



KINGDOM of Morocco
Ministry of Economy and Finance

Department of Studies and Financial Forecasts

***A Comparative Study of Regional
Contributions to the Creation of National
Wealth***

*Ordering and Reconfiguration of Local Productive Systems
in Support of Mapping Proposed by*

Advisory Commission for Reaionalisation.

June 2011

Table of content

Table of Content -----	2
List of Figures -----	3
Introduction -----	5
1. Regional Economic Cartography : Comparison between the Existing and the Proposed Mapping -----	5
2. Regional GDP Concentration in Four Regions -----	Erreur ! Signet non défini.
3. Sector-based Configuration of Regional Added Value -----	13
3.1. Regionalised Added Value in the Primary Sector -----	13
3.1.1. Regionalised Added Value in Agriculture -----	16
3.1.2. Regionalised Added Value in the Fishing Industry -----	17
3.2. Regionalized Added Value in the Seconadary Sector -----	18
3.2.1. Regionalised Added Value in the Constraction Industry Industry -----	20
3.2.2. Regionalised Added Value in the Transformation Industry-----	21
3.2.3. Regionalised Added Value in Oil Refinery and Other Energy Products-----	23
3.2.4. Regionalized Added Value in the Water and Electricity Supply -----	23
3.2.5. Regionalised Added Value in Contruction and Public Works-----	24
3.3. Regionalised Added Value in the Tertiary Sector -----	25
3.3.1. Regionalised Added Value in Hospitality Industry (Hotels and Restaurants -----	27
3.3.2. Regionalised Added Value in Commercial Services (Hotels and Restaurants excluded) -----	28
3.3.3. Regionalised Added Value of Non-commercial Services -----	29
Conclusion -----	30

List of Figures

Figure 1 : Synthetic Scale of Regional Sector-based Added Value 2009 .	7
Figure 2 : Projected Layout of the 12 Regions on the Synthetic Scale in 2009....	Erreur ! Signet non défini.
Figure 3 : Simultaneous Projected Layout of the 12 and 16 Regions on the Synthetic Scale in 2009	Erreur ! Signet non défini.
Figure 4 : Average Breakdown of Regional GDP (2000-2009).....	10
Figure 5: GDP Trends by Region in Million Dirhams (2000-2009)	Erreur ! Signet non défini.
Figure 6 : Trends in Regional GDP per capita in Dirhams (1998 and 2009)	Erreur ! Signet non défini.
Graph 7 : Breakdown of Regional GDP in % (2009).....	Erreur ! Signet non défini.
Figure 8 : Average Breakdown of Sector-based Added Value in Primary Sector (1998-2009)	Erreur ! Signet non défini.
Figure 9 : Average Breakdown of Regionalised Primary Value over 1998-2009 Period	Erreur ! Signet non défini.
Figure 10 : Trends in Added Value in the Primary Sector in the Main Regions in MAD million (1998-2009)	Erreur ! Signet non défini.
Figure 11 : Average Breakdown of Regionalised Agricultural Added Value (1998-2009)	Erreur ! Signet non défini.
Figure 12 : Trends in Agriculture Added Value in the Main Regions (1998-2009).....	17
Figure 13 : Average Breakdown of Regionalised Added Value in the Fishing and Aquaculture between 1998 and 2009	18
Figure 14 : Trends in Added Value in the Fishing and Aquaculture in the Main Regions in MAD million between 1998 and 2009	Erreur ! Signet non défini.
Figure 15 : Average Breakdown of Added Value per Activity Category in the Secondary Sector (1998-2009).....	18
Figure 16 : Average Breakdown of Regionalised Added Value for the Secondary Sector (1998-2009)	19
Figure 17 : Trends in Secondary Added Value in the Main Regions in MAD dirhams (1998-2009)	19
Figure 18 : Average Breakdown of Regionalised Added Value for the Extraction Industry between 1998 and 2009.....	Erreur ! Signet non défini.
Figure 19 : Trends in Extraction Industry Added Value in the Main Regions in MAD dirhams (1998-2009)	21
Figure 20 : Average Breakdown of Regionalised Added Value in the Transformation Industry between 1998 and 2009	Erreur ! Signet non défini.
Figure 21 : Trends in Transformation Industry Added Value in the Main Regions in MAD million (1998-2009).....	22
Figure 22 : Trends in Added Value for Oil Refinery and Other Energy Products in the Main Regions in MAD million 1998-2009).....	23
Figure 23 : Average Breakdown of Regionalised Added Value for the Water and Electricity Sector between 1998 and 2009	23
Figure 24 : Trends in Added Value for Water and Electricity in the Main Regions in MAD million 1998-2009).....	24
Figure 25 : Average Breakdown of Regionalised Added Value for the Construction and Public Works Sector between 1998 and 2009	25
Figure 26 : Trends in Added Value for the Construction and Public Works in the Main Regions in MAD million (1998-2009).....	25

Figure 27 : Average Breakdown of Added Value per Activity Sector in the Tertiary (1998-2008)...	26
Figure 28 : Average Breakdown of Regionalised Tertiary Added Value between 1998 and 2009....	26
Figure 29 : Trends in Tertiary Added Value in the Main Regions in MAD million (1998-2009).....	26
Figure 30 : Average Breakdown of Regionalised Added Value for the Hotel and Restaurant Industry between 1998 and 2009	27
Figure : Trends in Added Value for the Hotel and Restaurants Industry in the Main Regions in MAD million (1998-2009).....	28
Figure 32 : Average Breakdown of Regionalised Added Value for Commercial Services except Hotels and Restaurants between 1998 and 2009.....	29
Figure 33 : Average Breakdown of Regionalised Added Value for non-Commercial Services between 1998 and 2009	29

Introduction

Following his Majesty's landmark speech to the nation on March 9th, Morocco has entered a crucial phase in its multi-faceted and ambitious reforms. The country has made significant achievements but is keenly aware of the progress yet to be made nationally, regionally as well as internationally.

Regionalisation, together with other equally strategic issues, is at the heart of the on-going vibrant debate on several aspects of constitutional reforms. The aim is to further shore up democratic governance in its political, economic and social implications.

The report submitted to His Majesty by the Advisory Commission for Regionalisation outlines a set of related issues and presents a broad range of data in support of its analyses and propositions, especially with regard to regional mapping.

Following work on regionalisation and talks held with the Advisory Commission for Regionalisation, the Department of Studies and Financial Forecasts has thoroughly examined the issue of mapping through careful processing of available data and innovative modeling. The goal is to set up a regional configuration that rests on criteria of socio-economic homogeneity, where local systems of production are coherent, complementary and conducive to sustainable, inclusive and fair human development.

At a time when the ACR report is open to public debate, it would be appropriate to review collected data related to this large scale reform plan and offer an analysis based on development dynamics in all of the twelve regions suggested in the ACR proposal.

The present study seeks to highlight the economic layout of regions in the proposed mapping, using GDP as a synthetic indicator of national compatibility. Before highlighting staple features and future orientations of each region, we will explore the sector-based driving forces as well as the regional dynamics that manifested over the last decade.

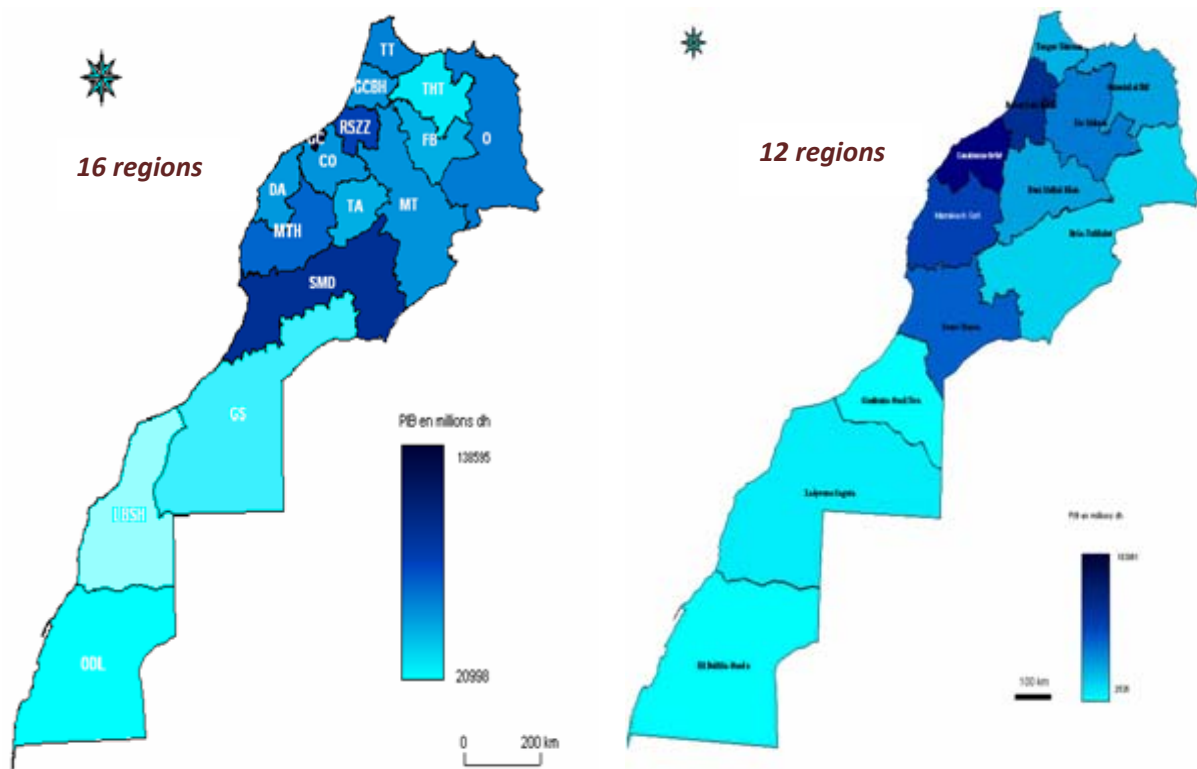
We will also examine regional disparities in terms of contribution to economic growth and assess the benefits of a new mapping, while taking full account of inequalities within and between the regions. The process of evening out disparities entails adequate choices and viable measures, as well as a balancing model that is adjusted to local finances in view of WCO challenges.

Further studies on issues related to regionalisation will be conducted by the DSFF in the hope of contributing rigorously and substantial to the on-going democratic debate on the strategic choices Morocco is expected to make.

1. Regional Economic Cartography : A Comparison between the Existing and the Proposed Mapping

Based on the strategy and data the DSFF used in its work on regional contribution to the GDP, this study seeks to examine results obtained against those that would emerge from the mapping proposed by the ACR.

Figure 1 : Map of Regional GDP according to the Two Mappings (2009)

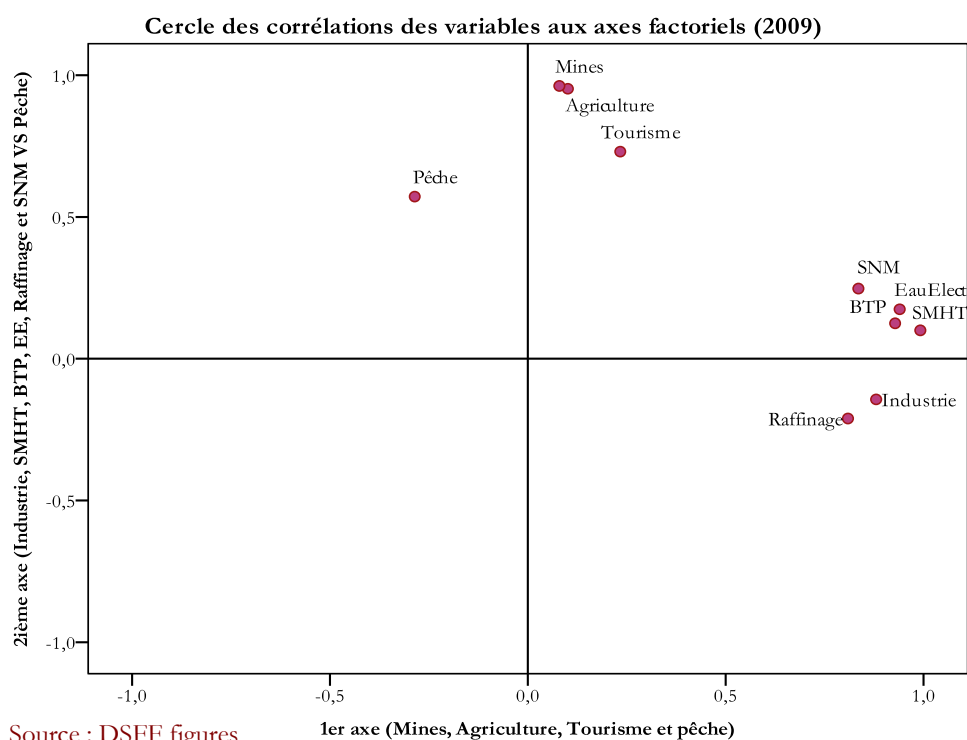


A comparative analysis of regional sector-based value on the basis of the existing mapping of 16 regions and the proposed mapping of 12 regions will allow us to chart transition from one model to the other, and to have a better grasp of emerging and viable poles as well as economic changes in regions which have either expanded or shrunk by one province.¹ Such an undertaking requires a synthetic representation that recovers a significant portion of overall information (78.8%). This synthetic dimension serves as a valuable reference to handle potential changes in local mechanisms of production.

Projection on the synthetic scale allows us to place regions from left to right based on the share of added value they create in industry, energy (water and electricity), public works and services other than the hospitality sector (hotels and restaurants). For instance, regions on the left are known for more vibrant fishing activities. On a vertical scale, such an approach enables us to place regions from bottom to top on the basis of **the** added value they contribute to mining, agriculture, tourism (hotels and restaurants) as well as fishing.

¹ Major Component Analysis (MCA)

Figure 1 : Synthetic Scale of Regional sector-based Added Value 2009



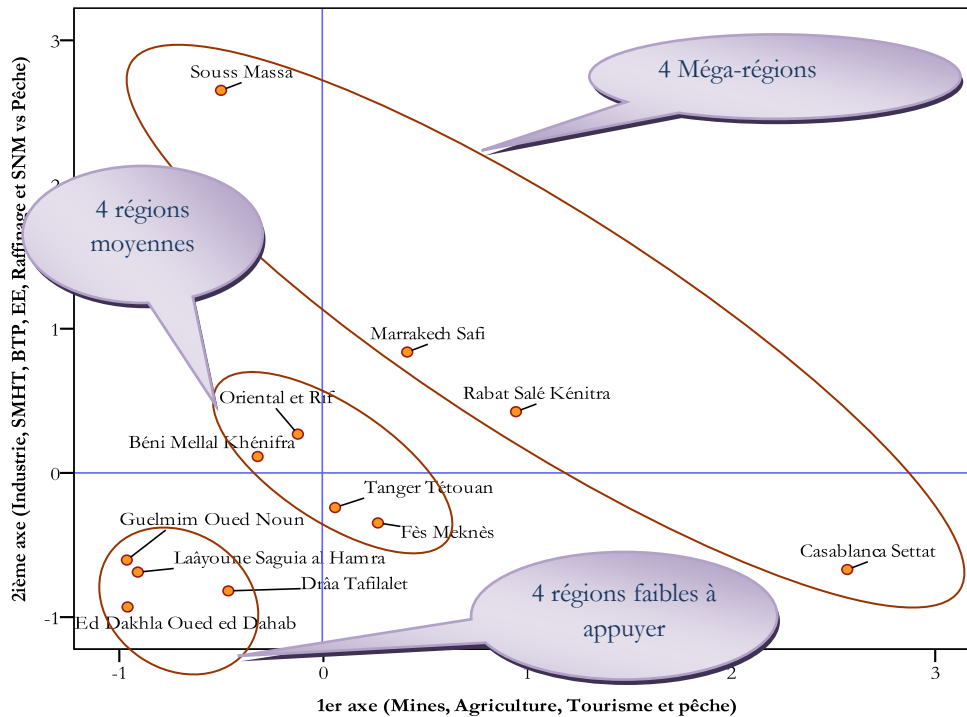
In 2009, the segmentation of regions on the basis of similarity of patterns in terms of the breakdown of added value by region came to endorse the homogeneity of their economies by setting up 4 mega-regions.

- The Casablanca-Settat region owes its position to the scale of its secondary and tertiary activity.
- The Souss-Massa region has a diverse economy which revolves around primary sectors, the processing industry and tourism.
- The Marrakech-Safi region has diverse economic activities such as mining, primary sector, tourism and public work.

Such findings are in line with the functional principle of urban polarisation ; a principle used in the new mapping of the Atlantic, Mediterranean and intermediate regions made up of densely populated areas and boast large urban amenities, ports as well as regional metropolises (See paragraph 23 of RAC Book I). In an increasingly globalised context, the functional principle seeks to highlight metropolitan assets in mapping out regional areas.

In keeping with the functional principle and using the model of mega-regions, a group of intermediate regions was set up to include Tangiers-Tétouan, the Eastern Rif, Fès-Meknès and Béni Mellal-Khénifra.

Figure 2 : Projected Layout of 12 the Regions on the Synthetic Plan in 2009



Source : DSFF figures

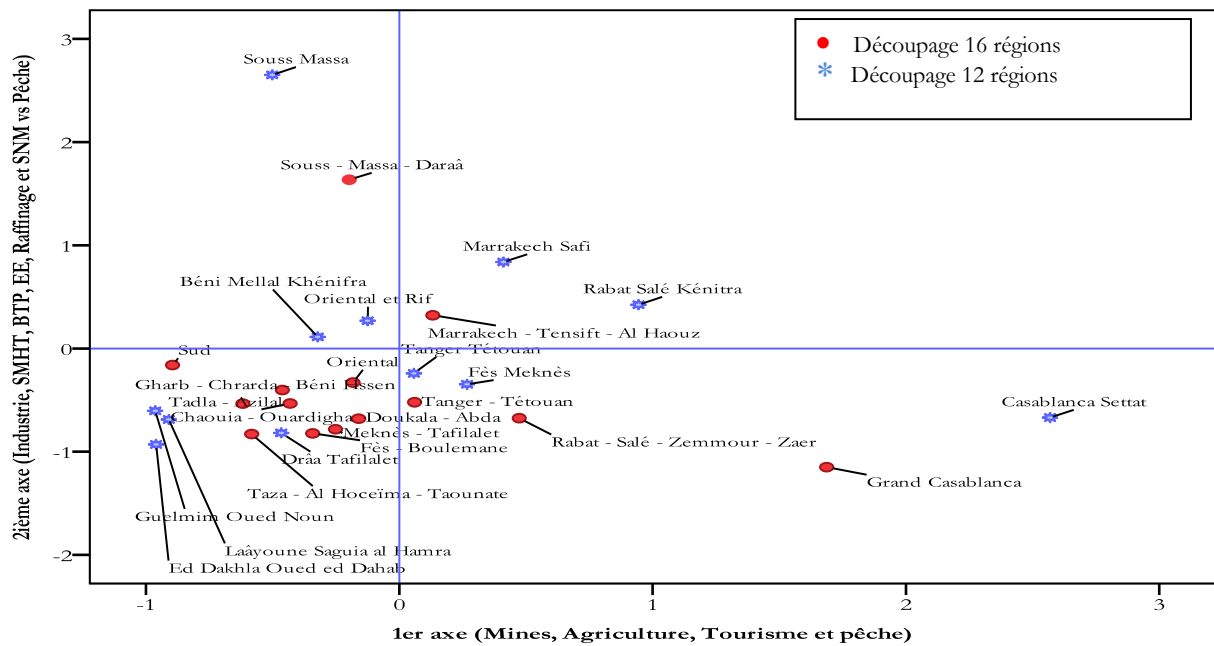
The chart above shows a homogeneous grouping of arid regions located in the Higher-Atlas area and known for fragile urban dynamics. This group has been set up on the basis of the homogeneity principle deemed relevant to this area and includes the regions of Guelmim Oued Noun, Darâa Tafilalet, Laâyoune Saguia al Hamra and Ed Dakhla Oued ed Dahab.

Using the earlier mapping as a reference, Figure 3 shows that the industrial connotation of the Greater Casablanca region has been further amplified, following the annexation of provinces of El Jadida and Berrechid. This newly born region has taken advantage of added value contributions of the above-mentioned regions and those of Benslimane and Settat without compromising its leading position in industry.

Following the removal of the Tata province, the Souss-Massa region will further specialize in agriculture, fishing and tourism activities.

The Safi province has consolidated the position of the Marrakech province on the national economic map, bringing it closer to regions specializing in the primary sector and mining industry. Indeed, the region has taken advantage of added value from fishing, the average of which has risen from 1.3% in the present mapping to 3.5% over the 1998-2009 period. Its contribution to agriculture-based added value has also risen by 1 point over the same period, from 7.7% to 8.7% of agricultural added value.

Figure 3 : Simultaneous Projected Layout of 12 and 16 Regions on the Synthetic Scale in 2009



Source : DSFF figures

The Rabat-Salé-Kenitra region, which incorporated the greater part of the former Gharb-Chrarda-Bni Hsen region, has further consolidated its administrative status in two major ways: specializing in non-commercial services and increasing its resources through contributions from regions principally known for industrial activities, public works and non-commercial services and, to a lesser extent, agricultural activities.

The Tadla-Azilal region, which now features in the new mapping as Beni Mellal Khenifra and includes Khouribga, Khenifra and Midelt, has fared well in terms of added value, and moved closer to the cluster specialized in agriculture and mining; thereby benefiting from the phosphates mining site of Khouribga.

An analysis of dispersion patterns, using the variation coefficient of regional GDP, shows increase in value from 62% in the present mapping to 84% over the 1998-2009 period, knowing that this coefficient should in principle drop and reduce the number of regions.² Such has been the case. It must be stressed that the proposed mapping is made up of regions better diversified than those of the present mapping.

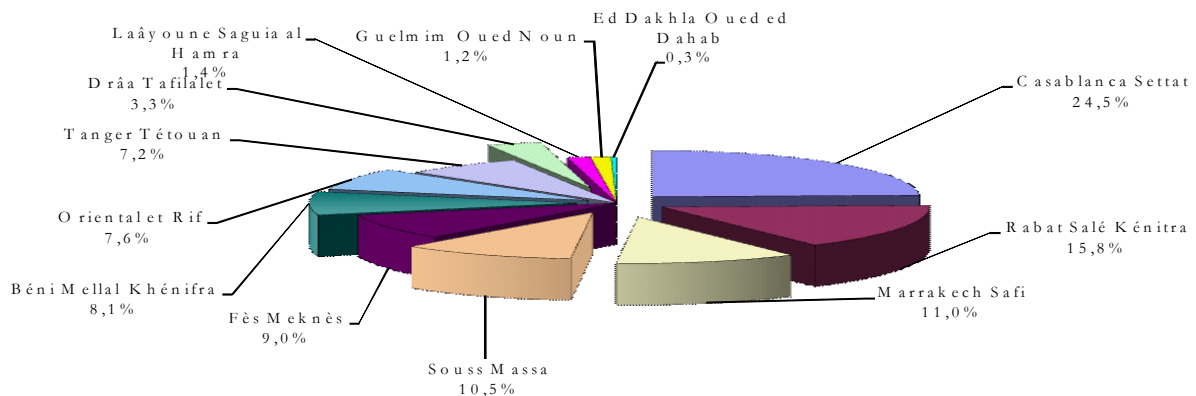
Such an outcome lends further support to the orientation of the ACR (Advisory Commission for Regionalisation) which adopted a mapping to bring to the fore regions with economically thriving urban areas. These areas will serve as a driving force for significant growth in neighboring areas. This mapping will give birth to non-polarized areas made up of regions able to sustain their own growth through a more rational use of local natural and human resources, as well as arid regions and oases in need of support from central government.

² The variation coefficient is a measure of relative dispersion. Being a non-unit based measure, this coefficient sets the relation between the average and the typical distance. The higher the value of the coefficient is, the greater is the average dispersion.

2. Regional GDP Concentration in Four Regions

The Casablanca-Settat region has achieved the highest average GDP share over the 1998-2009 period, contributing up to 24.5%, followed by the Rabat-Salé-Kenitra (15.8%), Marrakech-Safi (11%) and Souss-Massa (10.5%). This accounts for 61.9% of national GDP for the four regions. Such figures also show regional GDP concentration and attests to a legacy to be reversed by both current dynamics and other trends upheld by regional models of governance.

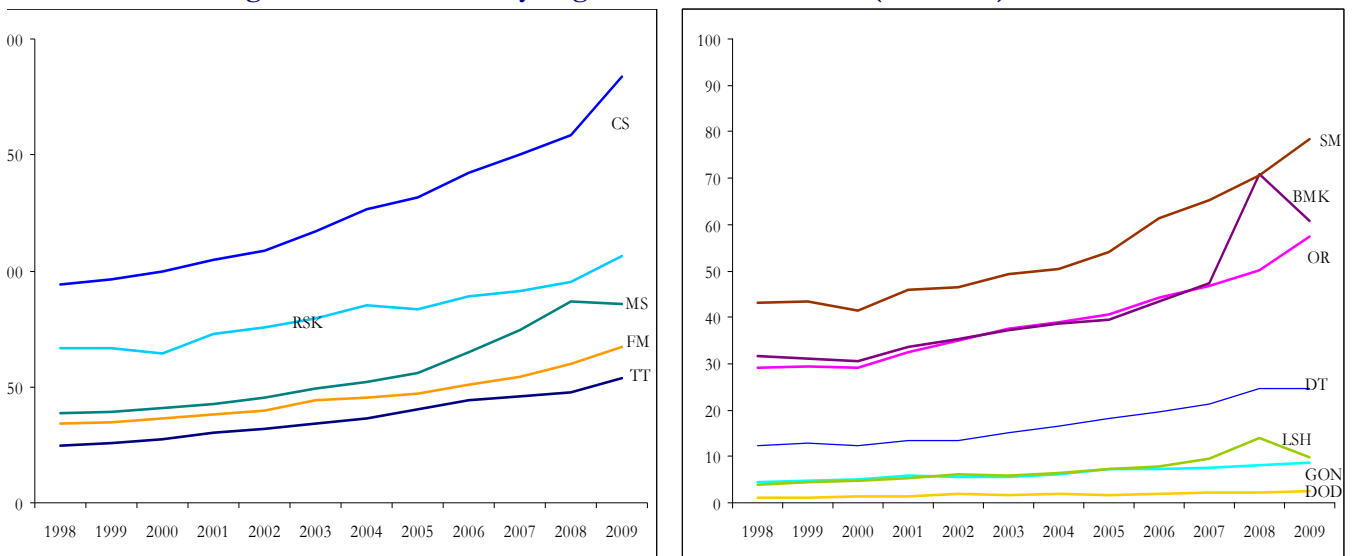
Figure 4 : Average Breakdown of Regional GDP (2000-2009)



Source : DSFF figures

The regions of Dakhla-Oued ed Dahab, Laâyoune-Saguia al Hamra, Marrakech-Safi and de Tangiers-Tétouan have achieved the highest average annual growth. With respective growth rates of 9%, 8.5%, 7.5% and 7.3%, these regions exceeded the average national growth rate of 6.1% over the 1998-2009 period. Conversely, the slowdown in growth of secondary activities has negatively impacted the GDP trend in the Rabat-Salé-Kenitra region, registering a modest 4.4% rate over the same period.

Figure 5 : GDP Trends by Region in Million Dirhams (2000-2009)

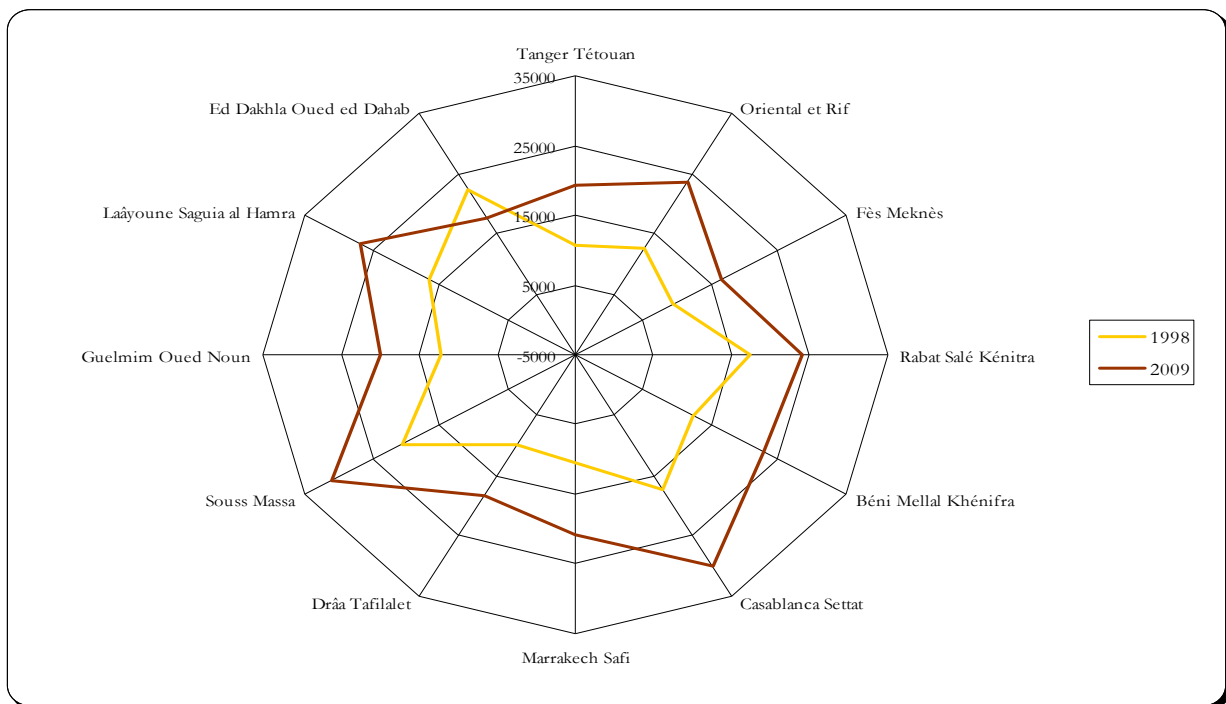


Source : DSFF figures

In spite of disparities between regions in terms of GDP per capita over the period 1998-2009, the GDP shows an average degree of homogeneity among the 12 regions. In fact, the Laâyoune-Saguia Al Hamra region has achieved the highest GDP per capita ; MAD 23,689 over the 1998-2009 period, followed by the Souss-Massa (MAD 23,400), Casablanca-Settat (MAD 21,590), Dakhla-Oued Eddahab (MAD 20,043) and Rabat Salé Kenitra (MAD 19,578). The Fez-Meknes region comes last with MAD 11,908 per capita.

In terms of growth, the Marrakech-Safi region has seen the highest consistent growth in GDP per capita with an annual average rate of 6.5%, followed by Darâa Tafilalet (5.8%), the Eastern Rif (5.8%), Tangiers-Tétouan (5.6%) and Béni Mellal-Khénifra (5.6%). The Souss -Massa and the Rabat-Salé-Kenitra regions have known a less significant trend in GDP per capita, with average rates of 3.8% and 2.9% respectively.

Figure 6 : Trends in Regional GDP per capita (1998-2009)



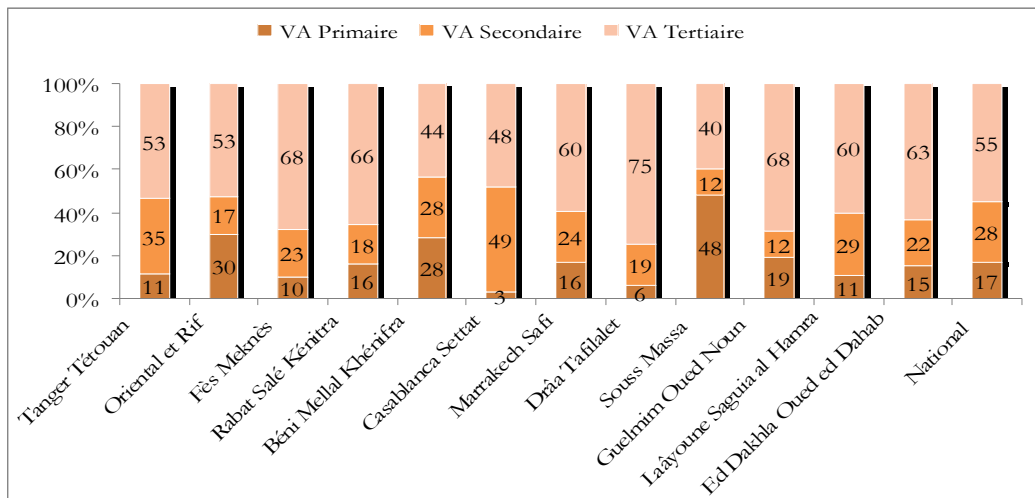
Source : DSFF figures

The make up of regional economies appears to be homogenous except for the Souss-Massa, the Eastern Rif and Beni Mellal-Khenifra regions where the primary sector is overrepresented compared to the national rate of 17%. The Souss Massa accounts for 48%, the Eastern Rif for 30%, and Beni Mellal-Khenifra for 28%.³ Similarly, the secondary sector is overrepresented in the regions of Casablanca-Settat and Tangiers-Tetouan, and which remains a

³ This has been measured by the specificity sector-based index, which examines the scale of a sector in a given region against the scale of the same sector at the national level. An index lower than 100 indicates that the sector is under-represented in the region in

staple economic feature of these regions. For its part, the Laâyoune-Saguia Al Hamra region, home to the food industry, and especially sea products, shows an overrepresentation of the secondary sector.

Figure 7 : Breakdown of Regional GDP in % (2009)



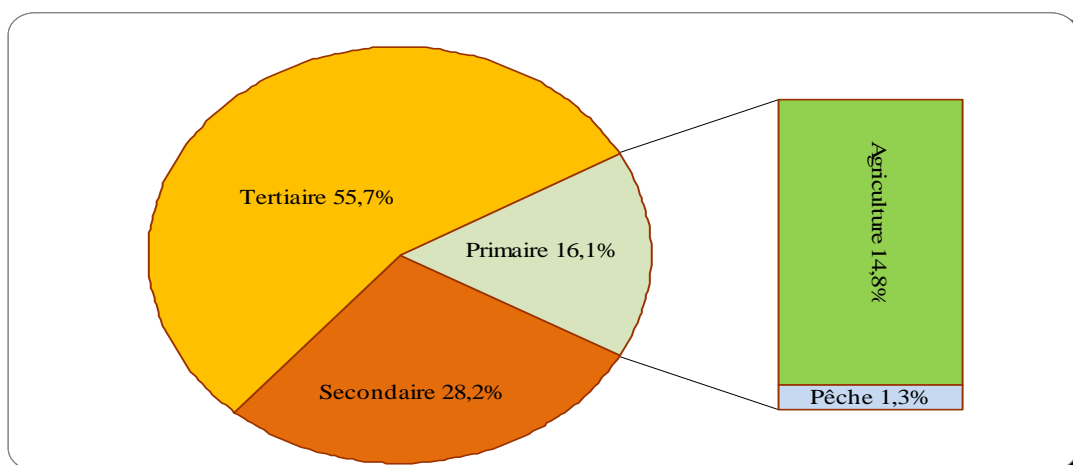
Source : DSFF figures

3. Sector-based Configuration of Added Value

3.1. Regionalised Added Value in the Primary Sector

On average, the primary sector accounts for 16.1% of overall added value for the period 1998-2009, 14.8% of which is generated by the sector of agriculture, fishing and related services. This sector is socially vital because of the number of jobs it provides, estimated at an average of 45.2% of the population in employment over the same period. The stakes in this sector, particularly in its agricultural component, are reflected in the commitment of public authorities to major reforms, such as the Green Morocco Plan put in place in 2008 to ensure balanced and dynamic growth in the different branches of the sector.

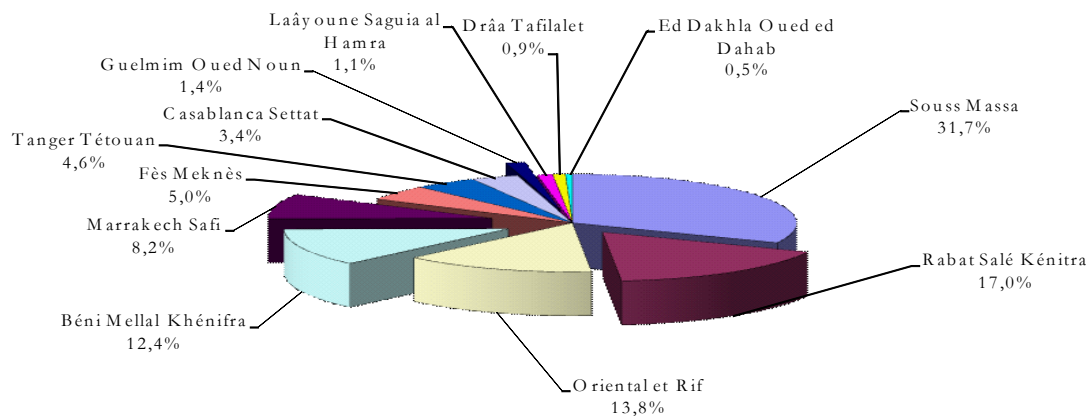
Figure 8 : Average Breakdown of Sector-based Added Value in the Primary Sector (1998-2009)



Source : DSFF figures

The Souss-Massa region achieved the highest average share in added value over the 1998-2009, contributing up to 31.7% to primary added value nationwide. The Rabat-Salé-Kénitra region comes second with an average contribution of 17%, followed by the Eastern Rif with 13.8%, and Beni Mellal-Khenifra with 12.4%.

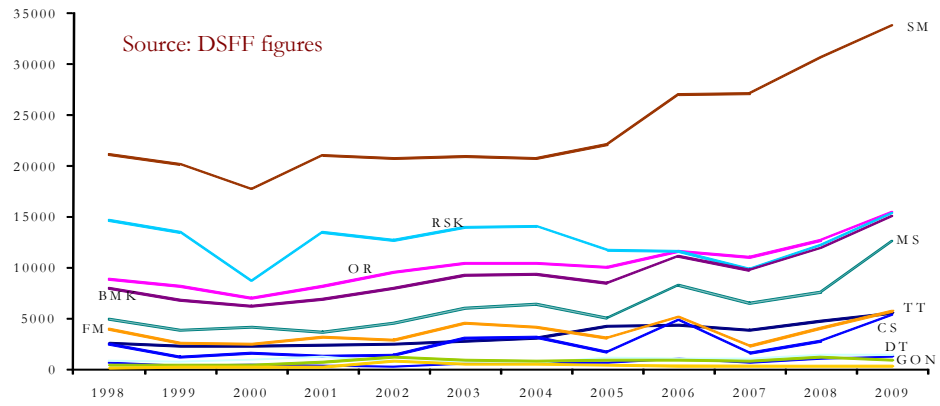
Figure 9 : Average breakdown of Regionalised Primary Added Value over the 1998-2009 Period



Source : DSFF figures

The volatility of agriculture added value has permeated trends in regional primary added value. The Rabat-Salé-Kenitra and Fez-Meknes regions have been the worst hit with an annual average rate of 0.4% and 3.4% respectively, much lower than the national average rate of 4.6%. The decline of the fishing sector in the Souss-Massa region was offset by growth in the agriculture sector that reached a 4.3% rate of growth in primary added value. Regions such as Dakhla-Oued Eddahab and Laayoune-Saguia Al Hamra, where the primary sector is dependent in great part on fishing, have maintained the same rate of growth in this sector with 7.8% and 7.3% respectively.

Figure 10 : Trends in Added Value in the Primary Sector in the Main Regions in MAD million (1998-2009)



The variation coefficient for added value in the primary sector shows serious scattering of this aggregate between the regions, in both the present mapping and the one proposed, to various degrees but above the 100% level, with 123.7% and 110.7% on average over the 1998-2009 period. Without contradicting the overall regional GDP analysis developed above, such findings are the result of the integration of some traditionally agricultural provinces to regions where the sector of agriculture is not strongly represented.

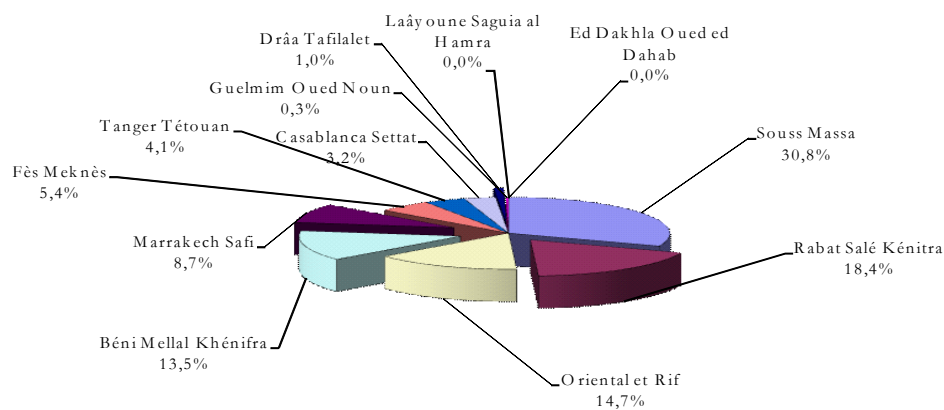
With the exception of the Ouezzane province, the Gharb-Chrarda-Bni Hsen has been entirely incorporated in the Rabat-Salé-Kenitra region following the proposed mapping. This resulted in a transfer of 15.2% in national primary added value. For its part, the Casablanca-Settat region, which exclusively specialized in secondary and tertiary activities, now holds a significant share in primary added value. This added value proceeds from the traditionally agricultural provinces of Chaouia-Ouardigha region (present mapping) and accounts for 2.8% of national added value in the primary sector. Consequently, a slight decrease in inter-regional disparities in terms of primary added value has been noted in the proposed mapping.

3.1.1. Regionalised Added Value in Agriculture

In the absence of data and explicative variables for agriculture-based added value in the Laâyoune-Saguia Al Hamra and Dakhla-Oued Eddahab regions, the level of agricultural production could not be gauged. Agricultural production is, however, not very significant given the weather conditions that characterize the region.

It appears that the Souss-Massa region achieved the highest average share in terms of agriculture-based added value for the 1998-2009 period, thus contributing up to 30.8% to national agricultural added value. The Rabat-Salé-Kenitra region comes second with an average contribution of 18.4%, followed by the Eastern Rif region with 14.7%.

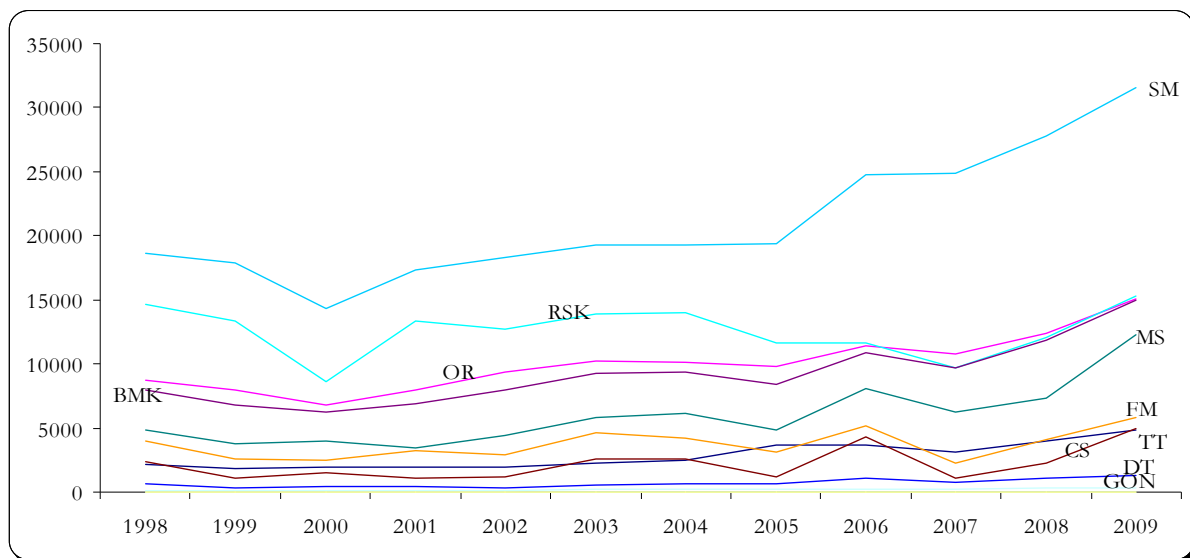
Figure 11: Average Breakdown of Regionalised Agricultural Added Value (1998-2009)



Source : DSFF figures

Such a breakdown does not reflect the differentiated trends in agricultural added value at the regional level. In fact, regional agricultural added value has reached an average annual rate of growth of 4.7% at the national level. The rainy season of 2009 has benefited all regions which have reached a level growth that exceeded the national average. The highest rates of growth have been reached in Casablanca-Settat (8.8%), Marrakech-Safi (7.6%), and Tangiers-Tetouan (7%). However, the floods of 2009 seriously damaged crops and harvests in some regions, especially in Rabat-Salé-Kenitra, Fez-Meknes, and Souss-Massa which registered the lowest rates of growth, with 0.3%, 3.4% and 4.9% respectively.

Figure 12 : Trends in agriculture added value in the main regions in MAD million (1998-2009)

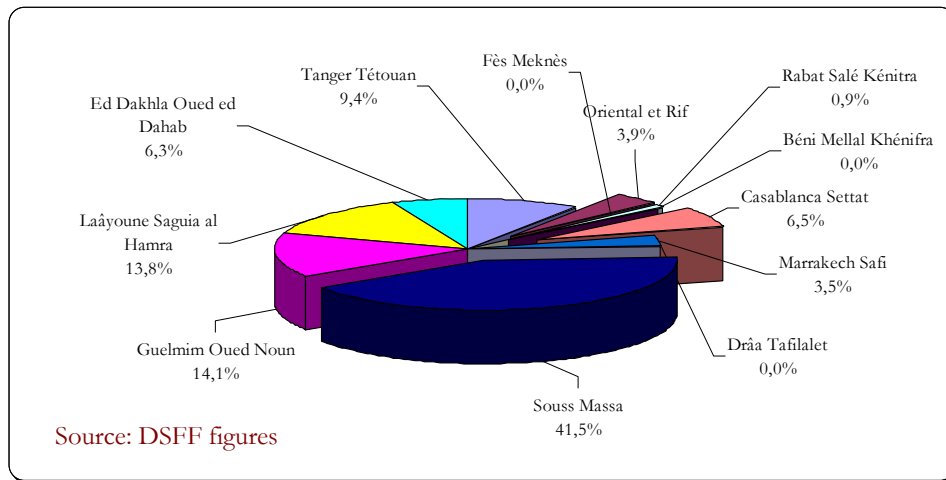


Source : DSFF figures

3.1.2. Regionalised added value in the fishing industry

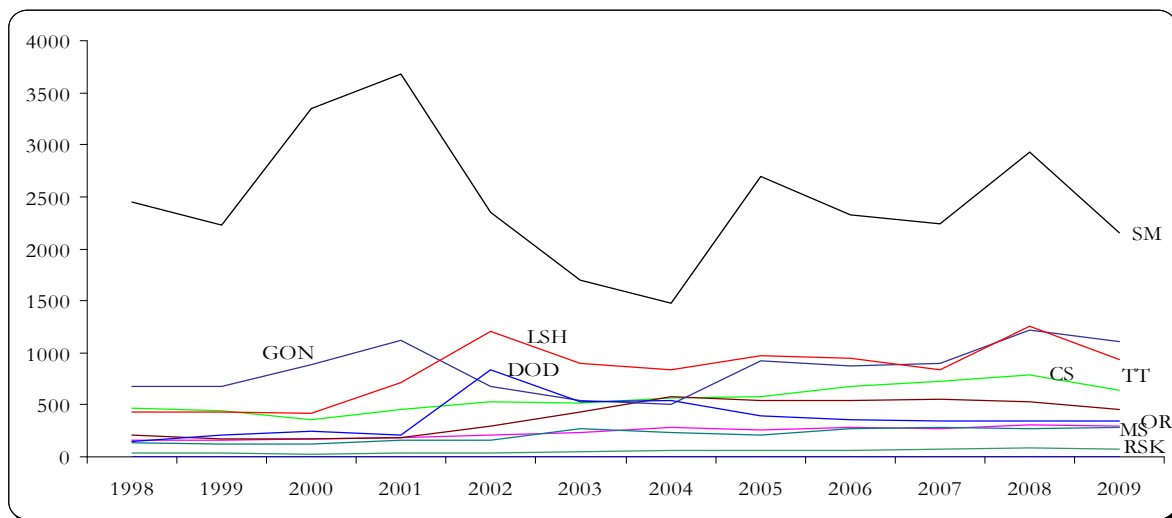
The Souss-Massa region achieved the highest average share of added value for the fishing industry and aquaculture between 1998 and 2009, accounting for 41.5% of the sector's added value nationwide. Guelmim-Oued Noun, Laayoune-Saguia Al Hamra, and Tangiers-Tetouan lag behind with 14.1%, 13.8%, and 9.4%, followed by Casablanca-Settat and Dakhla-Oued Eddahab with average annual contributions of 6.5% and 6.3%.

Figure 13 : Average breakdown of regionalised added value in the fishing and aquaculture sector between 1998 and 2009



However, in terms of economic momentum, added value in the fishing industry in the Souss-Massa region somehow dropped, with an average annual growth rate of -1.2% , while remaining solid in other regions, notably in Dakhla-Oued Eddahab with 7.8% , Laayoune-Saguia Al Hamra with 7.3% , the Greater Casablanca with 7.2% , and Rabat-Sale-Kenitra with 7.2% .

Figure 14 : Trends in added value for the fishing and aquaculture sector in the main regions in MAD million between 1998 and 2009

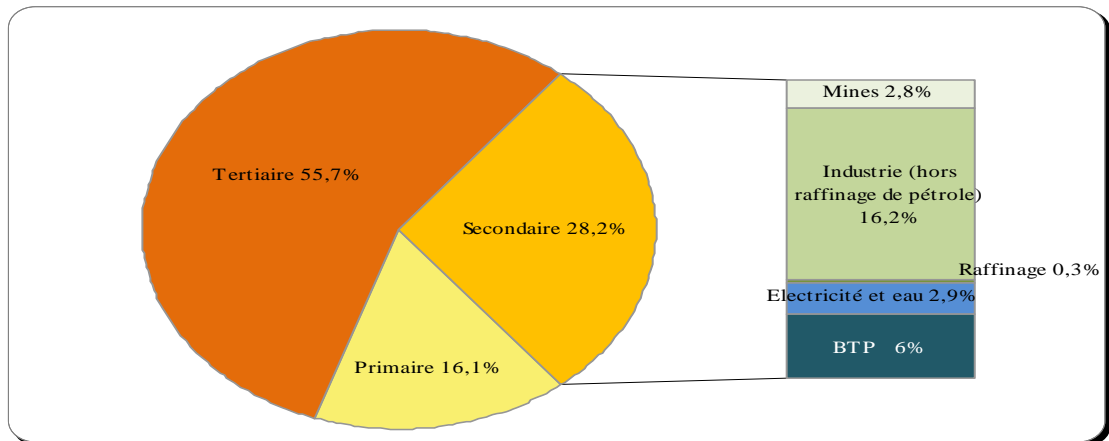


Source : DSFF figures

3.2. Regionalised added value in the secondary sector

The secondary sector accounts for an average of 28.2% of overall added value between 1998 and 2009, mainly derived from the transformation industry with an average contribution of 16.2% to overall added value. This sector enjoyed an average annual growth on a par with that of GDP, 6.4% , between 1998 and 2009.

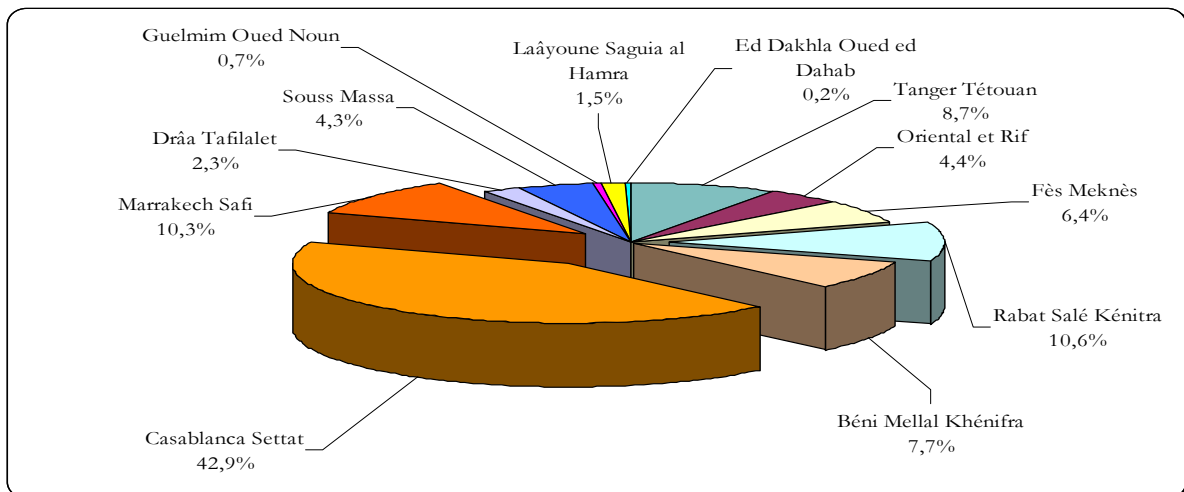
Figure 15 : Average breakdown of added value per activity category in the secondary sector (1998-2009)



Source : DSFF figures

The regional analysis shows that the Casablanca-Settat region accounts for the highest average share in added value for the secondary sector nationwide between 1998 and 2009, with a contribution of 42.9%. Rabat-Sale-Kenitra lags behind with 10.6%, followed by Marrakech-Safi with 10.3%, Tangiers-Tetouan with 8.7%, and Beni Mellal-Khenifra with 7.7%.

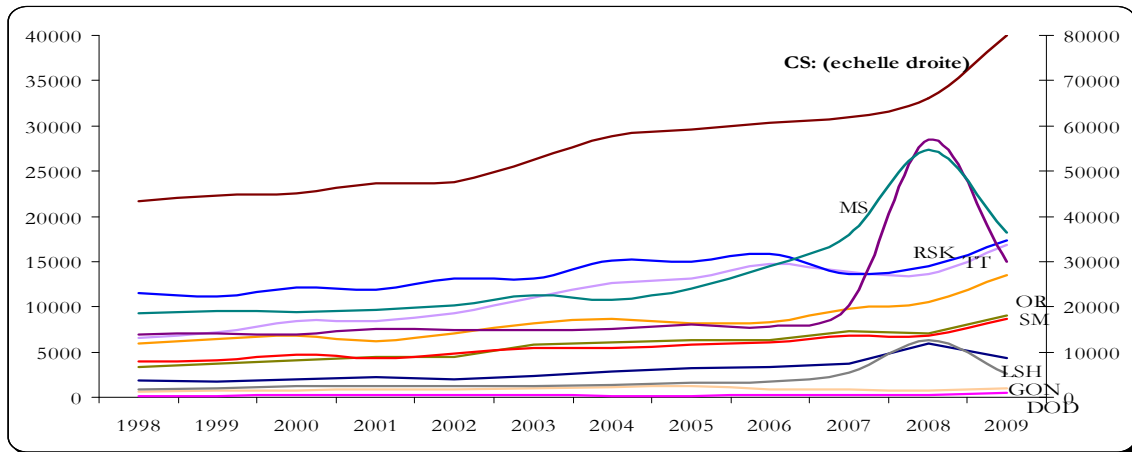
Figure 16 : Average breakdown of regionalised added value for the secondary sector (1998-2009)



Source : DSFF figures

Sustained growth in secondary added value nationwide has had an impact at the regional level. Dakhla-Oued Eddahab, Laayoune-Saguia Al Hamra, the Eastern Rif, Tangiers-Tetouan, and Draa-Tafilalet are the most dynamic regions with respective average annual growth rates of 13.6%, 10.9%, 9.3%, 9% and 8.3%. Moreover, the 'one off' added value achieved by the phosphate industry in 2008 boosted trends in secondary added value in regions hosting extraction sites (Beni Mellal-Khenifra, Marrakech-Safi, and Laayoune-Saguia Al Hamra), reaching a peak in the same year. Elsewhere, the Rabat-Sale-Kenitra region registered a rate below the national average, 3.8% against 6.4%, following a drop in industrial output, notably in the oil refining sector with the closure of the Sidi Kacem refinery in 2009.

Figure 17 : Trends in secondary added value in the main regions in MAD million (1998-2009)



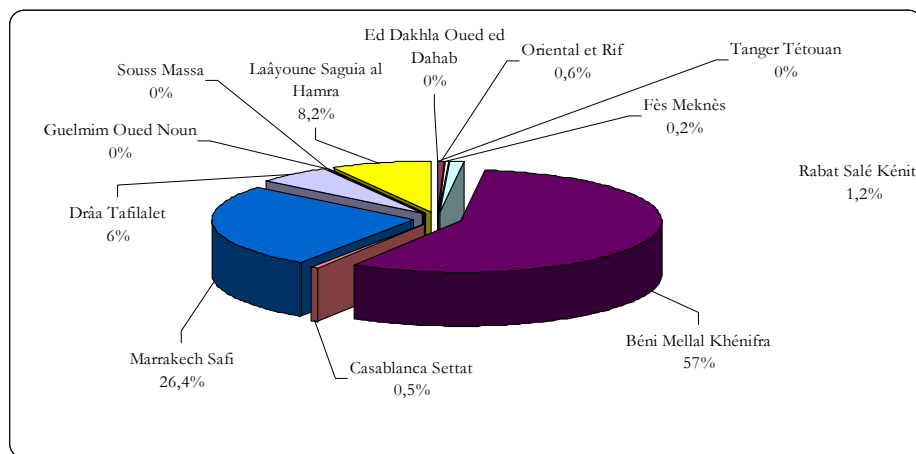
Source : DSFF figures

The newly-proposed mapping into 12 regions has highlighted a significant dispersion of added value in the secondary sector. The added value variation coefficient for the sector has moved up from 120.4% with the current mapping to 137.5% with the mapping into 12 regions between 1998 and 2009, an increase of 17 points. Such a greater interregional heterogeneity reflects the rationale of the proposed mapping, which is designed to create poles of high-population density equipped with prioritised urban infrastructure, major ports and regional metropolises.

3.2.1. Regionalised added value in the extraction industry

The Beni Mellal-Khenifra region accounts for the highest average share in added value for the extraction industry between 1998 and 2009, with a 57% contribution to the sector’s added value nationwide. Marrakech-Safi comes second with 26.4%, while Laayoune-Saguia Al Hamra and Draa-Tafilalet follow at some distance, with 8.2% and 6% respectively. Such results are mainly due to the thriving production of phosphate and derived products found in these regions. Indeed, between 1998 and 2009, the extraction sites of Khouribga (Beni Mellal-Khenifra), Benguerir and Youssoufia (Marrakech-Safi), and Boucraa (Laayoune-Saguia Al Hamra) account for 66.5%, 14.2%, and 9.3% of national phosphate production, respectively.

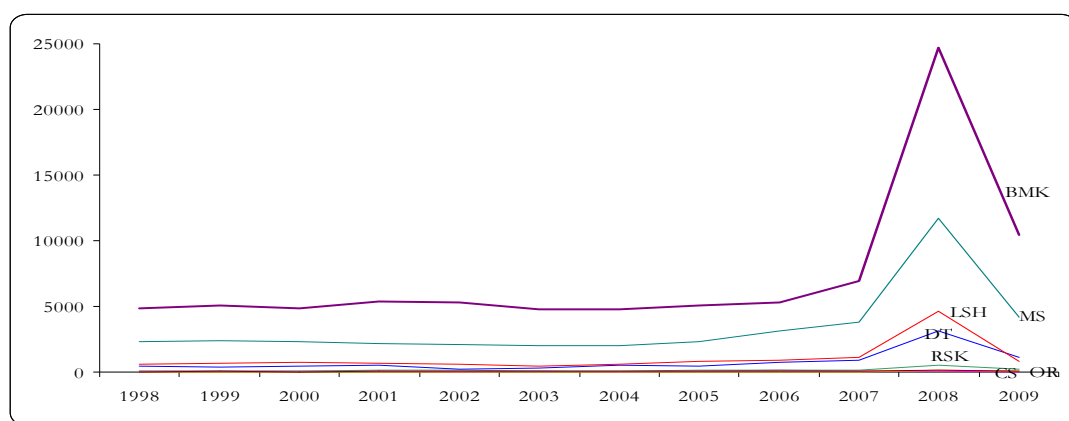
Figure 18 : Average breakdown of regionalised added value for the extraction industry between 1998 and 2009



Source : DSFF figures

In 2008, with phosphate prices rocketing and demand for derived products increasing, the extraction industry achieved exceptional added value, especially in the regions where this sector depends heavily on phosphate. But in terms of growth, the regions which make a limited contribution to added value created from phosphate were the most dynamic between 1998 and 2009. Thus, the Fez-Meknes region enjoyed an average annual growth rate of 19.2%, trailed by Casablanca-Settat with 14.3%, Beni Mellal-Khenifra with 7.2%, Marrakech-Safi with 5.4%, and Laayoune-Saguia Al Hamra with 3.4%. With a share of 0.6% in added value for the extraction industry, the Eastern Rif region suffered a drop of – 8.5%.

Figure 19 : Trends in extraction industry added value in the main regions in MAD million (1998-2009)



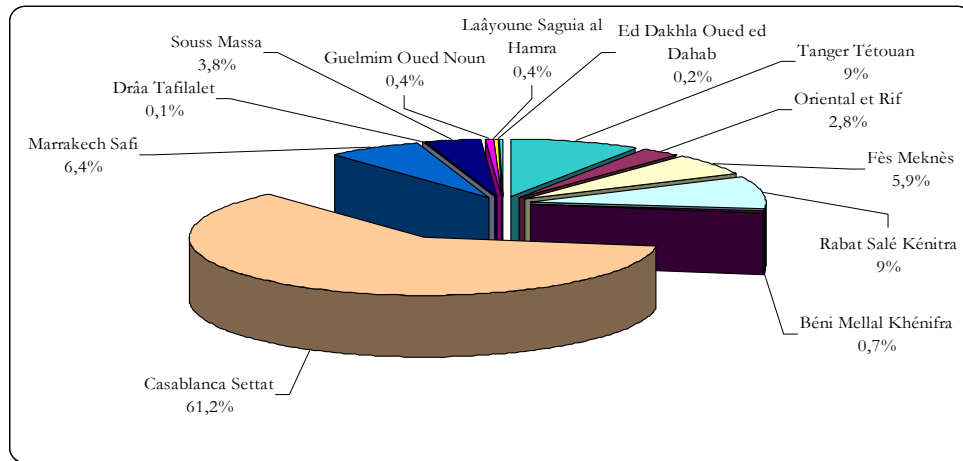
Source : DSFF figures

3.2.2. Regionalised added value in the transformation industry

The Casablanca-Settat region accounts for the highest average share in added value in the transformation industry⁴ between 1998 and 2009, with a contribution of 61.2% to the sector's added value nationwide. Such performance underscores the region's status as the first industrial centre in the Kingdom. Nevertheless, the sector's average annual growth in the region is on a par with the national average (5.3%), a foreboding sign of the region's declining productive capacity, as well as of the shift towards tertiary activities.

Figure 20 : Average breakdown of regionalised added value in the transformation industry between 1998 and 2009

⁴ See detailed results in annex 4.

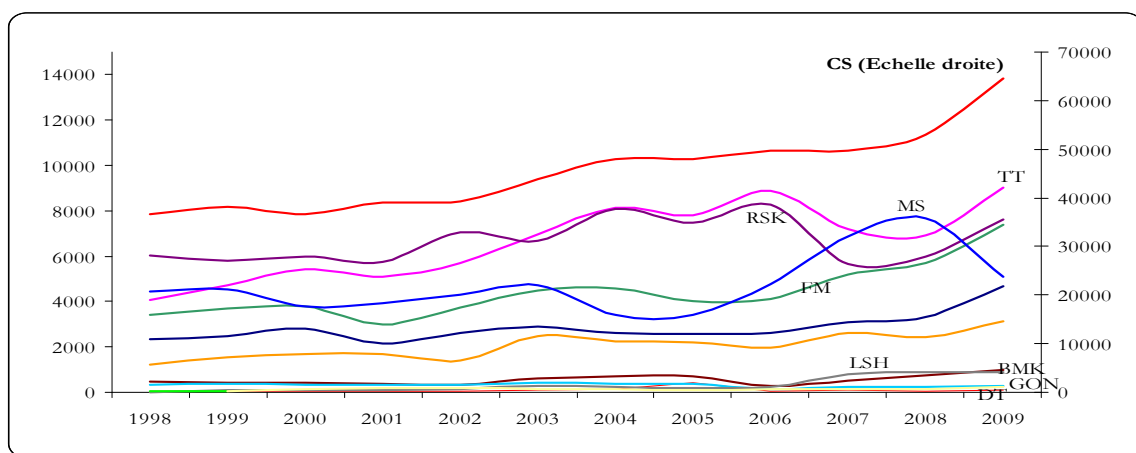


Source : DSFF figures

The Tangiers-Tetouan and the Rabat-Sale-Kenitra regions come second behind Casablanca-Settat with a 9% share in industrial added value each. This underscores the emergence of Tangiers-Tetouan as a new national economic pole developing around the Tanger-Med port whose expansion has generated great momentum across the region. It also reflects the fact that the Rabat-Sale-Kenitra region has been refocused on export-oriented industrial sectors and with high added value, through the development of cutting edge technological industries such as microelectronics and nanotechnology, and transformation industries such as textile, food, electronics and mechanics.

Thus, industrial added value in these regions is mainly created in export-oriented industries. In the Tangiers-Tetouan region, the clothing and fur industry accounts for 24.8% of industrial added value region and 21.5%, the food industry for 19.7%, and machine and electrical appliances for 18.8%. In the Rabat-Sale-Kenitra region, these account for 21.5%, 17.6%, and 19.4%, respectively.

Figure 21 : Trends in transformation industry added value in the main regions in MAD million (1998-2009)



Source : DSFF figures

In terms of growth, the Laayoune-Saguia Al Hamra enjoyed the highest rate of growth between 1998 and 2009, with an average annual rate of 39.6%, followed by Dakhla-Oued Eddahab with 15.4%. Such performances are notably due to the solid results achieved in the food industry which draws on the sea produce these regions are known for.

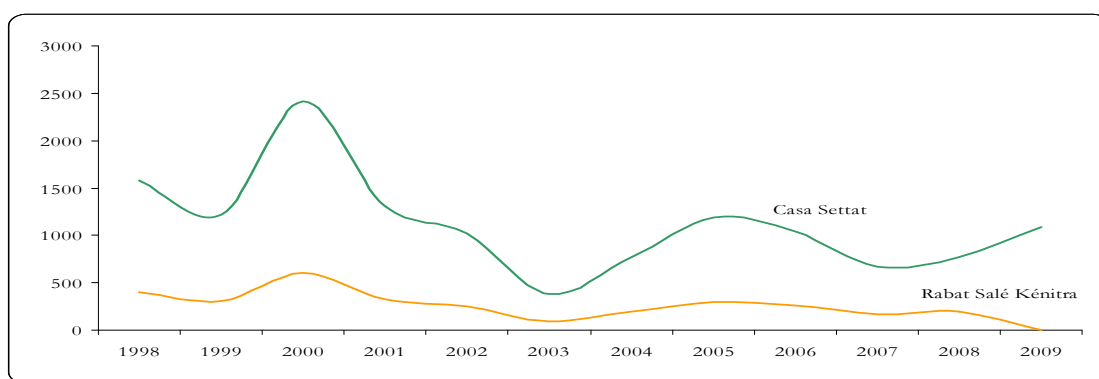
3.2.3. Regionalised added value in oil refining and other energy products

Prior to 2009, oil refining was exclusive to the two cities of Mohammedia (SAMIR) and Sidi Kacem (SCP) which accounted for 80% and 20% of national output, with a contribution to GDP of 0.3% between 1998 and 2009⁵. As released in national statistics and up to 2008, the sector's output was divided between the Casablanca-Settat region (80%) and the Rabat-Sale-Kenitra region (20%), but has been entirely attributed to the first region since 2009.

The sector has suffered a drop in added value following the investment plan launched by SAMIR in 2005 to modernise technical installations and facilities at the Mohammedia refinery, and which has required a budget of MAD 10 billion. The plan is notably designed to improve the refinery's competitiveness and make gains in terms of productivity, which would bode well for the Casablanca-Settat region. Contrarily, the closure of the Sidi Kacem refinery in 2009 has deprived the Rabat-Sale-Kenitra region of a long-term source of wealth.

Finally, the concentration prevailing in the oil refining sector was compounded in the wake of the merger of SCP and SAMIR in 1999, creating a quasi monopoly in the sector which may undermine competitiveness.

Figure 22 : Trends in added value for oil refining and other energy products in the main regions in MAD million (1998-2009)



Source : DSFF figures

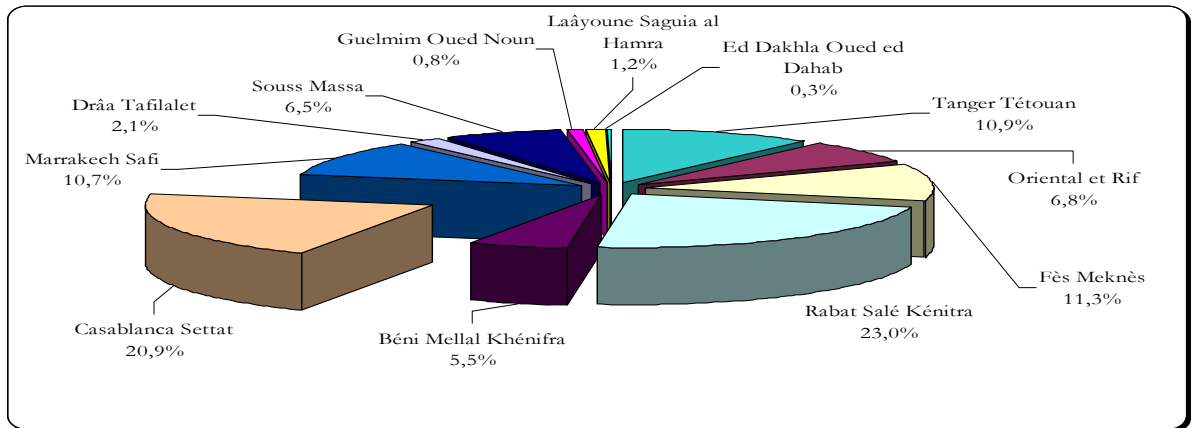
3.2.4. Regionalised added value in the water and electricity sector

The Rabat-Sale-Kenitra region achieved the highest average share of added value in the water and electricity sector between 1998 and 2009, with a contribution of up to 23% to the sector's added value nationwide. Casablanca-Settat came next with an average contribution of 20.9%, boosted by the El Jadida province (former province of the Doukkala-Abda region) where the Jorf Lasfar thermic plant is located, a plant which by itself accounts for 9.3% of the sector's added value

⁵ Average breakdown of available and released data for the 1990-1998 period.

nationwide. The Tangiers-Tetouan and the Marrakech-Safi regions followed in third and fourth place with 10.9% and 10.7%.

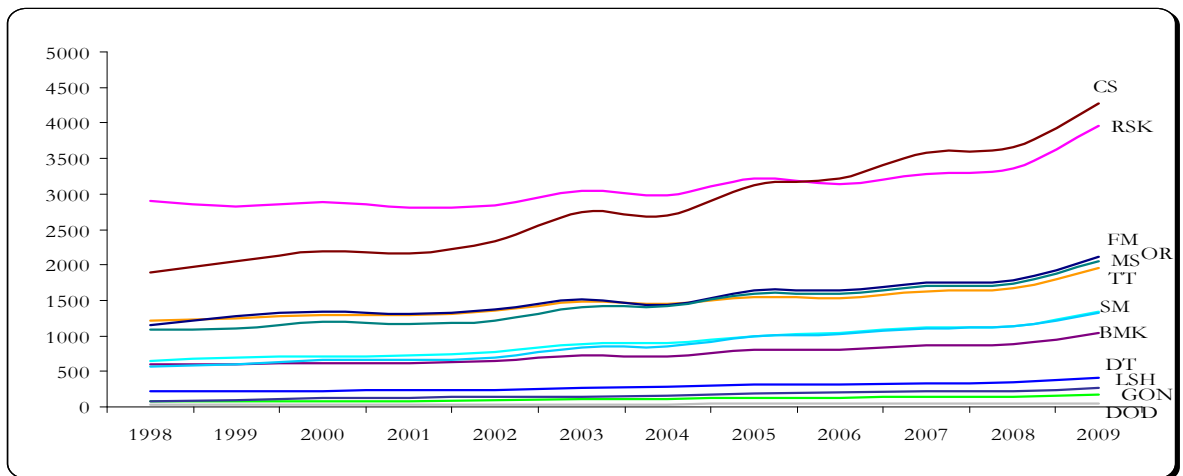
Figure 23 : Average breakdown of regionalised added value for the water and electricity sector between 1998 and 2009



Source : DSFF figures

In terms of growth, the Laayoune-Saguia Al Hamra region enjoyed the highest rate with 10.8%, trailed by Souss-Massa and Casablanca-Settat with 8% and 7.7%, respectively. These good results could be consolidated following the generalisation of delegated management in distribution, and the on-going liberalisation of the electricity market, designed to improve the sector’s productivity.

Figure 24 : Trends in added value for water and electricity in the main regions in MAD million (1998-2009)



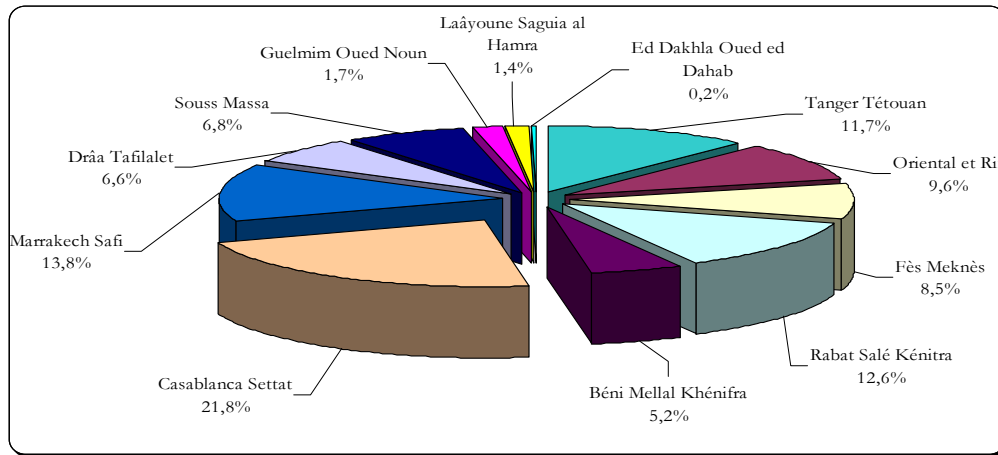
Source : DSFF figures

3.2.5. Regionalised added value in construction and public works

The Casablanca-Settat region accounts for an average share of 21.8% of added value in the construction and public works sector nationwide between 1998 and 2009. The Marrakech-

Safi region comes second with an average contribution of 13.8%, followed by Rabat-Sale-Kenitra with 12.6% and Tangiers-Tetouan with 11.7%.

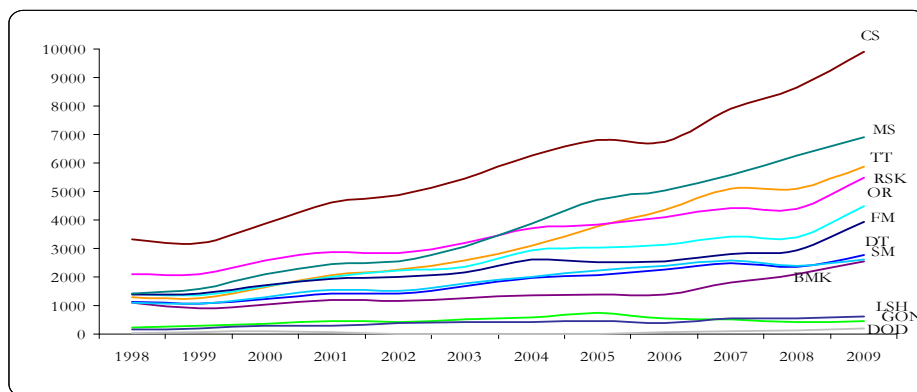
Figure 25 : Average breakdown of regionalised added value for the construction and public works sector between 1998 and 2009



Source : DSFF figures

In terms of growth, the Marrakech-Safi region’s added value for construction and public works grew at an average annual rate of 15.5%, as the demand for all types of housing increased, especially with foreign demand and the further development of tourism infrastructure. The Tangiers-Tetouan region benefited from expanding infrastructure to rise to second place with a 14.9% rate, followed by Dakhla-Oued Eddahab with 14.1%, Laayoune-Saguia Al Hamra with 13.3%, and the Eastern Rif with 11.1%.

Figure 26 : Trends in added value for the construction and public works sector in the main regions in MAD million (1998-2009)

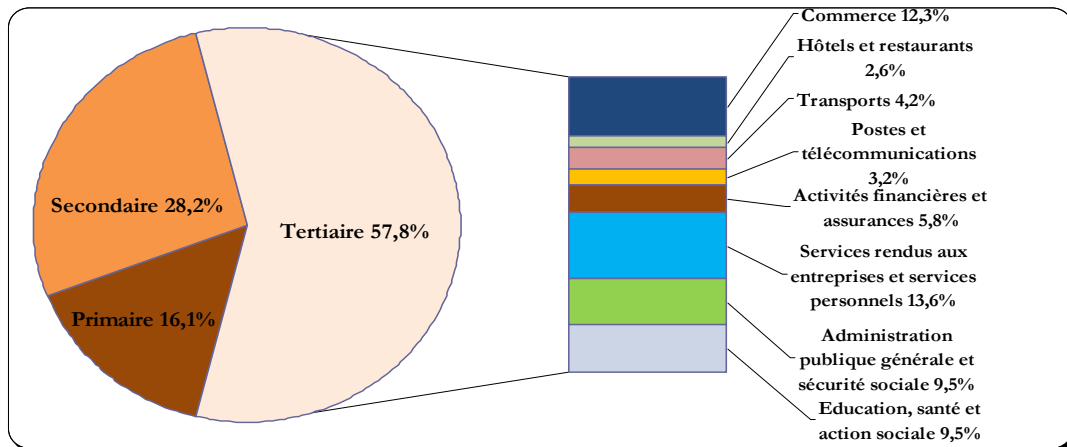


Source : DSFF figures

3.3. Regionalised added value in the tertiary sector

The tertiary sector accounts for 57.8% of overall added value between 1998 and 2009, comprising mainly services to business and personal services, an average contribution to overall added value of 13.6%, and trade with 12.3%. This sector enjoyed growth higher than that of GDP (6.7%) over the same period.

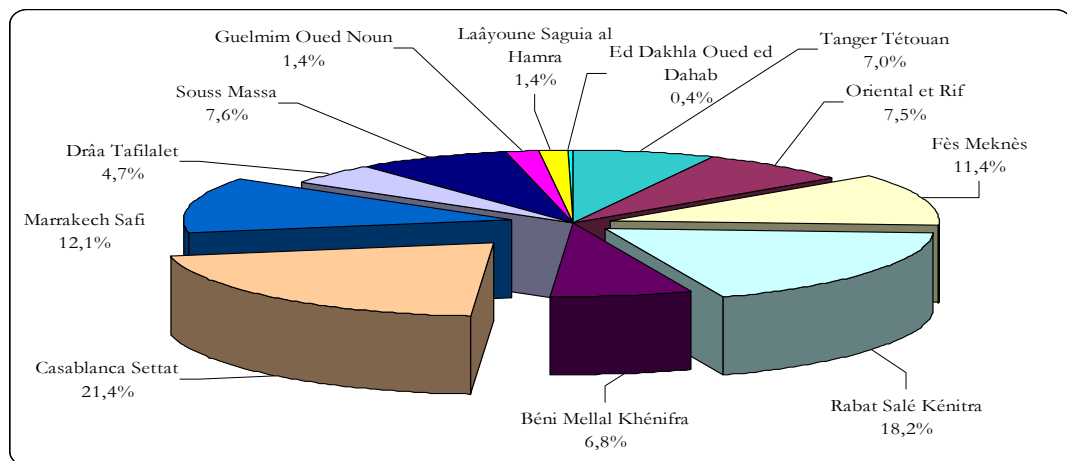
Figure 27 : Average breakdown of added value per activity sector in the tertiary (1998-2008)



Source : DSFF figures

Between 1998 and 2009, the Casablanca region accounted for the most significant average share of tertiary added value with a contribution to tertiary added value nationwide of 21.4%, followed by Rabat-Sale-Kenitra with 18.2%, Marrakech-Safi with 12.1%, and Fez-Meknes with 11.4%.

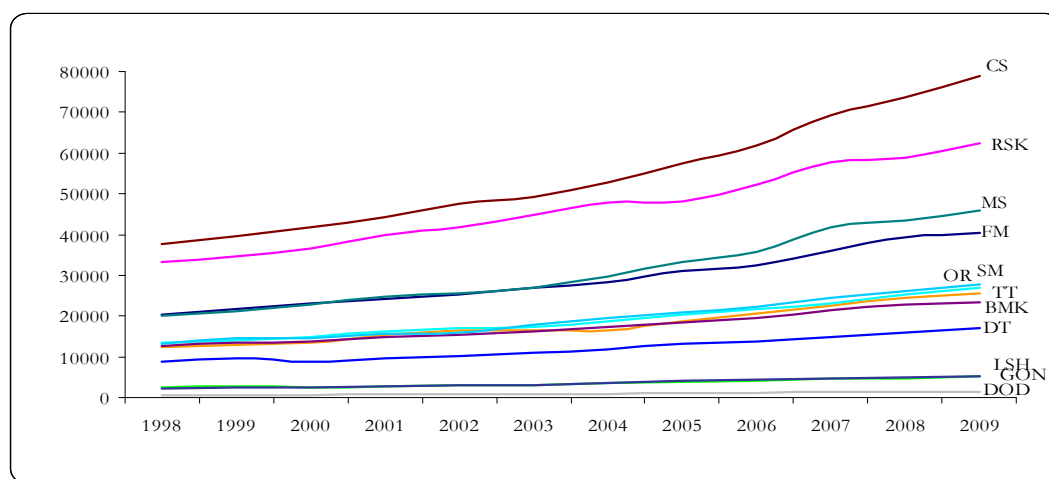
Figure 28 : Average breakdown of regionalised tertiary added value between 1998 and 2009



Source : DSFF figures

The sustained growth in tertiary added value nationwide was also reflected at the regional level. Dakhla-Oued Eddahab, Laayoune-Saguia Al Hamra, and Marrakech-Safi were the most dynamic regions with average annual growth rates of 8.2%, 7.9%, and 7.8%.

Figure 29 : Trends in tertiary added value in the main regions in MAD million (1998-2009)



Source : DSFF figures

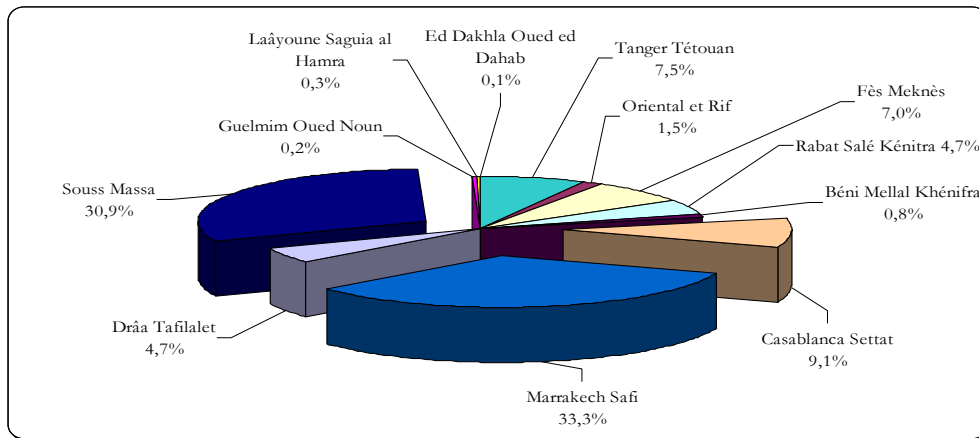
The interregional heterogeneity of tertiary added value was accentuated with the 12-region mapping. The proposal to have 4 mega-regions, comprising Casablanca-Settat with strong commercial and financial services, Souss-Massa and Marrakech-Safi, leaders in the tourism industry, Rabat-Sale-Kenitra with significant non-commercial services and tourism, resulted in the dispersal of these aggregates. Measured by the variation coefficient, dispersal rose from 58% with the 16-region mapping to 80.7% with the 12-region mapping.

3.3.1. Regionalised added value in the hospitality industry

The regions of Marrakech-Safi and Souss-Massa achieved 64.2% of added value for the hotel and restaurant industry with 33.3% and 30.9% between 1998 and 2009. Casablanca-Settat, Tangiers-Tetouan, and Fez-Meknes trail behind with average contributions of 9.1%, 7.5%, and 7%.

The implementation of 'Plan Azur' is expected to alter this tourism map, with a more thorough use of regional assets resulting from the new regional approach. Indeed, in 2001 Morocco launched 'Vision 2010', an ambitious tourism strategy, with the awareness of the sector's strategic role in sustainable regional development as well as the economic and social momentum it creates for local populations. Such a regionalised strategy helped extend tourism products which had been limited to specific areas, notably with the opening of the Saidia resort and the Mazagan resort in El Jadida. This strategy has inspired a new vision of tourism for 2020, based on the successes of previous strategies while taking into account and developing regional diversity and potential, to meet the requirements of the most promising markets.

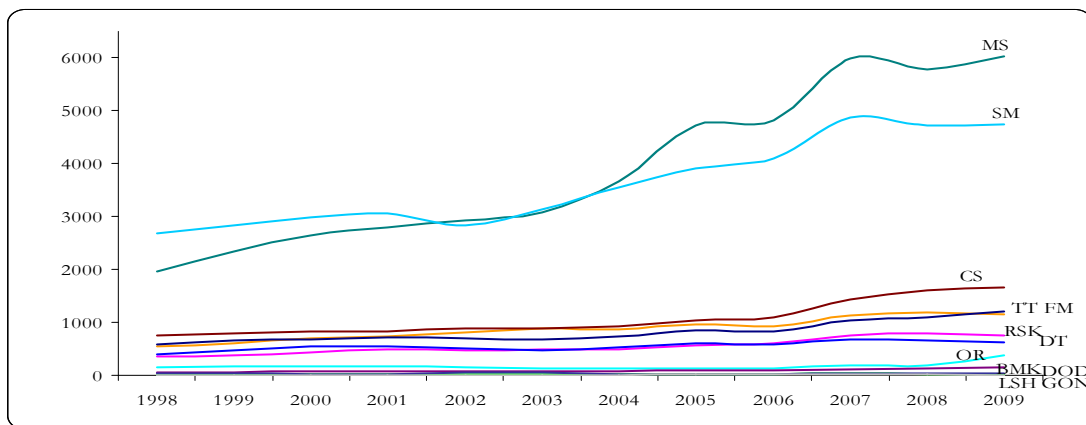
Figure 30 : Average breakdown of regionalised added value for the hotel and restaurant industry between 1998 and 2009



Source : DSFF figures

Despite an international climate deeply affected by the economic and financial crisis, all regions achieved sustained growth in added value for the hotel and restaurant industry. Indeed, the regions of Marrakech-Safi and Guelmim-Oued Noun were the most dynamic over this period, with average annual growth rate of 10.7%. Furthermore, the Beni Mellal-Khenifra region enjoyed an average annual growth rate above the national average, 9.1% against 7.5%, even though the region's contribution to added value was low (0.8%).

Figure 31 : Trends in added value for the hotel and restaurant industry in the main regions in MAD million (1998-2009)

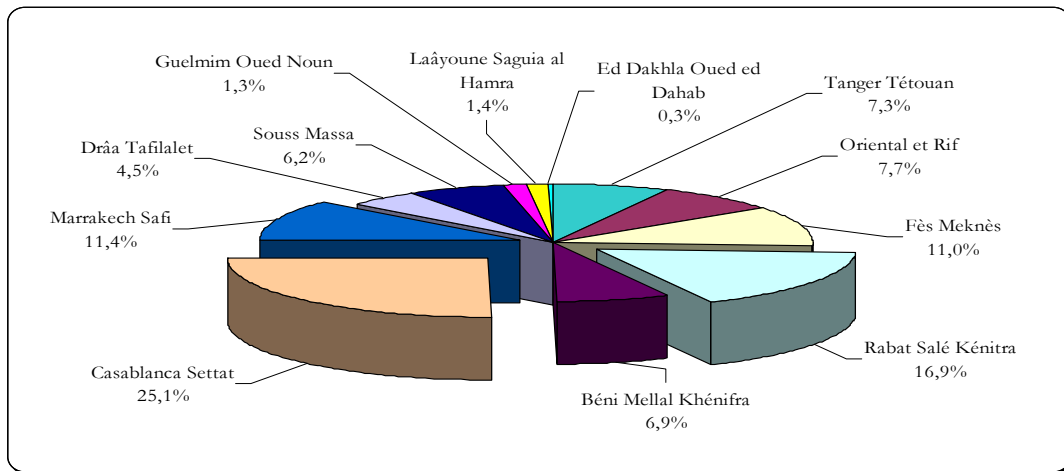


Source : DSFF figures

3.3.2. Regionalised added value for commercial services (hotels and restaurants excluded)

The Casablanca-Settat region accounts for an annual average of 25.1% of added value for commercial services except hotels and restaurants nationwide, while Rabat-Sale-Kenitra comes second with 16.9%. The sector's dynamic affects all regions, with regional growth rates slightly above or below the national average rate of 6.6%. Such a trend shows that regions are promoting services as part of their productive systems. The creation of techno-poles in all regions underscores the development of this sector.

Figure 32 : Average breakdown of regionalised added value for commercial services except hotels and restaurants between 1998 and 2009

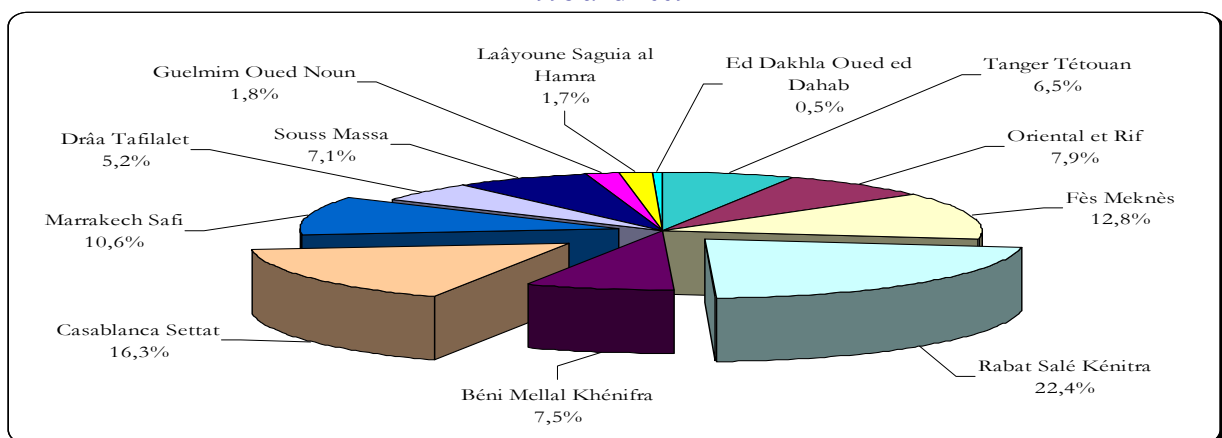


Source : DSFF figures

3.3.3. Regionalised added value of non-commercial services

Because of its status as administrative capital, the Rabat-Sale-Kenitra region makes a contributes significantly to added value for non-commercial services, with an average share of 22.4% between 1998 and 2009, followed by Casablanca-Settat with 16.3%. Except for Rabat-Sale-Kenitra, the distribution of added value created regionally matches population patterns, given the role of the state in providing access to basic services (health, education, security, ...), with some variations linked to the degree of urbanisation that differs from one region to another. Public efforts to extend basic services to all regions have generally produced a standard level of growth of around 6.7% in regional added value for non-commercial services, with the exception of Dakhla-Oued Eddahab and Laayoune-Saguia Al Hamra which enjoyed average annual growth rates of 9.5% and 8.4% between 1998 and 2009.

Figure 33 : Average breakdown of regionalised added value for non-commercial services between 1998 and 2009



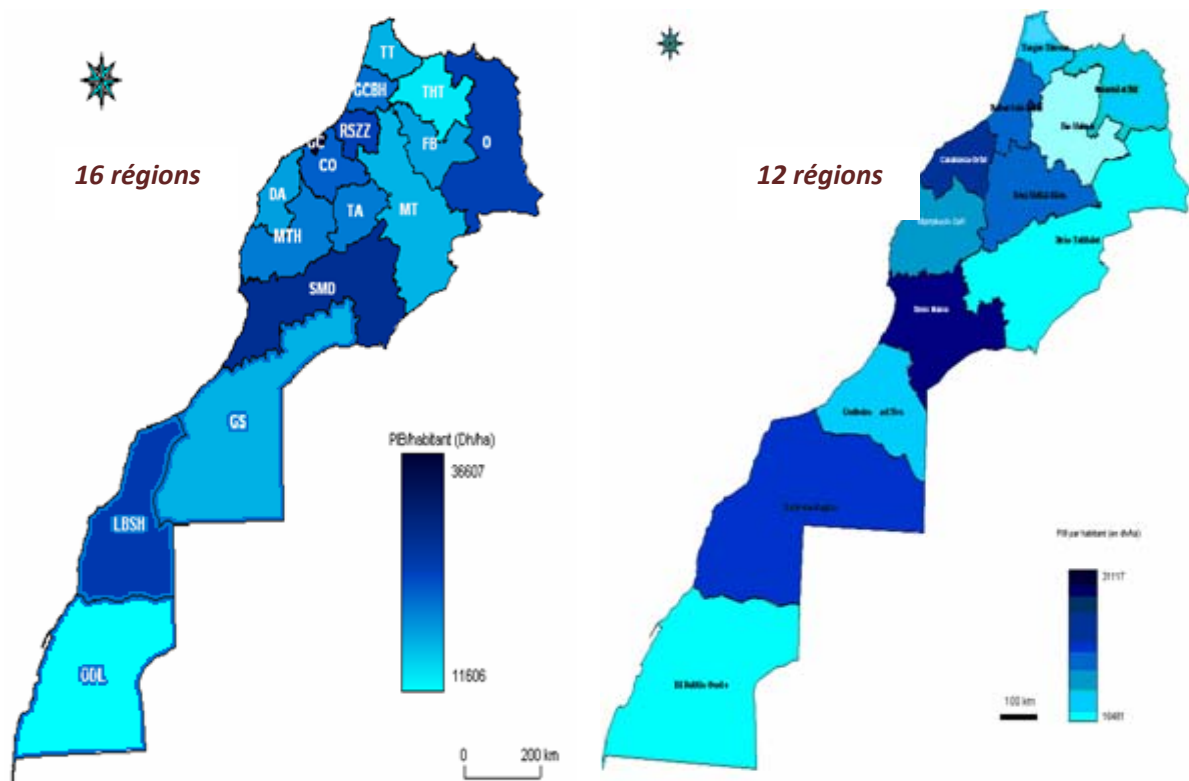
Source : DSFF figures

Conclusion

In light of the regional mapping proposed by the Advisory Commission for Regionalisation, the present review offers an analysis of sectorial added value per region and regional sectorial dynamics likely to promote economic vocation as well as local specialisation. Thus, the study of regional and sectorial contribution to national wealth has brought to the fore three major categories of regions ; four mega-regions, four regions achieving moderate economic development, and four regions in the process of catching up. The first category comprises regions which create a large part of national wealth, with a contribution of 61.8% between 1998 and 2009 : Casablanca-Settat with 24.5%, Rabat-Sale-Kenitra with 15.8%, Marrakech-Safi with 11%, and Souss-Massa with 10.5%. Nevertheless, in terms of growth rate, regions in the last category enjoyed more dynamic growth with rates above the national average of 6.1%, such as the region of Dakhla-Oued Eddahab with 9% and the region of Laayoune-Saguia Al Hamra with 8.5%.

Such interregional discrepancies in growth are also reflected in GDP per inhabitant, with a significant increase brought about by the adoption of the new regional mapping. The GDP/ inh. indicator has picked up in all regions, albeit at different paces. Thus, 5 regions out of 12 have a GDP/ inh. above the national level : Laayoune-Saguia Al Hamra (MAD 23,689/ inh.), Souss-Massa (MAD 23,400/ inh.), Casablanca-Settat (MAD 21,590/ inh.), Dakhla-Oued Eddahab (MAD 20,043/ inh.), and Rabat-Sale-Kenitra (MAD 19,578/ inh.).

Table 2 : Map of regional GDP/ inh. according to the two mappings (2009)



Furthermore, the spatial concentration around the three categories identified is compounded by greater sectorial concentration. Nearly half of primary added value nationwide is created in two regions, Souss-Massa with 31.7% and Rabat-Sale-Kenitra with 17%. In the secondary sector, three regions account for more than 50% of national added value : Casablanca-Settat with 42.9%,

Rabat-Sale-Kenitra with 10.6%, and Marrakech-Safi with 10.3%. Such concentration is also found in the tertiary sector with four regions accounting for more than half of national tertiary activity: Casablanca-Settat with 21.4%, Rabat-Sale-Kenitra with 18.2%, Marrakech-Safi with 12.1%, and Fez-Meknes with 11.4%. This distribution is linked to regional vocations and potential, as well as to demographic patterns and economic and social liabilities.

Moreover, the study highlights a relative level of sectorial specialisation in the regions, given that the contribution to regional GDP of different sectors varies from one region to another. Thus, the primary sector is overrepresented in the regions of Souss-Massa, the Eastern Rif, and Beni Mellal-Khenifra, if compared to the national average, while the secondary sector is similarly overrepresented in the regions of Casablanca-Settat, Tangiers-Tetouan, and Laayoune-Saguia Al Hamra, where it has always featured prominently.

Based on regional GDP, these results largely support the adoption of a new regional mapping by the Advisory Commission for Regionalisation, in order to promote the emergence of strong and economically viable urban poles, as well as non-polarised areas. The latter comprise areas which should be able to sustain growth by tapping further into local human and natural resources, and desert areas or oases which should continue to build on current levels of growth, supported by and benefiting from national prioritisation schemes.

While the new regional mapping offers a coherent, pragmatic, and functional outlook based on a specific set of functionality and homogeneity criteria, it is nevertheless dependent on the institutional framework to be designed for the regions if it is to mobilise regional human and material resources successfully. A pertinent economic approach to the regions will contribute to sustainable human development, equal opportunities, and social inclusion and integration

Bibliography

- Adeline Béoutis, Hélène Casset-Hervio et Élodie Leprevost, " *Les produits intérieurs bruts régionaux en 2003 Forte concentration spatiale et dynamismes contrastés* ", Insee Décembre 2005.
- André Lemelin et Pierre Mainguy, " *Revue des méthodes d'estimation du produit intérieur brut régional* ", Cahier technique et méthodologique, Institut de la Statistique du Québec, Février 2009.
- André Lemelin et Pierre Mainguy, " *Estimation du produit intérieur brut régional des 17 régions administratives du Québec* ", Cahier technique et méthodologique, Institut de la Statistique du Québec, Mars 2009.
- " *Des indicateurs régionaux de développement humain dans le Nord - Pas de Calais et en Wallonie* ", Etudes Prospectives Régionales n°10, Juin 2006.
- F.Carlevaro, " *Régionalisation d'agrégats nationaux au moyen d'indicateurs : une méthode économétrique* ", dans B.Guesnier et J.H.P.Paelinck, Modélisation spatiale : Théorie et applications, Institut de Maths Economiques et Université de Dijon, 1987.
- Jean Ousset et Michel Negre, " *Des comptes nationaux au comptes régionaux L'exemple des comptes de l'Agriculture* " Revue économique, Sciences Po University Press, Vol. 24, No. 4, Juillet 1973.
- J.P.DELISLE, avec la participation de C. LELONG et A. KIRTHICHANDRA, " *Méthode de calcul des valeurs ajoutées régionales par industrie et des PIB régionaux. SEC 1995, années de base 1994-1996* ", INSEE, novembre 2000.
- LIEW, L.H. " *Tops-down* " versus " *Bottoms-up* " approaches to regional modeling ", Journal of Policy Modeling, 1984.
- Olivier FROUTÉ et Benoit MASSUYEAU, " *Évaluation du PIB à Mayotte* ", Document de Travail CEROM n°1, Mai 2005.
- " *Produit intérieur brut régional par industrie au Québec* ", Institut de la Statistique du Québec, 2006.
- " *Spécialisation et concentration industrielles : Atouts et vulnérabilités des secteurs et des régions* ", DEPF, Ministère de l'Economie et des Finances, Juin 2009.
- Vincenzo Spiezia, " *Mesurer les économies régionales* ", Cahiers Statistiques, OCDE, février 2004.