The Application of Regional Accounts as an Entry Point to Achieve Sustainable Development in Egypt

Mahmoud Mohamed ElSarawy (Central Agency for Public Mobilization and Statistics, Egypt)

Paper Prepared for the IARIW 33rd General Conference

Rotterdam, the Netherlands, August 24-30, 2014

Second Poster Session

Time: Thursday, August 28, Late Afternoon
The Application of Regional Accounts as an Entry Point to Achieve Sustainable Development in Egypt

Author: Mahmoud Mohamed ElSarawy
Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt
E-mail: Mahmoud_sa@capmas.gov.eg

ABSTRACT:

Development is the process of raising the rate of economic growth and to achieve structural change in the direction of increasing the share of the productive sectors and advanced technology in the gross domestic product. The preparation of the economic accounts at the regional level one of the tools by which to determine the most important economic variables at the level of each region, And estimate the extent of its contribution in the economic development at the national level, And also determine the employment status of each sector within the region, which helps in setting priorities in the preparation of plans, funding and investment, which is part of the regional plan in general. And also measure the level of well-being and growth between different regions.

Regional accounts are useful tool in the economic and social analysis, on both regional and national to achieve coordination and balance between the objectives of regional and national to improve the standard of living of each region.

This paper will study the importance, Applied constraints, How to apply regional accounts and its impact on the sustainable development and achieve social justice in Egypt.

Key words: Regional accounts, sustainable development, economic development.
1. **Introduction:**

Regional accounts are an extension of national accounts from which data are available by sub-regional unit, region, major region, as well as by other regional divisions based on municipalities if required. The statistics also contain comparison data on regional structures, and on their development and levels.

The world economy is experiencing quick and successive changes in the current time and about the trend of international and regional blocs and severe competition among developing countries to attract international investment, which led to the importance of pursuing many programs of economic and social reform so that they can meet the needs of these changes.

Egypt is one of those States which worked on the implementation of programs aimed at restructuring its economy of increase rates of growth of domestic product (GDP), Through the re-structure their various sectors and improve their performance and raise rates, And take advantage of the capabilities of the existing economy, and expand the production base to allow for the diversification of agricultural production patterns and methods according to different climate and soil, And the establishment of new poles of industrial production outside the domain populated to alleviate the environmental pollution in the Delta and the old Valley, To avoid depletion of productive land. As well as work on the multi-center and polar world rather than relying on a single pole and be center of attraction for immigration from different parts of the country.

Therefore should be provided various tools for decision makers, which will enable them to achieve the development goals of the state. The most important of these tools in providing data and information that describes the most important characteristics of the economic and social characteristic of each region or governorate in the country, Order to estimate the size of the contribution of each region or governorates in savings, and also estimate the size of investments required to implement the plan developed, and the duration of its ability to finance part of the investments.

The preparation and installation of economic accounts at the regional level one of these tools by which to identify the most important economic variables at the level of each region or governorate, which is in production, output, private consumption, government consumption, savings, investment .... And so on.

So as to determine whether the Region or Governorate to achieve regional objectives. Then estimate its contribution to economic development at the national level. And also determine the functional status of each sector within the region, which helps in setting priorities when planning funding and investment.

And also measure the level of and growth between different regions and comparison between those regions. And also considered the national accounts Regional useful tool in the economic and social analysis, and at both the regional and national levels to achieve coordination and balance between the objectives of regional, national, to improve the standard of living in each region or province, and solve problems and achieve higher growth rates of the least developed regions, and contribute in achieving the desired objectives at the national level and raise the level of welfare of all residents of the state.

2. **Objectives of the study:**

The study aims to study the importance, Applied constraints, How to apply regional accounts and its impact on the sustainable development and achieve social justice in Egypt.

The importance of these accounts, including provide him with data and information, such as determining the size of the production requirements at the level of each activity in the region, the study of the exchanges between the the Region or Governorate and other regions of the state, configure the database to be the basis to calculate the weights of index numbers of production or output, which enables the measurement of a real change in the size of the output level of each region or Governorate, And used it as a tool in the preparation of regional development plan, especially when determining the functional
status of each sector within the region, which helps in putting priorities when planning funding and investment.

It also helps these accounts through the provision of data on the volume of consumption at the level of each region or Governorate in the measurement of the relative weight of consumption of different groups and calculates the elasticity’s of consumption.

Accounts data are used as the basis for measuring the level of welfare and growth between different regions, and as a tool for comparison between different regions, in addition to its contribution to the studies concerned with the most important problems of the regions of the state, making it easy for decision makers to develop appropriate solutions to address it.

3. **Basic objectives to prepare and installation of Regional Economic Accounts:**

1- raising the rates of growth in less developed regions, and, by extension, raising the rates of growth on the national level, where the raising the rates of growth in regions of the state in fact, the goal of integral growth objective on the national level, but are the way to achieve economic and social welfare in the economy as a whole.

2- Measure of income disparities between regions, which helps in the work of research studies that help raise the level of income in the less developed regions.

3- Action detailed description of the structure of the economies of the regions in the country.

4- These accounts help through the provision of data in determining the importance of each sector within the region and the national economy, thus contributing to establish priorities for financial assistance in the investment programs of the private sector.

4. **Importance of applying regional accounts:**

The preparation of national accounts at the regional level of great importance as a mirror that reflects the interaction of various economic variables at the level of regions and governorate, and then on the national level, as it describes the impact of the interaction of different policies on it. And also it is the basis for achieving the objectives of regional development plan, which is the most important objectives are as follows:

- Create a basic themes of productivity in the development of manned space is working to attract local and foreign investments.
- Increase the national income by maximizing the economic return of the resources available to the Territories.
- Encourage the spread of small and medium industries and linked to with large-scale industries.
- Encourage industries that provide a competitive advantage in their creation, which linked the economic structure of the territory and in line with the climate of industrial integration of the region, and the possible introduction of modern technology in production.
- Distribution of projects on a sound basis on regions and governorate according to the competitive advantages enjoyed by each region.

5. **Visualize regional economic account:**

5.1. **Greater Cairo Region:**

Egypt consists of 27 Governorates and gathering 7 regions, Greater Cairo region contains the governorates (Cairo, Giza and Qaliopia). This region is considered the most important regions in Egypt, as it contains multiple economic activities and the most attractive region for residents from all over the country. It has a quarter of Egypt’s population and accounts for 8.7% of the Total area of Egypt.
5.2. **Visualization of regional economic data:**

In this part we will use Tableau public program to visualize regional economic data such as the relative distribution of total production, wages and governorates production structure of economic activities in the Greater Cairo region.

**Table No. (2)**

The relative distribution of production structure of economic activities in the Greater Cairo region

<table>
<thead>
<tr>
<th>Economic Activities</th>
<th>Cairo</th>
<th>Qaliopiya</th>
<th>Giza</th>
<th>Greater Cairo Region</th>
<th>The rest of Egypt region’s</th>
<th>Total Egypt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>0.20</td>
<td>2.80</td>
<td>3.60</td>
<td>6.60</td>
<td>93.40</td>
<td>100</td>
</tr>
<tr>
<td>Industry</td>
<td>21.60</td>
<td>7.30</td>
<td>10.30</td>
<td>39.20</td>
<td>60.80</td>
<td>100</td>
</tr>
<tr>
<td>Electricity, water and gas</td>
<td>33.10</td>
<td>4.00</td>
<td>5.90</td>
<td>43.00</td>
<td>57.00</td>
<td>100</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>33.30</td>
<td>4.40</td>
<td>8.50</td>
<td>46.20</td>
<td>53.80</td>
<td>100</td>
</tr>
<tr>
<td>Construction and Building</td>
<td>29.60</td>
<td>3.20</td>
<td>15.00</td>
<td>47.80</td>
<td>52.20</td>
<td>100</td>
</tr>
<tr>
<td>Restaurants</td>
<td>31.80</td>
<td>5.40</td>
<td>14.00</td>
<td>51.20</td>
<td>48.80</td>
<td>100</td>
</tr>
<tr>
<td>Tourism</td>
<td>35.10</td>
<td>0.05</td>
<td>16.60</td>
<td>51.75</td>
<td>48.25</td>
<td>100</td>
</tr>
<tr>
<td>Health Care Services</td>
<td>25.80</td>
<td>0.40</td>
<td>47.40</td>
<td>73.60</td>
<td>26.40</td>
<td>100</td>
</tr>
<tr>
<td>Cinema and Sports</td>
<td>67.60</td>
<td>1.30</td>
<td>8.80</td>
<td>77.70</td>
<td>22.30</td>
<td>100</td>
</tr>
<tr>
<td>Banks</td>
<td>75.50</td>
<td>1.00</td>
<td>5.60</td>
<td>82.10</td>
<td>18.80</td>
<td>100</td>
</tr>
<tr>
<td>Financial intermediation</td>
<td>72.50</td>
<td>0.70</td>
<td>19.30</td>
<td>92.50</td>
<td>7.50</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source* ¹: Dr. Iman Mohammed Ahmed - National Planning Institute.

---

¹ The source of all regional numbers: Apply the methodology for the preparation and installation of regional accounts in the System of National Accounts 1993 - Greater Cairo - Dr. Iman Mohammed Ahmed - National Planning Institute.
- Figures (1) shows that agriculture activity representing 6.6% of the total production for the region, restaurants and tourism activities represent nearly 50% and the financial intermediation activity consider the most economic activities production at Greater Cairo region, it presents about 92.5% of the total production of the region and the rest of Egypt regions presenting only 7.5% of the production of financial intermediation activity all over the rest of the six regions of the state.

Table No. (3)
The relative distribution of the wages structure of economic activities in the Greater Cairo region

<table>
<thead>
<tr>
<th>Economic Activities</th>
<th>Cairo</th>
<th>Qaliopiya</th>
<th>Giza</th>
<th>Total Region</th>
<th>The rest of the regions</th>
<th>Total Egypt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>0.03</td>
<td>1.40</td>
<td>1.90</td>
<td>3.33</td>
<td>96.67</td>
<td>100</td>
</tr>
<tr>
<td>Electricity, water and gas</td>
<td>11.70</td>
<td>2.60</td>
<td>2.70</td>
<td>17.00</td>
<td>83.00</td>
<td>100</td>
</tr>
<tr>
<td>Construction and Building</td>
<td>27.80</td>
<td>3.00</td>
<td>16.20</td>
<td>47.00</td>
<td>53.00</td>
<td>100</td>
</tr>
<tr>
<td>Tourism</td>
<td>31.90</td>
<td>0.09</td>
<td>17.70</td>
<td>49.69</td>
<td>50.31</td>
<td>100</td>
</tr>
<tr>
<td>Industry</td>
<td>31.60</td>
<td>8.50</td>
<td>10.10</td>
<td>50.20</td>
<td>49.80</td>
<td>100</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>44.70</td>
<td>3.60</td>
<td>10.20</td>
<td>58.50</td>
<td>41.50</td>
<td>100</td>
</tr>
<tr>
<td>Health Care Services</td>
<td>37.20</td>
<td>2.40</td>
<td>19.20</td>
<td>58.80</td>
<td>41.20</td>
<td>100</td>
</tr>
<tr>
<td>Restaurants</td>
<td>38.40</td>
<td>4.30</td>
<td>17.30</td>
<td>60.00</td>
<td>40.00</td>
<td>100</td>
</tr>
<tr>
<td>Banks</td>
<td>57.50</td>
<td>0.40</td>
<td>17.80</td>
<td>75.70</td>
<td>24.30</td>
<td>100</td>
</tr>
<tr>
<td>Cinema and Sports</td>
<td>67.90</td>
<td>0.80</td>
<td>10.40</td>
<td>79.10</td>
<td>20.90</td>
<td>100</td>
</tr>
<tr>
<td>Financial intermediation</td>
<td>64.00</td>
<td>0.40</td>
<td>17.20</td>
<td>81.60</td>
<td>18.40</td>
<td>100</td>
</tr>
</tbody>
</table>
The relative distribution of the wages structure of economic activities inside Greater Cairo region

Figure No. (2)

- In table (2) there is a lot of data and percentages but we cannot find the objects of this table nor we can take a right decision throw it. But if we convert this table to a simple graph like Figure No. (3) It’s obvious that Cairo governorate is considered the most provinces in Egypt that consists of high wages and also within the region where we find that the activities of cinema and sports is the highest activity in terms of wages, followed by Financial intermediation activity followed by banks activity and finally the least in the relative distribution of the wage structure activity is agriculture. For the provinces of Giza and Qaliopia, we find that relative distribution of the wage structure activity it is too limited and the ratio is between 0.09% and 20%.

6. **Apply regional accounts impact on the sustainable development Conclusions:**

Development is the process of raising the rate of economic growth and achieve structural change in the direction of increasing the share of productive sectors and cutting-edge technology in the gross domestic product, leading to a higher standard of living in the context of the management of social interdependence with the outside world can not be separated from the development planning where the planning is the method Scientific regulator to exploit the resources of the community to achieve the optimal exploitation of the largest satisfy the needs of the residents in the community. One of the dimensions of the planning activity is the time dimension (the future), and Dimension importantly second is the spatial dimension (the place - the region), which is the so-called science of regional planning that cares planned economy in the future, at the state level (the whole place is political), or divisions of this economy, whether The regions or provinces (municipalities) or smaller regions such as cities or villages or regions in particular. It is not enough development to be achieved, but the important thing is to continue the development process, a so-called sustainable development, and the continued development can not be based only on the capabilities of national self.
7. **Conclusion:**

- The necessity of compiling economic accounts at the regional level is clear because of its importance in the development of regions and access to the comprehensive development at the national level.
- Apply regional accounts as an entry point to achieve sustainable development.
- The need for statistics and data at the regional level to help in the creation of regional accounts.

8. **References:**

- SHARLEEN FORBES, (2010) “GETTING BETTER VALUE FROM OFFICIAL STATISTICS BY INCREASING AND IMPROVING THEIR USE”.
- ———. 2009. HOW CAN OFFICIAL STATISTICS CONTRIBUTE TO THE ANALYSIS OF CLIMATE CHANGE IMPACTS, VULNERABILITY AND POLICIES? PAPER PRESENTED AT THE 57TH SESSION OF THE INTERNATIONAL STATISTICAL INSTITUTE, IN DURBAN, SOUTH AFRICA.
- FEW, STEPHEN, (2009) NOW I SEE IT: SIMPLE VISUALIZATION TECHNIQUES FOR QUANTITATIVE ANALYSIS. ANALYTICS PRESS.