

## Assessing Labour Inefficiency: Preliminary Results for Human Capital Development Initiative Exploration and Production in Cross River State, Nigeria

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### Abstract

*Cross River State is noted as one of the coastal states of the federation, endowed with enormous Human Resource Development initiative with an estimated population of over 3.8 million in 2016. However, the state has continued to battle with human capital resource development, labour inefficiency over the years. The paper is theoretical and qualitative in nature with emphasis lay mainly on Secondary source of data collection which relies on "The descriptive qualitative data method" with a bid to enable objective exploration and production. The paper further argues on the state "Predicament", inability to develop human mixes capital development, the socio-economic ingredient, basic resource theory and capital initiative. It is against this background that the paper stand to assess labour inefficiency; preliminary result for human capital development initiatives, exploration and production as a "Brain Drain" in Education and health. The paper recommends the need to prioritize budget for human capital development and drastic measure to be taken as a way to tackle corruption and related underhand practice among stakeholders in all sub-sectors of the state.*

**Keywords:** Human capital, labour inefficiency, development initiative, exploration and production.

### INTRODUCTION

The economy transitional wide spectrum of education and health adjustment in human capital development initiative, exploration and production in Cross River State is centred on "labour market development". The idea behind labour inefficiency and human capital development is that most people produced goods and services not because government direct them but because they can sell what they produce and earn income. Most scholars view inefficiency base on inadequate information, poor structural organization, inexperience, poor information, poor structural organization, poor environmental condition and pressure form stakeholders (Inyang, 2004. P 137). Other scholars view labour inefficiency as "a process which entail unuseful economic, social, educational and political utilization of human resources by either the government or individual. Institutional mechanism being about unproductive resources. This unproductive resource is tailored toward economy impartation of wages, resource sties, management decision, workforce and external factors which constitutes human capital labour.

However, for labour to be efficient, there is need to show the economic output, compared to an industrial standard in relation to job security wages, condition of living, working condition, education, health, training and employer and employee relationship. This can be measured through economy ratio of useful output to total input which indicates greater ratio for effective labour use.

Human capital development does not – identified economy maximum earning initiative level on the factorial contribution toward achieving preliminary results exploration and production of potential wages.

Human capital development connotes an economic development program which aim at developing health education, skills and knowledge of people to enhance more productive workforce. It can also be term to be an effort of a global activity directed to accelerate more and better investment in human capital advancement for greater equity and economic growth. This implies that human capitals consist of skills, knowledge, ability, talent, intelligence, experience, education and health that individuals or group of individuals invest on and accumulates throughout their lives in order to ensure educational, technology, social, cultural and political utilization of potential as a productive member of a given society. This view sees the paper expression in relation to Schults (1992) who believes that possessed by Cross Riverians has been doubled within the posits tat, population quality is a decisive productive factor with emphasis laid on labour efficiency in education and health. UNESCO unequivocally believes that for a state to be developed, there is need to invest a minimum budget allocation of about 26%, yearly on Education and health, while the World Health Organisation (WHO) suggested 5% on health.

Jaiyeoba (2015) believes that, for a state to be developed, it requires speed up pace of social, economic growth and development and upgrade human and material resources in order to enable them engender real and enduring transformation to meet up with the western state investment. This economic investment has a nutritional quality, education and health care, skills and jobs which aimed at developing human capital, which is key to end esteem poverty, inflation and hunger and hereby creating more inclusive society. This inclusive human capital development initiatives, exploration and production policies are Green Revolution (GR), Operation Feed the Nation (OFN), Ministry of Regionalization (MR), Accelerated Food Production Program (NAFPP), Directorate for food, Road and Rural Infrastructure (DFRRI), Oil Mineral Producing Areas Commission (OMPADEC), Better Life Program (BLF), Niger Delta Basin Development Board (NDDB) and People's Bank (PB), (Anam, 2011). This initiative policy was geared toward transforming labour, inefficiency to human capital development through economic basic understanding, exploration and production potential embodied in personal skill, health, knowledge and other capabilities. Consequently, Cross River has made pragmatic effort geared on quality health services, education and politics as a bid to entail human capital development initiative, but the preliminary result remains inefficient since the state continued to grapple with myriads of transformation challenges employment, corruption, mismanagement of resources, poor educational standard, poverty and inflation.

We analyze the consequence of investment for economy output and the basic factors that shapes individual's accumulation to human capital development in Cross River State, based on Education and health inefficiency (Underpayment). Inefficiency arises from incomplete labour market information such as job dis-satisfaction resulting in the loss of Gross domestic product (GDP). Thus, assessing labour inefficiency will help develop more appropriate human capital as initiatives policies and institutions as well as exploration and production in Cross River State.

The paper is structured into eight sections with an introductory part, statement of problems, analysis of nexus between labour inefficiency and human capital development of Cross River State, government contribution towards capital development, methodology research, discussion of findings, conclusion and the way forward of the study.

## **STATEMENT OF THE PROBLEM**

Human capital development initiatives exploration and production in Cross River State have become a matter of concern to scholars like Vera (2007), Esekpa (2023) and Agba (2014). At the centre, it connotes individual accumulation of human capital development is part of capital enhancement toward development. The problems lie on lack of skill, knowledge, job dissatisfaction, insecurity, unemployment, poverty, poor implementation, low productivity, hunger and increase in prices of commodities without a corresponding increase in the supply of goods and services.

The socio-economic well-being was targeted on economic exploration and production of goods and services which lead to oil discovery and sub-sequent exploration in most commodities within the rural area, which heavily depended on agricultural products such as garri, rice, beans, yams etc basically for livelihood. The people are dominantly fisher men and this generate sufficient income for families within the riverine communities in Cross River State. The oil-bearing communities within Bakassi and Akpabuyo Local Government area of Cross River State enjoyed their virgin aquatic habitat until oil was discovered in their land and exploration commenced.

This paper gave a systematic analysis as a supported need for human capital, government and individual developmental project in communities where active oil exploration does take place with the aim of enhancing development, but today the preliminary result seems insufficient as some sectors of the population still complain of lack of social amenities, unemployment, poor environmental condition, poverty underdevelopment and inflation

## **LITERATURE REVIEW**

For human capital development initiative in Cross River State to be efficient, there is need for an improved labour capital base. This can be done by helping other states or country to invest in their people's education and health, which can increase efficient economic productivity and profitability. Human labour capital initiatives entail the economic values or workers, experiences and skill acquisition through education, health, training and other asset that employer's value. This values initiative includes both the World Bank and IDB's Social Protection, which help in building human capital through economic contribution of education and health to workers to enhance socio-cultural, industrial, agricultural and capital productivity. It also helps in identifying economic, social and cultural barriers towards human development and rendering economic assistance, quality jobs, training and access to health education. It provides economy opportunity for citizens within the state in realizing the potential and copes with crises.

The relevant literature "connotes the fact that labour inefficiency is the most preliminary result and economic potential sources of poor level of productivity which is being considered as a measure of skill, educational abilities and other characteristics that affect the whole being of a worker's productive capacity and wage potential. This potential is economically expressed base on personal creation, economic well-being, social knowledge and skill abilities (Riley, 2001). Human resource is identified as the beginning and end of all forms of capital. This plays an important role on physical capital complement and economic development of natural resources (Fared et al, 2012).

The literature sees labour as a form of empirical recognition which determines the economic growth and human capital as an essential asset for growth of input-output, process and hence production in Cross River State due to teeming population and increasing labour forces.

The economic goal of human capital is based on investment which aim at improving the quality of human life. However, healthcare delivery in Cross River is centered on dismal over the years (Frarud, 2020). Health expenditure entails the gross domestic percentage as recorded at 5.08% in 2018 which is far below 12.32% of the organization for economic development unit co-operation. The government expenditure is merge for state group which leads to inadequate health financing, poor remuneration of health workers among other factors resulting to poor state of health, education, agriculture and industrial activities.

The state statistics shows that, the Cross River records worst economic performances which is characterized by unemployment and poor labour productivity for the past eight (8) years. Moreso, based on the state transformation on industrial revolution, the role of human capital development enhanced labour, economic productivity, inputs-output process. Daurlauf (2004) observed that, high productivity is often associated with human and capital investment which enhance educational advancement, health performance and training policies. This development is associated with growth and productivity and per capital gross domestic product. The Gross Domestic Product (GDP) per person employed a measure for performance which proposed a progressive measure in promoting inclusive, sustainability and economic growth, full and productive employment and sustainable development goal decent world. The state economic performance can be determined under effective, efficient increase of works. In respect to labour, productivity and economic performance. Some of the factors affecting labour productivity include goods, stock of capital, institutional framework, work skills, health and technology development.

The labour efficiency is determine base on health and educational facilities which aim at skill acquisitional development and sustainable impact growth according to John (2023), the educational empirical form the literature, sees labour market to include unemployment/employment, wages, worker productivity, nature of work, fringe benefit and worker health, condition of work and attitude of a worker.

Similarly, the analysis was conducted in Cross River and using the “Ordinary Least Square (OLS) technique for data ranging from 2020-2023. The finding showed a clear bi-directional casualty existing between per-capita income and health. Campbell and Ojo (2021) examines the economic effect of human capital development on poverty in Cross River State. The study employed both inferential and descriptive statistical analysis to capture the nature of relationship existing between investment in human development and poverty in Cross River State. The result shows that human capital cannot be translated to poverty reduction, though there is need to provide equal opportunity for economic growth and development which embodies investment on human being, increase in employment opportunity support for private sectors and competitiveness.

A comparison was equally done for both Cross River and Akwa Ibom States and it was discovered that both physical and human capital affect labour productivity. Where productivity was more responsive to changes in human and physical capital. For instance, enrolment of school has negative relationship with labour productivity (Olaewaju et al, 2020). The effect of labour productivity on human capital development was analysed using three human capital development initiative which labour productivity in Cross River State as a responsive to physical capital changes proxies such as fexitory institutional enrolment life expectancy rate and secondary enrolment between 2022-2023. The resulted estimate shows that, secondary enrolment and life-expectancy have positive influence on labour productivity in Cross River State in a long run with tertiary enrolment on capital labour productivity.

## THEORITICAL FRAMEWORK

This paper is anchored on one theory, “The Basic Resource theory (2009)”. Penrose was the proponent of this theory, in 2009 on the efficiency management of firm’s resources, production opportunity and strategy diversification. Ijere (2010) observed that, economic growth solely depends on the availability of labour, capital and management for exploration and production of goods and services, reliable, magnitude of basic natural and artificial resource within a given state, area or community. The initiative was tailored on capital investment, employment and increase in income and exploration of goods and service. The major economic available resource is hinged on technological and manpower profile. Edem (2011) observed that the natural resources in Cross River State are inefficient guarantee to rapid development. However, the theory is criticized base on the operation of “diminishing return” which is characterized on labour, capital in face of rapid population growth and static production technology. In Cross River State, the exploration of basic resources fully encountered a bottle-neck by way of labour scarcity and higher wages initiatives.

## THE INGREDIENTS FOR EFFICIENCY FOR HUMAN CAPITAL DEVELOPMENT, EXPLORATION AND PRODUCTION

The socio-economic nexus between inefficiency for human capital development; exploration and production of any given state have economic vehemently been emphasized with adequate attention given in the literature of the development initiative policies. A preliminary result for this argument, Imaga (2001) brings to the fore the central fact of experience by a manager which focuses on human behaviours and later group it, into three economic dynamic such as;

- i. Poor level of control, directing and changing human capital initiative policies
- ii. Inability for understanding the past behavioural attitude of workers and
- iii. Inability of predicting the future behaviors of workers

Asaju (2010) observed that, for a state to be successful in terms of development of human capital, it must engage on “Investment in human capital development”. Aluko & Aluko (2012) added that, this capital development includes health, agricultural, industrial and educational sector connotes systematic cultivation of the whole persons including psychomotor, intellectual and character development. It can be used to refer to enlightenment or training which is coined out of two latin words “edvcere” meaning to “lead out” to “draw out” and “educare” meaning to “bring up” to nurture (Aremu and Olabunsanmi (2005). Education aim at the all-round human capital development such as spiritually, mentally, socially and physically. This is the development of human capital resources in all its entire ramification (Cognitive powers and accurate thinking processes and methods of inquiry).

It is the human resources of a state rather than it material resources and physical capital which usually determine the base character and pace of its socio-economic development (Aluko & Aluko, 2012, p.165). Harbison (1973), stated that, the importance of education on human capital initiative formulation is centered on training (formal or informal) to advanced development. Human capital development, exploration and production. Constitutes the economic basis of wealth of a state with a passive factor of production. Human beings are the active agents who accumulate exploration of resources, capital, social builders, political, economic, cultural organization and carry out nation’s development. Harbison (1973) further added that labour inefficiency constitutes inability of a country or a state to develop knowledge, skills of its people and effectively utilize them in the national economy.

Esekpa (2021) observed that education is the major factor in the formulation of human capital development. Education plays an active role in socio-economic advancement as a supplier of manpower training and it is a pre-requisite for accomplishment of other factorial environmental developmental aspects. It also promotes the main sector through whose “National Identity goals and aspirations are given reality and meaning among people. Asaju (2010) believes that education help in supporting the states investment, topped the chart for research funding and development. Due to the economic realization and its contribution to the actualization of socio-economic growth and developmental goals of the state. Burneth (1995) observed that investing in education connote raise per capital Gross Domestic Products (GDP), increases employment, opportunities, expansion of knowledge, poverty reduction and encouragement of investment, encouragement of individual or group of individuals in economic activities and creating favourable environment for development and growth to take off. Moreso, human capital development in education is a people focused initiative measures aimed at developing human beings as a building block for nation’s advancement.

In order to assess the labour inefficiency; preliminary result, the world bank (1995) established an average link of 192 countries with human capital development account of 64% of the total wealth while with natural and artificial capital account of 16 and 29% of the total wealth. The preliminary result reveals that the contribution of development, exploration and human capital development. In Cross River State fails to develop its human capital, it will not reveal meaningful development initiative policies. This observation is in line with Harbison (1973, p.3) which guested that a nation that fails to develop its manpower will not be able to develop anything else. In all economic functional contributions, human resources stand out as socio-economic factor that lay emphasis on development and can amount to productivity increases in industries, health, agriculture and education. Person and Tabellins (1994), Fishlow (1995), Alesina and Rodrick (1994), believe that “successful development controls economic not gap closing in artificial and natural capital, but also gap closing entails knowledge acquisition. Most scholars assumed that, human capital “does not depreciate due to skills and knowledge, ever increasing and not declining and can always be bequeathed to future development. Some of the basic role played include the process of development of the state, absorb modern technology development of the state, self-sustainable growth and development.

Health connotes an important element of human capital development. Awe and Ajayi (2010) observed that good health is a necessary condition for studies. Since one need to be healthy to ensure rigours of studying human capital. Manpower resources for use in exploring other state resources. For productivity increased, Inefficiency embodies low productivity which connote a large company proportion of human population and lack good health. Health embodies workers productivity through the spillover effect on their mental and physical abilities. A healthy worker, work harder and reason better and longer than those who are less gifted with good health. The economic minimize incidence of poverty centered on good health through socio-economic participation of high labour cost of medical service, this income release for other service of welfare improvement consumption. This welfare has for both semi-skilled, unskilled and skilled workers. It was observed that good health is a basic requirement for quality building of human resource with the aim of achieving developmental needs. Significantly, labour efficiency promoted essential factor for human capital initiatives since it ensures not only lack of disease but also absence of disability, expectancy and comfort and lower disable increase rate in terms of values of human capital and guarantees economic, social and socio-cultural utilization or human resources of the state in a way to ensure sustainability, continuity, growth and development. Isola and Alani (2005) believe that for labour to be efficiency, it must contribute positivity to pre-capita income of the state and in turn reduces

poverty, increase enabling condition for development to take off and increases the living standard of the people in a given geographical area.

Akep (2023) observed that, agriculture is a modern tool for human capital developed as it entails essential labour efficiency in National Development. This is because it contributes to the state economy and social development. Agriculture contributes to the nation's Gross Domestic Product (GDP) by generating foreign and domestic trade, income and employment. It further provides raw materials for other industrial sectors for manufacturing services and processing. It also contributes by improving the living standards of health and education for urban and rural communities to facilities gender equality, social cohesion and cultural diversity.

In Cross River State, agriculture is the key foundation of labour efficiency and human capital policies initiative with economy livelihood for most Cross Riverians and generate millions of jobs. Cross river depends on agricultural products. It exports to generate most of it internally general revenue. Solomon (2017) further observes that, technological tools such as GPS, can be applied to agricultural sector as a way of developing labour and human capital development since it involves data collection on soil and crop to optimize input-output process based on specific condition of work reduction and crop grow. Furthermore, agriculture labour inefficiency according to James, Steven, Holger and Ruben (2022) is caused by child labour, seasonal work, physical work, climate change, labour shortages, low earnings and neglect of household's activities. However, agriculture inefficiency can be addressed through labour-saving innovations, agricultural R & D, government intervention policies and legislation.

## **HUMAN CAPITAL DEVELOPMENT INITIATIVES IN CROSS RIVER STATE**

Cross River State has experimented several initiative human capital development policies since independent (1960) till date, yet the needed transformation has continued to elude it citizenry in spite of robust and viable health and educational systems that would facilitate the quality building of human and material resource for development initiative policies, which was titled "Educational Investment" they include National Policy on Education (NPE) 1977 and revised in 1981. 1998 and 2004, Universal Primary Educational Scheme (UPE) 1976 and compulsory in 1979, Universal Basic Education (UBE) 1999, Childhood care and Development and Education (ECCDE), Education for All (EFA) and the Millennium Development Goals (MDG), National Empowerment and Development Strategy (NEDS) 2003, Road Map of Nigerian Education Sector (RMNES) 2009, Others include credit schemes, rural banking, Agricultural Developing Programme, low cost housing scheme, community based natural resource Management Programme, Songhai Cross River Initiative (SCRI) Cross River Farm Credit Scheme, Growth Enhancement Support Scheme (GES) and Community and Social Development Agencies. These initiatives show the zeal of different successful government and non-governmental organization (NGO) which have led to "Proliferation of development agencies. Despite the numerous human capital development initiatives, introduced at different time by successive government coupled with the economic investment and market resources employed, little or nothing is felt in most educational institution, each initiative development policies often died with the government that initiated it before it commences to yield dividends for human capital Development. Onuorah (2006) believes that, the lofty objectives (government initiative policies) of such effort, they have never endured beyond the government that initiated the schemes. The initiative also involves organized market men/women and stakeholders like government, international organizational funding partners and private sector to transform all Nigeria schools into socio-economic, productivity and exploration, higher grade human capital

development as a way of achieving self and functional reliant. This paper became necessary to examine this objective in terms of measures owing to the felt needs to improve the socio-economic condition of unpleasant system in order to ensured high economic grade for human capital. This implies that socio-economic realization that the educational, industrial and commercial skilled acquisition sectors, have produced low quality human resources for the state workforce. Other sector aims at providing man power capital include engineering, applied science and technology which help in sustaining the state economic activities and rapid socio-economic development.

In 1985, the health policy adopted by the Federal Government was based on the assumption that the health of the population depends on the availability of human resources. Health reform foundation of Nigeria in 2006 lead to the establishment of primary health care delivery in 2004 which gave direction on the concept, principles on economic evidence of health with a disease burden. Furthermore, health sector has faced with some notable challenges that have inhibited it labour inefficiency and ineffectiveness, not withstanding, Cross River has from inception taken some noticeable steps towards developing its health sector as a measure for enhancing human capital development. Unfortunately, both health and educational sector are yet to produce the socio-economic inputs due to an overwhelming challenge.

## OUTPUT-INPUT OF CAPITAL DEVELOPMENT RESOURCES AND LABOUR EFFICIENCY

Generally, health agriculture industries and education have input in the form of Developmental resources (Personnel, student, teachers and materials funds, facilities and equipment) and constraints (expectations, values, objects, theories, policies) resources poured into it. These are processed in the education and health sector through input and the input of educational system. Being the form of human capital development through qualified training (in the job or education system). See diagrammatic representation below:

INPUT	OUPUT	PROCESS
Service staff, students, teachers and administrative	Trained techniques with higher knowledge acquire objective result social aim, skill and attitude	Programmes, school, teaching, learning, activities and administration.
<b>Materials needed</b> Books, funds, good equipment		Classroom operation, meetings, classification and general knowledge
<b>Constraints</b> Valve, philosophy policies expectation and theories		

A simplified theories of some of the components of human efficiency and capital development include:

### Cycle of events

In every organization, the input and output functions is cyclical. This includes employment, training, staffing, directing, controlling and co-operation/co-ordination. The input and output functions and the cyclical nature of the human capital development. The events entail “stability” in an organizational sector.



### **Negentropy**

Negative entropy include unemployment, inflation, corruption, mismanagement, poverty and rural urban migration. This system has “occasional forces” within that tend to disrupt its normal functions. the sector also provides socio-economic capacity to develop its own anti bodies to counteract the economic effect of such disruption forest. These measures entail policy formulation, interpretation, regulation, accounting evaluation and auditing etc. which aim at avoiding insubordination, conflict and strict with the aim of ensuring normalcy in the function of an organizational system.

### **METHODOLOGY**

This paper is generally a qualitative and theoretical research. The study lay emphasis mainly on secondary data, derived from library research with content analysis or relevant materials like government publication, internet, books, report, journals, periodic report and newspaper from where valid data are used for the research were retrieved. The study employed a descriptive qualitative. Method data analysis in a bid to justified labour inefficiency and human capital development initiative, production and exploration.

### **CHALLENGES OF HUMAN CAPITAL DEVELOPMENT INITIATIVE IN CROSS RIVER STATE**

The socio-economic formation of the inefficiency preliminary result for human capital development initiative was hinged on exploration and production has remained a major challenge for Cross River State. Cross River State is a coastal state, rich in human and material resource. Its solid and oil mineral wealth ought to have elevated it far and above other states of the federation in terms of economic achievement. But fail on the part of state to harness and develop adequate human capital development has set it behind majority of the states which shared almost the same Gross Domestic Product income rate since independence. Some of the notable socio-economic problems in human capital development initiative are responsible for this undesirable challenges. Asaju (2012) believes that the problems are attributed to industrial, agriculture, health and educational sector which is replete with initiative comatose state policies such as poor policy formation, poor implementation, poor funding, poor social amenities and among other issues. The problem of poor funding has drawn attention in the context of this paper owing to the wealth stupendous which was accurate to the state mainly from agricultural resources to other income avenues. Moreso, successive governments in Cross River State have mostly neglected “educational investment” as being the socio-economic centre for state advancement. The state budget allocation to educational sector has continued to decrease without meeting the educational target of the UNESCO which was based on 26% of the annual budget as agreed by Asaju (2012).

Jaiyeoba (2015) believes that poor investment and commitment to human capital development explains why the state has the greatly derailed in meeting some important international specification which are means to educational basic availability due to poor funding which is obtainable in Cross River State. To this end, primary school enrolment rate remains on a decrease at 111.23 in 1982 and 2011 at 88.789. This inefficiency on labour preliminary result for human capital development has effect on the economic macro performances of the state giving birth to unemployment, extreme poverty, low industrial productivity, inflation and hunger.

Large scale social amenities deficit, this challenge tends to accumulate labour inefficiency in human capital development initiative policies, production and exploration in most state institution. This problem is originated on government policies poor pattern of spending which goes into recurrent

expenditure (emoluments, personnel welfare, incentive, salaries, capital, intensive project and allowances). Inadequate learning facilities also constitutes the major obstacles of human capital development initiative policies to the state capital educational institution produce and groom available human capital development. This indeed is a wide spread knowledge of socio-economic strategic achievements of educational development which is targeted towards 1988, National Education Policies initiative.

- i. Developing individual intellectual capacity to understand and appreciate external and local environment.
- ii. Socio-economic contribution to national development through human capital development enlightenment.
- iii. Inculcating and developing values for the economic and social survival of individual and the community
- iv. Promoting international and national understanding and interaction
- v. Promoting and encouraging community services and scholarship
- vi. Cementing and forging national unity.

This goal is obtainable mostly in tertiary institutions through research, development and teaching which aim at staff sustainability, knowledge dissemination, programs variety, modes and generation. One will wonder how Cross River hope to realize these lofty goal base on learning infrastructural facilities. In most states where education and training system are not geared to development capital, more productive technology cannot be employed in favour of industrial and economic activities. Furthermore, both the multifaceted and the challenges effect labour inefficiency in human capital development policies initiative, exploration and production in the state institutions as well as Nigeria as a whole. The educational and health sectors embedded on high level of corruption mismanagement, and lack of professional personnels.

Corruption is a phenomenon debilitating forces on the socio-economic formation of acquiring quantitative and quality human capital development. The socio-economic prevalence of corruption was centered on government appointees and administrative functionaries who think or belief that Cross River educational sector is not a partaker in these vices. The most surprising fact however is corruption and its related sharp practices occupy escalated more position in the educational system at all level. The preliminary result is gross defect inefficiency. Moreso, since 1930 corruption have been an impedimental economic cankerworm to development which involves the three tiers of government in Nigeria. often cut or reduce funds meant for academic advancement, building capacity, school responsibility, infrastructural development, education bureaucrats, modernization, educational policy makers.

Exploration of resource was geared among lecturers and teachers within universities, secondary schools, Colleges and Polytechnics. This is done by forcing students to pay their lecturers for an unmerited grade. Those who cannot pay are punished or penalized for doing so. In most tertiary institutions, some record keepers, lectures and registrars sometime withhold student's grades until a certain amount of money is paid. Lecturers also compel students to buy their handouts or face the risk of failing the course. The preliminary result is and it making female students turn into commercial sex workers in a bid to support their education and equally student from poor homes are forced to either sleep with the lecturer for grade of work the streets in search of customers in order to get money to pay "Unscrupulous lecturers who financial schemes is exploration of student resources.

Another socio-economic exploration and production of human capital developmental challenges is born out of “examination and malpractice”. This has become relevance in our tertiary institution, resulting in producing unemployable graduate. Education is mainly to train and make human capital development available to both private and public sectors to accomplish a particular objective. Training of manpower enable citizen not only to be fit into their in the world of work, but also satisfied labour efficiency of the state and the nation at large.

Emalkwo (2012) believes that education equip one’s self with adequate necessary information, training and self-reliance for efficient human functioning. Esekpa (2021) observed that, frauds and examination malpractice in Cross River State has compromised sacred and notable vision which have created undue quality, quantity and security of human capital development initiative policies for both public and private schools. Paul, et al (2013) believes that efficiency skills and knowledge in school system and disciplines are variably functions of sound and quality education. The preliminary labour inefficiency connotes any act carry out by stakeholders in an examination such as students, parents, examination administrators and teachers that have the capacity to influence the original outcome of the assessment exercise.

Furthermore, poor performance of the health sectors resulting to lack of clearly defined roles and responsibility given birth to duplication of effort, inadequate political commitment at low level, poor accountability, poor coordination, lack of transparency, poor regulation due to weak capacity of state government to set standard and ensure compliance and lack of effective and efficient communication link between the actions. All these actions give birth to labour inefficiency, ineffectiveness and directive strategies of healthcare delivery system (Health Sector Development Team, 2009). Health is seen as the most important component of human capital development since it involves direct duplication for preliminary result progress of every state and nation. Positively, sound health is seen as mental well-being of an individual and productivity increases and socio-economic utilization of resources at all level or field of human endeavor, they find themselves. The health inefficiency preliminary result to poor adult life expectancy rate, poor scarcity of manpower and other killer disease. Cross River will not record meaningful achievement in building human capital development if it continues and sincere commitment and adequate capital investment is not made in all fields of life mostly education, technology, agriculture and health sector.

Arising from those challenges, human capital initiative can be seen from table 1, 2 and 3 the strength of Cross River Civil and public service staff by categorizing them on sex and salary grade level 2020-2023

**TABLE 1: SUMMARY OF STAFF IN CROSS RIVER CIVIL AND PUBLIC SERVICE BY CATEGORY, SEX AND SALARY GRADE LEVEL, 2020**

S/ N	CATEGORY	GL. 01-06			GL. 07-13			GL. 14-16			GL. 17			GL. 18			UNSPECIFIED			GRAN D TOTAL
		M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	
1	MINISTRIES	331	18	517	1,26	1,27	2,537	262	18	443	1	4	20	1	5	20	0	0	0	3,537
		6			2	5			1		6			5						
2	EXTRA-MINISTERIAL DEPARTMENTS	2,39	31	2,711	1,17	683	1,858	381	21	599	4	5	9	1	2	16	3	15	51	5,244
		5	6		5				8					4			6	0		
3	COMMISSIONS	94	35	129	268	145	413	54	22	76	2	0	2	3	0	3	0	0	0	623

4	BOARDS	589	189	778	3,085	1733	4,818	713	501	1214	3	0	3	0	0	0	0	0	0	6,813
5	AGENCIES	46	33	79	299	263	562	65	33	98	4	0	4	2	0	2	0	0	0	745
6	TERTIARY INSTITUTION	86	50	136	274	155	429	53	30	83	0	0	0	3	0	3	0	0	0	651
	<b>TOTAL</b>	<b>3,541</b>	<b>809</b>	<b>4,350</b>	<b>6,363</b>	<b>4,254</b>	<b>10,617</b>	<b>1,528</b>	<b>985</b>	<b>2,513</b>	<b>2</b>	<b>9</b>	<b>38</b>	<b>3</b>	<b>7</b>	<b>44</b>	<b>3</b>	<b>15</b>	<b>51</b>	<b>651</b>

SOURCE: Data Analysis Unit, Cross River State Office of the Head of Service, Calabar.

**TABLE 2: SUMMARY OF STAFF IN CROSS RIVER STATE CIVIL AND PUBLIC SERVICE BY CATEGORY, SEX AND SALARY GRADE LEVEL, 2021**

S/ N	CATEGORY	GL. 01-06			GL. 07-13			GL. 14-16			GL 17			GL 18			UNSPECIFIED			GRAND TOTAL
		M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	
1	MINISTRIES	323	175	498	1,224	1,240	2,464	288	216	504	18	6	24	14	3	17	0	0	0	3,507
2	EXTRA-MINISTERIAL DEPARTMENTS	2,483	346	2,829	1,133	675	1,808	351	203	554	4	2	6	15	2	17	35	15	50	5,264
3	COMMISSIONS	87	35	122	253	130	383	49	18	67	3	1	4	2	0	2	0	0	0	578
4	BOARDS	557	182	739	2,982	1,692	4,674	643	479	1,122	3	0	3	0	0	0	0	0	0	6,538
5	AGENCIES	43	33	76	295	266	561	62	33	95	4	0	4	2	0	2	0	0	0	738
6	TERTIARY INSTITUTION	116	57	173	244	161	405	37	10	47	0	1	1	3	0	3	0	0	0	629
	<b>TOTAL</b>	<b>3,609</b>	<b>828</b>	<b>4,437</b>	<b>6,131</b>	<b>4,164</b>	<b>10,295</b>	<b>1,430</b>	<b>959</b>	<b>2,389</b>	<b>3</b>	<b>1</b>	<b>42</b>	<b>3</b>	<b>5</b>	<b>41</b>	<b>3</b>	<b>1</b>	<b>50</b>	<b>17,254</b>

SOURCE: Data Analysis Unit, Cross River State Office of the Head of Service, Calabar.

**TABLE 3: SUMMARY OF STAFF IN CROSS RIVER STATE CIVIL AND PUBLIC SERVICE BY CATEGORY, SEX AND SALARY GRADE LEVEL, 2022**

S/ N	CATEGORY	GL. 01-06			GL. 07-13			GL. 14-16			GL 17			GL 18			UNSPECIFIED			GRAND TOTAL
		M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	
1	MINISTRIES	260	151	411	1,130	1,149	2,279	346	279	625	17	4	21	9	3	12	0	0	0	3,348
2	EXTRA-MINISTERIAL DEPARTMENTS	3,785	635	4,420	1,040	626	1,666	329	198	527	4	3	7	13	1	14	34	15	49	6,683
3	COMMISSIONS	73	30	103	243	129	372	51	22	73	2	1	3	2	0	2	0	0	0	553
4	BOARDS	510	157	667	2,707	1,530	4,237	776	567	1,343	2	0	2	0	0	0	0	0	0	6,249
5	AGENCIES	37	25	62	256	227	483	80	54	134	4	0	4	1	0	1	0	0	0	684
6	TERTIARY INSTITUTION	113	54	167	242	162	404	37	10	47	0	1	1	3	0	3	0	0	0	622
	<b>TOTAL</b>	<b>4,778</b>	<b>1,052</b>	<b>5,830</b>	<b>5,618</b>	<b>3,823</b>	<b>9,441</b>	<b>1,619</b>	<b>1,130</b>	<b>2,749</b>	<b>2</b>	<b>9</b>	<b>38</b>	<b>2</b>	<b>4</b>	<b>32</b>	<b>3</b>	<b>1</b>	<b>49</b>	<b>18,139</b>

SOURCE: Data Analysis Unit, Cross River State Office of the Head of Service, Calabar

#### THE DEMOGRAPHIC ANALYTICAL PROFILE

From table 1,2 and 3, showed the analytical profile based on chi-square test of independence between 2020-2023 has observed and expected frequencies.

**Table 1. Chi-Square Test of Independence – 2020**

**Observed & Expected Frequencies**

Grade Level	Male (O)	Female (O)	Male (E)	Female (E)	(O-E) <sup>2</sup> /E (Male)	(O-E) <sup>2</sup> /E (Female)
GL 01–06	3541	809	3027.9	1322.1	87.6	214.9
GL 07–13	6363	4254	6675.7	3941.3	14.6	24.7
GL 14–16	1528	985	1602.0	911.0	3.4	6.0
GL 17	29	9	26.0	12.0	0.4	0.8
GL 18	37	7	36.4	7.6	0.01	0.05
<b>Totals</b>	<b>11,498</b>	<b>6,064</b>	<b>11,498</b>	<b>6,064</b>	<b>106.0</b>	<b>246.5</b>

**Table 2. Chi-Square Test for Independence-2021**

**Observed & Expected Frequencies**

Grade Level	Male (O)	Female (O)	Male (E)	Female (E)	(O-E) <sup>2</sup> /E (Male)	(O-E) <sup>2</sup> /E (Female)
GL 01–06	3609	828	2897.3	1539.7	174.5	322.7
GL 07–13	6131	4164	6726.5	3568.5	49.0	99.0
GL 14–16	1430	959	1561.5	827.5	11.0	20.9
GL 17	32	10	27.4	14.6	0.8	1.5
GL 18	36	5	27.0	14.0	3.0	5.8
<b>Totals</b>	<b>11,238</b>	<b>5,966</b>	<b>11,238</b>	<b>5,966</b>	<b>238.3</b>	<b>449.9</b>

**Table 3. Chi-Square Test of Independence – 2022**

**Observed & Expected Frequencies**

Grade Level	Male (O)	Female (O)	Male (E)	Female (E)	(O-E) <sup>2</sup> /E (Male)	(O-E) <sup>2</sup> /E (Female)
GL 01–06	4778	1052	3859.1	1970.9	215.5	422.0
GL 07–13	5618	3823	5862.0	3579.0	10.3	16.7
GL 14–16	1619	1130	1921.5	827.5	47.7	111.3
GL 17	29	9	29.4	8.6	0.0	0.0
GL 18	28	4	27.0	5.0	0.04	0.20
<b>Totals</b>	<b>12,072</b>	<b>6,018</b>	<b>12,072</b>	<b>6,018</b>	<b>273.5</b>	<b>550.2</b>

#### 4.1 Chi-Square Test of Independence: Gender and Grade Level

The Chi-Square Test of Independence was conducted to determine whether gender distribution is significantly associated with grade levels (GL 01–06 to GL 18) in the Cross River State Civil and Public Service for the years 2020, 2021, and 2022. The test compared the observed counts of male and female staff across grade levels with the expected counts under the assumption that gender distribution is independent of grade level.

The hypotheses were:

**H<sub>0</sub> (Null Hypothesis):** Gender distribution is independent of grade level.

**H<sub>1</sub> (Alternative Hypothesis):** Gender distribution is significantly associated with grade level.

The results are summarized in Table 4

**Table 4: Chi-Square Results for Gender and Grade Level (2020–2022)**

Year	$\chi^2$ Value	df	Critical Value (0.05)	Decision
2020	352.5	4	9.488	Reject H <sub>0</sub>
2021	379.4	4	9.488	Reject H <sub>0</sub>
2022	823.7	4	9.488	Reject H <sub>0</sub>

### Interpretation of Chi-Square Results for Gender and Grade Level (2020–2022)

The Chi-Square Test of Independence was used to determine whether gender distribution was significantly associated with grade levels in the Cross River State Civil and Public Service for the period 2020–2022. The results across all three years were **highly significant**, with calculated Chi-Square values (352.5 in 2020, 379.4 in 2021, and 823.7 in 2022) far exceeding the critical value of 9.488 at 5% significance level with 4 degrees of freedom. This implies that **gender distribution was not independent of grade level** during the study period.

#### 1. 2020

The 2020 results indicated that male staff were disproportionately concentrated at the two extremes of the grade structure:

**Lower grades (GL 01–06)** had significantly more male staff than expected.

**Higher grades (GL 17–18)** also showed male dominance.

Female staff, on the other hand, were concentrated in the **middle grades (GL 07–13)**, with much lower presence in senior roles. This suggests that women were less likely to occupy decision-making positions, reflecting barriers to career advancement.

#### 2. 2021

In 2021, the imbalance persisted with little structural change:

Men continued to dominate both the entry-level and leadership grades.

Women were again largely clustered in the middle grades, particularly GL 07–13.

The significant Chi-Square statistic confirms that the **distributional gap between men and women across grade levels remained systemic**. This continuity highlights that no substantial policy interventions or structural adjustments occurred to improve gender representation in senior levels.

#### 3. 2022

By 2022, the gender imbalance became even more pronounced:

The Chi-Square statistic (823.7) was the highest recorded, showing a widening gap.

Male staff numbers increased substantially in both the lower cadre (GL 01–06) and senior grades (GL 14–18). Female representation stagnated or declined, especially at GL 17–18, where women remained almost absent. This indicates not only persistent but also **worsening inequality** in gender representation across grade levels.

#### 4. Overall Interpretation

The consistent rejection of the null hypothesis across the three years demonstrates **a systematic and entrenched gender disparity** in the Cross River State Civil and Public Service. The findings suggest:

**Labour Inefficiency:** The underrepresentation of women in senior grades means the service is not making full use of its available human capital. Capable female staff remain underutilized in decision-making positions.

**Barriers to Female Advancement:** Structural or cultural obstacles—such as promotion bottlenecks, biased recruitment, or limited access to training—likely contribute to the persistent imbalance.

**Implications for Human Capital Development:** By failing to ensure equitable distribution of opportunities, the civil service undermines diversity, innovation, and inclusive growth. The results

therefore call for deliberate policies to promote gender equity in promotions, leadership appointments, and career development.

## Discussion of Findings

### 4.5 Discussion of Findings on Gender and Grade Level Distribution

The analysis of the association between **gender distribution** and **salary grade levels** in the Cross River State Civil and Public Service using the **Chi-Square Test of Independence** revealed consistent and highly significant results for the period **2020–2022**. In all three years, the null hypothesis was rejected, meaning that gender distribution was **not independent of grade level**. Instead, there was a strong and systematic association, pointing to structural imbalances in how male and female staff are distributed across job hierarchies.

#### 4.5.1 Evidence of Persistent Gender Imbalance

The Chi-Square values obtained (352.5 in 2020, 379.4 in 2021, and 823.7 in 2022) were all far above the critical value of 9.488 at 5% significance level, with 4 degrees of freedom. These values confirm that the **gender imbalance was statistically significant throughout the period**.

In **2020**, men were heavily represented in both junior levels (GL 01–06) and senior leadership (GL 17–18), while women were mostly concentrated in mid-level positions (GL 07–13).

In **2021**, the pattern remained unchanged, reflecting persistent barriers to upward mobility for women.

By **2022**, the imbalance intensified. Men increased their presence in both junior and senior positions, while women's representation stagnated or declined, especially at the highest levels of leadership. This indicates not only persistence but also **worsening inequality** in the distribution of male and female staff across grade levels.

#### 4.5.2 Implications for Labour Efficiency

The findings carry important implications for **labour efficiency** within the civil service. Labour efficiency is achieved when staff are distributed and promoted according to their qualifications, skills, and performance, without discrimination or barriers. The results suggest the opposite:

1. **Underutilization of Human Capital:** Women are disproportionately absent from senior grades, meaning their skills and experience are not fully harnessed for leadership and policy-making roles.
2. **Inefficient Career Structures:** The clustering of women at mid-level grades indicates promotion bottlenecks or systemic barriers preventing progression to higher ranks.
3. **Organizational Productivity:** When advancement is skewed by gender, the civil service risks limiting innovation, inclusiveness, and the quality of decision-making (Becker, 1993; Psacharopoulos & Patrinos, 2018).

Thus, the civil service operates below its potential because of inequitable utilization of its workforce.

#### 4.5.3 Link to Human Capital Development

Human capital theory emphasizes the economic value of investing in people through education, training, and fair career progression (Schultz, 1961; Becker, 1993). For the Cross River State Civil Service, the findings suggest that **investments in human capital are not equally rewarded across genders**. Despite the availability of qualified female staff, their career progression is curtailed by structural imbalances.

The results therefore highlight a contradiction: while the state invests in training and professional development for both male and female staff, the returns on investment are disproportionately realized by male staff who advance more quickly into senior roles. This undermines the overall goal of building an efficient and inclusive workforce.

#### 4.5.4 Comparison with Previous Studies

The results of this study are consistent with findings in other Nigerian and African contexts.

**Aina (2011)** noted that women in Nigeria's public service face "sticky floors and glass ceilings" that confine them to lower and mid-level positions. **Ogunlela and Mukhtar (2009)** similarly observed that despite women's qualifications, they remain underrepresented in senior leadership due to institutional and cultural barriers. Internationally, **World Bank (2012)** reports highlight gender inequality in labour allocation as a key factor reducing overall productivity in developing economies.

This study aligns with these observations, showing that Cross River State is no exception.

#### 4.5.5 Policy and Institutional Implications

The persistence of gender imbalance across grade levels calls for deliberate **policy reforms** to address labour inefficiency and promote inclusive human capital development. Key implications include:

1. **Promotion Policies:** Transparent and merit-based promotion systems are necessary to eliminate hidden gender biases.
2. **Capacity Building:** Targeted training and mentorship programs for women could support their progression into senior roles.
3. **Gender Mainstreaming:** Policies should ensure gender considerations are integrated into recruitment, promotion, and leadership selection processes.
4. **Monitoring and Evaluation:** Regular audits of staff distribution can help track progress toward gender equity.

#### 4.5.6 Conclusion

In conclusion, the Chi-Square results for 2020–2022 clearly demonstrate that **gender distribution is strongly associated with grade level** in the Cross River State Civil and Public Service. The consistent overrepresentation of men in senior positions and women in mid-level grades reflects systemic labour inefficiency and underutilization of female human capital. These findings underscore the need for urgent policy interventions to ensure equitable distribution of opportunities, thereby enhancing organizational productivity and advancing human capital development in the state.

Furthermore, the labour inefficiency, preliminary results for human capital development initiatives, exploration and production in Cross River State, centered on development crisis which are result preliminary neglect and socio-economic labour inefficiency to build robust and formidable pool of human capital resources in order to achieve a particular goal. The finding obtained from analysis of the data of the study revealed that two important sectors (Education and health), which constitute the pillar-arch in human capital development initiative in the state which are in mori-bund condition. The successive government in the state have not made any tangible effort or demonstrated genuine and strong commitment toward human capital development in health, education, agriculture industrial and commercial sectors; they merely paid lip ears to the state affairs in their critical sectors. The preliminary result causes gross neglect and socio-economic overwhelmed plethora problems which have rendered human capital development and labour inefficiency. This plethora problems include underfunding of educational and health sectors, corruption, operational infrastructures, poor training, examination malpractices, poor quality manpower development, inadequate invariability drastic measures, poor appropriate combination of skilled manpower and dilemma development. In order to enhance socio-economic advancement, there is need for Cross River State both government and private sector to address the observed deficiencies to enable her



achieve a certain goal in order to build robust human capital development base on socio-economic attainment growth and development.

## RECOMMENDATIONS

Based on the existing data collection, the broad recommendation of this paper include;

1. Cross River should prioritize human capital development in the state development plan and constantly review it as a way of increasing budget allocation to education and health is a way of meeting UNESCO and WHO standard
2. There is need to resuscitate dilapidated educational and health facilities across the three senatorial districts that make up the state for effective and efficient service delivery.
3. The state house of assembly should formulate laws that will bring socio-economic development in the general working environmental condition in both private and public sector as a way of reducing the rate of human capital flight and increase state capacity to retain appreciable number of her professional skilled for the interest of the state.
4. Drastic measures should be taken as a way to tackle corruption and related underhand practices among stakeholder in all sub-sectors of the state educational institutions.
5. The three senatorial districts that made up the state should have genuine political will and sincere commitment to socio-economic development of human capital as a way of encouraging education and health as areas of policies initiative
6. Institutions should be made to recognize examination malpractice as a criminal offence with serious punishment and special court should be designate or established for malpractices persecuting.

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