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# The territorial disparities of development: Synthetic HDI by delegation in Tunisia

Adel Bousnina<sup>1\*</sup>
University of Tunis (Tunisia)- (nsira2002@yahoo.fr)

# Abstract:

The aim of this article is to analyze the territorial and local disparities of development in Tunisia. The interest will be focused on composite indicators of human development by region and especially **by delegation** and the HDI (human development index) or synthetic indicator of human development in all the delegations of Tunisia. Finally, in each governorate, we will analyze the main factors and the different causes and explanations of local inequalities.

**Keywords**: Territorial disparities, delegations, HDI, Human development

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#### Introduction

In previous research, we have shown that despite the significant improvement in human development indicators in all regions in Tunisia, regional disparities remain considerable and unequal regional development remains thorny. This inequality is evidenced by the persistence of the same regional typology (for decades) which favors coastal governorates to the detriment of inland areas ((Bousnina A., 2007). We are able to affirm that there are several Tunisias in the same country distinguishing "developed Tunisia" and "underdeveloped Tunisia" and we can speak (following the example of J.F.Gravier) of a threatening imbalance the future of the country with " the Tunisian coast and desert "(Bousnina A., 2012).

But the meticulous and in-depth study of development indicators shows the importance of local inequalities, not only at the inter-regional level but also and above all at the intra-regional level and within the most developed governorates of the country, which shows the primacy of local issues (Bousnina A., 2019).

If we take the most developed region, in this case Tunis, recent statistics confirm the above-mentioned findings: some indicators are very eloquent: the poverty rate is 2% in Cité El Khadra against 18% in Sidi Hassine; the unemployment rate is 4% in El Menzah against 25% in Sijoumi and 24% in Djebel Djouloud; the various indices give us a regional development indicator of 922 in Bab Souika against 317 in Sijoumi.

In the interior regions in general and in certain delegations of Kasserine and Sidi Bouzid in particular, these indicators are clearly below the national average. For example, in Kasserine, the various indices give us a regional development indicator of 437 in Kasserine Nord against 04 in Majel Bel Abbes, 005 in Alyoun and 000 in Hassi Ferid (which occupies rank 264, i.e. -d. the last rank of all delegations on Tunisian territory).

According to this same approach, we will try to calculate the synthetic index of human development, or synthetic HDIs, in all the delegations of Tunisia, i.e. 264 delegations in the 24 governorates and the seven districts of the country: the District of Tunis, the North East, North West...

However, certain methodological remarks are in order:

- the HDI (or the Human Development Index) is a summary indicator which makes it possible to measure the evolution of socio-economic indices and which reflects the progress made in particular in terms of human development. This classic HDI represents the arithmetic average of the following three components: the economic index or standard of living (represented by GDP per capita in terms of purchasing power parity), the education index (measured by an average weighted at two-thirds the adult literacy rate and one-third the school enrollment rate at all levels) and the longevity index (measured by life expectancy).

-we used our own approach based on the calculation of a synthetic HDI (Bousnina A., 2012), because this synthetic index takes into account the multifaceted aspect of the problem of development and integrates the different manifestations of reality (economic, social, 'infrastructure...). This is why we calculated the average of seven indices: we integrated two indices relating to employment and unemployment (overall unemployment and unemployment of higher education graduates), two indices relating to education (literacy and higher education) and three indices relating to infrastructure and equipment (connection of dwellings to the drinking water network (SONEDE, the national water company), connection to the sanitation network (ONAS, the national sanitation office) and the proportion of households connected to Internet)

- for the calculation of the HDI, the method is obviously based on the calculation of the indices taking into consideration the minimum and maximum values. The indices are calculated on the basis of the following formula: Index= (Actual value – minimum value) / (maximum value - minimum value). The economic index was approximated by the unemployment index because of the unavailability of data on income or expenditure per person or per household in the various delegations:

The economic index (or employment index) = 1- unemployment index (Unemployment index = real value (or unemployment rate) - minimum value (0) / maximum value (50) - minimum value (0). So the economic index is equal to: 1- (T. unemployment /50)

- of course, we cannot study and analyze the indices of all the delegations (264), which is why we have chosen in each governorate the most significant indices and the most eloquent indicators, in particular in the most disadvantaged delegations and the most marginalized localities.

To lighten the text, only the results of the calculation of the synthetic human development index (or the synthetic HDI) have been left for each delegation (see the annex to see the different variables and the components of the HDI in delegations, from the governorate of Tunis for example).

#### I- The District of Tunis

In this section, we will calculate the synthetic HDI of the different delegations of four governorates: Tunis, Ariana, Ben Arous and Manouba.

Table 1- Synthetic HDI in the District of Tunis

Delegation	HDI	Delegation	HDI	Delegation	HDI	Delegation	HDI
Carthage	817	Ariana ville	876	Ben Arous	752	Manouba	760
Medina	724	Soukra	757	La Nouvelle Medina	767	Douar Hicher	622
Bab El Bhar	826	Raoued	732	El Mourouj	801	Oued Elil	669
Bab Souika	742	Kalaat El Andalous	633	Hammam Lif	755	Mornaguia	639
El Omrane	738	Sidi Thabet	590	Hammam Chott	758	Borj Amri	481
El Omrane supérieur	749	Cité Ettadhamen	646	Boumhel El Bassatine	762	Jedeida	578
Ettahrir	775	El Mnihla	685	Ezzahra	819	Tebourba	575
El Menzah	892	Total (governorate)	745	Rades	786	El Battane	495
Cité El Khadra	854			Megrine	792	Total (governorate)	646
Le Bardo	799			Mohamdia	665	Total (Tunisia)	609
Sijoumi	619			Fouchana	668		
Ezzouhour	731			Mornag	606		
Elhrairia	696			Total (governorate)	742		
Sidi Hassine	617					•	
El Ourdia	740						
El Kabaria	712						
Sidi El Béchir	751						
Djebel Jelloud	631						
La Goulette	854						
Le Kram	791						
La Marsa	800						
Total (governorate)	758						

Source: Elaborated by our calculations, based on NIS<sup>1</sup> data (GPHC 2014)

The synthetic HDI of the governorate of Tunis is clearly higher than the national average, most delegations record HDIs above 700 or even 800 (Bab El Bhar, Carthage, La Marsa, La Goulette and Cité El Khadra).

However, the analysis by delegation shows very significant disparities between the delegation of El Menzah (whose index is close to 900) and the two delegations of Sijoumi and Sidi Hassine with an index close to 600. If the differences in the indicators infrastructure (water, sanitation, etc.) are not flagrant, the inequalities in terms of unemployment and the labor market are remarkable and they have a direct impact on the HDI in the various delegations.

In this regard, the higher employment index exceeds 891 in El Menzah while it is lower than 380 in Sijoumi and 455 in Sidi Hassine (the same is true for overall employment). This is inherent in the weakness of the economic activity in some delegations, within the Capital of Tunisia, where one finds districts and localities characterized by a real social marginalization and a weak economic integration, with rates of very high unemployment in some delegations, particularly for higher education graduates (this rate exceeds 30.9% in Sijoumi, 27% in Sidi Hassine and 25% in Djebel Jelloud, compared to 5% in El Menzah).

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<sup>&</sup>lt;sup>1</sup> NIS: National Institute of Statistics; GPHC: General Population and Housing Census.

Note, finally, the considerable inequalities in terms of internet connection rates (81% in El Menzah against 18% in Sidi Hassine) and also in higher education rates (75% and 34% respectively).

Although Tunis is the main industrial area of the country (along with the Sahel and Sfax), local disparities are still significant, which explains the low employment in certain delegations. Thus, "the mismatch between supply and demand, the distortion in space create very long journeys between home and work [...]. There is the problem of inter-zonal balance in greater Tunis, which presupposes a development and spatial planning policy emphasizing a slowdown in settlements in the South, on the priority equipment of areas lacking in employment such as the West or the North and finally the loosening of the cluttered and cumbersome Town Center with a view to the proper functioning of the City" (Sethom N., 1992).

Like the governorate of Tunis, Ariana's HDI is higher than the national average, but it reveals relatively large disparities between several delegations. If Ariana city is the best off (with an index exceeding 875), Sidi Thabet is, on the other hand, less well off (its index is less than 600) particularly in terms of infrastructure indicators, with a network connection rate of sanitation that does not exceed 40% and a proportion of internet connection lower than 24%.

As for the Cité Ettadhamen delegation, the weakness of its composite index is mainly due to the high level of unemployment and the weakness of economic activity, which explains the increase in unemployment in general and more particularly that of higher education graduates, with a rate of 27% which is significantly higher than the national average.

For the governorate of Ben Arous, we note that the various delegations have indices that are often higher than the national average. In addition, the disparities between the different localities are not very significant, unlike most governorates in Tunisia: the majority of the sectorial and synthetic indices are between 600 and 800, which reflects a relative "homogeneity" in the Ben Arous region characterized by relatively satisfactory infrastructure indicators and above all by one of the most important economic dynamics (in particular industrial and commercial dynamics) in the country.

However, we must note the weakness of the various indices in Mornag, characterized by the importance of the rural component, the low density of the population, the importance of the dispersed habitat and the weakness of the indicators of the infrastructure (in particular the internet connection and connection to the sewer network).

Contrary to Tunis, Ariana and Ben Arous, the fourth governorate of the District of Tunis (Manouba) is characterized by the existence of certain delegations whose synthetic HDI is very weak and clearly lower than the national average (even lower than 500), in particular in El Battane and Borj Amri: the first is characterized by a very low internet connection index (14%)

and above all a low professional integration on the job market, in particular for young graduates from higher education where the rate unemployment is 35%.

As for the second delegation, in this case Borj Amri, it is also characterized by a high unemployment rate among higher education graduates (28%) but also and above all by the weakness of the infrastructure indicators, with a connection rate to the internet by 20% and above all a rate of connection to the sanitation network which does not exceed 11%.

With regard to Douar Hicher, and despite the relative improvement of infrastructure indicators, the importance of unemployment is undeniable with a rate of nearly 20% for overall unemployment and more than 31% for graduates of the superior. The impact of unemployment is, in this respect, not only socioeconomic but also individual and psychological. In a recent survey carried out in Douar Hicher and Ettadhamen, certain researchers studied the representation of unemployment and underlined "the importance of the individual effects (material needs, deviance) of unemployment, in comparison with its social effects (denial of recognition, humiliation by others...). Thus, the psychological component is present in nearly half of the responses, 28.6% of young people having recourse to the notion of suffering and 17.1% speaking of despair; in total, it is therefore 45.7% who place this dimension of experience of unemployment in first place" (Ben Amor R. and Moussa H., 2016).

#### **II- The North East**

This part concerns the three governorates of the North East (Nabeul, Zaghouan and Bizerte) and the analysis of the synthetic HDI in the different delegations of this region.

Table 2- Synthetic HDI in the North East

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Delegation	HDI	Delegation	HDI	Delegation	HDI
Nabeul	753	Bizerte Nord	753	Zaghouan	633
Dar Chaabane	706	Zarzouna	703	Ezzeriba	599
Beni Khiar	691	Bizerte Sud	571	Bir Mchergua	531
Korba	636	Sejnene	355	Elfahs	528
Menzel Temime	569	Djoumine	358	Ennadhour	404
El Mida	505	Mateur	586	Saouef	359
Kelibia	634	Ghezalla	393	Total (governorate)	535
Hammam El Guezaz	588	Menzel Bourguiba	638		
El Houaria	481	Tinja	646	1	
Takelsa	486	Utique	490	1	
Sliman	679	Ghar El Meleh	596	1	
Menzel Bouzelfa	603	Menzel Djmil	686	1	
Beni Khaled	634	El Alia	638	1	
Grombalia	652	Ras Djbel	678	1	
Bouargoub	548	Total (governorate)	616	1	
Hammamet	660	Total Tunisia	609	1	
Total (governorate)	638			]	

Source: Elaborated by our calculations, based on NIS data (GPHC 2014)

The North East is one of the most dynamic regions of Tunisia. With the District of Tunis and the Center East, the governorate of Nabeul is characterized by an intensive economic dynamic and by a high level of development, due to the sectorial economic diversification and the rapid development of the tourism and industrial sector since independence.

However, some delegations remain (until now) characterized by weak integration into the economic circuit and by a relatively weak infrastructure. For example, we note that, for Takelsa, the internet connection rate is less than 10% and the connection to the sewer network does not exceed 7%. For El Houaria, the HDI is strongly affected by the importance of unemployment among university graduates with a rate of more than 35% (this is combined with the weakness of the infrastructure indicators).

These two delegations have an HDI of less than 500, unlike the majority of Nabeul delegations whose index is generally higher than the national average. This explains, moreover, the attractive character of "Cap Bon" and the positive growth of the population during the last decades. As such, most towns in Nabeul recorded a population growth rate above 1.5% between 2004 and 2014, while net migration is often positive (more than 13,000 between 2009 and 2014).

On the other hand, the governorate of Zaghouan is the only one (in the North East District) to have a synthetic HDI lower than the national average. The weakness of the infrastructure, the relatively high rate of illiteracy, the critical situation of the labor market, the weakness of the industrial "fabric" in several delegations... so many factors which explain this level of the HDI which is even lower to 400 in several localities, which explains their classification as areas for development or priority intervention: these are in particular Ennadhour and Saouef, in these two delegations, the proportion of illiterates is greater than 35%, the rate of households connected to the internet is below 5% (1% in Saouaf), the rate of connection to the sanitation network does not exceed 27% (11% in Saouaf). The geographical factor is, in this respect, decisive, for example, for the supply of running water, the delegations of Ennadhour and Saouef have rates below the regional and national average given the mountainous rural character of these two delegations and the connection to the drinking water network by SONEDE is very expensive; they are served by the Rural Engineering (RE) network (Ministry of Regional Development, 2012).

This geographical factor is combined with the weakness of the economic dynamics in the region in general and in these two delegations in particular, since the number of private companies in the governorate still remains below the level of several industrial poles, the industrial indicators are very weak in the two delegations of Saouef and Ennadhour because of the non-existence of developed industrial zones despite the advantages and incentives granted by the

State to these two delegations classified as priority zones for regional development (Ibid, p.15).

As far as Bizerte is concerned, this governorate is a part of the Tunisian coastal axis, an overdeveloped axis to the detriment of the underdeveloped and marginalized inner periphery.

However, within the governorate of Bizerte there are delegations where the synthetic HDI is very low, around half of the national score, with an average of 355 in Sejnene and 358 in Djoumine (393 in Ghezala against more than 750 in Bizerte Nord). Of course, these two disadvantaged regions have very low indices in terms of infrastructure and even education: for Djoumine, for example, the illiteracy rate is over 42%, the connection to the ONAS network is 4.7% and the internet connection is almost non-existent (0.6%); the same is true for Sedjnene and Ghezala. We can also add the importance of unemployment, in particular that of higher education graduates with a rate oscillating between 27% and 31%.

In fact, these three delegations suffer from high poverty and unfavorable living conditions; they are classified as disadvantaged areas and require intervention at the regional and local development level.

# **III- The North West**

In this section, interest is focused on the analysis of local disparities in the North West and on the study of the synthetic HDI of the various delegations of the four governorates of the district: Béja, Jendouba, Le Kef and Siliana.

Table 3- Synthetic HDI in the North West

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Delegation	HDI	Delegation	HDI	Delegation	HDI	Delegation	HDI
Béja Nord	584	Jendouba	571	Kef Ouest	648	Siliana Nord	613
Béja Sud	580	Jendouba	404	Kef Est	639	Siliana Sud	519
		Nord					
Amdoun	422	Bousalem	492	Nebeur	413	Bouarada	504
Nefza	397	Tabarka	468	Sakiet Sidi	454	Gaafour	528
				Youssef			
Teboursouk	500	Ain Drahem	383	Tajerouine	502	Elkrib	520
Tibar	418	Fernana	<u>296</u>	Kalaat Snan	476	Bourouis	393
Testour	515	Ghardimaou	376	Kalaat Khesba	471	Makthar	415
Goubellat	395	Oued Mliz	328	Djerissa	501	Errouhia	428
Mdjez Elbeb	593	Balta Bou	359	Elksour	469	Kesra	478
		Aouane					
Total	517	Total	427	Dahmani	446	Bargou	474
(governorate)		(governorate)					
Total Tunisia	609			Essers	501	Elaroussa	440
				Total	526	Total	502
				(governorate)		(governorate)	

Source: Elaborated by our calculations, based on NIS data (GPHC 2014)

If the governorate of Béja records an HDI lower than the national average, and this like all the interior regions of the country, certain delegations are characterized by a very weak HDI lower than 400; these include Nefza and

Goubellat with respective scores of 397 and 395 and where infrastructure indicators are well below the national threshold.

In several rural areas of Béja, the water supply, for example, is very low in several localities, while -paradoxically- the hydraulic and natural resources of the governorate are very significant.

In the same context, we should note the weakness of the industrial "dynamics" and job creation in the region (evidenced by the high unemployment rates, particularly for higher education graduates: more than 31% in Amdoun, Tebousouk, Tibar and Goubellat), despite the diversity and wealth of resources in the governorate of Béja: cultivated land, forest land, cereal production, considerable water resources, mineral water sources, diversity of building materials, the importance of cultural resources and historical and archaeological sites, the diversity of economic and tourism opportunities, the importance of the agri-food sector...(Ministry of Regional Development, 2013).

On the other hand, and by analyzing the scores of the various delegations of the governorate of Jendouba, certain points must be underlined.

First, all the delegations (except Jendouba center) have an index significantly lower than the national average and oscillating between 300 and 490.

Secondly, we should note the existence of several localities registering a very low HDI of less than 400 (at least five delegations).

Thirdly, the delegation of Fernana "stands out" with a score below 300, which reflects the real marginalization of this locality where we find very low indices both for infrastructure and for education and employment: for example, we find in Fernana an internet connection rate of 3%, a running water supply rate of only 23%, a proportion of households with a connection to the ONAS network which does not exceed 9%, an illiteracy rate of more than 44%...

Fourthly, we must emphasize the importance of overall unemployment and especially that of higher education graduates. This concerns almost all the delegations where there is an overall unemployment rate always above 22% (32% in Oued Mliz) and above all a rate of graduates which is very "alarming" in certain localities such as Boussalem and Fernana (35%), Ghardimaou (38%), Jendouba North (44%) and Oued Mliz (46%).

The weakness of the economic dynamics and of the industrial zones on the one hand and the "deficiency" of entrepreneurship and private initiative on the other hand, explain this situation of the labor market and the drop in job offers (for report on demand). As Rabah Nabli notes, in several inland regions (including Jendouba and the North West in general), "economic operators suffer from both a lack of culture and well-established entrepreneurial traditions, the absence of a reliable infrastructure, support structures for private initiative and distance from decision-making centers [...]. All these factors

constitute the major obstacles to be overcome, which the tax advantages granted by the State have not been sufficient to neutralize" (Nabli R., 2008).

Like Béja, the marginalization of the various delegations of Jendouba coincides with the importance of the resources and the potentialities of the governorate: agricultural areas, forests, irrigated perimeters, hydraulic and halieutic resources, archaeological sites, mineral water sources, natural parks, tourist center (Tabarka-Ain Drahem), investment opportunities (border area with Algeria)... (Ministry of Regional Development, 2013).

Moreover, and as usual in the North West, almost all the delegations of the governorate of Kef have an HDI lower than the national average (with the exception of Kef Center). In addition, unemployment among higher education graduates is high in most localities with rates often exceeding 30% (33% in Tajerouine and Djerissa, 34% in Kalaa Khesba and 36.6% in Dahmani).

The delegation which records the lowest HDI is Nebeur, where we find indices clearly below the national average, in particular concerning the indicators of infrastructure with a rate of connection to the sanitation network of 19% and a proportion of households connected to the internet which does not exceed 5% (with an unemployment rate for graduates of almost 30%). Even the rate of connection to drinking water is very low, because most of the delegations have a rural character with a difficult relief and a dispersed habitat.

This marginalization of the delegation of Nebeur and of the various localities of Kef (and of the North West in general) has prompted certain researchers to speak of a "blockage to development": as analyzed by N.Mhidhi, "the local population always tends to move towards other larger urban centers. In fact, these small towns are blocked upstream and downstream:

-upstream because the other larger centers, sub-regional or regional and even the Capital, do not need their mediation to extend their influence on local spaces

-downstream because the area concerned by these municipalities in the North West is so poor that it has nothing to contribute and only needs a few services" (Mhidhi N., 1998).

This blocking of development has generated undeniable demographic repercussions, in particular the depopulation of certain delegations where the population growth rate is not only stable but is even negative (between the two censuses of 2004 and 2014, the population growth in Kef is of -0.62), with an equally negative net migration of -7504 (between 2009 and 2014).

For the governorate of Siliana, only Siliana Nord stands out with an HDI higher than the national average, unlike all the other delegations which often have a score between 400 and 500. Two municipalities record very low indicators compared to the national threshold:

- the delegation of Errouhia where the illiteracy rate is very high (41%) and where the infrastructure indices are deficient (with an internet connection rate

of 5%, running water supply of 35% and connection to the ONAS network by 25%)

-the Bourouis delegation, which has a synthetic HDI of less than 400, where we find equally weak infrastructure indicators but also and above all very high unemployment rates (the overall unemployment rate is 30%, while that of graduates is 32%).

This considerable deficit of several delegations from Siliana, and from the North West in general, reflects very clearly the marginalization of the interior areas and the western part of the country. Some authors speak not only of an unequal development or a marginalization of the interior regions, but they even speak of *an isolation* of these areas because of their isolation both at the productive level and in the non-productive sector: the first is affected by "the absence of road infrastructure or by the shortage of substitutes, if not by the deterioration of equipment over time in such a way as to make the social unit (or the region) poorly integrated into the circuit that 'surround'. As for the non-productive level, "generally devolved to the State, isolation indicates the lack of socio-educational and collective facilities" (Amri L., 2002).

This situation of "landlockedness" and underdevelopment has harmful demographic effects, in particular depopulation and rural exodus:

-depopulation is evidenced by a negative growth rate in all the governorates of the North West (-0.05 in Béja, -0.37 in Jendouba, -0.62 in Kef and -0.48 in Siliana)

- the displacement of the population is attested by a still negative migratory balance reflecting the repulsive nature of the region; this balance is -35 thousand between 2009 and 2014 (in thousands: -7.6 in Béja; -12.1 in Jendouba; -7.0 in Kef and -8.3 in Siliana).

This crisis in the North-West, and rural regions in general (a crisis which is at the origin of significant migratory flows which sometimes generate stagnation, even a reduction in the population) is inherent in many structural causes which explain the depopulation of this region. These include: the weakness of the diversification of agriculture, the deterioration of incomes in agriculture, the mechanization of this sector (with the non-diversification) which has reduced the need for labor (the regression of working days available in the countryside of the region), mechanization (by hire) which generated a relationship of exploitation and domination and which accelerated the rhythm of destruction of the balance of the family economy, the absence of compensatory structural transformations (the weakness of industrial and tertiary investments)...) (Dimassi H. and Zaiem M.H., 1982).

# **IV- The East Center**

This section focuses on the study of synthetic HDIs and local disparities in the various delegations of the Center East and its four governorates (Sousse, Monastir, Mahdia and Sfax).

Table 4- Synthetic HDI in the Center East

Delegation	HDI	Delegation	HDI	Delegation	HDI	Delegation	HDI
Sousse Medina	800	Monastir	797	Mahdia	693	Sfax Ville	765
Sousse Riadh	728	Werdanine	658	Boumerdes	510	Sfax Ouest	756
Sousse Jawhra	805	Sahline	717	Ouled Chamekh	424	Sakiet Ezzit	695
Sidi Abdelhamid	666	Zarmdine	578	Chorbene	414	Sakiet Eddair	689
Hammam Sousse	786	Beni Hassen	590	Hebira	461	Sfax Sud	648
Akouda	718	Jammel	665	Essouassi	481	Tina	586
Kalaa Kebira	656	Benbla	708	Eldjem	546	Agareb	449
Sidi Bouali	608	Moknine	631	Chebba	619	Djbeniana	475
Hergla	631	Bekalta	666	Meloulech	466	El Amra	456
Enfidha	520	Teboulba	683	Sidi Alouane	474	El Hancha	464
Bouficha	555	Ksar Helal	693	Ksour Essef	577	Menzel Chaker	469
Kondar	461	Ksibet Elmediouni	711	Total (governorate)	555	Ghraiba	344
Sidi Elheni	473	Sayada Lamta Bouhjar	735			Bir Ali Ben Khlifa	310
Msaken	704	Total (governorate)	701			Skhira	323
Kalaa Sghira	676					Mahres	532
Zaouia Ksiba Thrayet	653			•		Kerkenah	594
Total (governorate)	698					Total (governorate)	614
Total Tunisia	609	1					

Source: Elaborated by our calculations, based on NIS data (GPHC 2014)

With the capital and Monastir, Sousse is one of the most developed regions of the country. The "Pearl of the Sahel" benefits from several "comparative advantages" including its geographical location, the importance of tourist areas, the development of infrastructure and collective equipment, considerable investment (both public and private) in industry (electrical, mechanical...) and in the tourism sector...

In the words of Mr. Jedidi, "the Sahel is undeniably one of the regions of the country which seems to benefit the most from the achievements of the regime since independence [...]. The economy has undergone radical changes: olive growing, which was the foundation of the regional economy, has clearly regressed, quickly giving way to non-agricultural activities, both secondary (notably the modern processing industry) and tertiary (tourism, commercial and non-commercial services, etc.), which have thus become preponderant" (Jedidi M., 1986).

However, and despite all these changes and all these advantages, there are relatively significant local disparities between the best-off delegations recording a score greater than or equal to 800 (in this case Sousse Medina and Sousse Jawhra) and the less well-off delegations with a score below 480 (namely Kondar and Sidi Elheni), i.e. a gap between the extremes of almost 340 points.

The marginalization of these two delegations is confirmed by numerous indicators, in particular the indices relating to infrastructure and education:

-the rate of connection to the sanitation network is negligible in Sidi Elheni and Kondar (less than 5%) while it is 80% in the entire governorate

- the illiteracy rate is almost 30% in these two localities while the average rate for the governorate does not exceed 13.4%; the same is true for higher education (between 22 and 23% against nearly 44% for the Sousse region).

These delegations are characterized by the predominance of the rural and agricultural population, which explains the weakness of the economic fabric and the deficiency of the industrial zones, and which generates a poverty rate higher than the average of the governorate and unemployment - in particular of young graduates - relatively higher compared to the other communes of Sousse (20% in Kondar and 22.4% in Sidi Elheni, against 10% in Sousse Medina and Sousse Jawhra).

Like Sousse and Tunis, Monastir can be considered one of the most developed governorates in the country and "the pearl" not only of the Sahel but of the entire coastal axis. But, unlike Sousse and Cap Bon, Monastir is distinguished by the virtual absence of marginalized delegations. It should be noted, in this respect, that this governorate records an urbanization rate of 100%, ie. that the rural population, predominantly agricultural and "left behinds", is almost non-existent (as evidenced by the poverty rate among the lowest in the country). In 2015, for example, the extreme poverty rate was 0.3% and the overall poverty rate was 8.3% (against respective national rates of 3% and 15%).

Even the lowest-ranked delegations in the governorate register an HDI of nearly 600, while the region's average index is significantly higher than the national average. It should be emphasized, in this regard, that the indices of overall employment and those of the employment of graduates are clearly high in most of the municipalities of Monastir compared to the other delegations of the country, with an overall unemployment rate of 9 % (against 15% nationally).

This reflects the level of development of the labor market in Monastir, in particular thanks to the rapid growth of the industrial and tourism sector.

For the tourism sector, the pace of tourism growth has been significantly faster than in the country as a whole: it has "almost doubled for the number of hotel establishments, foreign tourist entries, direct hotel jobs and revenue in foreign currency, more than doubled for tourist units and almost tripled for accommodation capacity" (Ibid).

With regard to industrialization, some delegations are characterized by particular economic dynamism. Let us quote in particular Ksar Helal which is marked "historically and structurally by the textile activity. The textile, clothing and leather industries alone account for 85% of companies and 93% of jobs in

Helalian industry [...]. The "cluster" of Ksar Helal is structured globally as follows: upstream, there are the yarn suppliers with two types of actors, the modern spinning mills and the hundred or so wholesalers who import yarn; at the heart we find the official industrial weaving companies around which gravitate the informal industrial weaving units as well as the manual weavers. Downstream, we find clothing" (Tizaoui H., 2013).

However, and contrary to Sousse, Monastir and Sfax, the governorate of Mahdia constitutes "the bad example" of the Sahel and the littoral axis: it is the governorate which makes the exception in the Center East, with very weak indices by compared to other governorates in the district. Of all the delegations of Mahdia, only Mahdia city has an HDI higher than the national average, while the other localities (except Chebba) record scores often between 400 and 500.

Some delegations stand out for the considerable weakness of the infrastructure indicators and, subsequently, for obtaining an HDI below the average threshold of 500. These include Chorbene, Ouled Chamekh, Hebira, Meloulech and Sidi Alouane, where we find a sanitation index still below 7% (2.3% in Hebira). The same goes for the internet connection rate (with a proportion oscillating between 5% and 10%). This is combined with an unemployment rate of higher education graduates which is relatively high in several predominantly agricultural and rural delegations, and where there is a deficiency in business creation and a weakness in economic and industrial activity. For example, there is an unemployment rate for graduates of 28% in Chorbene, 29% in Ouled Chamekh and 32% in Meloulech.

Nevertheless, the resources and opportunities in the various delegations of Mahdia are considerable. In addition to its geographical location (with 75 km of coastline on the Mediterranean), the advantages affect so much agriculture (very important oil production, fishing products of nearly 14% of national production, the dairy basin, etc.) as the industrial sector (industrial zones and also the advantages granted to regional development zones) and the tourist and artisanal sectors (seaside tourism, thalassotherapy centers, specialty in certain trades such as silk and mosaic, the very important archaeological heritage)... ((Ministry of Regional Development, 2013).

On the other hand, and with regard to Sfax, the capital of the South is, with Tunis and the Sahel, among the most dynamic regions of the country and "the economic metropolis" of southern Tunisia. According to R. Nabli, the main explanatory factors of the prosperity of Sfax are the following:

"- the privileged geographical location of the city: Sfax is surrounded by a rich agricultural region, with cereals, fruit trees and olive trees as main crops [...], which favors the development of agri-food production

-the second characteristic is linked to the importance of the port of Sfax: this port has always experienced intense traffic thanks in particular to the export of esparto, olive oil and especially phosphates

- the third - and perhaps the most important - characteristic consists in the existence in Sfax of an efficient productive fabric, largely made up of small and medium-sized enterprises." (Nabli R., 2008).

This favorable economic and cultural environment was at the origin of an undeniable economic and industrial dynamism, which facilitated the development of a secondary sector which itself had ripple effects on the development of the region in general: "We are in Sfax in a culture of entrepreneurs which relies on an economic environment historically faithful to its traditions, marked by a homogeneous socio-cultural fabric and a very strong representation of belonging. This development pole represents a specific alternative, an innovative action in search of new activities and a diversification of the local industrial fabric." (Tizaoui H., 2013).

However, and notwithstanding this development of the "capital of the South", some delegations remain characterized by a very low level of economic and human development, recording indices close to 300. These include Bir Ali Ben Khlifa, Ghraiba and Skhira, where we find an HDI of less than 350 and sectoral indicators showing undeniable "vulnerability" and marginalization:

-for infrastructure, for example, the connection rate to the ONAS network is between 2% and 5%, the proportion of households with internet access varies between 4% and 13%

-concerning the labor market, the overall unemployment rate is relatively high (20% in Bir Ali Ben Khlifa, between 25% and 26% in Ghraiba and Skhira), while unemployment among higher education graduates is, as for him, very important with rates which are between 37% and 41% in these three delegations.

#### V- The Center West

In this section, we will study the local disparities in the Center West, thanks to the analysis of the synthetic HDI of the different delegations of three governorates: Kairouan, Kasserine and Sidi Bouzid.

Table 5- Synthetic HDI in the Center West

Delegation	HDI	Delegation	HDI	Delegation	HDI
Kairouan Nord	616	Kasserine Nord	587	Sidi Bouzid Ouest	551
Kairouan Sud	565	Kasserine Sud	352	Sidi Bouzid Est	363
Echbika	438	Ezzouhour 532		Jilma	383
Sebikha	350	Hassi Ferid 347 (		Cebalit Ouled Asker	335
El Oueslatia	386	Sebeitla	402	Bir Elhfey	377
Haffouz	457	Sebiba	359	Sidi Ali Ben Aoun	335
El Alaa	413	Djedeliane	367	Menzel Bouzaine	<u>298</u>
Hajeb El	418	El Ayoun	293	Meknassy	439
Ayoun					
Nasrallah	351	Thalla	414	Souk Jdid	323
Echrarda	371	Hidra	340	Mezzouna	363
Bouhajla	340	Foussana	416	Rgueb	372
Total	450	Feriana	414	Ouled Haffouz	400
(governorate)					
Total Tunisia	609	Majel Bel	323	Total (governorate)	395
		Abbes			
		Total	414		
		(governorate)			

Source: Elaborated by our calculations, based on NIS data (GPHC 2014)

By analyzing the different governorates of the Center West, and starting with Kairouan, we notice not only the weakness but also and above all the total absence of certain equipment and several services. With regard to sanitation, for example, the index is equal to zero in Echbika and Nasrallah, and with the exception of Kairouan North and South, the connection rate remains below the national average. This rate is very low, especially in certain delegations (Cherarda, Nasrallah, El Alâa, Chbika).

Even for the rate of connection to running water, we note that it is significantly lower than the national average, with nearly 50% or, sometimes, 60% of the population not benefiting from SONEDE services. In these rural delegations, we can also highlight the low level of internet access (between 2% and 3%) and the high proportion of illiterates (more than 40% in four localities).

With regard to the job market, and because of the lack of opportunities (especially for graduates) and the virtual absence of industrial zones, particularly in rural areas, unemployment rates are high, particularly for higher education graduates, with rates of 28% in Nasrallah and over 30% in Echbika and Sbikha.

As analyzed in previous chapters, the chronic and persistent aspect of unequal development is confirmed by the existence of the same regional classification even if other indicators, other methodologies and other methods are used other reference periods. All highlight the same regional typology reflecting the marginalization of the interior and of "underdeveloped Tunisia".

This concerns in particular Kasserine and Sidi Bouzid who often "maintained" the last places in the ranking. But the meticulous and in-depth

analysis of the indicators, not only at the overall level of the governorate, but above all at the level of the delegations, shows the extent of the marginalization of these localities and the primacy, even the urgency, of opening them up. It can be said without exaggeration that this is a population that has been neglected for too long. Just read some very eloquent indicators in Kasserine:

-for the HDI, six delegations have an index lower than 360, including El Ayoun which has a score lower than 300

- for the sanitation network, the rate is 0% in six delegations and it is less than 14% in two other localities
- -concerning running water supply, the rate does not exceed 28% in El Ayoun and 26% in Hassi Ferid
- -for internet access, the rate is often less than 10% and does not exceed 0.7% in El Ayoun and 0.6% in Hassi Ferid
- with regard to higher employment, unemployment rates are above 30% in all the delegations (except Hassi Ferid); the highest rates are recorded in Ezzouhour, Thalla and Majel Bel Abbes (with respective rates of 38%, 42% and 45%).

By studying this western strip of the country (which includes Gafsa, Le Kef and especially Kasserine), some geographers conclude that it constitutes "a depressed space with regard to numerous socio-economic indicators because affected by the importance of unemployment and informal activities and the extent of migration [...]. These regions are still subject to the weight of multiple limiting factors: low attractiveness of exporting, industrial or tourist activities (due to the distance from coastal towns), low qualification of the workforce (not numerous enough to be able to attract new businesses), the dead-end situation of the corridors and communication axes articulated on the coast (undergoing the constraining effect of the relief orienting the life of relations in an east-west direction so as to set up an obstacle to the development of northern relations -South) [...]. Admittedly, they are more urbanized than the regions of the median strip, but they nevertheless remain incapable of stimulating the growth of their economy" (Hayder A., 2006).

In the words of H. Sethom, it is a "dominated and exploited periphery [...], which is continually being emptied of its human and economic content" and which remains disinherited "because of unemployment, insufficient investment and severity of natural conditions" (Sethom H., 1992).

The situation of Kasserine is almost similar to that of Sidi Bouzid. The latter includes delegations characterized by unquestionable marginalization, despite the importance and dynamism of the agricultural sector.

The statistics show that, on the one hand, 8 delegations (out of a total of 12) record a connection rate to the sanitation network below 7% (0% in Souk Jedid and 0.8% in Rgueb), and, on the other hand, 9 delegations have a household connection rate of less than 10% (2.3% in Souk Jedid). For the unemployment

of higher education graduates, let's not forget that it was the main factor in the outbreak of the Tunisian revolution in 2011, precisely from Sidi Bouzid where we find the highest rates of unemployment of higher education graduates, a rate which is -on average- higher than 35% but which exceeds 40% in Sidi Ali Ben Aoun and 45% in Meknassy and Menzel Bouzaine.

For all these reasons, it should be noted that, despite the importance of the agricultural sector, the governorate of Sidi Bouzid is the only one with an average index below 400, due to the low HDIs in almost all localities, with scores which oscillate, in 9 delegations, between 298 and 383.

In summary, the Center West is probably the most marginalized region of the country: "All the parameters indicate that the Center West often ranks last: education (illiteracy rate), household equipment or unemployment [...]. In addition to the geographical isolation, the interior regions in general and the Center West in particular are also disconnected from modern communication networks: highways, airports and ports. The weakness of regional towns is another major handicap that blocks any endogenous or exogenous development initiative" (Belhedi A., 2012).

However, the opportunities and "comparative advantages" of the three governorates of the district are not negligible, in particular water resources, building materials, natural and archaeological sites... and more particularly the dynamism of the agricultural sector.

#### VI- The South East

In this section, we will calculate and analyze the synthetic HDI of the different delegations of three governorates: Gabes, Medenine and Tataouine.

Table 6- Synthetic HDI in the South East

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Delegation	HDI	Delegation	HDI	Delegation	HDI
Gabes Medina	662	Médenine Nord	544	Tataouine Nord	529
Gabes Ouest	586	Médenine Sud	496	Tataouine Sud	491
Gabes Sud	697	Beni Khadech	367	Smar	382
Ghannouch	573	Ben Guerdane	433	Bir Lahmar	448
El Metouia	608	Zarzis	536	Ghomrassen	556
Menzel El Habib	374	Djerba Houmet	625	Dhehiba	352
		Souk			
El Hamma	515	Djerba Midoun	576	Remada	344
Matmata	389	Djerba Ajim	528	Total (governorate)	485
La nouvelle	384	Sidi Makhlouf	338	Total Tunisia	609
Matmata					
Mareth	445	Total (governorate)	518		
Total (governorate)	567		•		

Source: Elaborated by our calculations, based on NIS data (GPHC 2014)

Compared to the situation after independence, the South East and more particularly Gabes experienced sustained growth and an undeniable improvement in the level of development (Bousnina A., 2012). The industrial sector played, in Gabes specifically, a primordial role thanks to the importance

of the industrial investments deployed in particular during the 1970s: "In Gabes, the decision to set up a chemical pole associated from the start the creation of a modern port with the establishment of units for the revalorization of the resources of the subsoil of southern Tunisia. The industrial-port zone of Ghannouch includes, in addition to the thermal power station, gas turbines and a terminal of the southern gas pipeline, a set of large and medium-sized units mainly processing lime phosphate or its derivatives. The chemical sector employs a total of 43.7% of employees in the entire Gabesian industry. In addition, (we can mention) the cement company, the metal construction workshops, the building materials industry and the mechanical sector" (Dlala H., 1993).

But we must also see "the other side of the coin": the perverse effects of the chemical industry and its impact on the environment and pollution. As the geographer Habib Ayeb noted, if Gabes has the only coastal oasis in the world, we must not forget that this real heritage of local biodiversity is endangered because of pollution: "In front of the palm grove, a blackish mud flows towards the sea [...]. It was near the beach of Chott Essalem and in front of a coastal oasis - a rarity in the world - that the Tunisian Chemical Group (GCT), a public company operating phosphate mines, set up in the 1970s. All every day, its production units discharge 14,000 tons of phosphogypsum into the sea, according to the authorities. In addition to this environmentally harmful sludge, the plant releases phosphoric acid into the air" (Larbi K., 2017).

This pollution problem in Gabes is combined with a very significant problem of unemployment among graduates due to the exhaustion of the industrial sector and the lack of outlets in other sectors. In the chemical industry, for example, after the revolution, and with the considerable drop in phosphate production (-54% between 2010 and 2016), the chemical group experienced a "draconian" drop in its production, with operations including only between 30% and 40% of its productive capacity between January 2011 and September 2017.

Thus, unemployment among higher education graduates remains very high, it is greater than (or equal to) 40% in Menzel El Habib, Matmata and Mareth (it even exceeds the 45% threshold in El Hamma).

The same is true for the infrastructure, in particular the internet connection and sanitation which are clearly below the national threshold (for example, the rate of connection to the ONAS network is 5% in Menzel El Habib, 3% in New Matmata and 2% in Matmata.In these three delegations precisely, there is an HDI of less than 400). This can be attributed, among other things, to natural factors and geographical constraints (scattered settlements, the predominance of oases and the Sahara in certain delegations, etc.).

On the other hand, and with regard to the governorate of Medenine, it records an HDI of 518 and a score below the national average. Some

delegations are characterized by the weakness of the various indicators and by an HDI of less than 370, notably Sidi Makhlouf and Beni Khadech. In these localities, the infrastructure indicators are clearly below the national threshold (0% for the sanitation network and 5% or 6% for internet access).

Natural constraints play an essential role here; for example, the density in Sidi Makhlouf and Beni Khadech is between 6 and 20 inhabitants per km2, which reflects the importance of the dispersed habitat. As H. Mzabi carefully analyzed, the South East region (in general) "belongs to the pre-Saharan domain characterized by a simple subtabular structure [...]. This structure has given rise to the relief of this region composed of a few large sets of little variation. The slight dip, the alternation of hard and soft material favored an action of erosion which generated an immense relief of cuesta [...]. This region on the margins of the Mediterranean zone is particularly fragile and its inferiority results from the constraints of its natural environment" (Mzabi H., 1993).

In addition, one notices in several delegations of Médenine the weakness of the index of employment (in particular higher). As such, the unemployment rate for higher education graduates in Beni Khedache is 40%, while it has reached a very alarming threshold in Sidi Makhlouf with a rate of nearly 50%. Among the main factors, we can cite in particular the weakness of the economic and industrial dynamics in the region, for many reasons: "The narrowness of the regional market, the low financial means of the premises despite the occasional attraction of promoters of region, the low qualification of the promoters and the workforce, constitute the difficult conditions in which the industrial promotion in Medenine finds itself. Despite the incentive policies, industry in Medenine does not have any particular advantages" (Hayder A., 1998).

On the other hand, we must note the importance of the HDI in the island of Djerba (in particular Djerba Houmet Souk) where we find indices clearly higher than the national average reflecting the economic prosperity and the over-development of the country agglomeration. In our opinion, this is inherent to two main reasons: entrepreneurship (or trade) and tourism.

First of all, the entrepreneurial and commercial culture is well anchored in Djerba: "By tradition, Djerbian entrepreneurs began their social ascent from capital accumulated in commerce or trading. They are generally situated in a logic of continuity, moreover even their industrial projects are in reality only an extension in industrial form of their initial activity, trade" (Nabli R., 2008).

Secondly, the undoubted development of the tourist sector in Djerba has been considerable since the 1960s, making the city "the island of dreams" and one of the main tourist destinations in Tunisia (in 2015 for example, the capacity in beds for all the tourist regions in Tunisia is equal to 241.4 thousand,

of which more than 57 thousand for the Djerba-Zarzis region, i.e. nearly 24%; for tourist nights, they are often between 25% and 30%).

Finally, concerning the third governorate of the South East, and with an area of 38,889 km2, Tataouine occupies nearly 25% of the area of the country and more than 43% of that of the South. It is the largest governorate in the country but has the lowest density (only 4 inhabitants/km2), which explains the importance of the dispersed habitat and subsequently the great weakness of the infrastructure indicators, in particular at Smar, Dhehiba and Remada. All these delegations have an HDI of less than 400 and record sanitation indices of 0% and internet connection rates of between 9% and 13%.

With regard to the job market, and except for Ghomrassen (30%), the unemployment rate for higher education graduates is still above 34% and it exceeds the 40% threshold in Tataouine Sud, Bir Lahmar and Dhehiba. For female unemployment, we find a rate for higher education graduates that is higher than 50% in almost all the delegations (53% in Smar, 55% in Bir Lahmar and 56% in Tataouine Sud), which clearly reflects the weakness of economic activity and the "deficiency" of business creation in the region.

Paradoxically, the region is very rich in agricultural and natural resources (such as gypsum or marble) and especially oil wealth where we find 42% of national oil production, produced from the fields of El Bourma and modern fields like Zar, Elwara... This may explain the discontent of the population and the importance of sit-ins and strikes in the region (let us mention in particular the famous sit-in of El Kamour which paralyzed the oil sector and led to violent clashes between May and June 2017).

#### VII- The South West

This section concerns the study of local disparities and the analysis of synthetic indices of human development in the South West, and more specifically in the different delegations of three governorates: Gafsa, Tozeur and Kebili.

Table 7- Synthetic HDI in the South West

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Delegation	HDI	Delegation	HDI	Delegation	HDI
Gafsa Nord	310	Tozeur	659	Kebili Sud	495
Sidi Aich	342	Degach	523	Kebili Nord	556
El Ksar	566	Tameghza	400	Souk El Ahad	446
Gafsa Sud	609	Nafta	645	Douz Nord	551
Om Elaraies	364	Hazoua	471	Douz Sud	490
Redeyef	445	Total (governorate)	601	Faouar	353
Metlaoui	494			Total (governorate)	492
Mdhila	455			Total (Tunisia)	609
El Gtar	453				
Belkhir	358				
Sned	354				
Total (governorate)	490				

Source: Elaborated by our calculations, based on NIS data (GPHC 2014)

The study of the governorate of Gafsa is specific for a very simple reason: it is the only governorate where we find three delegations with an employment index (of higher education graduates) equal to 0 (Om Elaraies, Redeyef and Metlaoui, where this unemployment rate exceeds 50%) and 5 other delegations where this index is between 32 and 219, i.e. a higher unemployment rate of between 39% and 48% (the unemployment rate for graduates in the entire governorate is equal to 41.5%). Of course, this directly affects the HDI which is below 500 in nine delegations and it is even below 365 in five communes.

The problem of phosphate in Gafsa is central and some researchers even speak of the "curse of phosphate" in the mining basin which has become, at the same time, "a moribund region and a veritable powder keg; the central power has made Gafsa "an outraged, broken and martyred region"; there are at least four disasters that the mining basin is currently experiencing: an ecological disaster (due to pollution from the chemical industry), a health disaster (increase in the rate of people affected by cancer), a social disaster (including tribal rivalries) and above all an economic disaster: "The GAFSA Phosphate Company (CPG), or the Cobbanya as the Gafsians call it, is the cornerstone of economic activity in the mining basin. There was a time, not so long ago, when GAFSA was the CPG and the CPG GAFSA. Everyone worked there. La Cobbanya paid for the water and electricity consumption of all households in the mining area. She took care of the education of the children [...]. For more than a century, even today (and I hope not forever!), the region's economy has been dependent on the CPG. The economic fabric is rudimentary. And as a result, the blow of the restructuring was hard, very hard" (Loungou E., 2015).

As previously mentioned, after the revolution, and with the proliferation of sit-ins and strikes, phosphate production experienced a considerable drop of 54% between 2010 and 2016, phosphate exports were 1335 million dinars in 2010; they did not exceed 423 million dinars at the end of 2015 and 623 MD in 2016.

For the governorate of Tozeur, we note the importance of the HDI in Tozeur Center which exceeds the national average, and the weakness of the index in the other delegations (except Nafta). In Tameghza, for example, the HDI is equal to 400, the infrastructure indices are very low (8.7% for the proportion of internet access and for the rate of connection to the sanitation network), whereas the employment index for graduates is less than 300, representing an unemployment rate of over 35%.

In this respect, we should note the importance of agricultural and tertiary investments but also and above all their concentration in certain delegations, which explains the local disparities in the region. If Tozeur is based on the oasis economy and on agriculture (the annual production of dates is between 35 and 40 thousand tons), the development of Saharan tourism has had an undeniable positive impact on the economy of some localities.

Several phases have marked the development policy for Saharan tourism: during the 1960s, the creation of the first tourist establishments in the South; during the 1970s, the diversification of activity and the construction of the first tourist areas in Nafta and Tozeur; from the end of the 1980s, granting specific advantages to investment in the Saharan regions and the implementation of the strategy for the development of Saharan tourism (Hayder A., 1995).

These various measures generated a rapid increase in tourist activity which is expressed by the considerable increase in the accommodation capacity of the region: the capacity in beds for the Gafsa-Tozeur tourist region rose from 2,988 beds in 1984 to 6,821 in 1992 and to 11,111 beds in 2015. Similarly, the number of establishments increased from 33 to 90 between 1985 and 2015.

However, and despite the rapid development of Saharan tourism, the latter remains limited in space and has only affected a few localities and certain specific centres. Indeed, the integration of the Saharan South into the Tunisian economy "has essentially been achieved by creating tourism dependent on seaside tourism, a by-product of the latter allowing it to be diversified somewhat. The Saharan tourist space is structured by non-regional tourist companies, around rather comparable and undiversified sites which provide little incentive for a prolonged stay and the multiplication of the effects on the regional economy" (Ibid).

Finally, and with regard to the governorate of Kebili, the synthetic HDI is clearly below the national average (and all the localities have an index below 600), the HDI is even lower in certain delegations such as Faouar where it is equal to 353 and where there are infrastructure indicators below 10%. This explains the integration of several delegations of Kebili in priority development zones and the multitude of tax and financial incentives for investment in these municipalities.

But what is even more "alarming" is the great weakness of the economic and industrial fabric and the high unemployment rates, especially for university graduates. Indeed, the overall unemployment rate is 21% for the entire governorate and it fluctuates between 19% in Douz and 28% in Faouar. With regard to graduate unemployment, this rate remains very high and exceeds 40% in 4 delegations: Douz Sud, Souk El Ahad (44.9%), Faouar (44.1%) and Kebili Sud (46.4%). %). Unemployment is even more serious for women, with an overall rate of 44% in Kebili Sud and 48% in Faouar, and above all an unemployment rate for female graduates which exceeds 53% in Douz Sud, 58% in Kebili Sud, 59 % in Souk El Ahad and 62.9% in Faouar.

Among the main explanations for unemployment in Kebili, especially that of executives, we find above all the absence of industrial zones and the predominance of the agricultural sector (the importance of date production), a sector which rarely hires, in Kebili, executives and the female population. Even

the companies that operate in the industrial sector of the region, they are few and they often operate in the packaging of dates.

# Conclusion

If in previous research we have shown the existence of two developed and underdeveloped Tunisias (or the Tunisian coast and desert), this article has tried to show the existence of several countries, including a forgotten, marginalized Tunisia, landlocked and left behind.

The score recorded in a large number of delegations (such as Hassi Ferid, Majel Bel Abbas, Sidi Ali Ben Aoun, Souk Jedid, Gafsa Nord, Bouhajla, Bir Ali Ben Khlifa, Oued Mliz, etc.), with an index that is below the threshold of 350 and sometimes even **below 300** (El Ayoun, Menzel Bouzaiene, Fernana, etc.), this score confirms this marginalization and isolation, especially since certain infrastructure or employment indices are sometimes close to zero.

Furthermore, we must note the impact of political centralization (or the absence of decentralization) on local and regional inequalities, because this centralization does not value the contribution of local and regional officials and neglects the participation of the population to the decision. However, it seems that the legal shortcomings (inherent to the issue of local development and decentralization) are being gradually corrected, particularly in the new constitution. In Chapter VII relating to local power, article 131 states that "Local power is based on decentralization. Decentralization is materialized by local authorities comprising municipalities, regions and departments".

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<sup>•</sup> Most of the references are in French, that's why we left the original title of the book or article.

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Annex- The synthetic HDI and its components (Example: the governorate of Tunis)

Delegation	I.	I. higher	literacy <sup>iii</sup>	Higher	INTERNET <sup>v</sup>	SONEDEvi	ONASvii	HDI <sup>viii</sup>
	employment <sup>i</sup>	employment <sup>ii</sup>	•	Education <sup>iv</sup>				
Carthage	782	798	913	689	586	970	980	817
Medina	719	651	863	503	389	962	981	724
Bab El Bhar	806	824	941	683	581	963	988	826
Bab Souika	701	684	870	576	418	957	985	742
El Omrane	673	750	857	521	415	968	984	738
El Omrane supérieur	677	656	894	599	466	966	986	749
Ettahrir	705	698	914	606	547	969	987	775
El Menzah	875	891	956	759	810	967	989	892
Cité El Khadra	846	865	927	700	685	965	989	854
Le Bardo	745	761	910	663	564	968	982	799
Sijoumi	560	380	806	387	239	972	989	619
Ezzouhour	725	627	873	533	405	966	986	731
Elhrairia	660	582	873	464	352	964	976	696
Sidi Hassine	671	455	844	342	190	946	873	617
El Ourdia	679	697	887	531	436	971	982	740
El Kabaria	632	619	877	494	421	965	980	712
Sidi El Béchir	694	704	873	586	453	968	982	751
Djebel Jelloud	553	492	814	391	240	951	975	631
La Goulette	826	865	948	658	696	963	986	854
Le Kram	768	823	910	540	549	966	983	791
La Marsa	820	836	907	547	555	966	967	800
Total (governorate)	722	750	888	543	469	964	972	758
Total (Tunisia)	704	599	807	409	287	846	614	609

Source: Elaborated by our calculations, based on NIS data (GPHC 2014)

<sup>&</sup>lt;sup>i</sup> Global employment index (including general unemployment rate).

<sup>&</sup>lt;sup>ii</sup>Higher employment index (including the unemployment rate of higher education graduates).

iii Literacy rate of the population (10 years and over).

<sup>&</sup>lt;sup>iv</sup> Rate of schooling at the higher education level of the population (19-24 years old).

<sup>&</sup>lt;sup>v</sup> Proportion of households connected to the internet.

vi Rate of connection of housing to the drinking water network (SONEDE).

vii Rate of connection of dwellings to the sewerage network (ONAS).

viii The average of the 7 indicators (Reference 1000, for the HDI and the other indices).