2011 Socio-Economic Survey: Sectoral Wages and Emoluments

This abstract contains the 2011 Report on Sectoral Wages and Emoluments in Selected Sectors of the Nigerian Economy
SURVEY ON SECTORAL WAGES AND EMOLUMENTS

This report provides an overview of the structure of employment and remuneration across selected sectors included in the NBS Establishment Survey, 2011.

Emolument is defined as advantage, benefit, profit or wages received as compensation for being employed or holding an office in the survey sectors under consideration. This includes manufacturing sector (cement, and other manufacturing), Hotels and Restaurants, Wholesale and Retail Trade, Mining and Quarrying, Private Professional Services, and Building and Construction. This report contains a brief analysis of these sectors over the last one year.

Sample Design and Methodology

The scope of the survey covered the subject areas using 3 NBS survey infrastructure namely; National Integrated Survey of Households, National Integrated Survey of Establishments and System of Administrative Statistics.

National Integrated Survey of Households (NISH)

The National Integrated Survey of Household is the system for which all the Household-Based Surveys are conducted in the National Bureau of Statistics. The scope covered under the NISH includes: Household Composition, Household Amenities, Health, Education and Employment. Others include
Contraceptive Prevalence, Births and Deaths in last 12 months, Child Immunization and Child Malnutrition, Ownership and Access to Information and Communication Technology (ICT), Voluntary or Social Work (Non-profit Institutions), Operation of ICT business outfit, Housing project, Remittances from abroad; Crop Production, Livestock Production, Poultry Keeping, Fishing, Farming Inputs and Processing and Storage Facilities.

**National Integrated Survey of Establishments (NISE)**

Nine (9) sectors were covered under the National Integrated Survey of Establishments. These were Agriculture (Crop, Livestock, Poultry, Fishing, Hunting and Forestry), Mining and Quarrying, Manufacturing (Cement, Oil Refining and other Manufacturing), Building & Construction, Wholesale and Retail Trade, Hotel and Restaurant and Tourism, Organized Road Transport/Storage, Private Professional Services and Other Community Social and Personal Services. Areas covered include kind of activity, legal form of ownership, persons engaged, paid employees, wages and salaries, description of products, installed production capacity, production and cost of production/operation etc.

**System of Administrative Statistics (SAS)**

The System of Administrative Statistics cut across establishments and institutions in areas such as Education, Electricity, Oil and Gas, Health, Housing, Public Administration, Utilities and Government Finance.
Survey Instruments

The main instruments developed for the collaborative survey were the questionnaires and instruction manuals. The instruction manuals were developed to facilitate application of the questionnaires, covering the three NBS survey infrastructure.

The National Integrated Survey of Households (NISH)

Six (6) types of questionnaires were developed, including the General Household Survey (GHS) questionnaire, General Household Listing and Master Sample questionnaire, Crop Farmers, Livestock, Poultry and Fishery questionnaires. The GHS questionnaire used for this survey is revised along with the World Bank to be able to capture poverty analysis issues.

The National Integrated Survey of Establishment (NISE)

Seventeen (17) types of questionnaires were designed to capture the relevant information canvassed from the 9 sectors and sub-sectors of the economy, namely; Agriculture, including Crop, Livestock, Poultry, Fishing, Forestry, Mining and Quarrying, Manufacturing, Building & Construction, Wholesale and Retail Trade, Hotel and Restaurant and Tourism, Organized Road Transport/Storage, Real Estate and Business Services, Health and Social works, Other Community Social and Personal Services Activities. Analogue questionnaires were used for collecting data on all the sectors in the NISE module.
The System of Administrative Statistics (SAS)

Twenty Five (25) types of questionnaires were designed to collect information through administrative records from institutions and establishments in social and economic sectors covering; Education, Electricity, Oil and Gas, Health, Housing, Public Administration and Defense, Utilities, Government Finance, etc.

Analogue questionnaires were used for all the sectors and sub-sectors.

Sample Design

The multi-subject socio-economic survey employed the National Bureau of Statistics’ (NBS) NISH and NISE Sample designs.

National Integrated Survey of Household Sample Design

This Sample Design consists of the General Household Survey and the National Agricultural Sample Survey designs. Both survey designs were derived from the NBS 2007/12 NISH sample design. The 2007/12 NISH sample design is a 2-stage, replicated and rotated cluster sample design with Enumeration Areas (EAs) as first stage sampling units or Primary Sampling Units (PSUs), while Households constituted the second stage units (secondary sampling units). The households were the Ultimate Sampling Units for the multi-subject survey.
Generally, the NISH Master Sample in each state is made up of 200 EAs drawn into 20 replicates. A replicate consists of 10 EAs. Replicates 10-15, subsets of the Master Sample were studied for modules of the NISH.

**General Household Survey (GHS)**

The GHS was implemented as a NISH module. Six replicates (10–15) were studied per state including the FCT. With a fixed-take of 10 households systematically selected per EA, 600 Households (HHs) were thus, selected for interview per state including the FCT. Hence, nationally, a total of 22,200 HHs were drawn from the 2,220 EAs selected for interview for the GHS. The selected EAs and HHs within them cut across the rural and urban sectors.

**Private Farmers Survey**

Total sample size of 35,520 Farming Households (FHHs) across all the states including FCT, were drawn from 2,220 EAs. In each state 960 FHHs were drawn from 60 EAs. The listings of households in the selected EAs were updated before being stratified into farming and non-farming households. The farming households were further stratified into Crop Farming Households (CFHHs), Livestock Farming Households (LFHHs), Poultry Farming Households (PFHHs) and Fishing Farming Households (FFHHs). In each EA, ratio 5:5:3:3 were imposed according to the intensity and preponderance of these farming activities. At the end, 16 HHs were expected to be covered in
any ratio if the imposed one could not be satisfied. At each level of selection, households were systematically selected using different random start. All households that qualified as farming households were served with relevant private farmers questionnaires.

**National Integrated Survey of Establishments Sample Design**

Two frames comprising of Corporate Farms and Establishments employing 10 persons and above were used. 400 corporate farms were canvassed. A total of 4,600 establishments employing 10 persons and above were canvassed for the survey. A combination of parameters was factored into the selection and allocation of establishments to the sectors and states. The parameters were; the contribution of each sector to the GDP, number of establishments in each employment band by sector and purposive or a-priori knowledge of performance of the sectors to the economy.

**System of Administrative Statistics (SAS) Design**

The design for the SAS involved complete coverage of the listed establishments/Institutions, Ministries, Departments and Agencies. The SAS operation covered all relevant MDAs at the National, State and Local Government Area Levels.
**Field Work Arrangement**

The field work arrangement for the survey followed two approaches as contained in the NISH and NISE survey systems, meaning that NISH was household based while NISE/SAS adopted the Establishments/Institutions approach.

**Household Component**

In each state, 3 teams were used. A team was made up of one supervisor and four enumerators. Each team covered 20 Enumeration Areas for a period of 26 days. A pair of Enumerators in a team covered 10 EAs. This translated to covering an Enumeration Area for an average of 5 days for the different statistical operations. Each team moved in a roving manner.

**Establishment Component:**

The second approach involved lodgment and retrieval of NISE and SAS questionnaires. The number of staff per state varied with the total establishments studied. On the average, ten (10) officers covered the operation in each state.

**Quality Control and Retrieval of Record**

Quality Control measures were carried out during the survey, essentially to ensure quality of data. Three levels of supervision were adopted, involving supervisors of the team at the first level; CBN staff, NBS State Officers and
Zonal Controllers at the second level and finally the NBS/NCC Headquarters staff constituting the third level supervision.

Field monitoring and quality check exercises were also carried out during the period of data collection as part of the quality control measures. A sample of 600 household was taken from each of the 36 states and the Federal Capital Territory (FCT). This produced a national sample size of 22,200 households of which over 97 percent responded. The main survey instrument used for capturing information on ICT Access and Ownership is the General Household Survey Questionnaire and the field manual which explains the design and definitions of terms and terminology.

The survey was conducted between February and March 2011 and completed in July 2011.
**Highlights of Findings**

Over 2009 and 2010, the professional services, manufacturing sectors (excluding cement), and the wholesale and retail sectors continue to be the largest employers in the survey. In 2010, most sectors covered in this report exhibited an increase in the number of paid workers. However, sectors such as cement manufacturing and professional services exhibited declines. The banking sub-sector, a component of the professional services sector is one reason for the exhibited decline in the aforementioned sector, due to the ongoing reforms and consolidation.

The manufacturing sectors (cement and other manufacturing) and the professional sectors recorded the highest earning workers over the year. This reflects the premium on the ability to produce goods and services consumed in the country as well as the demand for skilled manpower in a range of services from banking and finance, to telecommunications and consulting.

![Figure 1: Persons in paid employment](Image)
**Figure 2**: Change in Paid Employment by Sector. Source: NBS 2011

**Figure 3**: Average sectoral monthly wage (Naira). Source: NBS 2011
Cement manufacturing

The number of persons in paid employment at the end of 2010 in the cement manufacturing sub-sector stood at 3318, compared to 4142 in 2009, a decline of 19.9%. In 2010, the average monthly wage fell to N80144.84 from N83961.41 in 2009, a decline of 4.5%. At the end of 2009, the number of workers engaged in the cement industry stood at 4289 but this dropped to 3658 by the end of 2010, meaning 631 persons either lost their jobs or switched jobs away from the cement manufacturing industry. The total spending on emoluments (comprising of wages/salaries and other benefits) for the industry in 2010 stood at about N3.19 billion, which was approximately 23.5% less than the N4.17 billion spent in 2009.

![Figure 4: Persons Engaged and Persons in Paid Employment in the Cement Manufacturing Sector in 2010. Source: NBS 2011](image-url)
**Hotels & Restaurants**
The total emoluments spending for the Hotels & Restaurants sector was N29.73 billion in 2010, representing a 6.1% increase over 2009 spending of N28.01 billion. Workers in this sector earned an average monthly wage of N34,544.55 in 2010, compared to N33,988.08 in 2009 a slight increase of 1.6%. The number of persons in paid employment in the Hotels and Restaurants sector increased to 71,726 in 2010 from 68,696 in 2009. This represents an increase of 4.4%. Between the end of 2009 and 2010, the number of persons engaged in the sector increased by 2336 persons to 73,026 persons.

![Figure 5: Persons Engaged and Persons in Paid Employment in the Hotels and Restaurants Sector in 2010. Source: NBS 2011](image)

**Mining & Quarrying**
In the mining and quarrying sector, the average monthly wage which stood at N26,575.32 in 2009, fell to N22,475.31 in 2010 (a decrease of 15.4%). The number of persons in paid employment rose during the period from 4858 in
2009 to 5792 in 2010, an increase of 19.2%. A total of 5,147 persons were engaged in the sector in 2009. This rose to 6,221 in 2010, meaning 1074 jobs were added in the sector during the period under review. Total spending on emoluments increased slightly to N1.56 billion in 2010, compared to N1.55 billion in 2009.

Figure 6: Persons Engaged and Persons in Paid Employment in the Mining and Quarrying Sector. Source: NBS 2011
Professional services
In 2009, the workers in private professional services earned on average, a monthly wage of N32,871.63. This rose to N42,558.92 in 2010, representing a 29.5% increase. The total wage bill for this sector in 2010 stood at N167.4 billion, an increase of 26.2% from N132.7 billion recorded in 2009. Among the sectors surveyed, this sector has the highest number of paid employees, with 327,777 persons in 2010, a decline of 2.5% from 336,309 a year earlier. Between 2009 and 2010, the number of persons engaged in private professional services increased from 341,247 to 345,568, implying addition of over 4321 jobs during the period.

Figure 7: Persons Engaged and Persons in Paid Employment in the Professional Services Sector in 2010. Source: NBS 2011

<table>
<thead>
<tr>
<th>Persons engaged</th>
<th>Persons in paid employment</th>
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<tbody>
<tr>
<td>2009 341274</td>
<td>2010 345568</td>
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<td></td>
<td>2009 336309</td>
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<td>2010 327777</td>
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**Wholesale & Retail trade**

The survey of wholesale and retail trade covers establishments engaged in bulk and retail trade activities such as stores and supermarkets. In 2010, average wage stood at just over N19,798.06 per month for the 92,287 workers in paid employment in the sector, whereas in 2009, a total of 78,049 workers in paid employment earned a monthly wage of N18,693 on average. This represented a 5.9% increase between 2009 and 2010. The total expenditure on emoluments for the sector reached N17.5billion in 2009, but rose to N21.9billion by end of 2010, a 25.2% increase. Approximately 15,095 persons were employed in the sector during the year.

![Figure 8: Persons Engaged and Persons in Paid Employment in the Wholesale and Retail Sector in 2010. Source: NBS 2011](image-url)
Building and construction
The building and construction sector paid a monthly wage of N33,997.06 on average in 2009, but this rose to N35,121.16 in 2010, a 3.3% increase. In addition, 76,473 workers were in paid employment in the sector in 2010 compared to 66,814 in 2009. In 2010, 76,611 persons were engaged in the sector compared to 67,305 persons engaged in 2009. For 2010, the total wage bill stood at N32.23billion compared to N27.26 billion in 2009, an increase of 18.2%.

Figure 9: Persons Engaged and Persons in Paid Employment in the Building and Construction Sector in 2010.
Source: NBS 2011
Other manufacturing
In this category, an additional 2913 positions were created within the year, as 323,716 persons were engaged in the sector in 2009, rising to 326,629 in 2010. The monthly wage, on average, also rose by 17.5% to N58,949.40 in 2010, up from N50,177.32 in 2009. 288,276 persons were employed and paid in 2009, but this increased by 4.3% to 300,675 persons as paid employees in the sector in 2010. The total wage bill for the sector in 2010 was N212.69 billion representing a 22.5% increase over the total wage profile of N173.58billion in 2009.

Figure 10: Persons Engaged and Persons in Paid Employment in the Other Manufacturing Sector in 2010. Source: NBS 2011
Conclusion

As in every economy, there continues to be a premium on the ability of individuals to contribute value added inputs into the production process, whether in the manufacturing sector or the professional services sector. Nigeria’s demand for basic goods and services as well as creativity is reflected in the higher average monthly wages in the manufacturing and professional services sectors relative to other sectors.

Definitions

i. **Average monthly wage**: this is obtained by dividing summation of the total wage bill over the year by the number of persons in paid employment as the end of the year end i.e \( \frac{\text{TOTAL WAGES \& SALARIES PAYMENTS (Q1 to Q4)}}{\text{TOTAL PAID EMPLOYEES (Q4)}} \). The result is divided by 12 (months) to obtain the monthly wage.

ii. **Number of paid employees**: represents the workforce for the purpose of computing sectoral remuneration levels. The value at the end of the year (Q4) is taken as reference.