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**PRODUCTIVITY MEASUREMENT IN THE CONSTRUCTION INDUSTRY
BY**

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1. INTRODUCTION – THE CONCEPT OF PRODUCTIVITY .

This is a measure of the quantitative relationship between what is produced and the total resources used , that is a cost – benefit ratio geared at using smaller resources to produce an output meant for larger resources (such as labour) with ultimate satisfaction without compromising standards

2. THE RELEVANCE/SCOPE OF THE CONSTRUCTION INDUSTRY

More than 50% of our gross national earnings³ are spent in providing residential, industrial, commercial accomodation, roads, airports, harbours, schools, communication infrastructure etc. Thus, a reasonable control of the economy can be approached from the construction industry since it is responsible for provision of good housing, good tap water supply, roads, electricity, health institutions, educational institution, communication systems and recreational facilities^{3,4}. This can be achieved by effective management and cost control.

3. CLASSIFICATION OF THE CONSTRUCTION INDUSTRY

These include⁴:

(i) Formal (Organized) Sector

This involves all construction companies whether foreign or indigenous that operates under contract and undertakes major construction projects in the nation. The ratio of participation (**foreign : indigenous**) is **19:1** or in terms of percentage **95% to 5%**. Examples of key actors here include: Julius Berger, Borini Prono, Cappa & D' Alberto, G. Cappa, Dumex, Solel Boneh, Bouygues, SPIBAT, Stirling Civil Engineering, Fougerolle, Strabag, Guffanti, Costain, Nigercat, Mothercat, Reynold Construction Company (RCC), Ray Royal Construction, Ehi Nigeria Limited etc.

(ii) Informal (Unorganised) Sector

This include hired artisans, craftsmen and labourers used in owner supervised private constructed dwelling houses and other projects in that category.

4. ASPECTS OF PARTICIPATION IN THE INDUSTRY

This can be through the provision of^{1,3}:

- (i) Skilled manpower (engineers, architects, quantity surveyors).**
- (ii) Unskilled manpower (craftsmen, artisans, labourers).**
- (iii) Capital investment (by government, individuals, banks), and**
- (iv) The ownership of construction companies.**

There is reasonable competition in item (i), item (ii) is totally provided locally and item (iii & iv) are dominated by foreign companies/investors.

5. FACTORS INFLUENCING PRODUCTIVITY

These include the following ^{1,2,5} :

- Nature and quality of production-materials,
- Nature of production environment,
- Amount of plant and equipment employed and their efficiency,
- Volume, continuity and uniformity of production,
- Utilisation of manpower,
- Non-existence of genuine workers participation in management,
- Poor management of resources,
- Inadequate expertise in manpower management,
- Low level of skilled workers in the industry,
- Inadequate/lack of contract planning and control procedures on site,
- Inability to delegate to a fairly senior administrator within the firm free hand to manage the firm,
- Inadequate staff training,
- Cost/finance/foreign exchange control,
- Choice of materials,
- Absence of construction cost information service,
- Government, etc.

These problems plague the industry thereby negatively affecting productivity in the industry. All these misnomers are as a result bad management. Proper management of manpower and other resources will ultimately lead to improved productivity².

6. SOURCES OF THE PROBLEMS(VIS-À-VIS INDIGENOUS PARTICIPATION)

(i) Finance/Capital

The financial involvement is huge and can be obtained from subscribing individuals, firms, bank loans, government grants etc.

The existing requirements in terms of bonds, collateral and guarantors is difficult.

(ii) Government attitude

Even government has little or no confidence in the indigenous companies in the implementation of major projects/landmarks and at times even minor ones. Also enabling laws, policies and codes of conduct have not been strictly adhered to even where they exist.

(iii) Social attitude of Nigerians/Sole ownership

Sole ownership is a persistent characteristic of indigenous companies and even when partnership is attempted or exists, bigheads are easily developed especially when a partner wills financial and/or job inputs. This promotes the

existence of weak companies with a low capital base. This weakens the strength to compete favourably in the industry.

7. TOWARDS INCREASING INDIGENOUS PARTICIPATION IN THE INDUSTRY

The construction industry is the bedrock for national development. Also, every great nation must control its own destiny by vigorously participating in the construction industry. National development at a less expensive cost (controlling cost in the industry), can only be achieved by researching into the use of local materials, publicizing locally achieved construction techniques (as NIA is doing through Archibuilt), making some vital engineering data collected through experience available to Nigerian planners⁴. However, about 75% of the materials required for the construction industry are imported. There is therefore the need, to increase on the local inputs through the following³:

(i) Workers participation in productivity management

The aim is to increase productivity and efficiency, better understanding of workers (various) roles in the industry, satisfaction of workers urge for self expression leading to industrial peace, better relations, better commitment, increased co-operation by establishing a Joint Consultative Council/Forum between management/skilled/unskilled workers to discuss aspects pertaining to their job, welfare, wages, conditions of service and safety. Presently, workers participation can be put at about 30%² hence the evident low productivity measure in the industry.

(ii) Finance/Government Policies

- This is to enable easy access to loans with guarantee from government agencies or contract awardee to make all payments through the bank or any financier of the project.
- The monitoring of projects/payment deals for materials procured by the project financier will increase the capital base and strength of the firm.
- Institution of a law by government blacklisting permanently fraudulent companies and non-conforming banks/project financiers will forestall failed projects, raise confidence and increase productivity.
- Government participation with indigenous construction companies by acquiring controlling shares(to be relinquished later) hence boosting the capital base/granting team management provision and confidence building.
- Deliberate policy by government to reserve certain category of construction works for indigenous companies.
- Encouraging association of indigenous construction firms to operate under a specific code of conduct.

8. Conclusion

The paper has considered productivity and the construction industry including the scope, relevance, types, participation, problems, sources of the problems and remedies towards encouraging proper and better indigenous participation and increased productivity. It is evident from the fore going that the construction industry has not

come come of age being at present heavily dominated by foreign companies. Also, the culture of the people has not been seriously considered for various projects that have been implemented in the industry. This has lead to the collapse of our roads, communication system, power supply, water supply, health, accommodation etc. Project cost has also been extremely high leading to foreign exchange/reserve depletion. One can conveniently say that the productivity level is far below average. However, there is a new wave by NIA via archibuilt to sensitize the people towards using locally available materials in the industry to cut down on cost while providing functional units by making use of appropriate technology. Also, government, by the establishment of the Petroleum (Special) Trust Fund has encouraged indigenous professionals in various consortia to participant on various projects throughout the nation. The intention apart from promoting professionalism is to forestall abandoned projects which before now was characteristic of the industry, effect cost control, maintenance/provision of basic facilities-roads, water, schools, hospitals etc as well as facilities management. In this direction it is intended that there will be increased productivity in the construction industry.

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