# The negative effects of food price inflation on pupils' attainment and performance at school in Algeria

Dr Abdelmajid AMRANI, C.U. Tamanrasset Dr Zouhir. AMRANI, U. d'Oum El Bouaghi

#### **Summary:**

This study attempts to discuss the negative effects of food inflation on school wastage in Algeria.

The results obtained by means of (i) theoretical investigation, and by means of (ii) a field work conducted in two wilayate (county) of the country clearly indicate:

- For a significant percentage of families, more than half of the income is spent on food.
- Food price inflation pushes poor families to make severe cuts on educational spending.
- In the context of lack of financial support, vulnerable families have serious difficulty to keep all their children at school, and learners encounter severe handicaps in their school attainment and performance.

These facts induce high school wastage and inefficiency of the public sector. The solution to such a problem requires a better understanding of both parents and learners difficulty, and the definition of a sound scheme of financial help, and moral support.

**Key words**: food inflation, school wastage, school attainment, help scheme.

#### الملخص

تهدف هذه الورقة إلى أبراز العلاقة بين ارتفاع إشعار المورد الغذائية من جهة والتحصيل والرسوب المدرسي من جهة أخرى في الطور الابتدائي, والمتوسط والثانوي في الجزائر. وتحوي هذه الورقة على بحث نظري وعمل تطبيقي في ولأية الاغواط و تندوف ، أما نتائج البحث فتبرز و جود علاقة عكسية قوية بين المتغيرين.

#### 1- Subject matter.

This study seeks to investigate the negative effect of food price inflation which has been increasing since 2006 on (i) repeat rates and (ii) dropout rates of pupils at primary, mid-secondary and secondary level on education in Algeria.

These two features (repeat and dropout) of school inefficiency represent an important aspect of educational wastage, in terms of:

- A loss of income opportunities especially for learners from poor milieus and rural areas.
- A mediocre level of performance of the public sector.

#### 2- Methodology.

This study is based on two main parts:

- (i) An insight into the research background on the subject, as well as the collection of a set of factual data.
- (ii) A field work carried out in two wilayate (counties) where school wastage rate was reported to be very high. This research work was aimed to collect a set of objective data from people who are directly involved in educational wastage.

### 2.1- Overview on the research background

This work can be summarized as:

A brief inquiry in some recent research works, especially those carried out by the United Nations organizations (FAO, UNICEF, UNESCO...). The aim of such work is to give the reader an insight in the efforts being deployed in this field of interest, and to try to treat the subject far beyond mere local frontiers. To avoid aberrant research findings, the author kept throughout the study clear in mind the constant need for conducting an original and adapted approach when tackling specific social problems.

- ➤ An attempt to put forward some definitions of the concepts used in the study to avoid confusion and misunderstanding in the discussion to come.
- *Deschooling* has often been defined by sociologists as <u>a reduction</u> in the number school enrollments of children in school age (non schooling), and an <u>increase in the number of school leavers</u> (dropout) before the age of sixteen (Lange, 1991).
- *Non schooling* is more frequently encountered in economically poor milieus. The high number of children to raise and the high cost of living very frequently push poor parents to sacrifice some of their children by depriving them from educational benefits (G. Doumandji and S. Ziane 2006). In recent years, this phenomenon seems to expand very rapidly in Algeria, but owing to the lack of reliable data, it is premature to discuss it on credible grounds.<sup>2</sup>
- *Dropout* (school rupture abandons). It often takes the form of a slow and progressive detachment (aloofness/separation) of learners from school interest. Dropout is often due to either family disorganization, or to some difficulty in the pupil's educational acquisition process. In either case, the rupture frequently often ends up

<sup>&</sup>lt;sup>1</sup> -The Algerian economic crisis that took place between 1986 and 1996 following the drastic fall in oil prices led the government to make significant budget cuts in the education sector. At the same time, the National Economic Council (CNES) reported that the educational goods could not escape from the negative effects of inflation. The cost index of educational goods climbed between 1993-1996 from 245 to 551 AD, and the registration fees from 181 à 254 AD.

<sup>&</sup>lt;sup>2</sup>- In spite of the overwhelming belief that in developing countries, females are more concerned by the will of parents to deprive them from the benefit of education, the field work carried out in nine wilaya couldn't confirm this belief.

in delinquency, truancy, violence (B. Geay and A. Meunier 2003) and jail (Lochner and Moretti 2004).

The individual and social financial costs of school rupture are very high. Those who acquire little education can hardly find jobs. When employed, they earn low wages.<sup>3</sup> On social grounds school rupture is synonymous with loss in the stock of human capital and more financial help, more health care, and more infancy protection.<sup>4</sup>

In Algeria, substantial percentage of school dropout is not solely due to family disorganization but to the parent's financial inability to meet the school needs of their children.

- **Repeat** is the result of low grades obtained by the learner and which ends up in an extension of the study duration.<sup>5</sup> The benefits of repeating a course will not be discussed in this paper.<sup>6</sup> School failure, in the light of recent study findings is a worldwide spread phenomenon.<sup>7</sup> It is not specific to one region

\_

<sup>&</sup>lt;sup>3</sup>- In fact, rising skills implies the necessity to complete at least upper secondary education for successful labor market entry and for further participation in lifelong learning (see OECD, 2000).

<sup>&</sup>lt;sup>4</sup>- Regional Conference of Elected from Montreal, Report on poverty in Montreal, 2004.

<sup>&</sup>lt;sup>5</sup>- Repeat ends up by an extension of one additional school year(s) duration. Repeat is useless, since it is scarcely followed by a real improvement in school quality formation and it is costly as it creates a bigger tension on the demand for education.

<sup>&</sup>lt;sup>6</sup>- The inefficacy of repeat has been proved by many research works. In an Iredu publication, Thierry Troncin jugged repeat as an unjust solution, inefficacious on pedagogic grounds and costly.! http://www.girsef.ucl.ac.be/Cahiers\_CREF/052cahier.

<sup>&</sup>lt;sup>7</sup>- Failure at school and dropout are so widespread that about a third of young men and more than one-in-five young women enrolled in upper secondary school do not obtain the "diploma"; Niall O'Higgins, Marcello D'Amato,

more than another. It penalizes more severely learners from poor families, however.<sup>8</sup>

School repeat is costly. In the OCDE countries, the financial cost of one year extension of the study is 20 000 dollars par head.<sup>9</sup>

Dropout and repeat are, the main ingredients of school wastage and an important source of inefficiency in the use of social resources.

#### > A collection of a set of factual data.

In this study it is made intensive use of quantitative data. The data used are mainly from official documents from the Algerian National Statistical Organization (ONS) and from the Algerian Ministry of Education (MEN).

### 2.2- The empirical research (data from questionnaires).

The empirical research is a field work aimed at collecting a set of information directly from the "mouth" of those people concerned with school wastage. The field work was carried out in two wilayate of the country during the period May-December 2009. 10

The objective of the research background and the empirical research is to collect enough evidence to:

Floro, Ernesto Caroleo & Adriana Barone, Gone for Good? Determinants of School Dropout in Southern Italy, Discussion Paper No. 3 292, January 2008.

<sup>&</sup>lt;sup>8</sup>- F. Jarraud, 2006, « Le Café Pédagogique », http://www.oecd.org, 23-03-2006 édition.

<sup>&</sup>lt;sup>9</sup>- Inspite of this alarming situation, educational managers seem little eager to put an end to this outrageous resource wastage (Gérard, 1997).

<sup>&</sup>lt;sup>10</sup>- The wilayate visited are respectively: Laghouat and Tindouf.

- To discuss on objective grounds four main research hypotheses.
- To put forward a workable platform of recommendations capable of helping learners from poor families to cope with the sharp food inflation, and to make better use of public resources through a sound help scheme in favor of vulnerable learners.

#### 2.2.1- Research hypotheses.

Four research hypotheses were formulated:

**H1**: There exists in Algeria a marked upward trend in food price increase.

**H2**: Food spending is largely preponderant in family budget structure.

**H3**: School wastage (repeat and dropout) as a consequence of food inflation has reached an alarming boundary.

**H4**: A better understanding of the difficulties met by (i) poor families in their effort to keep their children at school and (ii) the difficulties met by pupils in their learning process, allows define a more efficient help policy by the public authority.

#### 2.2.2- Field work design.

The framework of the field work and the collected data are summarized in the tables to come.

Table 1: General framework structure of the field work inquiry

Communes	ıya				
	Commune 1 (D) 11	Commune 2			

<sup>&</sup>lt;sup>11</sup> - D and R stand for Dropout and Repeat, respectively.

Types of populations		$(R)^{10}$
- Education directors	- two primary	- two
- School headmasters	schools	primary
- School teachers	- two mid-	schools
- Pupils' parents	secondary schools	- two mid-
- Pupils	- one secondary	secondary
	school	schools
		- one
		secondary
		school

Source: Table established by the author.

Table 2: Number of respondents per wilaya, per commune and per type of population.

	Commune for dropout « D »					nune for repeat « R »  Populations						
	Populations											
Wilayat e	Pupils			Parents	Teac hers	Не	Pupils		Pa re	Теас		
	Sec	Mid- Sec	Pri		nors	ad mast ers	Sec	Mi d- Sec	Pri m	nts	hers	aster s
aghouat	62	42	68	60	37	4	41	53	51	2 2	37	5
Tindouf	47	59	74	35	34	4	33	64	37	1 3	24	3

Source: Questionnaires from the different respondents.

- The questionnaires for pupils and parents were structured in five basic rubrics: (i) personal data, (ii) environmental data, (iii) behavioral data, (iv) financial difficulty and quality of the current help measures carried out by the government, (v) attitudes and motivation.
- The questionnaires for teachers and headmasters were structured in three basic rubrics: (i) a set of personal data (ii) a set of data referring

to the difficulties in school progress for learners and for parents to keep their children at school, and (iii) the efficacy of the government's help policy.

#### 3- Context of the study

The context in which this study was conducted can be better apprehended through the following main socio-economic important facts:

#### **3.1- The steep increase of food price.** <sup>12</sup>

The ongoing increase of food price that began in the year 2006 led many researchers to investigate the causes and effects of such upward push on poor populations (IFPRI 2008a). The importance of such research stems from the fact that countries which import more food than they export are precisely those countries that fall under the poverty circle. It has been established (Ivanic &Martin 2008), that for nine developing countries, the impact of food price increase is almost always negative. <sup>13</sup> For Africa the majority of the countries fall within the negative effects of food price increase (FAO 2008; Aksoy & Isik-Dikmelik 2008). More worrying is that, the evolution is showing

<sup>&</sup>lt;sup>12</sup> - The increase in food price has begun to have serious repercussions on vulnerable populations in many respects. Its impact on nutritional grounds and on health state has put at risk the perspectives of realization of the millennium development objectives (MDO). The increase of food price caused not only the fight against poverty and hunger to resume (MDO 1) but complicated even further the realization of the educational objectives (MDO 2), the reduction of mother and infant mortality (MDO 4 and OMD 5) and the propagation of certain serious infectious and mortal diseases (OMD 6).

According to World Bank estimations, the increase in food product could make bascule 100 millions of people in deep state of misery. Source: United Nations, Information Brochure, WFP, June, 2008.

<sup>&</sup>lt;sup>13</sup> - Except the case of Vietnam and Peru, where, the welfare state of rural populations was positive. For these two countries, on average, the advantages outweighed the disadvantages of food price increase.

indicating clear signs of worsening for the poorest (Poulton & al. 2006 & FAO 2008). 14

#### 3.2- Price increase risks for a country.

The negative repercussions of an increase in food price for a country depend on (i) its degree of exposure to those prices and (ii) to its degree of vulnerability.

- <u>The degree of exposure</u> as defined by World Food Program (WFP) of a particular country depends on (i) the ratio import/export of food products, (ii) the transportation costs, (iii) the commercial barriers, (iv) the exchange rates, (v) the internal taxation and subsidy of food products, (vi) the free market regulations, and (ii) the State capacity to intervene on the market.
- The degree of vulnerability as defined by WFP depends on:
- (i) The level of Sate intervention capacity.
- (ii) The volume of imported food compared to total imported goods, exported food products, and the stock of foreign currencies
- (iii) .The relative importance of urban population;
- (iv) The level of already existing rates of inflation.
- (v) The proportion of populations that spend a significant percentage of their income on food. 15

<sup>&</sup>lt;sup>14</sup>- The most likely remaining increase in food prices is largely justified by the following facts:

<sup>(</sup>i) The switch from petrol to ethanol exacerbated the decrease in food supply.

<sup>(</sup>ii) The changes in climate due to CO<sub>2</sub>, emissions from industrialized countries.

<sup>(</sup>iii) The population increase and the rigid supply of food production in developing countries.

<sup>(</sup>iv) The switch to free market economy (globalization) shows a more precarious situation for most developing countries.

<sup>&</sup>lt;sup>15</sup> - Look up: United Nations, Information Brochure, World Food Program, June, 2008.

The research made by WFP led to the identification of the countries that are more exposed to food price inflation. The groups of population more subject to a negative impact of food price push are those populations that:

- (i) Buy more food than they sell (net buyers),
- (ii) Spend a substantial percentage of their income on food.

Finally, the impact of food inflation depends on (i) the importance of the increase, and (ii) the degree of vulnerability of the country.

Until very recently, solely urban populations used to complain about the negative effect of food price push. The poor rural populations who buy more food products than they sell seem no longer at shelter from the effects of food inflation.

Recent research findings stress the fact, that food price inflation often induces on poor populations a large span of sequential reactions such as:

- (i) An attempt to find an extra job to help the family cope with the situation.
- (ii) An effort to reduce less vital expenditures.
- (iii) Get involved in prohibited and/or immoral activities. 16

### 3.3- The importance of material and financial means in education.

Material and financial means play an important role in pupils' learning process. In recent past, material conditions were thought to be completely alien to pupil's school attainment. For the French sociologist Bourdieu (P. Bourdieu 1960), material means are neutral and money has little to do with pupils 'school performance. According to him, the factor that really determines school attainment is the "natural connivance" by which successful learners come necessarily from families whose parents are highly educated. This excludes all

<sup>&</sup>lt;sup>16</sup> - Look up: D. Maxwell, R. Caldwell, "The Coping Strategies Index: Field Methods Manual", Second edition, 2008).

pupils from working class who do not have the necessary "cultural capital".

This belief is also found in some Anglo-Saxon authors who showed through empirical works that random shocks on parents' income had had no significant impact on pupil's school performance.<sup>17</sup>

Many studies came to progressively put an end to these beliefs which wrongly attribute the destiny of pupils in a monist fashion to either money or individual merits of learners.<sup>18</sup>

Nowadays, the importance of material means is more and more frequently put onto the scene by many researchers. The incapacity of parents to cater for their children's basic school needs in terms of books, copybooks, cloths, food, medical care, rest... constitutes a serious handicap in pupils' learning and school progression. Fairly recently a study came to emphasize the negative influence of poor housing on pupils' school performance. <sup>19</sup>

The majority of developing countries populations do not possess the necessary resources to meet their children school needs. A significant proportion of the Algerian population live difficult months ends. A study by the Algerian Trade union for Civil Servants (SNAPAP)

1.

<sup>&</sup>lt;sup>17</sup>- S. John, 2000, "Does Parents' money matter?" Journal of Public Economics, 177, pp. 155-184.

<sup>&</sup>lt;sup>18</sup>- Recent research works indicate, that school performance, is in fact a multifactoriel causality problem: « To understand the phenomenon of school success and failure, one has to take into account all dimensions that may intervene in the process: social dimension, cultural, economic, family, affective, medical, biologic, cognitive, pedagogic,... B. Geay and A. Meunier, Cahiers de la recherche sur l'éducation et les savoirs, N°2, 2003, pp. 7-19.

<sup>&</sup>lt;sup>19</sup>- It is reasonable to assume the existence of a negative effect of bad housing on pupils 'capability to concentrate and grasp lessons. There is substantial medical literature on the conditions of developing pulmonary disease Cuijpers & al. [1995] or Williamson &t al. [1997], who strongly emphasize the role of bad housing on asthma pathology. High level of noise hampers the ability of children to concentrate, grasp and memorize Larson & Petersen [1978].

indicates that 76.71% of civil servants encounter difficulties to make ends meet. <sup>20</sup>

# 3.4- The heavy weight of food spending: Specter of serious social and political difficulty.<sup>21</sup>

In most developing countries food spending largely outweighs all other expenses. For large families any increase in food price has dramatic impact on poor families.<sup>22</sup>

The United Nations index for Food and Agriculture shows that the price of food products increased by 7% in 2006, 17% in 2007 and 50% during the 2007 third trimester. <sup>23</sup>

In such context one may realize that most developing countries are suffering from malnutrition, heath deficiency (Smith & al. 2006; Alderman et al. 2006; Pongou & al. 2005; Cornia et Deotti 2008; FAO 2008; Jensen et Miller 2008), bad school performance (Escobal et al. 2005), high populations migrations,<sup>24</sup> and social and political turmoil <sup>25</sup>

<sup>&</sup>lt;sup>20</sup>- The study carried out by the trade union used an overall sample of 22 482 civil servants, 17 248 among them declared to have difficulty to make ends meet.

<sup>&</sup>lt;sup>21</sup> - Food price increase has already caused much social trouble in many developing countries. These last years trouble spots are reported in Burkina Faso, in Cameroun, in Senegal, and in Morocco. Source: AFP, Information Internationales: la hausse des prix alimentaires menace l'éducation des plus pauvres 15 April, 2008.

<sup>&</sup>lt;sup>22</sup>- A large family size has a negative impact on social destiny. This affirmation would have appeared most astonishing if it were not from Dominique Merllié and Olivier Monso for Insee studies. Their research findings indicate a negative impact on social success when families ha ve more than two kids. http://www.insee.fr/fr/ffc/docs\_ffc/ref/FPORSOC07f.PDF - Look up « L'impact de la hausse des prix des denrées alimentaires sur la pauvreté des enfants au Mali », Bamako, novembre, 2008.

<sup>&</sup>lt;sup>24</sup>- The works of the 14<sup>th</sup> conference of the occidental Mediterranean home ministers (CIMO or 5+5) held in Italy on 24 November 2009 emphasize the

#### 3.5- Poverty, exclusion and schooling.

Poverty concerns all fragile social categories. These include those who:

- (i) Live on social pensions.
- (ii) Are seeking for a job.
- (iii) Are poor workers. <sup>26</sup>

Nowadays, a significant proportion of the population in developing countries is out of work. Any jump in food price may push large groups of workers fall in poverty and misery.

Several studies came to the conclusion that the school system whose initial role was to fight inequality of chances and exclusion tends, to reproduce inequality and excludes poor families to aspire to reach higher levels in the professional and social hierarchy ladder.<sup>27</sup> Very often the <u>inequality of chances begins at primary level and it is quasi-irremediable</u>. And, all discriminative help policies implemented at subsequent levels of education are very often reported be vain.<sup>28</sup>

-

dangers of the illegal immigration and the extreme difficulty of developing countries to put an end to such alarming migration phenomenon.

<sup>&</sup>lt;sup>25</sup>- These last years, most developing countries are witnessing a steep increase of hooliganism, violence and illegal migrations.

<sup>&</sup>lt;sup>26</sup>- « Compte Rendu de la Mission Parlementaire sur la Pauvreté et l'Exclusion », B. Seillier, http://www.Senat.fr, 2nd July, 2008.

 $<sup>^{27}</sup>$  - The parliament report give some surprising data as it affirms that :

<sup>- 50 %</sup> of French children who leave school (dropout) are from 20 % from poor milieus;

<sup>-</sup> It is almost eight times more likely that a child whose parents fall within the 10 % of the poorest milieus lags behind (repeat) than a child whose parents fall within the first 10 % of the richest families;

<sup>-</sup> and nearly 60 % of the pupils whose parents are unqualified workers or out of job are not « A level » diploma holders, versus only 13 % of children whose parents are teachers. http://www.Senat.fr, 2nd July 2008.

<sup>&</sup>lt;sup>28</sup>- This means that any policy geared at enhancing the principle of equality of chances should be guaranteed and implemented at primary level of education.

### 3.6- The young children, first victims of food price inflation.<sup>29</sup>

Till now, several studies carried stress the financial incidence of food price inflation on macro-economic grounds. The induced poverty due to food price inflation has a negative effect on schooling conditions for pupils from poor families. This in turn results in school difficulty (high rates of drop-out and repeat) and gloomy working life perspectives (World Bank, 2008).

#### 4- Main study findings.

The theoretical and the field work investigation led to the following main research findings:

# 4.1- Inflation process, low income families' financial conditions, and resource wastage.

- The collected data indicate the existence of a high degree of exposure of the country (Algeria) to any food inflation. This stems mainly from the negative disequilibrium between the level of the supply and the demand for food. The lack of balance between these two aggregates is a serious index for a high vulnerability of the country (imported inflation).
- Tables 1 to 5 which refer to the «family financial situation» in the two wilayate investigated show that the overwhelming majority of the families have considerable difficulty to make ends meet. This means that learning conditions for pupils can only be deplorable.
- Extra jobs of parents and children, social help, social loans, financial help from the government seem to be insufficient to keep all the children at school. This alarming fact appears from the handicapping situations lived by learners in their everyday school life (tables 6.1 up

<sup>&</sup>lt;sup>29</sup>- In the context of food inflation, poor families are bound to reduce all expenditures. Since food spending is very often at its lowest level (incompressible), the only alternative is to reduce the other spending. Any cut in educational means is synonymous with school difficulty, bad performance, repeat and dropout.

to 6.8). The lack of material means doesn't only concern the pedagogic means, it goes far beyond this. It includes a large span of vital needs such as nourishment, clothing, sleeping, health care...).

Hence, not only are children penalized on their daily food ration, on adequate clothing, on transportation, on leisure..., they are as well very often deprived from their inalienable right to education. This state of affairs is both socially intolerable and morally inacceptable.

- The application of Student tests and Chi-squared tests on the collected data via the questionnaires clearly show that:
- (i) In spite of slight differences in opinions, we are in most cases dealing with samples from the same population.
- (ii) Answers from different types of population are independent from each other.<sup>30</sup>

In other words the statistical results clearly corroborate the idea that poor financial condition is at the origin of families not been able to keep their children at school. In other words food price inflation is at the very root of school wastage and public sector inefficiency.<sup>31</sup>

<sup>31</sup>- The field work revealed a significant rate of children who lag one year behind compared to normal school age at primary level and two up to three years at the end of secondary school. This is indicative of the importance of school wastage.

<sup>&</sup>lt;sup>30</sup>- Regarding to whether the financial constraint is really binding in the pupils' school difficulty, a large majority of respondents confirmed the vital importance of financial means in school achievement. The application of Student test to the answers from the different populations questioned indicated, in spite of some slight differences in opinions that the samples were from the same population. Moreover, the answers from the school heads masters, and teachers seem to be highly correlated (coor = .9224). Finally, the Khi-squared calculated value in most cases turned out very small and never reached 0.4.

#### **4.2- Test of hypotheses**

#### **4.2.1**- Hypothesis 1:

- According to the United Nations index for Food and Agriculture which shows that the price of food products increased by 7% in 2006, by 17% in 2007 and by 50% during the third trimester 2007 to the third trimester 2008.
- According to the available data in the time span 1968-2008 as shown in Tables and Graphs 1 and 2 referring to the consumption index reported by World Bank (World Bank, 2008).
- According to the ONS statistics, the average rhythm of inflation in Algeria is 5, 7% for the first nine months of the year 2009. 32
- According to Pr Mebtoul in his article in the Algerian daily « Le Quotidien », quoting data from ONS, affirms that the rate of inflation is in constant increase. From 1, 6% in the year 2005, it climbed to the successive levels 3% in 2006, 3,5% in 2007, 4.5% in 2008 and was greater than 5,7% for the 10 first months of the year 2009. 33

In the light of the above data, it is fairly safe to say that there is sufficient evidence that Algeria is going through a marked inflation upward trend. Hence, hypothesis 1 should not be rejected.

#### **4.2.2- Hypothesis 2**:

- From the remarks formulated in the research background which indicate on the basis of many research findings that in most developing countries 50% of the overall income is devoted to food spending.

From the data collected in the two wilayate investigated via the questionnaires for parents, 54, 52% of the respondents affirm

<sup>&</sup>lt;sup>32</sup>- Read the daily "Horizon" dated 24<sup>th</sup>, October 009.

<sup>&</sup>lt;sup>33</sup>- A. Mebtoul, University professor, international expert in economics, in the daily "Le Quotidien" December 12, 2009.

spending more than 50% of their total income in food expenditure (Table 2 in the main study).

In the light of the above remarks, there is enough evidence that for an overwhelming majority of families, food spending is largely preponderant. Thus, one cannot reject hypothesis 2.

**4.2.3- Hypothesis 3**: The rate of repeat and dropout for the three consecutive years 2006 to 2009 as reported in the official documents of the Ministry of Education are indicative of (i) a substantial rate of repeat and dropout and (ii) an increasing phenomenon of school wastage. These figures can be summarize in the following table:

School year	Repeat	dropo	out	Total		
	Number	%	Number	%	Number	%
2006/2007	907 316	11,95	425 692	5,61	1333008	17.65
2007/2008	1017814	13,57	501508	7,48	1519322	21.05
2008/2009	-	-	-	-	248868	25.2
					2	2

Table 3: Overall rate of school failure.

Source: Data from the Ministry of Education official documents (from Table 9 of the main study).

Data of Table 3 indicate a fairly high rate of school wastage and that this phenomenon is constantly increasing over time. From these aggregate, one may objectively figure out, that wastage rate would certainly be higher in poor regions of the country and particularly in rural milieus.<sup>34</sup>

<sup>&</sup>lt;sup>34</sup>- Many research findings stress the fact that in most developing countries, it is poor rural milieus that are the main victims of the scarcity of resources in education

In the light of the data in figure 3, one may be inclined to accept the fact that there exists nationwide a high rate of school wastage, hence, hypothesis 3 should not be rejected.

#### **4.2.4-** *Hypothesis* **4**:

- The review of the research literature showed the importance of both material and immaterial means in school pupils' attainment and school performance. The field work indicates on the basis of the opinions of all the populations concerned with school performance (pupils, parents, teachers, headmasters, and education directors) that materials and financial means are in fact, determinant in both attainment and performance.

The vital importance of material and financial means in pupils' school performance stem from the set of Tables 6.1 up to 6.8 35 which refer to the frequency of handicapping situations for pupils.

- <u>Table 6-1</u>- Pupils arriving at school without the necessary means to do their school work..
- <u>Table 6-2</u>- Pupils arriving at school without adequate clothes to participate in sports activity.
- <u>Table 6-3</u>-Pupils arriving at school without adequate clothes regarding climate conditions.
- <u>Table 6-4</u> Pupils too tired to do school work.
- <u>Table 6-5</u> -Pupils arriving at school without having breakfast.
- <u>Table 6-6</u> Pupils hungry arriving at school without having lunch.
- <u>Table 6-7</u>- Pupils arriving at school without having done their homework.

<sup>&</sup>lt;sup>35</sup>- The numbers of the tables correspond to the numbers of the tables in the study.

#### - <u>Table 6-8</u> - Pupils arriving late at school.

Furthermore, the field wok brought significant evidence which indicate that the solution to families and learners' school difficulty requires an appropriate help scheme in favor of needy families and pupils to achieve equality of chances.

In the light of all these evidence, one is objectively inclined to accept hypothesis 4.

#### 5- Conclusion

The theoretical investigation and the field work brought about sufficient evidence which establish a tight link between the recent price push in food prices and a large span of school difficulties especially for those pupils from poor and rural areas. The negative incidence of the effect of the increase in food prices observable since 2006 seems, in the light of the evidence produced, to be incontestably at the very root of considerable school wastage (repeat and school dropout) at primary, mid-secondary and secondary level of education. The public authority had intervened with a set of financial and social measures to try to help needy families and pupils cope with the difficult economic situation. But, the implemented help measures (as they are perceived by teachers and school masters) turned out inadequate and insufficient. These measures need reconsidering to be more efficient to those populations that desperately need help.

#### 6 - Recommendations

To be efficient any investment project should make sure that money is well spent. In our context this means that we need to work out an adequate help policy. The latter should be geared to help those people who really need help. In so doing the investment scheme is likely to produce maximum effect. If it is true that because the low level of

income of the majority of the populations, all youngsters from poor families who attend school in developing countries deserve to help, nonetheless, in the context of scarcity of resources one should make and observe some priorities.

#### 6.1- Recommendation 1: Equality of chances.

As pointed out earlier in the research background, the inequality of chances begins at primary school and it is quasi-irremediable. One should therefore, put the emphasis on helping adequately pupils at primary level of education.

# 6.2- Recommendation 2: The necessity to device a set of preventive actions through a "veil cell".

A pupil who repeats a course and/or drops out is a learner in difficulty. This can be detected before the process reaches a critical boundary. It is therefore worthwhile to design and implement a "veil cell" device capable of detecting fairly early pupils' weaknesses and try to remedy the situation casuistically (case per case). In our case, the field work indicated that repeats and dropouts were in most cases due to the inability of parents to meet the increasing cost of their children school needs.

#### 6.3- Recommendation 3: Generalization of preschool system.

Many research findings stress the fact that children who fail in their studies very often belong to those families with low financial income and/or from popular origin. The C.R.E.S.A.S <sup>36</sup> firmly affirms that poor school performance is very often attributable to poor spoken language level of pupils from disadvantaged socio-economic milieus (use of incorrect language forms, weakness of vocabulary, use of wrong syntaxes, inability to properly use certain language functions).

<sup>&</sup>lt;sup>36</sup>- Study carried out over ten years by the French « Centre de Recherche de l'Education Spécialisée et de l'Adaptation Scolaire (C.R.E.S.A.S.). The study findings titled «l'échec scolaire n'est pas une fatalité » Author : <u>C.R.E.S.A.S.</u>, 1982, p. 72.

The introduction and generalization of a preschool system with the mission to help those children with poor language acquisitions compensate their language deficit will be a significant step towards educational equality of chances.

# 6.4- Recommendation 4: More dynamic (vigorous) role for parents' association.

Totally absent on the grounds, the parents' association should play a more dynamic role. Parents who live more time with their children are in a better position to find appropriate solutions to many of pupils' difficulty.

#### 6.5- Recommendation 5: Creating a help networks.

Whatever, the form or the importance of the government's helps, this can by no means be a miracle solution to all problems of poor families. It is wiser and more constructive to think of a set of specific alternative actions that constitute a more reliable and durable shield against the negative effects of a rise in the cost of living. The creation of a network of help actions is often most suitable. The help measures that can be deployed could take the form of a series of material and immaterial actions. It would be worth regenerating the "Touiza" <sup>37</sup> spirit that played a powerful solidarity role in the recent past years.

<sup>&</sup>lt;sup>37</sup> - Touiza is a form of social solidarity between the populations. Solidarity, in helping one another in case of difficulty (death, illness, economic difficulty; natural cataclysm...).

#### 7-References

- 1- Acemoglu D. and J. Angrist (2001), "How Large Are Human Capital Externalities? Evidence from Compulsory Schooling Laws," *NBER Macroannual*, pp. 9-59.
- 2- Angrist J. D. and A. Krueger (1991), "Does Compulsory School Attendance Affect Schooling and Earnings?" *Quarterly Journal of Economics*, Vol. 106, No. 4, pp. 979, 1014.
- 3- Cardoso A. R. and D. Verner (2006), "School drop-out and push-out factors in Brazil: the role of early parenthood, child labour, and poverty", *IZA DP* No. 2515, December.
- 4- Eckstein Z. and K.I. Wolpin (1999), "Why Youths Drop Out of High School: the Impact of Preferences, Opportunities, and Abilities", *Econometrica*, vol. 67, n. 6, November, pp. 1295-1339.
- 5- Hanushek E. A., V. Lavy and V. L. K. Hitomi (2006), "Do students care about school quality? determinants of dropout behaviour in developing countries", *NBER Working Paper* 12737.
- 6- Lee V.E and D. T. Burkam (2003), "Dropping Out of High School: The Role of School Organization and Structure", *American Educational Research Journal*, Summer, Vol. 40, No. 2, pp. 353–393.
- 7- Rumberger R. W. and S. L. Thomas (2000), "The distribution of dropout and turnover rates among urban and suburban high schools", *Sociology of Education*, 73(1), 39–67.