

## Environmental Issues in Nigeria's Commercialisation and Privatisation Policy

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**ABSTRACT** The necessity of privatisation as a policy for promoting efficient utilisation of national resources and economic growth is now widely recognized. Also in recent years, the concerns about environmental consequences of the growth and development have increased. The real policy challenge is how to integrate environmental concerns in commercialisation and privatisation policy. Nigeria embraced commercialisation and privatization as a development strategy in the mid-1980s, this period has also witnessed heightened concerns about the environment. The paper demonstrates that there is cause for concern about environment consequences of public enterprises reform because of the divergence between private and public costs and benefit with regard to the environment. The paper also shows that environmental issues did not form a part of public enterprises reform programme in Nigeria until very recently. Post-reform performance evaluation has therefore not been able to incorporate environmental consequences. In all we argue that it is necessary to have framework that is useful in comparing welfare changes and its distribution among major groups in the society applicable for both pre and post-privatisation performance evaluation, since the ultimate goal of privatisation is improved social welfare level.

### INTRODUCTION

The desirability of equitable development is now universally recognised. Deliberations have gone on for sometime on how best to achieve this goal. For sometime, it was considered sound economic policy for Government to establish and invest in statutory and state-owned enterprises (SOEs), particularly in the face of limited private capital and natural monopolies. Experience in most emerging market economies has, however, shown that it was no longer sound economic policy to continue to allocate substantial proportion of national resources to a few SOEs, whose performance has not justified the heavy outlays on them. Rather, it is a more sound economic policy to continue to devolve greater role to the market, the private sector, and this may be a better way of promoting equitable growth and development. This has led to Governments embracing commercialisation and privatisation as a policy for achieving that goal.

Similarly, the last decade and half has witnessed rising concern about whether environmental constraints will limit development and whether development will cause serious environmental damage. Environmental problems can and do impede the goals of development. Environmental damage can undermine future productivity. Destroyed ecosystem in the name of economic growth and rising incomes today jeopardises future incomes. Also, environmental

problems undermine attainment of equitable development. It is recognised that private markets provide little incentive for curbing pollution. Yet it is often the poorest who suffer most from the consequences of pollution and environmental degradation.

Thus, on the one hand, the necessity of privatisation as a policy for promoting efficient utilisation of national resources and economic growth is now widely recognised. On the other, concerns about environmental consequences of growth and development have increased in recent years. The real policy challenge is how to integrate environmental concerns in commercialisation and privatisation policy.

Nigeria embraced commercialisation and privatisation as a development strategy in the mid-1980s. This period has also witnessed heightened concerns about the environment. This paper appraises Nigeria's commercialisation and privatisation programme (CPP) to see how far environmental issues have featured in the policy, and possible environmental consequences of the policy as currently implemented.

In section II we present theoretical considerations on possible link between commercialisation and privatisation and the environment. Section III presents an overview of Nigeria's CPP. The conception of CPP and how this may affect the environment, and the methods adopted for implementing the policy are examined. Specifically, the enabling legal instruments are

examined to see how far environmental concerns are integrated and enforced. Section IV presents an analytical framework for integrating environmental safeguard in Nigeria's CPP. Section V concludes the paper and offer some recommendations.

### **Commercialisation, Privatisation and Environment: Some Theoretical Issues**

Privatisation is a programme of divestiture of public enterprises (PE) introduced within the framework of macroeconomic reform. It involves the transfer of ownership and controlling share from public to private sector. Commercialisation involves reform of the PE sector to subject them to market discipline while still remaining a PE.

Economic theory does not provide an explicit link between PE reform and the environment. Attempt is not made in this paper to construct such theory. Rather, attempt is made to demonstrate that such a link does exist, and as such that there is need to take environmental implications into account in implementation and evaluation of PE reform programmes.

Microeconomic theory provides a basis of drawing a link between privatisation and economic growth. It is possible to move from that to a link between growth and the environment. Similarly, welfare economic theory provides a basis for integrating environmental consequences of production activity into welfare measurement, and thereby a basis of assessing environmental implications of PE reform. Microeconomic theories used to justify PE reform, particularly privatisation, derive from theoretical perspectives on the ownership issue drawn from property right theory, public choice theory and principal-agent analysis (Alchian, 1965; Tullock, 1965; Jenson and Meckling, 1976).

The key theoretical elements underpinning the argument for a change of ownership from public to private relate to two main considerations. First, is the view that public ownership led to the pursuit of objective that detract from economic welfare maximisation. Second, is that an ownership change could improve economic performance by changing the mechanisms through which different institutional arrangements affect the incentives for managing enterprises (Vickers and Yarrow, 1988). The logical conclusion is that ownership change leads to economic efficiency. The link between priva-

tisation and the environment could from this be drawn from the effect of pursuit of efficiency objective on the environment. A popular measure of efficiency is profitability. The way the objective is pursued could have positive or negative impact on the environment. It has been noted that though its use should be encouraged, the fact remains that "profitability is a most imperfect guide to PE performance" (Nellis, 1986:51). This is because many markets, especially in Africa, are not competitive, and prices may not sufficiently incorporate environmental concerns, especially if profitability is based on maximum benefit – minimum costs calculations. In other words, publicly relevant profit is quite different from privately relevant profit because publicly relevant prices differ from privately relevant prices (Jones, 1991).

From welfare economics perspective, the theoretical arguments for the advantages of private ownership (privatisation) are based on a fundamental theorem of welfare economics which suggests that, under strong assumptions, a competitive equilibrium is pareto optimal. However, these assumptions include that there are no externalities in production or consumption, that the product is not a public good, that the market is not monopolistic in structure, and that information costs are low. These assumptions are strong indeed for typical developing countries like Nigeria.

We end the section with a summary of what could be said to be the state of debate on the link between PE reform and the environment. It derives from attempt to answer the question; does privatisation increase or decrease industrial pollution? (World Bank, 1992a).

Some would argue that privatisation is beneficial to the environment. This position is based on the following. First, PEs tend to use older, more polluting technology than private firms. In the light of considerable evidence that a common effect of ownership change is increased investment, privatisation should be associated with less pollution as new owners install cleaner technology. Second, PEs may more easily avoid compliance with pollution controls, because they have less of an adversarial relationship with the public sector. Many PEs receive exemptions from the pollution regulations of their owner, the government. And third, PEs have tended to benefit from protection, and have, therefore, tended to be more materials – intensive, energy-

intensive and thus pollution-intensive than private industries might have been. Examples of these are petrochemicals and cement industries.

Others would argue that privatisation could increase pollution. First, private enterprises may have more incentive to undertake polluting activities than complacent PEs that do not have to worry if they make losses. Second, private enterprises may be more likely to bribe regulators in order to evade pollution controls. They are more likely to have the money than PEs and they may not have the scruples of the publicly employed managers. And third, private enterprises are better able to hide information from government than PEs. This makes it harder for regulators to control them.

Clearly, ownership is not a safeguard for environmental concerns, and as such there is the need for deliberate effort to take environmental concerns into account when designing, implementing and evaluating PE reform programmes. This is particularly so as it is generally recognised that private markets provide little or no incentive for curbing pollution, and that it is often the poorest who suffer most from the consequences of pollution and environmental degradation (World Bank, 1992 b).

In the next section, an overview of the PE reform programme in Nigeria is presented, with a view to highlight environmental implications and the extent to which cognisance is taken of these.

Commercialisation and Privatisation of PEs in Nigeria: An Overview Commercialisation and privatisation have become one of the most important elements of the continuing global trend of the increasing use of markets to allocate resources. The objectives of privatisation worldwide include the following:

- to raise revenue for the state;
- promote economic efficiency;
- reduce government interference in the economy;
- promote wider share ownership;
- provide the opportunity to introduce competition;
- subject PEs to market discipline; and
- develop national capital markets.

In Nigeria PEs were established involuntarily every sector of the economy, driven initially by the desire to use them as a means for achieving rapid economic development. Indeed, for sometime it was considered sound economic policy for Government to establish and invest in

statutory corporations and PEs. The pace accelerated in the 1970s in the wake of enormous revenues from oil. By the end of the 1970s there were over 1800 PEs in Nigeria, from traditional public utilities to banking, insurance, hotels, transportation, cement, sugar, and petroleum (both up-and down-stream).

By 1986 the level of government investments in its PEs was estimated at N36.5 billion. It estimated that PEs consume about N200 billion annually by way of grants import duty waivers, tax exemptions, etc. In 1998, PEs enjoyed about N265 billion, as given in Table 1

**Table 1: Transfers to parastatals and agencies, 1998 amount (Nbn) % of Total**

Subsidised foreign exchange)	156.5	59
Import duty exemptions	12.5	5
Tax exemptions/arrears	15	6
Unreconciled revenues	29.5	11
Loans/guarantees	16.5	6
Grants, subventions, etc.	35	13
	265	100

\* at N22 instead of N86 to the dollar prevailing in 1998.

Source: Bureau of Public Enterprises, Status Report June 2003 P.4.

As at December 2000, the total liabilities of thirty-nine of these PEs were in excess of N1.1 trillion, with accumulated losses of N92.3 billion (FGN 2003:6). It is estimated that successive Governments in Nigeria have invested up to N800 billion in these enterprises, but annual returns on this have been below 10 percent (FGN, 2000). In addition to these low returns, the low quality of service delivery, the non-alignment of supply to demand and the secondary or negative multiplier effects on the economy of their poor performance became a cause for concern. For example, it is estimated that the nation may have lost about \$800 million due to unreliable power supply by NEPA and another \$440 million due to inefficient fuel distribution (FGN, 2000).

Diagnoses showed that, like in many other developing countries PEs in Nigeria suffer from fundamental problems of defective capital structure, excessive bureaucratic control or intervention, inappropriate technology, gross incompetence and mismanagement, corruption and crippling complacency which monopoly engenders (FGN, 2000; Alayande, 1999; Obadan and Ayodele, 1998). This thus provided the imperative of privatisation and commercialisation.

In July 1988 the Federal Government promulgated the Privatisation and commercialisation Decree (now Act) No. 25 (CPD) in which it outlined the major objectives of the commercialisation and privatisation policy in Nigeria. These are to:

- reorient the PEs toward performance improvement; aimed at attaining viability and overall efficiency; reduce the dominance of unproductive investments in the PE sector;
- check the absolute dependence of the PEs on the Treasury for funding; and dispose of PEs that provide goods and services which the private sector can better provide.

These objectives are thus a summary of global objectives of privatisation stated above. Nigeria's PE reform was a four-pronged programme of partial commercialisation, full commercialisation, partial privatisation and full privatisation. Full commercialisation shall be where the affected PE was to be operated as a fully commercialised enterprise, setting its prices appropriately so as to operate at a profit. Such enterprise was not to receive any government subventions and could raise its necessary investible funds through the capital market, but will still remain 100% government owned.

Partial commercialisation shall be where the enterprise is expected to operate in a way to cover at least its operating costs from its own sources. The balance could be provided in the form of capital grants but on a justified basis. Full privatisation is where there would be full divestiture of all government equity interests. And partial privatisation is where the government sells only a proportion of its equity interests.

The Technical Committee on Privatisation and Commercialisation (TCPC) was established and charged with the responsibility of implementing the programme.

Under the (PD most of the PEs producing utilities (electricity, water, communication and transportation) were to be fully or partially commercialised, while those producing social services and other commodities were for full or partial privatisation. A total of III PEs were identified for full or partial privatisation. A total of III PEs were identified for full or partial privatisation and another 35 were for full or partial commercialisation. These are listed in Appendix Table 1.

In 1994 the TCPC was replaced by the Bureau of Public Enterprises (BPE). In July 1999 the

National Council on Privatisation (NCP) was inaugurated and charged with responsibility to:

- approve policies on privatisation and commercialisation;
- approve guidelines and criteria for valuation of PEs for privatisation and choice of strategic investors;
- approve PEs to be privatised and commercialised;
- approve the prices for shares or assets of the PE to be offered for sale;
- approve the appointment of privatisation advisers and consultants, and
- review, from time to time, the socio-economic effect of the programme and decide on appropriate remedies (FGN, 2000).

The programme was to be in three stages as follows:

*Phase One* – to be completed by December 1999-June 2000, included commercial ad merchant banks and cement companies that were already quoted on the Stock Exchange, and petroleum marketing companies.

*Phase Two* - to include hotels, motor vehicle assembly plants, fertilizer, sugar, paper, steel, media, and insurance companies. This was to be completed between February and December 2001.

*Phase Three* – to include NEPA, NITEL, NAFCON, Nigeria Airways, petroleum refineries, aluminum, and machine tool. This was to be completed between September 2000 and December 2001.

Five main approaches were evolved for the privatisation programme:

public sale of shares through the Stock Exchange.

Private placement, for enterprises in which government holdings were so small that shareholders could not be persuaded to make a public offer of shares even where such enterprises have fulfilled the listing requirements of the stock Exchange.

Sale of assets, for enterprises with very poor track record and little prospect for improvement, in which case neither public offers or private placement methods would be attractive. Such enterprises are liquidated and assets sold off.

Management buyout, in which case the entire affected enterprise or a substantial part of its equity capital is sold to the workers. The reorganisation of the enterprise would then be by the workers for effective management.

Deferred public offer, in cases where some

PEs are considered viable but it is reckoned that if sold by shares the anticipated revenue would be lower than the real values of their underlying assets. In such cases, the assets are revalued and a price that more reflective of the current value of the assets is negotiated, on a willing buyer-seller basis.

### III (i) Status of Programme Implementation

For phase one, the privatisation of PEs slated for privatisation under this phase is all but completed. This included the liquidation of Calabar Cement Company. The case of Benue Cement Company was yet to be concluded, and privatisation of Assurance Bank and Afribank was in advanced stage as at December 2002. From these transactions, around N200 billion was remitted to the Treasury. Table 2 shows the proceeds from these transactions, which far exceeded initial expectations.

For phase two, cases of enterprises engaged in sectors where the prices of their output or services are largely market-determined, thirteen transactions have been concluded, and others are close to being finalised or are awaiting final payments. Table 3 shows the proceeds from these transactions.

For phase three, which involves monopoly sector of the economy, the implementation of the programme requires sector reform and restructuring prior to or side-by-side with the divestiture transaction. The sequence of the phase is:

- policy formulation or review
- legal / regulatory framework design
- restructuring and liberalisation, and
- privatisation transaction.

Detailed appraisal of economic impact of Nigeria's commercialization and privatisation programme is beyond the scope of this paper. Aigbokhan (1994) examined the case of Delta Steel Company, Obadan and Ayodele (1998) present an appraisal as in 1996 and Alayande (1999) as in 1997. With the additional data for the period up to end of 2002, the general conclusion from this partial appraisal is that a number of the objectives of the programme have been substantially attained. Government has realised a noticeable amount in proceeds from these transactions and this has improved its revenue. Also, divestiture has reduced government outlays on the PE sector, and has therefore

**Table 2: Phase one proceeds**

	Core Investor Proceeds	Public Offer Proceeds	Post Offer Proceeds (States)(a)	Post Offer Proceeds (IIs)	Sale on NSE Floor	Total Proceeds
NAL	NIL	573,000,480.25	255,775.729	59,4,295,165	NIL	1,423,071,374.25
IMB	NIL	11,262,696.75	1,116,635.25	2,205,379.80	778,369.60	15,363,081.40
UNIPETROL	1,593,750,000	435,801,067	10,157,105	12,785,215	NIL	2,052,493,387
FSB	NIL	1,258,520,369.40	133,441,208.20	256,445,978.87	39,447,024	1,686,854,530.47
ASHAKA	1,572,187,500	369,142,669.50	72,028,910.25	94,170,688	NIL	2,107,529,767.75
CCNN	622,761,278.82	44,941,345	3,165,857.50	10,531,507.07	NIL	681,399,988.39
NOLCHEM	7,412,916,000	979,913,750	305,455,000	117,337,775	200,626,884.53	9,016,249,409.53
AP	2,308,824,000	272,240,265	195,777,900	102,011,379.58	NIL	2,878,853,544.58
WAPCO	1,798,550,000	808,307,115	31,660,035	213,185,819.16	167,184,623.06	3,018,887,592.22
BCC	918,316,128.20	NIL	NIL	32,960,867	NIL	951,276,995
TOTAL	N16,227,304,907.02	N3,944,822,642.90	N1,007,578,380.20	N1,435,929,774.48	N408,036,901.19	N23,831,979,720.59

Source: BPE Status Report June 2003 p.42

**Table 3: Phase two proceeds**

<i>Enterprise</i>	<i>Bidding date</i>	<i>Gross proceeds</i>
Niger dock Limited	2-Jan	N3.50 Billion
FESTAC'77 Hotel	2-Jan	N1.01 Billion
NITEL (Unconcluded)	2-Feb	N15.40 Billion
Non-Refundable deposit		
Assurance Bank Nigeria LTD	2-Feb	N0.85 Billion
Nicon Hilton Hotel (Unconcluded)	2-Oct	N0.32 Billion
Bid Bond Proceeds		
Capital Hotels PLC	2-Oct	N4.5 Billion
Nigeria Reinsurance Corporation	December -02	N1.01 Billion
Niger Insurance PLC	2-Dec	N0.62 Billion
Savanna Sugar Company Limited	December -02	N1.35 Billion
National Trucks Manufacturing, Kano	December -02	N0.80 Billion
Electricity Meter Company, Zaria	December -02	N0.40 Billion
National Fertilizer Company of Nigeria	3-Mar	N10.28 Billion
Nicon Hilton Hotel, Abuja	3-Apr	N7.54 Billion
<b>Total</b>		<b>N50.40 Billion</b>

released resources for other developmental needs. Second, capital market has further deepened since the programme. Volume of stocks traded on the Stock Exchange rose from 2.1 million in 1998 to 4.997 million in 2000 and to 6.614 million in 2002. The number of deals rose from 84, 935 to 256, 523 to 451, 850 respectively, and value of stocks were N13.6 billion, N28 billion and N89.4 billion respectively. Market capitalisation of the Stock Exchange rose from N1.2 billion in 1989, to N65.6 billion in 1991 to N285 billion in 1996. In 2001 and 2002 it stood respectively at N662.6 billion and N 763.9 billion. Third, gross earnings of the enterprises exceeded targets in most enterprises, except NEPA. Thus, as a measure of efficiency, it may be argued that privatisation has brought about some improved performance of the PE sector. The appraisal in this paper is, however, a highly partial one, and may not provide sufficient basis for such a conclusion. Instead, the primary focus of this paper, as has been mentioned above, is to examine to what extent environmental concerns were a part of the PE reform programme and could therefore be used to evaluate the impact of the programme. The rest of this section examines the provisions of the enabling legislation as well as BPE evaluation reports from this standpoint.

### **III (ii) Environmental Concerns in PE Reform Enabling Instruments**

Public Enterprises (Privatisation and Commercialisation act of 1999, as amended by the Public Enterprises (Privatisation) Act of 2000 is the enabling legislation of the PE reform programme. This legal instrument together with

Privatisation Handbook (FGN, 2000) provide guidelines on the reform programme.

In the guidelines, the critical areas of interest in negotiations with the potential strategic / core investors are:

the price to be paid for the 40% equity to be acquired;

the terms of payment;

the role of the strategic/core investor in the future management of the PE being privatised;

the level of participation by Nigerian managers and technology transfer;

the future development of the enterprise as perceived by the Strategic / Core Investor;

the funding arrangements for rehabilitation, expansion or diversification of the enterprise post-privatisation; and

staff welfare, retraining and development (FGN, 2000: 43 – 44).

Section 8 of the Act states, 'notwithstanding the provisions of any other enactment and without prejudice to the generality of section 6 of this Act, a commercialised enterprise shall operate as a purely commercial enterprise (FGN, 2000: 7).

It is thus clear that no specific functions of the Council or Bureau nor instrument of negotiation of terms of privatisation relate to environmental concerns. This is despite a window provided by one of the items of responsibilities the Council was charged with at inauguration, which requires it to 'review from time to time, the socio-economic effect of the programme and decide on appropriate remedies'. Emphasis in both commercialisation and privatisation has been on economic efficiency.

This seems to reflect implicit acceptance of the view that 'policies that are justified on economic grounds alone can deliver substantial environmental benefits. Eliminating subsidies for the use of fossil fuels...making heavily polluting state-owned companies more competitive...are examples of policies that improve both economic efficiency and the environment (World Bank, 1992 b: 1).

This viewpoint tends to ignore basic welfare economic theory which suggests that the market frequently does not accurately reflect the social value of the environment. First, no market exists, because it is difficult to demarcate or enforce the use of the environment. And second, individuals and societies lack information about environmental impacts or about low-cost ways to avoid damage. Private firms may not provide better information because they find it difficult to capture the benefits.

Thus the PE reform programme as implemented under Phase One and Phase Two does not seem to allow for integration of environmental concerns. Ex-post performance evaluation of commercialised and privatised enterprises would therefore indicate that these enterprises may not have been as profitable as their records may suggest. Environmental consequences of cement and petrochemical industries especially is a case in point.

Apparently in response to agitations by environmentalists, particularly in the oil producing areas, Government seems to now recognise the need to integrate environmental concerns. For example, for its Oil and Gas sector reform under Phase Three of the programme, the specific objectives include:

Urgent amelioration of adverse social and environmental impacts of upstream operations, a sustainable clean physical environment, social equity, and an end to violence in the oil producing areas...Greater attention is to be given to environmental and health safety priorities in the downstream sector (FGN, 2002: 44).

Similar environmental concern is, however, not explicitly stated with regard to NEPA and NITEL reform programmes.

Since the late 1980s the international community has brought environmental issues to the front burner of policy debate. Accordingly, the World Bank has made it an element of its lending programmes (see Shirley, 1989). Nigeria has lately been a beneficiary of the programme.

The Bureau of Public Enterprises, in collaboration with the Federal Ministry of Environment very recently produced Privatisation Environmental Handbook (PEH) (FGN, 2003). The stated focus of the PEH is on the process of identifying, evaluating and mitigating the environmental, health, safety and social (EHSS) impacts and consequences of individual privatisation transactions, which are subject to mandatory environmental assessment. The objective is to protect the environment by minimising respective risks and maximising the environmental benefits of each transaction, as well as timely and diligent identification of potential EHSS risks and related liabilities of a specific PE that could undermine the success and sustainability of privatisation transactions.

The policies and principles of the EHSS include:

priority of preventive actions aimed at avoiding further environmental degradation;

application of polluter pays principle whenever possible and of transparent allocation of responsibility and liability for environmental damage; and

involvement of affected stakeholders in environmental and social aspects of privatisation process (FGN, 2003: 3).

The BPE is empowered to ensure compliance with applicable laws and regulations by new owners/investors of privatised enterprises, and it has authority to cancel any privatisation transaction if the new owner/investor is not in compliance with provisions of privatisation contract.

As a measure to ensure integration of environmental issues, environmental assessment would be required of every transaction. In recognition of the fact that not every privatisation will require full blown environmental assessment (EA), environmental audit (EAu) or environmental impact assessment (EIA), an environmental assessment classification is introduced. Enterprises for privatisation are grouped into category A, B or C, depending on the degree of environmental risk.

Category A is for high risk enterprises, which are situated in an industry that is likely to have significant EHSS impacts and have potential large EHSS liabilities. An environmental audit (EAu) is required for such enterprise; an EA/EIA may also be required if it falls within the EIA legislation.

Category B, which is for medium or standard risk level, is where potential adverse EHSS impact is less severe and costly. Privatisation contract for such enterprises will require standard EHSS compliance. Enterprises would require routine monitoring and at least one environmental auditing during the first three years of operation.

Category C, low risk enterprises, are those with low or minimal adverse EHSS impacts. EA action required such enterprise is limited to the screening stage.

Mechanism is also available for post-privatisation evaluation. A year after operation under the new owner/investor, BPE would be required to prepare an EHSS Evaluation memorandum (EHSEM) to establish whether the privatisation transaction has achieved its overall EHSS objectives. Appendix Table 2 shows the various features of the procedure BPE is to follow to ensure that environmental issues are integrated into privatisation programme.

The foregoing indicates that serious effort is of late being made to establish procedure to integrate environmental issues into PE reform programme in Nigeria. This was, however, after two of three phases of the programme have been completed. Although there is provision for post-privatisation evaluation, the analytical procedure is not stated. Also, apart from provision for EA/EAu and EIA pre-privatisation, no explicit analytical procedure is stated for undertaking analysis of environmental consequences. There is need for such analytical frame applicable to both pre-and post-privatisation impacts. In the next section one such framework is presented.

#### **A Framework for Analysis of Environmental Consequences of Commercialisation and Privatisation**

As was shown in section II, environmental issues in the context of PE reform fall within welfare economics theory. A useful analytical framework for examining environmental issue both pre – and post- privatisation, from the point of view of this paper is cost-benefit analysis. It is considered important that any framework chosen should be applicable to both stages of reform programme, that is ex-ante and ex-post stages. The framework presented in this section builds upon Jones et al. (1990) and Galal et al. (1992). The former is an ex-ante and the latter an ex-post application. However, neither of the two authors' frame work explicitly considers environmental

issue. Rather, focus was limited to consumer welfare. Their framework is therefore extended to incorporate environmental consequences. The presentation is, however, limited to ex-post analysis of privatisation.

Cost-benefit analysis normally comprises several stages, and the listing of current and future costs and benefits to be included, The critical issue in the process is deciding how far one should go in evaluating external (indirect) benefits and costs of the environment. The other is the difficulty in placing monetary values on non-traded environmental goods and services. These considerations would need to be taken into account in implementing the framework discussed below, which draws on Galal et al. (1992).

Privatisation policy is aimed at improving public resource allocation and enhance economic efficiency. The ultimate objective is improvement in social welfare. Assuming that all provisions in PEH are fulfilled before privatisation, it is expected that this would lead to a change in welfare level. Post-Privatisation welfare level could then be analysed and decomposed to evaluate how sections of the economy may have benefited. The buyer or provider of capital, the seller or government, consumers of output/services of the enterprise, providers of inputs of labour and environmental resource/the society are all expected to have a share in the welfare change, either as gainers or losers.

Thus, the welfare change following privatisation (DW) would be decomposed into a change in enterprise profits (Pr) and change in consumer surplus (DS), considering that consumer dissatisfaction is one of the reasons for privatisation. Also relevant is the change in profits of competing firms (DC), as the privatised enterprise's competitors may face a loss of their share of market and profits following improved performance of the privatised firm. Workers in the privatised firm may face either income rise or decline, depending on the terms of negotiation with the new owner/investor, thus a change in their share of benefits arising from the firms operations, (DL).

Thus far, distribution of welfare change is:

$$DW = DPr + DS + DC + DL \dots\dots\dots (1)$$

Meanwhile, the private buyer gains to the extent that his maximum willingness-to-pay (Zb) exceeds the negotiated price actually paid (Za). Thus, buyer's share is

Zb - Za  
 Government's share of the profit then is  
 $DPr - (Zb - Za)$

This could be positive or negative, depending on the relation of Za to Zb. If Za is less than Zb, government's share will fall and could be negative.

Valuation of these flows by society may be asymmetric. An element of the project evaluation literature is the notion that a naira of government revenue may be worth more than that of the numeraire consumption good by a factor termed the government revenue multiplier (lg). Similarly, a naira of private profit may be worth more than that of consumption as it creates employment in the face of high unemployment level, giving rise to private profit multiplier (lp). In addition, society's valuation of environment may be higher than the private enterprise's. The latter's valuation of costs of environmental degradation may be lower as it does not capture all benefits. On the other hand, society's valuation of benefits may be higher because it does not capture all costs. Net cost to society could therefore be measured as the difference between relative benefits less the difference between relative costs,

$$NBs (Bs - Bf) - (Cf - Cs) \dots\dots\dots (2)$$

If equation (2) is substituted into equation (1), distribution of welfare change becomes

$$DW = DPr + DS+DC+ DL +DNBs \dots\dots\dots (3)$$

Post-privatisation evaluation, applying this framework, is then undertaken by estimating the changes separately in the values to different groups post-privatisation, that is, under private operation, (Vp) and comparing it with values under public operation, that is, pre-privatisation (Vg).

$$DW = Vp - Vg = (Pp + Sp Cp + NBsp) - (Pg+Sg+Cg + NBsg) \dots\dots\dots (4)$$

The equation will enable comparison of welfare changes of the respective groups post-privatisation.

Although the analytical framework is relatively simple, the real challenge lies in measuring the components of the equation.

**CONCLUSION**

This paper has demonstrated that there is cause for concern about environmental consequences of PE reform. This derives

particularly from divergence between private and public costs and benefits with regard to the environment. The paper also shows that environmental issues did not form a part of PE reform programme in Nigeria until very recently. Post-reform performance evaluation has, therefore, not been able to incorporate environmental consequences.

It is not clear from the PEH what methodology would be used in post-privatisation performance evaluation. For purpose of consistence, the paper argues that it is necessary to have a framework that is applicable for both pre- and post-privatisation performance evaluation.

A simple variant of cost-benefit framework is presented - Since the ultimate goal of privatisation is improved social welfare level, the framework should be useful in comparing welfare changes and its distribution among major groups of society.

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## APPENDIX

**Table 1:**  
**Schedules**  
**First Schedule**  
**Section 1 (1)**  
**Part 1: Enterprises in which equity held shall be partially privatised**

<i>Enterprises</i>	<i>Maximum Strategic Investor Participation As Percentage After Privatisation</i>	<i>Maximum Federal Government Parastatal As Percentage After Privatisation</i>	<i>Nigeria Individuals Participation As Percentage After Privatisation</i>
<i>Telecommunication Sector</i>			
1. Nigerian Telecommunication Plc	40%	40%	20%
2. Nigeria Mobile Telecommunication Ltd	40%	40%	20%
<i>Electricity Sector</i>			
National Electric Power Authority	40%	40%	20%
<i>Petroleum/Oil Sector</i>			
1. Port-Harcourt Refinery (I)	40%	40%	20%
Port-Harcourt Refinery (ii)	40%	40%	20%
2. Kaduna Refinery and Petro-Chemicals	40%	40%	20%
3. Warri Refinery and Petro-Chemicals	40%	40%	20%
4. Eleme Petrochemicals Company Ltd.	40%	40%	20%
5. Pipelines Product and Marketing Company Ltd.	40%	40%	20%
6. Nigerian Petroleum Development Company Limited	40%	20%	40%
<i>Fertilizer Companies</i>			
1. Federal Superphosphate Fertilizer Company Limited	40%	20%	40%
2. National Fertilizer Company Nigeria Limited	40%	20%	40%
<i>Machining Tools</i>			
1. Nigerian Machine Tools Company Limited	40%	20%	40%
<i>Gas</i>			
Nigeria Gas Company Limited	40%	20%	40%
<i>Steel &amp; Aluminum Sector</i>			
1. Jos Steel Rolling Mill Limited	40%	20%	40%
2. Katsina Steel Rolling Mill Company Limited	40%	20%	40%
3. Oshogbo Steel Rolling Company Limited	40%	20%	40%
4. Ajaokuta Steel Company Limited	40%	20%	40%
5. Delta Steel Company Limited	40%	20%	40%
6. Aluminum Smelter Company Limited	40%	40%	20%
<i>Mining And Solid Minerals Sector</i>			
1. Nigerian Coal Corporation and subsidiaries	40%	40%	20%
2. Nigerian Mining Corporation And Subsidiaries	40%	40%	20%
3. Nigerian Uranium Company Limited	40%	40%	20%
4. Nigerian Iron-ore Mining Company Limited	40%	40%	20%
<i>Media Companies</i>			
1. Daily Times of Nigeria Plc and subsidiaries	40%	20%	40%
2. New Nigerian Newspapers Limited	40%	40%	20%
<i>Insurance Companies</i>			
1. NICON Insurance Company Plc	40%	40%	20%
2. Nigerian Reinsurance Plc	40%	40%	20%
<i>Transport And Aviation Companies</i>			
1. Federal Airports Authority of Nigeria	40%	40%	20%
2. Nigerdock Limited	40%	40%	20%
2. Nigeria Airways Limited	40%	40%	20%
<i>Paper Companies</i>			
1. Nigerian National Paper Manufacturing Company Limited, Iwopin	40%	40%	40%
2. Nigerian Newsprint Manufacturing company Limited, Oku Ibokun	40%	40%	40%
3. Nigeria Paper Mills	40%	40%	40%
<i>Sugar Companies</i>			
1. Sunti Sugar Company Limited	40%	40%	40%
2. Lafiji Sugar Company	40%	40%	40%
3. Nigeria Sugar Company Bacita	40%	40%	40%

**First Schedule****Section 1 (1)****Part ii: Enterprises in which equity held shall be fully privatised**

<i>Infrastructure Utility Companies</i>	<i>Federal Government Ownership Government Ownership</i>	<i>Post Privatisation Federal Ownership</i>
1. Unipetrol Plc	40%	Nil
2. National Oil and chemical Company Limited	40%	Nil
3. African Petroleum Plc	40%	Nil
4. Nigeria Cement Company Limited Nkalagu	10%	Nil
5. Calabar Cement Company Limited	40%	Nil
6. West African Portland Cement Plc	27%	Nil
<i>Commercial And Merchant Banks</i>		
1. Afribank Nigeria Plc		Nil
2. Assurance Bank Plc		Nil
3. FSB International Bank Plc (Shares owned by Parastatals)		Nil
4. International Merchant Bank Plc		Nil
5. NAL. Merchant Bank Plc		Nil
<i>Agro – Allied</i>	25%	Nil
1. Ayip-Eku Oil Company Plc		
2. Opobo Boat Yard	25%	Nil
3. Nigerian Romania Wood Industries Limited	25%	Nil
<i>Motor Vehicles And Truck Assembly Companies</i>		
1. Anambra Motor Manufacturing Company Limited	35%	Nil
2. Leyland Nigeria Limited	35%	Nil
3. Nigeria Truck Manufacturing Company	35%	Nil
4. Peugeot Automobile of Nigeria Limited	35%	Nil
5. Volkswagen of Nigeria Limited	35%	Nil
6. Steyr Nigeria Limited	35%	Nil
<i>Hotels</i>		
1. Nigeria Hotels Limited	47%	Nil
2. Festac 77 Plc	100%	Nil

**Second Schedule****Section 6 (1)****Part I: Partial Commercialisation**

Nigerian Railway Corporation  
 Cross River Basin Development Authority  
 Hadejia-Jama' are River Basin Development Authority  
 Lower Benue River Basin Development Authority  
 Nigeria River Basin Development Authority  
 Ogun-Osun River Basin Development Authority  
 Upper Benue River Basin Development  
 Sokoto-Rima River Basin Development Authority  
 Anambra-Imo River Basin Development Authority  
 Benin Owena River Basin Development Authority  
 Chad River Basin Development Authority  
 Kainji Lake National Park  
 Federal Radio Corporation of Nigeria  
 Nigerian Television Authority  
 News Agency of Nigeria  
 Nigerian Film Corporation  
 Nigerian Postal Services (NIPOST)  
 Old Oyo National Park  
 Gashaka Gumu National Park  
 Chad Basin National Park  
 Yankari National Park.  
 Cross River National Park  
 Niger Delta Basin Authority  
 Niger Delta Development Authority.

**Part****Section 6 (2)****Full Commercialisation**

Nigerian National Petroleum Corporation  
 Tafawa Balewa Square Management Committee  
 Nigerian Ports Authority  
 Federal Mortgage Bank of Nigeria  
 Nigerian Industrial Development Bank Limited  
 Nigerian Bank for Commerce and Industry Limited  
 Federal Mortgage Finance Co. Limited

*Source:* FGN (2000) Privatisation Handbook, Spectrum Books, Ibadan.

**Table 2: Coordination with & integration of environment into privatization process**

(Consistent with the process stipulated in Privatization Procedures and Process Guidelines, BPE, Abuja, Nigeria, March 2002)

<i>Stage of Privatization</i>	<i>EHSS Actions and EA Tools to be Used</i>	<i>Guidance and Comments</i>
1. Decision to privatize a public enterprise [4 (four) process streams are available.] Approved list of public enterprises to be privatized is attached to the decree & revised accordingly by the NCP.	<i>Environmental Screening</i> 3. (three) EA screening categories (EA Category A,B & C) are available in accordance with Nigerian legislation and consistent with World Bank policies. EDSS Part I shall be completed by a PE. BPEEA reviews it and assigns EDSS an ID for internal filing and monitoring. EDSS, Part II shall be completed (after review of EDSS, Part I ) by the BPEEA and cleared by the FME.	PE is responsible for furnishing the BPE with satisfactory EHSS information. BPEEA & BPEEO provide a PE Category A “ red flag” or “Extreme Caution List”, s/he immediately notifies DGBPE, BPELD and supervising department. BPE & FME DISCUSS agree on the appropriate EA-related course of action. If classified into EA Category C, BPEEA files EDSS, Parts I & II and any other documents received from a PE in the BPE files and closes the case.
2. Diagnostic review of a public enterprise		Scoping is based on review of readily available public EHSS data and information. If additional EA work is necessary, BPEEA notifies in writing a PE of the decision & applicable EA requirements, requests PE to formally conform its commitment to comply and indicate what EHSS information should be considered confidential, and authorize the BPE to disclose EHSS Leaflet from BPERMD.
<i>Privatization Environmental Handbook</i>	Communities is initiated at this stage- it leads to finalization of TOR/SOW for Eau/EA/EIA	If a PE formally indicates its unwillingness to authorize disclosure of all or part EHSS information, BPEEA seeks guidance from DGBPE and BPELD on how to proceed. If the PE's decision to withhold disclosure does not relate to concealing of information about past or ongoing activities (and EHS liabilities) that might pose a threat is public health, safety, social order, natural environment, neighbouring countries as well as violate national legislation or international agreements, the BPE proceeds with the application. If the PE's decision to withhold disclosure intends to conceal information about past or ongoing activities (and EHS liabilities) that might pose a threat to public health, safety, social order, natural environment, neighbouring counties as well as violate national legislation and international agreements, the NCP guidance or decision. In this case, the BPE formally informs the applicant of its decision.

<i>Stage of Privatization</i>	<i>EHSS Actions and EA Tools to be Used</i>	<i>Guidance and Comments</i>
3. Preparation for sale & selection & appointment of privatization advisers, like lawyers, valuers, accountants and technical consultants.	<p>ALL Expression of Interest (EOI) Request for proposals (REP,) TOR/SOW shall contain a requirement for EHSS due diligence.</p> <p>An Eau or rarely an EIA shall be initiated in concurrence with FME. TOR/SOW for EAu/EIA shall be cleared with FME.</p>	<p>In accordance with the BPE Management Committee decision, each BPEEO must ensure that EDS, Part I has been completed by all privatized public enterprises.</p> <p>It is important to ensure that PE timely furnishes BPEEA with EHSS information to update an EDSS, Part I, when circumstances change or new information becomes available.</p> <p>BPEEA starts, in coordination with the FME, drafting TOR/SOW for any EA work necessary.</p>
4. Invitation to and EIA by potential NOI		
5. Issuance of Information Memorandum	<p>Limited environmental language (EHSS representations) to ensure disclosure shall be included EA and/or EIA or any other EHSS data and information contained in reports prepared by privatization advisers and/or environmental consultants shall be available at the BPE Data Room (upon request.)</p>	<p>See samples of standard environmental language are available from BPELD.</p>
6. Due diligence by a NOI	<p>BPEEA, BPELD and supervising Department shall: Draft, in close coordination with FME &amp; based on EAu/EA/EIA., when deemed necessary &amp; required by law, an Environmental Management Plan (EMP) or an Environmental Compliance Plan (ERCP.) The second time public consultations are conducted to take into account the views and concerns of affected local populations Draft privatization sale contract's EHSS representations, warranties and indemnifications (RWI)</p>	<p>By this time, any EAu/EA/EIA should be completed to allow BPE and FME to review their adequacy, including of proposed draft EMP and ERCP. FME shall initiate certification process for any submitted or available EAu/EA/EIA.</p> <p>At this stage, BPE should seek Bank's guidance on the adequacy of any EAu/EA/EIA. This activity is essential to exclude situation when any EAu/EA/EIA may be certified by the FME and fail to pass the Bank's EA review and vice versa. This coordination with the Bank will not compromise Nigeria EAu/EIA process or create "conflict of interest" situation, rather it will help to facilitate preparation of various types of EA of high quality as well as implementable EMP or ERCP.</p> <p>EDSS, Part II is updated by BPEEA and cleared by designated authorized FME representative. These will also allow BPE start drafting EHSS RWI.</p> <p>Review of any EAu/EA/EIA is an interactive process requiring timely and transparent communication between the BPE, FME, a PE and all relevant consultants appointed by the BPE to advise of a specific privatization transaction and conduct EAu/EA/EIA.</p>

<i>Stage of Privatization</i>	<i>EHSS Actions and EA Tools to be Used</i>	<i>Guidance and Comments</i>
7. NOI's submission of bidding documents (technical and financial)	BPEEA, together with PBELD and FME, shall review any EHSS stipulations provided by a NOI	
8. Negotiations	EMP/ERCP and RWI shall be part of negotiations	BPE negotiates with the selected NOI to establish primary terms and conditions of an individual transaction, including all EHSS aspects as well as agree or RWI and EMP or ERCP, particularly their cost, financing, schedule, performance and monitoring requirements, and ways and means to resolve any outstanding or emerging issues.
9. Signing of sale contract	When deemed necessary and/or required by law, EMP/ERCP shall be annexed to the sale contract, which shall contain RWI	
10. Ownership is transferred to the NOI	FME monitors and enforces implementation by the NOI of the EMP/ERCP and FME ensures NOI compliance with all existing RWI and EHSS laws and standards. BPE EA distills lessons learned, i.e. ex-post evaluation. BPEEA, together with designated authorized representative of the FME, participates in the Bank's supervision missions, prepares annual and quarterly reports.	EHSS monitoring (EHSSM) is a continuous and consistent process of gathering information relating to compliance and performance of the NOI. The EHSSM is essential because EHS and social risks are dynamic and may change significantly after privatization. EHSSM should focus on two aspects of the privatized PE (a) the NOI'S compliance with Nigerian environmental and other legislation in general, and with any EHSS RWI and EMP or ERCP set forth in the Privatization Sale Contract, and (b) regulatory trends, particularly as changing environmental legislation may introduce new standards which cannot automatically be met by the NOI, thus exposing both parties to new sources of risk and liability as well as may lead to a contraction of the NOI's thus exposing both parties to new sources of risk an libility as well as may lead to a contraction of the NOI's markets. The FME, together with BPEEA, should develop a case-by-case strategy for EHSSM involving the following steps: (a) developing appropriate schedule for EHSSM of RWI and EMP or ERCP, (b) identifying resource requirements, and (c) agreeing The EHSSM and reporting formats with the NOI [in addition, the NOI should be required in the Privatization Sale Contract to submit brief annual environmental performance reports, and the FME may specify the format for these reports.]

<i>Stage of Privatization</i>	<i>EHSS Actions and EA Tools to be Used</i>	<i>Guidance and Comments</i>
		Evaluations should be planned, conducted and reported in ways that encourage follow-through by the NOI and stakeholders, so that the likelihood that the evaluation will be used is increased. The perspectives, procedures and rationale used to interpret the findings should be carefully described, so that the bases for evaluation judgments are clear.

*Source:* FGN (2003) Privatisation Environmental Handbook, volume one.