

Spatial Distribution of Socio-Economic Factors in Kogi State, Nigeria: Development Issues and Implication(s)

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Abstract—This study analyzed the spatial distribution of socio-economic factors in Kogi state with a view to examining its implications on the development of the state. Consequently, questionnaires were administered on both the selected individual respondents (784) in the state and on the administrative offices (local council offices, 21) to solicit relevant information on the spatial distribution of socio-economic factors in their areas. The collected data were tabulated and analyzed using percentages. The study revealed commerce/trade, education, and health care, etc. as the major socio-economic factors in the state but with marked variation/imbalance in their spatial distribution across the study area. The rural-based local government areas have far less of such important facilities. Conclusively, it was recommended that there is need for socio-economic transformation of living conditions of people in the study area especially by positively redistributing local political power and the resources that are abound in the state will be felt by everybody including the commoners.

Keywords—Development, local government areas, socio-economic factors, spatial distribution.

I. INTRODUCTION

THE issue of regional inequalities is very glaring in developing countries of the world due to various reasons like uneven distribution of physical, human & natural resources, and variations in the level of economic development and this has given rise to polarized pattern of development among regions and among countries of the world. In the developing economies, such as Nigeria, spatial inequalities are noticeable between rural areas and their urban counterparts. This polarization of society into rural and urban components is hardly arguable. Such highly centralized spatial structure of the Nigerian economy and standards of living is deeply rooted in the history of colonization which led to the movement of labour to areas with comparative advantages in cash crop production and emergence of a number of regional developments along the transportation system [1]. The profound influence of this trend on national and regional development is still very much evident today as both the state

and local government capitals/headquarters are more socio-economically developed than the adjoining hinterlands.

There are research findings by different researchers all over the world that aimed at recognizing the spatial variations/inequalities in the distribution of socio-economic factors/development ... [2] which ultimately will assist the governments, citizens and policy makers in addressing it. For instance, Kalirajam's [3] study on the economic reform and the transmission of growth impulses across Indian States and that of Noorbalahrh's on spatial inequality, polarization and its dimensions in Iran [4] are examples of international researches on the spatial distribution of socio-economic development. So also, in the context of Nigeria, tremendous research efforts have gone into the study of spatial incidence of development. The findings of such national studies bore remarkable similarities with those done at the international level. For instance, Abumere [5], [6] both submitted that the rich is getting richer while the poor is getting poorer in, especially between the inland North and Coastal South of, Nigeria; and also that the attainment of distribution equity, which informed the numerous policies and programs of the Nigerian government, was yet to be achieved. Again, the research of Ita et al. [7] also shows that growth centers induce further development and higher levels of prosperity over an extensive geographical area. According to Adefila [8], historical factors, political, cultural, and natural endowment to economic processes, among others, are the main causes of uneven spatially spread socio-economic activities. The researcher further asserted that with the understanding of processes at work, attempts have always been made towards the identification of spatial inequalities among the regions and to produce a body of theory for their areal explanation. Yet till-date, there are veritable testimonies that regional imbalance in the distribution of economic factors/development still persists in Nigeria. Therefore, it is on this basis that this study aimed at providing empirical data on the spatial distribution of socio-economic factors/development in Kogi State. However, the specific objectives are to:

- i. Identify the major indicators of socio-economic factor in Kogi State.
- ii. Analyze the spatial distribution of the socio-economic factor in Kogi State.
- iii. Discuss the implication(s) of the observed spatial distribution of these factors on the socio-economic development of the study area

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II. STUDY AREA

Created in 1991, Kogi state which has a total landmass and total population of about 30,345.74 Km/Sq and 3,442,868 respectively [9] is located in the North-Central part of Nigeria. Specifically, it lies between latitudes $6^{\circ}49'N$ - $8^{\circ}30'N$ and longitudes $5^{\circ}35'E$ - $7^{\circ}45'E$ and it is bordered by both Federal Capital Territory (FCT) and 10 other states [10]. The main

ethnic groups in Kogi state are the Igalas (largest group), Ebiras, and the Okuns. Kogi state, with landscape of about 300-600 m.a.s.l and many hills, is majorly drained by River Niger and Benue [11]. The state has 2 marked seasons (dry seasons from November to March and rainy season from April to October), a yearly temperature range of $22.8-33.2^{\circ}C$, and both forest and savannah vegetations [12].

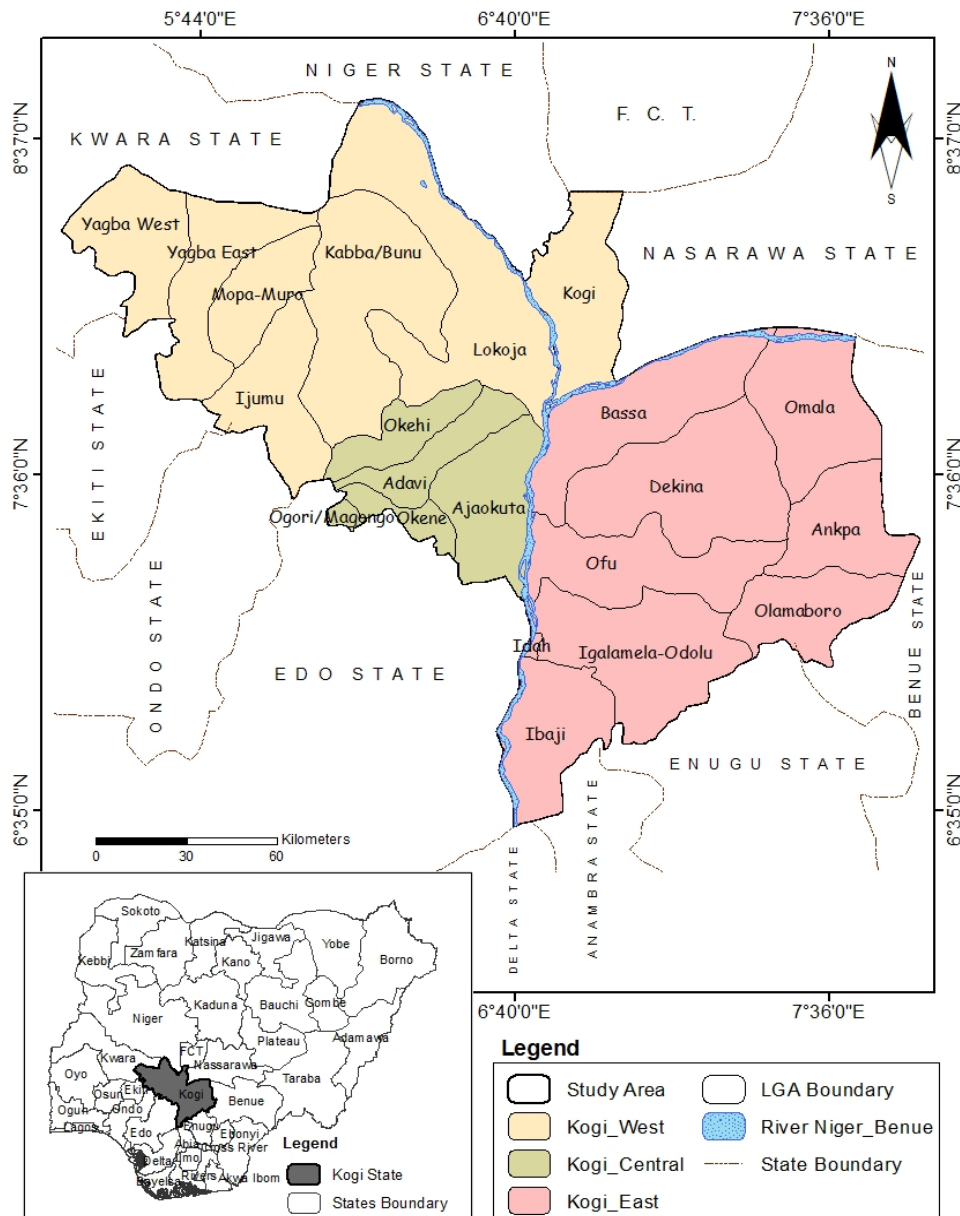


Fig. 1 Map of Kogi State Showing the Senatorial Districts and the Local Government Areas [10]

III. MATERIALS AND METHODS

Materials collected and used for the study included information on the major socio-economic factors, like education, commerce, social & infrastructures and others

(either state or private facilities). These data provided first-hand information on the major socio-economic factors, spatial distribution and pattern of socio-economic development in the study area. Data collection was done by the researcher and 5 field assistants between September and November 2015; and a

total of 784 questionnaires were administered on respondents to identify and list all the socio-economic factors in their local government areas (LGAs). From these, 22 socio-economic factors were identified from which 4 important ones were extracted for analyses and discussion. Thereafter, 21 questionnaires were administered on the twenty-one Local Government Headquarters to determine the distribution of the identified major/selected socio-economic factors. In addition, many respondents were randomly interviewed if whether they own a mobile phone and/or listen to Radio/Television in their homes. Lastly, direct field observation and interview methods (as well) were used to determine the number of Telecommunication Mast (TCM) in the study area. All observation/interviews were duly recorded and used for analyses. Subsequently, tables, frequency and maps were used for data presentation and analyses.

IV. RESULT AND DISCUSSION

A. Major Factors of Socio-Economic Development in Kogi State, Nigeria.

The major socio-economic factors/indicators that were extracted and used for this study in Kogi state include Commerce & Trade, Education, Communication, and Health Care. Below are the highlights of these identified major socio-economic factors/indicators in the study area.

1. Commerce/Trade Facilities

Among the important socio-economic factors in Kogi State are markets (commerce/trade). Table I shows a total 499 markets (186 periodic and 313 daily) in Kogi state, it is however evident that there is glaring spatial variation in the distribution of such markets. For instance, out of the 186 periodic markets in the whole state, only Igalamela LGA in Kogi East senatorial district has as much as 20 of them whereas Ogori LGA (Kogi Central) has just only 2. Also, out of a total 313 daily markets in the state, 90 of them are located in just 3 LGAs (Ankpa LGA 30, Bassa LGA 30 and Dekina LGA 30) all of which are in Kogi East senatorial district. This is much more than the total daily markets that are located in the whole of either Kogi West or Kogi Central senatorial districts where each of them has just only 61 daily markets (see Fig. 2). Therefore, in Kogi state, the spatial imbalance in the distribution of commercial activities (particularly markets) has greatly and negatively influenced the spatial pattern of socio-economic development in the state. This is because, commerce and trade is one of the backbone of a developing society. Hence, it is very important to spatial, economic and social growth. It can therefore be argued that the availability of commercial facilities in any settlement does not only demonstrate the level of exchange of goods and services in that settlement [13]. but also related to the level of development of such settlement. Therefore, the uneven distribution of this facility in Kogi state makes those LGA with fewer markets to be backward in term of socio-economic development.

TABLE I
DISTRIBUTION OF MARKET FACILITIES IN KOGI STATE, NIGERIA

Senatorial District	LGA	Periodic Markets	Daily Markets	Total	%
Kogi Central	Adavi	06	15	21	4.2
	Ajaokuta	04	08	12	2.4
	Ogori-magongo	02	06	08	1.6
	Okehi	06	12	18	3.6
	Okene	10	20	30	06
	District Total	28	61	89	17.8
Kogi East	Ankpa	08	30	38	7.6
	Bassa	10	30	40	08
	Dekina	15	30	45	09
	Ibaji	10	20	30	06
	Idah	12	16	28	5.6
	Igalamela	20	18	38	7.6
	Ofu	10	12	22	4.4
	Olamaboro	15	23	38	7.6
	Omala	10	12	22	4.4
	District Total	110	191	301	60.3
	Kogi West	186	313	499	100
		(37.3%)	(62.7%)		

2. Educational Facilities

TABLE II
DISTRIBUTION OF EDUCATIONAL FACILITIES IN KOGI STATE, NIGERIA

Senatorial District	LGA	Primary	%	Secondary	%	Tertiary	%	Total	%
Kogi Central	Adavi	35	3.1	10	1.7	-	0.0	45	2.6
	Ajaokuta	25	2.2	18	3.1	-	0.0	43	2.5
	Ogori-magongo	15	1.3	12	2.0	-	0.0	27	1.5
	Okehi	30	2.6	18	3.0	-	0.0	48	2.7
	Okene	35	3.1	20	3.4	02	8.3	57	3.2
	District Total	140	12.3	78	13.2	02	8.3	220	12.6
Kogi East	Ankpa	55	4.8	40	6.8	01	4.2	96	5.5
	Bassa	95	8.4	50	8.5	-	0.0	145	8.3
	Dekina	102	9.0	53	9.0	03	12.5	158	9.0
	Ibaji	65	5.7	55	9.4	01	4.2	121	6.9
	Idah	50	4.4	45	7.7	01	4.2	96	5.5
	Igalamela	54	4.8	35	5.9	02	8.3	91	5.2
	Ofu	98	8.6	21	3.6	-	0.0	119	6.8
	Olamaboro	60	5.3	26	4.4	02	8.3	88	5.0
	Omala	51	4.4	15	2.5	02	8.3	68	3.9
	District Total	630	55.5	340	57.8	12	50	982	56.2
	Kogi West	1135	100	588	100	24	100	1747	100

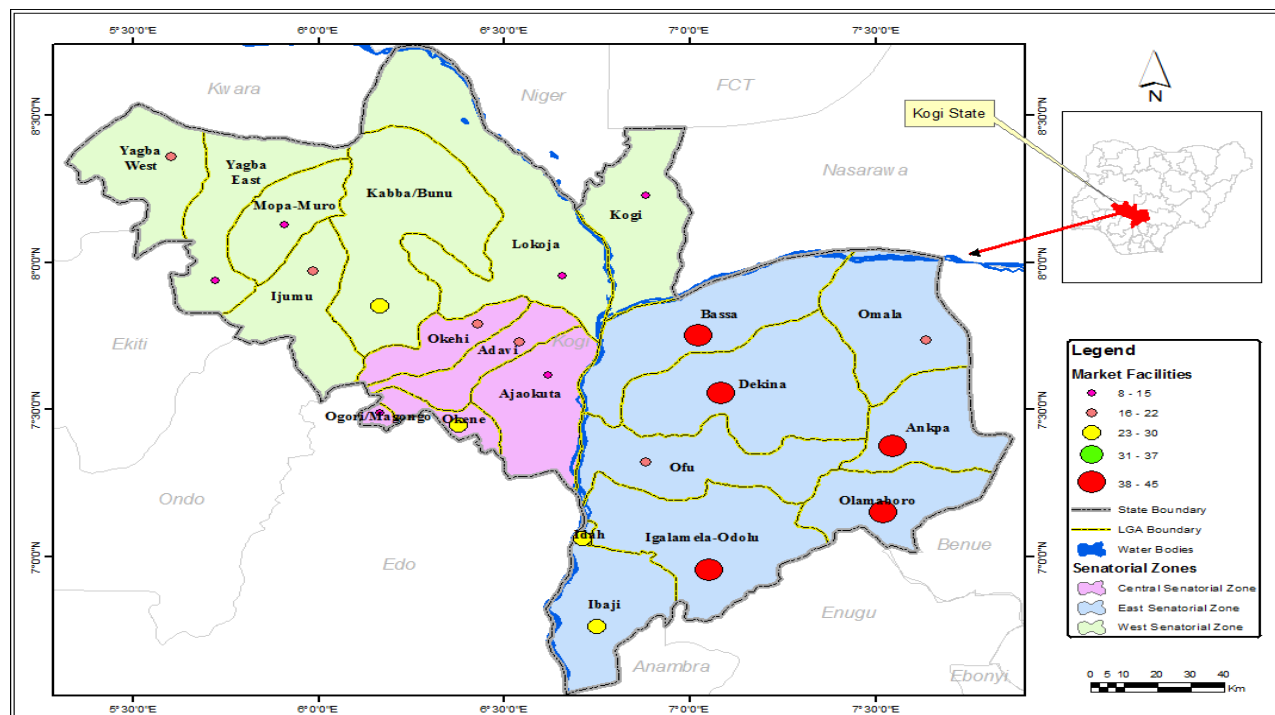


Fig. 2 Distribution of Markets in Kogi State, Nigeria

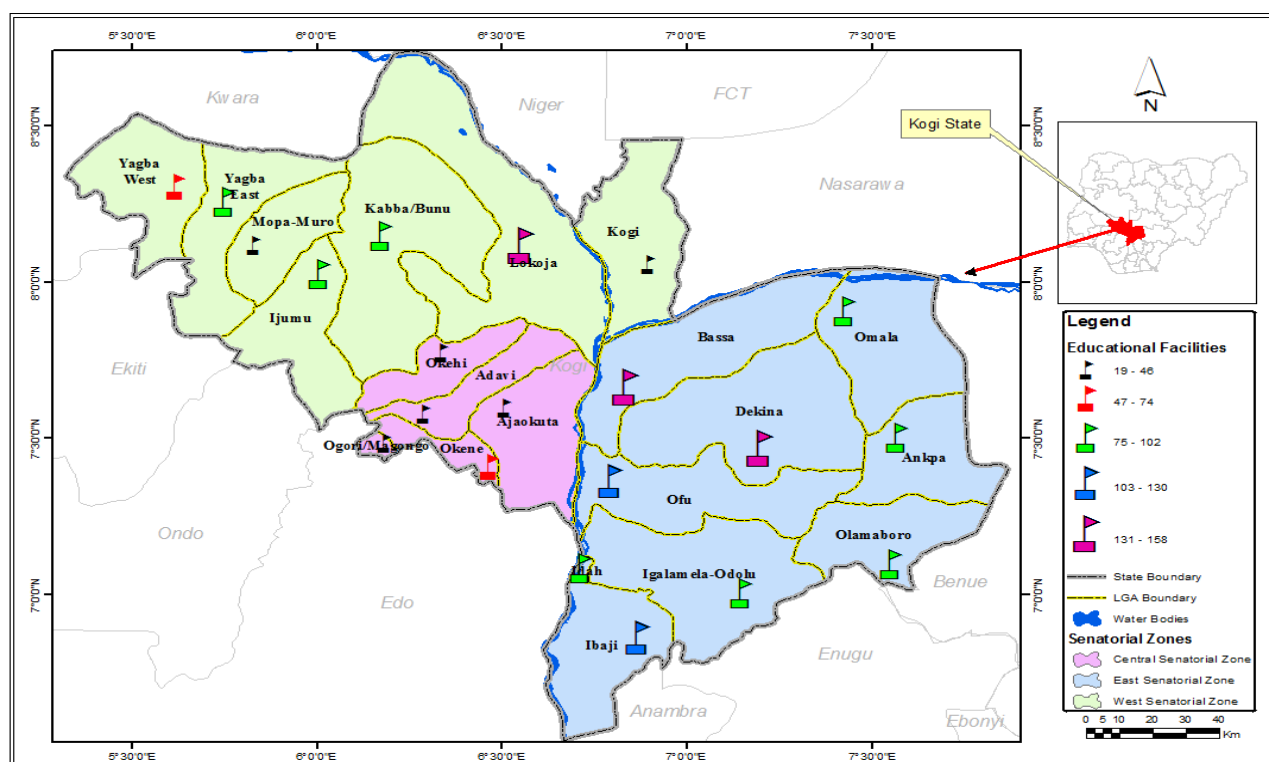


Fig. 3 Distribution of Educational Facilities in Kogi State, Nigeria

Table II shows that there is a total of 1,747 educational facilities in the whole of Kogi state but they are greatly unevenly distributed spatially because only Kogi East

Senatorial district with just only 9 LGAs houses more than 55% of such facilities with over 30% of it in just only 4 LGAs (Bassa LGA 8.3%, Ibaji LGA 6.9%, Dekina LGA 9.0%, and

Ofu LGA 6.8%). This is equivalent to what the whole of Kogi west senatorial district with 7 LGAs has. Although, Lokoja is the state capital yet it has as many as 158 schools including 102, 51 and 5 primary, secondary and tertiary schools respectively. Unfortunately, Ogori, Kogi, and Mopa-muro are among the LGAs with the least educational facilities. Even more worrisome is the spatial distribution of the tertiary institutions in the state because whereas only Lokoja and Dekina LGAs alone has a combined total of 8 higher institutions out of the 24 in the state, about 8 other LGAs have none.

TABLE III
DISTRIBUTION OF COMMUNICATION FACILITIES IN KOGI STATE

Senatorial District	LGA	Projected Population (2014)	No of Post Offices	No of TCM	No of Mobile Phone Users (%)	No of Radio/TV Listeners (%)
Kogi Central	Adavi	279,037	10	04	80	70
	Ajaokuta	157,275	04	02	60	50
	Ogori	51,136	04	05	60	60
	Okehi	287,201	10	07	60	75
	Okene	418,292	08	08	75	75
	District Total	1,192,941	36	26	335	330
Kogi East	Ankpa	341,927	10	07	60	80
	Bassa	179,440	15	10	56	80
	Dekina	334,237	18	12	70	75
	Ibaji	163,878	08	08	65	65
	Idah	102,452	07	08	70	68
	Igalamela	188,896	08	14	65	75
	Ofu	245,973	08	10	55	70
	Olamaboro	203,595	10	15	78	80
	Omala	138,695	08	12	65	80
	District Total	1,557,166	92	96	584	673
Kogi West	Ijumu	152,343	06	05	70	60
	Kabba/Bunu	266,176	10	08	60	60
	Kogi	147,856	06	05	80	45
	Lokoja	252,605	10	15	60	80
	Mopa-muro	144,579	04	05	65	65
	Yagba-East	189,658	07	08	65	75
	Yagba-West	179,750	08	10	65	70
	District Total	1,332,967	51	56	465	455
	Total	4,257,183	179	178	1384	1458

Evidently, education is a key to achieving poverty eradication, food security, durable peace and sustainable development. Findings of previous studies have shown that education affects the pattern of employment, income status, housing, food and nutritional status and the overall level of well-being [14]. Hence, education is regarded as an engine of growth and plays a unique role in economic development and the social transformation process {Falola, 1989 in [14]}. In this study the availability of more schools in some part of the study area than others were seen to have contributed, a great deal, to the observed spatial pattern of socio-economic development in Kogi state.

3. Communication Facilities

According to Table III, there are about 179 post offices and 178 communication masts in the study area. However, their

spatial distribution throughout the 21 LGAs of the state was not balanced. For instance, except Lokoja LGA (state capital) all the LGAs with most of the TCM are in the eastern senatorial district of the state (Dekina 12, Olamaboro 15, Igalamela 14, and Omala 12). Unfortunately, Mopa-muro, Ogori, Adavi, and Ijumu amongst other western and central senatorial districts have the least. Again, the spatial distribution of post offices in the study area (Kogi State) is as well not balanced (see Table III). Interestingly however, as much as 55-80% and 65-90% of the population in Kogi state have access to mobile phones and radio/television facilities/services respectively.

The role of communication in the process of development in any society cannot be over-emphasized. It is capable of assisting the diffusion of ideas and innovation; and help in no small measure to spread the benefit of development from the industrial urban centres to the rural hinter-lands usually in form of spread effects [15]. Also, [16]-[18] all acknowledged the crucial role of communication to spatial, economic and social development. Therefore, in this study, communication system in the study area was seen to have contributed a great deal to the observed spatial pattern of socio-economic development in Kogi state (Fig. 4) with much more socio-economic development in the eastern senatorial district of the state than in any other district(s).

4. Medical Facilities

TABLE IV
DISTRIBUTION OF MEDICAL FACILITIES IN KOGI STATE, NIGERIA [19]

Senatorial District	LGA	2014 Projected Population	Primary Facilities	Secondary Facilities	Tertiary Facilities	Total
Kogi Central	Adavi	279,037	30	02	00	32
	Ajaokuta	157,275	23	02	00	25
	Ogori-magongo	51,136	09	02	00	11
	Okehi	287,201	22	02	00	24
	Okene	418,292	36	11	00	47
	District Total	1,192,941	120	19	00	139
Kogi East	Ankpa	341,927	40	06	00	46
	Bassa	179,440	87	08	00	95
	Dekina	334,237	127	12	01	140
	Ibaji	163,878	39	03	00	42
	Idah	102,452	43	01	00	44
	Igalamela	188,896	70	03	00	73
	Ofu	245,973	75	03	00	78
	Olamaboro	203,595	78	12	00	90
	Omala	138,695	30	03	00	33
	District Total	1,557,166	590	50	01	641
Kogi West	Ijumu	152,343	34	03	00	37
	Kabba-Bunnu	266,176	36	03	00	39
	Kogi	147,856	32	01	00	33
	Lokoja	252,605	35	15	02	52
	Mopa-Muro	144,579	20	03	00	23
	Yagba-East	189,658	33	02	00	35
	Yagba-West	179,750	21	02	00	23
	District Total	1,332,967	208	19	02	227
	State Total	4,083,074	915	104	03	1022
			(89.5%)	(10.2%)	(0.3%)	

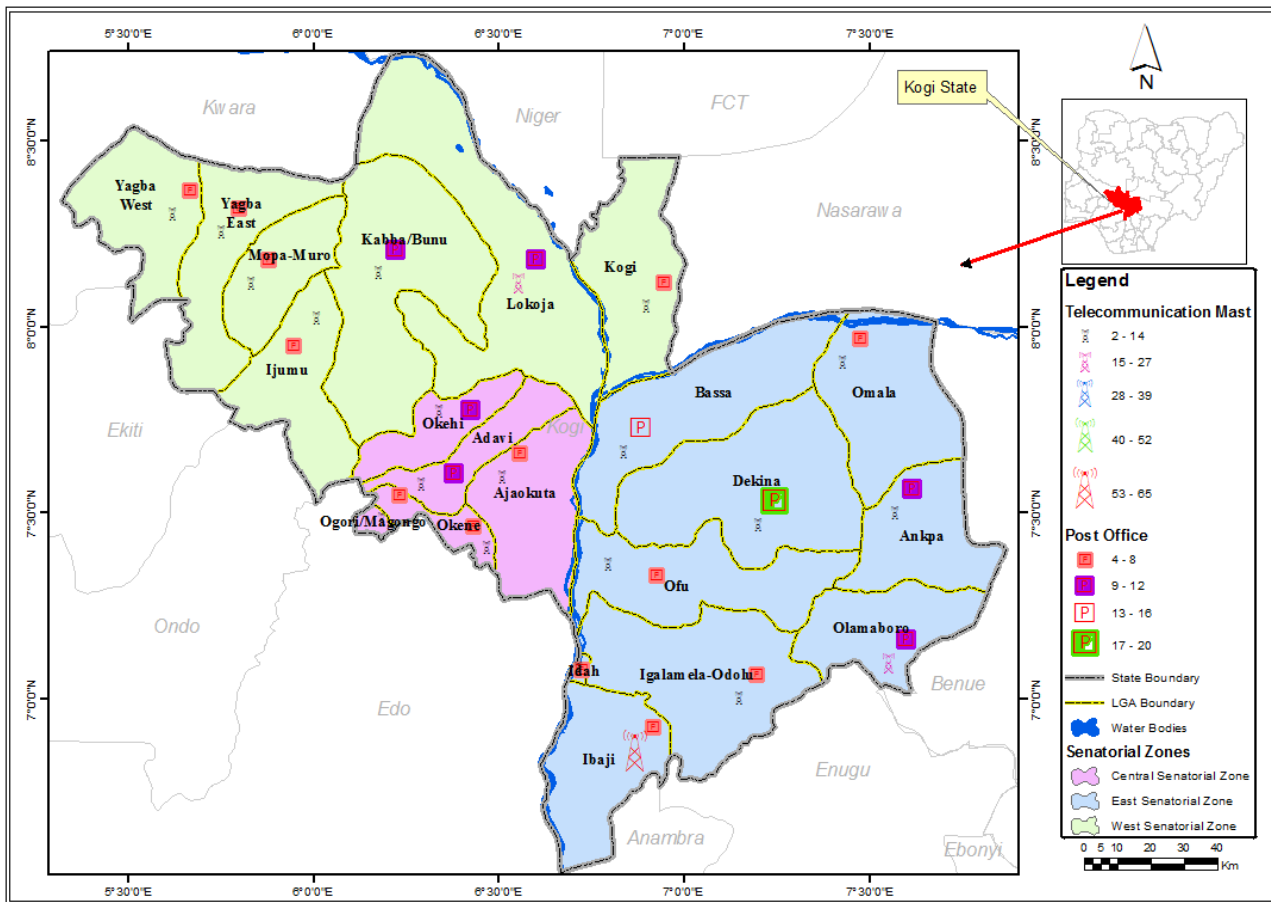


Fig. 4 Distribution of Communication Facilities Kogi State, Nigeria

According to Table IV, Kogi state has a total of 1,022 medical facilities in the rate of 89.5%, 10.2% and 0.3% for primary, secondary and tertiary facilities respectively. However, the distribution pattern of these facilities mostly favours Kogi East Senatorial District (57.7%). This is distantly followed by Kogi West and Kogi Central Senatorial Districts with just 20.4% and 11.7% respectively. Furthermore, more than half of the available primary (64.5%) and secondary (56.8%) health facilities are located in Kogi East Senatorial District alone. Kogi Central has the least (13.1% primary and 21.6% secondary health facilities). This did not reflect the pattern of population distribution in the state which is 38.1%, 32.6%, and 29.2% for Kogi East, Kogi West and Kogi Central Senatorial Districts respectively.

The implication(s) of the uneven spatial distribution of medical facilities in Kogi State is that more residents of Kogi East Senatorial District will have access to better/more Medicare than their counterparts in the other Senatorial Districts. For instance, while on average, just a little over 2400 residents of Kogi East Senatorial District will use one medical facility in their area, it is rather as many as 5873 and 8583 residents that will use same numbers of facility in Kogi West

and Kogi Central Senatorial Districts respectively. This is grossly insufficient to meet the healthcare needs of the residents of the area especially for the fact that these few facilities are spatially unevenly distributed. Therefore the observed spatial distribution pattern of the health facilities in the study area corroborate the assertion of {Falola, 1989 in [14]} who remarked that on the pattern of health status, there is considerable inequality among States in urban than rural areas; and Okafor, in [14] who also asserted that, the distribution of health facilities has been lopsided in favour of the just 20% of the population in the urban centre to the neglect of the 80% of the population that resides in rural areas. Therefore, convergence of opinions agreed that there is a close association between health status and the general socio-economic well-being of a population; especially that lack/insufficient of adequate basic health care facilities have led to inefficiency in production, declined productivity, reduced life-expectancy and increased infant mortality rate [14]. Therefore, medical and health facilities are very crucial in spatial pattern of socio-economic development in any society.

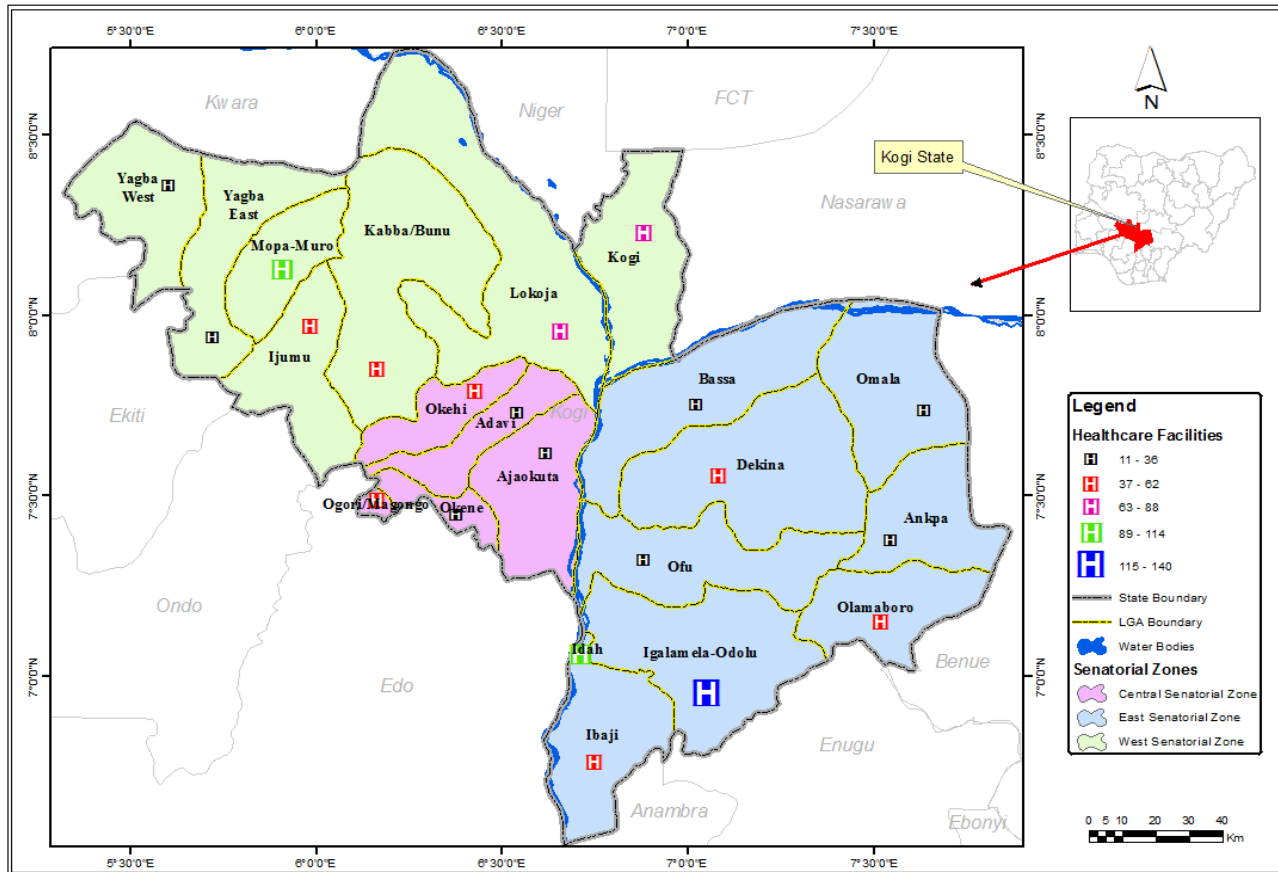


Fig. 5 Distribution of Health Care Facilities in Kogi State, Nigeria

V. CONCLUSION

This study was conducted with the aim of identifying the major socio-economic factors, its spatial distribution and implication(s) on socio-economic development in Kogi state. After painstakingly identifying the 4 major socio-economic factors in the area, it was evident that there is imbalance/inequality in the distribution of these development indicators among the LGAs in the state with relatively high concentration of it in the state capital and in the nine LGAs of the Kogi East Senatorial District only, and gross deficiency in the remaining LGAs. Such spatial distribution will not promote development. Therefore, redistribution actions/plans must be formulated and implemented to a logical conclusion by the governments at all levels so as to guarantee socio-economic development and the general well been of the citizenry of Kogi state, Nigeria.

VI. RECOMMENDATION

Based on the findings of this study, it is recommended that more important socio-economic factors like post offices, secondary and tertiary institutions, commerce/trade, medical/health be provided especially in those LGAs with less of such facilities so as to enhance rapid economic growth and social-economic development most especially in such LGAs/rural

areas. It is believed that this can, and will, drastically reduce the rate of inequality in the economic development, if not totally eliminated, and general living condition of the residents of the area will improve. Such transformation of living conditions of people in the study area should be coupled with positive redistribution of local political power "such that even the very, very local dwellers will have a say in the manner in which the resources of the state are distributed" [20].

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