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Population Ageing in Tunisia

التهرم السكاني في تونس

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Abstract

The principal aim of this article is to analyze the problematic of the ageing of the Tunisian population, its characteristics, its impact and its perception (representations) in Tunisia. The first part will focus on a brief study of aging in Tunisia, its main characteristics and the evolution of the age structure. The second part will be centered on the impact of ageing and its main repercussions (in particular, economic dependency, financial and social impact). Our interest will be focused in the third part of the article on the perception and representations of the population on various aspects relating to ageing and mortality in Tunisia (among others, number and growth of the population, number of people aged 60 and over, the ageing of the population, the infant mortality, the current level of mortality, etc.), and this thanks to the results of an inquiry.

الكلمات المفتاحية:

التهرم السكاني

التركيبة السكانية

الشيخوخة

التمثلات

استبيان.

ملخص

الهدف الأساسي من هذا المقال هو تحليل إشكالية التهرم السكاني في تونس وخصائصه وتأثيره وتمثلاته في تونس.

يركز الجزء الأول من المقال على دراسة موجزة للتهرم والشيخوخة في تونس وخصائصه الرئيسية وتطور التركيبة السكانية والهيكلة العمرية. أما الجزء الثاني فيركز على تأثير التهرم السكاني وأهم تداعياته (على وجه الخصوص، مؤشر التبعية والأثار المالية والاجتماعية). وينصب اهتمامنا في الجزء الثالث من المقال حول تصور السكان وتمثلاتهم لمختلف الجوانب المتعلقة بالشيخوخة والوفيات في تونس (على سبيل المثال، عدد ونمو السكان، عدد ونسبة الأشخاص الذين تبلغ أعمارهم 60 عامًا فأكثر، شيخوخة السكان ، وفيات الأطفال والمستوى الحالي للوفيات...)، وهذا بفضل نتائج استبيان.

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1. Introduction

During the last decades, Tunisia has achieved its demographic transition, characterized by a substantial drop in mortality and a rapid decline in fertility. The success of the demographic policy in Tunisia is unquestionable, it is attested by the control of the SFI, Synthetic Fertility Index (which went from 7.1 children per woman in 1966 to 2.1 currently) and by the significant drop in the various indicators of mortality (for example the mortality rate, which fell from 25%o in 1956 to 5.9%o in 2018).

This demographic transition is inherent in the transformation of nuptiality and reproductive behavior; it has also generated a progressive aging of the population and an undeniable control of demographic growth (Bousnina A., 2015).

In Tunisia, the transformation of the age pyramid has been at the origin of several changes, in particular a decline in the proportion of young people and an increase in that of the elderly population.

The repercussions of these changes are significant for most socio-economic sectors and especially for the socio-demographic dimension and the aging of the population.

In order to study these structural changes, we will begin with the analysis of the evolution of the structure by age of the Tunisian population, the characteristics of aging in Tunisia… In the second part, we will analyze the impact of ageing and its repercussions. The third part of the article will be centered on the analysis of the perception and representations of the population on various aspects relating to aging, thanks to the results of an inquiry.

I-The population ageing in Tunisia, the main characteristics and the impact

I.1. The evolution of the age structure

The demographic transition experienced by Tunisia (thanks to the rapid decline in fertility) explains the continuous decline in the proportion of children aged under 5, since this age group represents only 8% of the total population in 2014 against 18.6% in 1966 (which corresponds to a decrease of more than 10 points). Similarly, the proportion of the 5-14 age group continues to decline and did not reach 15% in 2014, whereas it exceeded 27.9% in 1966. This development will thus affect the number of children aged under the age of 15, whose proportion experienced the most spectacular drop, dropping from 46.5% to 23.8% during this period (and this drop will further increase to 18% in 2041).

On the other hand, the proportion of the population of working age and especially the proportion of people aged 60 and over have increased considerably, to the detriment of children aged under 15, as shown in the following table:

Table 1. Evolution of the age structure between 1966 and 2014 (in %)

Year	0-14 years	15-59 years	60 years and over
1966	46.5	48.0	5.5
1975	43.8	50.4	5.8
1984	39.7	53.6	6.7
1994	34.8	56.9	8.3
1999	30.9	60.1	9.0
2014	23.8	64.5	11.7

Source: NIS (National Institute of Statistics)

The table shows the importance of the aging of the Tunisian population. Indeed, the percentage of the "elderly population" (60 years and over) is experiencing very significant growth, and the numbers have increased from 253.3 thousand in 1966 to 1285 thousand people in 2014, which corresponds to a colossal increase of more than 400%. The proportion has increased over the past five decades from 5.5% to nearly 12% (Bousnina A., 2016).

In addition, the population of working age has experienced a dizzying increase from 2174.6 thousand in 1966 to 7084 thousand people in 2014, registering a considerable average annual growth during this period. Of course, this increase had repercussions on its proportion in the total population (which rose during this period from 48% to 64.5%) and consequently on additional job applications, which created significant pressure in the labor market.

Despite this pressure, this transformation of the age pyramid remains "very favorable to economic development since it is accompanied by an exceptional rise in the share of adults of working age. This kind

of golden age for development will last another two or three decades, but then will come "the swing of the pendulum" (because of the ageing of the population)" (Bchir M. et Vallin J., 2001, p. 264).

In summary, the Tunisian population is experiencing a gradual reduction of young people under the age of 20 in favor of the working-age population and people aged 60 and over. In this respect, two demographic indices can reflect the evolution of the profile of this age structure, namely the average age and the median age.

Table 2. Evolution of the average age and the median age between 1966 and 2014

Year	Average age	Median age
1966	23.7	17.3
1975	23.8	18.2
1984	25.1	20
1994	27.2	22.9
1999	28.2	23.6
2004	29.5	25.4
2014	32.1	30.0

Source: NIS

While in 1956, 50% of the population was under 16.8 years old, this median age exceeded in 2014: 31 years old. This evolution - one of the consequences of the transformation of the age pyramid - places Tunisia in the "intermediate countries" which no longer have a very young population, but also which do not belong to all the countries where ageing is very advanced and where the median age was already 33.7 years in 1990[1] . It should be noted, on the other hand, with the current evolution of the "Tunisian demographic structure", that the country is gradually approaching this category of country where the median age is almost 34 years.

On the other hand, the demographic projections (2021-2041) show the inevitable ageing of the Tunisian population and the radical transformation of the population structure, as shown in the following table:

Table 3. The outlook for the structure of the population between 2021 and 2041

Year	0-14 years	15-59 years	60 years and over
1966	46.5	48.0	5.5
2021	25.5	60.4	14.1
2026	25.3	58.5	16.2
2031	23.1	58.7	18.2
2036	20.3	59.5	20.3
2041	18.6	58.8	22.6

Source: NIS

These perspectives of the structure of the Tunisian population allow us to make the following remarks:

- for the population aged 0-14, and whatever the forecast scenario, the proportion of under-15s will increase until 2021 and then begin to fall thereafter, it goes, for the average hypothesis, from 23 .8% in 2014 to 25.3% in 2026, to 20.3% in 2036 and reaches 18.6% in 2041

- the proportion of people aged 15-59 will drop significantly to around 58% in 2026 (regardless of the scenario). It would reach 59.5% in 2036 and 58.8% in 2041 for the medium assumption

- for the population aged 60 and over: the projection highlighted in particular the inevitable movement towards significant ageing of the population. Whatever the scenario of the forecast, the proportion of over 60 years goes from 11.7% in 2014 to 16% in 2026, it will be around 20% in 2036 to reach 22.6% for the average hypothesis and 23 % for the low hypothesis in 2041 (Institut National de la Statistique, 2015, pp.13-14).

I.2.Population ageing

Population ageing is thus the fundamental structural consequence of the demographic transition, since it is, on the one hand, an inevitable effect of the decline in the birth rate, and on the other hand a phenomenon which could be accentuated in the future.

From 1999, the demographic structure recorded (for the first time since independence) a balance between the percentage of elderly people and that of children aged under 5 (9%). In 2010, the proportion of elderly people exceeded that of children, with a percentage that exceeded the level of 10% in recent years (precisely from 2011), for the first time since 1956.

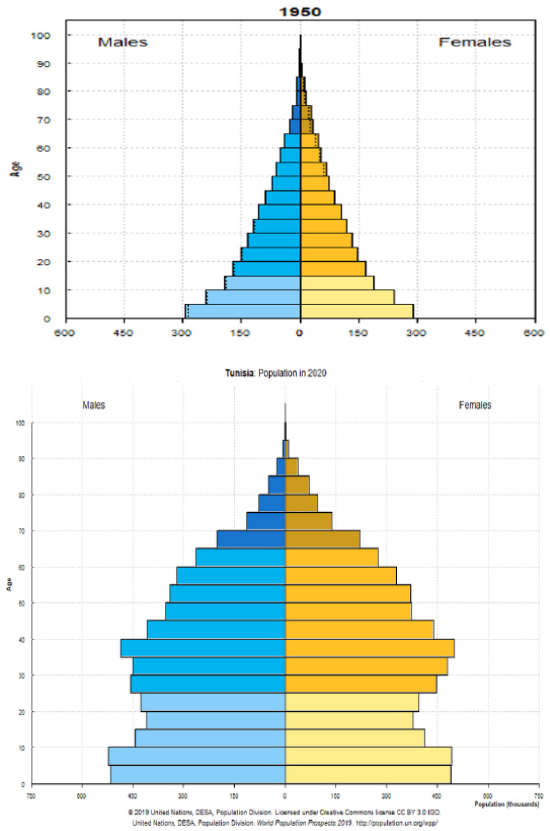
[1] According to the United Nations classification, Tunisia is part of the intermediate set where fertility began to decline between 1950 and 1990, while the other two groups concern countries where fertility had not yet begun to decline in 1990, and countries where fertility began to decline before 1950.

According to the official population projection (2014-2044) produced by the NIS, this trend should increase in the future. In fact, the age structure will be marked by the increase in the elderly population (aged 60 and over), which should see its weight double between 1995 and 2044. According to the hypothesis of a moderate decline in fertility, this proportion would reach 22% in 2041 (against 5.5% in 1966 and 8% in 1994).

The inevitable ageing of the Tunisian population could be materialized by the size of the workforce in the age group 60 and over, which could exceed the threshold of 3 million people in 2041 (253.3 thousand in 1966), while the proportions of children (0-14 years) could experience an irreversible decline (falling from 46% in 1966 to 18% in 2041).

The evolution of the profile of the pyramid by age and sex shows the extent of these structural changes following the decline in population growth. In this respect, one could move from an age pyramid of a young population characterized by a very broad base which narrows as it advances in age, to a pyramid of an old population with a top as wide as base, as shown in the following graph:

Graphic 1. The age pyramid in Tunisia between 1950 and 2020



Source:World Population Prospects : The 2019 Revision, New York, ONU, 2019

Thus, we are in the presence of "an ageing from below" due to the decrease in the birth rate and which has increased the proportion of the elderly in the population because the young people have regressed. As such, we can speak of an ageing indicator which can be designated ''either by the V/P ratio or by J/P" (Seklani M., 1997, p.315). This indicator has evolved in Tunisia since 1966 as follows:

Table 4. Evolution of the aging indicator in Tunisia between 1966 and 2041 (in %)

Year	V/P (%)	J/P (%)
1966	5.5	46.5
1984	6.7	39.7
1999	9.0	30.9
2020	11.2	24.2
2036	20.3	20.3
2041	22.6	18.6

Source: (P: The total population; V: number of elderly people (60 years over) and J: number of young people aged 0-15 years); Source: M.Seklani (1997); NIS (Population Projections: 2014-2044)

In addition to aging from the bottom of the pyramid, Tunisia could experience the situation of the countries of the North, which have entered a phase where aging from the top "adds to the effects of the decline in fertility. After a certain stage, the progression of life expectancy is no longer based on the decline in infant mortality but essentially on that of mortality at advanced ages […], [and this thanks] to progress in health and subsequent progress in the life expectancy which will themselves bring demographic ageing" (Vallin J. et Locoh T., 2001, p. 571).

Subsequently, the evolution of the profile of the pyramid by age and sex shows the extent of these structural changes following the decline in population growth. Initially, there is a broadening of the base of the age pyramid which reflects an increase in the proportion of young people under 15 in the total population, then in a second phase the fall in their proportion following the decline in the fertility rate (ageing from below) and a corresponding increase in the share of adults and especially the elderly (ageing from above).

But we must also note the importance of what is often called ''differential ageing'', because the

elderly population (aged 60 and over) is far from being homogeneous: "By observing more closely the distribution by age of the Tunisian population, there is thus a concentration of people aged over 60 in the "young old" age bracket, that is to say aged between 60 and 80, while the category of the elderly (over 80), made up of 215,044 individuals, represents only 16.5% of those over 60, and only 2% of the entire population. Tunisian aging is therefore unique in that it results in the emergence of an intermediate category of young seniors'' (Bouhdiba S., 2017, p.57).

II. The impact of the population ageing

The repercussions of the population ageing are multiple in more ways than one. Following the example of Alfred Sauvy (Sauvy A., 1972, pp.9-26), we can speak of two primordial consequences of the aging of the population, in this case the variation in the dependency ratio and the additional social charges.

First of all, the problem of additional social charges is acute and the cost of social coverage is becoming increasingly heavy. Ageing is often reflected at the level of social security funds "by an unfavorable demographic ratio, it is the ratio of active to inactive people with social insurance. It means a financial burden for the funds which, apart from the services provided to their active members, must cover the care of a growing number of inactive members who are still dependent on them"(Seklani M., 1997, p.325).

As such, several indicators show the financial difficulties experienced by the various social funds in Tunisia. In fact, the deficit of these funds which continues to widen, requires urgent solutions from the State. For the NPSSF (National Pension and Social Security Fund) for example, according to the terms of the director of the fund, the number of members of the NPSSF is increasing by 2.5% per year, while the number of retirees benefiting from income thanks to the fund increases by 5% per year. He specified that the increase in NPSSF subscription fees is not sufficient to absorb a deficit estimated at 166 million dinars in 2013. This deficit would even be increasing and it is necessary to find other sources of income to ensure the survival of the fund. In addition, the director of the NPSSF specified that several factors tend to aggravate the deficit of the social security funds such as unemployment and the demographic upheavals that Tunisian society is experiencing(http://www.businessnews.com.tn (26/04/2013).

For all the social funds, this deficit, estimated at 280 million dinars (MD) in 2013, could reach 400 MD in 2014 and 700 MD in 2015. These figures were put forward by Ahmed Ammar Younbaï, Minister of Social Affairs, in his intervention at the forum of labor inspectors (April 2014) in Hammamet "If the social funds keep the same working methods, this deficit could amount to 1,000 MD (one billion dinars) in 2016", he warned (http://www.kapitalis.com (17/04/2014).

These estimates, which were relatively pessimistic in 2014, turned out to be really too optimistic. The indicators in 2019/2020 show (according to the official declarations of the Minister of Social Affairs) that the deficit of the social funds has reached **3 billion dinars** (the deficit of the NPSSF alone is 1 billion).

As stated by M.K. Jelassi, the observation is undeniable; the social funds are facing the worst stage of their activity since their establishment several decades ago. A sequence that cannot make us forget the golden age of these funds which even financed public projects. In this sense, the former Minister of Finance, Hassine Dimassi, recalled that until the end of the 1990s, the public investments mobilized were financed by the savings of public companies, including in particular the National Social Security Fund (NSSF) and the National Pension and Social Security Fund (NPSSF). So what has turned these coffers into a financial burden that weighs on the socio-economic situation? This is undoubtedly a clear mismanagement recorded especially after the revolution. In any case, this is confirmed by this former minister. He regrets, in this regard, an alarming deterioration of the financial statements of these funds during the last eight years, affirming that this question must be the absolute priority of the next government (Jelassi M.K., 2019).

In deficit, these social funds "could become even

more so under the double effect of demography and unemployment. According to estimates by international institutions, the deficit of the pension system, the most at risk, could reach 4% of GDP if deep reforms are not immediately undertaken" (Jouini E., 2013, p.82).

On the other hand, the different demographic ratios have undergone a regular transformation during the last decades. This substantial change is further confirmed by the evolution of the aging/active ratio, a ratio that continues to decrease to the detriment of working people, since it went from 4.3% to 13.8% between 1980 and 1994 then to nearly 15% in 2010. In the coming decades, this ratio would rise much faster, in favor of the elderly population and at the expense of the working population, since it could reach 31% in 2031 and even exceed 38% in 2041, as shown in the following table:

Table 5. Evolution of the aging/active ratio in Tunisia between 1980 and 2041 (in %)

Year	Aging/active ratio (%)
1980	4.3
1990	12.2
1994	13.8
1998	12.5
2004	14.6
2010	14.9
2021	23.3
2031	31.0
2036	34.1
2041	38.4

Source:Elaborated by our calculations, based on NIS data

Secondly, and concerning the impact of aging on the dependency rate, we note an increase in this rate following the gradual increase in the number of elderly population, who are dependent on the active population. Often, the advance of this relationship of economic dependence is inherent in the reduction in the proportion of young people. However, this reduction generates for a certain period an increase in the weight of the population of working age, which leads to a drop in the dependency ratio of the old population.

Table 6. Evolution of the dependency rate[2] in Tunisia (in %) between 1966 and 2041

Economic dependency can be approached differently by defining the dependency rate as the share occupied by children (0-15 years) and those aged 60 and over in the total population. According to this definition, this rate is equal to 39.9% in 1999 while it exceeded 52% in 1966. On the other hand, it would probably not exceed 35.6% and 35.4% respectively in 2010 and 2020, which reflects the demo-economic "golden age" or the very favorable period for development characterized by a greater proportion of the active population. On the other hand, this rate could experience a further increase from 2030 due to the rapid increase in the proportion of the elderly population.

Moreover, in addition to the demographic consequences, the impact of the aging of the population can also be socio-cultural, since its consequences affect the family as well as the social relations and culture. This phenomenon "is obviously to be taken into consideration as a whole because the problems caused by the ageing of the population go far beyond the financial imbalances of pension schemes or the increase in national health expenditure. Indeed, the ageing of the population will necessarily have formidable impacts on all aspects of our lives and on the entire economic and social prospects of the nation. This can range from investment to consumption, from the way businesses operate to the organization of work and urban planning; or even what we have considered up to now as an absolute taboo: the reception and support of very old or disabled people outside the traditional family circle. It will also affect culture, thought, transport, leisure or eating habits" (Touhami H. 2010).

On the other hand, and beyond these considerations on the population ageing, on the demographic transition and on the decline in fertility (and mortality), it is necessary to take an interest in the perception of the individuals concerned directly by this problem, in this case the Tunisian population, and in particular young graduates.

[2] The dependency rate can be defined by the ratio: Population aged 60 and over / Population aged 15-59.

This is what we will look at in the next part of the article.

III- Perception and representations of mortality and ageing in Tunisia: results of an inquiry

III.1-Presentation of the inquiry

III.1.1- The objectives of the inquiry

The fundamental objective of the survey is to analyze the perceptions of the population (especially young graduates)[3] on various aspects relating to the population/development issue in Tunisia. To do this, our study and our questionnaire were based on two main themes: population and human development.

Among the main interests of the first theme, we can cite in particular the perception of young people in terms of population, birth rate, nuptiality, demographic growth and their vision of ageing and migration (internal and international).

As for the second theme relating to human development, the aim is above all to analyze the perception of the population concerning the standard of living and the material and financial resources available, and to study the perception of young people on the unemployment crisis, its importance and its main causes.

In this article, we will focus our interest on the first theme and on the perception of demographic problems by young graduates.

III.1.2- The population interviewed and the drawing up of the sample

The sampling was carried out using the quota method, according to which the sample must have the same composition as the total population according to certain well-defined criteria. For our part, we have chosen the level of education and age to collect the opinion and perception of development by a proportion of the reference population which represents young people with a higher level of education (the population with higher level, according to the 2011 population employment survey (for example), is equal to 1070 thousand people; our sampling rate being 1/2000, our sample is therefore equal to 535 individuals).

The characteristics of our sample are given by the following table:

Table 7. Distribution of the sample according to age and sex

Characteristic	Number	%
Sex		
Men	273	51,0
Women	262	49,0
Age		
20-25	161	30,1
25-30	214	40,0
30-39	131	24,5
40 years and over	29	5,4
Total	535	100

Source: Personal inquiry

On the other hand, we included the 30-39 age group in our study for many reasons, in particular the late age at marriage (over 35 for men and over 30 for women), the delay in financial autonomy, the lengthening of the duration of studies, the delay in the age of the first child, the occupation of a stable job at a relatively high age (CREDO, 2012).

It should be noted, in this regard, the concentration of the higher level (university level of education) in the age group 20-39 years (more than 820.8 thousand, i.e. almost 77% of the entire population with a higher level, including 188 thousand in the 30-34 age group and 108 thousand in the 35-39 age group).

III.2. Mortality and ageing

Asked about the current level of mortality, the vast majority of respondents (nearly 80%) think that people die less frequently than in the past. This significant drop in mortality is explained, according to the respondents, by many factors, in particular the improvement of sanitary facilities, scientific and sanitary development, citizens who are more aware and more aware of their state of health, the improvement in the quality of life, the substantial reduction in contagious diseases, concern and even

[3] This population concerns individuals with a higher level of education, ie. young people who have passed their baccalaureate and who have completed at least one year of higher education (this concerns the largest part of our sample, i.e. more than 94%, which we have supplemented by thirty respondents who have not the characteristics required - age and level of education - to have the exact number of our sample).

"the culture of health" (As for the 21% who think the opposite, they lead to an increase in mortality when new diseases appear and the increase in the number of accidents and stress).

Table 8. The current level of mortality

Question: Currently, do you think that in Tunisia people are dying		
	Number	%
More frequently	113	21.1
Less frequently	422	78.9
Total	535	100

Source: Personal inquiry

Moreover, while infant mortality has fallen sharply in Tunisia since independence (between 1950 and 2018, the IMR fell from 203 to 14 per 1,000 births), disparities between regions and environments remain considerable.

On this issue, we wanted to question the population, and we noticed that more than 75% of respondents found that infant mortality is higher in the countryside, for many reasons:

-the lack of equipment and the very low number of hospitals

-illiteracy and lack of awareness

-more difficult living conditions

-the isolation of certain countryside

- the weakness of social security (or social coverage) in rural areas (especially for women)

- the higher number of children (in the rural family).

On the other hand, almost 12% of those interviewed think that infant mortality is higher in cities (in the words of one respondent, "the countryside is healthy while the city is polluted"), while other respondents believe that the situation is similar in both rural and urban settings (thanks to the evolution of health in rural areas and the decentralization of health services).

Table 9. Infant mortality in the countryside

Question: In your opinion, is infant mortality in the countryside (compared to the cities)		
	Number	%
More important	403	75.3
Less important	68	68
As important	64	64
Total	535	535

Source: Personal inquiry

The decline in mortality and the demographic transition have generated an ageing of the Tunisian population, especially during the last two decades. This phenomenon, which was little known to the Tunisian public, is currently perceived by a large part of the population (nearly 80%), in its two forms: the first relating to average longevity (do we live older?) and the second inherent in the increase in the proportion of people aged 60 and over.

The main explanations of ageing in Tunisia, according to the terms of the respondents, mainly concern:

-improved life expectancy

-improved medical care

-exercise of sport and medical control

-the existence of better material conditions thanks to the retirement pension and the improvement of social coverage

- improving the standard of living

-increased spending on health

- lower mortality rates.

Table 10. The ageing of the population

Question: Do we live in Tunisia today, in general, older or less old than before?		
	Number	%
Older	421	78.7
less old	114	21.3
Total	535	100

Source: Personal inquiry

Table 11. The number of people aged 60 and over

Question: As far as you know, today in Tunisia, is the number of people aged 60 and over increasing, decreasing, or staying the same?		
	Number	%
Increases	434	81.1
Decreases	63	11.8
Stay the same	38	7.1
Total	535	100

Source: Personal inquiry

With the ageing of the population, the cost of public health could increase and the deficit of social funds would be greater. As previously mentioned this deficit, estimated at 280 million dinars (MD) in 2013, has reached 3 billion dinars in 2020. As such, the results of the various studies

show the need for the reform of social security schemes and confirm the serious risk of financial sustainability of our pension schemes in the very near future, even threatening the viability of our current systems.

III.3. Number and growth of the population

While most respondents have a relatively satisfactory idea of demographic trends in general, there is a certain "fluttering" in knowledge of the exact size of the current Tunisian population.

The Tunisian population reached 10.7 million in 2012 and 11.06 million in 2014, and only 16% of the surveyed population placed it in the 10-11 million interval. On the other hand, nearly 80% of respondents have an estimate higher than the reality, since 35% place the population in the interval 11-12 million and more than 40% estimate that this number is greater than or equal to 12 million individuals (of course during the year 2014).

Table 12. The current size of the Tunisian population

Question: According to you, how many inhabitants does Tunisia currently have?		
	Number	%
Less than 10 million	88	16.4
10-11 millions	188	35.1
11-12 millions	212	39.6
12 millions	25	4.7
Over 12 million	17	3.2
I do not know	5	0.9
Total	535	100

Source: Personal inquiry

Contrary to these "tergiversions" concerning the size of the Tunisian population, almost all of the respondents show great certainty about the increase in the population since independence, with a proportion of more than 92% (only 4% believe that the population has decreased and 3% believe that it has remained stationary).

Table 13. Evolution of the Tunisian population

Question: Since independence, do you think that the Tunisian population		
	Number	%
Increased	493	92.1
Decreased	22	4.2
Has remained stationary	20	3.7
Total	535	100

Source: Personal inquiry

Regarding the future, the general idea is that the Tunisian population will increase in the next decade (and this for more than 50% of the interviewees). The explanations for this increase are multiple and they relate in particular to the improvement in life expectancy, the improvement of living conditions, the development of medicine and the health sector, the birth rate higher than the death rate…

However, this opinion is not unanimous since almost a quarter think that the Tunisian population will experience a reduction in its numbers (due to the low birth and fertility rates, the increase in the rate of celibacy, the availability of means contraception, the increase in the age at marriage, etc.), while the remaining quarter believe that the population will remain stationary (for many reasons, including the low rate of quasi-stable population growth, the effectiveness of family planning, the drop in nuptiality, the balance between the birth rate and the death rate, the emancipation of Tunisian women and the availability of means of contraception, etc.).

Table 14. The attitude towards the future movement of the Tunisian population

Question: Do you estimate that, in 10 years, the Tunisian population:		
	Number	%
will increase	269	50.3
will decrease	131	24.5
will remain stationary	135	25.2
Total	535	100

Source: Personal inquiry

On the other hand, the trends of the population surveyed with regard to demographic growth show a certain preference for the stabilization of the population: this trend favorable to the stationary state is expressed by more than 56% of the people surveyed and it is explained by many economic and social factors:

- keep the same standard of living

- achieve economic and social balance

-economic crisis

-the limited resources (and wealth) of the country (and of the Tunisian family)

-weak economic growth

- to be able to meet the economic and social needs of the population

-to have a balance between economic growth and population growth

- the size of the population must be proportional to wealth

- be able to distribute resources in an equitable manner

-the existence of several problems (unemployment, poverty, housing, etc.) which may be accentuated with the increase in the population (Cf. for more details, Bousnina A., 2019)

-incomes are not high enough to be able to meet the needs of high population growth (or to be able to satisfy the entire population)

-"The Tunisian consumes and does not produce, so the rapid increase in population can have negative repercussions"

-we must think about sustainable development (the needs of future generations).

In addition to this preference for the stationary state, we find a relatively average proportion (23%) of "supporters" of population increase, who explain this attitude by many causes:

- reduce the effects of ageing

- have a young population

- renewal of generations

-keep a growing workforce

-have new generations with innovation capabilities

-to increase production

-strengthen human capital and human resources

-religion (and the "religious obligation" of the multiplication of the population, according to some respondents).

On the other hand, 20% of those interviewed want the Tunisian population to decrease, because of the country's limited resources and to have less unemployment and less poverty. According to the terms of some respondents, the population should decrease because of the "lack of civility" and since "nothing has changed in the mentality of Tunisians". Moreover, "Tunisia's resources are not already sufficient to eleven million".

Table 15. The attitude towards the movement of the Tunisian population

Question : In your opinion, is it desirable that the Tunisian population		
	Number	%
Increases	127	23.7
Decreases	107	20.0
Stay stationary	301	56.3
Total	535	100

Source: Personal inquiry

III.4. Attitudes and importance of population/ development issues

In relation to the standard of living and the different socio-economic conditions of the country, youngs were questioned on "the optimum number" that the population of Tunisia must have or the number that Tunisia can sustain adequately. The data in the table below show "a Malthusian attitude" since nearly 49% of those questioned are for an interval of 5-10 million, while nearly 20% think that this number should not exceed 5 million (i.e., at total, almost 70% who think the country can only support a population of less than 10 million).

Table 16. The "ideal" size of the Tunisian population

Question: How many people can Tunisia currently support?		
	Number	%
Less than 5 million	102	19.0
Between 5 and 10 million	258	48.2
Between 10 and 12 million	76	14.2
12 million and more	34	6.3
I do not know	65	12.1
Total	535	100

Source: Personal inquiry

Regarding awareness of population issues, more than 98% respond that population/development issues are very important (65%) or important (33.5%). Only a few respondents think that these questions are secondary (because they only concern intellectuals and researchers, or because it is the quality of life

and the "inner strength" of individuals that are more important than any quantitative problems). For almost all of the public, the importance of these issues is due to several factors:

*Very important questions:

-it is the basis of any development policy (or any plan)

-this affects the future of Tunisia

-this concerns social issues that have an impact on the country's economy and political stability

-know the indicators of development (or underdevelopment) of a country

-Follow trends and prepare deadlines

-these are hot topics (especially unemployment and the standard of living)

-have a statistical base capable of optimizing research and planning efforts

*Important questions:

-this concerns the human development of the country

- know our economic and social situation

-population statistics help us to find solutions to economic and social problems

- the interference between population and socio-economic problems

-Human resources and population are the capital of our country.

Table 17. The importance of population issues

Question: Are people›s questions important?		
	Number	%
very important	348	65.0
Important	179	33.5
not important	08	1.5
Total	535	100

Source: Personal inquiry

Finally, and to conclude, we wanted to ask the population a "summary question" relating to their attitude towards population growth (favorable or unfavorable to growth). The answers confirm, once again, the Malthusian attitude of the population, since more than 71% are not in favor of such growth, and this for many reasons, socio-economic in most cases:

-not to aggravate the situation of economic and social crisis

-not further increase unemployment and poverty rates

- the weakness of natural, material and financial resources (the limited wealth of Tunisia)

-have fewer difficulties and economic problems

-minimize state expenses

-"with the current problems of Tunisia, the increase in population will aggravate the situation and we will find ourselves in a vicious circle"

-the situation can become more dramatic (if there is rapid population growth)

-rapid population growth aggravates the challenges and problems facing the country

-the number of young people is already very important, we must take care of its future

- we must "manage" economic growth and the standard of living of the population

- to have a balance between: the labor market, the "consumer market" and the means of the State

- the risk of "overpopulation"

- the most important thing is the quality of the population and not its number.

For the rest of the population surveyed (28%), their natalist (or anti-Malthusian) attitude is inherent in certain economic and socio-cultural factors, and sometimes even religious considerations:

-increased population means improved wealth creation and production

-have a young and dynamic nation (or population) (and reduce the risk of ageing)

- the wealth of the country is that of its human resources

-Tunisia needs workers (the population ageing cannot facilitate the development of the Tunisian economy)

- the problem is not population growth but the distribution of wealth

-to balance the reversal of the age pyramid

- "these are the recommendations of religion and of our prophet".

Table 18. Attitude towards the growth of the Tunisian population

Question: Are you in favor or against the growth of the Tunisian population?		
	Number	%
Favorable to	151	28.2
Unfavorable	384	71.8
Total	535	100

Source: Personal inquiry

Conclusion

Among the main repercussions of the demographic transition in Tunisia, the ageing of the population can be considered as one of the most important structural consequences, it is an irreversible structural effect linked to the age structure of the population; a structure that is experiencing a reduction in the relative weight of children, a rapid increase in the proportion of the population aged 60 and over and a considerable increase in the proportion of the elderly.

The socio-demographic challenges of aging are thus multiple: from the baby boom to the papy-boom, the challenges of the period to come must take into consideration "the transition paradigm", reflecting not only the demographic transition but also and above all the epidemiological transition experienced in our country.

Concerning the inquiry, the main conclusions that can be drawn from the analysis of the perception of young Tunisian (with regard to demographic problems) can be summarized as follows:

-a "Malthusian" attitude can be identified, since a large proportion of respondents show a clear preference for stabilizing the population (and even, in some cases, a certain preference for reducing the number of workers). This trend is confirmed by attitudes relating to the birth rate and fertility (the average number of children desired by more than 85% of respondents is between 2 and 3 children)

-concerning the demographic transition and the population ageing, we note that this phenomenon, which was poorly known to the Tunisian public, is currently perceived by a large part of the population (nearly 80%)

Moreover, and despite the performances achieved, the demographic policy must go beyond the concern for fertility control to remedy the shortcomings observed and to meet the challenges of the period to come, by taking charge - in collaboration with all development actions - new strategies and objectives that take into consideration "the transition paradigm" reflecting the economic transition, the demographic transition and the epidemiological transition experienced in Tunisia. In fact, our country has experienced, during the last decades "a crucial phase of its demographic transition and it has entered fully into an epidemiological transition; after having recorded considerable progress in the fight against infectious, perinatal and maternal diseases, which for several decades led to high mortality, particularly among women and children, Tunisia must now face another challenge, that of non-communicable diseases, such as cardiovascular diseases, cancers and accidents" (Ben Romdhane H., 2006, p.351).

The socio-demographic challenges are thus multiple: from the baby boom to the papy boom without transition, when we were in full demographic transition, the problem of employment which primarily concerns young people, the situation of the elderly without family and without resources, the explosion of celibacy which affects several age groups (and which results from the growing difficulties of young people, even graduates, to access work at least sufficiently paid to get married) (ONFP, 2006, pp.466-469.)

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