This paper was originally drafted in early 1988. At the request of Ghana Government officials it was not published or circulated widely because the Public Investment Programme material had been made available to me on a 'privileged basis'. Now that nearly 27 years has passed since it was drafted I feel that it can safely be circulated without restriction.

PROJECT REHABILITATION IN GHANA'S ECONOMIC RECOVERY PROGRAMME

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The issues associated with the planning and appraisal of rehabilitation projects have been somewhat neglected and the programme of work in progress at the Project Planning Centre is an attempt to rectify this situation. It would be wrong to focus exclusively on the circumstances of individual projects without placing them in context. The Ghanaian experience of the 1980s has been an excellent example of how years of economic decline may be arrested, stabilised and then reversed by decisive economic policies. The 1983 Budget and the "Economic Recovery Programme" were the starting points in this exercise, proving to be the test of resolve required by the international community (represented by the World Bank and the International Monetary Fund in particular - but also including a wide range of other multilateral and bilateral institutions). The "structural adjustment programme" has encompassed many economic measures including devaluation of the Cedi and changes in controlled prices and wages, as well as international borrowing and substantially increased domestic investment. Perhaps more significantly the **system** of economic control has been changed, so that the procedures for exchange rate adjustment and for controlling prices (for example) have been changed - making it likely that future adjustments will be economically, socially and politically less traumatic than they have been in the past. (In this respect one is reminded of the significance of the 1967 devaluation for British economic policy.)

Given the years of decline it is hardly surprising that a high percentage of the projects included in the recovery programme have been "rehabilitation" in nature. This paper aims to explore some of the issues raised by this situation. First, the setting will be outlined, through a description of some of the elements of the Ghanaian economic decline. Second, the role of project rehabilitation in the 1986-1988 Public Investment Programme will be explored. Third, the implications of this decline on project planning, implementation and management will be discussed. Fourth, some institutional experience with recent rehabilitation programmes will be outlined. Finally, a summary of the main issues raised in the paper will be presented together with some conclusions.

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1. THE ECONOMIC DECLINE

The Macro-economic Context

In describing the macro-economic context emphasis will be given to the relevance of this context to the circumstances of individual projects. Table 1 presents a set of indicators which give some notion of the economic environment. Official estimates of the average level of real per capita income show a fall of over 36 per cent between 1974 and 1984 (in the same period the Gross National Product fell by 15 per cent - between 1976 and 1981 the Gross National Product increased by about 3 per cent). The picture is therefore one of declining purchasing power per head of population, and of stagnant or declining aggregate purchasing power in the economy as a whole - significant for projects depending on steady or increasing purchasing power for their viability.

TABLE 1 - BASIC ECONOMIC INDICATORS - GHANA

Year	Per capita GNP - (1975 cedis) (a)	Inflation year on year (per cent) (b)	Domestic Capital Formation (per cent of GDP) (c)	Index of Manufctrng Production (1977=100) (d)	Estimated Manufctrng Capacity Utilisation (per cent) (e)	Index of Mineral Production (1977=100) (f)	Production of cocoa (000 tonnes) (g)	Production of Maize (000 tonnes) (g)
1974	620							
1975	537	29.6						
1976	504	28.1	4.0					
1977	504	67.2	8.4	100		100.0	277.4	274.0
1978	504	73.3	3.6	81.0	40.4	87.1	268.2	218.0
1979	479	39.6	1.0	67.8	33.1	74.9	280.8	380.0
1980	465	44.5	2.9	69.0	25.6	73.8	277.2	382.0
1981	438	92.4	1.3	63.3	24.9	68.2	246.5	378.0
1982	394	20.7	0.3	50.4	21.0	59.9	202.5	346.0
1983	366	123.1	0.3	35.3	30.0	50.2	168.1	172.0
1984	394	35.3	2.5	39.3		57.9	166.7	574.0
1985				49.3		85.3		
1986								

Sources and Notes:
(a) Central Bureau of Statistics; ***Quarterly Digest of Statistics***; Vol.11 No.1, March 1984; Table 67 page 74 and September 1986 equivalent.
(b) ibid; calculated from Table 68 page 75 and September 1982 and 1986 equivalents - "inflation" has been taken as the "implicit deflator" used in converting current price GDP statistics to constant 1975 price data.
(c) ibid; calculated from Tables 72 and 68, pages 79 and 75 and September 1986 equivalent.
(d) ibid; Table 9A page 10 and September 1986 equivalent.
(e) ibid; Table 8 page 9 and September 1986 equivalent.
(f) ibid; Table 7 page 9 and September 1986 equivalent.
(g) ibid; Table 3 page 5 and September 1986 equivalent.

One of the principal reasons for the stagnation / decline in the economy was the very low level of net domestic capital formation - i.e. new investment. The aggregate figures shown in Table 1 would, of course, include some substantial new projects, but many existing activities would have had inadequate maintenance expenditures and/or replacement investment. The gross capital formation figures also reflect a shortage of foreign exchange (see Table 2). One factor linked to the investment performance was a persistent decline in the quality of those public services which depended substantially on replacement investment (e.g. transport and communications, electricity, water and sewerage etc.). This decline of public services added, in many cases substantially, to operating costs for a range of economic activities through a deterioration in the level of infrastructural support.

The index of manufacturing production shows a fall of about 60 per cent between 1977 and 1984 with signs of some recovery in 1985. There has been a persistently low, and declining, average level of capacity utilisation in the manufacturing sector, implying that industrial costs have been substantially higher than they would have been with better utilisation. In many cases, of course, utilisation could realistically be no higher due to shortages of foreign exchange, inadequacies of raw material and other supplies (often associated with foreign exchange constraints), and shortfalls of demand due to limited purchasing power. Low levels of capacity utilisation have therefore been caused principally by problems at the macro-economic level rather than at the micro-economic level.

The index of mineral production (mainly directed to an export market) shows a 35 to 40 per cent decline between 1977 and 1985, again with some recovery evident towards the end of the period - even the 1977 starting point represented a comparatively low level of production compared to previous achievements. Further evidence for a tightening of the foreign exchange situation is shown by the cocoa production data, with a decline of about 40 per cent in the annual quantity produced between 1977 and 1984.

Maize production shows quite substantial changes from year to year, reflecting changes in weather conditions and in producer prices (the difference between official and unofficial maize prices over the period 1977 to 1983 probably increased, so that farmers would have increasingly depended on the unofficial market - see later section on prices and inflation). The impact of the serious drought in 1983 is clearly shown by the halving of maize production between 1982 and 1983 - one of the principal reasons for the very high level of inflation in 1983 [Green, 1988; page 9].

Table 2 presents data from I.M.F. Balance of Payments estimates for Ghana over the period 1970 to 1986. These figures have the advantage of being expressed in current US dollars, thus abstracting from the exchange rate between the Cedi and the US dollar (the exchange rate is also shown in the table). The 1970s, of course, was a period of comparatively high domestic inflation in the Western world, so that the approximate doubling of Ghanaian export revenues over the period does not necessarily imply any increase in purchasing power at all. However, the 1980s show a significant, and very sharp, drop in foreign exchange revenue, very severely restricting the import capacity and thus having serious ramifications for all those parts of the economy which depended on imports for continued effective operation. This deterioration in the foreign exchange position therefore goes a long way to explaining the predicament of large areas of the economy, including manufacturing capacity utilisation (see Table 1) and the low levels of capital formation (both new and replacement investment).

Table 3 presents some foreign trade indicators taken from a 1984 World Bank report. It shows the 1981 export quantity index at about half the level of 1975 and the import quantity index at about two-fifths of that in 1975. This gives further evidence of the seriousness of the foreign exchange situation and of its significance for the economy as a whole. Further, between 1975 and 1980 there was a fall of about 30 per cent in the purchasing power of exports, showing that, at least in part, the deterioration of the economic situation was no fault of Ghana herself. Indeed, if the period from 1970 to 1980 is taken the deterioration in the purchasing power of exports was about 50 per cent (if the statistics are taken at face value), giving some indication of the difficulty faced by a government attempting to secure an economic recovery. Not only had the domestic economic position of Ghana deteriorated over this period, but her international position was, by 1980/81, less favourable than it had been ten years earlier.

TABLE 2 - BALANCE OF PAYMENTS ESTIMATES AND EXCHANGE RATE

Year	Merchandise Exports ($USm fob)	Merchandise Imports ($USm fob)	Other Goods and Services and Income ($USm net)	Public and Private Unrequited Transfers ($USm net)	Capital Movements other than Reserves ($USm net)	Other ($USm)	Total Change in Reserves ($USm)	Exchange Rate (C=$US1.00)
1970	427.0	(375.1)	(117.9)	(1.7)	42.9	16.8	8.0	1.02
1975	801.0	(650.5)	(177.4)	44.6	(26.4)	19.3	(10.6)	1.15
1978	892.8	(780.3)	(216.7)	58.3	251.1	(87.7)	(117.5)	1.51
1979	1065.7	(803.1)	(219.4)	78.8	(47.1)	(92.0)	17.1	2.75
1980	1103.6	(908.3)	(245.7)	79.6	(24.4)	(70.9)	66.1	2.75
1981	710.7	(954.3)	(260.2)	83.0	360.9	71.0	(11.1)	2.75
1982	607.0	(588.7)	(209.2)	82.5	140.1	(10.7)	(20.8)	2.75
1983	439.1	(499.7)	(185.9)	72.4	44.2	(119.2)	249.1	20.33
1984	565.9	(533.0)	(234.0)	162.3	104.0	(76.9)	11.7	35.99
1985	632.4	(668.7)	(240.0)	142.1	131.2	(53.9)	56.9	54.27
1986	773.4	(712.5)	(298.5)	194.6	94.1	(82.0)	30.9	89.29
1987								
1988								

Sources and Notes:
( ) indicates a negative value.
Source for data other than exchange rates - International Monetary Fund; ***International Financial Statistics***, Vol.XL 1987, pages 356/357.
Source for exchange rates - 1970, 1975, 1978 and 1986 - IMF; ibid.; page 355.
- 1979 to 1985 - Central Bureau of Statistics; ***Quarterly Digest of Statistics:*** Vol.13 No.3, September 1986, Table 31 page 36.

TABLE 3 - FOREIGN TRADE INDICATORS - GHANA

Year	Export Quantum Index (1975 = 100.0)	Import Quantum Index (1975 = 100.0	Purchasing Power of Exports (a) i) Ratio	ii) Index
1970	103	114	1045	143.5
1975	100	100	728	100.0
1978	59	78	658	90.4
1979	52	66	630	86.5
1980	54	57	505	69.4
1981	49	41	n.a.	n.a.

Sources and Notes:
World Bank; ***Ghana: Policies and Program for Adjustment***; Washington, 1984; Table 3 Page 8.
(a) The Ratio is Export earnings deflated by the import unit value index, and the Index has simply been calculated with the 1975 Ratio as 100.0.

TABLE 4 - EXPORT VOLUMES - GHANA

Year	Cocoa Beans (tonnes) (a)	Cocoa Butter (tonnes) (b)	Wood and Timber Products (000 m^3) (b)	Gold (000 grammes) (c)
1972			1006	
1973			1134	
1974				
1975				
1976	327,643			16,416
1977	253,033	21,736	586	13,208
1978	213,441	15,825	591	9,747
1979	189,357	13,470	285	11,818
1980	210,797	11,035	185	10,820
1981	191,503	5,765	222	10,765
1982	239,931	5,610	110	9,386
1983	163,417*		96	8,621
1984	148,875*		90	8,880
1985	171,797*		229	8,966

Sources and Notes:
* indicates crop years 1982/83, 1983/84 and 1984/85.
(a) Central Bureau of Statistics, ***Quarterly Digest of Statistics***; Vol.11 No.1 ,March 1984, Table 58 page 65 and September 1986 equivalent.
(b) ibid; Table 60 page 67 and September 1986 equivalent.
(c) ibid; Table 59 page 66 and September 1986 equivalent.

Table 4 contains export volume data which explains a considerable part of the drop in export revenues shown in Table 2. Exports of cocoa beans in 1985 were 52 per cent of the 1976 level; exports of cocoa butter in 1982 were 26 per cent of the 1977 level; exports of timber products in 1985 were 39 per cent of the 1977 level, and 23 per cent of the 1972 level (although the 1985 level was itself double that achieved in 1982-1984); and exports of gold in 1985 were 55 per cent of the 1976 level. In 1975, for example, cocoa beans and minerals contributed 68.5 per cent of export revenue, while in 1982 they contributed 58.2 per cent [Quarterly Digest of Statistics; Vol.11 No.1, March 1984, Tables 58 and 59 pages 65 and 66; and September 1982 equivalent], giving an indication that one of the principal reasons for the decline in foreign exchange earnings was the deterioration in the production and export of"traditional products". Timber and timber products, to give another example, contributed 9.0 per cent of export revenue in 1975 but only 1.8 per cent in 1982 [ibid.]. This demonstrates the dire necessity of maintaining the production of "traditional products", and of maintaining "traditional markets", even if the long term objective might be to diversify in both production and marketing.

The Ghana foreign exchange rate has been a controversial issue for many years. Prior to 1978 the exchange rate had been C1.15 to US$1.00 for several years as is shown in Table 2. In August 1978 the Cedi was devalued to C2.75 to US$1.00 (a 139 per cent devaluation) - giving an average exchange rate for the year of C1.51 to US$1.00. Given a more than four- fold increase in the domestic price index between 1978 and 1982 it is hardly surprising that pressures were increasing for a further devaluation (not least, the difference between the official and "open-market" foreign exchange rate had reached a factor of about 20 - sic-twenty). The April 1983 Budget included a substantial "devaluation", which was consolidated into the official exchange rate in October of the same year (see Appendix A). The devaluation amounted to a reduction in the exchange value of the Cedi by a factor of about 10. Since 1983 there have been several subsequent devaluations, including the operation of a "second window" dual exchange rate for a period (to some extent "by-passing" the unofficial "open-market" or black-market rate). In the 1987 budget the official dual exchange rate was unified into a new rate in the order of C150 - 160 to US$1.00. Over the period 1982 to 1987 Ghana has therefore experienced devaluation by a factor of over 50 (i.e over 5000 per cent), with internal inflation of perhaps 400 per cent. The implications of this for project planning and operation are clearly of considerable significance.

The Cocoa Sector

As an indication of the problems created by the delay in taking radical economic policy measures it is illuminating to take the cocoa sector. The significance of this sector is based on its macro-economic characteristics as the major foreign exchange earner, a major source of government revenue through taxation, and as a major source of household income (thus influencing purchasing power). On all three counts the cocoa sector is relevant to the rehabilitation issue at the macro- economic level.

Table 5 shows the Cedi value of cocoa exports per tonne, the producer price, an index of the real value of the producer price and the percentage of the Cedi value of exports received by the producer. The high percentage of export revenue received by the producers in 1980/81 was due to a drop in the world price and a stable producer price, while in 1981/82 the producer price trebled and the export proceeds per tonne fell by about 17 per cent. The fact that the producer price in 1981/82 was two and a half (sic - 2.5) times the export proceeds per tonne is indicative of the desperation of economic policy. The Cocoa Marketing Board had a deficit of C2,300 million in the 1981/82 crop season [World Bank, 1984, op.cit.; Table 10.3 Page 181]. Notwithstanding the higher cocoa price in 1981/82 it was still only 61 per cent of the real value paid to producers in 1974/75, this historically low level largely accounting for the decline in production.[1] In turn the relatively low producer price arose largely because of the extreme over-valuation of the Cedi. Following the considerable devaluation the producer price of cocoa was increased to C20,000 per tonne in May 1983 [World Bank, 1984 op.cit.; Para 100 Page 39], thus approaching the real producer price ruling in 1974/75 once again.

1 Production and export statistics have to be interpreted in the context of the incentive that the low Ghanaian producer price gave to producers and/or traders to smuggle cocoa into the Ivory Coast in return for payment in a comparatively hard currency (CFA francs). In addition to possibly stimulating local production, the higher Ghana producer price reduced the incentive to smuggle, and would increase the proportion of the Ghana crop exported through official channels - thus increasing the proportion of foreign exchange flowing through official as opposed to unofficial channels. This, of course, would have an effect on revenue flowing to government through the tax on cocoa exports, and on foreign exchange available to the Bank of Ghana as opposed to private individuals in the black market (we might expect that this would change the priorities for which the re-allocated foreign exchange would be used).

TABLE 5 - THE ECONOMIC SIGNIFICANCE OF THE COCOA SECTOR IN GHANA

	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982	1983	1984	1985
Value of Cocoa Exports (c/tonne) (a)	1688.00	1526.00	2596.00	4436.00	9740.00	10290.00	5607.00	4648.00				
Producer Proceeds (c/tonne) (a)	560.00	597.00	771.00	1308.00	2526.00	4000.00	4000.00	12000		20000		
Index of Real Producer Price (1974/75 = 100.0 (b)	100.00	68.30	39.40	41.40	53.80	24.80	24.80	60.90				
Producer Price as Percentage of Export Proceeds (c)	33	39	30	29	26	39	71	258				
Cocoa Export Duty Income to Government (cmill.) (d)			269.00	278.10	1085.30	1362.80	534.6	-ve	-ve	2800.00	3851.40	8966.40
Total Government Revenue (c mill) (e)			1074.60	1539.10	2187.80	3026.10	3279.10			10241.00	22641.00	40311.00
Cocoa Duty as percentage of Government Revenue (f)			25.00	18.10	49.60	45.00	16.30			27.30	17.00	22.20

<u>Sources and Notes:</u>

(a) World Bank; ***Ghana: Policies and Program for Adjustment***; Washington, 1984; Table 10.3 Page 181
(b) Ibid.; Table 10.1 Page 179.
(c) Calculated.
(d) Central Bureau of Statistics;***Quarterly Digest of Statistics***; Vol. 11 No. 1, March 1984, Table 36 Page 40.
(e) Ibid.; Table 30 Page 34.
(f) Calculated.

TABLE 6 - GOVERNMENT REVENUE AND EXPENDITURE - GHANA (C MILLION)

Year	Price Index (a)	Government Revenue (1975 prices) (b)	Government Expenditure (1975 prices) (c)	Gross National Product (1975 prices) (d)	Government Expenditure as per cent of GNP (e)
1975/76	100.0	814.8	1,438.6	5,241	27.4
1976/77	128.1	838.9	1,518.5	5,046	30.1
1977/78	214.2	718.5	1,408.8	5,105	27.6
1978/79	371.2	589.4	1,103.0	5,633	19.6
1979/80	518.3	583.9	901.3	5,396	16.7
1980/81	748.7	438.0	1,031.1	5,436	19.0
1981/82	1440.3	315.6	614.0	5,290	11.6
1982	1738.0	267.1	562.6		
1983	3876.6	264.2	380.6		
1984	5246.0	431.6	508.8		

Sources and notes:
(a) See Table 1 above.
(b) Calculated from (a) and Central Bureau of Statistics; ***Quarterly Digest of Statistics***;Vol.11 No.1,March 1984, Table 30 page 34 and equivalent for September 1986.
(c) See (b) above.
(d) ibid; Table 1 page 1. Gross National Product for 1975 against Government Revenue and Expenditure for 1975/76 etc.
(e) Calculated from (c) and (d).

Government Revenue and Expenditure

Table 6 presents some statistics for Government Revenue and Expenditure over the period 1975/76 to 1985 expressed in constant 1975 prices. It can be seen very clearly that Government Expenditure as a proportion of Gross National Product fell from over 25 per cent to below 15 per cent in this period, and, in all likelihood fell even lower by 1983 and 1984. Given the increasing significance of "parallel markets" it is likely that over the period covered by the table the proportion of GNP actually effectively recorded in the official statistics would have declined. If this were the case then the proportion of GNP acquired by the public sector would probably have been increasingly overstated in the later years of the series.

The significance of this table for the issue of project rehabilitation is that the declining proportion of Government Expenditure to GNP is evidence of the deterioration in the quality and quantity of public sector services to the directly productive sectors of the economy. Thus, effective rehabilitation of the productive sectors (through specific projects) would depend in some degree on the recovery of Government Revenue, and the establishment of higher levels of expenditure on essential public services (including administration). This issue is therefore part of the emphasis which is required on the interdependence of the various elements of the economy in creating an environment in which rehabilitated activities have a reasonable chance of securing success.

Prices and Inflation

Inflation averaged 52 per cent per annum over the period 1976 to 1984. During this period quite strict price controls were in force, with associated "parallel" or "black" markets, meaning that inputs purchased and outputs sold through official channels tended to be "under-priced". If, in order to continue the operation or establishment of a project or enterprise, it was necessary to buy inputs from the "black" market, the effects on aggregate costs could be very significant by comparison with the budgetted cash flows, which, particularly for the public sector, would be expressed in terms of official prices. If it were to be possible to sell production on to the "black" market (or, even, to sell price-controlled inputs on the "black" market) the effects on the actual cash flows could be substantially positive by comparison with budgetted revenues based on official prices. This is but one example of the effects of the price distortions introduced by strict but ineffectual price controls in an environment of high inflation [World Bank, 1983; Chapter 6 - Table 6.1 and Figure 6.1] The high rate of inflation also tended to place pressure on the credit available for working capital.

High levels of inflation tend to make the planning, appraisal, implementation and operation of development projects more difficult, particularly if there are associated substantial changes in relative prices of various inputs and outputs. Thus, in a planning context the inflationary experience in Ghana may be seen as a disruptive influence.

Manpower and Management

One specific area of "price control" which has had undesirable effects on the economy is that of "wage control". The scanty evidence available suggests that wage controls were considerably more effective in the public sector than in the private sector [Tribe, 1983(A); page 21], implying that private sector wages were often significantly higher than those in the public sector. Since "official" wage/salary levels, particularly prior to the 1983 budget, were related to officially fixed prices of e.g. foodstuffs, many employees, at all points of the wage/salary distribution, found that their regular income was insufficient to maintain themselves and their immediate family at a socially and physiologically acceptable level. In considering the economic impact of this condition it is useful to distinguish four identifiably separable effects:

1) Productivity - Inadequate food intake (in terms of both quantity and quality) has an adverse effect on labour productivity, particularly at low income levels - both physically and mentally.
2) Time and Effort - The fact that food prices were high, and other commodities scarce, implies that considerable time and effort was required to locate and purchase commodities in the quantities required and at prices which were affordable, taking such time and effort away from regular workplace activities, and further reducing productivity.
3) Recruitment - Where labour was hired on a daily, or similar short-term basis in the public sector, low wage levels made recruitment in sufficient numbers difficult since the alternatives of work on own-account, for private employers, or not at all, could be economically more rational for potential employees. Direct or indirect access to commodities through networks associated with the workplace could be more important to the longer-term employee than the explicit remuneration involved.
4) Income Generation - Where official wage/salary levels were low there was a considerable incentive to acquire part-time and/or supplementary income through second jobs of some sort. One effect of this would be to reduce the amount of effort

expendable in the regular first employment; another effect was to take employees away from their workplaces. On both counts the need to generate additional income over and above that from the first regular employment would reduce the effectiveness with which that employment was undertaken.

A major objective of the recovery programme therefore had to be the increase of "official" wages and salaries to a "living" level so that a tightening up of employment regulations effecting absenteeism etc. would then be practicable and fair.

In this context the distribution of some food and other essential commodities (maize, soap, tinned milk, cooking oil etc.) through official channels (Workers' Defence Committees at workplace and Peoples' Defence Committees at place of residence) at controlled prices made excellent sense. The principal problems were that such allocations could not achieve full coverage of the population, or even anything like full and effective coverage of those households targetted through these Committees.

Another significant issue has been that of the complexities of management in an economy experiencing the kind of crisis which afflicted Ghana. It is commonplace to argue that management in LDCs is less effective than in developed countries due to the lower average level of skills and experience particularly associated with lower levels of training. Another dimension which is not often discussed are the peculiar difficulties of enterprise/institution management in the economic circumstances that Ghana has been experiencing for some considerable time. In the immediately previous paragraphs problems associated with the labour force have been outlined, and these, of course, increase the complexities of personnel management - particularly in public sector bodies in this case. If, in addition, a range of inputs needed to maintain output in the productive sectors are scarce and considerable ingenuity and effort is required in order to acquire supplies of tolerable quantities, then the degree of managerial (and technical) dexterity demanded in order to keep up an approximately "normal" level of activity would be considerably greater than in the equivalent sectors in developed industrial countries.

Thus, not only might it be argued that the **management capacity or capability** in LDCs such as Ghana is at a lower level than that found in more developed countries, but in addition, the **management task** is often considerably more **complex** and **demanding** in LDCs. Given the fact that the available managerial skills in Ghana would be diverse in nature, the likelihood of the management factor being **more** crucial than in developed countries for the success or failure of an enterprise and/or institution has considerable implications. Not least of these is the example given by Killick of the extraction of funds from Ministries in Accra [Killick, 1978; page 246]. He describes how a considerable proportion of management time and effort could be dissipated through an "administrative rationing effect", while in the United Kingdom, for example, availability of funds would usually be considerably more routine and automatic. Although his example comes from an earlier period than that reviewed in this paper the problem that he demonstrated appeared still to afflict a number of institutions.

2. REHABILITATION IN THE 1986-1988 PUBLIC INVESTMENT PROGRAMME

A major part of Ghana's Economic Recovery Programme / Structural Adjustment Programme has been the Public Investment Programme (P.I.P.). In addition to devaluation, changes in price controls and other economic changes, it was clearly necessary to substantially lift the level of investment in the economy in order to move towards sustained economic recovery and further growth growth. In this respect the programme of larger scale investment included in the P.I.P. represented a leading role for the public sector in stimulating economic recovery (a number of joint ventures with the private sector were also included - particularly in mining). Table 7 summarises the investment programme elements of the P.I.P., with particular attention to the role of rehabilitation projects.

Some kind of working definition of a rehabilitation project is clearly necessary in this context. In principle the objective of a rehabilitation would be to put an economic activity back into the proper condition that was originally intended when it was established. However, in some cases the circumstances have changed with the passage of time to the extent that a **project redesign** is necessary (perhaps a product market has changed due to technical progress; perhaps a source of raw materials has been exhausted leading to a switch in materials and possibly also in production technology). In the area of infrastructure a distinction is made in the P.I.P. between the **rehabilitation** and the **reconstruction** of a road - the former arising due to, for example, persistent neglect of maintenance (for whatever reason), and the latter involving a significant change in alignment and/or reconstruction of the basic foundations. In other cases rehabilitation may be undertaken in combination with **capacity extension**, or with the **completion** of a project which has never been fully commissioned. A distinction should also be made between an investment project which involves the **renewal of time-expired assets**, and one which is a true rehabilitation in the sense of the setting right of an activity which has, for whatever reason, failed.

TABLE 7 REHABILITATION IN THE 1986-1988 PUBLIC INVESTMENT PROGRAMME

A: ALL PROJECTS IN P.I.P. - 1986 TO PROJECT COMPLETION

Sector	Total Number of Projects	of which Rehabilitation Projects	Total Sector Investment (c mill)	of which Rehabilitation (c mill)
Agriculture	50	14	47738	16949
Industry	14	4	11873	7240
Mining & Forestry	14	6	54703	50684
Water Supply	9	2	38340	9732
Transport & Comm.	38	14	86563	57590
Energy	21	6	60184	12855
Roads & Highways	28	15	89593	56590
Education	10	2	3560	1050
Health	17	10	24082	14449
Totals	201	73	416636	227401

TABLE 7 CONTINUED

B: ALL PROJECTS IN P.I.P. - 1987 INVESTMENT ONLY

Sector	Total Number of Projects	of which Rehabilitation Projects	Total Sector Investment (c mill)	of which Rehabilitation (c mill)
Agriculture	45	13	6905	1622
Industry	11	2	3946	1516
Mining & Forestry	11	6	12638	12384
Water Supply	8	2	4241	713
Transport & Comm.	25	11	12093	7704
Energy	14	5	9921	2680
Roads & Highways	18	8	15535	10587
Education	10	2	3169	659
Health	15	10	2213	1568
Totals	157	59	70661	39433

C: "CORE" PROJECTS IN P.I.P. - 1987 INVESTMENT ONLY

Sector	Total Number of Projects	of which Rehabilitation Projects	Total Sector Investment (c mill)	of which Rehabilitation (c mill)
Agriculture	43	11	6875	1592
Industry	11	2	3946	1516
Mining & Forestry	11	6	12638	12384
Water Supply	8	2	4241	713
Transport & Comm.	25	11	12093	7704
Energy	14	5	9921	2680
Roads & Highways	18	8	15535	10587
Education	10	2	3169	659
Health	15	10	2213	1568
Totals	155	57	70631	39403

D: "SUPERCORE" PROJECTS IN P.I.P. - 1987 INVESTMENT ONLY

Sector	Total Number of Projects	of which Rehabilitation Projects	Total Sector Investment (c mill)	of which Rehabilitation (c mill)
Agriculture	6	0	3085	0
Industry	0	0	0	0
Mining & Forestry	1	1	1722	1722
Water Supply	3	1	668	668
Transport & Comm.	5	2	5349	2509
Energy	1	1	580	580
Roads & Highways	3	2	7519	7314
Education	1	0	562	0
Health	1	1	300	300
Totals	21	8	19785	13093

Source and Note:
Values are expressed in 1987 Cedis using a Foreign Exchange rate of US$1-00 = Cedis150-00

For the classification of rehabilitation projects in the P.I.P. for Table 7 the definition taken has explicitly excluded "reconstructions" and "extensions", but has included all projects described as being basically in the nature of a rehabilitation. Inevitably some inconsistencies might exist due to inadequate information being available, or due to blurred distinctions, but the criteria for inclusion have been as consistent as possible.

Development projects do not, and cannot, fit neatly into a three-year rolling plan concept such as the P.I.P. Apart from unanticipated delays (and, of course, in some cases unexpectedly rapid developments) some projects for which implementation is planned to be complete in the period 1986-1988 were started before the end of 1985, and others starting during the programme were expected to be completed after the end of 1988. With the anticipated acceleration of public sector investment the latter is likely to be more significant than the former.

Part A of Table 7 shows that of 201 projects included in the P.I.P. 73 could be characterised as "rehabilitations", accounting for C227,401 million (54.6 per cent) of the C416,636 million total planned investment. Thus rehabilitation projects accounted for significantly more than half of the total planned investment. Careful attention to their role in the programme is therefore justified. Part B of Table 7 includes those projects for which investment expenditure was planned for the year 1987 (157 of the 201 included in the P.I.P.). Of these projects 59 could be characterised as rehabilitations, accounting for C39,433 (55.8 per cent) of the C70,661 million total.

Because of the uncertainties associated with funding, and other economic and non-economic circumstances, of many of the projects included in the P.I.P., a distinction was made between three levels of "priority" for projects which have been included. "Core" projects were those felt to of a be high priority, Part C of Table 7 showing that for 1987 this included 155 projects, 57 of which were rehabilitations, accounting for C39,403 million (55.8 per cent) of the C70,631 million total. It should be obvious that this "Core" set of projects was essentially identical to the projected total for 1987, involving hardly any reduction in projected investment due to the omission of comparatively "low priority" projects.

Therefore, a set of "Supercore" projects was drawn up (shown in Part D of Table 7) including only 21 "high priority" projects, 8 of which were rehabilitations, accounting for C13,093 million (66.2 per cent) of the C19,785 million total investment. This "Supercore" included approximately one-third of the investment projected for "Core" projects, and so represented a considerable narrowing down of priorities. It is notable that the "Supercore" included a higher proportion of rehabilitation investment compared with the "Core" projects (66 per cent as opposed to 56 per cent). However, it is also notable that the "Supercore" included a high proportion of infrastructure projects (transport and communications: roads and highways) and that for some sectors a very high proportion of projected investment was to be rehabilitation by nature (100 per cent for 3 sectors, and 97 per cent for a fourth).

The P.I.P. represented a considerable step forward in the economic planning system of Ghana, it being the first time for about ten years that anything resembling a "development plan" had been produced. It also represented the first in a series of "rolling-three-year" public investment programmes. Since it included only large scale investments in the public sector (with a limited number of joint venture projects), it excluded smaller scale public sector/joint venture projects, and private sector investments. In particular, a significant amount of agricultural investment must have been excluded. This means that the total planned investment included in the P.I.P. is only part of expected Gross Fixed Capital Formation.

The P.I.P. targets should be compared with recorded Gross Capital Formation. Recent published data are for 1984 at C18,607 million (Quarterly Digest of Statistics; September 1986 page 85, Table 76). The "Core" projects, with a projected 1987 investment expenditure of C70,631.3 million, might therefore appear excessively optimistic. However, several factors have to be taken into account in making proper comparisons between 1984 actuals and 1987 targets: In the early 1980s Gross Capital Formation was at an historically low level. In 1982 it was 3.2 per cent of Gross Domestic Product, in 1983 3.7 per cent and in 1984 6.9 per cent. However, in interpreting the statistics for Capital Formation as a proportion of Domestic Product account has to be taken of the high foreign exchange content of capital formation (for

1987 all 201 projects in the P.I.P. have a foreign exchange element of 69 per cent, the 155 "Core" projects have a 66.7 per cent foreign exchange element, and the 21 "Supercore" projects a 68 per cent foreign exchange element), and the severely over-valued exchange rate of 1982 and early 1983 (together with the extremely depressed state of economic activity at that time). For 1982 the exchange rate was C2.75 = US$1.00 throughout, for 1983 the average rate was C20.00 = US$1.00, and for 1984 the average was C35.99 = US$1.00.

Therefore, in comparing 1984 and 1987 statistics adjustment has to be made for price changes (domestic inflation and devaluation) and for the fact that investment is in the process of recovering to a level which may be considered more normal and/or desirable for the achievement of sustained economic growth and development. In the short period this would probably involve a restraint of consumption in order to raise the savings and investment ratios.

Taking the 1984 value for Gross Capital Formation at C18,607.1 million, we might assume that half of all investment expenditure - in that year - might have involved the use of foreign exchange. The exchange rate moved from C35.99 = US$1.00 in 1984 to C150.00 = US$1.00 in the P.I.P., a factor of 4.2. Half of the 1984 Capital formation is C9,303.55 million, which adjusted to 1987 values would give C39,074.9 million. The National Price Index moved from a 1984 average of 3304 (1977 base) to a level of 5175 as at December 1986, a factor of 1.57. Applying this factor to the domestic element of capital formation in 1984 (another C9,303.55 million) gives a "1987 equivalent" of C14,606.6 million. Thus 1984 Gross Capital Formation at "1987 prices" would be in the order of C53,682 million (C39,074.9 million plus C14,606.6 million). Of course, account has to be taken of the fact that rehabilitation projects, in re-activating existing assets, may have a lower capital-output ratio than equivalent new projects. This means that the "real effect" of any given level of rehabilitation investment may be higher than that of new investment, so that the aggregate capital formation levels of rehabilitation programmes cannot be compared directly with entirely new project investment.

TABLE 8 - ESTIMATION OF 1987 DOMESTIC CAPITAL FORMATION (Cmillion)

	1984 (1984 prices)	1984 (1987 prices)	1987 (1987 prices)
Gross Capital Formation 1984 (a)	18,607.1	53,681.5	
of which foreign exchange expenditure	9,303.6	39,074.9	
of which domestic expenditure	9,303.6	14,606.6	
Gross Capital Formation 1987 (estimated) (b)			106,000
of which Public Investment Programme			70,661
of which "other"			35,339

Sources and Notes:

(a) i) GCF 1984 - Central Bureau of Statistics; ***Quarterly Digest of Statistics***; Vol.13 No.3 September 1986, pages 86/87

ii) Foreign exchange expenditure - estimated on the basis of the foreign exchange component of the P.I.P.

iii) Domestic inflation - Central Bureau of Statistics - National Price Index

(b) Republic of Ghana ; ***Public Investment Programme 1986-1988***; Volume I Main Report; Summary Table 2.0/87 page 53.

The 1987 P.I.P. investment target of C70,661 million (covering, say, two-thirds of total investment expenditure in the national economy) might be associated with an aggregate GCF target of C105,945 million, a doubling of the 1984 level in real terms. Even this targetted level of Gross Capital Formation would still be modest as a ratio of GDP, perhaps in the order of 12 to 15 per cent, whereas a reasonable long term target might be around 20 to 22 per cent of GDP expended on new and replacement investment. These estimates have been summarised in Table 8. The P.I.P. target level of investment would then appear quite modest at this stage of Ghana's economic restructuring.

3. IMPLICATIONS OF THE P.I.P. FOR PROJECT APPRAISAL

At the macro-economic level the P.I.P. represents a major step forward in the Ghanaian context. At the micro- economic level it raises a number of interesting issues that have yet to be resolved. In discussing these issues it is not suggested that any short-comings which are identified are peculiarly Ghanaian in nature - rather they are short-comings within a global professional context.

It has been seen that a high proportion of projects included in the P.I.P. are rehabilitation in nature - 35 to 40 per cent of the projects: 55-66 per cent of projected investment - this essentially being the justification for the emphasis of this paper. The criterion on which projects have been included in the P.I.P. was that economic appraisal gave an Economic Rate of Return of at least 15 per cent. This implies, in the first instance, that economic appraisal of all projects has been undertaken using a consistent set of shadow prices - this is unlikely in reality, and the implications of this will be explored later in this section of the paper. There are other issues which deserve careful consideration. In two sectors explicit rejection of the Economic Rate of Return criterion was made - water and sewerage projects were appraised on the basis of the Benefit-Cost Ratio (a valid criterion, but without specification of the discount rate used in the calculations) and health sector projects were not appraised using any conventional economic analysis due to its inappropriateness to the sector (although some reference is made to cost-effectiveness). This raises the question of whether "identical" economic appraisal criteria can effectively be used for all sectors of the economy, and if not, whether any explicit and consistent set of guidelines have been laid down for the use of practitioners appraising projects for and/or in Ghana. This issue is a familiar one, and the Ghanaian experience is not exceptional in any way.

More fundamentally, however, even if the 15 per cent Economic Rate of Return is taken as the cut-off point for inclusion in the P.I.P. there are significant issues related to the rehabilitation scenario. If the 15 per cent Economic Rate of Return is used universally, then both new projects ("green- field") and rehabilitations (whether or not associated with substantial project redesign or extension - "reconstruction" in the highways parlance) are being asked to pass the same test. Two questions can be raised in this context -

a) Are we satisfied that it is possible to use directly comparable appraisal methods for rehabilitations and new projects?

b) Even if we are satisfied that it is **possible** to undertake comparable appraisals of rehabilitations and new projects (for example giving some guidance between the options of scrapping an existing activity in favour of a new one), are the methods actually used in the Ghanaian context consistent between rehabilitations and new projects, and between different sectors? Given the lack of professional guidance from the literature on project appraisal the supposition must be that the answer to this question is "No".

In this situation it is more than likely that some rehabilitation appraisals might have been based only on "incremental analysis"; some on the "with rehabilitation basis" **with** adequate allowance for the opportunity cost of assets already in place; and some on the "with rehabilitation basis" but **without** adequate allowance for the opportunity cost of assets already in place. It is also likely that different sets of shadow prices have been used for different appraisal reports - further compounding the potential for inconsistencies between appraisals, whether of rehabilitations or of new projects.

A further area of difficulty for the economic practitioner is the fact that economists effectively have no theoretical tools with which to predict the effects of a devaluation programme which, by the second quarter of 1987, had seen the Cedi fall to 1.83 per cent of its first quarter 1983 value in relation to the US dollar. In essence it is likely that the tools of **marginal** analysis have been used to assess the impact of a major **structural adjustment**. In this respect the Economic Recovery Programme has taken place in economically uncharted waters. In the project appraisal context the economic analysis has in all likelihood been carried out on the basis of constant relative market prices of various inputs, of various outputs, and of a constant input/output price ratio, at a time when the ratio of domestic to external prices has been changing quite radically, and when many domestic price changes have been just as radical as an integral part of the Economic Recovery/Structural Adjustment programme.

The Recovery Programme started in 1983 in conditions of severe pricing and other economic distortions [World Bank, 1983; op.cit.], a very good example of circumstances in which shadow prices should be calculated and then used consistently in project appraisal. However, the very action of the large devaluation itself represented a considerable disturbance to the economic system, and several other policy measures taken at the same time would also have had "knock-on" effects. Thus, in a situation where there were serious "distortions" at the start of the Recovery Programme, within the objective of eventually reducing the extent of these "distortions", progress towards the goal involved, temporarily, the introduction of even more distortion. In the mean time projects have had to be appraised, with market prices exceptionally difficult to predict even one year ahead, let alone over ten years or more of project life. This suggests that the use of shadow prices in the economic appraisal of rehabilitation projects which are included in Structural Adjustment programmes such as Ghana's should be regarded as absolutely essential, the point being that while **relative market prices** may be changing constantly and significantly, equivalent **relative shadow prices** should not be changing to anything like the same extent, if at all.

In these circumstances considerable doubt must be thrown on the validity of the results of the economic appraisal of projects included in the 1986-1988 P.I.P. However, some criterion has to be used for inclusion or exclusion of projects from the Programme, and it is, of course,better to have a systematic appraisal framework even if specific deficiencies in its application can be identified. Perhaps systematic sensitivity analysis could have offered a degree of reduction in arbitrariness, but there is no evidence of its consistent use with the projects included in the P.I.P.

In this discussion three areas of general interest have been identified, and may be set down separately:

a) In the Ghanaian context of the mid-1980s the conventional tools of economic appraisal of projects would have to be used with especial care, and with attention to their deficiencies in that specific context.

b) In the particular P.I.P. context of a high proportion of rehabilitation projects, the fact that professional guidance on the appropriate economic appraisal methods to use in such cases has been effectively non-existent means that consistent criteria for inclusion or exclusion of projects would have been especially difficult to achieve.

c) In the type of structural adjustment represented by Ghana's Economic Recovery Programme it is crucially important that a consistent set of shadow prices be used in the economic analysis of projects, including rehabilitations.

4. INSTITUTIONAL EXPERIENCE WITH REHABILITATION PROGRAMMES

The national and sectoral targets presented in the P.I.P. have to be converted into individual sectoral and institutional programmes, and into individual projects. The discussion which follows outlines some of the issues and experience associated with a few of them.

The World Bank-funded Industrial Sector Adjustment Credit (ISAC) was established in 1986/87 with a view to channelling foreign exchange through the banking system to industrial projects requiring rehabilitation. Appendix B includes an outline of the terms of the scheme, and a copy of the newspaper advertisement inviting applications. With the significant devaluation which has taken place the Cedi equivalent of foreign exchange costs has increased significantly, and, despite the apparent need for rehabilitation investment, it was feared that firms would be slow in coming forward to take up the loans because of liquidity problems associated with the economic changes. The ISAC Programme included not only foreign exchange for onwards lending to firms, but also a significant training element designed to familiarise loans officers from banking and other relevant institutions who were to be responsible for handling loan appraisals.

It can be seen from Appendix B that there were clear eligibility criteria with respect to the removal of bottlenecks, utilisation of domestic raw materials, assurances of raw materials supply, labour intensity of the operation and the characteristics of the product market (basic consumer goods, intermediate product, significant provider of government revenue or with proven export potential). For loans in excess of US$100,000 the financial rate of return was required to be greater than the cost of borrowing while the economic rate of return was to exceed 15 per cent. Loans amounting to less than US$100,000 were to show qualitative economic viability and an acceptable production cost after rehabilitation. The activity to be rehabilitated should not have benefitted from World Bank funding in the previous 5 years, and had to show operation for at least the previous 2 years. The maximum size of loan was US$1,000,000, and the total credit facility was US$10 million. The advertisement made specific mention of the objective to "assist in financial, organisational and/or managerial restructuring" in addition to basic rehabilitation activities. State-owned enterprises were required to demonstrate the inclusion of their project in the Public Investment Programme 1986-1988. This scheme can therefore be seen to have had clear objectives, and to have been clearly targetted at the twin purposes of channelling foreign exchange to industrial enterprises requiring rehabilitation, and of training project officers from banking and associated institutions.

Another example of a scheme designed to provide foreign exchange for rehabilitation has been the Timber Sector Export Rehabilitation Programme. Funds were provided to the National Investment Bank in 1985 by the International Development Association for onward transmission to firms with acceptable applications. Originally the timber companies were intended to purchase foreign exchange directly from the bank, but due to liquidity problems of prospective borrowers the scheme was converted to a loan programme. Since the loans were expressed in Cedis, repayment was in Cedis, so that the programme never had "export retention" provisions.[2]

The total funds involved in this programme were US$28.8 million most of which had been disbursed by May 1987. Of the 60 firms that benefitted from the scheme only 14 were regular NIB customers, so that it was only for this 14 applicants that the NIB prepared the feasibility studies. The loans were made with a one year moratorium and a further 2 years to complete repayments. Applicants could select from two methods of repaying the loans and interest. In the first, the rate of interest was 20 per cent with repayment in Cedis at the foreign exchange rate ruling at the time of loan disbursement, so that the Government took the foreign exchange risk. In the second the rate of interest was 10 per cent with repayment in Cedis at the foreign exchange rate ruling at the time of repayment, so that the borrower took the foreign exchange risk.

Additional evidence of the significance of the rehabilitation issue in April/May 1987 comes from the Special Projects Department of the Agricultural Development Bank where 11 out of 23 projects being handled were rehabilitations; the National Investment Bank (again) where an African Development Bank-funded scheme 20 out of 31 projects were rehabilitations; and the Ghana Investments Centre [which handles larger scale projects with significant overseas involvement] where out of 154 projects considered following the adoption of the 1985 Investment Code 30 were rehabilitations/extensions. The Ghana Industrial Holding Corporation (the state body responsible for public sector larger scale manufacturing establishments) similarly was involved in a rehabilitation programme.

The rehabilitation issue is clearly one of considerable concern throughout the institutions handling investment projects in Ghana during the Recovery Programme. It is notable that recurring themes in discussions with senior professional staff in April/May 1987 were the lack of any guidelines for the preparation of appraisal reports on rehabilitation projects and the lack of any guidelines on the use of shadow prices in Ghana. Perhaps the preparation and distribution of these two sets of guidelines might be seen as a fairly high priority in the Recovery Programme.

[2] Note: "Export retention" refers to the system whereby exporting firms are permitted to retain part of their foreign exchange earnings in overseas accounts for the purchase of essential inputs. In addition to providing an additional incentive to export, the system also partially overcomes the problems associated with the shortage of foreign exchange for the purchase of spare parts and materials. Of course, it cannot contribute to the problems of firms which do not directly export.

5. SUMMARY AND CONCLUSIONS

The first section of this paper emphasised the inter- face between the performance of the economy as a whole and that of individual projects. Just as the period of economic decline consisted of mutually reinforcing deterioration of per capita income, investment, government revenue, foreign exchange earnings etc., so the period of stablisation and recovery has to include mutually reinforcing improvements in these variables. However, the issue of priorities is a significant one - many problems at project/activity/enterprise level are related directly to the deterioration of the foreign exchange position. Improvement of the foreign exchange position requires, inter alia, recovery of revenue from traditional exports such as cocoa, timber and minerals (particularly gold). However, before significant improvements can be achieved with these sub-sectors it is necessary to rehabilitate both production and infrastructure facilities on which they depend. Some of the infrastructure and other services require an increase in government revenue and expenditure which depend, in turn, on recovery of economic activity and of the cocoa sector in particular. The cocoa sector is important not only as a source of foreign exchange but also as a source of government revenue and consumer purchasing power.

In considering the economic and financial viability of individual projects, it is therefore necessary to view many of them (particularly in the Public Investment Programme) as being mutually interdependent and supportive. Assumption about future levels of capacity utilisation, for example, would depend on this view. Additionally, other areas of economic policy such as price control, distribution of essential commodities, and wage/salary levels and distribution, all have their part to play in an overall economic rehabilitation programme.

The Public Investment Programme 1986-1988 was a major part of Ghana's Economic Recovery Programme, making a considerable economic contribution through a lifting of the level of Capital Formation, and the inclusion of a large number of rehabilitation projects (accounting for slightly in excess of one-third of all projects and in excess of half of total projected investment). It also represented an innovation in the process of the "rehabilitation" of Ghana's economic planning, incorporating a significant systematisation of the public sector development programme, on which basis further improvements in the economic planning machinery would be possible.

However, significant questions arose concerning the consistency with which individual projects were included in the Public Investment Programme 1986-1988. The first of these questions related to the extent to which **inter-sectoral consistency** had been achieved since an economic rate of return of 15 per cent was the basic qualification for inclusion and two sectors had used alternative criteria (one the Benefit-Cost Ratio and the other, perhaps, a form of cost-effectiveness analysis). The second question related to **intra-sectoral consistency** between new projects and rehabilitation projects, so that there is reason to doubt whether the analytical methods used in the economic appraisal of projects permitted strict comparability between alternative new and rehabilitation projects. Much of this issue relates to the treatment of "sunk costs" and to the alternative analysis of rehabilitations using "incremental analysis" and/or "with rehabilitation" methods. In the absence of clear guidelines consistency cannot be assumed to have been achieved. The third question is an extension of the second and again relates to **intra-sectoral consistency**, although in this case the doubt is over the comparability of the economic appraisal of alternative rehabilitation projects within a particular sector, when inconsistent analytical methods may have been used. The fourth question relates to the use of **shadow prices** so that in the absence of a clearly established set of shadow prices in Ghana the criterion of economic viability of projects prior to inclusion in the Public Investment Programme would have no consistent basis.

These remarks were substantially confirmed through interviews with a number of senior officers in institutions concerned with the planning, appraisal and implementation of development projects, including rehabilitations. In this respect it is very likely that the Ghanaian experience is replicated in a wide range of less developed countries, particularly in Africa. The economic infrastructure for the systematic economic appraisal of projects now exists in many such countries (including Ghana) as it did not 15 to 20 years ago. However, the experience of a series of crises, amounting in some cases to an almost continuous crisis, has made the "honing" of this economic infrastructure a slow process. It is to be hoped that, in Ghana, the establishment of the Economic Recovery Programme, combined with firm and resolute political control, will lead to the elimination of the inconsistencies which remain.

The content and institutional nature of the country- level economic rehabilitation programme, as well as that at sector-level (reflected in the interviews reported in this paper), gives every indication that even at the international level (e.g. World Bank and other aid agencies) there is still a degree of experimentation and learning being undertaken. This reflects the sheer size of the task which is being approached, amounting, as in the case of Ghana, to a national economic reconstruction. It is in the spirit of participation in this task that this paper is presented as a modest contribution.

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APPENDIX A - THE 1983 BUDGET - MAJOR FEATURES OF THE BUDGET

The 1983 Budget marked the effective starting point of the major Economic Recovery Programme for Ghana. The main provisions of the budget were as follows:

1) **Exchange Rate Adjustment** - A system of surcharges and bonuses were introduced at 9.9 and 7.5 times the face value of the transaction for specified types of dealings calculated at a C2.75=US$1.00 exchange rate (see quotation below on the exchange rate). [The surcharges and bonuses were abolished with effect from 10th October 1983, and a new exchange rate was consolidated at C30.00=US$1.00.]

2) Substantial changes in **controlled prices**, and in the approach to price control policy.

3) A doubling of the gross **minimum wage**, with a consistent set of increases throughout the basic civil service wage/salary structure. [The originally proposed increase in the minimum wage was revised slightly upwards after negotiation with the Ghana Trades Union Congress.]

4) Restraint on the growth of **money supply**. Review of the interest rate structure. Preferential treatment of the agricultural sector in credit allocation.

5) Review of the **fiscal structure**. Introduction of a net wealth tax as a means of securing for the public sector some of the gains made by operations in "parallel markets".

6) Review of **import duties** to reflect the exchange rate adjustment.

7) Review of **non-tax revenues**, including medical fees, passport fees and licence fees.

8) Strict review of the **Balance of Payments** situation and allocation of foreign exchange for imports.

9) A **Development Budget**

> - placing "emphasis on increased food and raw materials production for local consumption, increased production for export and improvement in infrastructural facilities and health services."
> - "It is planned to launch a New Deal for the cocoa industry. It is envisaged that this will include rehabilitation and replanting and a producer price which is remunerative together with a producer price policy aimed at ensuring that there would not be significant erosion of this price in real terms."
> -"Since the timber industry presents an opportunity to earn considerable foreign exchange quickly the rehabilitation of this sector is given attention in the Recovery Programme."
> -"One of the short-run objectives [in the mining sector] is to mount a rescue operation for the State Gold Mining Corporation. This rescue plan includes mine shaft repairs, purchase of critical mine and mill spare parts and equipment, embarking on a crash programme for recruitment of expert staff and rehabilitation of infrastructure."
> -"With the improved foreign exchange receipts as discussed in the balance of payments and import programme, production in the manufacturing sector is expected to increase significantly."

SIGNIFICANT QUOTATIONS FROM THE BUDGET SPEECH

Exchange Rate Adjustment

"A number of anomalies follow from this overvaluation. Principal among these is the conferring of large and often illegal and untaxed profits on those who get access to foreign exchange.

"Meanwhile, exporters who earn foreign exchange from their exports are often starved for Cedis because we give them 2.75 Cedis for every dollar they earn from legal exports.

"The real losers in this exchange rate policy are of course the working people, the underprivileged who have no access to foreign exchange, and who at any rate cannot afford it even at the cheap rate of 2.75 Cedis to the US dollar.

"What is more, they must pay prices for finished locally manufactured goods far in excess of the manufacturer's costs calculated as the cost of foreign exchange to him plus his margin of profit, since they seldom get them at the official retail prices.

"The system of bonuses and surcharges seek to promote activity in the productive sectors of the economy by conferring on foreign exchange earners bonuses which are to be financed by surcharges on all users of foreign exchange."

"A surcharge of 7.5 times the face value of the transaction, that is the Cedi value as calculated at the official rate of exchange, will be charged on all transactions falling under the Special Imports Category, namely crude oil imports, and inputs for the GHAIP Refinery, and on transactions involving socially sensitive imports and official transactions classified in Categories I, II and V. Category I includes most raw materials, day-old chicks, agricultural and horticultural machinery, tractors etc., in Category II are meat, clinker, packaging materials etc., and in Category V Transfers in respect of official commitments.

"Transactions involving goods and services classified under Categories III, IV and VII will attract a surcharge of 9.9 times the face value of the transaction (i.e. the Cedi value as calculated at the official Cedi rate of exchange). Category III includes all non-oil imports of goods currently attracting import duty of 35 per cent ad valorem and not included in Category II. All non-oil imports of goods currently attracting import duty of 60 per cent ad valorem, all non-oil import of goods currently attracting import duty of 100 per cent ad valorem. Category IV covers non-oil imports which are currently subject to specific, rather than ad valorem import duty, and not included elsewhere. Category VI covers all transfers in respect of payment for freight and insurance. Category VII covers transactions like:
a) procurement of airline tickets, and purchases (including repurchases) of foreign exchange,
b) transfers for medical expenses,
c) private transfers for educational fees, stipends etc.,
d) private unrequited transfers, dues and subscriptions.
In respect of transactions under Category VII as detailed above, a foreign exchange transfer tax of five per cent is also payable. The base for this tax is the face value of the transaction together with the surcharge."

"For the implementation of the bonus system, banks authorised to receive foreign exchange will pay bonuses on earnings surrendered to them as follows:
1) A bonus of 7.5 times the face value calculated at the official Cedi rate of exchange will be applied to foreign exchange receipts in respect of cocoa, cocoa products, coffee, sheanuts, logs, gold, diamonds, manganese, bauxite, residual oil and electricity.
2) For all other sources of earnings of foreign exchange not included in Category I above, a bonus equivalent to 9.9 times the face value of the foreign exchange surrendered. These sources include export proceeds for manufactured goods, processed timber, and for tourism, as well as direct transfers of foreign exchange by Ghanaians residing abroad.
"The bonus, like the surcharge, is additional to the face value of the foreign exchange transaction..................... The Bank of Ghana will subsequently refund to the paying bank the full amount of face value and bonus, upon application by the paying bank in accordance with guidelines to issue from the Bank of Ghana."

<u>Discussion of Price Control</u>

"In the past, enforcement of pricing policies has tended to vary with the politics and class structure of the government of the day, and the extent of involvement of its collaborators in the lucrative trade of distribution."

"The result of this confused state of affairs is that empirically, inflation has tended to be higher in periods when official policy has favoured price controls."
"At the very best, price controls have tended to be a response, often cynical and half- hearted, to rising prices rather than a consciously formulated and integral part of overall economic policy which makes possible democratic and popular control over the system of distribution."

"At the same time, given the weight of local food in official price indices, price developments have been largely a reflection of events in the uncontrolled sector."

"Consequently, the effectiveness or otherwise of price controls has little relevance to the changes in the overall cost of living as measured by the official price indices."

"Thirdly, to the extent that price controls have been effective, this has largely been the case at the factory or wholesale level and hardly so at the retail level. The cost of living index, as a basis for measuring inflation in Ghana, however, is a measure of prices at the retail level."

"The institution of price controls may become the occasion for reduced levels of Government receipts at least with respect to ad valorem indirect taxes as well as corporate income taxes. This is because even though the controls may in practice be ineffective, the control prices become the official basis for the various taxes."

"On the other hand the system of Government purchases is such that with or without controls, Government expenditures are rapidly inflated by ruling transaction prices."

"The potential gap thus created between payments and receipts is either closed by new taxes and higher tax rates or by deficit financing."

"Neither approach to closing the gap has succeeded in restraining further increases in the level of prices."

"The underlying principle of the new approach to pricing policy is based on the recognition that where there are serious supply bottlenecks, neither laissez-faire market determined prices nor the rigid enforcement of prices unrelated to costs of production is a satisfactory basis for action."

"A viable pricing policy must be formulated in the context of a systematic elimination of the critical supply bottlenecks, to increase productivity and production, together with responsible management of Government finances aimed at eliminating the severe imbalances that lead to heavy deficit financing and the debasement of our currency."

"In an attempt to tackle production bottlenecks, raise productivity and production, and encourage responsible financial management, pricing policy will be based on production costs together with appropriate incentive margins."

"The aim is to evolve a set of competitive price guidelines which together with supplementary imports especially of food, will moderate the scarcity premia responsible for the high retail prices."

"Under the programme, therefore, prices have been determined on the basis of production costs of domestic produce with a margin for incentive. The margin itself should not only provide the necessary incentive, its size should also be in conformity with the overall policy on incomes."

<u>Lending to Public Corporations</u>

"One disturbing factor in the expenditure category is the rapid growth in Net Lending - loans (and equity) less repayment and equity which recorded an appreciable increase."

"The largest beneficiaries are:
1. State Gold Mining Corporation
2. Black Star Line
3. Ghana Oil Palm Development Corporation
4. Twifu Oil Palm
What is even more disturbing is that the analysis of the cash flow of these Corporations indicates such poor performance that it is evident that repayment would pose problems."

APPENDIX B - INDUSTRIAL SECTOR ADJUSTMENT CREDIT PROGRAMME

WORLD BANK/BANK OF GHANA

ELIGIBILITY CRITERIA FOR ISAC REHABILITATION LOANS

1. SPECIFIC CRITERIA

a) The objective shall be to remove a bottleneck that is constraining the RP Enterprises ability to increase production or to reduce unit production costs at current levels of input availability; and

b) The RP Enterprise shall demonstrate;

(i) that at least 50 per cent of its inputs are based on domestic raw materials or that the RP would enable this to be achieved;

(ii) That adequate supplies of raw material can be obtained once capacity has been rehabilitated; or

(iii) that it is a highly labour-intensive operation.

c) The product produced by the RP Enterprise is a basic consumer good (especially one consumed in rural areas) or an intermediate good used in the production or packaging process of other industries, or a revenue earner subject to special excise and/or other taxes, or a product which the RP Enterprise has been exporting during the past three years or could export.

2. GENERAL CRITERIA

a) The RP Enterprise shall have been in production for the preceding two years, at least.

b) State owned enterprises are ineligible, unless their investment programmes are included in the Ghana Government public investment programme 1986-88.

3. FINANCIAL RATE OF RETURN AND PROJECT VIABILITY

a) Each RP shall be viable in accordance with the Marketing, Technical and Financial considerations set down in paragraphs A, B, C & E of Schedule III.

b) RPs for amounts in excess of US$100,000 equivalents must show a FINANCIAL RATE OF RETURN GREATER THAN THE COST OF BORROWING.

4. ECONOMIC RATE OF RETURN

a) Each RP shall show an economic return which exceeds 15 per cent in accordance with the Economic consideration given in Paragraph D of Schedule III.

b) For RPs in amounts of less than US$100,000 and where sufficient data are not available, economic viability may be shown qualitatively and by demonstrating that the unit cost of production after rehabilitation is below the C.I.F. price plus applicable import duties for the equivalent product.

5. INELIGIBILITY

a) RPs which do not meet the criteria in 1 and 2 and/or do not satisfy the requirements for both a financial and economic return shall be disapproved by the PBs.

b) Any RP enterprise which has benefitted from a World Bank funding for rehabilitation since 1982, shall not be eligible.

NEWSPAPER ADVERTISEMENT, MAY 1987

BANK OF GHANA
NOTICE NO. BG/DF/86/1 (ABRIDGED)

INDUSTRIAL SECTOR ADJUSTMENT CREDIT (ISAC)
INDUSTRIAL REHABILITATION COMPONENT

The Bank of Ghana announces for the information of all banks that under Credit No. 1672 GH of the International Development Agency, about US$10 million has been allocated to be disbursed for industrial rehabilitation/restructuring.

The objectives of the rehabilitation/restructuring are as follows:
a) To break bottlenecks that prevent the enterprise from making greater use of its installed capacity to increase production;
b) To replace equipment which are on the verge of breaking down and which if not replaced, would lead to decline in existing production levels;
c) To increase productivity and alter the structure of costs to make the enterprise competitive at border prices;
d) To change the production mix to meet export demand or specific domestic market needs;
e) To make greater use of available domestic materials to replace imported inputs;
f) To assist in financial, organisational and/or managerial restructuring, if necessary, to achieve (a) to (e) above.

ELIGIBILITY CRITERIA FOR ISAC REHABILITATION LOANS

1. SPECIFIC CRITERIA
a) The objective shall be to remove a bottleneck that is constraining the RP Enterprise's ability to increase production or to reduce unit production costs at current levels of input availability; and
b) The RP Enterprise shall demonstrate:
i) that at least 50 per cent of its inputs are based on domestic raw materials or that the RP would enable this to be achieved;
ii) that adequate supplies of raw material can be obtained once capacity has been rehabilitated; or
iii)that it is a labour-intensive operation.
c) The product produced by the RP Enterprise is a basic consumer good (especially one consumed in rural areas) or an intermediate good used in the production or packaging process of other industries, or a revenue earner subject to special excise and/or other taxes, or a product which the RP Enterprise has been exporting during the past three years or could export.

2. GENERAL CRITERIA
a) The RP Enterprise shall have been in production for the preceding two years, at least.
b) State owned enterprises should demonstrate that their investment programmes are included in the Ghana Government public investment programme for 1986-88.

Industrial enterprises interested in utilizing the ISAC rehabilitation facility may obtain further details from their bankers, Bank of Ghana or Ministry of Industry, Science and Technology.

April 1, 1987.

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