

Ensuring Arab-African Food Security

ضمان الأمن الغذائي العربي- إفريقي

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Abstract:

Food security is considered one of the serious problems that must be resolved as soon as possible, due to its attachment to human and the continuity of his offspring, affected by environment, and the social relations that linked him to his kind, and other creatures, as well as the economic aspect of it, it is closely linked to the economic problematic related to satisfying the growing needs in light of the lack of resources. Considering that the most important of these needs are Food and Drink needs, which cannot be fully satisfied without ensuring food security.

And since the Competitive Advantage related to production capacity between countries is one of the most important factors for achieving economic integration, it was necessary to create integrations between countries according to data that would make it successful. That is why this research paper came in an attempt to highlight the success factors of Arab-African integration in the field of Sustainable Food Security, and the achievement of sustainable development goals related to it through: "SDG 02: Zero Hunger", in an attempt to answer the problematic question: **How can Ensuring Arab-African food security?**

Keywords: Food security, Arab-African integration, sustainable development, social equation, Environmental dimension, Economic dimension.

Jel Classification Codes: A130, O5, R21, R22.

ملخص:

يعتبر الأمن الغذائي من المشكلات الجديدة الواجب حلها في أقرب الآجال, وذلك لتعلقه بالإنسان واستمرار نسله, متأثراً بالمحيط البيئي, والعلاقات الاجتماعية التي تربطه بيبي جنسه, ومع غيره من الكائنات, فضلاً عن الجانب الاقتصادي له؛ حيث يرتبط ارتباطاً وثيقاً بالمشكلة الاقتصادية المتعلقة بإشباع الحاجيات المتزايدة في ظل شح الموارد. وأهم هذه الحاجيات هي حاجيات المأكل والمشرب, هذه التي لا يمكن أن تحقق الإشباع التام لها بدون ضمان تحقيق الأمن الغذائي.

ولما كانت الميزة النسبية المتعلقة بالإنتاج بين الدول من أهم عوامل تحقيق التكامل الاقتصادي, كان من اللازم خلق التكاملات بين الدول وفق معطيات يكون من شأنها إنجاح هذه الأخيرة. ولهذا جاءت هذه الورقة البحثية في محاولة لإبراز عوامل نجاح التكامل العربي-إفريقي في مجال الأمن الغذائي المستدام, وتحقيق أهداف التنمية المستدامة المتعلقة به من خلال: "الهدف التنموي الثاني: القضاء التام على الجوع", وذلك في محاولة للإجابة عن سؤال الإشكالية: **كيف يمكن ضمان الأمن الغذائي العربي الإفريقي؟**

الكلمات المفتاحية: الأمن الغذائي, التكامل العربي-إفريقي, التنمية المستدامة, المعادلة الاجتماعية, البعد البيئي, البعد الاقتصادي.

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Introduction:

The economic problematic describe the continual humans carrying on to reach his rising needs with considering the limits of resources. These needs which vary in order; so that comes first the necessary needs which guarantee his survival, and one of these needs is: FOOD.

Food occupies an important role in the life of living organisms, of which humans are at the top, and for that reaching the nutritional need which rooted since his creation is an absolute necessity, that is why we find him striving and developing himself in order to make things easier for him, which created disparity among human beings in the issue of satisfying this need, to be divided into two groups; The first: within satisfying his nutritional needs, and The second: which did not reach that, and within the humanity framework the two parties must be integrated to ensure the continuity of the human race, Accordingly, the term “FOOD SECURITY” emerged and was emphasized in global development plans and sustainable development, and set goals that the process proceeds according to studied steps in order to achieve it, regardless of ethnicity or continental difference.

Because of that this research paper aims to answer the problem: **How can Arab-African food security be guaranteed?**

In order to answer this problem, the following hypotheses can be formulated:

Hypotheses:

- 1) Food security expresses the provision of food for all human beings without distinction between their different affiliations, within the framework of the complete eradication of hunger.
- 2) Each of the Arab countries and African possess several elements that make integration between them in order to achieve food security desirable and an imperative.
- 3) Arab-African food security can be guaranteed through internal cooperation before external, and moral conviction before material.

Previous Research:

1) CHRISTAIN HANDERSONs Study “The power of food security”*:

The practice and policy of food security have been the subject of a large body of research. Less is known about the politics of food governance. This article responds to this gap by proposing that food security policies in the Arab Gulf states constitute a form of knowledge-power. This is manifest in a discourse that produces authority, legitimates the region's rulers, and facilitates the needs of the institutions and companies that oversee the governance of food. The discursive emphasis on food security as a technocratic matter serves to obfuscate political and environmental realities; it facilitates the acquisition of foreign land and fulfills objectives of security and profit.

2) BOUSAIDA & MOKHTARs Study “The role of Arab food integration in achieving food security”*:

* Christian Handerson, **The power of food security**, Globalization Journal, volume 0, issue ahead of print published online in 29/05/2022, Taylor & Francis group, UK, pp 01-17.

The problem of food deficit in the Arab world is closely linked to the lack of integrated strategic planning, development and status of retail and disintegration, which live at a time when the world is headed towards integration and the entire Alliance, which has become an important tool to achieve sustainable economic development. The state of disintegration and, the economic development of Arab-starved after the integrative and holistic impacted heavily on the exploitation of the full and perfect what is available to him from the human resources and material; and this situation has reflected negatively on the level of productivity of these resources, and thus exacerbate the food gap in the majority of Arab countries. Under these circumstances we will try in this intervention to address the problem of the contribution of the integration of Arab food in the food security of the region, and therefore by standing on the reality of food security in Arab countries, and the reasons behind the worsening food deficit and to identify obstacles and challenges and requirements of this integration, as well as its role in achieving food security in the region.

3) ABBAS ABDELAHFIDH & OTHERs Study “The Reality of Food Security in North African Contries and ways of Integration among them” **:

This study dealt with the food security situation of north African countries for the last five years, especially in particularly with the coronavirus which caused affected the availability of food. This study included an analysis of the development of production and basic food, with a review of some trade exchanges of food between Algeria and the rest of north African countries. This study concluded a positive improvement in food security conditions in 2019 compared to previous years thanks to some policies adopted by north African countries to develop the agricultural sector and confront the obstacles caused by the covid19 and climatic changes such as desertification, drought and water scarcity, and the negative point remains the absence of agro-food integration between north African countries.

Research Gap:

It is noted that the previously mentioned studies dealt with the definition of food security and the living reality associated with it, and some of them gave some solutions and methods in order to achieve this goal and the role of integrations in achieving this matter. But! all studies did not mention the important role of the social equation that achieves the success of these integrations. Likewise, most studies neglected the link between Arab countries and African countries, bearing in mind that this allocation is necessary in view of the social equation linking each of these countries.

That s why, this study came in an attempt to redress this matter, and here lies the research gap to be covered by the researcher.

* بوسعدة سعيدة ومختار رحمانى حكيمة. دور التكامل الغذائي العربي في تحقيق الأمن الغذائي، مجلة حوليات، المجلد 29، العدد 02، نشر في: 20/06/2016، جامعة الجزائر، الجزائر، ص ص 75-97.

** عباس عبد الحفيظ وآخرون، واقع الأمن الغذائي في دول شمال افريقيا وسبل التكامل فيما بينهم، دفاتر MECAS، المجلد 18، العدد 02، نشر في: 02/12/2022، جامعة تلمسان، الجزائر، ص ص 649-663.

I- definition of food security:

Trough this partition we try to defined the meaning of Food Security depending on: Food and Agriculture Organisation “FAO”, and studies that related with, since it is the first responsible about it in the UN Group.

I-1- What is food security:

When we use the expression of “Food Security” we mean generally that: When any country produces a sufficient amount of food for it, relying on its resources and ingredients, and that its food products are able to compete in foreign markets and generate income in hard currency, which helps it to barter for commodities and food products that it does not have the advantage of producing. In other words, food security is the state’s provision of food to its citizens in quantity and quality, taking into account the health of its citizens and the fairness of food access to all its citizens, especially those with limited incomes, and at the same time achieving a stock of food to face unexpected circumstances, whether natural or economic, and its provision is either through Local production or import depending on its financial savings obtained from its exports (“AOAD”, 1996, p. 28).

Definition of Rome Declaration about World Food Security ‘1996’ (FAO, 1996) :

Food security exists when all people have, at all times, physical and economic access to sufficient, safe and nutritious food to meet their energy needs and food preferences for leading healthy and active lives. In this regard, concerted action at all levels is needed .

Definition of the Food and Agriculture Organization (FAO) (FAO, Food Security, 2006):

Availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices.

I-2- Security Food Dimensions:

The term “Dimension” expresses walking in parallel with the general framework of the goal according to a specific way to reach it, and in the case of multiple dimensions in one process, it becomes necessary to work on finding a consensual formula in order to harmonize the dimensions among them while moving towards achieving the goals of the process.

According to MAXWELL.S and FRANKENBERGER.TR, the dimensions of food security can be summarized in the following elements (FRANKENBERGER & MAXWELL, 1992, pp. 11-17) :

I-2-1- Sufficiency: What is "Enough"?

The concept of “enough food” is presented in different ways in the literature: as “minimal level of food consumption”; as a “target level”; as “the basic food (needed)”; or as the food “adequate to meet nutritional needs”. In more descriptive formulations, “enough (food) for life, health and growth of the young and for productive effort” or as “enough food for an active, healthy life” or as “enough food to supply the energy needed for all family members to live healthy, active and productive lives.”

From these definitions and others, we can extract the sufficiency variables as:

First, the unit of analysis in these definitions is the individual, not the household. Where the household is referred to; it is usually as an aggregation of individuals whose food needs must be satisfied. Only rarely

Secondly, although the definitions mostly refer to “food,” the main concern is with calories and not with: (a)protein, (b)micro-nutrients or (c)more generally; food quality and safety. This is mainly because analysts operate on the principle that other needs are usually satisfied when calorie intake is satisfactory.

Finally, and notwithstanding the difficulty of measurement, an important aspect of assessing whether people have access to “enough” food is to ask how far they fall below the threshold. This is something not much discussed in the recent food security literature

Taking these various considerations together, we find that the concept of enough food is problematic. Nevertheless, it appears to make sense:

- a) to concentrate initially on calories.
- b) to define needs not just for survival, but also for “an active, healthy life”.
- c) to assess not just the fact of a shortfall but also its gravity.
- d) and to begin with individual needs and build up to the household.

I-2-2- Access and Entitlements

The second of our core concepts is “access”, the question of whether individuals and households (and nations) are able to acquire sufficient food. It is often argued that the focus on access is a phenomenon of the 1980s, largely resulting from the pioneering work of Amartya Sen (SEN, 1981) on food “entitlements”. However, the interest in whether and how people acquire food has a longer pedigree and is rooted in nutrition planning.

In 1973, for example, Joy developed the idea of a “functional classification” (Joy.L, 1973, pp. 165-197) of malnourished people and argued that; food and nutrition planning starts not from the

measurement of nutrient and food supply “gaps” but from the identification of who it is that is poorly nourished and why.

Many similar analyses were incorporated in nutrition studies during the 1970s. In the light of later debates, it is interesting that Joy's functional classification included ecological, demographic and economic factors

An access approach was also incorporated in food policy analysis argued that: 'food security is a problem most often conceptualised as macro phenomenon deviations from trend in aggregate consumption.' However, as a human problem, it is primarily one of the welfare vulnerability distinct categories of people within the population... the urban poor, the rural landless and small or marginal farmers.

Sen's entitlement framework provides a systematic approach to the definition and assessment of vulnerability. An individual's entitlement is rooted in his/her endowment -the initial resource bundle- which is transformed via production and trade into food or commodities which can be exchanged for food. If the entitlement set does not include a commodity bundle with an adequate amount of food, the person must go hungry; in Sen's terminology, the individual has suffered an entitlement failure. In a private ownership market economy, the entitlement relations of individuals are determined by what they own, what they produce, what they can trade, and what they inherit or are given.

Using the entitlement framework, Sen demonstrated that a decline in food availability was neither necessary nor sufficient to create hunger. He showed that famine could occur in the absence of any change in production, if the value of people's production and work activities declined relative to the cost of staple food.

Sen's analysis has been extended in subsequent writing in at least five ways:

- First, the original analysis omits all nonlegal transfers of resources and hence the role of violence and social disorder leading to entitlement collapse.
- Secondly, the analysis is household centred. This means not only that the unequal distribution of food among household members receives no attention, but also that the non market rights and obligations of the household are neglected, because of a failure to embed the entitlement relations of the household into the social and political fabric of the wider community.
- Thirdly, because death is presumed to derive from inadequate food consumption, the role of disease in determining famine mortality is not addressed.
- Fourthly, no attention is given to the significance of cultural preferences and tastes in determining voluntary under-consumption when entitlement is adequate.

Finally, and perhaps most important of all, the original entitlement framework has no temporal dimension. Consequently, the analysis is a historical and cannot account for changing vulnerability to entitlement failure.

I-2-3- Security

The third main concept is that of “security:” secure access to enough food. This builds on the idea of vulnerability to entitlement failure introduced in the previous section, focusing more clearly on risk.

The notions of risk and risk avoidance have been central to definitions of food security, since the term came into use in the 1970s. However, the scope of risk analysis has widened as the scope of food security itself has widened, to focus increasingly on individual and household level analysis.

The World Food Conference identified the risk of “acute food shortages in the event of widespread crop failure, natural or other disasters,” as well as the risk of fluctuations in production or prices (UN, 1974, p. 14); and many subsequent analyses similarly concentrated on risks to national food supply and the Balance of Payments. At the same time, others began to look more closely at welfare vulnerability, short term variability in entitlements and the ability of household food systems to resist “crises threatening to lower the achieved level of food consumption”.

By the mid-1980s, “analysis of risk of inadequate access (had become) an important concern” and food insecurity was more often defined in terms of risk, as resulting “from an unfavourable balance between risk and insurance;” as being at “undue risk of losing access to the food needed for a healthy life;” and as “the risk of an ongoing lack of access by people to the food they need.”, it is necessary to identify the risks to food entitlements. These can originate from many sources and include variability in crop production and food supply, market and price variability, risks in employment and wages, and risks in health and morbidity. Conflict is also an increasingly common source of risk to food entitlements.

The link between risks and assets has been illustrated by (Toole & Jonsson, 1991) as; the most food secure households are those which achieve adequate access to food while using only a small proportion of available resources; otherwise the most food insecure, those most at risk, fail to achieve adequate access even by devoting a large proportion of available resources to food.

Consequently, to summarize the implications of this analysis for models of food security, we think it important to distinguish between the risks of entitlement failure and the costs borne in the event of failure. This has a number of advantages when trying to operationalise the concept of food security:

- First, the distinction suggests a framework within which accepted indicators of food insecurity can be developed; For example: threshold probabilities and asset holdings could be used to classify households, with a series of probabilities being used to distinguish between the mildly, moderately, and severely insecure.
- Secondly, the focus on risks highlights the critical choices facing food security planners, particularly those in resource poor countries; Public policy can concentrate on alleviating the costs of entitlement failure what Dreze and Sen have termed “entitlement protection” or focus on reducing the likelihood of entitlement “entitlement promotion.”
- Thirdly, the concept of risk emphasises the time dimension of the food security problem. Households may allocate their resources over time in ways which optimise the adequacy of food access, without sacrificing stability in that access, in other words; they try to ensure current access without jeopardising future food consumption. This introduces the idea of choice into the analysis, which permits dietary inadequacy to be seen as both the cost of entitlement failure and the opportunity cost investments in entitlement promotion.

Finally, by separating out risks and outcomes, the links between food security and nutrition can better be delineated. A food secure environment is clearly an important determinant of adequate dietary intake. Whether this translates into good nutritional status, however, will depend on a range of other issues, such as health and sanitary factors, methods of food preparation and the adequacy of general child care. Secure access to enough food to meet household food needs is a necessary but not sufficient condition for good nutritional status.

I-2-4- Time

Finally, we come to “time:” secure access to enough food at all times. The topic is not much discussed in the literature. However, following the lead of the World Bank, it has become conventional to draw distinction between chronic and transitory food insecurity; Chronic food insecurity means that a household runs a continually high risk of inability to meet the food needs of household members. In contrast, transitory food insecurity occurs when a household faces a temporary decline in the security of its entitlement and the risk of failure to meet food needs is of short duration. Transitory food insecurity focuses on intra- and inter-annual variations in household food access. It has been argued that this category can be further divided into cyclical and temporary food insecurity. Temporary food insecurity occurs for a limited time because of unforeseen and unpredictable circumstances; cyclical or seasonal food insecurity when there is a regular pattern in the periodicity of inadequate access to food. This may be due to logistical difficulties or prohibitive costs in storing food or borrowing.

In practice, chronic and transitory food insecurity are closely linked. Successive exposure to temporary, but often severe, stress may increase the vulnerability of the household to chronic food insecurity, by causing households to liquidate assets in their efforts to stabilise food consumption.

I-3- The policies adopted in order to achieve food security in the Arab-African area “North African countries” (مراد، 2010):

North African countries, like other developing countries, live in a state of food deficit that becomes more acute with each passing day. The volume of production does not cover self-sufficiency in basic food needs, which prompts them to import to cover the deficit, which poses a great threat to the economies of North African countries, such as the lack of foreign currency balances and increasing their external indebtedness, either politically, increases their external dependency, but socially, it may generate a strange consumption pattern among the peoples of North Africa that may lead to preferring foreign products over local ones (بوسعدة ومختار، 2016).

I-3-1-Economic Development Policy :

The policy of economic development is linked to characteristics that exist in these developing countries. Achieving economic development is based on agricultural development and industrial and integration between them, so a country that has advantages and characteristics that help produce foodstuffs by pumping large investments directed to the agricultural sector, which works to redistribute income in order to diversify agricultural productivity. But if it does not have those characteristics, it resorts to industrial development to provide foreign exchange in order to provide food through import.

It should also be noted that there are two types of agricultural development: horizontal and vertical; The Horizontal agricultural development represented in increasing investments in major

projects such as irrigation and drainage in order to increase the areas of arable land and reclamation of other lands, while the Vertical agricultural development achieve through the introduction of modern technologies in the agricultural sector in order to develop animal and fish production, so in order to achieve the required level of food security it should considered the necessity of integration between the horizontal agricultural development and the vertical.

As for the industrial development policy, it is based on increasing the volume of investments directed to the industrial sector, which works to improve industrial productivity and thus increase industrial exports, which provides special financial resources from foreign currency, which allows the import of food that cannot be provided locally, which helps to achieve food security, that's why the industrial development requires a large amount of capital, and despite its importance in achieving food security, it achieves less results than the agricultural development policy that achieves a distinct level of food security directly.

I-3-2- Food production development policy:

Countries resort to this type of policy when they face risks represented in the instability of international economic relations or the existence of speculation or monopolies in global markets, which makes it difficult to import foodstuffs at competitive prices, so the state then resorts to paying attention to the agricultural sector by reclaiming the largest possible areas, in addition to To make optimal use of economic resources to produce basic food commodities and raise animal and fish production, in order to achieve local self-sufficiency in food.

I-3-3- Prices policy :

Countries aim, through the price policy, to ensure the continuity of the flow of food during the year, especially for the poor classes with low incomes who cannot meet their needs for food commodities at their real prices, so that the state adopts, through the price policy, two approaches:

- The first: Influencing food prices by setting compulsory prices within the reach of all classes of society in order to ensure the continuity of the flow of food, as countries work to form a strategic stock of food, the volume of which increases in the case of a surplus in production and decreases when there is a shortage of it, and this approach requires The state exerts efforts to determine the optimal size level for this optimal food stock to ensure price stability
- The second: By subsidizing prices to ensure the continuity of the flow of food, especially for the poor classes, and to achieve price stability. The government also bears the difference between the real price of the food commodity and the price subsidized for that real commodity from the state budget, but it is a shame on the state for this approach in the difficulty of determining classes Which benefit from subsidies, which encourages waste and wasteful consumption and the growing phenomenon of smuggling food commodities to neighboring countries due to the price difference.

I-3-4- Food Rationalization Policy:

It is intended to control consumption levels according to the needs of the community for food commodities and the natural capabilities available to the state in order to achieve food security, which is based on the following steps:

- Modifying consumer patterns by eliminating irrational consumption habits by intensifying awareness programs through the media
- Eliminate forms of waste and extravagance, especially on the part of those with high incomes, by imposing taxes on luxury food commodities.
- Rationalizing food subsidies so that they are limited to basic essential commodities

Ensuring Arab-African Food Security

- Rationalizing the import of food commodities so that they are limited to basic foodstuffs that are not available in local market.
- Search for foodstuffs in foreign markets that be acceptable quality and moderate prices

II- Sustainable Arab-African food security:

It should be noted first of all the basis for this demand, which can be identified in the question: Why Arab-African? and Why sustainable?

It may seem at first glance to the reader or the knowledgeable person that this 'specialization' is a mere formulation of a problem which its answer is theoretical more than practical, But! on the contrary this allocation reflects a clear and deep vision, and an in-depth study that resulted in this allocation; because of the sustainability term which fundamentally related to the element of Time and Longevity, as well as the goal of food security.

It is also due to several reasons summarized by the following elements:

II-1- The social equation linking Arab and African countries:

Speaking about Social-Equation, we talking about the basic element that must be considerate in moving towards the success of any development plan or any scheme related to society and the relationship between peoples. Hence, it is necessary to address the elements of compatibility of the social equation between the Arab countries and the countries of the African continent, which are summarized as follows:

II-1-1- The large part of the Arab countries are belong to the same continent:

A total of 11 out of 22 Arab countries are located to the continent of africa with an estimated area of 9,593,378 out of a total of 13,483,366, where they are matched by the countries of the Arab world located in the continent of Asia, 11 out of 22 countries with an estimated area of 3,844,988 out of a total of 13,483,366, with a difference estimated at almost 3 times, This makes the social equation that binds the peoples of the Arab countries and the countries of the African continent closer to consensus.

II-1-2- Bloods union:

Whether we like it or not, belonging to the African continent has advantages that affect the population of it that imposes a kind of fanaticism when it comes to talking about continental affiliation, which can be directed according to the springboard to be followed, as it may be directed towards spreading racism, spreading discrimination and a spirit of negativity among the societies of the continent. In contrast It may direct towards the positive spirit in order to rise and get rid of the shackles of colonialism and subordination to the other.

II-1-3- The intellectual orientation:

The intellectual orientation of the peoples of the countries of the African continent that corresponds to a large extent with the intellectual orientation of the peoples of the Arab-worlds countries; This is evident through the writings and publications published by scholars of various fields - especially the social and human ones - in the scientific field, and by writers of novels and literature in the literary and fictional field. Where do we find a kind of compatibility and complementarity between Africans and Arabs while reading the publications of each of them, to the extent that the reader almost does not differentiate between the nationality of the writer or his ethnic affiliation in many cases.

II-1-4- The reference or historical background :

That brings together most of the countries of Africa and the Arab-worlds countries ,especially the military occupation over the past periods of time, which developed into a political occupation recently.

II-1-5- The religious nature

That connects most of the peoples of the Arab countries and the countries of African continent, where we find the most of the societies of African countries embrace one of the monotheistic religions “Islam, Christianity, or Judaism,” which makes the religious doctrinal base unified, agreeing in many matters and differing in various things, which overlooked -most of the time- when it comes to worldly matters that are far from ideological or religious fanaticism.

For example In Islam: There is nothing wrong about Muslims dealing with a Jews or a Christians 'People of the Book', but rather it is urged to treat them kindly, and the matter is the same with regard to Judaism and Christianity.

II-2- Sustainable food security:

The United Nations works within the framework of achieving sustainable development in order to achieve interim goals; These goals guarantee the right of the present generation to benefit from resources without prejudice to the right of future generations to benefit from them to the same extent, without deviating from the: Environmental, Social, and Economic frameworks which called the dimensions of sustainable development; For this, the same organization set preliminary interim goals called the Millennium Development Goals (MDGs), adopted in 2002, and evaluated in 2015, and after evaluating the achievement of these goals, it was agreed on second interim goals that will be in the horizon of 2030, called the Sustainable Development Goals (SDGs) and given the term “2030 Vision”.

The issue of food has been explicitly addressed through the objectives related to hunger and its elimination, these are:

II-2-1- MDGs: Eradicate extreme poverty and hunger (UN D. G., 2009, p. 14):

In general, this goal was set in order to eliminate the biggest economic problem in the world, "poverty". In order to facilitate the achievement of this goal, it was divided into basic goals:

- a) Halving the proportion of people whose income is less than \$1 a day between 1990 and 2015; Where people whose income is less than a dollar per day are considered from the poor class, as this amount does not achieve self-sufficiency for individuals.
- b) Providing full and productive employment and decent work for all, including women and youth.

halving the proportion of people who suffer from hunger between 1990 and 2015; The goal of eliminating hunger in the world is the most important goal that contributes to the eradication of poverty, that way the Hunger is the most important result of poverty, given that the poor is the one who does not have his daily sustenance and is not guaranteed it.

II-2-2- SDGs: Zero Hunger: (European Union)

This goal deals with the basic human need to obtain healthy and nutritional food, and the means through which this need can be secured in a sustainable manner for all.

Tackling hunger cannot be achieved through just increased food production; Well-functioning markets, increased incomes of smallholder farmers, equal access to technology and land, and additional investments all play a role in creating a vibrant and productive agricultural sector that builds food security. .

Accordingly, sustainable food security can be defined by linking food security with sustainable development and established plans in order to achieve it through its objectives, as follows:

A Sustainable Food System (SFS) according to (Food & Agriculture Organization, 2018, p. 01) is: a food system that delivers food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised. This means that::

- Always profitable (economic sustainability);
- Widespread benefits to society (Social Sustainability)
- Positive or neutral impact on the natural environment (environmental sustainability)

The American Public Health Association (APHA, 2007, p. 03) defines a sustainable food system as: one that provides healthy food to meet current food needs while maintaining healthy ecosystems that can also provide food for generations to come with minimal negative impact to the environment. A sustainable food system also encourages local production and distribution infrastructures and makes nutritious food available, accessible, and affordable to all. Further, it is humane and just, protecting farmers and other workers, consumers, and communities.

And we can define the Sustainable food security as: "Providing suitable food for current generations in ways that do not place prior restrictions on future generations to enjoy equal or better food."

Therefore, talking about sustainable food security is more important than talking about food security only, especially when it comes to Arab-African countries.

II-3- Ways to achieve sustainable Arab-African food security:

We must stress that Africa is considered the world's food basket, and expresses its self sufficiency in food and even transcends it to the surplus, and sponsorship of other countries of the world, due to the geographical, climatic, and natural factors that it abounds in, but the poor management, the treatment imposed on it by the international community, and the state of underdevelopment that most of its countries living in gives a stereotype that does not at all reflect the rich reality of the continent and its food resources, but rather makes it live in the lowest levels of food security, not mention the Sustainable Food Security.

In this context, we can give some measures that may ensure the achievement of Arab-African food security:

- 1) Paying attention to the establishment of a free zone of cooperation between the Arab and African countries so that several countries would be representatives of other countries and be

- elected according to the system of contracts that are of medium duration from one year to 3 years at most.
- 2) Paying attention to the national food trade balance, and establishing a trade balance concerned with Arab-African cooperation
 - 3) Paying attention to transnational food associations: by granting customs facilities and others.
 - 4) Trend towards producing commodities that can be saved without burdens
 - 5) Availability of food through the surplus production of plant and animal food commodities in the Arab world.
 - 6) Creating a food stock reserve according to the prevailing consumption rates.
 - 7) Control of food surpluses destined for destruction and food awareness
 - 8) Establishing an agreement equation between the food needs scale “Necessities, Needs, Luxuries”: in order to direct production towards the appropriate type
 - 9) Creating a food budget based mainly on the principle of allocation; Based on the limit of sufficiency and the limit of subsistence, and that by defining specific spending system which start with those who do not guarantee their daily sustenance, gradually to those who guarantee food necessities, then those who guarantee needs, then luxuries.
 - 10) Establishing an agreement equation between increasing population growth and purchasing power.
 - 11) Establishing an compatibility equation between food output and economic output.
 - 12) Establishing an agreement equation between hunger and food output.
 - 13) Within the framework of food diversification and ensuring its security, we must stress ensuring that Arab-countries benefit from food resources - which are necessary in most cases - "plant and animal", in the process of food production or re-production, as well as ensuring that African-countries benefit from food resources - luxury and necessity most of the time - in the process of exporting to the same countries.

Finally! We must not overlook while moving towards achieving "Arab-African food security" goal the internal catalyst factor, given that any project needs a catalyst for its continuity and sustainability, which can be considered in our case as: "Food/Non-Food" commodity exchange;

Which will done by creating a platform to achieve commodity exchange according to the binary “Food product / Non-Food product”; According to a mechanism that guarantees the supply of the African continent from the surpluses of ‘Non-Food’ items available in the Arab countries, in return, the Arab countries collect ‘Foodstuffs’ from the African countries, and vice versa.

So that the integration between these exchanges, especially the ‘Nutritional’ ones, is through studying the deficiency that each side suffers from, as for ‘Non-Food’ commodities, they are integrated into the economic system in order to achieve economic growth that opens the way for the same countries in order to open up to the world and join the path of development.

Conclusion:

Food security is considered one of the most important elements of development, rather is the first goal that development plans seek to reach, and one of the methods that are adopted for that is the establishment of economic integrations, as it takes into account: political orientations, continental and ethnic affiliations, ect...

This research paper came in order to highlight the elements of the region Arab-African that could succeeds in this endeavor, and the proposed methods in order to ensure food security and its sustainability.

Hypothesis examination:

The **first hypothesis**: verified; Where food security expresses the provision of food to all residents in quantity and quality to meet their needs on an ongoing basis for a healthy and active life, and this is what the study adopted.

The **second hypothesis**: verified; Where the study proved that the Arab-African countries possess many elements that affect the success, guarantee and sustainability of food security, through their participation in the basic basis for the establishment of integrations, which is the social equation.

The **third hypothesis**: verified; This is evident through the last section of this paper, where the reader notices that the proposed ways to achieve Arab-African food security are involved in the element of internal cooperation that establishes external cooperation, if the condition of conviction in the issue is moral before it is material.

The study came out with several results, the most important of which are:

Results:

- 1) Food security is a humanitarian issue before it is material or belonging.
- 2) Food security is considered one of the most important issues of the time that national and international development plans seek to achieve.
- 3) The suffering of the African continent with the problem of food security is not limited to ethnic affiliation, but rather goes beyond it to human affiliation.
- 4) The suffering of the peoples of the African continent from hunger and food insecurity is not based on a lack of wealth, but rather the pressures of the international community exerted on them, otherwise it is the world's food basket..
- 5) The Arab countries are considered more relief from the crisis that the African countries are suffering from, and for this reason they must contribute to achieving food security for the peoples of the continent, which occupy a large part of their geographical area.
- 6) The necessity of hastening to achieve Arab-African nutritional complementarities, because the issue is the issue of continuing offspring.

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