and through which the providers and structures of this sector are financially or materially rewarded according to the 'achievement of objectives. It is a matter of using the available financial resources to seek to obtain better results and a better public educational service for the beneficiary populations. This funding differs from traditional input-type funding where learning structures receive the inputs necessary for their operation without any contractual obligation of results. The PBF thus makes it possible to finance learning and educational services according to the performance achieved and the indicators defined beforehand.

Several models find their field of application in the dynamics of solving the problems of educational policies and organizational management. Indeed, neoliberal theories induce a diversity of theories of public administration which, while varying in detail, have certain common claims. Thus, the FBP leans on the one hand on the new public management (NPM). Functioning of the market, including the perspectives of private governance [14]. In reality, it acts as if competition, which is always understood as the foundation of market efficiency, takes the place of a political principle.

If it is true that the rigidity of the administration, its lack of flexibility, its demotivating sense that characterizes NPM theory are proven, it is also true that these postulates are not always verified and verifiable in organizations in general, and in schools in particular. It would be wrong to always consider the private sector as being free from all constraints. Indeed, collective agreements, in some cases, can perform a similar or even more rigid function than public administration. Moreover, the public sector should not always be viewed as inflexible. In fact, since he employs several contract workers, this implies that the management of resources takes onsome degree of flexibility and gives managers some significant leeway. It is therefore important to emphasize that the status of the

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public service is not necessarily demotivating for its employees insofar as there are administrative mechanisms within it which are part of a logic of employee motivation to a performance perspective. This translates into promotions, financial and non-financial incentives that have a positive impact on the performance of the latter. The management mechanisms put in place by the FBP highlight the NPM theory through the subsidies that are distributed to the various actors of the educational community in order to improve the various performance indicators through the purchase of performance.

Furthermore, PBF is also based on the applied theory of change of [15]. It is an approach that explains how a given intervention or set of interventions can achieve change in an organization. [16],this paradigm is part of a dynamic description of the achievement of objectives set by organizations. This pragmatic approach facilitates the evaluation and measurement of the social impact of a social event [17]. In practice the applied theory of change aims to measure and analyse the impact of PBF in the education sector. It simplifies the selection of evaluation questions and appropriate indicators, just as it allows the comparison of desired results with achieved results. In the case in point, the theory of change will make it possible to compare the results of the pilot establishments after implementation of PBF with those of the control establishments on the basis of the chosen indicators. However, for [17],the results will not always be there as mistakes can be made during the implementation of the project. Indeed, the hypotheses between the activities and the targeted changes may be erroneous, just as the hypotheses may not be sufficiently developed and verified in the organizations in question due to non-compliance with the contract which binds the various actors.

In reality, the implementation of PBF cannot be done without contracts, without a contractual commitment that binds the actors of the different parties with a view to achieving the results fixed in advance. This means that the contract is the very keystone of the implementation of PBF. It leans on the theory of the agency which presents the organization as single actor of the divergences of potential interests between the various partners who are the managers, the shareholders and all the other actors. [18] presents this paradigm as: "a contract by which one or more persons (the principal) engages another person (the agent) to perform on their behalf any task which involves a delegation of some decision-making power to the agent ". It is indeed a nexus of contracts established between the various stakeholders, namely the development partners or the State (main) and the schools (agent), who have partly divergent interests. By delegating their decision-making power to managers, shareholders must adopt both disciplinary and incentive measures for controls and reduce the negative sequences that are due to information asymmetries between them. In order to protect the profitability of their financial investments by reducing the costs generated by these measures, while controlling the managers. However, public policies are generally arbitrary and based on tensions and contradictions. Anything that makes it difficult for the main actors of PBF to respect the contracts (the performance purchasing agency, the service providers, the regulator (State) and the community that is the beneficiary) especially in a context where the State Jacobin is at the heart of all decisions. The implementation of performance-based financing thus requires the autonomy of establishments in terms of management because if the problem of educational equity sought is acute in the Priority Education Zones, the fact remains that "Non-Priority Education Zones" are also affected.

Indeed, for more than a decade the education quality indicators have looked great in the pilot schools of the PBF project in the Kadeidivision. These schools are positioned as the most efficient and therefore as the best in terms of quality of education. Their position at the top of the chains of quality and quantity indicators in this division contrasts radically with that of the control schools in the same division. Indeed, the enrolment rate is around 74% in the pilot schools as opposed to 45% in the control schools, the school dropout rate is estimated at 10% in the pilot schools compared to 65% in the control schools. The enrolment rate for young girls is estimated at 71% in the pilot schools as opposed to 38% in the control schools. The school success rate rises to 81% in the pilot schools compared to 62% in the control schools. The abyssal gap between the two groups of schools thus raises several questions. Why are education quality indicators better in pilot schools than in control schools? What is the added value of PBF in structuring the management of pilot schools? In other words, what does the PBF bring back to the classic management of pilot schools to the point of having a significant impact on the quality of education, especially when we know that at the base, all the schools are supposed to benefit from the same instruments management, the same resources: human, material and financial?

III. METHODOLOGY

Our population is made up of primary, nursery and communal schools in the Kadeidivision. This divisionhas 248 schools including 218 public schools, 17 private schools, 13 communal schools. It also has 52 nursery schools including 45 public and 7 private. Head teachers and principals form a heterogeneous population because they are made up of men and women. For the sake of efficiency in data collection, goal-oriented sampling was combined with quota sampling.

A. Goal-oriented sampling

We initially opted for a sampling oriented towards the objective or *"purposivesampling"*. This entails obtaining a sample which has certain specific characteristics with regard to the objectives of the study. Indeed, we go to those who are able to give useful answers to the hypothesis test [19]. In addition, directed sampling has the specificity that it leads the researcher to the best-documented resource persons on the subject to be treated. In this case, the principals of the pilot and control schools that make up our sample are those to whom the questionnaire was sent.

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B. Sampling by quotas

Quota sampling is one of the most common forms of non-probability sampling. It is carried out until a specific number of units (quotas) for various subpopulations have been selected. Since there are no rules that govern how one should go about meeting these quotas, *quota sampling* is really a means of meeting sample size goals for certain subpopulations. For this research, it is a question of integrating all the primary and nursery schools of the division in proportion to their level of representativeness. Clearly, the majority school sectors (public, private, municipal) will have the most representative samples (quotas).

C. Determination of sample size

For the sake of representativeness of our sample, we will draw inspiration from the work of [20] for which the reliability of a sample is estimated at 5% of the parent population. However, [19]believe that *"the larger a sample, the more likely it is to reflect the population".*

D. Presentation of the data analysis technique

To achieve the objectives of this study, a model will be used: that with the average effect of the treatment [1](based on the method of propensity score matching) and it will be estimated using the statistical software STATA 12. This section presents the model and the method of analysis of the impact of financing by the performance of schools on the quality of education.

E. Medium treatment effect model

To determine the impact of the performance-based funding program on the quality of education (number of students enrolled, dropouts, successes) a mean treatment effect model was implemented. This model was introduced by Rubin in 1974 and makes it possible to determine both the causal effect of the program that one wishes to evaluate and the nature of the selection bias. In the context of this study, this model can be represented as follows:

Suppose that for each establishment i of a sample of size N, we observe all of the following variables: enrolments, dropouts and successes, each of which takes the value 1 (PBF=1) when the establishment benefits from the program and 0 (PBF=0) if not; the result variable here measured by the number of pupils/rate noted nbt which is represented by two latent variables nbt_0 (when the establishment has not benefited from the program) and nbt_1 (when the establishment has benefited from the program) . These variables correspond to financing potentials and are never realized simultaneously. When nbt_1 is achieved, nbt_0 is unknown and corresponds to the result that would have been achieved if the establishment had not benefited from the program and vice versa. nbt_0 is often referred to as a counterfactual. Thus the observed number/rate can therefore be deduced from the potential variables and the adoption variable by the following relationship:

$$nbt = PBF.\ nbt_1 + (1 - PBF)\ nbt_0 \quad (1)$$

A first estimate of the impact of the PBF funding program would consist in calculating the average of the differences in the number/rate of pupils enrolled, having dropped out or succeeding between the establishments benefiting from the program and the non-beneficiaries either

$$D = E\ (nbt_1 \mid PBF = 1) - E\ (nbt_0 \mid PBF = 0). \quad (2)$$

But the problem with this estimator is that the difference in the number/rate of students between pilot and control schools may not be entirely due to the funding program due to the heterogeneity of teaching at school level and unobservable characteristics. .

Now if in equation (1) we add and subtract the counterfactual, we get:

$$D = E(nbt_1 \mid PBF = 1) - E(nbt_0 \mid PBF = 0) + [E(nbt_0 \mid PBF = 1) - E(nbt_0 \mid PBF = 1)] \quad (3)$$

$$D = [E(nbt_1 \mid PBF = 1) - E(nbt_0 \mid PBF = 1)] + [E(nbt_0 \mid PBF = 1) - E(nbt_0 \mid PBF = 0)] \quad (4)$$

$$D = ATE + B \quad (17)$$

Where ATE and B are the mean treatment effect and selection bias, respectively. Various methods have been developed to eliminate this selection bias. These methods can be grouped into two groups: experimental methods and quasi-experimental methods. The experimental methods consist in randomly dividing the study population into two groups, including a control group and a treatment group that will receive the treatment. Thus the impact is obtained by comparing the results of the two groups.

In this study, we opted for the propensity score matching method for two main reasons. First, because it eliminates the selection bias relating to the observable characteristics of establishments. Secondly, to our knowledge, there are no eligibility criteria for establishments benefiting from the program.

F. Estimation method

Estimation of the impact of the performance-based funding program for institutions by propensity score matching is carried out in three stages:

The first step is the estimate of benefiting from the financing by the establishment. It can be done using a logit or probitmodel. As part of this study, a Probit model was used and this estimate allowed us to calculate the probability for an establishment (propensity score) to benefit from the program.

The second step is the determination of the common support and the execution of the balance test. This step is very important because it makes it possible to limit the sample to units for which there is a common support in the distribution of propensity scores, i.e. to retain individuals for which the probability distribution for participants and non-participants overlap. For this, several techniques can be used (Fougère, 2010) [21]:

- One can for example exclude observations whose - estimated propensity score is close to 1 or 0;
- Heckman et al (1998) prefer to delete the observations of the control group whose Co-variables have a density lower than a certain threshold;
- Dehejia and Wabba (1999)[22]suggest removing all observations from the control group for which the estimated propensity score is less than the minimum of the estimated propensity scores in the treatment group, and applying the same rule for the maximum. It is the latter technique that was used in this study.

In addition, the determination of common support was complemented by a propensity score balancing test to ensure that the matching performed on the basis of the propensity score balances the distribution of the X variables in the two groups, treatment and control. Mean comparison tests for the X variables on the paired and unpaired samples were therefore performed to ensure the robustness of our estimates.

The third step is the matching of beneficiaries and non-beneficiaries. Two techniques are commonly used (the Nearest Neighbour Matching and the Kernel based matching) were used to calculate the average effect of the treatment on the treaties of the establishments having benefited from the program.

The Nearest Neighbour Matching was used to match each establishment in the treatment group with the 5 establishments in the control group with the closest propensity scores. After performing the matching, the difference between the number/rate of pupils of the beneficiaries and the weighted average of the number/rate of pupils of the matched non-beneficiary establishments will be calculated. Thus the average effect of the treatment on the treated is obtained by averaging these differences over the entire population studied.

The Kernel matching was also used to match the performance of each program beneficiary with the weighted average of all non-beneficiaries. The idea behind this method is to ensure that each untreated individual participates in the construction of the counterfactual of the treated individual i, with an importance that varies according to the distance between his score and that of the considered individual. Thus it will assign a higher weight to those of these observations (untreated establishments) whose probability of being treated is “close” to that of the treated individual i. The average effect of the treatment on the treaties was therefore obtained by taking the difference between the number/rate of pupils according to each of the outcome variables (enrolled, dropouts and successes).

The last step is the estimation of the standard deviation. Indeed, the standard deviation of the estimator is obtained by applying the bootstrap methods, which consists in replicating the entire estimation procedure on a randomly drawn sample with replacement in the initial sample, and in determine the standard deviation of the distribution of the set of estimators thus obtained. Since the standard deviation must also take into account the fact that the score is not known and is therefore estimated. Each stage of the bootstrap must therefore include not only the matching on the sample drawn, but also the estimation of the s core [23].Cited by [24]bring about improvements in the education sector.

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IV. RESULTS

$Q_{1\text{-}1}$-School funding of has enabled													
Schools' intake capacity	**Control schools**					**n**	**Pilot schools**					**n**	**Total**
	High	Medium	Neutral	Low	Zero	93	High	Medium	Neutral	Low	Zero	75	
Number of schools available		2 3.22%	9 9.67%	82 88.17%			69 92%	1 1.33%		5 6.66%			168
Teacher availability level		7 7.52%	11 11.82%	75 80,64%			71 94.66%	2 2.66%	2 2.66%				
Children and parents' interest for school		9 9.67%	13 13.97%	71 76.34%			60 80%	10 13.33%	5 6.66%				
School fees for different families		40 4.30%	3 3.22%	50 53.76%				21 28%	3 4%	51 68%			
Parents and children's level of belief	89 95.69 %	3 3.22%	1 1.07%					30 40%	5 6.66%	40 53.33 %			168
Total						93						75	168

Table 1: Opinions on the funding of the child's schooling

Source: Author from survey data

Performance-based funding								
No treatment (no)				**Treatment (yes)**				
	NOT	Proportion	standard deviation	NOT	Proportion	standard deviation	min	max
schooling: No	93	.043	.204	75	.0	.412	0	1
schooling: Yes	93	.957	.204	75	.1	.412	0	1

Table 2: Descriptive statistics of the schooling variable after PBF

Source: author from survey data

H1 _				
Degree of significance (ß)	***10%**	****5%**	*****1%**	0%
Impact	**ATK=.102***			
Decision	H_1 is Verified			

Table 3: Verification of the hypothesis

* Significant at 10%; ** significant at 5%; *** significant at 1%
Source: Author calculation made from survey data

V. DISCUSSION

The dynamics of schooling of the pupils justifies the logic of socialization of the human being in the prospect of mobilization of the instruments which contribute to civilization. Socialization through education draws the composite portrait of the citizen desired by political decision-makers. In this sense, the mobilization of human, financial, material and informational means reflects the clear will of a State to be part of the direction of improving the conditions of quality education. However, these various means are almost non-existent in the Kadei division, which has been declared a priority education zone. The national educational policies applied there reveal a marked injustice compared to other education areas in terms of schooling. Indeed, nearly 87% of school principals say that the Kadeidivision suffers from a deficit in school infrastructure. 86.7% of school heads admit that the level of teacher availability is low. Anything that would partly promote poor school results. 76.34% of those surveyed certify that children and parents show a lack of interest in schools. School principals admit that the level of beliefs of families is high, and would influence the schooling of children.

However, the management mechanisms put in place by the FPB seem to have improved the indicators related to schooling. In terms of illustration, 92% of the head teachers of the pilot schools note an increase in the number of primary schools in the area. This statistic shows that the demand and supply of education has improved. The positive

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consequence is that pupils and parents have become aware of the importance of the school institution. It is reflected, among other things, in a level of availability of teachers, even though before the implementation of this management instrument, the Kadei divisionhad an enrolment rate of approximately 50%. 95% of school principals say that the level of teacher availability in schools has increased. This has led to an improvement in the school results of the pupils. 80% of the parents of pupils certify that the interest of the latter vis-à-vis the school institution has improved, thus leading to an increase in the interest of their offspring. .68% head teachers say parents' school fees have been reduced. Decrease which is linked to the subsidies distributed by the PBF program. 53.33% of school principals say that the level of belief in traditions of parents and therefore of students has increased. Parents' school fees have dropped, as have parents' beliefs, which are part of the logic of school stigmatization. It should be noted that the aforementioned modalities C contribute to improving the supply of and demand for education in an education system. However, the latter are overdue in this locality.

According to economists, the demand for education refers to the expression of parents' attitudes, expectations vis-à-vis their children in terms of schooling. Several economists explain this concept based on human capital theory. According to this, education would appear as an investment in human capital and therefore as a consumer good. As such, the motivations of parents to invest themselves in the education of their children can present themselves on the one hand under the inclination of altruism. This is why[25]think that: *"Parents are supposed to derive satisfaction from the well-being of their children and cross this satisfaction by giving their children the opportunities for a better life".* The second inclination is the interest that parents have in investing in the schooling of their children to guarantee their old age. It is therefore certain to admit that in one or the other inclination, the parents have every interest in collaborating with the principles and the requirements that the PBF imposes in terms of collaboration.

The studies reported [26] on the economic determinants of schooling show that the level of income influences decision-making in the schooling dynamics of children in their families. It can be observed that in the majority of households in the Kadeidivision, parents find it difficult to send their children to school because of the lack of financial means. Those who manage to do so, do so more by mimicry or by effect of imitation and not by conviction that schooling is a determinant of the future and the future of the child. In fact, many parents remain stuck in cultural considerations that reduce the child exclusively to traditional values. However, [25]describe schooling as an *"investmentin human capital".* The two researchers also refer to the limits of the human capital investment model, such as the financial constraints affecting families and sub-optimal schooling decisions. Finally, they establish the responsibility of socio-economic characteristics in the dynamics of schooling. The criticism directed towards the theory of human capital is linked to its too individualistic character, even though in the dynamics of schooling, decision-making should be collective, especially for African countries which generally languish in perceptible misery.

According to human capital theory, parents invest in the education and training of their children. And so a return on investment should be expected as they begin to enjoy the fruits of their labour. However, this logic is not fully realized in the socio-cultural context of the Kadei division, insofar as the schooling of children for the majority of parents is still not a priority. However, the integration of PBF in this area has shown a change in the mentalities of the educational community vis-à-vis the school. An increase in the rate of schooling is perceptible, even though the latter is motivated by subsidies which are distributed there.

A study carried out at the University of Ouagadougou in Mali in 1997 reveals that other factors are likely to influence the schooling of children. These include child labour which is believed to be the main factor in the non-enrolment of children in the East Cameroon region. Thus, according to [27], the social, economic, cultural, political and religious domains have a significant impact on the schooling of families and he proposes to take into account *"the demand for education as the product of a set of factors (social, cultural, economic, demographic, religious, political) that individuals voluntarily take into account in their schooling practices".* The financing of the schooling of children positively and significantly improves the quality of education in the schools in the Kadeidivision. However, this significance is only expressed at 10%. This means that at 90%, we can be certain that PBF influences the schooling of children, and therefore impacts the quality of education.

PBF is positioned as a management instrument that is part of the dynamics of improvement of education quality indicators; but its effectiveness is more linked to the empowerment of the various actors and the various structures which constitutes its corpus. The hyper centralization of decisions observed at the political level makes its implementation difficult insofar as the interference biases the results. Effective decentralization could, however, allow CTDs to apply it in all its rigor (autonomy) in order to obtain the most satisfactory results.

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