

Evolution of food prices and its impact on food security in Algeria

HALMOUCHE cheikh ¹ ♦, MADI mohamed brahim ²

¹ IEOEI, Khemis Miliana University (Algeria), chico.555@live.com

² IEOEI, Khemis Miliana University (Algeria), mb.madi@univ-dbk.m.dz

Received: 07/11/2022

Accepted: 02/01/2023

Published:15/01/2023

Abstract:

This study aims to present the food security situation in Algeria through the World Food Security Index and identify the challenges that prevent the achievement of the goal of food security in Algeria.

This study found concluded that the state of food security in Algeria is still in the process of development, and in order to enhance and support food security, a framework for appropriate policies must be put in place to maintain food security.

Keywords : food security, World Food Price, food prices in Algeria.

♦ Corresponding author.

I- Introduction:

Achieving food security is the main goal of countries that have prioritized the provision of basic food for their people, especially since the emergence of food security as a concept in the mid-1970s, emphasizing that ensuring food security and nutrition is the right of every citizen, as a result, it is mainly important to ensure that there is sufficient food. It is preserved in many international conventions and treaties. Food security is a difficult issue and despite different actors addressing it, hunger and food insecurity still affect the lives of many people as they are affected by various social, economic and environmental reasons and especially political ones. If we return to Algeria, it is one of those countries that, despite of the fact having disposable natural resources, it relies on imports to meet its food needs, particularly its basic necessities. So, in this article, we will try to answer the following questions:

-What is the impact of food prices on food security in Algeria?

-To study the problem, we have to develop a hypothesis: the world food price index has to do with food security in Algeria.

In this study, we used Descriptive and statistical study methodology. The purpose of this study is to demonstrate the current state of food security in Algeria using the World Food Price Index. Importance of the research: it addresses an important and sensitive issue, namely food security, which is of concern to countries around the world as it is of vital importance to societies and individuals and affects their lives .It also addresses food security in Algeria.

1. Theoretical frame for food security

This section will focus on the definition of food security, the legal framework for food security, its dimensions and food insecurity.

1.1. Definition of food security

The concept of food security emerged in the mid-1970s during discussions on international food problems the concept of food security was officially affirmed in 1974, following the world food crisis of 1973/1974 (sposito, 2009/2010, p. 7)

Where the term food security was used in the 1974 World Food Conference, which witnessed the first item of the International Declaration on the Elimination of Hunger and Malnutrition that was adopted by governments, "Every man, woman and child has the inalienable right to be free from hunger and malnutrition in order to fully develop and preserve their physical And mental capabilities " (rahmani, 2020, p. 237).The primary focus was primarily on food supply problems to ensure the availability and to some extent the stability of basic food prices at the international and national levels.

The concept of food security has developed since the 1974 World Food Conference, and the following are the most important definitions of food security: (rahmani, 2020, pp. 237-238)

- Defining food security in the work of the World Food Summit 1974: It is defined as follows: "The availability at all times of adequate global food supplies from basic foodstuffs to maintain a steady expansion in food consumption and to compensate for fluctuations in production and prices.
- The definition of FAO in 1983: Food security means: "Ensuring that all people at all times have material and economic opportunities to obtain the basic foods they need.

- The definition of the World Bank in its report on poverty and hunger in 1986: Food security was defined as: "All people at all times have enough food to lead an active healthy life. (Clay, 2002)
- The definition of the World Food Summit 1996: "Food security is achieved at the level of the individual and the family and the national, regional and global levels when all people at all times enjoy physical and economic access to adequate, safe and nutritious food that meets their nutritional needs and suits their food tastes for an active and healthy life.
- The definition of FAO in 2001: The definition of the World Food Summit 1996 has been repeated: "Food security is a situation where all people at all times have access to material, social and economic access to adequate, safe and nutritious food that meets their nutritional needs and suits their nutritional preferences in order to lead an active and healthy life.

From previous definitions we notice that the concept of food security has evolved over time food ", where the focus was on the problem of food abundance and it had proved insufficient to achieve food security, Food may be available but inaccessible, while the current concept of food security is a multidimensional concept based on access to food, Food safety, food is suitable for individuals' tastes, and ensures a healthy and active life and that the concept has evolved from quantitative to qualitative issues. (international and national) to a partial level (family and individual level). (rahmani, 2020, p. 238)
The focus on food policies is increasing. Among other objectives, there are usually four: (parker, 1989)

- Effective growth in food and agriculture sector;
- Improve income distribution, primarily from expanding employment,
- Provide adequate food and nutrition to the entire population by providing a continuation floor;
- Food security to insure against poor harvesting, natural disasters or uncertainty in global food supplies and prices .

Food security policies are crucial for a developing country because they affect :

- adequate nutrition;
- farm income;
- food prices and political stability ;
- Agricultural productivity and manufacturing potential;
- Government budget and foreign exchange reserves. (Enders, 1994)

Furthermore, as Maxwell (1989) emphasized, improving understanding of food security issues is the only top priority in improving food policy development and planning in developing countries.

1.2. Analysis on the effects of food insecurity

Anderson and Scandizzo (1984) defined food insecurity in terms of probability of starvation. Using a cross-sectional data set on developing countries, they tested the relationships expressing food risk as a function of normal food availability, distribution risk, and production risk. Among other things, they found variation in production and

purchasing power as major factors having negative effect on people's welfare. (Yazdanpanah, 1994, p. 15)

1.3 .The Macro-economy Environment and Food Security

Macroeconomics play a key role in determining food security at all levels, through its impact on production (incentive impact), availability (trade and food security arrangements impact) and access (the impact of import capacity through export earnings and capital flows, employment impact and income generation). These effects, in turn, are primarily determined by national macroeconomic policies controlled by Governments (internal macroeconomics), and by the parameters imposed by the international environment (external macroeconomics). (corbett, 2019, p. 11)

Key issues to be considered at the macro level (at the country level) in assessing food security include overall levels of food production, agricultural and non-agricultural production for export, recent evolution and projections of such levels, developments in terms of trade and volatile levels of production and trade. (Yazdanpanah, 1994, p. 15)

1.4.Factors affecting the food security

Based on Smith (1990), important demand-side factors affecting food security include: (Yazdanpanah, 1994, p. 16)

- population growth
- Income growth and distribution (related to internal fiscal and monetary policies, world economy environment, distribution of rights and food assistance programs) and distribution (related to internal fiscal and monetary policies, world economy environment, distribution of rights and food assistance programs).

On the supply-side, the important factors which affect food security at the national level include:

- weather (erratic weather is a major source of variation in domestic production of food),
- production and production growth rates (depending on applications of technology, such as new crop varieties, tractors and fertilizers, in adequate levels and at appropriate times),
- (policy incentives to produce food for domestic needs (as influenced by world prices, internal pricing policy, adequacy of internal infrastructure to support marketing, such as roads and institutions),
- stock behavior
- availability of imports (food policies of major exporters, foreign.

1.5.Food self-sufficiency and food security

Food security" is sometimes equated at the national level with "food self-sufficiency". This is not necessarily the meaning adopted in this study. Theoretically, it is possible for a country to be better off by pursuing a trade-oriented policy. That is, according to its comparative advantage, it may pursue domestic production and/or imports to meet domestic food demand. While some studies suggest that there is no necessary link between self-sufficiency and food security (see, for example, Reutlinger and Pellekaan, 1986) , these do not prove that resort to imports will enhance food security for all vulnerable groups

either. In this respect, food security is a direct function of how the imported food and purchasing power is distributed . (Alangir & Avova, 1991, p. 112)

According to the World Bank (1986), the frequently advocated course of action to increase national food production for self-sufficiency is neither a necessary nor a sufficient condition for reducing chronic food insecurity. An increase in food self-sufficiency which involves the reduction of food imports without having secured an equivalent increase in domestic production is likely to make things worse. More food production is not necessary for improving food security because the domestic food supply can always be increased through greater imports or less exports of food, and existing food supplies can be redistributed.

More food production is never a sufficient condition in the achievement of food security because it does not guarantee that the people who need more food will have the ability to acquire it. For a large group of developing countries, however, the focus on food security at the national level tends to be bound up with concerns for national food self-sufficiency and dependency. (Yazdanpanah, 1994, p. 17)

Some developing countries, including oil exporting countries such as Mexico, were concerned that reliance on food imports, most notably grains, from a few exporters would create an undesirable and potentially difficult dependency. The tendency for some food exporters to talk of the "food weapon" as an international political leverage, coupled with the grain prohibition against the former Soviet Union in 1980 and later threat of food restriction against some Persian Gulf countries reinforced this anxiety. Political vulnerability aside, most food importing countries, even oil exporting countries, face foreign exchange constraints for food imports. Food security, therefore, became bound up with the idea of increasing national production of basic food, reducing reliance on an unstable international market. The precise structure of national production (and the cost of this kind of policy) is of secondary importance . In addition, the consequences of the policies of major food producers and exporters influence the supply, price and distribution of food in food importing countries. Therefore, their policies play an important role in food security of food importers. In this respect, to reduce the threat to food security of food importing. (corbett, 2019, p. 8)

2. Food prices change globally

Prices of food commodities in world markets have declined dramatically since the early 1960s to the early 2000s, when they fell to their lowest level and then slowly increased from 2003 to 2006, after which they moved upward from 2006 to mid- 2008 before falling in the second half of that year to re-increase between 2010 - 2011 to gradually decrease for most food commodities, and 2017 took a lot of food commodity prices upward trend which led to increased concern about the capacity of the food economy; Especially during the current global crisis after the corona virus pandemic and the Russian-Ukrainian war and its impact on providing enough to feed billions of people, these food price disruptions are governed by many factors, especially those related to rising prices. (fairouz, 2020, p. 108)

2.1. Global trends in basic food prices

The FAO Food Price Index averaged 154.2 points in June 2022, a decrease of 3.7 points (2.3%) from May's level, marking a decline for the third consecutive month, although still

29.0 points (23.1%) higher than last year's value. The fall in June month shows a decline in international prices of vegetable oils, cereals and sugar, while dairy and meat prices have risen.

The FAO Cereal Price Index averaged 166.3 points in June 2021, 4.1% lower than in May, although still 36.0 points (27.6%) higher than in June 2021. After setting a near-record level in May, international wheat prices in June fell by 5.7 per cent, although they were still 48.5 per cent higher than in the past year. Lower prices in June were driven by the seasonal availability of new crops in the northern hemisphere, improved crop conditions in some major producing countries including Canada, higher production expectations in the Russian Federation and slower global import demand. International prices of coarse grains fell by 4.1% in June, although they were still 18.4% higher than in the past year. Pressures towards lower prices due to available seasonal quantities in Argentina and Brazil, where maize harvests are succeeding rapidly, together with improved crop conditions in the United States of America, supported a 3.5 per cent decline in global maize prices. Concerns about demand expectations have increased Amid economic slowdowns, pressures toward price cuts. Among other coarse grains, the prices of sorghum and barley fell by 4.1% and 6.1%, respectively, in conjunction with lower corn and wheat prices. The high demand for Indica and Basmati rice has continued to increase international rice prices.

The FAO price index for vegetable oils averaged 211.8 points, a decrease of 17.4 points, for palm oil, sunflower, soy and rapeseed. International prices declined during this period.

FAO's dairy price index averaged 149.8 points in 2021. International prices for all dairy products have risen. Cheese prices recorded the greatest rise. World prices of dried milk rose owing to high import demand, continued declining global supply and low stock levels. International butter prices have rebounded with market uncertainty over milk deliveries in the coming months boosting foreign purchases as well as Europe's domestic demand.

(FAO, 2022)

2.2. Food price fluctuations during the 2004-2021 period

From the following table, the food price index of the Food and Agriculture Organization of the United Nations (FAO) will be reviewed from 2004 to 2021, calculated using average export ratios per group for 2014-2016. The overall index includes a total of 95 quotations and includes 05 partial indicators:(fairouz, 2020, p. 110)

- . Meat Price Index: calculated from the average prices of meat, namely poultry, and cow, sheep;
 - Dairy products price index: It consists of the pricing of butter, whole milk powder, skimmed milk powder, and cheese;
 - Cereal price index: This index is calculated from the export pricing of maize, the rice pricing and the wheat price index issued by the International Grains Council;
 - Vegetable Oil Price Index: It consists of the pricing of 10 different vegetable oils;
 - Sugar Price Index: An index formulated from the prices of the International Price Agreement.

Table (1): FAO food Price Index 2004-2021

Years	sugar price index	Oil and Fat Price Index	cereal price index	Dairy Price Index	Meat Price Index	Food Price Index
2004	-44.3	69.6	64.0	69.8	67.6	65.6
2005	61.2	64.4	60.8	77.02	71.8	67.4
2006	91.4	70.5	71.2	73.1	70.5	72.7
2007	62.4	107.3	100.9	122.4	76.9	94.3
2008	79.2	141.1	137.6	132.3	90.2	117.5

2009	112.2	94.4	97.2	91.4	91.7	91.7
2010	131.7	122.0	107.5	111.9	106.7	106.7
2011	160.9	156.5	142.2	129.9	131.9	131.9
2012	133.3	138.3	137.4	111.7	122.8	122.8
2013	109.5	119.5	129.1	140.9	120.1	120.1
2014	105.2	110.6	115.8	130.2	115.0	115.0
2015	83.2	89.9	95.9	87.1	93.0	93.0
2016	111.6	99.4	88.3	82.6	91.9	91.6
2017	99.1	101.9	91.0	108.0	98.0	98.0
2018	77.4	87.8	100.8	107.3	95.9	95.9
2019	78.6	83.2	96.6	102.8	95.1	95.1
2020	79.5	99.4	103.1	101.8	98.1	98.1
2021	109.3	164.9	131.2	119.1	125.7	125.7

Source: FAO, <https://www.fao.org>

We notice from the above table that the food index is constantly rising during the studied period, reaching the maximum level of 2021 of 121.7 points. According to the Meat Price Index (MEPI), there were two shocks to the price hike, which recorded around 160.7 points, up 46 points from 2004. the meat price index rose again during the period 2011-2012 by about 23 points, i.e. in proportion to the price shock in 2008, but the price continues to rise until 2014, then the index begins to decline.

Dairy Price Index averaged 132.3 points 2008, international price quotations for skim milk powders fell the most, reflecting lower import demand, as buyers were well covered for their near-term needs coupled with increased export availabilities in Europe. Whole milk powder prices dropped substantially, principally due to lower buying interest from China, only partially compensated by higher purchases by Southeast Asian countries. Meanwhile, world butter prices declined on weak import demand, impacted by high retail prices and market uncertainties about consumer purchases in the months ahead.

International cheese prices increased, underpinned by a steady import demand and less buoyant export availabilities from leading producing countries in Western Europe.

Sugar Price Index: Also saw its value rise starting from - 2004 to reach about 209.6 points from 2006 and then decrease to continue its rise in 2008 and then reach a maximum of 368.9 points From 2011, an increase of 159.3 points over 2006, representing an increase of 76% over 2006; After 2011, the index began a slight decline from year to year until falling to 190.7 points in 2015.

From the table of world food price indicators of the Food and Agriculture Organization of the United Nations, we notice that there are two crises of high food prices: the crisis of 2008 and the crisis of 2011.(FAO, 2022)

2.3.The crisis of high food prices in 2008

Global cereal stock fell in 2008 to its lowest in 25 years to reach about 405 million tons, a 5% decline from the 2006/2007 year's rates Food prices in the world market have risen significantly. According to FAO data, between August and now food prices have risen by 45%. There are about 37 countries suffering from a food deficit in the world, and the continued rise in food prices would affect about 200 million children, bringing the number of children in the world who suffer from hunger to about one billion children.

The FAO Regional Representative for Latin America, José Graziano, attributed the high food price crisis to the tendencies of the world's investment funds to speculate on commodity prices after suffering heavy losses in the global financial markets. There are also other reasons, including a decline in the growth rate of global domestic product (GDP) during 2007. and projections of a continuing decline during 2008 and the orientation of Western countries to produce biofuels, One of the reasons for the world's high food prices

and some fear that agricultural goods for biofuels will be produced at the expense of humanitarian food needs .(FAO, 2010)

Among the main causes of the 2008 food crisis are the following: (Bachir, 2013, p. 70)

- Large industrialized States use basic agricultural crops as biofuels (especially corn), rather than oil, on the pretext of reducing emissions from transport, conserving the environment and improving energy security.
- High fertilizer prices, considering that fertilizer is an energy-intensive product. This has led to a high cost of food production.
- Shortage of cereal production four consecutive seasons due to environmental and climate factors of the desert
- High living standards and growth rates in developing countries,
- Ongoing monopolistic practices on foodstuffs and agriculture in global exchanges and investment funds, as well as some exporting countries' use of export restrictions
- Increasing the world's population by up to 74 million annually, t is a challenge to provide food for population
- The 2008 global financial crisis affected investment in the agricultural sector.

2.4.The crisis of high food prices in 2011

The World Bank's food price index, which measures global prices, is 36 percent above its level a year earlier and remains close to its 2008 peak. Key increases compared to a year ago include maize (74 percent), wheat (69 percent), soybeans (36 percent) and sugar (21 percent), although rice prices have been stable. In many countries, vegetables, meats, fruits and cooking oil continued to rise with potentially adverse nutritional consequences for the poor.

Food prices have soared due to severe weather events in key grain exporting countries, export restrictions, the increasing use for biofuel production, and low global stocks. The food price hike is also linked to surging fuel prices -- crude oil increased 21 percent in the first quarter of 2011 as a result of unrest in the Middle East and North Africa.

According to Food Price Watch, poorer countries have experienced greater food inflation than higher income economies. In the Kyrgyz Republic, for instance, where the poorest 10 percent of the population spends 73 percent of their budget on food, food price inflation in 2010 was 27 percent. As a result, the number of people living below the poverty line could increase by 11 percentage points.

Measures to reduce the impact of high food prices on the poor include targeting social assistance and nutritional programs to the poorest, removing grain export restrictions, and relaxing biofuel mandates when food prices exceed threshold levels. Improving country capacity to manage volatility through financial market instruments, better weather forecasting, more investments in agriculture, the adoption of new technologies, such as rice fortification to make it more nutritious, and efforts to address climate change are also needed (World Bank, 2022)

3. Evolution of food prices in Algeria

The prices of basic food commodities in Algeria, like the rest of the world, have known since the beginning of the current century great fluctuations characterized by a rise movement that peaked in 2008 and 2011, which affected the stability of its markets through

the decrease in the volume of stocks and the increasing severity of price fluctuations in the markets of grains and vegetable oils, the development of food prices in the Algerian national market is mainly linked to its fluctuations in global markets, considering that the supply of the Algerian national market with foodstuffs of wide consumption as raw materials used As inputs in the manufacture of these products or manufactured products destined for direct consumption, subject to import at high rates. (fairouz, 2020, p. 72)

3.1. Development of the food price index in Algeria and the world during the period 2007-2020

The following table shows Algeria's food price index compared to the world food price index.

Table (2) the development of the food price index in Algeria and the world during the period 2007-2020

Years	Global indicator	Algerian indicator
2007	161.4	122.9
2008	201.4	132.1
2009	160.3	144.5
2010	188	150.6
2011	299.9	159.5
2012	213.3	183.3
2013	209.8	185.7
2014	201.8	193.9
2015	164	200.0
2016	154.9	207.4
2017	174	217
2018	182.3	202,2
2019	201.9	206,2
2020	212.4	211,1

Source: FAO, <https://www.fao.org>

From the table, we note that the general consumer food price index in Algeria is on a continuous rise during the period 2007-2020, as the rates of change vary from year to year, which reached a maximum in 2012, with a price change rate of about 14.9%, when the index reached about 183.3 points compared to about 159.5 points in the year 2011, so that the rate of change decreased in 2013 to 1.3%, but it remained in a state of fluctuation between rise and fall until 2017, while the general index of food prices in Algeria remained on a continuous rise, unlike the global index, which witnessed two main rises in food prices, namely the crisis of 2008 and 2011. After that, the index began to decline, only to rise again in 2017

3.2. The evolution of the basic food price index in the Algerian market during the period 2007-2020

The following table shows the price index of basic foodstuffs in the Algerian market during the period 2007-2020.

Table (3): The development of the price index of basic foodstuffs in the Algerian market during the period 2007-2020

years	vegetables	fruit	sugar	vegetables oils	Dairy	meat	cereals
2007	186.5	211.5	170	113.6	107	92.86	108.6
2008	199.9	225.6	195	130.2	114	98.18	232.7
2009	237.6	246.3	172	156	115	155	114
2010	151	197.9	177.5	157.4	115.2	151	114.9
2011	155	158.5	181	177	122	170	124
2012	200	180	183	183	125	207	129

2013	296.8	185.7	183.1	186.8	124.9	214.1	130.7
2014	196.6	220.4	181.1	188.6	132.5	179.8	131.6
2015	242.2	195.5	183.7	188.7	137.2	213.7	135.9
2016	215.7	259.85	189.5	189.6	139.9	223.7	145.8
2017	267.6	303.6	196.3	191	141.7	220.9	154.3
2018	283,07	341,70	205,93	194,71	147,81	173,56	153,13
2019	273,62	327,24	196,16	196,84	150,66	172,47	156,19
2020	260,24	348,51	184,37	198,84	152,06	189,79	159,27

Source: National Statistical Office ONS, Price Indications, official website <https://www.ons.dz/>

We notice through the table the fluctuation of the basic food price index in the Algerian market during the period 2007-2020, as all basic food commodities are witnessing a continuous increase from year to year despite some declines in 2013 due to the decline in the world food price index, as both cereals and milk prices were not affected by fluctuations in world market prices. State subsidies for these materials maintain price stability at an acceptable level, For example, hard and soft wheat are sold at subsidized prices by the National Grain Office estimated at about 2280 DZD and 1285 DZD per quintal, respectively, while they are purchased from the international market at about 4500 DZD and 3500 DZD per quintal of hard and soft wheat, respectively, and the state bears The difference in price.

On the other hand, the National Office of Milk sells milk powder at a subsidized price estimated at 159 thousand dinars per ton against an average import in the range of 420 thousand dinars per ton, and sugar prices have known increases in the price per kilogram between 2009 - 2011 until prices were roofed in 2011 and urgent measures were taken by the Algerian government to control prices .the price of sugar to 90 dinars per kg for white sugar and 600 dinars per package vegetables oils 5 liters in March 2011, and the profit margins for sugar and vegetables oils were roofed by about 8%, 5%, 5% and 10% of the original price of the product locally, for importer, wholesale and retail respectively. (FAO, 2021)

The Food and Agriculture Organization of the United Nations (FAO) confirmed the global decline in food prices in 2015 and, in a statement, reversed that decline to the abundance of production and competition among exporters on the one hand, the decline in the economy and the lack of demand on the other.

FAO's assessment is based on the movement of commercial transactions by measuring the trading prices of five major food commodities in international markets, namely cereals, meat, dairy, vegetable oils and sugar. (fairouz, 2020, p. 203)

3.2. How to determine food prices in Algerian markets:

The price in Algerian markets is determined by the Government's mechanisms, through which prices are controlled in these markets, so that consumables are accessible to the Algerian consumer.

3.2.1. Price controls in Algerian markets:

Since independence until the year 1991, the profit margins for all final products destined for direct consumption were determined according to the issuance of Ordinance No. 00-91 of January 15, 1991 related to competition, within the framework of economic reforms that adopted the principle of price freedom. Through the amendment in August 2010 and while preserving the principle of price freedom, Article 5 was amended by the inclusion of new provisions that allow the determination of profit margins and prices of goods and services,

or homogeneous items of goods and services, or their roofing or ratification, on the basis of the proposals of the concerned sectors. According to these amendments, it is possible to determine Profit margins and prices of commodities and services, or their ceiling or ratification, with the intention of: (abd el azize, 2017, p. 176)

- Stabilize the price levels of essential or widely consumed goods and services in the event of a perceived market disruption.
- Combating speculation in all its forms and maintaining the purchasing power of the consumer.
- The products and services whose prices and definition are regulated in: bread (regular and improved), semolina, - milk bags, - drinking water .
- Establishment of a mechanism to compensate producers when prices of imported materials exceed the limit at which two materials cannot be reached Normal vegetable oil and white sugar of the citizen at the metered Prices.
- Daily follow-up on the evolution of the prices of all basic food products by the interests of the Ministry of Commerce on the basis of which the public authorities will intervene to establish the appropriate mechanism to frame the price of any product when needed.

Conclusion

The concept of food security emphasizes on the need for all human beings to have access at all times to adequate material and economic opportunities to achieve enough food services.

Many people in the world lack sufficient amounts of food because of Wars, civil conflicts, natural disasters and climate change.

According to the World Food Security Index, which provides a framework for assessing the food security of countries around the world, levels of food security vary between a low level of performance and a better level of performance.

For Algeria from 2004 to 2021, The level of food prices fluctuated in Algeria, which is one of the countries with an average level of food security, due to the change in international food prices, for several reasons, including:

- Fluctuating prices of basic food items;
- the structural weaknesses of Algerian agriculture;
- Underdevelopment of the food industry;
- The absence of sufficient governance structures, which leads to ineffective decisions being made.

In order to ensure the food security of individuals in Algeria, Appropriate politicaframework with an integrated long-term vision They are developed and protect the purchasing power of the citizen by supporting and controlling the prices of basic foodstuffs, and the policies established must be characterized by:

Inclusiveness, differentiation, sustainability, and applicability.

Bibliography:

- Alangir, M., & Avova, p. (1991). *Providing Food Security for All. Published for the International Fund for Agricultural Development* . New York: University Press.
- Clay, E. (2002). *Food Security: Concepts And Measurement*. Retrieved 10 03, 2022, from fao: <https://www.fao.org/3/y4671e/y4671e06.htm>
- corbett, J. (2019). *Food Security and Regional Development*. Boulder: Westview Press.
- Enders, w. (1994). *Applied Econometric Time Series: A USERS' Guide* . New York: Wiley and sons.
- parker, S. (1989). *Agricultural Progress in the Third World and Its Effect on U.S. Farm Exports*. Washington: Congressional Budget Office.
- sposito, T. (2009/2010). *Agriculture Urbaine Et Periurbaine Pour Lasecurite Alimentaire En Afrique De L'ouest. Le Cas Des Micro-Jardins Dans La Municipalite De Dakar(thèse dedoctorat)*. milano: Université Degli Studi.
- Yazdanpanah, a. (1994). *impact of oil price on food security in theAlgeria, Iran, and Saudi Arabia: cointegration, vector-error correction model, dynamics, andcausality analysis*. Iowa: Iowa State University.
- Rahmani, m. (2020, juin 30). Food Security in Algeria: Concept Review and Measurement Indicators. *Economic and Management Research Journal* , p. 237.
- abd el azize, k. (2017, 06 08). The impact of the inflation index on Algeria's price increase. *Journal of Economics and development* , p. 176.
- fairouz, b. (2020). The impact of price fluctuations on sustainable food security in Arab countries (doctoral thesis). Faculty of Economic and Commercial Sciences and Management Sciences, setif: Farhat Abbas University.
- World Bank. (2022, 07 12). *Rising prices pose a risk to the poor*. Retrieved 07 14, 2022, from World Bank: <https://www.albankaldawli.org/>
- Bachir, b. A. (2013). High Food Prices Worldwide Causes and Responses. *Journal of Economics and development* , p. 70.
- FAO. (2022). *State of the World's Food 2022*. Retrieved 07, 12, 2022, from FAO: <https://www.fao.org>
- FAO. (2021). *World Food Price Index*. Consulté le 08 15, 2022, sur FAO: <https://www.fao.org>
- FAO. (2010). *The World's Food Crisis*. Retrieved 08 21, 2022, from FAO: <https://www.fao.org>
- FAO. (n.d.). *Introduction to the Basic Concepts of Food Security*. Retrieved 10 05, 2022, from FAO: <https://www.fao.org/3/al936>.