



Evolving adequate futuristic institutional framework and capacity for sustainable transport management in the southwest coastal area of Nigeria

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Abstract

A national search for good comprehensive and strategies guidelines for developing the enormous natural resources in Nigeria's coastal area is going on. This search is prompted by the increasing geo-economic of this area which needs sustainable of Transportation management. There exists in the area, coastal water, inland waterways, rivers, lacks with little overland roads as a hindrance to these enormous resources. This paper examines the paradigm of sustainable transportation system use and the potentials as the nation's coastal area. Looking at the numerous natural resources and transportation problems as very crucial to sustainability of the numerous economic resources. It considers critically, the existing framework put in place to manage the vital transportation needs of the region. A proper analysis revealed disjointed task orientation of existing agencies and technical inadequacies among other serious deficiencies. The research concludes by systematically evolving a new framework, considered sufficient and necessary to sustain a good transportation system utilization in the area for social-economic development of the Nation.

Keywords: sustainable, transportation, social- economic, development, coastal - resources

Introduction

Transport and transportation infrastructural development contributes significantly to economic growth. A recent study by the World Bank revealed that across Africa infrastructure contributed 99 basis points per capital economic growth and 56 basis is from transport versus 68 points for other structural policies. Most of the contribution came from increases in Global distribution and in stocks (89 basis points) verse quality improvement (10 basis point).

These findings show that growth is positively affected by the volume of transport and transportation infrastructure stocks and the quality of capacity infrastructural services (Calderon, 2009) ^[4] one of the three broad categories of local economic development LED initiatives and involves participation of community Based organisations (CBOs) in the provision of physical infrastructure in transportation system in their communities

The nation is undergoing rapid economic development that needs adequately futuristic institutional frame work and capacity for sustainable transportation system. Further, the rapid exploitation especially of fossil fuels sea-ports developments, fishing industries, Export processing Zones and manufactured industries obviously have impacts on the transportation system and fragile physical ecosystems of the area. (Akinoyosoye2010) ^[1]. The critical resources in the coastal area are obviously non-renewable, the long-term use of which can only be sustained if the rate of use is controlled to match the limits of regeneration and natural growth. Sustainability after all is about ensuring intergenerational equity in access to and use of transportation for resources management (Badejo, 2010).

CBOs have roles to play in economic development of individuals and local communities as they are involved in various developmental activities to enhance the living standard of the communities (Nelson 2004). The movement

and freight activities are basis on transportation, They execute their intentions through infrastructural provision, transportation and promotion of small and medium scale business and equally act as facilitators or avenues through which development diffused into communities The resources potential of the area can only be sustained, if there is harmonious development between resources use and the institutional capacity to move or distribute or transport the potential to the consumers (Olaseni 2004).

According to world commission on Environment and development (WCED 1989), sustainable development is a process of change in which the exploitation of resources, the direction of investment, the orientation of technological development and institution of technological development and institutional change are all in harmony to enhance both current and future potential to meet human needs and aspirations through transportation system. The sustainable transportation development is the angle which catalysis the harmonious huge Relationship envisaged.

The transport industry is all pervading. It is involved in all the phases of production, consumption and distribution of goods and services. Consequently transportation is an inevitable component of all human endeavors. Improvements in transport infrastructure will increase personal mobility, reduce travel time, permit greater freedom, to people to choose where they live, work and shop. In the case of goods an efficient transport lowers the cost of production, acts as a means of diffusion of information, ideas, and disease and illegal activities (Calderon 2009) ^[4].

Transport infrastructural development largely depends on the stage of development of a nation's economy, the level of social development, the nature of the geographic environment and the political situation and stability of the country. Provision of transport infrastructure in Nigeria has

been the prerogative of the various tiers of government federal state and local government. The major determining factors have been of socially and politically strategic than economic (Oni, 2010).

The provision of new transport infrastructure whether on a local, state or federal government scale and whichever level of development affects transport capacity, price, model choice and trip making and purpose. Transport infrastructures have played dominant roles in the exposure of people to innovation. The development of railways, Airways and roads which began during the early years of British colonial rule in the country had significant effects on the process of regional development in Nigeria because it stimulated the product of new agricultural commodities such as cocoa, groundnuts, cotton, palm produce rubber, maize and Kolanut. The modern transport system brought new manufactured goods produced in Europe to people in various part of Nigeria brought water transportation.

Objectives of the Study

The main aim of this study is to examine the social-economic sustainable transportation Futurist work and capacity adequacies in the Southwest coastal area of Nigeria. This research ork examined existing transport frame work, Infrastructure in the study area, with the emphasis on it adequacy and capacity for future management. It also examined the available infrastructure and the likely futuristic frame work that are capable in sustenance of transportation and the development of a good management system while the contribution of the CBO's are used to forecast for the future.

Justification of the Study

The southwest of Nigeria is an area where enormous resource under exploitation, where more than 70% of Nigeria's industries investments, sea-port international commercial business Centre's are located. The same area is where the latest technology in crude-petroleum exploitation is on display, but where the expected institutional and human capacity, infrastructure to effect a sustainable frame work on transportation management usage of resources are in adequate.

Transport investment frame work and technologies are yet to be put in place. It is a huge and intolerable missing link in the chain of a proper definition to sustainable development. In 1996, the chairman of the steering committee of Niger Delta Environmental survey [NDES] stated that adequate institutional capacity is the objective to formulate action plans and strategies for effective institutional management of Nigeria's coastal environment to achieve sustainable development [NDES] which include transportation infrastructure in the coastal area.

The world bank also issued a report on the implementation of an action plan for integrated coastal zone management [ICZM] in Nigeria. In meeting the objective action plan institutional reform is an integral part of capacity building and transport infrastructure to create professional result-oriented and responsive agencies. Badejo (2000) Discussing maritime transportation policy and fishery resources management in the southwest coast of Nigeria, canvassed for micro meso and macro-focusing of implementable transport frame work policies by both local and national agencies. Obed. (2013) called for appropriate institutional frame work to resolve conflicts arising from the

transportation system in the coastal area of Nigeria.

Huge transport infrastructure projects in developed or industrialized world reflect a huge increase in the demand for movement of people and intergeneration new transport demand. It affects the local spatial economy and environment. It allows new patterns of national economic development to occur in contrast, the lack of sufficient transport infrastructure in less developed nations remains major problem to economic development. Ilaje local government falls into the category above. This paper examined the road transport infrastructural deficiencies of Ilaje area of Ondo State, in the south west, of Nigeria. Its socio-economic consequences on the community. The paper is divided into sections study area. Road transport infrastructure and problems effects of poor road transportation, the way forwards.

The Study Area

The paper focuses on the adequate futuristic institutional framework and capacity for sustainable transportation management to the south west coastal urban area (Lagos state) Apapa compared with that of rural coastland Ondo state (Ilaje LGA) through the provision of certain transport infrastructural facilities. The Apapa local government is located in Lagos State in the southern western geopolitical coastal zone of Nigeria. Lagos State is one of the smallest states in surface area. It is situated in the extreme south west corner of the country and comprises mainly the administrative local government of 56 local go0vernment as well as the first federal capital and commercial hub of the country. Generally Lagos state consists of Island-Lagos, Ikoyi, Apapa, Badagry among others. It hosts the international seaport which is the biggest in Africa. The Ilaje LGA, which is located in Ondo State was created out of the former Ilaje / Ese Odo LGA on 1st October 1996. It total land area is 2,300 Square kilometers. It lies within 4°28'N- 7°40'N and 5°41' – 7°23'E while the head quarter is at Igbekoda town. Igbekoda has offices in the Niger Deltas Development Commission (NDDC). Ondo state oil producing Area Development Commission (OSOPADEC) a naval base state civil service offices and series of commercial banks. The LGA is home to over 350 000 inhabitants going by the projections from the 2006 National Population census figures. The major tribe is Ilaje while the dominant occupation of the people is fishing. Existing natural resources include petroleum. Bitumen and water resources. There few roads and transport infrastructural facilities.

Methods and Materials

The two LGAs were selected for this study based on major geographical economic and cultural distinction. Apapa LGA is dominated by water transportation and sea-port activities it's an import and export shipping and fishing setting (characteristic of a coastal area which has direct link with the sea. It act as a link to the interlard of the state that accommodates most of the highest ware-house seaport, ship-yard, shipping industries, income earners and revenue generation to both private and public organizations and a lot of allied services facilities in which movement, mobility of both "Okada", cars, lorries, Trailer, sea-boat, ferry that need adequate Futuristic institutional framework and capacity for sustainable Transportation it's an urban area that is expanding daily.

Ilaje LGA is a coastal area, virtually rural, accommodating fishing occupation and uses of water boat and ferry for their fishing activities and Agriculture, Farming activities. The modern industry in the area are the exploitation of crude oil and bitumen both Apapa and Ilaje are linked with sea coastal ways with interlink to the inland towns with roads in Ilaje the construction of roads are minimal. Both LGA has the same geographic environment with coastal sea.

Open and close ended questions were employed to elicit data from household-heads and transport users, transport operator and transport policy agency. A total of 262 copies of the survey questionnaire were retrieved out of the 275 distributed to respondents (representing 95.3% response rate) in Apapa LGA while all of the 230 copies administered to respondents in Ilaje were retrieved.

The survey was conducted by trained field assistants for a week to allow for easy and maximum access to respondents. Data processing involved uni-variate analysis resulting in the generation of tables and charts which were later employed in the development of the facility contributory index. [FCI] model. The model was further developed using Likert's scale to obtain the level of contribution of transport facilities provided by; Government and CBOs to the respondent's economy.

Summary of Literature Review

The Geomorphological units of Nigeria coastal area is in composed of four distinct units namely the Barrier – Lagoon complex, the Mud coastal, the Actuate delta and the strand coast. Transport infrastructure depicts, in the first place, roads for cars, buses and trucks and rails for trains. However, natural the infrastructure is air and water (Jansson 2000). Inland waterways requires heavy investments in canals and locks, but also air transport and sea transport require manmade supplements- traffic Control devices, navigational aids, Stations etc. to constitute complete air ways and fair ways. Trimboth (2001). Defines transportation infrastructure as the underlying structure that Support the delivery of impacts (Labour and Consumers). To place of productions, goods and services to Customers, and people to work and Market places,

This work is confined to coastal area development with links to hinterland while community area are majorly on coastal site which include roads and water ways development, traffic management water transportation infrastructures and its development all this contribute to the commercial activities and economic development by providing access to an increasing productivity and providing amenities which enhance the quality of life and type of Transport support Frame work available in type of Transport support framework available in the area. Akinyosoye (2010) ^[1] stated that 'the settled that the services generated as a result of an effective transport infrastructure base will translate to transport and infrastructure base will translate to an increase in aggregate output. Installations of these transport infrastructures although will not produce goods and services but will ultimately provide input for commercial activities and development. Badejo (2006). Freight transport vehicles need special infrastructure as well as elaborate space for loading and unloading, jetties incase of water transport while this is

apparently different in road transport where the needs are bus-stops, filling stations, road signs, furniture and safety equipment.

In rural areas, the provision of these infrastructure is not available and its available where its provided by CBOs and CDD and LED. Oni (2006). Transport commercial activities in the coastal areas include a subset of complex system of companies, firms small scales organisations putting water motor vehicles, boats, ferry, vessels on water for commercial freight transaction for trader's uses, which try to maximize their profits by offering services to traders, passengers and recreational uses (which consists both of individuals and other companies) at the lowest production cost. The benefits derived from these are: travel time, vehicle operation costs, goods and passenger safety, gross output and human capital employment, revenue generation. Inter-relationship with other communities, assess to government services and other amenities, community development and spatial cohesion that favour a process of geographical specialization that increases transportation services.

Local Economic Development facilities contribution involves several multi-actors and approaches where a group of actors fall under CBOs. Mandela (1995) emphasized the fact that the Participation of CBOs and NGOs had enriched the evolution of the Reconstruction and Development Programme (RDP) into concrete policy document. In South Africa Participatory Rural Appraised (PRA) is an approach used by NGOs and other agencies involved in Transport International development.

Research Outcome: Comparison of Facility Contribution

This section discusses a pair-wise comparison of user's assessment of the provided facilities in the contributing to transport frame work and capacity in the two LGAs of study. It also concludes with a general but clear-cut comparison of the contribution of the facilities to the standard of operation, road users of transport system. In both cases, the aforementioned FCI model was employed to arrive at necessary conclusion. The model was developed such that weights were assigned to the people's perception of the level of each facility contribution. Table 1 below is Total of frequencies for levels of contribution.

To arrive at table 1. Respondents were required to indicate whether the listed facilities had been provided or not by government in the community. Also for those who responded positively, they were to indicate the perceived level of contribution of each facility to transport sustainable framework management. Therefore. Table 1 shows the total number of respondents who responded positively on facility provision and also the disaggregation of those respondents according to the perceived level of contribution of each facility to their operation system. For each facility, it is easily inferred from the table that most respondent indicated non-provision or did not respond at all; since the total number of respondents for Apapa and Ilaja are 262 and 230 respectively. This confirmed an earlier finding that government had performed far better than CBO's and NGOs in providing transport facilities within the study areas.

Table 1: Facility Contribution FOR APAPA COASTAL AREA AND ILAJE LGAs- Frequencies for Provision and Levels of Contribution

| S/N | Facility | Provided/ No: of respondents | | Very little Contribution | | Little contribution | | Fair contribution | | High contribution | | Very high contribution | |
|-----|--------------------------------------|------------------------------|-----|--------------------------|-----|---------------------|-----|-------------------|-----|-------------------|-----|------------------------|-----|
| | | ACA | ILA | ACA | ILA | ACA | ILA | ACA | ILA | ACA | ILA | ACA | ILA |
| 1 | Warehousing | 31 | 35 | 5 | 15 | 5 | 9 | 8 | 5 | 9 | 6 | 4 | 0 |
| 2 | Ferry | 64 | 55 | 18 | 22 | 21 | 16 | 17 | 6 | 8 | 7 | 0 | 4 |
| 3 | Safety/traffic control | 30 | 42 | 1 | 21 | 10 | 7 | 7 | 4 | 8 | 6 | 4 | 4 |
| 4 | Jetties | 74 | 69 | 15 | 19 | 23 | 11 | 14 | 16 | 9 | 19 | 13 | 4 |
| 5 | Boats | 64 | 84 | 16 | 42 | 10 | 21 | 12 | 3 | 19 | 14 | 7 | 4 |
| 6 | Motor car | 27 | 27 | 21 | 15 | 4 | 7 | 1 | 0 | 1 | 5 | 0 | 0 |
| 7 | Road | 65 | 72 | 14 | 40 | 17 | 5 | 19 | 11 | 12 | 5 | 3 | 5 |
| 8 | Transport Safety Education awareness | 31 | 53 | 8 | 19 | 2 | 16 | 4 | 5 | 14 | 11 | 3 | 5 |
| 9 | Water hyacinth Facility | 75 | 17 | 12 | 5 | 9 | 5 | 17 | 2 | 33 | 8 | 4 | 0 |
| 10 | Fuel / oil Filling Stations | 70 | 45 | 18 | 15 | 18 | 16 | 7 | 7 | 18 | 5 | 9 | 4 |

Source: Author’s Computation, February 2015. ACA = APAPA Coastal Area, ILA = ILAJE LGAs

Table 2: Facility Contribution for APAPA COASTAL AREA- Sum of Weight Value and FCI Computation

| S/N | Facilities | Provide/No Respond. | Freq. for Very Little Ctrbtn x1 | Freq. for Little Ctrbtn x2 | Freq. for Fair Ctrbtn x3 | Freq. for High Ctrbn x4 | Freq. for Veryhigh Ctrbtn x5 | TWV | FCI | FCI-Mean | (FCI-mean)^2 | Ranking | |
|-----|-------------------------|---------------------|---------------------------------|----------------------------|--------------------------|-------------------------|------------------------------|-----|-------|----------|--------------|---------|--|
| 1 | Safety/traffic/C | 30 | 1 | 20 | 21 | 32 | 20 | 94 | 3.13 | 0.44 | 0.1936 | 1 | |
| 2 | Water hyacinth | 75 | 12 | 18 | 51 | 132 | 20 | 233 | 3.11 | 0.42 | 0.1764 | 2 | |
| 3 | Warehousing | 31 | 5 | 10 | 24 | 36 | 20 | 95 | 3.06 | 0.37 | 0.1369 | 3 | |
| 4 | Transport/ Safe Edu/ Aw | 31 | 8 | 4 | 12 | 56 | 15 | 95 | 3.06 | 0.37 | 0.1369 | 3 | |
| 5 | Boats | 64 | 16 | 20 | 36 | 76 | 35 | 183 | 2.86 | 0.17 | 0.0289 | 5 | |
| 6 | Jetties | 74 | 15 | 46 | 42 | 36 | 65 | 204 | 2.76 | 0.07 | 0.0049 | 6 | |
| 7 | Fuel oil | 70 | 18 | 36 | 21 | 72 | 45 | 192 | 2.74 | 0.05 | 0.0025 | 7 | |
| 8 | Road | 65 | 14 | 34 | 57 | 48 | 15 | 168 | 2.58 | -0.11 | 0.0121 | 8 | |
| 9 | Ferry | 64 | 18 | 42 | 51 | 32 | 0 | 143 | 2.23 | -0.46 | 0.2116 | 9 | |
| 10 | Motor car | 27 | 21 | 8 | 3 | 4 | 0 | 36 | 1.33 | -1.36 | 1.8496 | 10 | |
| | | | | | | | | | EFCI= | 26.86 | | 2.7534 | |

Mean =26.86/10=2.69. Variance=2.7534/10=0.2753. SD=(0.2753)^0.5=0.5247

Source: Author’s Computation February 201

Note: 1 5in x1-x5=Weights for Very Little Contribution to Very Contribution, Ctrbn = Contribution, Rspdt = Respondent.

Table 3: Facility Contribution for ILAJE-Sum of Weighted Value and FCI Computation

| S/N | Facilities | Provided/ No: of RspdTabts | Freq. for Very Little Ctrbtn x1 | Freq. for Little Ctrbn x2 | Freq.for Fair Ctrbtn x3 | Freq. for High Ctrbtn x4 | Freq. for Very high Ctrbn x5 | TWV | FCI | FCI-Mean | (FCI-Mean)^2 | Ran king |
|-----------|---------------------------|----------------------------|---------------------------------|---------------------------|-------------------------|--------------------------|------------------------------|-----|-------|----------|--------------|----------|
| 1 | Ferry | 55 | 22 | 32 | 18 | 28 | 20 | 152 | 2.76 | 0.50 | 0.2500 | 1 |
| 2 | Jetties | 69 | 19 | 22 | 48 | 76 | 20 | 185 | 2.68 | 0.42 | 0.1764 | 2 |
| 3 | Water hyacinth | 17 | 5 | 10 | 6 | 20 | 0 | 41 | 2.41 | 0.15 | 0.0225 | 3 |
| 4 | Transport/saft. education | 53 | 19 | 32 | 15 | 32 | 25 | 123 | 2.32 | 0.06 | 0.0036 | 4 |
| 5 | Fuel oil | 45 | 15 | 32 | 21 | 12 | 20 | 100 | 2.22 | -0.04 | 0.0016 | 5 |
| 6 | Safety/traffic/C | 42 | 21 | 14 | 12 | 24 | 20 | 91 | 2.17 | -0.09 | 0.0081 | 6 |
| 7 | Road | 72 | 40 | 10 | 33 | 44 | 25 | 152 | 2.11 | -0.15 | 0.0225 | 7 |
| 8 | Warehousing | 35 | 15 | 18 | 15 | 24 | 0 | 72 | 2.06 | -0.2 | 0.0400 | 8 |
| 9 | Boats | 84 | 42 | 42 | 9 | 56 | 20 | 169 | 2.01 | -0.25 | 0.0625 | 9 |
| 10 | Motor car | 27 | 15 | 14 | 0 | 20 | 0 | 49 | 1.81 | -0.45 | 0.2025 | 10 |
| EFCI SUM= | | | | | | | | | 22.55 | | 0.7897 | |

Mean=22.55/10=2.26 Variance=0.7897/10=0.0790. SD = (0.0790) 0.5 = 0.281.

Source: Author’s Computation, February 2015.

Table 4: Facility Contribution for APAPA COASTAL AREA and ILAJE LGA - Comparison of FCIs

| S/N | Facilities in the LGAs | Apapa Coastal Area | | | | | Ilaje LGA | | | | |
|-----|--------------------------------------|--------------------|------------|-----------|--------------|---------|-----------|------------|----------|--------------|---------|
| | | TWV | FCI | (FCI-Mean | (FCI-Mean)^2 | Ranking | TWV | FCI | FCI-Mean | (FCI-Mean)^2 | Ranking |
| 1 | Safety/traffic control | 94 | 3.13 | 0.44 | 0.1936 | 1 | 91 | 2.17 | -0.09 | 0.0081 | 6 |
| 2 | Water hyacinth | 233 | 3.11 | 0.42 | 0.1764 | 2 | 41 | 2.41 | 0.15 | 0.0225 | 3 |
| 3 | Warehousing | 95 | 3.06 | 0.37 | 0.1369 | 3 | 72 | 2.06 | -0.2 | 0.0400 | 8 |
| 4 | Transport safety education Awareness | 95 | 3.06 | 0.37 | 0.1369 | 4 | 123 | 2.32 | 0.06 | 0.0036 | 4 |
| 5 | Boats | 183 | 2.86 | 0.17 | 0.0289 | 5 | 169 | 2.01 | -0.25 | 0.0625 | 9 |
| 6 | Jetties | 204 | 2.76 | 0.07 | 0.0049 | 6 | 185 | 2.68 | 0.42 | 0.1764 | 2 |
| 7 | Fuel/Oil | 192 | 2.74 | 0.05 | 0.0025 | 7 | 100 | 2.22 | -0.04 | 0.0016 | 5 |
| 8 | Road | 168 | 2.58 | -0.11 | 0.0121 | 8 | 152 | 2.11 | -0.15 | 0.0225 | 7 |
| 9 | Ferry | 143 | 2.23 | -0.46 | 0.2116 | 9 | 152 | 2.76 | 0.50 | 0.2500 | 1 |
| 10 | Motor car | 36 | 1.33 | -1.36 | 1.8496 | 10 | 49 | 1.81 | -0.45 | 0.2025 | 10 |
| | | | EFCI=26.86 | | 2.7534 | | | EFCI=22.55 | | 0.7897 | |

Author’s Compilation: February2015

Total of weighted value (TWV) and facility contributory index (FCT) computation: A comparison –Table 2 and 3 below; show the calculated values for total of weighted values (TWV) and the FCI for each assessed facility in a ranked manner in Apapa and Ilaje LGAs respectively. The weighed values were first obtained by multiplying the weight attached to each level of contribution with the number of respondents for that level of contribution. The TWV is the addition of all weighted values of a particular facility while the FCI was obtained by dividing the TWV by the total number of respondents (n) for that facility. Afterwards the mean, variance, and standard deviation of the FCL were equally obtained. The facilities on both tables are arranged in a ranked manner so that those with the highest FCLs appear at the top of the tables.

For comparative discourse, Table 2 and Table 3: which is the intent of this research, focus shall be on Table 4 which shows the FCI values and their deviation for both LGAs. Furthermore the ranking of transport facilities in Apapa coastal area shall be the reference points for basis of comparison; so that the facilities on Table 4 are listed as on Table 2. With the TWV, FCI and variance shown, the relative impact of the provided facilities between the LGAs on the transportation system in the study areas will be deduced. The LGA with higher FCI for each facility is revealed and reasons responsible are highlighted in each case.

On specific facilities, safety/ Traffic control facilities has FCI of 3.13 and 2.17 ranking 1 and 6 with deviations 0.44 and -0.09 in Apapa and Ilaje respectively. While the direct and indirect economics benefits are appreciated by the more literate society in Apapa, this might not be the case for Ilaje where not many high qualified safety care / Traffic control facilities such as Traffic officers/ Accident first aids are considered as good safeguards for passengers and transport operator in addition to the direct benefits for employee's/ users of such outfits and these are common in Apapa. Of importance is the fact that the same CBOs have come in by providing space in the form institution for such outfits to operate though it is the government that still provides the required equipment, medicine, and other necessary supporting facilities for the operation, this could be reused for the purpose of accident victims aids.

Water hyacinth. Collection facility and other harmful aquatic weeds is rank 2 and 3 with FCI of 3.11 and 2.41 and deviations of 0.42 and 0.15 in Apapa and Ilaje respectively. These rankings are close but FCI are far apart. Observation revealed a higher waste generation in Apapa coastline (an urban plus, an international sea – ports Terminals) than in coastal rural Ilaje area; when CDAs assist in the clearing of water hyacinth by the coast refuse collector, it is an indirect way of reduction in waste management costs. It is not surprise also that the ranking of water hyacinth collection facility is next to that of safety care/ traffic control facility in Apapa since water hyacinth collection are also waterway maintenance for water vehicles free movement. Lack of proper water hyacinth collection and disposal facilities makes for indiscriminate dumping of refuse which can seriously Jeopardies waterways vehicles and freight distribution. This also affirms that inland waterways Authority are good agents of waterways environment management as by their basic functions in Nigeria.

Warehousing has FCI of 3.06 and 2.06 and ranking of 3

and 8 in Apapa and Ilaje respectively. In Apapa coastal area, they have a deviation about the mean of 0.37 while at Ilaje the deviation is 0.20. In Apapa, at times, operator/users in the area have spill over benefits in form of vehicles and services to users of warehousing, who may want to rent space, storage and loading or off-loading services, delivery services among others things. On the contrary, at Ilaje, the warehouse are basically for consumer/user and group traders and not usually very attractive or big enough for patronage for international shipping or freight forwarder or exporters. Interesting enough, transport safety education ranks the same 3 with warehousing in Apapa, sharing same TWV and FCI values. This is not unconnected with the fact that the benefits are of the same for both facilities in Apapa. For transport safety education, across the LGAs, the FCLs are 3.06 and 2.32 and deviations of 0.37 and 0.06 about means in Apapa and Ilaje respectively with a ranking of 4 in Ilaje. It is explicitly inferred that both deviation and FCL are higher in Apapa area. This has resulted from the influence of an urban population and level of awareness and enlighten which have to spend more to boost the community economy of immediate social status than it obtains in the rural areas. Those who organize short training course in transport education or organize seminars and workshops benefit more in Apapa than Ilaje. However, the boats services which rank 5 in Apapa with an FCI of 2.86 (which is above the mean) is ranked 9 with an DCL of 2.01 (below the mean) in Ilaje. In Apapa, just as it is in the case of transport safety education, Trainer, consultants and educators will benefit from such boat services while most of the learners in boats management and operation in Ilaje will only need to overview to close by fishermen which are located within same waterways coastal settlements dotting the LGA without sufficient training boats and financial power to afford even the necessary boats for operation or usage in some cases.

Jetty is ranked 5 with FCL of 2.76 in Apapa coastal area while it ranks 2 with FCI of 2.68 in Ilaje. Jetties are usually the commonest business points in coastal rural areas. The same applies to Ilaje. Even the slightly big settlement (which specialise in fishing) like Igbokoda, Ayetoro, Ugbenla. Ode-Mahin and Ode-Ugbo still have similar experience since the generality of the people including those that cannot afford to create their own jetty take their boats or canoe to other jetties to do business. In some cases, some of their passengers/ cargoes are best transported to open jetties market. They see this as major transport economic support to their business and life hence the high ranking of jetties in this sense. Despite the relatively lower FCL for Ilaje when compared with Apapa coastal area, it could be still be deduced that jetties contribute more to the transport economic activities of the people in Ilaje than it does to the transport activities in Apapa coastal due to the fact that Apapa has large sea-port which handles large transportation activities than Ilaje and its big firm that has access to the terminal which act as export/ import point to both international and local freight handling as revealed by the ranking among other facilities in same LGA.

Fuel supply also rank higher in Ilaje than in Apapa coastal areas. It rank 7 in Apapa coastal area while it rank 5 in Ilaje, same with higher FCL of 2.78 in Apapa coastal area than FCL of 2.22 in Ilaje. Interesting enough fuel has the least positive deviation of 0.05 about the mean of FCL in Apapa coastal area but a negative deviation of -0.04 in Ilaje

respectively. Despite the presence of most oil well/oil field (crude) in Ilaje, access to easy fuel for transporter is still in high cost and a serious problem either for vehicles both water vehicle or motor vehicle or generator for business. Sourcing of such fuel could be costly and tasking. It is therefore not a surprise that economic value of fuel supply in Ilaje is not high enough. The FCL shows that CBO-provided fuel (burkecry) still contributes more to transportation system in Apapa than it does in Ilaje. CBOs are responsible for filling stations, in certain few area of Apapa coastal area. However, most filling stations and oil tanker are provided by different investors in Apapa coastal area.

In both LGAs, roads are closely ranked as 8 and 7 with negative deviation of -0.11 and 0.15 about the mean of FCL in Apapa coastal area and Ilaje respectively. Relative to other facilities in each LGA, there is not much difference in the positioning of this facility as it concerns contribution to the transport sustainability frame work. Though the FCI is higher in Apapa coastal area than it is in Ilaje, the contribution of CBOs to road provision is still not perceived as a major contributor to the transport infrastructure and life of the people in the same Apapa coastal area. People seem to have come to terms with the thought that it is a normal thing to have tarred roads in urban centres and so do not give that much value to a situation where the community pulls resources together to grade a road that is not tarred or to expand a path. In a place like Ilaje, the boats are used mainly for transportation until recently when a road was constructed from Igbokoda (the local government headquarter) to Ayetoro linking Aboto, Ode-Mahin, Ugbonla and Ode-Ugbo. The same road which branches off at Aboto is being extended to Olokola linking Alape, Ipare, Ereke and Etikan.

Ferry by the community is highly valued in Ilaje, ranking 1 compared with what goes on in Apapa coastal area where it ranked 9. This is one of three cases where the FCI is higher in Ilaje than in Apapa. As could be seen on the table. FCI for Apapa is 2.23 while that of Ilaje is 2.76 as the highest FCI in the LGA. In Apapa the deviation is as far as -0.46 away from the mean while in Ilaje, it has positive deviation of 0.57. The fact that CDAs in Ilaje make arrangement to provide ferry for communities, which goes a long way to boasting transportation business, cannot be overemphasized. This is done through the contribution provided by the cooperative societies out of which purchase of ferry for transportation usage in the community. In Apapa CBOs especially residence or landlords associations still have to ask households to contribute money towards repairs of ferry or boat in some cases.

Motor vehicles attracted more attention in Ilaje than Apapa coastal area with FCI of 1.81 and 1.33 respectively. They are expected to contribute to the mobility or transportation of the people but the contrary has been the bottom of the table and have deviation of -0.136 and -0.45 about the mean of their FCIs for Apapa and Ilaje respectively.

Organized transport agency are extremely few in both areas. When they exist, it is the initiative of the private sector. The best most CBOs could do is to provide open transport operation services or commercial vehicle for freight, passengers and cargo/services.

Summary of Finding and Inferences

1. The highest FCIs for Apapa coastal area and Ilaje are 3.13 and 2.76 respectively
2. Five facilities in Apapa coastal area have higher FCIs than the highest FCI (i.e 2.76) in Ilaje.
3. The mean FCI in Apapa (i.e 2.69) is greater than that of Ilaje (i.e 2.26)
4. Seven facilities have FCLs with positive deviations about the mean in Apapa coastal area while only four facilities in Ilaje have positive deviations about the mean.
5. Pair-wise comparison of the FCLs and their rankings across the two study areas revealed that 5 facilities (safety/ traffic control facilities, water hyacinth facilities, warehousing, boats and transport education) have higher rankings (not FCI) in Apapa than Ilaje, while 4 facilities (jetties, fuel, road and ferry) have higher rankings in Ilaje than Apapa. Additionally the FCIs of those high ranking facilities in Ilaje are lower than FCIs of same facilities in Apapa coastal area except for ferry.
6. A T-test, revealed a significant difference between the FCIs of Apapa area and Ilaje at a significance level of 0.038 (assuming 0.05 confidence level). This resulted in the rejection of a null hypothesis (Ho) that there is no significant difference between FCIs in Apapa and Ilaje and accepting an alternate directional hypothesis (Hi) that FCIs in Apapa area is greater than FCIs in Ilaje.

Hence, the above is sufficient to conclude that facility provision by CBOs in Apapa has contributed more to transportation system or micro-economy in Apapa (that have urban hinterland) than in Ilaje (a rural coastland). This confirms the greater effectiveness of CBOs towards Transport and Institutional framework development in the urban areas than in rural areas. The various limitations confronting CBOs in the rural areas are inhibiting factors to their effectiveness. a greater portion of such limitations is lack of funding or assistance from the government. This also further affirms the urban-bias theory of government's intervention in the development of local rural communities.

Recommendation and Conclusions

The impact of CBOs in both study areas is so limited expectedly in the area of provision of fuel, ferry, road and motor vehicle facilities, hence the need for attention in both study areas. In connection with fuel supply in the two study areas and especially at Ilaje which is surrounded by natural oil deposit field, there is a strong necessity to proffer solution.

With negative deviations of FCI in respect of Ilaje. CBOs particularly, the CDAs need a sustainable approach like the User-Pay-Principle to provide and maintain sustainable fuel supply for Vehicles/ Transporters. Building filling stations which provide access to fuel can be embarked upon by CDAs. Finance for the main project could be sourced from members cooperative societies while maintenance cost of road and water ways will be provided by users at cheap rate from time to time (ie. Toll-gate fees).

Also, since provision of stable ferry supply is a sine-quanton in the process of improving both transportation, micro and macro economy of Transportation Institutional frame work

of a nation. The transportation sector will need both policy and infrastructure over haul. At the multimodal system many businesses are negatively affected as traders in perishable goods have problems running/distribution of their businesses/goods without regular transport supply of freight forwarder.

Purchase and maintenance costs of modern ferry vehicle (to run businesses) actually shoot up the final transport costs of such freight/cargoes.

Motor vehicles/buses and facilities must come with enlightenment and cheap cost of use. In an environment where the culture of buses/joint-owned vehicles is not so appreciated, there is need for sustained enlightenment program especially in both urban-hinterland and rural coastland area of the study area. Provision of facilities should be initialized with small scale facilities. This could be afforded by the CBOs. Response and attitudes of the operators/users are to be monitored to see the need or otherwise for expanded Transportation Institutional Framework for futuristic and capacity sustainable management and bigger buses scale facilities. Road construction being a major project will have to remain in the hands of the government and international organization who need to mobilize resources towards the rural coastal areas.

Since CBOs activities are generally more effective in the urban mobility than at the rural coastal transportation. International organizations will need to spread their aid to coastal settlements which are at disadvantage likely due to lack of strong transportation activities typical of part cities and at economic impacts.

Several of such settlements especially those without oil installations in the coastal area without oil installations in the coastal area need more attention of the international organizations such as the United Nations and the world bank. However, the need for consultation with the CBOs will go a long way in making their contributions effective.

Furthermore, government should provide a conducive environment for the CBOs through manpower training to aid skill acquisition and team building framework for sustainable transportation. This will assist in encouraging and mobilising relevant agencies to support the activities of the CBOs in the communities.

There is the great need for partnership between government, CBOs and NGOs in order to facilitate support towards transportation's infrastructural development of communities, while simultaneously investing in the mobility of the people in the area of enlightenment, education and institutional development. This could be achieved through organised interactions or fora between the three stakeholders, operators, user, policy makers and communities. This kind of fora will generate memoranda of understanding to establish necessary partnership between government and other users, operators, owners and NGOs and the CBOs.

Participatory monitoring and evaluation approach should be introduced by the CBOs to monitor transport policy, transport institution and transport projects while adequate feedback mechanism should be put in place.

The above is expected to improve the transportation system, institutional framework and transport projects in both study area and the state at large. In this respect, CBOs will continue to contribute to the economic development of safety and security of transport operation, users and owners at the local level and international while major development in the rural areas especially Ilaje area an oil field with

Bitumen deposit should be given necessary economic attention infrastructure and sustainability.

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