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Sectoral contributions of small scale industrial enterprises to regional development in Ondo State, Nigeria

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Abstract: While development effects of small scale industries is not in doubt, this study examined the relative contributions of different sectors of this industrial sub group to regional development, with a view to isolating the most important contributors to development in Ondo state. The study made use of 353 questionnaire which was administered on proprietors of small scale industries in the state proportionately. Data were also derived from agencies and ministries of government that were responsible for formulating and implementing policies on small scale industries. Data collected were subjected to descriptive and inferential statistic. Objective criteria 6 - 1 were used to rank proprietors views on degree of contribution of each sector to development of the state. Total scores were derived for each industrial sector. Score were presented in bar graphs and further subjected in to factor analysis, where highest factor loadings of 0.723, 0.615 and 0.766 were derived for food/agro based, consumer products and industrial/ construction products small scale enterprises among all categories of small scale enterprises. The study was therefore able to isolate these three subsectors as the major contributors to regional development of the state.

Keywords: small scale industries, industrial sectors, regional development

1. Introduction

Extant literature is explicit on the problems of underdevelopment facing third world countries. The state of underdevelopment of these countries is a reflection of the low level of technology, high incidence of unemployment and underemployment, as well as the generally high poverty level experienced especially in most African countries. (Human Development Index, 2009)

One of the often touted solutions to the problems impeding development in the third world countries is the emphasis on small scale industrial enterprises (SSI). The intention behind

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the encouragement of the SSI, according to Ofori-Cudjoe (2009), Endashaw (2009) and Boakye (2010) lies in the development of a diversified economy that could propel the achievement of stable and sustainable societies, since the agricultural sector, the main economic activity in Sub-Saharan African countries cannot provide enough employment and income to the growing population.

The United Nations Millennium Development Goals (MDGs) sets a critical challenge of halving absolute poverty in the world by 2015, the Nigerian vision 2020, which was launched in 2006, has among its objectives sustainable industrial development by the end of targeted year. Small scale industries have been identified to be capable of making important contribution towards achieving these goals by reducing poverty, and improving other indices of development. This is because small scale industries, as acknowledged by the World Bank (2004), attract indigenous labour, account for a substantial part of the total manufacturing value added, employ significant number of people in Africa and Latin America (Dutta, 2005) and offer strong grounds for linkage creation between rural and urban population (Omisakin, 1999 and Kappel, 2004, Philip, Mark and Andrian 2007, Sanni 2009).

A cursory examination of SSI sector in Nigeria however shows that its potentials at reducing urban and rural poverty have not been fully explored. It employs just about 20 percent of the labour force while contributing very little percent to the Gross Domestic Product (Fabayo 2009). These contrast sharply with the situation in countries such as United States of America and Israel, where SSI employs between 55 and 53 percent of the work force and contributes up to 50 percent of the Gross Domestic Product (International Development Corporation 2005).

In order to correct this anomaly, the Federal Government of Nigeria between 1975 and 2002 designed and implemented several policies and incentives to give financial, technical and managerial assistance to small-scale industries. The small-scale industrial credit scheme and the creation of industrial development centres (IDC) had been the two major schemes for administering the incentives. These were complemented by the creation of Small and Medium Scale Enterprises Development Agency (SMEDA) in 2002, and the establishment of industrial estates and parks. The Federal government at various times established the Nigerian Industrial Development Bank (N.I.D.B) which was later renamed Bank of Industry (BOI) in 2002, National Economic Reconstruction Fund (NERFUND) Export Credit Guarantee Scheme, and Free Trade and Export Processing Zones in Calabar, Lekki, Olokola, Onne among others . These were all in

a bid to encourage the growth of this sector, in order to make it a spring board of sustainable economic development.

All these efforts according to Akinbinu (2001) and Inegbenebor (2006) have led to the preponderance of SSI in Nigeria, accounting for between 80% and 90% of manufacturing plants and value added, if informal sector is added. United Nations Development Programme (1999) had foreseen this when it reported that the economic depression, which became pronounced in the 1980s in Nigeria, had made access to global investible capital difficult for large scale industrialization. This simply means that the SSI sector will continue to grow at the expense of major industries for a long time to come.

Few studies such as Olayiwola and Adeleye (2005) which was concerned with the impact of agro- industrial promotion on rural development; Fatusin (2008), who studied regional planning impacts of small scale industries in Akoko region of Ondo state, Oyelakin - Oyelaran (1997) who investigated the impact of SSI clusters in Nnewi in Anambra State, and Dwyer and Sit (2010) whose works centered on the SSI and the problems of urban and regional planning in Hong Kong, have been conducted from regional planning perspectives, among others.

While these studies have been significant in themselves, they have not examined the sectoral contribution of small scale industrial subsectors from regional perspectives, with a view to identifying the major sectors contributing more to regional development of the region. A study of this nature will help to identify which sector to promote if the goal of regional development is to be realized, hence this study.

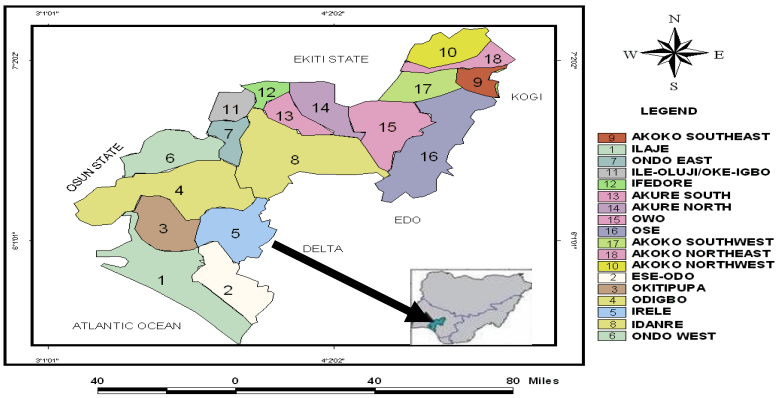
2. Ondo State

Ondo state of Nigeria lies between latitudes 5"45' and 7°52'N and longitudes 4°20' and 6° 05'E. Its land area is about 15,500 square kilometres. Ondo State is bounded on the east by Edo and Delta states, on the west by Ogun and Osun States, on the north by Ekiti and Kogi States and to the south by the Bight of Benin and the Atlantic Ocean (Ondo state, 2009)

The state is one of the seven states created on 3rd February 1976. It was carved out of the former Western State. The state covered the total area of the former Ondo Province, which was

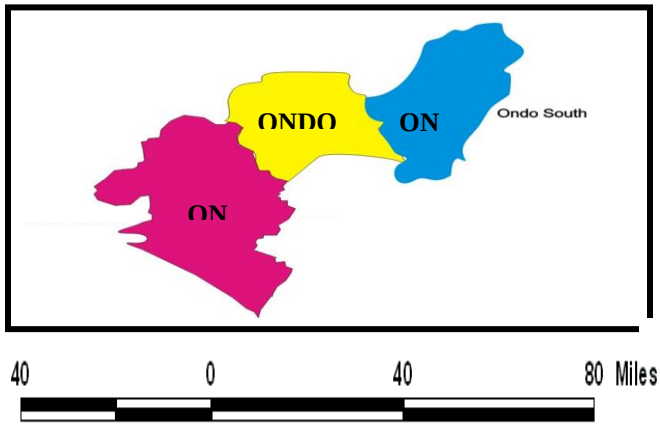
part of the western region created in 1915 with Akure as the provincial headquarters. Ondo State took off formally on 1st April 1976, consisting of the nine administrative divisions of the former Western State (Ondo State Ministry of Information and Culture, 1979). These nine divisions then were Akoko. Akure, Ekiti Central, Ekiti North. Ekiti South. Ekiti West, Okitipupa, Ondo and Owo. Akure town-ship was retained as the state headquarters. However, on 1st October 1996. Ekiti State comprising Ekiti Central, Ekiti North, Ekiti South and Ekiti West Divisions was carved out of Ondo State. Hence, the present Ondo State is made up of Ondo North Ondo South nad Ondo Central divisions which now constitute 18 local government areas as shown in Maps 1 and 2. Akure remains the State capital.

Map 1. Local government Areas



Source: Ondo State Annual Report, 2000

Map 2. Regions of Ondo State



Source: Ondo State Annual Report, 2000

The state has a long history of craft industries. Owo for example was noted for its pottery and beads, Ondo for weaving and metal smelting, Akure was a centre of bronze making, while Okitipupa was noted for production of indigenous soap as well as water based SSI such as fish and shrimp processing and gin making (Fatusin, 2013)**.**

3. Research method

In order to make the study representative of the entire state, three (3) major towns Akure, Ikare and Okitipupa, three (3) minor towns Ugbe, Obaile and Odeaye, three (3) major villages; Iboropa Aponmu and Ikoya were investigateded (see fig.2).The sample frame covered all the SSI (formal and informal) in the nine settlements selected. There were 1411 in the study area.The sample size of the SSI was 353. This constitutes 25% of the entire sample frame (1411). To collect the needed data questionnaires were administered on proprietors of small scale industries. Small scale industries in each town were first identified and numbered during reconnaissance survey. Twenty-five percent (25%) of the industry in each of the nine settlements were sampled for interview. Data were analyzed using simple tables, graphs and factor analysis

4. Literature review

There is a bit of controversy as to what business units can rightly be referred to as small scale industry. According to Wheeler (2005), definition varies from country to country. The definitions in use depend on the purposes those definitions are required to serve and the policies which govern the sector. Therefore definition varies from country to country from one industrial grouping to another and from one financial institution to the other. Generally some parameters are used either singly or in combination (Cohen and Morrison 2004, Ishengoma and Kappel 2004). These are capital investment on plant and machinery, number of workers employed and volume of production or turnover of business (Johnson 2006).Yet researchers have tried to

classify these enterprises into different areas. Scholars such as Akerele (2000), Onwumere (2000: 14-19), and Obadan and Agba (2006) classified SSI into; Formal and Informal SSI, Rural or village based SSI and High technology, knowledge Driven SSI. However little or no efforts have been made to compare their individual contributions to regional development.

The small enterprise sector employs over 80% of the working population of Nigerians employed in the manufacturing sector (UNDP, 2000). It is a very important part of the nation's economy as it acts as a shock absorber by providing employment for workers who otherwise might have been unemployed thus reducing poverty. Esubiyi (1992: 6-10) affirmed that the economic growth in developed countries has often resided in the development of small scale industries. This view was supported by Akabueze (2002), Gebremeskel, Gebremariam and Gebremedhin (2004) and Tukahashi, Higashitaka and Tsukade (2010) who however hammered on business failure analysis. The establishment of these industries has been the springboard of industrial development of many countries such as Pakistan, Korea and Indonesia. According to him, this sub sector is important as an engine of growth and is expected that the gains to be derived from the establishment of small scale industry will be translated into development at low investment cost. These industries will also be able to harness their raw materials locally and serve as raw material inputs to the large scale industries. In the Republic of South Korea, where large firms have often played a leading role in the economy, small enterprises were responsible for 80% of the employment created in the manufacturing sector between 1976 and 1986 and 45% of the total value added in 1989. The Government of Korea had successfully developed a strategy of increasing local employment and attaining economic growth through the promotion of this sector. As a result small enterprises are now responsible for more than 2/3 of the country's national industrial output (Ifo, 2000).

Adegbite (1991) observed that the small scale industries have a number of advantages which derive from the fact that they are more labour intensive than large industries and so are more capable of creating jobs, highly conducive to the provision of effective training ground for entrepreneurs and development of managerial talent. Moreover, the SSI is more likely to use local raw materials and technology and thereby stimulate rural development and save foreign exchange. They are also less complex in terms of technology; they provide linkage between the large industries through production of semi finished raw materials, easy to set up since they are within financial reach of many individuals and are amenable for location over a wide

geographical area of the country. On the basis of all these, he had recommended the promotion of SSI to newly developing countries.

This opinion finds support in the works of Stuart (2000) and Dutta (2005) who found out that the province of West Bengal, which was considered most backward some; few years' back has been able to develop in recent years due to massive development of infrastructure by the government of the province. This effort has attracted massive rural industrialization through small scale industries. The spills over effects have been massive, to the extent that West Bengal has become one of the fastest growing provinces in India (Taub and Taub, 2000).

Otaigbe (2000) a thriving SSI sector operating in a competitive setting promotes efficient use of development resources, thus providing a source of wealth, dynamism, competitiveness and knowledge to the economy as a whole. He is of the opinion that a vibrant private sector creates jobs, generates income and contributes to the overall productivity and human resource development through the transmission of technologies and training. Evidence from the newly industrializing countries of East and South East Asia indicates that jobs and incomes created by private enterprises lead to a more equitable diffusion of the benefits of growth to more people. In Thailand (UNDP et. al., 2002) the economic impact of small scale industry has been recognized as accounting for 52% of total industrial output, 80% of employment in the industrial sector. In China, the UN report also indicated that the small scale industry account for 71.9% of total industrial output despite the great number of large scale run industries.

Good as these arguments are one problem that can be identified is the tendency to lump all small scale industries together, yet it is clear that not all sectors deserve attention, or put differently, not all small scale enterprises are propulsive enough to engender sustainable development and be used as a tool of regional development planning. This study intends to examine the contribution of various small scale industrial sub groups to the development of Ondo state of Nigeria.

5. Findings

One major focus of this study was the examination of the contributions of the various categories of small industrial enterprises to regional development of the study area. This was with a view to identifying the major industrial contributors to development of the region. According to Perroux (1955) not all industries are propulsive and capable of generating sustainable development impulses. Yet these development impulses were the tonic needed to invigorate a developing region like Ondo State of Nigeria. In order to investigate categories of small scale industries that can be recommended for regional development planning of the State, Some developmental impulses that an industry must possess to be able to impact positively on any region were isolated. Some of these are:

a. Quantity of a class of small scale Industries present in a locality
b. Local sourcing of raw materials
c. Contribution to skill development
d. Technology adopted in production
e. Capital retention in the region of location
f. Employment
g. Possibility of product being used within the source region
h. Return on capital investment
i. Improvement in income

These developmental impulses were compared with existing situation in the state as a whole and the regions in particular, in term of the contribution of the various categories of small scale industrial enterprises to development. In order to make the work scientific, Ranking Scale was applied. Objective criteria were used to rank the impacts of these industries. Scores were given from 6 – 1, depending on their percentage of contribution. The reason being that six categories of SSI were identified For example if most of a category of SSI sourced their raw materials from the area of its operation, it was scored 6, followed by the next categories, which were scored 5, 4, 3, 2, and 1 for the least. The contributions of the various categories of small scale industrial enterprises and the tables to support the discussion were briefly highlighted below

The quantity of small scale industries that is located in the study area revealed an overwhelming dominance of food and agro bases enterprises. This is not surprising considering

the level of technology, pattern of demand and economic structure among residents in the state. This sector accounted for 35.7%.of all enterprises in this category. This is followed by consumer products enterprises which was 33.4%, industrial material/ constructional products based enterprises accounted for 20%. Others are less significant (see Table 1).

Table 1. Quantity of Small Scale Industries in the Study Area

Products of Small Exp.	Freq	%	Ondo North	Ondo Central	Ondo South
Food & Water Products.	126	35.7	50 (49%)	47 (33%)	29 (26%)
Industrial materials /Constructional products	71	20	24 (23.5%)	32 (22.6%)	15 (13%)
Consumer products	79	22.4	18 (17.6%)	35 (24.8%)	26 (23%)
Metal /capital goods	15	4.2	2 (1.9%)	3 (2%)	10 (9%)
Wood based firms	22	6.2	4 (3.9%)	8 (5.7%)	10 (9%)
Textile	40	11	4 (3.9%)	16 (11%)	20 (18%)
Total	353	100	102	141	110

Source: Authors' own elaboration

One of the major arguments in favour of small scale industries is their tendency to source their raw materials from the local areas thereby helping sustain the economy. Wood based enterprises are more backwardly linked to the local economy since they€ sourced over 70% of their raw materials from the local areas. This is followed by agro products based small enterprises which sourced 55% of their raw materials from the source region. Consumer products based enterprises sourced 51%, while capital goods enterprises sourced 33.3% locally. This is shown in Table 2.

Table 2. Possibility of Local Sourcing of Raw Materials

Type of Industries	Freq	Percent
Agro Product	22	55
Industrial/ Constructional material	21	29.6
Consumer Product	41	51.9
Capital goods	5	33.3
Wood based firms	16	72.7
Textile	22	55
Total	160	100

Source: Authors' own elaboration

One veritable means of poverty reduction is the ability of small scale industries to improve the skill development which ultimately improves innovation development of new products and income. Out of the 706 workers interviewed 541 or 76% agreed that their being employed in small scale enterprises have improved the level of their skill development. The extent of this however vary between sectors. For example 93% of workers in agro based enterprises, 41% in industrial products/constructional materials, 70% in consumer products, 50% in capital goods, about 80% in wood based and 44% in textiles sectors. (See Table 3).

Table 3. Contribution to Skill Development

Type of Industries	No of Employment	No of people that believe it has contributed to skill development	Percent
Agro Product	290	270	93
Industrial Raw /Constructional material	72	30	41.7
Consumer Product	214	150	70
Capital goods	8	4	50
Wood based firms	95	75	78.9
Textile	27	12	44
Total	706	541	

Source: Authors' own elaboration

An evaluation of the technology of production adopted by small enterprises in the study area revealed three distinct means of production. Some firms adopted labour intensive and capital intensive modes of production exclusively, while others combined labour and capital intensive modes as shown in Table 4.

Table 4. Technologies Adopted in Production

Type of Industries	Labor	%	Capital	%	Capital &Labour	%	Total
Agro Product	70	55	26	20.6	30	23.8	126
Textile	10	25	10	25	20	50	40
Capital goods	2	13	10	66.7	3	20	15
Consumer Product	50	63.3	10	12.7	19	24	79
Industrial Raw /Constructional material	10	14.1	50	70.4	11	15.5	71
Wood based firms	2	9.1	4	18.2	16	72.7	22
Total	144		100		110		353

Source: Authors' own elaboration

Note: enterprises are scored on the basis of labour intensiveness of production.

As shown in Table 4, 40.8% (141) adopted labour intensive mode of production. Almost all of these enterprises were informal ones. One hundred and ten (110) enterprises constituting 31% adopted capital-intensive mode, while 28% (99) adopted both labour and capital intensive modes. From the table, it is obvious that majority of these enterprises employed labour intensive means. This is hardly surprising considering the level of technology that was available to small scale industries in the state. The implication of this is that small scale industries contributed more to employment generation than perhaps large scale industries.

In the area of capital retention in the source region, the total capital retained which was spent on transportation, food, housing, and for domestic activities were estimated based on the responses of the workers. These were estimated at 35% of salary which translated to N4046567 per month in Ondo North, 32% of salary in Ondo Central (N4815150) and 38% of salary in Ondo South (N3305921).These estimations were based on responses across regions. These provided considerable capital for growth. Over all estimated monthly capital retention by all the stakeholders-workers, proprietors and customers were calculated at #12167638, and monthly expenditures on food were estimated at #3727744.

Table 5. Capital Remittance / Retention by Workers

Region	No. of workers sampled	Estimated average total monthly income (₦)	Estimated % of capital remittance	Amount of capital remittance (₦)	Estimated % of capital retention	Amount of capital retained (₦)
Ondo North	204	6225487	35	2178920	65	4046567
Ondo Central	284	7081102	32	2265952	68	4815150
Ondo South	220	5332130	38	2026209	62	3305921
Total	706			6471081		12167638

Source: Authors' own elaboration

The Table above shows that majority of workers spent a larger part of their incomes in the area where they work. This is because most of the workers were indigenes of places where their enterprise were located. Mean salaries paid to individual worker per month was calculated and multiplied with the number of workers sampled per region. This gave the estimated average total monthly income earned by workers per region. Having estimated the average percentage of

capital remittance and retention by workers based on their responses, absolute figures on the estimated capital retention and remittance were derived.

Table 5 shows that while ₦2178920 were remitted by workers in Ondo North, more than ₦4046567 which was about double of that amount was retained in the source region. While ₦2265952 was remitted by workers in Ondo Central, ₦4815150 were retained and while ₦2026209 were remitted by workers in Ondo South, ₦3305921 was retained on monthly basis. Capital retained at source region creates multiplier effects on the local economy.

The sectors that retained the highest amount of capital in the source region were calculated. It was discovered that Agro based enterprises generated ₦3476468 or 28.6% of the total capital retained, followed by capital goods industries that retained N2, 897057 or 23.8%. Textile/ fashion design sector retained N 17,38234 or 14.3%, wood based industries retained N2317645 or 19&. Other is insignificant.

Table 6. Capital Retention According to Sectors in the Source Region

Type of Investment	Estimated monthly Capital retention	%	Ondo North	Ondo Central	Ondo South
Agro products	3,476,468	28.6	1,158,835 (9.5%)	1,160,124 (9.5%)	1,157,509 (9.5%)
Textile	1,738,234	14.3	579,411 (4.8%)	582,411 (4.8%)	576,412 (4.7%)
Industrial raw/ Contructional materials	1,158,823	9.5	390,250 (3.2%)	267,345 (2.2%)	501,228 (4.1%)
Consumer products including	579,411	4.8	284,123 (2.3%)	193,137 (1.6%)	102,151 (0.8%)
Capital goods	2,897,057	23.8	1,165,000 (9.6%)	965,685 (7.9%)	766,372 (6.3%)
Wood based firms	2317645	19	772,548 (16.6)	980,541 (8.1%)	564,556 (4.6%)
Total	12167638	100	4,350,167	4,149,243	3,678,228

Source: Authors' own elaboration

The pattern of employment generated by the different classification of small scale enterprises was investigated. The study found out that out of the five different categories of small enterprises (when classified by types of product) such as Agro based enterprises, industrial material\constructional products based, consumer products, capital goods, wood products based enterprises, agro based enterprises employed the highest number of people i.e. 252 employees which accounted for 35.7% of the total number of employees sampled. This is closely followed

by consumer products enterprises which had in its employment 158 people or 22.4%. The least number of employees came from enterprises which produced capital/metal goods, which accounted for 4.3% of the total. This is not surprising considering the fact that most of the small enterprises in the study area were agriculture based processing mills or consumer products based firms. There were few capital/metal goods producing enterprises. Aside from that, agriculture based small enterprises have were found to be more linked to the local economy through backward and forward linkages.

Table 7. Employment

Categories of small scale enterprises (by products)	No. of employees	%	Ondo North	Ondo Central	Ondo South
Agro food	252	35.7	73(35.8%)	95(33.7%)	84(38.2%)
Industrial /Constructional materials	142	20	39(19%)	55(19.5%)	48(21.8%)
Consumer products	158	22.4	48(23.5%)	50(17.7%)	60(27.3%)
Textiles	80	11	20(9.8%)	50 (17.7%)	10(4.5%)
Capital / Metal goods	30	4.3	10(4.9%)	14(4.9%)	6(2.7%)
Wood based firms	44	6	14(6.9%)	18(6.3%)	12(5.5%)
Total	706	100	204	282	220

Source: Authors' own elaboration

Another measure of regional development impact relates to the possibility of products being used within the source region. Yet it is evident that Agro/food based enterprises has the highest propensity of being used within the town of location. Fifty six (56%) of products were used within the towns where they were sited. This is followed by constructional materials based enterprise 50%, wood based enterprises being 45% and consumer products enterprises, 32%. Other sectors are less significant (see Table 7).

Enterprises with the highest returns on capital investment may help to improve regional development since they, all things being equal attract highest investment. Increased investment leads to more jobs, linkages and multiplier effects. Enterprises with the highest returns on investment according to responses of proprietors were the wood based enterprises where 72.7% of respondents in the sector picked good returns. This is followed by the food products sector where 54.8% of respondents in the sector only picked good returns. Textiles had 42.8% and consumer product small scale enterprises had 37% of entrepreneurs picked good return on capital

investment. The implication of this is that wood based and food based small scale enterprises have the highest propensity to invest further in the local economy.

Table 8. Possibility of Product Being Used Within the Source Region

Market range	Food /Agro Product		Textile		Consumer Product		Iron & Capital goods		Wood Based Enterprises		Constructional Material	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Valid No Response	-	-	-	-	-	-	-	-	-	-	-	-
Within the Town	70	55.6	10	12.8	25	32	2	13	10	45	20	50
Within the State	51	40	8	11	13	16.7	10	66.6	-	-	8	20
Within Western State of Nigeria	3	2.4	12	17	17	21.8	3	20	9	40.9	6	15
Within Nigeria	2	1.6	40	57	23	29.5	-	-	3	13.6	6	15
	126		70		78		15		22		40	

Source: Authors' own elaboration

Table 9. Return on Capital Investment

Market Range	Food Product		Textile		Consumer Product		Iron & Capital goods		Wood Based Enterprises		Industrial/ Constructional Material	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Valid No Response	-	-	-	-	-	-	-	-	-	-	-	-
Poor	1	0.8	2	2.9	2	2.6	-	-	-	-	-	-
Average	53	42	33	47	44	56	10	66.7	6	27	33	82.5
Good	69	54.8	30	42.8	29	37	5	33.3	16	72.7	2	5
Excellent	3	2	5	7	4	5	-	-	-	-	5	12.5
	126		70		79		15		22		40	

Source: Authors' own elaboration

Lastly, the average monthly incomes of workers working in all the industrial categories were calculated in order to determine the sectors that had the highest positive impact on income of worker. It was discovered that worker in wood based enterprises had the highest estimated monthly average income of N10, 003 followed by capital goods enterprises with N9, 208, textile sector paid an average of N8, 201, and others are shown in Table 10

Table 10. Impact on Income

Industrial group	No	Estimated monthly average income of workers
Agro	252	5,450
Industrial / Constructional material	142	6,200
Consumer product	158	6,500
Textile	80	8,201
Capital goods	30	9,208
Wood	44	10,003

Source: Authors' own elaboration

The Table below was therefore derived from the discussion so far held. The objective criteria which were used to rank the percentage of the degree of contribution of these various categories of industries to regional development were added up as shown in Table 11.

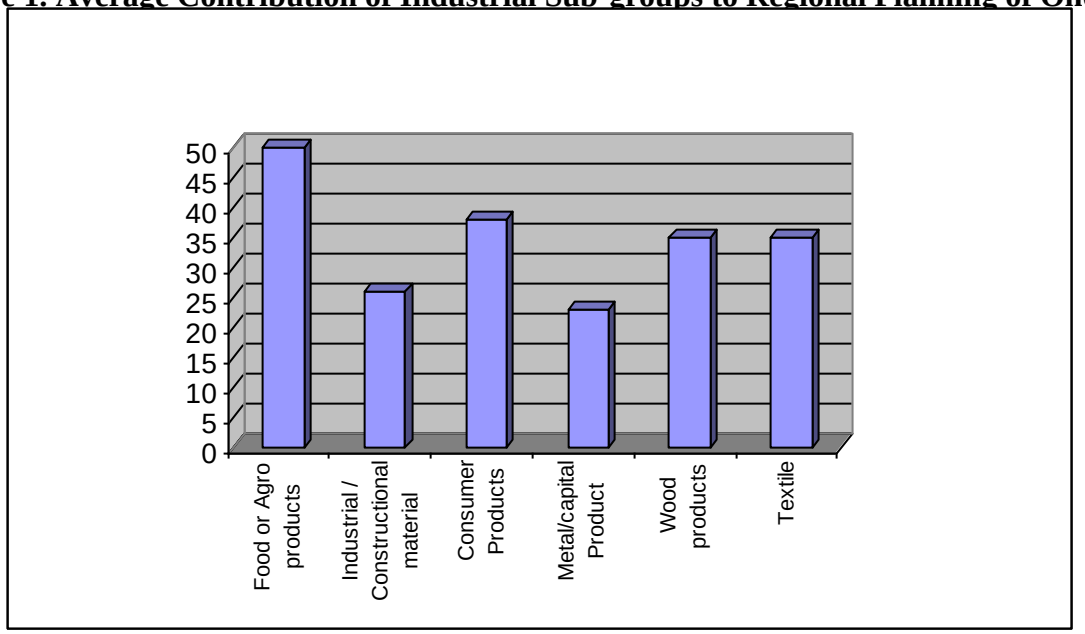
Table 11. Ranking of Relative Contribution of Industrial Sub-groups to Development

Categories	Quantity of SSI Present	Local Sourcing of Raw material	Contribution to skill development	Technology adopted	Capital retention in the source region	Employment	Possibility of product being used within	Income level of workers	Return on Capital investment	Gender friendliness	Total Score
Food or Agro products	6	3	6	5	6	6	6	1	5	6	50
Industrial / Constructional material	4	1	1	3	2	4	5	2	1	3	26
Consumer Products	5	4	4	6	1	5	3	3	3	4	38
Metal/capital Product	1	2	3	2	5	1	2	5	2	-	23
Wood products	2	6	5	1	3	2	4	6	6	-	35
Textile	3	5	2	4	4	3	1	4	4	5	35

Source: Authors' own elaboration

The total scores of the various categories of industries were shown here in form of graph in Figure 1 below.

Figure 1. Average Contribution of Industrial Sub-groups to Regional Planning of Ondo State



Source: Authors' own elaboration

One could therefore deduce from Figure 1 that agro/ food based small enterprises, consumer product industries and wood based enterprises contributed more to regional development with a total score of 50, 38 and 35 with the least being Metal/Capital product based small enterprises with their average scores of 26, and 23 respectively.

Table 12. Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.882	48.026	48.026	2.882	48.026	48.026	2.382	39.707	39.707
2	1.403	23.379	71.404	1.403	23.379	71.404	1.902	31.697	71.404
3	.808	13.471	84.875						
4	.583	9.716	94.591						
5	.301	5.010	99.601						
6	.024	.399	100.000						

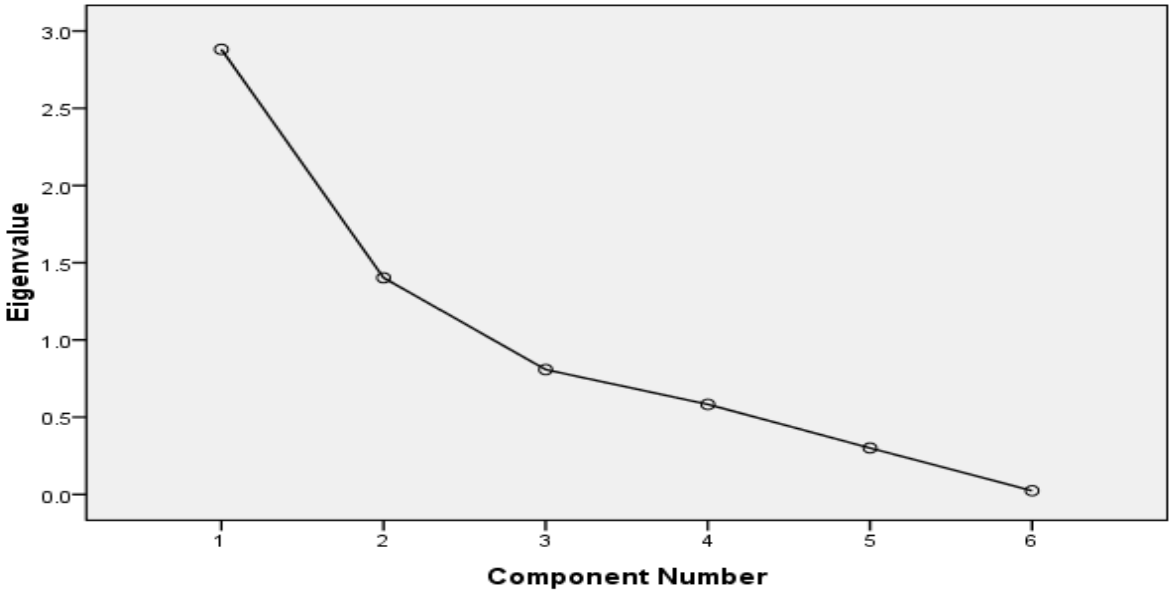
Extraction Method: Principal Component Analysis.

Source: Authors' own elaboration

However, in order to introduce more rigors into the study, Factor analysis was applied in analyzing the scale which ranked the degree of contribution of various industrial sub groups with

a view to isolating the most important group that contributed more to regional planning. The variance is shown in Table 12.

Figure 2. Screen plot of contribution of various industrial sub-groups



Source: Authors' own elaboration

The result showed that there is a slight variation, food and agro product, as well as consumer products industries still maintained some dominance with loadings of 0.723 and 0.615 as in Fig. 2. However wood products industry dropped and was replaced with industrial/constructional product industries, which had a loading of 0.766. Other industrial sub-groups remained insignificant. The screen plot of the degrees of contribution of the industrial subgroups is shown in Fig. 2

The categories of small scale enterprises that were best for the different regions of Ondo State were also investigated. It is however clear that all the regions exhibit the same characteristics with minor variation. For example, the percentage of food industries, though averaged 35.7% for the whole Ondo State, it however varied from 49% in Ondo North, 33% in Ondo Central, and 26% in Ondo South. A casual observer may argue that food based enterprises were more relevant to regional development of Ondo North and Ondo Central rather than Ondo

South. This may not be entirely true since even the 29 agro based enterprises sampled in Ondo South which equals 26% is still the highest for that region among all the classes of industries.

The contribution of agro based enterprises, consumer products industries, and industrial/construction product industries were also strong in the area of local sourcing of raw materials in all the regions sampled (55%, 51.9%,29.6% and 72.7%) as shown in table 2, same with their contributions to skill development, and capital retention in source regions. Wood based enterprises were particularly strong in the area of improvement in income and returns on capital investment as shown in Table 3, across the three regions. While industrial/ constructional products contributed more in the area of quantity of product, employment and use of products as raw materials for other enterprises. Yet food based enterprises had, low capital investment, and were dependent on local raw materials.

In the area of employment generation, these industrial categories generate the total of 552 employment representing 78% of total employment, through the contribution of wood based enterprises is not really high (44) or just 9.6% .It may therefore be safe to conclude that these industries were more linked to the local economies in the three regions sampled, of course with some minor variations.

On the basis of these discussions therefore, these three categories of industries were food or agro based, consumer products and industrial/construction product enterprises are recommended for the regional development of the three regions of the state.

6. Summary and conclusion

The study has been concerned with evaluation of the various small scale industrial subsectors with a view to measuring their contributions to development of Ondo State of Nigeria. This was with the objective of isolating the most important contributors that should be encouraged for comprehensive regional development of the state. To this extent, views of the 353 sampled proprietors of all sectors were collated on the quantity of small scale industries present in the state, possibility of local sourcing of raw materials, contribution to skill development, technology adopted in production, capital retention in the source region, employment capability, possibility of the products being used within the source region, returns in capital averment, and

impact on improvement in income. Objective criteria were used to rank the above indices of development and scores were given from 1-6, depending on the impact a particular sector has had on development. Total scores were derived and presented in bar graph, where four sectors were isolated-food/Agro products, consumer products, wood products and textile sectors with total scores of 50, 38, 35, and 35.

In order to introduce more regions into the study, factor analysis was applied to evaluate the scores derived for each sector. The result shows that food/agro products industries and consumer product enterprises remain dominant with factor loading of 0.723 and 0.615, while wood sector dropped and was replaced with industrial/constructional products industries with factor loading 0.766. The study therefore established that these three small scale industrial sub sectors contribute more to regional development of Ondo state and should be encouraged.

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Wkład sektora małych przedsiębiorstw przemysłowych w rozwój regionalny w stanie Ondo w Nigerii

Streszczenie

O ile ekonomiczne efekty niewielkich przedsiębiorstw przemysłowych nie budzą wątpliwości, o tyle w artykule przeanalizowano relatywny wkład różnych sektorów z podgrupy przemysłowej w rozwój regionalny, wyodrębniając najważniejsze czynniki rozwoju w stanie Ondo. W badaniach wykorzystano 353 kwestionariuszy skierowanych do właścicieli małych przedsiębiorstw przemysłowych proporcjonalnie w całym stanie. Dane uzyskano również z agencji rządowych oraz ministerstw odpowiedzialnych za formułowanie oraz wdrażanie polityki dotyczącej sektora małych przedsiębiorstw przemysłowych. Zgromadzone dane poddano statystycznej analizie opisowej oraz dedukcyjnej. Kryteria celu 6-1 wykorzystano do uporządkowania poglądów właścicieli dotyczących stopnia wkładu sektora w rozwój stanu. Całkowity wynik uzyskano dla każdego sektora przemysłu i zaprezentowano za pomocą wykresów słupkowych, a następnie poddano analizie czynnikowej. Najwyższe współczynniki (0,723; 0,615 i 0,766) spośród wszystkich małych przedsiębiorstw przemysłowych charakteryzowały przemysły rolno-spożywczy, produktów konsumpcyjnych oraz produktów przemysłowych i budowlanych. Z tego względu badania pozwoliły na wyróżnienie tych trzech podsektorów jako najbardziej przyczyniających się do rozwoju stanu Ondo.

***Słowa kluczowe*:** małe przedsiębiorstwa przemysłowe, sektory przemysłowe, rozwój regionalny