

Tax Incentives, Algeria's Mechanism in Making Food Available: Analytical Study During the Period (2010-2020)

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Abstract: This study aimed to evaluate the role of tax incentives granted to investors in the agricultural sector, in making food available locally in Algeria during the period (2010-2020). For this purpose, the database of the Arab Organization for Agricultural Development was relied upon, using the descriptive analytical approach within three axes. It has become clear to us that these incentives are inefficient, since local agricultural production cannot meet the total demand for food, which requires Algeria to import, and are also ineffective, since there are still available resources in the field of agricultural investment not yet exploited.

Keywords: Effectiveness; Efficiency; Food availability; Food security; Tax incentives

1. Introduction

Being considered as an essential requirement for the continuation of human life, agriculture always seeks, within its multiple needs, to satisfy the needs of food first. Countries depend on what their agricultural sector produces in the first place, but in the event that it is insufficient, they must import the quantities that fill their food gap.

Thanks to the abundance of food production on the global level, importing food was initially a solution without any risks, as the desired quantities were imported at an acceptable level of prices. However, the world's comfortable view towards importing food, changed during the early seventies of the twentieth century, due to the global food crisis that the world witnessed in 1972, when it was realized that the era of food abundance was approaching its end (Marion , 2011, p. 7), this is because of the erosion of the global food stock to below safety levels, due to the harsh climatic fluctuations, this is what made the world meets with a new issue, which is food security, that was defined for the first time in 1974 by the World Food Summit as: "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." (Rahmani , 2020, p. 237)

Since its emergence, the issue of food security has been considered the main core of the agenda of governments, especially in countries that depends heavily on imports. This is evident through the various efforts they exert, with the aim of relying more on local agricultural production, and within this context, Algeria is at the forefront of these countries, where it granted a set of tax incentives to the investors in the agricultural sector, with the aim of making food available locally.

1.1. Research Problematic

In light of the foregoing, we pose the following question: **Does agricultural production in Algeria respond to the tax incentives granted to the agricultural sector with the aim of making food available?**

As a preliminary answer to this problematic, we adopted the following hypotheses:

1. Agricultural investment project and production in Algeria in light of tax incentives are not increasing during the period (2010- 2020).
2. In light of the tax incentives granted to agricultural sector, Algeria during the period (2010-2020) is unable to provide food locally for its citizens.
3. Given the available untapped agricultural resources in Algeria, tax incentives are not a sufficient mechanism to make food available locally.

1.2. Research aims

Through this study, we aim to:

- . Identifying the various tax incentives granted to investors in the agricultural sector in Algeria.
- . Identifying the status of the agricultural sector in light of the tax incentives granted to it, within the national economy in Algeria.
- . Identify the approved sources of food availability in Algeria.
- . Estimating the food gap in Algeria, and studying the possibility of bridging it.
- . Evaluating the policy of tax incentives granted to investors in the agricultural sector in Algeria, that is pursued with the aim of making food available locally.

2. Tax incentives granted to the agricultural sector in Algeria

Tax is considered to be a tool in the hands of the state to achieve a set of goals by providing what is known tax incentives.

2.1. Tax incentives

Tax incentives are common around the world, especially in developing countries. Where government try to attract domestic and foreign capital. (Klemm & Van Parys, *Empirical Evidence on the Effects of Tax Incentives*, 2010, p. 2)

2.1.1. Tax incentives definition

Tax incentives are: "Fiscal measures used by governments to attract investment

domestically and internationally in certain key sectors of the economy". (Munongo, Ayo Akandi, & Robinson, 2017, p. 152), moreover, tax incentives are the concessions in tax codes that mean a conscious loss of government budgetary revenue. (CEDEFOP, 2023)

2.1.2. Forms of tax incentives

Tax incentives take different forms which are as follow:

A. Tax holiday: A tax holiday is a governmental incentive that temporarily reduces or eliminates taxes for consumers, or businesses as an investment incentive. The objective of the latter is to encourage economic activity and foster growth. (Kagan, 2023)

B. Investment allowances and tax credits: Investment allowances and tax credits are forms of tax relief that are based on the value of expenditures on qualifying investments. They provide tax benefits over and above the depreciation allowed for the asset. A tax allowance is used to reduce the taxable income of the firm. A tax credit is used to directly reduce the amount of taxes to be paid. (Holland & Vann, 1998, p. 06)

C. Tax deduction: Is a specific expense that a taxpayer has incurred and can subtract from their taxable income. Therefore, deductions can encourage certain uses of income. (CBPP, 2020, p. 02)

In addition to these incentives, the government can grant other incentives that take the following forms: (Klemm, Causes, Benefits, and Risks of Business Tax Incentives, 2009, p. 04)

D. Financing incentives: Reductions in tax rates applying to providers of funds, e.g., reduced withholding taxes on dividends;

E. Exemptions from various taxes: Exemption from certain taxes, often those collected at the border such as tariffs, excises and VAT on imported inputs;

F. Reduced tax rates: Reduction in a tax rate, typically the corporate income tax rate.

2.2. The content of tax incentives granted to the agricultural sector in Algeria

The agricultural sector enjoys a large amount of tax incentives, that is why the tax revenues from this sector do not exceed 0.03% of the total tax revenues. (حيمران، 2021), the main forms of tax incentives granted to this sector are: Tax exemption, exemption from customs duties, sales tax exemption. The agricultural activities in Algeria benefit from the following tax incentives: (المديرية العامة للضرائب، 2022)

2.2.1. In the field of gross income tax

The following incomes and revenue are exempted from gross income tax:

- Income from the cultivation of cereals, dry legumes and dates;
- Revenues generated from agricultural and animal husbandry activities practiced in newly reclaimed lands for a period of 10 years;
- Permanent exemption for income generated from activities related to natural milk for consumption as it is.

2.2.2. In the field of corporate profits tax

The following profits benefit from exemption from corporate profits tax as follows:

A. The beneficiaries of the permanent exemption from tax on corporate profits are:

- Agricultural cooperation funds for banking and insurance operations carried out with their partners only;
- The agricultural supply and purchase cooperatives, as well as the unions benefiting from the credit, are handed over to the qualified departments of the Ministry of Agriculture and managed in accordance with the legal and regulatory provisions that regulate them, with the exception of transactions with non-partner users;
- Cooperative companies for the production, transformation, preservation and sale of agricultural products, as well as their approved associations according to the same conditions stipulated above and managed in accordance with the legal or regulatory provisions that govern them, with the exception of the following operations:
 - Sales that are realized in retail stores that are separate from its main establishment;
 - Transfers of products or semi-products, with the exception of those destined for human and animal nutrition, or that can be used as raw materials in agriculture or industry;
 - Transactions made with non-partner users that the cooperatives have authorized or compelled to accept.

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This exemption applies also for the following operations and activities:

- Operations carried out by grain cooperatives and their unions with the Algerian Professional Office of Cereals and related to the purchase, sale, or transfer of grain;
- Operations carried out by grain cooperatives with other grain cooperatives within the framework of programs prepared by Algerian Professional Office of Cereals or with a license from it;
- Income generated from activities related to natural milk destined for consumption.

B. The beneficiaries of temporary exemption from tax on corporate profits are:

- The production of nitrogenous fertilizers (urea and ammonia) modified locally and destined for sale in the national market, benefit from the exemption from tax on corporate profits for a period of three (3) years, starting from the fiscal year 2013. Benefiting from this exemption is linked to the subscription of a book of conditions whose conditions are determined by regulation.

2.2.3. In the field of value-added tax

The following are exempted from the value-added tax:

- Combine harvesters made in Algeria;
- Nitrogenous and phosphate fertilizers, phosphopotassium and compound fertilizers (NPK sulfate and NPL chlorine) contained in customs tariffs No. 31-02, 31-03, 31-04 and 31-05, as well as materials related to plant growth included in customs tariffs No. Sub-tariffs No. 10-10-08-38 to 00-90-08-38 (Insecticides, anti-fungicides, fungicides, herbicides, germination inhibitors and plant growth control, disinfection and all similar materials presented in forms or packaged for retail sale or in the form of preparations or in the form of materials such as

wick strips, match candles and fly repellent paper);

Also exempted from value-added tax, starting from the date of issuance of the Supplementary Finance Law for the year 2009 until December 31, 2018, the rents paid within the framework of the rental loan contracts and related to the following:

- Agricultural equipment produced in Algeria;
- Equipment produced in Algeria and necessary for the realization of cold rooms and grain silos intended for the preservation of agricultural products;
- Equipment produced in Algeria, necessary for irrigation to save water and used exclusively in the agricultural field;
- Equipment produced in Algeria, used in the realization of small dairy products and intended for the processing of fresh milk;
- Equipment produced in Algeria, necessary for the cultivation of olives and the production and storage of olive oil;
- Equipment and supplies produced in Algeria and necessary to renew production tools and invest in the manufacturing industry.

3. The reality of the agricultural sector in Algeria in light of tax incentives granted to it, during the period (2010- 2020)

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Agriculture in Algeria relies on various agricultural investments which is defined as follow: "It is the use of the available agricultural production factors of land, labor and capital..., and operating them with the intention of producing agricultural products to meet the needs of consumers and obtain the best possible results, which differ according to the prevailing economic system". (رابحي، 2021، صفحة 05)

Through this axis, we will address the reality of the agricultural sector in Algeria, in light of the tax incentives granted to it during the period (2010-2020), within the Algerian economy, by studying the development of the size of agricultural projects as well as the percentage of agricultural production within the gross domestic product.

3.1. Agricultural investment projects in Algeria in light of the tax incentives granted to the agricultural sector during the period (2010-2020)

The agricultural projects in Algeria are of different fields, some of them are specialized in livestock breeding and animal production, and others that are specialized in plant production. The following is the status of the total agricultural investment projects in Algeria in light of the tax incentives during the period (2010-2020).

Table 01. The status of agricultural investment projects in Algeria during the period (2010-2020)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
agricultural investment projects	29	32	46	83	93	100	100	102	123	101	90

Source : (AAPI, 2023)

We note from the table above that a group of agricultural investment projects were registered in Algeria annually during the period (2010-2020), and it is also noted that the number of these projects is constantly increasing during the period (2010-2018), while their

number decreased during the years 2019-2020. However, the number of these projects in general witnessed a recovery during the study period, as 29 agricultural projects were recorded during the year 2010, while 90 projects were registered during 2020.

3.2. Agricultural production in Algeria in light of the tax incentives granted to the agricultural sector during the period (2010-2020)

knowing the position of the agricultural sector within the Algerian economy, lead us to study the percentage of agricultural production within the gross domestic product (GDP) during the period (2010-2020).

Table 02. The position of the agricultural production within the gross domestic production in Algeria during the period (2010-2020) 1000 million U.S Dollars

	Gross domestic product (GDP)	Gross domestic agricultural production	Gross domestic agricultural production out of (GDP)%
2010	161 734,4	13 644,41	8,43 %
2011	199 416,64	16 242,60	8,14 %
2012	207 821,72	18 334,02	8,82 %
2013	209 415,56	20 573,39	9,82 %
2014	213 343,00	21 966,00	10,30 %
2015	166 894,00	19 718,00	11,81 %
2016	160 090,44	19 551,48	12,12 %
2017	167 574,80	20 565,07	12,27 %
2018	204 523,00	20 769,54	10,16 %
2019	171 157,86	25 291,00	14,78 %
2020	147 688,69	20 756,16	14,05 %

Source: (2023، المنظمة العربية للتنمية الزراعية،)

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We note from (Table 02) that the domestic agricultural production in Algeria during the period (2010-2020) is fluctuating and unstable, but in general it is in a state of development, as it recorded an amount of 13 644.41 million dollars, while in 2020 it recorded 20 756,16 million dollars, and thus developed by 7 111,75 million over 10 years.

The fluctuation and instability of domestic agricultural production in Algeria during the period (2010-2020) is due to several factors and causes, as follows:

- The direct negative effects of climate change on agricultural production, as the abundance of agricultural production depends on the extent of the stability and moderation of the climate, and therefore climate disruptions such as drought or floods lead to a decline in this production inevitably;
- The decline in the number of agricultural investment projects due to the termination of the agricultural investment project, or change the sector of activity from agricultural to other sectors;
- The reduction of agricultural investors in the size of their investment projects due to several obstacles such as financing problem.

It is noted from the same table that the local agricultural production in Algeria during the period (2010-2020) is somewhat weak compared to the gross domestic production (GDP), as the proportion of local agricultural production out of the gross domestic production did not exceed 14.78% throughout the study period, and this indicates that the Algerian economy is based on other sectors that are more important than the agricultural sector.

4. Evaluation of tax incentives granted to the agricultural sector in Algeria

during the period (2010-2020)

The goal of the Algerian government behind granting tax incentives for the benefit of investors in the agricultural sector, is to provide food locally for its citizens and to achieve the highest levels of food security, which is recently defined as follow: "exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life". (FAO, 2023)

These tax incentives will be evaluated on the basis of efficiency and effectiveness, and for this purpose we must first address the reality of agricultural production. It should be noted that in our study of the latter's reality, we will focus on basic food commodities only, which benefits greatly from tax incentives.

Table 03. Local agricultural production of basic food commodities in Algeria during the period (2010-2020) 1000 Ton

	Cereals	Raw sugar	Pulses	Vegetable oils	Vegetables	Fruits	Meat	Milk	Total
2010	4 558,57	00,00	72,32	178,69	8 640,42	2 705,39	559,66	2 854,07	19 569,12
2011	3 727,99	00,00	78,82	421,03	9 569,24	3 708,31	597,74	3 165,66	21 268,79
2012	5 137,15	00,00	84,29	250,79	10 402,32	3 856,74	606,27	3 063,84	23 401,4
2013	4 912,23	00,00	95,83	406,36	11 866,41	4 231,63	606,60	3 400,67	25 519,73
2014	3 435,23	00,00	123,47	57,16	12 583,02	4 498,83	771,02	3 649	25 117,73
2015	3 829,37	00,00	107,35	86,67	12 785,42	4 962,45	819,02	3 805,00	26 395,28
2016	3 445,16	00,00	77,31	99,55	8 880,20	4 796,74	1 053,17	3 586,53	21 938,66
2017	3 478,07	00,00	107,21	99,36	8 882,46	5 284,20	1 073,70	3 521,21	22 446,21
2018	6 065,94	00,00	146,30	101,40	9 409,39	14 634,71	1 047,67	3 280,00	34 685,41
2019	5 633,45	00,00	146,56	115,82	8 619,98	5 006,10	828,43	3 189,24	23 539,58
2020	4 392,30	00,00	115,05	249,90	10 287,21	4 552,00	798,52	3 354,70	23 749,68

Source: (2023, المنظمة العربية للتنمية الزراعية،)

We note from the above table that the local agricultural production in Algeria during the period (2010-2020) is fluctuating and unstable, due to the impact of the various challenges that affect and hinder the agricultural production process, as the amount of this production was limited between 19 56,912 thousand tons as the lowest value in 2010, and 34 685,41 thousand tons, as the maximum value in 2018. It is also noted from the same table that despite the fluctuation of this production, it developed during the period (2010-2020) from the amount of 19 569.12 thousand tons during 2010 to the amount of 23 749.68 tons during 2020.

4.1. Evaluation of tax incentives granted to the agricultural sector in Algeria in terms of efficiency during the period (2010-2020)

Efficiency is defined as: "The ability to achieve an end goal with little to no waste, effort, or energy. Being efficient means, you can achieve your results by putting the resources you have in the best way possible. Put simply, something is efficient if nothing is wasted and all processes are optimized. This includes the use of money, human capital, production equipment, and energy sources". (Banton, 2023). The efficiency of anything in any field, is evaluated based on several standers including the performance one, therefore the evaluation of the efficiency of tax incentives granted to agricultural investors based on this stander, requires us to research first the outputs of the agricultural sector (Table 03), then study whether these outputs are compatible with desired goals from granting these incentives, which is to provide food locally. This leads us to know the reality of food security in Algeria in terms of the availability of food, that is to know the reliable sources for the availability of the latter.

Food availability is an important indicator among the four approved indicators in measuring the level of food security. The latter is defined as: "The existence of enough quantities of food of adequate quality, supplied through domestic production or import (including food aid)". (García-Díez, Gonçalves, Grispoldi, Cenci-Goga, & Saraiva, 2021, p. 02)

In addition to what its agricultural sector produces (table 03), Algeria resorts to importing food due to the insufficiency of its domestic agricultural production to meet the total demand for it. The following table shows the quantity of basic food commodities imported during the period (2010-2020).

Table 04. Imported food commodities in Algeria during the period (2010-2020) 1000 Ton

	Cereals	Raw sugar	Pulses	Vegetable oils	Vegetables	Fruits	Meat	Milk	Total
2010	7 946,15	1 347,92	206,06	682,94	30,82	354,76	62,30	2 752,26	13 383,21
2011	11 039,25	1 572,71	247,84	662,00	38,81	817,11	47,69	3 133,69	17 559,1
2012	9 912,51	1 697,99	176,49	718,36	32,7	195,21	72,52	2 899,38	15 705,16
2013	7 501,93	1 415,04	185,89	35,83	331,95	331,95	49,70	1 983,95	11 836,24
2014	12 497,7	1 711,08	193,58	931,41	54,24	511,92	82,81	1 031,82	17 014,5
2015	13 915,58	1 673,36	230,98	1 012,07	63,14	460,67	69,24	728,82	18 153,86
2016	13 382,91	1 894,47	199,35	1 023,85	44,07	296,02	68,05	762,56	17 671,28
2017	12 912,30	2 210,40	237,52	1 055,28	32,08	117,81	51,77	682,56	17 299,72
2018	16 734,58	2 280,77	242,85	1 045,42	32,08	241,64	51,74	757,98	21 387,06
2019	17 215,71	1 782,60	210,56	1 048,20	42	315,11	56,94	644,09	21 315,21
2020	12 381,47	1 886,12	191,55	1 003,92	29,65	316,1	33,77	1 271,85	17 114,43

Source: Arab agricultural statistics yearbook, vol 41, 40, 39, 38, 37, 36, 35,34, 33.

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From the previous table, we note that Algeria during the period (2010-2020) imported all types of basic food commodities, and that the total amount of food imported is fluctuating and unstable, as the lowest value was recorded in 2013 at 11 836,24 thousand tons, and 21 387,06 thousand tons was the highest value during the year of 2018, and in general, the volume of food imported in Algeria increased during the same period from 13 383,21 thousand tons in 2010 to 17 114,43 thousand tons in 2020, that is, an increase of 3,731.22 thousand tons.

Based on what was discussed previously, we find that local agricultural production in light of tax incentives granted to agricultural sector in Algeria during the period (2010-2020), is insufficient to meet the citizens' need for food locally, which forces the state to import from abroad with the aim of filling the food gap, which is defined as follow: "it is a measure of the extent of the food problem that the country faces, and it is measured by the difference between the total needs of different food products (quantities of food needed for consumption), and the total produced locally, that is, it is the net imports of the main food commodities. (16 صفحة، 2017، إسلامي)"

4.2. Evaluation of tax incentives granted to the agricultural sector in Algeria in terms of effectiveness during the period (2010-2020)

Effectiveness means obtaining the best possible results in production (Poskart, 2014, p. 180), it known also as the extent to which stated goals are (Productivity Commission, 2013, p. 06). Therefore, effectiveness is achieved when the desired goals are reached, even if this costs the exploitation of all available resources. To judge the tax incentives granted to agricultural investors in Algeria during the period (2010-2020), whether they are effective or not, we must first determine the goal for which these incentives were granted, which is the availability of food locally.

Given that tax incentives are inefficient in making food available locally, we cannot judge them to be ineffective either, since in order to judge the effectiveness of these incentives or not, we must address the status and reality of the resources available in the field of

agricultural investment, which means that:

- If all available resources in the field of agricultural investment are exploited, and yet food is not available locally, these incentives can be judged to be somewhat effective, because the problem is insufficient resources.
- If there are remaining available resources that have not yet been exploited, and food is not available locally, then these incentives are ineffective

The following is a study of the reality of the main resources needed in the field of agricultural investment in Algeria during the period (2010-2020), which are land, water, and labor.

4.2.1. Arable lands

Land is considered one of the most important basic resources in the agricultural production process, the following table shows the reality of the arable land resource in Algeria during the period (2010-2020).

Table 05. Arable land (exploited and unexploited) in Algeria during the period (2015-2020) (1000 HA)

	Arable land	Cultivated area	Cultivated area from arable land (%)	Uncultivated area	Uncultivated area from arable land (%)
2010	11 710,74	8 435,03	72,02%	3 275,71	27,98%
2011	11 692	8 445,49	72,23%	3 246,51	27,77%
2012	12 185,03	9 032,70	74,12%	3 152,33	25,88%
2013	11 505,32	8 461,87	73,54%	3 043,45	26,46%
2014	11 530,58	8 465,04	73,41%	3 065,54	26,59%
2015	10 426,92	8 488,03	81,40%	1 938,89	18,6%
2016	43 395,21	8 448,48	19,45%	34 946,74	80,55%
2017	43 769,89	8 534,60	19,50%	35 235,29	80,5%
2018	41 350,85	5 522,41	13,35%	35 836,43	86,65%
2019	43 968,80	5 724,78	13,02%	38 244,02	86,98%
2020	41 358,85	7 240, 49	17,50%	34 118,36	82,5%

Source: (2023، المنظمة العربية للتنمية الزراعية،)

It is noted from the table above that arable land in Algeria during the period (2010-2020) is not fully exploited, as the percentage of the uncultivated area of arable land during the period (2010-2015) was limited between 27.98% and 18.6%, while during the period (2016-2020), this percentage increased, as it was limited between 80.5% and 86.96%. The reason for this is the increase in the area of arable land, while the level of exploitation of the latter has remained approximately at the same level.

4.2.2. Water

In Algeria, the sources of water are divided into conventional sources such as rainwater, groundwater, and surface water such as lakes, and unconventional sources such as desalination of seawater and recycling of used water, (مغربي، 2016، صفحة 105) among these sources, Algeria relies on rain and surface water to supply the agricultural sector with water (ياحي، 2023) Therefore, the fluctuation of precipitation will inevitably affect the volume of production. However, since Algeria has a water reserve of 40 thousand billion cubic meters, located in a lake in the south, sufficient for 40 centuries, (كتاب، 2017) the water resource is not considered a problem that hinders agricultural production.

4.2.3. Labor

No matter how much technical and technological means develop in any production process, the need for human resource remains, especially in the field of agriculture. The following table shows us the volume of employment in the agricultural sector in Algeria during the period (2010-2020).

Table 06. Agricultural labour force in Algeria during the period (2010-2020)

	Total labour force	Agricultural labour force	agricultural labor out of the total labor (%)
2010	10 544,00	2 420,00	22,95 %
2011	10 662,00	2 442,60	22,99 %
2012	11 423,00	2 476,50	21,67 %
2013	11,964,00	2 528,90	21,13 %
2014	11 454,00	2 550,00	22,26 %
2015	11 931,00	4 959,80	41,57 %
2016	10 845,00	2 545,19	23,47 %
2017	10 858,00	2 608,77	24,02 %
2018	12 400,00	2 648,98	21,36 %
2019	12 700,00	2 693,55	21,20 %
2020	12 102,76	2 650,00	%21,90

Source: Arab agricultural statistics yearbook, vol 40, 39, 38,37, 36, 35, 34, 33.

We note from the previous table that the maximum volume of the agricultural labor force, out of the total labor force in Algeria during the period (2010-2020), was recorded during the year 2015 at 41,57%, while this percentage during the rest of the years of the same period was estimated between 24.02% during the year 2017, and 21.13% during the year 2013. Therefore, there is a group of agricultural workers lost their jobs after 2015, for certain reasons. So, there is an unemployed workforce, in addition to that Algeria suffers from unemployment which reached 13% in 2020 (بن مهيدي و زياتي، 2022). This indicates that Algeria does not suffer from a lack of employment.

Based on what was previously discussed about the reality of the basic resources needed in the process of investment and agricultural production in Algeria during the period (2010-2020), it became clear to us that these resources are not fully exploited in light of the tax incentives granted to the agricultural sector, and this is what proves the ineffectiveness of this incentives.

5. Conclusion

Undoubtedly, the availability of food at the required level, and ensuring its sustainability, is a prerequisite for achieving food security, for this purpose, it is necessary for any country to take note of all the variables that would negatively affect the trend of food availability, in order to be able to control with the aim of weakening their negative effects to the maximum extent, this is on the one hand, and striving to improve agricultural sector, because it is the safest source in making food available on the other hand. Through our study of the role of tax incentives granted to the agricultural sector with the aim of making food available locally in Algeria during the period (2010-2020), since taxes are variables that indirectly affect the availability of food, we have concluded the following results:

- The multiplicity and different tax incentives granted to the agricultural sector in Algeria, and the focus on granting permanent exemptions to investments producing basic foodstuffs such as cereals and milk
- Algeria's granting of many tax incentives to investors in the field of agricultural investment,

indicates the government's intention to achieve food security in which it depends on local agricultural production away from imports;

- The weakness of the agricultural sector in Algeria in light of tax incentives, whether in terms of the number of project or in the size of production;

- The diversity of agricultural products in Algeria in light of the tax incentives granted to investors in the agricultural sector;

- In light of tax incentives, poor production of some food commodities such as oils, and the absence of production of some others such as raw sugar

- In light of the tax incentives granted to the agricultural sector, Algeria is unable to provide food locally from all food commodities, and therefore it is witnessing a food gap from all these commodities.

- Tax incentives are not enough as a policy to push agricultural investment to the level that make food availability locally.

- Agricultural production in Algeria in light of the tax incentives granted to the agricultural sector is fluctuating and unstable and is not taking an increasing trend. - The ineffectiveness and inefficiency of the tax incentives granted to the agricultural sector in making food available locally, given that the resources exploited in the field of agricultural investment are not able to provide food at the required level, which keeps Algeria in a state of importing food on the one hand, and on the other hand that there are available untapped resources such as lands.

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- The inability of the agricultural sector in Algeria to make food available and provide it locally, in light of the tax incentives it enjoys and the available resources, indicates that the sector suffers from certain problems.

On the basis of the results obtained, we suggest some recommendations that would achieve Algeria's goal of granting tax incentives to investors in the agricultural sector, which is developing local agricultural production and making food availability locally, which are as follow:

- Raising awareness of the size of the tax incentives that the Algerian state grants to investors in the agricultural sector, with the aim of attracting new investors.

- Using the latest technological techniques in the field of agriculture, which will increase the productivity with the least possible number of resources, especially in the field of irrigation, given the sensitivity of this resource;

- Encouraging family agricultural production, through rebuilding the countryside again by providing the necessary living requirements there;

- Create a suitable climate for agricultural investments by investigating the problems facing the agricultural sector, and searching for ways to solve them;

- The need for the state to accompany the farmers, which will enable it to know the various problems and obstacles at the time they occur, in order to contribute to developing appropriate solutions for them at the appropriate time;

- The need for government support for agricultural production requirements and inputs, such as chemical fertilizers, improved seeds, and pesticides, as well as advanced equipment and

tools that would increase productivity.

- Supporting and developing scientific research in the field of agriculture, because of its importance in creating solutions to challenges that would hinder production.
- Informing agricultural investors and training them on how to use new agricultural techniques and methods;
- Adopting advanced, high-quality storage systems to preserve agricultural products for longer periods, with the aim of avoiding rotting;
- Focus on growing crops that are compatible with the nature of the prevailing climate in order to reduce production costs;
- Providing guarantees to agricultural investors and insuring them against all challenges and dangers that prevent them from achieving profit;
- Attaching agricultural investors with experts and engineers to help realize their strengths and weaknesses, in order to make more accurate decisions;
- Developing and securing the water resource by expanding the capacity of dams, establishing seawater desalination plants, and creating artificial lakes;
- Developing the infrastructure, like roads and ports, as it is a basic requirement in the process of transporting and distributing the inputs and outputs of the agricultural production process;
- Reviewing the legal texts in the field of agricultural investment, and reformulating them in a way that attracts investors.

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Appendices:

RÉPUBLIQUE ALGÉRIENNE DÉMOCRATIQUE ET POPULAIRE
 SÉRVICES DU PREMIER MINISTRE
 AGENCE ALGÉRIENNE DE PROMOTION DE L'INVESTISSEMENT



PART DES PROJETS D'INVESTISSEMENT INSCRITS DANS LE SECTEUR AGRICOLE Période :
 2002- 2021

	NOMBRE DE PROJETS	%
AGRICULTURE	1 428	2,42
TOTAL GLOBAL	58 889	100

ÉVOLUTION DES PROJETS D'INVESTISSEMENT INSCRITS DANS LE SECTEUR AGRICOLE
 Période : 2002- 2021

	NOMBRE DE PROJETS	%
2002	47	3,29
2003	114	7,98
2004	65	4,55
2005	50	3,50
2006	67	4,69
2007	39	2,73
2008	33	2,31
2009	17	1,19
2010	29	2,03
2011	32	2,24
2012	46	3,22
2013	83	5,81
2014	93	6,51
2015	100	7,00
2016	100	7,00
2017	102	7,14
2018	123	8,61
2019	101	7,07
2020	90	6,30
2021	97	6,79
TOTAL	1 428	100%

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