



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

20262

Distr.
LIMITED

ODG.18(SPEC.)
7 July 1993

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

ORIGINAL: ENGLISH

4,472-
table
dis...

IN-DEPTH EVALUATION OF UNIDO'S INDUSTRIAL HUMAN
RESOURCE DEVELOPMENT ACTIVITIES

Country Case Study: Zimbabwe*

Prepared by the

Evaluation Staff
Office of the Director-General

* This document has not been edited.

V.93 87137

TABLE OF CONTENTS

ABBREVIATIONS	ii
1. ECONOMIC, SOCIAL AND INDUSTRIAL CONTEXT	1
General	1
Industry	3
Economic and Industrial Policy	4
Population and Employment	6
Women and Employment	10
2. THE WORKING ENVIRONMENT OF INDUSTRIAL ENTERPRISES	12
Government	12
Private Industry Sector	14
Industry Organizations	15
Workers' Organizations	15
Advisory Services Available to Industry	15
Banks - Financing of Business	16
3. INDUSTRIAL MANPOWER DEVELOPMENT	18
Introduction - The Overall System	18
Training for Professional and Management Development	19
Skills Training - Pre-employment and In-Service	20
Private Sector Training	24
Employment-oriented Education and Training Specifically for Women	24
Need for New Forms of Coordination and Integration of Tertiary Education	25
Expressions of HRD Demand	25
Training for Productivity and New Technology	25
Financing of HRD	26
.....	28
4. INTERNATIONAL ASSISTANCE TO HRD IN ZIMBABWE	29
A. UNIDO'S CONTRIBUTION	29
Data and Methodology	29
Output HRD	29
Input HRD	32
UNIDO Policy	32
B. UNIDO AND OTHER INTERNATIONAL ASSISTANCE TO HRD IN ZIMBABWE	33
5. UNIDO'S POTENTIAL CONTRIBUTION TO HRD ZIMBABWE	36
Conclusions and Recommendations	36
 Annex 1: STRUCTURE OF TECHNICAL/VOCATIONAL TRAINING IN ZIMBABWE	
 Annex 2: OPERATIONAL AND COMPLETED UNIDO PROJECTS IN ZIMBABWE	41
 Annex 3: LIST OF PERSONS MET	44
 Annex 4: COMPOSITION AND DATES OF THE MISSION	47

ABBREVIATIONS

AEF	Africa Enterprise Fund
BEST	Basic Education and Skills Training Programme
CAD/CAM	Computer-Aided Design/Manufacturing
CGC	Credit Guarantee Company
CIDA	Canadian International Development Agency
CRADU	Curriculum Research and Development Unit
CSO	Central Statistical Office
CTA	Chief Technical Advisor
CZI	Confederation of Zimbabwe Industries
DANIDA	Danish Industrial Development Agency
DCR	Development Cooperation Report, UNDP
EEC	European Economic Community
EIU	Economic Intelligence Unit
EMCOZ	Employers Confederation Zimbabwe
EMPRETEC	UN/UNDP Center on Transnational Corporations SSE training project
ERP	Economic Reform Programme
ESAP	Economic Structural Adjustment Programme
FINNIDA	Finnish Industrial Development Agency
GDP	Gross Domestic Product
GNP	Gross National Product
GTF	General Training Facility
HRD	Human Resource Development
IDBC	Indigenous Business Development Council
IDC	Industrial Development Corporation
IDF	Industrial Development Fund, UNIDO
IHRD	Industrial Human Resource Development
ILO	International Labour Organisation
IRSI	Industrial Research and Service Institution
ITC	International Trade Center UNCTAD/GATT
JPO	Junior Professional Officer
LIZ	Leather Institute Zimbabwe
MSE	Medium- and Small-scale Enterprises
MVA	Manufactured Value Added
NAMACO	National Manpower Council
NCC	National Consultative Council
NERDU	National Examination Research Development Unit
NGO	Non-governmental Organization
NORAD	Norwegian Agency for International Development
NPA	National Planning Agency
NUST	National University for Science and Technology
ODA	Overseas Development Administration
OGIL	Open General Import License
OTD	Organizational Training and Development
PTA	Preferential Trade Area for East and Southern Africa
SADCC	Southern Africa Development Coordination Conference
SAZ	Standards Association of Zimbabwe
SEDCO	Small Development Corporation
SIDA	Swedish International Development Agency
SME	Small- and Medium-scale Enterprises
SMI	Small and Medium Industries
SSE	Small-scale Enterprises
UDI	Unilateral Declaration of Independence
UNDP	UN Development Programme
UNV	UN Volunteers
USAID	US Agency for International Development
VCCZ	Venture Capital Company of Zimbabwe
WB	World Bank
WID	Women in Development
ZANU.PF	Political Party in Zimbabwe united by President Mugabe
ZDB	Zimbabwe Development Bank
ZDC	Zimbabwe Development Corporation
ZIC	Zimbabwe Investment Center
ZIMDEF	Zimbabwe Manpower Development Fund
ZISCOSTEEL	Zimbabwe Iron and Steel Company

1. ECONOMIC, SOCIAL AND INDUSTRIAL CONTEXT

General

1. Very recently a population census has been held (mid-1992), but no results are as yet available. Estimates for mid-1991 put the total population at 9.7 million. The yearly population growth rate between 1980 and 1989 is estimated to be on average 2.7% (UNDP, 1991). The age-structure in 1982 was one in which almost fifty percent of the population was under 15. Assuming that this situation has not changed substantially, this would put the potential labour force at some 4.5 million people. The density of the population during 1989 was 24 persons/sq km. Official estimates put average urban growth rate at 7.2 per cent between 1969 and 1982. This would mean that currently 30% of the population is urban-based, against 23% in 1982¹.

2. The majority of Zimbabweans are Shona. They outnumber the Ndebele, who live mainly in the south and west of the country by about four to one. The white population was put at around 120,000 in 1985 on the basis of voter registration. Emigration in recent years (1985-1990) had decreased to 1500 annually. Small groups of Asians and other minorities also exist. The main language spoken in towns is English, and it is used as language of instruction from secondary school onward (EIU Report, 1991-92). The adult literacy rate has gone up from 55% in 1970 to 67% in 1990, with men having a somewhat higher literacy rate (74%) than women (60%).

3. Health provisions have improved since independence (1980), with the infant mortality rate dropping from 83 per thousand births in 1982 to 49 in 1988. Life expectancy at birth was 57 in 1982, and 59.6 in 1990 (for women 61.4). Birth control facilities are widely available, but there are no incentives or compulsions. Expenditure on health rose to some 3.5 per cent of GDP in 1989/90².

4. A major development effort has been made since Independence in the area of education, with spending up from ZIM\$98 million in 1979 to ZIM\$1,013 million in 1988/89 (8.5% of GNP). Enrollment in primary schools grew from 819,000 in 1979 (when the war had reduced the numbers of children going to school from 70 to 50% of the potential numbers), to 2.2 mn in 1988 (since 1981 almost half the pupils have been girls on a yearly basis). Enrollment in secondary schools has also increased almost ten times since 1980: in 1988 total enrollment there was 653,353 people (in 1981 42% were girls, remaining steady until 1988). Higher education enrollment has also expanded to three times more from 12,226 in 1981 to 35,387 in 1988 slightly decreasing to 34,235 in 1989 (at this level figures are not gender-disaggregated). The figures on higher education do not include enrollment in private colleges.

5. The tremendous strides made by Zimbabwe in education has led to a better educated work force, with reading, writing and mathematic abilities. The work force is therefore trainable. The educational system is still largely British-based. Technical training has not performed well despite expansion and considerable investment. There are widespread shortages of trainers/lecturers and lack of appropriate training equipment, text books and consumables.

6. Zimbabwe scores rather low on the Human Development Index at 0.413, being 13th out of 65 countries in the "Low Human Development" bracket, and 108th out of the 160 countries

¹ Sources used in this section include: EIU Country Profile 1991-92 on Zimbabwe, Zimbabwe Statistical Yearbook 1989, C.S.O., Zimbabwe, and UNDP Development Cooperation Report Zimbabwe, 1990.

² EIU Country Profile 1991-1992 and 1992-1993 on Zimbabwe.

included in the total survey. GNP per capita in 1989 was US\$ 650, with a negative per capita growth rate between 1980-1989 of -.8%. Although large strides have been made in alleviating socio-economic differences in terms of health, education, and population control facilities, a large percentage of the population still remains in peasant agriculture (46.9% of the labour force in 1982)³. This is a central issue in Zimbabwe, as the distribution of land is still very unequal, resettlement is proceeding at a slow rate, and acute land hunger exists in the communal areas due to overpopulation, low soil fertility, drought, and erosion. It is acknowledged that land redistribution has to be carried out, but it has to be done without reducing the overall production of the commercial farms⁴.

7. Zimbabwe has a considerably more diversified economy than most of its neighbours (with the exception of South Africa) with a developed manufacturing sector, prosperous commercial farming, a well established mining industry and a relatively well developed infrastructure⁵. During the 1965-79s period of UDI the country was able to further develop its agricultural and mining sectors and extensively diversify its industry. This was encouraged by the sanctions which protected the domestic market for locally produced goods. However the growing impact of the war, international recession, higher oil prices, lack of high technology and imported goods led to an average yearly decrease of GNP by 1% between 1975-1979. After peace during the 1980s, the average yearly growth rate in GDP was 3.2%. During this period, Zimbabwe continued to have a fairly strictly controlled economy, put in place during the UDI.

8. Controls were focussed on the administrative allocation of foreign exchange, price controls and strict regulation of investment. After the introduction of a "Growth with Equity" policy in 1982 the education and health sector rapidly expanded. Attention was also given to communal farms which resulted in a large increase in agricultural production in these areas. A major product of this past independence policy was the unprecedented growth of the public sector which remains up to today a major contributory factor of Zimbabwe's government budget deficits. Currently Zimbabwe's Economic Reform Programme and its related World Bank Economic Structural Adjustment Programme are prescribing the reduction of the public service expenditure and of the civil service establishment. Only marginal success has been achieved so far.

9. The Central Government's financial deficit was in excess of 10% of GDP for much of the 1980s. Although a period with significant social achievements the past independence era was marked by an average growth in GDP of 3.2% well below the target of 5% real growth projected during the First Five Year Development Plan (1986-1990) and just above the 2.7% growth in population. This resulted in a disappointing performance in employment generation, with per capita incomes declining and investment levels falling in relation to GDP. Unemployment among school leavers is very high since low economic growth rates have prevented that the majority of school leavers from being absorbed by the formal economy. Moreover, export performance has been disappointing, where balance of payments were controlled by import restrictions which have starved the industry of raw materials, capital equipment and tooling. Which has led to shortages in the domestic market. Which in turn has fueled high inflation. The Government is hopeful that with the 1990 inauguration process of liberalization in key economic areas known as the Economic Reform Programme that these problems will be solved. The programme is supported by a World Bank Economic Structural Adjustment Programme. Global recession, budget deficits and the current drought are

³ HRD for Industry in Africa: country profiles, Regional and Country Studies Branch, UNIDO, March, 1992.

⁴ Only 40% at most of the arable land on commercial farms is cultivated, suggesting that it is possible to reconcile both aims (EIU Country Profile 1991-92).

⁵ EIU Country Profile 1991-92.

affecting the economy adversely, and making it difficult for the Government to effectuate this new policy.

Industry

10. Industry has contributed a quarter of GDP since about 1970, representing 28.6% of GDP in 1990⁶. It is linked to a highly productive agricultural sector, and strong mineral resource base. Trade is also important to the economy (47% of GDP in 1987), of which imports were 20% and exports 27%. The main contributors to exports are manufacturing (39% of total 1987 exports), mining (31%) and agriculture (28%).

Sectoral distribution is as follows:

	%
Textiles, apparel and leather	17.9
Food, beverages, tobacco	31.1
Chemicals, petroleum, rubber, plastic	14.8
Non-metallic mineral products	3.8
Fabricated metal, machinery and transport eq.	13.4
Paper and printing	5.8
Basic metal products	11.0
Wood and wood products	2.2
N.E.S.	0.1

11. The manufacturing industry is still heavily interlinked with Zimbabwe's agricultural base as can be seen from the large contribution to MVA in the food, beverages and tobacco branch, and textiles and leather industries, followed by metal and metal-related industrial branches. The latter contributes extensively to exports, both to the EEC countries as well as within the region (South Africa and SADCC countries). The output in the manufacturing sector rose by 2.5% in 1991 with the highest increase recorded in the textiles, drinks and tobacco sub-sectors. Foodstuffs grew moderately and the largest declines were in chemicals and oil products.

Table 2: Industrial trade by sector 1990⁸

	%	
	<u>Imports</u>	<u>Exports</u>
Food processing	1.0	17.5
Textiles and clothing	5.6	12.7
Wood products, furniture	0.2	1.1
Paper, Printing, publishing	1.7	1.0
Chemical industry	35.5	5.6
Non-metallic products	2.8	1.9
Basic metals, iron, steel	5.6	49.1
Machinery and equipment	46.1	10.5
Misc. products	1.4	0.7

⁶ UNDP Development Cooperation Report, Zimbabwe, 1991.

⁷ UNIDO Global Economic Database. Figures are based on information given by governments through UNSO and extrapolated whenever required. Totals do not tally due to rounding of figures.

⁸ UNIDO Database. Percentages are based on import/export values expressed in current US\$.

12. About 40% of exports are classified as being of manufactured products. The bulk of these, are however basic metals, iron and steel. Trade has diversified away from the prime South Africa market through export incentive programmes⁹.

13. Zimbabwe has one of best integrated manufacturing sectors in sub-Saharan Africa. In terms of output the basic metals and metal products have displaced food processing and clothing and textiles in importance¹⁰. Most of the recent growth has come from clothing and textiles, and the chemical industry however, with the volume of production in the metal sector lagging somewhat behind. During the UDI period the range of products grew enormously, under influence of extreme protection. The total ban on remission of profits (except for South African companies) forced foreign companies to reinvest and diversify more than usual. These factors have continued to be operative in Zimbabwe until very recently, when the Economic Structural Adjustment programme was launched.

14. The manufacturing sector is characterized by mainly large to medium scale companies operating in the formal sector (i.e. registered). Due to the protected environment, companies have diversified activities within one company, rather than maintaining linkages with other companies. This has meant that small and medium scale enterprises in the formal sector have until recently not been extensively developed, and the use of subcontracting until now has not been extensive. The informal sector consists of all businesses which are not officially registered with the Government; often enterprises do not register because of the transaction costs involved and the tax disadvantages in taking that step.

15. Until 1990, Government intentions were to increase its participation in manufacturing sector. This was done through direct purchases into private sector corporations, indirectly through the Industrial Development Corporation (IDC), and by taking equity stakes in new joint ventures. Para-statals include ZISCOSTEEL, the plant at Kwekwe has capacity approaching 1 million tons a year, output is normally around 700,000 tons. ZISCOSTEEL is heavily subsidized by the government. In 1988 a Zimbabwe Development Corporation was established with a portfolio of investments and controlling interests, as well as a company controlled by the ZANU-PF, with six major subsidiaries in 1989¹¹.

Economic and Industrial Policy

16. The Economic Reform Programme (ERP) introduced in fiscal year 1990/91 has as its principal objectives the generation of a higher rate of economic growth and the raising of the standards of living of its population. The policy is to create the conditions for market lead economic development in order to stimulate savings and productive investment and exports which in turn will promote sustainable growth and create employment. The ERP is seen to articulate and chart out policy strategies and investments to achieve these objectives while the Second Five Year Development Plan 1991-95 sets out the programmes and projects to be implemented over the plan and reform period.

17. The policy includes:

- Liberalization of fiscal and monetary regimes;
- Gradual liberalization of trade;
- Progressive deregulation of domestic controls;
- Proactive investment promotion.

⁹ EIU Country Profile, 1992-1993 on Zimbabwe.

¹⁰ EIU Country Profile 1991-92 on Zimbabwe: Index of manufacturing production.

¹¹ EIU country Profile 1991-92 on Zimbabwe.

18. The programme, however, has been hit hard by drought and as well by international recession which has severely affected trade. In addition to reduced exports, Zimbabwe has to import food and spend resources on other relief measures.

19. One keystone to ERP is the reduction of public expenditure for the civil service. Efforts in this direction has had only modest results. Some efforts have been made to reduce the tax burdens on individuals, particularly at the lower income bracket.

20. Concerning the reform of public enterprises greater flexibility is being provided in marketing and in prices. ZISCOSTEEL now charges prices equivalent to import parity. Staff rationalization has started in a number of para-statal. In general the Boards and Management of public enterprises have been accorded significant autonomy. The ultimate aim is to reduce or eliminate subsidies currently required to cover para-statal losses. There is also a movement to commercialize or privatize public enterprises, e.g. Zimbabwe Mining Development Corporation.

21. Cost recovery measures for primary school education were introduced with primary school fee now payable in urban areas only. However, assistance to being provided in the urban areas to those who cannot afford it.

22. The objectives of the monetary and fiscal sector reforms are toward more indirect monetary control, to increase competition in the sector, and introduce new money market instruments. A tight monetary policy is being pursued with restrictive monetary conditions and high interest rates. Problematic for the success of this programme is that due to the drought and recession and continuing budget deficits and increased debt current inflation is pegged at 40% and a 9% downturn of the economy is projected for 1992.

23. The liberalization of trade has officially and from responses received by industry representatives eased the import situation considerably. Allowing companies a much eased access to raw materials, spare parts and new machinery. The export retention scheme has been liberalized from 5%-7.5% of earnings to 15% across the board effective from July 1991 to 25% at the beginning of 1992. Retained foreign exchange entitlements may be used for free importation of goods except for those on the negative list, with imported goods being freely transferable.

24. A substantial number of goods have also been added to the Open General Import License Scheme (OGIL). However, this has put a strain on the balance of payments during 1991. The Government was compelled to raise the minimum import tariff to 10% on all imported goods and a further 10% on items on OGIL.

25. At the same time the Zimbabwe dollar was depreciated by 36% up to the end of September 1991. This was to limit imports and to encourage export. To ensure that the trade liberalization programme is sustainable, it is important that exports increase much more than they have in the past. A number of measures to enhance the export incentive regime were taken, they include:

- Deregulation in the agricultural marketing area and in the transport of products;
- Wages are now determined by collective bargaining;
- Local authority by-laws and regulations are being reviewed to make them more promotional of small to medium-scale business, and the informal sector;
- Share of domestic production subject to direct price control has declined from 60% in October 1990 to less than 30% at present;
- Deregulation and decontrol of investment. The Zimbabwe Investment Center (ZIC) that when the proposed ZIC bill goes through Parliament it will have the necessary

autonomy and manpower to take decisions on investment proposals within 60 days¹².

26. The Second Five-Year National Development Plan 1991-1995 has as its main objectives:

- improvements in living conditions and reduction of poverty
- economic growth
- increase and restructuring of investment
- expansion and liberalization of trade
- stabilization of public finances
- reduction of the rate of inflation
- creation of employment opportunities
- population planning
- regional development
- rural and urban development
- conservation of environment
- development of science and technology

Population and Employment

27. Population During 1990 it is estimated that in 1995, the country's population will reach 10.586 million. This means that over a five year period from 1990 to 1995, the population will grow at an average annual rate of 2.48%, compared to a rate of 2.76% during 1985-90 (see table)

Table 3: Population estimates during 1990 (in thousands)¹³

Total population by sex 1982-2000				
	1982	1985	1990	1995
Male	3,681	4,008	4,601	5,205
Female	3,836	4,167	4,768	5,381
TOTAL	7,517	8,175	9,369	10,586

Estimated Population Growth (average annual growth rate in %)				
	1982-85	1985-90	1990-95	1995-2000
Male	2.88	2.79	2.50	2.28
Female	2.80	2.72	2.45	2.25
TOTAL	2.84	2.76	2.48	2.27

¹² Budget Statement, 30 July 1992, by the Senior Minister of Finance, The Honour Dr. B.T.G. Chidziro, M.P.

¹³ Second Five Year National Development Plan 1991-95, December 1991

Population by broad age groups (in thousands)					
	1982	1985	1990	1995	2000
0 to 14 years	3,553	3,745	4,027	4,232	4,423
15 to 64 years	3,733	4,179	5,097	6,079	7,102
over 65 years	231	233	345	275	320
TOTAL	7,517	8,175	9,396	10,586	11,845

28. It is estimated that in 1995 there will be 982,000 more persons in the 15 to 64 age group than in 1990. The figure alone indicates the intensity of pressure on the educational institutions and on the job market.

29. Another striking feature is that the urban population is expanding at a very high rate, at an annual rate of 4.6%. Government is very much concerned about the social and economic implications of these growth trends.

30. In the Second Five Year Plan document it is estimated that 108,500 new jobs will be created in the formal sector. At the same time the informal sector, small scale industry and public works are expected to generate an equivalent number of jobs. The plan forecasts that during the first half of the plan a retrenchment of labour in both the public service and private sector will occur.

31. The retrenchment in the public sector has not really started, however, retrenchment in private industry has, due to recession and drought. Retrenchment in the public service is expected to number 25,000 over the five year period.

32. Government hopes to organize training schemes for these people and assist them to find new employment. Similarly, the private sector is expected to assist workers retrenched due to closure or streamlining of inefficient operations¹⁴.

33. The labour force¹⁵ of persons aged fifteen years or more is 40.6% of the total population in 1988-1990¹⁶. Women were 35% of the total labour force in that period, with participation rates higher in the rural areas than in the urban areas (resp. 52% and 37% in 1987)¹⁷. Non-adult labour exists, but has become marginal due to the rapid expansion of the educational system since 1980. No reliable figures on unemployment exist, but estimates by the Finance Minister in 1988 put it at around 30%¹⁸.

34. Employment is spread across three broad areas of the economy: formal wage employment, encompassing commercial agriculture and non-agricultural wage activities; employment in subsistence agriculture in communal areas; and a rather undeveloped informal sector. The formal wage sector was marginally the largest in 1982; the relative importance of

¹⁴ Zimbabwe Second Five Year Development Plan 1991-95, December 1991)

¹⁵ The labour force is defined as all persons above 15 years of age working or actively seeking for work during the week before the labour force survey. The latest labour force survey was carried out in 1986/87.

¹⁶ UNDP Development Report 1992.

¹⁷ World Bank Report, "Zimbabwe, A Strategy for Sustained Growth", Volume II: Annexes, Report no. 6981-ZIM.

¹⁸ EIU Country Profile 1991-92 on Zimbabwe.

both commercial and communal farming had fallen over the period 1969-1982, whereas the informal sector had tripled in relative size. Since 1982 formal sector employment has stagnated and this would indicate a rapid growth of the informal sector.

35. Sectoral trends can only be discussed within the formal sector of employment¹⁹. 21% of the formal sector labour force was in manufacturing, 30% in the primary production, and 49% in the tertiary sector. About 75% of all formal sector wage employment is in privately owned establishments.

36. Information on the number of people in manufacturing by major occupational group is not available in Zimbabwe, nor figures on employment status in the non-agricultural sector.

37. Informal sector. Most of Zimbabwe's labour force is now outside the formal wage sector: on communal lands, unemployed or in the non-agricultural informal sector. Communal farming takes up the major part of the labour force now (although the drought will have had an adverse impact in the last two years), and informal economic activities form a second major category.

38. Due to the stagnation in formal sector wage employment, informal activities will need to act as a major source of labour absorption to avoid open unemployment. The non-agricultural informal activities include manufacturing and repair activities in the communal areas (food processing, handicrafts and knitwear, and wholesale and retail trading).

39. Women constitute a 60% plus majority of informal employees. Although the informal sector is comparatively small it is growing rapidly due to the inability of the formal sector of employment to generate sufficient jobs. The formal sector has grown very slowly and has over the years 1980-90 been unable to generate sufficient employment. It has been able to generate only 18,000 jobs a year (mainly in the public service) as compared to a demand of 200,000-300,000 school leavers enter the job market each year. Due to the high unemployment, inappropriate provision of education and limited offers of paid employment many women are turning to the informal sector²⁰.

40. The urban informal sector is still very restricted in Zimbabwe, due to strict regulations concerning urban residence and zoning regulations. It differs from the informal sector in other countries in that (i) participants are predominantly self-employed, (ii) activities were more concentrated in manufacturing and repair (70%) than in trading, (iii) most participants appeared to have entered the sector after losing a formal sector job²¹.

41. There are over 845,000 MSEs²² in Zimbabwe employing just under 1.6 million people. Most are one proprietor operations (70%) which account for the low average size of employment of 1.8 workers. Women account for 67% of proprietors and 57% of the MSE labour force.

¹⁹ The coverage of the quarterly wage survey carried out by C.S.O. in Zimbabwe is wide: temporary and contract workers are included. Only wage employment in small agricultural establishments and casual work in the urban informal sector is excluded (WB, 1987).

²⁰ Integration of Women in Industrial Development, The small-scale enterprise sector, Mercy Sharan Dikits Double Day Consult (PVT) Ltd, Harare, May 1992, UNIDO project (TF/GLO/90/002)

²¹ WB Report no.6981-ZIM, Annexes, discussion of N.P.Noyo et al., "The Informal Sector in Zimbabwe", 1984.

²² "Micro- and Small-scale Enterprises in Zimbabwe: Results of a Country-wide Survey", Michael A. McPherson, 1991.

42. In order to address the alarming increase of unemployed labour the government intends to promote family planning, employment generation projects and decentralized development. Concerning employment high priority and incentives will be given to small-scale enterprises and various informal sector employment schemes.

43. The educational attainment of employed people is as follows:

<u>Table 4</u> ²³	<u>M</u>	<u>F</u>
No schooling	11%	17%
Primary	26%	26%
Secondary and tertiary	23%	14%

44. In comparison with this, the educational attainment of unemployed people is as follows:

<u>Table 5</u>	<u>M</u>	<u>F</u>
No schooling	1%	4%
Primary	17%	23%
Secondary and tertiary	29%	25%

45. The relative concentration of unemployment among the better educated indicates that (i) education does not anymore guarantee employment in the formal wage sector, (ii) unemployment among the uneducated is most likely absorbed in the informal agricultural and non-agricultural sector, and (iii) the direction of the trends among men and women are in the same direction, although unemployment for women with primary education only is higher than for men.

46. Unemployment is also concentrated among the younger age levels, with the majority being between the ages of 15-24, and dropping substantially afterwards. Again, trends for men and women follow the same direction, although the number of unemployed women between 20-24 is two-thirds the number of men. Discussions on unemployment in Zimbabwe currently focus on the effects of the large numbers of relatively educated youngsters entering the labour market, estimated at 100,000 per year. The figures given here for 1986/87 do not yet reflect that situation fully as it appears in 1992 where estimates are 150,000 to 200,000 per year. As against 70,000 formal sector job openings annually.

47. Skills mismatch. Since Independence, skills shortages have grown rapidly at various levels. Private industry spokesmen complain bitterly about the lack of skilled craftsmen at the supervisory level in several industrial sectors (engineering, foundry, machine tool industry), and the lack of opportunity to obtain proper training to bring workers up to that level. The public sector training offered through the apprenticeship system is a narrow channel (preparing only some 1800 apprentices per year); and the quality is felt to be lacking by industry (both para-statal and private). Alternative training channels are currently being developed by larger industrial companies and some para-statals (ZISCO National Railways), not only for their employees but also for others.

48. Quality of management. At the senior level of management, there is a dearth of managers who are able to cope with the effects of ESAP in a positive and creative manner. The fact that industry has enjoyed a protected market for almost thirty years, coupled with the fact that a large percentage of current senior management has "come up through the ranks" but not had formal management training as background are major factors contributing to the

²³ Calculated from 1989, "Zimbabwe Statistical Yearbook", Table 4.5 Distribution of Employment, by age, sex and level of education, 1986/87.

problem. The new generation of young Zimbabwean managers are highly competent and enthusiastic; however, it will take some time before they have sufficient experience to make an impact at the senior level.

49. Migration. Zimbabwe is suffering from various forms of internal and external 'brain drain'. The government's policy in the early eighties of mandatory wage freezes at higher occupational levels, and differential wage levels between private and public sector has led to the following trends:

- (i) a trend from government to private industry of trained people;
- (ii) a trend from private sector industry in Zimbabwe to industry outside the country (notably Botswana, South Africa, Namibia) of technically skilled people and professionals, due to higher wage levels there;
- (iii) a trend of teaching staff in the public sector both to private industry and outside the country;
- (iv) an influx of ex-patriate teachers at various levels of secondary and tertiary education.

Women and Employment

50. According to the Labour Force Survey (1986/87) women constitute 28% of the work force in the formal sector. They, however, constituted only 14% of the national trained work force.

Structure of Employment 1987

	<u>Paid or self-employed</u>	<u>Communal farmers</u>
Male	891,000 (72%)	699,000 (39%)
Female	346,000 (28%)	1,090,000 (91%)

Table 6: The Percentage of Wage Employees by Industry and Gender 1987

Industry	Male	Female	Total
Paid agriculture	238,000 (74%)	22,000 (26%)	320,000
Mining	16,000 (94%)	1,000 (6%)	17,000
Manufacturing	141,000 (84%)	26,000 (16%)	167,000
Electricity	11,000 (92%)	1,000 (8%)	12,000
Construction	46,000 (90%)	5,000 (10%)	51,000
Wholesale trade	76,000 (59%)	53,000 (41%)	129,000
Transport	70,000 (92%)	6,000 (8%)	76,000
Finance	17,000 (71%)	7,000 (24%)	24,000
Community and Social Services	251,000 (63%)	146,000 (37%)	397,000
Other	25,000 (57%)	19,000 (43%)	44,000
TOTAL	891,000 (72%)	346,000 (28%)	1,237,000

Source: Labour Force Survey (1986/87) in World Bank Report 1990

51. As can be clearly seen men predominate in all sectors except in wholesale trade and community and social services. In community and social services women are mostly teachers (37%), in finance bank tellers (29%), commercial agriculture (26%) and wholesale trade (41%). Less than 10% are employed in production industries. Although women are active in all sectors their participation in decision making positions is low:

Table 7: Occupational Structure by Gender (%) 1987

Occupational Category	Male N=827370	Female N=272260	Total N=1100630
Professional/ technical	9.8	20	12.0
Administration/ Managers	2.6	1.3	2.0
Clerical + Related	9.8	11.0	10.0
Sales Workers	5.4	10.4	7.0
Service Workers	18.7	20.5	19.0
Agricultural + Related	25.5	27.0	26.0
Production + Related	28.2	9.8	24.0

Source: Labour Force Survey

2. THE WORKING ENVIRONMENT OF INDUSTRIAL ENTERPRISES

Government

52. The Government of Zimbabwe has recently completed a new round in reorganizing responsibilities within and between Ministries, so that a clear overview (organigram) and a clear division of responsibilities is still lacking.

53. **Administrative Structure**²⁴ The Government has three components: Parliament, Cabinet and the Civil Service. Parliament is the supreme body that makes laws. Below Parliament is the Cabinet that implements laws passed by Parliament and also recommends new legislation for approval by Parliament. It is headed by the President. At the bureaucratic level, Central Government consists of Ministries (25) each headed by a Minister, with a Permanent Secretary as head of the Civil Service in the Ministry.

54. The national planning process includes the following components: Cabinet, the Ministry of Finance, Economic Planning and Development (represented by the National Planning Agency (NPA)), and the Ministry of Local Government. There is also the National Consultative Council (NCC) that plays an advisory role in the planning process through the NPA.

55. The National Planning Agency (NPA) initiates the plan process in response to a directive from Cabinet. Consultations are held with the other Government agencies and private sector organizations via the National Consultive Council and Sectoral Planning Committees.

56. A plan framework is then prepared which is done in conjunction with sectoral ministries and the private sector. Once the framework is approved by Cabinet it becomes the framework within which the national plan is elaborated. Sectoral plans constitute the major input in the formulation of the National Development Plan. The draft plan is approved by Cabinet. The implementation of the National Planning Agency supervises the implementation of the plan. Sectoral planning is undertaken by committees headed by Ministries and representatives of relevant private sector organizations. The resulting sectoral plans constitute key inputs in the elaboration of the National Development Plan.

57. The last component of the national planning machinery is the National Consultive Council. Its role is consultative and advisory in nature. Government uses the Council for advise on key issues. Membership includes senior Government officials, representatives of private sector organizations, members of Parliament and the Party.

58. Projects under the Development Plan are identified and prepared by a Government agency (ministry or parastatal). They are appraised by the National Planning Agency. Investment programmes are prepared every year and consist of on-going and new projects. The allocation exercise is done by the Treasury. The operational agencies (departments, parastatals, etc.) are in charge of implementation.

59. Industrial policy is implemented by the Ministry of Industry and Commerce, which until recently had as its main mandate a strong control over industry through its licensing policy. The new Minister wants to change the direction of the Ministry from exercising control towards stimulating development. The major areas in which this is to be done include: (i) expansion the industrial base through improving MVA, (ii) importing technical/training skills

²⁴ Search for Efficiency: Monitoring and Evaluation in Zimbabwe, M. Adil Khan and S. Mabhlahla, UNDP CEO Evaluation Studies No.2/91

in the short run, (iii) strengthening HRD in the area of science and technology, and building up entrepreneurship capacity.

60. The Ministry is not conversant with the status of HRD in industry as they would like to be. The Ministry wants to study the situation and take a more strategic role in this field and in other industrial development issues.

61. The relationship between the Ministry and the three categories of para-statal is to be changed drastically. The para-statal providing national infrastructure (Electricity Corporation, etc.) will remain in hands of the Ministry. The agriculture-related marketing boards will have to operate without or highly reduced subsidies. Finally, the development para-statal should be operated in future as commercial enterprises. The Ministry is planning to remove interference and enable such industries to privatize and compete as any other enterprise has to. (e.g. ZISCOSTEEL)²⁵.

62. The Ministry of Finance is important for all industrial enterprises (large and small formal) as it allocates the amount of foreign exchange allowed. The procedures involved are said to be lengthy and prohibit efficient planning at the enterprise level. In addition, there is currently a difference of opinions between the Reserve Bank of Zimbabwe and the Ministry concerning the procedures surrounding allocation of foreign exchange²⁶.

63. The Ministry of Higher Education is important in terms of setting the parameters for the supply of skilled manpower at the post-secondary school system, which is its mandate. It is responsible for all technical and vocational training. The focus of its activities has been on gradually expanding the capacity of the post-secondary system (and greater equality for black Zimbabweans within the system), and more recently, extending its scope from the predominantly liberal arts focus to include more science and technology. The data base on which such planning was built has been almost completely lacking. Such data has been collected mainly by The Manpower Planning Unit, which at that time came under the Ministry of Labour, Manpower Planning and Social Welfare. There little publication of such data was possible, making planning for other Ministries difficult. This Unit now comes under the Ministry of Higher Education, which offers the opportunity for direct inputs in the area of higher education planning. The ILO is assisting the Planning Unit in terms of carrying out labour market studies. However, it is not yet certain what the change-over means in terms of responsibilities.

64. The Ministry of National Affairs, Employment Creation and Cooperatives contains the Women's Affairs Department. Originally Women's Affairs came under the Ministry of Women's Affairs and Community Participation, where policies and a National Action Plan were developed in 1989 in the aftermath of a UNIDO-sponsored study on the role of women in industrial development²⁷. However, after the shift to the Ministry of National Affairs the Women's Affairs Dept. became closely linked to the administration of the Women's League of ZANU-PF (which is only now setting up its own secretariat), and has not followed up the National Action Plan nor developed any other plan of activities. According to personal communication, the activities deployed are: (i) setting policy for government on women, (ii) keeping women's problems politically visible, (iii) coordinating women's groups activities, and (iv) providing information for implementation of policies towards women at the provincial and district level.

²⁵ Mission findings, personal communication Minister of Industry and Commerce, Dr. C. Ushewokunze.

²⁶ ILO and Ministry of Labour, Manpower Planning and Social Welfare, "Employment Prospects in Zimbabwe under the Economic Structural Adjustment Program", August, 1992.

²⁷ See forthcoming evaluation report on The Prospective Role of Women in HRD in Zimbabwe, Sri Lanka, and Nepal.

65. The Public Services Commission of the Ministry of Public Services, Labour and Social Welfare is important in the context of this mission because it determines salary levels for the public sector, although the Ministry of Finance then allocates resources. A major problem signalled throughout the mission was the unattractive salary package offered teaching staff (both Zimbabwean and foreign) at the secondary and tertiary levels of the education system, which makes it very difficult to hold staff.

Private Industry Sector²⁸ - Special Characteristics

66. Zimbabwe has a comparatively well developed private sector compared to most other developing countries. It is marked by well developed forward, backward and lateral linkages and has most characteristics of a modern economy. Some 6,000 products are manufactured in Zimbabwe. Interestingly one half of these by single firms, Zimbabwe's industry is therefore highly concentrated. In the manufacturing sector, a 1986-87 Census of Production (CSO) reported 1,100 enterprises, of which 1,000 could be classified SMEs. Many sub-saharan countries with similar populations have only 250-300 formal manufacturing enterprises. Over 70% had 100 or fewer employees. The following table provides a breakdown of manufacturing firms by size measured by number of employees:

Number of Employees	1-100	101-200	201-500	501-1000	1000+
Number of Firms	791	124	80	74	25
% of sector total employment	14.6	10.6	3.0	27.3	34.6

Source: Table 2.8, Pattern of Formal Employment in Minery and Manufacturing, 1986/87. Paul Bennell, "Prospects for Employment, Skills Demand and Skills Supply in Zimbabwe, May 1990"

67. Zimbabwe's SSE sector (1-50 employees) does not fit into the usual profile of a developing country where small firms account for approximately one half of employment in the construction, transportation and manufacturing sectors since in Zimbabwe it accounts for only one quarter of employment in these sectors and a small fraction of both manufacturing and employment and output. Zimbabwe's SSE manufacturing sector is small and underdeveloped which is legacy of the dominance of the whites in the industry sector. They built a relatively broad and efficient manufacturing sector which impeded the development of a large SSE sector. This was coupled with labour laws and other restrictions which kept surplus labour in rural areas to work on commercial farms. Moreover, during UDI and the ensuing 10 years of independence operating under a closed economy, much of Zimbabwe manufacturing sector integrated vertically, backwards to the sources of supply, while other integrated horizontally, into operations which complemented their business activities or diversified their activity to spread risk. Today many of these firms are mini-conglomerates. Their business strategies formed during a time of closed, protected, import-substituting economy. This has closed off opportunity for the SSE manufacturing sector development. Yet small business is important for the expansion of the private sector. The small business sector is important for the following reasons:

- ◆ employment creation and consequently absorption of urban unemployment
- ◆ expands the breadth of the formal business base
- ◆ provides components and raw materials needed by large enterprises (upstream and downstream linkages)

²⁸ Private Sector Analysis, largely taken from USAID report, "Private Sector Training Needs Assessment", USAID/Zimbabwe, December 1990, prepared by Sabat Anderson Incorporated and Probe Market Research.

- ◆ helps develop a pool of qualified labour
- ◆ provides a pool of tested entrepreneurs, who could become leaders in the formal private sector

Industry Organizations

68. The private sector is organized along both sectoral lines as well as professional occupational lines. The Confederation of Zimbabwe Industries (CZI) draws its membership mainly from larger industrial companies (with both black and white ownership). The CZI has a Standing Committee on Training, and presents its views mainly through the National Manpower Council (NAMACO), which will be discussed in a next section. The views it holds on training concur with those of many others, so will be discussed in the next chapter as a whole. Currently, it is developing a more coherent standpoint on the role of small scale enterprises with a view to developing initiatives in this area.

69. The Zimbabwe National Chamber of Commerce, like CZI, is a lobby for its members. Its functions include: (i) coordinating training programmes for management at various levels, and (ii) running a small business support unit, directed towards existing and aspiring small scale entrepreneurs, particularly in the rural centers and 'growth points'²⁹.

70. NAMACO is an advisory committee to the Ministry of Higher Education, with representatives from industry, banking, professional organizations, trade unions, technical institutes and the University of Zimbabwe. Its role is to advise government on manpower training and development, through its Specialized Committees each related to an industrial or service sector branch. Its functioning until now has not been as effective as its members would like, and its recommendations on HRD are only recently being heard by government.

Workers' Organizations

71. The mission has heard little about the role of trade unions. Until now the government has set wage levels and increments across the board for both industry and the public sector, so that there has been little scope for collective bargaining. Under ESAP this situation is changing, with wage levels being set at sectoral level by means of collective bargaining process. Use of collective bargaining is subject to government approval of codes of conduct; out of 88 submitted codes only 33 have been approved as yet³⁰.

Advisory Services Available to Industry

72. There is a plethora of mainly private institutions offering management training services to industry. These range from non-profit organizations (such as the Zimbabwe Institute of Management) to commercial institutions such as Organizational Training and the Development Ltd. (OTD), set up by Anglo-American Corporation. They offer fairly standard programmes to improve business skills, and most do not include recently evolved ideas on 'total quality management'. Such institutions cater to both men and women managers in industry, with the percentage of women managers making use of such programmes ranging from 10-25% of the 'trainees'. None, however, has addressed the question of gender-specific outreach in order to improve the percentage of women trainees in their programmes.

²⁹ These are rural towns which have been identified by government as center of growth, where extra facilities are provided and exemptions to different forms of taxes are given to those investing there.

³⁰ ILO, Min. of Labour, Manpower Planning and Social Welfare, "Employment Prospects in Zimbabwe under the Economic Structural Adjustment Program".

73. Small scale businesses are increasingly being targeted for advisory services by bilateral and international aid agencies as well as national financial institutions. As a result, there are large numbers of organizations³¹ providing either credit or business skills training, or a wider combination of services. There is duplication in services provided, and each organization (except for govt. departments) has predetermined target groups (out of 45 organizations covered by the survey only three specifically targeted women entrepreneurs). Target groups specified by NGOs and some donor agencies are largely rural and informal sector businesses; the impression of the mission is that such activities have a dominantly income-generating character rather than building up viable businesses. On the other hand, financial institutions and govt. departments target exclusively small scale businesses in the formal sector (SEDCO, Empretec³², ZDB, IDBC). This implies that there may well be a gap in support for small scale businesses in the informal sector, which is not being met.

Banks - Financing of Business³³

74. Five major commercial banks operate in Zimbabwe. As part of the ESAP programme more banks will be allowed to operate to increase competition. Government has controlling interest in two banks, the Commercial Bank and Zimbank (Zimbabwe Banking Corporation). A Credit Guarantee Company (CGC), owned jointly by the commercial banks and the Reserve Bank, works closely with other banks to guarantee loans to small-scale enterprises (SSE).

75. Two development financial institutions have been set up by government, the Small Enterprise Development Corporation (SEDCO) and the Zimbabwe Development Bank (ZDB).

76. There are a large number of NGOs which offer finance to SSEs. The majority of these being on a grant basis. Some, however, offer loans on a subsidized basis, for example the Zimbabwe Women Finance Trust. Zambuko Trust, which started operating in 1992 concentrates its activities on financing SSEs.

77. In response to government pressure commercial banks have increased their lending to SSEs by creating special structures to deal with small business. These special units are designed to provide a mixture of financial support, advisory services and training to SSEs. Training services are provided by two banks. They are provided to complement their training activities. The courses cover topics such as record keeping. Loans are also made to cooperatives, with the bulk of lending going to women cooperatives.

78. The Credit Guarantee Company mentioned earlier extends guarantees of up to 50% of the amount being loaned by a commercial bank for a small-scale project. The average size of loan approved in the 1990/91 financial year was \$21,400. The total value of loans approved was \$5.8 million. The scheme is suffering from shortages of experienced staff able to cope the complexity and range of projects submitted for financing. Canadian assistance through CIDA will help strengthen CGC capabilities especially to assist women entrepreneurs.

79. The Small Enterprise Development Corporation (SEDCO) is a para-statal set up, with some help from UNIDO, to provide financial extension and training services to small-scale enterprises. SEDCO places considerable emphasis on training as an important means to ensure

³¹ The types of institutions range from donor agencies, international NGOs working either directly or through local NGOs, govt. departments, financial institutions, and local NGOs (see "Report on Survey of Small-Scale Business Support Organizations in Zimbabwe", 1990, commissioned by the Canadian High Commission Development Assistance Section, Zimbabwe Program.

³² A UNDP/UN Center on Transnational Corporations SSE Training Project

³³ "Support to Small-scale Industries and the Enhancement of Indigenous Ownership in Zimbabwe", draft report date 16 March 1992, Project DP/ZIM/90/005

business success. Courses cover Business Plan Development, Accounting, Finance, General Management, Marketing, Production, Operations Management and General Business Management. Nominal fees are charged.

80. The Zimbabwe Development Bank established in 1985 has traditional development initiatives. Projects are appraised against national objectives such as employment, foreign exchange earnings, linkages with the domestic economy and the promotion of Zimbabwean ownership and management. The bank's shares are held 51% by the Government, 7% by the Reserve Bank, 8% by the African Development Bank with the remaining shared between Commonwealth, European, Finnish, Dutch and German development agencies.

81. In response to its conservative lending policies which failed to build up entrepreneurship an entrepreneurial development fund was established. The fund offers concessional loans, venture capital and technical assistance in project preparation and implementation. Extension services are also provided through an African Development Bank financed facility. The Zimbabwe Development Bank will receive substantial assistance from the European Community to improve its SME lending programme.

82. Other venture capital funds include: the Venture Capital Company of Zimbabwe (VCCZ), Hawk Ventures Ltd., Manna Corporation, Africa Enterprise Fund (AEF), and the Zimbabwe Development Corporation (ZDC).

3. INDUSTRIAL MANPOWER DEVELOPMENT

Introduction - The Overall System

83. In Zimbabwe, education has been a priority area for Government 'to address the socio-economic needs of the country' by investing in human resource development. Given the fact that the country has been independent for only twelve years, policy has been concentrated until recently on the goal of improving the quantitative capacity of the education system. The main thrust of the policy in the early eighties was to get all school-age children into primary school, by introducing a system of tuition free primary school education. This was followed by absorbing large numbers of students at the secondary school level, and since 1988 policies have been developed to expand capacity at the tertiary level. (see Annex 1, Structure of Technical/Vocational Education in Zimbabwe)

84. The need for planning and coordinating tertiary level HRD has been recognized by establishing a Ministry for Higher Education in 1988 separated from the Ministry of Education (which has primary and secondary education as its work terrain). All centers for vocational and technical training, technical colleges and universities fall under the new Ministry.

85. Tertiary education has not been able to provide sufficient number of graduates to meet the HRD requirements of the country, particularly in the science-based occupations. Major constraints have been a lack of proper coordination of this level of education, financial constraints in terms of local currency and foreign exchanges, and insufficient qualified teaching staff.

86. The lack of coordination is reflected in the mismatch between the numbers of graduates required by the economy in science and technology-related fields and the predominance of university and college graduates in the liberal arts, and business and commerce administration. This is not to say that there is widespread graduate unemployment as yet. In a tracer study carried out by the University of Zimbabwe of 1988 graduates, only 4% were found to be unemployed³⁴. It is rather that private industry and the vocational and technical training colleges experience great difficulty in finding sufficient numbers of well-trained teachers to employ. It is thought that an increased supply of graduates in the science and technology field will be provided by the newly established University for Science and Technology in Bulawayo, with a bias towards applied science and technology subjects. The first group of students was admitted last year, and the number of applications was so large that only 5% of applicants were admitted³⁵.

87. A second problem is the lack of enough and up-to-date equipment in the colleges and University, due to severe constraints on allocations of foreign exchange. This has meant that students have been receiving training on old machines and that large amounts of equipment have not been working, due to lack of spare parts and people to repair them.

88. The rapid expansion of the system has led to a relative shortage of experienced teaching staff at various levels, with the most difficult levels to fill being public vocational and technical college and University level, particularly in technical and scientific fields. This is a problem which is not yet being effectively addressed by government, despite broad agreement and pressure from all people working in that field (both in private and public sector industry, and the teaching profession). The basic problem is the unattractive salary and fringe benefits package which the colleges and University are able to offer as part of the public

³⁴ "Report of the Commission of Inquiry into the Establishment of a Second University or Campus", Committee headed by Mr. P.R.C. Williams, February, 1989.

³⁵ The number of students admitted was 270 in 1991, whereas 6000 applications were received.

sector, and the pull from national private sector industry on the one hand, and the pull of higher salary levels in neighbouring countries on the other hand.

89. The brain drain from the educational system in Zimbabwe to a) national private industry, b) other countries of the region and c) the emigration of large numbers of skilled people at the time of Independence, means that shortages in manpower will remain for some time to come. It also implies that the educational system is relatively costly to Zimbabwean society as it is not getting the expected returns from the investment in education it is making. A partial solution to the problem which is currently adopted, is the use of ex-patriates to fill in gaps in teaching staff, particularly from countries for whom Zimbabwean conditions compare favorably with conditions in the own country. Although this does not entail extra costs for Zimbabwe, it does imply that the efficiency of the education system is impaired by the lack of permanency of staff and the danger of less coherence of teaching programmes due to different staff backgrounds.

90. More recently the question of curriculum development is being looked into, and the certification of degrees and diplomas as well. Due to the fact that many private and public training institutions exist, there is also a great difference in the quality of programmes offered. There is no uniform system of accreditation, so that the value of the certificates given is difficult to gauge.

91. There is still little manpower data available. In 1981 the Government carried out a large-scale manpower survey to inventory the effects of independence and large-scale emigration of the white population. That exercise has not been repeated on such a scale, although a 10% manpower survey was carried out in 1984/85 and was used for manpower requirement projections for the first National Development Plan. Although a Manpower Planning Unit exists and is carrying out studies with the help of ILO assistance, the studies have not yet been officially released, and their impact and use could not be ascertained by the mission³⁶.

92. HRD programmes are currently supply-led, but there is increasing agreement among both government official, education leaders and industry representatives that the professional and financial input from the private sector should be increased. This is reflected for instance, in the way the National Manpower Council is currently functioning more effectively - it is the main interface between the different parties. In addition, industry representatives are being recruited onto the Boards of the National University of Science and Technology, and in advisory committees to the polytechnics. There is also basic agreement among all parties that the major shortage in manpower lies at the level of skilled workers and supervisors, and the middle levels of management in industry.

Training for Professional and Management Development

93. There are several main avenues for the development of professional managerial skills.
- a. Overseas training, which is still being used by both government and private sector as a stop-gap measure, particularly for junior and senior levels of management. A problem is the gap between what was learned abroad and the local applicability or willingness to apply what has been learned.
 - b. Universities, of which there are two, offer a complementary diplomas and degree level programmes in science and engineering as well as professional subjects

³⁶ Complicating the situation, is the fact that the Manpower Planning Unit has been removed from the Ministry of Labour, Manpower Planning and Social Welfare into the Ministry of Higher Education, and it is not yet clear what its mandate will be.

(management and accountancy). Enrollments in the University of Zimbabwe are given below for 1988:

Table 8³⁷ Percentage University Enrolment by Faculty - 1988

Agriculture	4.0%
Arts (inclusive social sciences)	30.8%
Commerce	18.6%
Science	8.2%
Medical	8.1%
Engineering	6.3%
Education	11.9%
Veterinary	1.3%

N= 7699

Employers in industry often complain that University graduates are too academic, and not enough oriented towards future employment. At NUST this is being remedied by including a year's work experience within industrial companies as part of the four-year training programme. This provides employers with input into the degree training, and the students with practical career experience during training.

- c. Professional and private centers of which there a large number in Zimbabwe. A recent survey³⁸ covered 38 institutions without being exhaustive, of which 58% belonged to a consulting firm, corporation or corporate training center, 16% to a business or professional association, 15% to NGOs or international donors, and 5% were public institutions. The demand for management training is increasing, fueling the growth of such centers. The level of training covers all levels of employees up to senior management; one center explicitly targets all staff levels of client companies (systems training). Training materials from abroad (USA, Hawaii) are often used; but the need to adapt them to local conditions and culture is recognized.
- d. On-the-job training. Many companies have stated that they poach senior technical staff and managers from other companies. This is attributed to the existing shortage of trained managers, and the fixed salary levels set by government, which makes it easier for a future employer to offer a better package than the current employer.

94. The increasing range of training venues now amply meets the need for basic management training which was not readily available before. However, the training provided does not go much beyond the basic level; management subjects recently introduced elsewhere - such as total quality management - are not taught. Given the fact that Zimbabwean industry has to compete in the export market and with a neighbour like South Africa, it would make sense to also include up-to-date management training.

Skills Training - Pre-employment and In-Service

95. In 1980, the government inherited an education system in which a large part of the black Zimbabwean children received little or no education. Government efforts were therefore initially directed towards remedying this situation, before focussing attention on secondary and tertiary levels of education. In ten years, the enrollments in primary schools have risen

³⁷ Calculated from Appendix II; Table 5., "Report of the Commission of Inquiry into the Establishment of a Second University of Campus", February, 1989.

³⁸ prepared for USAID/ZIMBABWE, by Labat-Anderson Inc., "Private Sector Training needs Assessment", December 1990.

from 1.2 mn children in 1980 to 2.1 mn in 1990³⁹, and have currently stabilized. Expanding educational opportunities has also been extended to the level of secondary schools, whose enrollment levels have gone from 74,321 in 1980 to 676,884 in 1990.

96. The bias towards liberal arts training has already been mentioned before; in an effort to orient more children towards technical subjects, the government (Ministry of Education and Culture) has introduced technical subjects in the secondary school curriculum in order to improve preparation for employment. The focus is mainly on making children familiar with the use of different materials, rather than going into technical subjects very deeply. A second focus is on personal counselling to children in their choice of subjects, so that they have the right background when they want further vocational and technical training. This is particularly relevant for girls, who do not have sufficient math and science O-level requirements to go on to technical and vocational training institutions.

97. Technical and vocational training came under the Ministry of Higher Education when it was created in 1988. Until recently, the expansion of the educational system was not based on a comprehensive analysis of human resource requirements, given the fact that there was a shortage of trained people in all areas it was unnecessary to do so at that time. Now that the basis of primary and secondary education is in place, it will become more important to decide on priorities in the areas of technical training versus liberal arts and other subjects. The Ministry of Higher Education has developed a "Master Plan for Human Resources Development". The mission was unfortunately not able to obtain a copy.

98. The Ministry has also developed a plan for rationalizing technical and vocational training in both public and private sectors⁴⁰, which is gradually being carried out. Implementation is in the hands of the Department of Curriculum and National Examinations, which has two Units. The Curriculum Research and Development Unit (CRADU) coordinates the development of all vocational and technical education programmes in the country, through the Higher Education Examination Council (HEXCO), whose secretariat it runs. HEXCO approves courses developed by its committees, and the Department certifies training institutions providing them. Members of the Council include principals of colleges and training institutes, as well as industry from time to time. Until now, some 30% of all courses which the Unit wants to develop have been either developed and or approved by HEXCO. The training courses are actually carried out by a large number of institutions, including various other Ministries, private training centers as well as the technical colleges. The second Unit is the National Examinations Research Development Unit (NERDU) which institutes and manages a system of setting, marking, moderating and documenting all national examinations. 82% of all courses in technical colleges have now received local accreditation rather than British certification. A recent addition to the ministry has been the transfer of the Manpower Planning Unit from the previous Ministry of Manpower Planning, and Economic Development; this unit has done a review of manpower studies in the 1980s, and if released, should be able to contribute to the discussion on the direction of future manpower policies⁴¹.

99. Post secondary training in Zimbabwe is provided by 14 teachers' colleges, eight technical colleges, two vocational training centers, four agricultural colleges, four agricultural

³⁹ "Second five-Year National Development Plan 1990 - 1995", December 1991.

⁴⁰ "Rationalization and New Structure of Vocational and Technical Education in Zimbabwe, Ministry of higher Education", 1990.

⁴¹ The studies produced by this Unit with the support of the ILO Manpower Project have not yet been released by the Ministry, so that the mission is unable to comment on them.

institutions and 23 health institutions in the public sector⁴². In the following sections only the technical colleges and vocational training centers will be covered.

100. There are currently five levels of technical training: with their concomitant entry qualifications.

Qualification	Entry Qualification
- Pre-vocational Certificate (PVC)	Grade 7
- National Foundation Certificate (NFC)	Zimbabwe Junior certificate/Form 2
- National Certificate (NC)	5 'O' levels
- National Diploma (ND)	NC or 2 'A' levels
- Higher National Diploma (HND)	National Diploma

101. Secondary schools will offer PVC, the vocational training schools/technical high schools the NFC, the vocational training centers NC, the technical colleges NC and ND, and the Polytechnics the HND. Currently, the courses offered in the public sector institutions run over four years, although the Ministry of Higher Education is currently discussing reducing the length to three years.

102. There are two channels of access to vocational and technical training for trainees. The first is through the government apprentice training program, in which the government determines the number of apprentices, screens applicants, administers tests, and accepts apprentices into the programmes. The Ministry then allocates apprentices to industry, where the training takes the form of on-the-job training and related supplementary classroom instruction. The second channel is through private industry itself recruiting apprentices, which are then sent for classroom instruction when possible.

103. The Ministry of Higher Education has involved industry and higher education representatives in its HRD program, through the National Manpower Advisory Council (NAMACO). Currently, it is also trying to link up with representatives from the industrial community through their membership on Standing Committees, and Boards of Polytechnics and technical colleges. The mission feels that the process should be further stimulated, as it facilitates direct links between industry and training institutions at the levels where activity is actually taking place. Efforts are being made to make NAMACO more representative of industry and have it more involved in manpower development, even at the college level.

104. There are a number of problems in the public sector technical/vocational training system that still need to be solved. According to industry the major ones are⁴³:

- the number of apprentices put through the system is too low,
- large numbers of people choose subjects not geared to industry needs, especially women,
- there is a shortage of teaching staff and equipment, and
- the teaching staff is insufficiently paid, and so mobility is high.

⁴² "Private Sector Apprenticeship training in Zimbabwe: A case study of the Delta Engineering Training Center, CIDA", July 1992.

⁴³ The CZI brought out the Watts Report (in 1990, revised end 1991), in which the basic cause of the various problems mentioned here is given by the fact that the technical colleges have little autonomy in carrying out their daily activities, but have to go through the various Ministries, leading to a great deal of bureaucratic delay, and public sector salary levels.

105. These problems are confirmed by the following figures:

- a. The apprenticeship system put through on average some 1100 per year during 1986-1990 (1541 in 1990), whereas private colleges put through 12000 students per year.
- b. A summary of enrollment at all technical colleges in Zimbabwe in 1989 indicates that half of all students are enrolled in Business and Secretarial Studies (4945 out of 9112; 73% of all women students and 42% of all men students). By contrast the number of students in technical and engineering fields comes just under 30%. Table 6 indicates the numbers by gender.

Table 9 Number of students by area of study and gender⁴⁴

<u>Subject</u>	<u>men</u>	<u>women</u>	<u>% total enrollment</u>
Automotive eng.	399	17	4.5
Science and technology	245	69	3.4
Civil engineering,			
Mining and Building	374	22	4.3
Electrical engineering	697	30	8.0
Mech., Production eng.	630	10	7.0
Computer studies	87	55	1.6
	N= 5521	N= 3591	N= 9112

- c. The technical colleges operated in 1989 at 65% of their capacity to enrol students due to the lack of staff and resources⁴⁵. Funds from the Zimbabwe Manpower Development Fund (ZIMDEF⁴⁶) have been used mainly to construct facilities and buy equipment for teachers colleges, technical colleges and vocational training centers. However, the 1989 Annual Report from the ministry of Higher Education notes, 'lack of equipment continued to hinder some training programmes and college training capacities were not meaningfully increased'.
- d. The lack of staff - and qualified staff in particular - remains a major problem, due in large part to the unattractive levels of salaries in comparison with other countries and the private sector. Figures on lecturing staff in technical colleges in 1989 indicate that overall 35% of the posts remain vacant⁴⁷. The four areas of engineering show an above average of vacancies of around 40%. A number of donors are contributing to staff development programmes to alleviate such shortages (SIDA, CIDA, USAID, EEC). Ex-patriate staff was also recruited through a variety of channels. Locally, a number of disciplines were put on the 'critical shortage list', enabling the colleges to upgrade pay scales for teaching staff up to university lecturer scale.

⁴⁴ 'Annual Report of the Secretary for Higher Education for the year expiring December 31', 1989, presented to parliament 1991.

⁴⁵ *ibid.*

⁴⁶ ZIMDEF receives money from large employers who are assessed 1% of their gross payroll.

⁴⁷ see footnote 44

Private Sector Training

106. Private sector training is on the increase in Zimbabwe, and takes several forms⁴⁸. These are:

- a. for-profit and non-profit 'free standing' training institutions (eg., Speciss College, Ranche House College)
- b. established training departments or divisions of publicly held corporations in Zimbabwe (Delta Engineering Training Center, Astra Group Training)
- c. donor-supported training centers/regional training centers
- d. industrial branch institutes such as the Leather Institute of Zimbabwe (LIZ).

107. The types of training offered fall into two broad categories; skills training centers for technical personnel, and management training institutions offering modern training to mid-level and senior management. Although certificates are used, the emphasis is on applied and non-academic training. The skills training centers set up by private companies and para-statal have increased over the past years, and increasingly trainees from outside companies are also accepted. This development has been in response to the difficulties experienced by the public sector institutions, and the dearth of graduates coming to industry. The numbers of graduates from the private colleges numbers about 12000 per year; the numbers at the company training centers are much smaller.

108. Data on the quality of the training staff in the private institutions from a USAID report was rather inconclusive. Most teaching staff did have work experience, either/or combined with academic qualifications at the BA or MA level. Upgrading of permanent teaching staff received attention in the majority of institutions surveyed. Most institutions have strategic plans, covering one to three years, which are annually revised. This indicates the institutional strength of these organizations. The institutions are nearly or completely self-supporting financially (58%), financed by tuition and fees charged for training. The USAID's report conclusion is that non-governmental training in Zimbabwe does not show signs of severe financial strain at the moment. The main constraint noted was the lack of facilities such as: libraries, computer facilities and classrooms.

109. Private provision of vocational and technical training totaled, at December 1989, 106 institutions. The number of institutions are increasing rapidly.

110. Technical training facilities for the small scale sector are usually offered as part of a package by the various institutions assisting it. Often such institutions actually implement their training programmes through outside private colleges, such as Ranche House or Speciss College. If requested, such courses can be run specifically for women. Demand comes mainly from support institutions targeting women.

Employment-oriented Education and Training Specifically for Women

111. The numbers of girls participating in secondary education is only slightly less than that of boys. However, when participating in post-secondary education and training, there are clear gender imbalances in developing skills that are relevant to industry. As indicated above, the predominately secretarial, business and commercial subjects chosen by girls contribute to gender-stereotyping in employment afterwards. There are extremely few women trainees in the engineering sections of technical colleges; interviews with private sector representatives seem to indicate that women trainees are accepted when they apply, but specific outreach programs to increase the enrollment of women trainees was not encountered anywhere. The

⁴⁸ The following discussion is based heavily on 'Private Sector training needs Assessment', USAID/ZIMBABWE, December 1990 (prepared by Labat-Anderson Inc.), complemented by interviews held by the mission.

idea was quite new to many of those interviewed. Given the manpower shortage in the area of industrial HRD, more efforts should be put into recruiting women, as the current situation offers them more possibilities for employment than with an oversupply of trained people.

Need for New Forms of Coordination and Integration of Tertiary Education

112. There are several areas in which there is scope for further coordination:

- government and industry in policy and implementation
- curriculum development and standardization
- certification and trade testing
- relationships among education/training institutes/universities/research institutes

113. As recommended in a Commission Report⁴⁹ new forms of coordination and integration of tertiary education will be needed to regulate the relationship between university-level institutions, between them and non-degree institutions, and among the providers of non-degree tertiary programmes. The Commission recommended the creation of a National Commission on Higher Education and of a parallel coordinating body with its secretariat at the Ministry of Higher Education, for non-university institutions. There should be a close relationship between university and non-university sectors, to ensure in particular that easier progression is possible from certificate courses through diploma studies to degree-level programmes. Greater harmonization between tertiary colleges in different sectors should be sought, so that students can move more freely between courses and institutions.

Expressions of HRD Demand

114. The Department of Manpower Research and Planning previously within the Ministry of Labour, Manpower Planning, and Social Welfare, has undertaken studies concerning HRD demand. Unfortunately, only one study was ever brought out by the Ministry⁵⁰, based on projections of 1985 data from the Manpower Survey then carried out. The study itself mentions that occupational and skill categories were so aggregated that it was very difficult to tell whether all professionals are in short supply or only in particular professions. In addition, there was no system for collecting data from employers in a systematic fashion, although this is to be introduced in the Second Plan.

115. An ILO Manpower Studies Project is currently assisting the Department of Manpower Research and Planning, and a study was just completed but not yet cleared on the impact of ESAP on future employment - numbers and sectoral distributions. During the Zimbabwe study no comprehensive inventory of HRD demand prepared by industry could be found.

Training for Productivity and New Technology

116. Industry representatives acknowledge that a major factor in improving productivity is the availability of relevant management and supervisory skills. It is only very gradually beginning to be recognized by industry that companies within one industrial branch must work together to develop a pool of human and technical resources at the cutting edge of a particular industry. The pressure of ESAP and the expected competition from South Africa have been contributing factors. The example of the Leather Institute of Zimbabwe (funded by UNIDO within the framework of the Eastern Africa Leather Industry Project) was to many industrialists an eye-opener of how to set up such cooperation, and evoked great interest. The

⁴⁹ Report of the Commission of Inquiry into the Establishment of a Second University or Campus, February 1989

⁵⁰ "Manpower Requirements and Their Training Implications 1986-1990", Ministry of Labour, Manpower Planning and Social Welfare, October 1989.

training given at LIZ and the new technology introduced via LIZ are a model which could be usefully implemented in a number of other industries in Zimbabwe.

117. At another level, the question of rehabilitation and maintenance system training also came up regularly in discussions. In this context, the example of ZISCOSTEEL is relevant. Under UNIDO auspices, training was given in introducing maintenance systems which would provide significant improvements in productivity. However, it was found that not only the relevant supervisory engineers should have been trained (as they were) but also senior management who have decision-making powers to implement such a maintenance systems. Engineers receiving training had difficulty in getting management to switch from a trouble-shooting perspective to a systems perspective.

118. The comments above relate mainly to medium- and large-scale industries. Within the small-scale informal sector, training for entrepreneurs is also necessary to introduce new areas of technical skills and above all to identify possible new product markets. The example of the training courses for women entrepreneurs (sponsored by UNIDO), given by a private institute (Ranch House College) in food processing is an interesting case in point. Teaching staff indicate that the demand for this course has remained high, and that the women entrepreneurs completing the course find a ready market for their goods in the rural areas. The College is planning to extend its programme in this area to a permanent feature of the College⁵¹. This example indicates that training programmes for small scale entrepreneurs is relevant, provided it pertains to a sector where 1) the raw materials for entrepreneurs are readily accessible, 2) it does not require cash outlays above the capacity of the entrepreneurs, and 3) the product market is not saturated.

Financing of HRD

119. Attainment of the objectives of Zimbabwe's Development Plan requires a clearly defined investment strategy. At the core of this strategy which is linked with high levels of investment in productive sectors is the development of human resources with requisite skills.

120. Government has recognized that the availability of middle and high level manpower in sufficient numbers is one of the prerequisites of rapid socio-economic development and is central to the development process. This process is being constrained by a shortage of human resources in scientific and technological fields such as the various branches of engineering (chemical and mechanical), manufacturing (industrial engineering), mining and agriculture.

121. The education system has not been able to meet the manpower requirements of the economy, particularly in regard to science-based education. Constraints have been a lack of proper coordination, financial constraints in terms of local currency and foreign exchange and insufficient qualified teaching staff. Staff shortages have been caused by the ever widening gap between the salaries paid in the public and the private sector, and higher salaries paid by neighbouring countries.

122. Government has given priority to the development of higher education sector. Employment in most sectors of the economy was declining during periods of recession and draught whereas employment in education continues to grow. Since independence, expenditure on education has been growing at a rate faster than any other sector. It now accounts for a greater share of expenditure than other sectors including defence. For the Fiscal Year 1988/89 total Government recurrent expenditure amounted to ZIM\$4,495 million of which ZIM\$ 997 millions, or 22% was for education.⁵²

123. Continued growth in expenditure on education at school level is thought to be needed as more children are now at secondary school where expenditure per student is higher than in primary school. The initial need to provide primary and secondary education for all children has tended to direct a greater proportion of the education budget to these two levels of the

⁵¹ mission findings

⁵² see footnote 49

education sector. For the Fiscal Year 1988/89, the recurrent budget for education was ZIM\$ 997 millions of which ZIM\$ 847 millions or 85% was allocated to primary and secondary education. Leaving only 15% of the budget for tertiary education.

124. The ability of the country to increase provision of tertiary education depends on the performance of the economy. Sustained growth is required. Government has however continued to increase provision of social services faster than the growth of the economy, this being a major factor in the deterioration of public finances. Budget deficits averaged 10% of GDP from 1979/80 to 1988/89.

Table 10: Budget Deficits in Zimbabwe 1979/90 to 1988/89 (in ZIM\$)

Year	Budget deficit (\$ m)	GDP at factor cost (\$ m)	Budget deficit as percentage of GCP
1979/80	377.4	2,937.0	12.8
1980/81	285.4	3,639.5	7.8
1981/82	381.4	4,340.5	7.3
1982/83	457.3	4,991.0	9.2
1983/84	617.8	5,509.0	11.2
1984/85	706.8	6,237.0	11.3
1985/86	682.1	7,657.5	9.3
1986/87	996.8	8,305.0	12.0
1987/88	896.0	9,308.0	9.6
1988/89	1,150.0	10,906.0	10.5

Sources: 1) Government of Zimbabwe Budget Statement, 2) Government Central Statistics Office

125. Severe foreign exchange shortages have been experienced by the economy since Independence. For the education and training sector this has led to shortages of books, laboratory equipment and workshop items required for teaching applied sciences including engineering and other technical subjects.

Table 11: Ministry of Education Recurrent Expenditure (\$m) 1980/81-1988/89 (in ZIM\$)

Year	School Education				Tertiary Education							
	Primary	% Change	Secondary	% Change	Teacher Education	% Change	Univ. ⁵³ Zimbabwe	% Change	Voc. & Tech. Colleges ⁵⁴	% Change	Total Tertiary	% Change
1980/81	146.2	-	54.8	-	5.9	-	11.0	-	8.7	-	25.6	-
1981/82	198.0	35.4	77.0	40.5	9.5	61.0	12.6	14.5	10.0	14.9	32.1	25.4
1982/83	259.7	31.2	92.4	20.0	11.1	16.8	14.9	18.3	13.5	35.0	39.5	23.1
1983/84	302.2	16.4	130.3	41.0	12.3	10.8	16.7	12.1	14.5	7.4	43.5	10.1
1984/85	306.2	1.3	165.4	26.9	16.2	31.7	20.6	23.4	10.3	-29.0	47.1	8.3
1985/86	361.0	17.9	181.5	9.7	21.6	33.3	26.3	27.7	20.7	101.0	68.6	45.6
1986/87	419.2	16.1	223.8	23.3	28.0	29.6	37.3	41.8	23.1	11.6	88.4	28.9
1987/88	435.5	3.9	236.5	5.7	30.8	10.0	44.4	19.0	26.8	16.0	102.0	15.4
1988/89	509.4	17.9	293.8	24.2	29.2	-5.2	46.0	3.6	-	-	-	-

⁵³ The University of Zimbabwe recurrent expenditure is based on calendar year.

⁵⁴ 1960-1984, Ministry of Manpower Planning and Development; 1984 to 1987, Ministry of Labour, Manpower Planning and Social Welfare; 1988 to present, Ministry of Higher Education.

Sources: Ministry of Finance, Ministry of Higher Education, Ministry of Primary and Secondary Education

126. The amount provided for the Ministry of Higher Education during 1989/90 was \$ 172,348,000. Representing an increase of \$ 22,342,000 (14.9%) over the previous years. Grants accounted for \$ 94,097,000 of the total budget, leaving only \$ 78,251,000 for the Ministry of Higher Education's services.

127. The expenditure incurred during 1988/89 were follows:

	ZIM\$
Administration and General	21,975,000
Government Teachers' College	25,800,000
Government Technical Colleges	21,515,000
Vocational Training Centers	1,374,000
Private Teachers' College	325,000
University Grants	59,293,000
Scholarships and other Grants	14,784,000
Loans to University Students	<u>3,504,000</u>

163,982,000

Revenue collected

Government Teachers' College Tuition and Boarding fees	2,355,000
Government Technical College Tuition and Boarding fees	1,626,000
Rent on Government Accommodation	153,000
Interest on Vocational loans to Students	244,000
Sundry items	<u>932,000</u>

5,310,000

128. The Zimbabwe Manpower Development Fund (ZIMDEF) 1989/90 income amounted to ZIM\$ 46,284,000, which represented an increase of 18% over the previous year. The general fund holding as at 31 December 1989 stood at ZIM\$ 102,677,000.

129. During 1989/90 ZIM\$ 38,508,000 of the fund's holding was spent on the following:

Apprenticeship Expenses	13,541,000
Skilled Workers Expenses	415,000
Grants and Rebates	7,623,000
Returnees Expenses	10,000
Vocational and Technical Training Projects	16,304,000
NAMACO and Committee Expenses	51,000
Administrative Expenses	564,000

Note: Expenditures incurred by the Ministry of Higher Education were taken from Government of Zimbabwe, Annual Report of the Secretary of Higher Education for the year ended 31 December 1989, dated 1991

130. Although the overall period is not known a total of ZIM\$ 39,099,037 was allocated on the ZIMDEF budget for capital outlay for buildings at technical colleges and vocational training centers.

4. INTERNATIONAL ASSISTANCE TO HRD IN ZIMBABWE

A. UNIDO'S CONTRIBUTION

Data and Methodology

131. A list of current and pipeline projects is attached as Annex 2. As of October 1992, 6 projects were on-going with a total value of US\$ 1.6 million. They are being implemented by the Department of Industrial Operations in UNIDO, of which two are concerned with institutional infrastructure, relevant to human resource development issues. Four are related to activities in specific sub-sectors, in which it is not totally clear to what extent the projects contain HRD aspects.

132. Since 1982⁵⁵, 34 projects have been completed by UNIDO. They represent a total value of US\$4.6 million, and have been financed from different sources. 58% of the projects were funded by UNDP, 21% by the UNIDO IDF, and 11% from other funds.

133. Of the projects completed, five were direct training projects routed through the IHRD Branch. One project concerning staff development was routed through IPCT/FEAS, another through PPD/SMA/ECDC, and one project through TF/RAF.

134. Information on the number of fellows and participants trained in Zimbabwe over the last three years was collected by the UNIDO Office in Harare, since the last three years, at the initiative of the JPO.

135. However, as far as could be ascertained, the information was not used to assess the impact of the projects, nor to conduct tracer studies on the use participants made of the skills they had acquired.

136. The assessment of the HRD components of UNIDO projects by the mission was done by means of discussions with senior managers or officials of the organizations concerned, or the National Project Directors. Almost all the current or recently completed projects were visited by the mission, especially those having a major training component. The assessment is also based on study of evaluation reports and final reports related to specific projects.

Output HRD

137. During the three-week mission to Zimbabwe seven UNIDO project sites were visited.

138. UNIDO activity in Zimbabwe started in 1980, when Zimbabwe became independent. the departure of a large portion of the white skilled labour force resulted in a vacuum in the people needed to run the economy and industry. UNIDO technical assistance with an IHRD component covered the steel industry, the pharmaceutical industry, small scale and rural based industries, strengthening the standards association, metallurgy quality control and the transport sector. Direct training was given in areas of management, energy auditing and banking management. Most of those projects are reviewed below.

139. ZISCOSTEEL - representing the only major steel industry in the PTA/SADCC region has been a major focus for UNIDO activities, including training. The importance of HRD as output is recognized by the training manager at ZISCOSTEEL, and is reflected in the systematic way training needs are identified within the company, as well as in the identification of training needs outside the company which are not being met through the apprenticeship scheme (as discussed in the previous chapter). ZISCOSTEEL has set up a training center which increasingly provides vocational and technical training for those employed elsewhere in the industry. The training department at ZISCOSTEEL - although a

⁵⁵ UNIDO activities in Zimbabwe started only after Independence in 1980.

parastatal - has expressed similar views concerning the national bottlenecks in the technical and professional training systems as those expressed by private industry.

140. ZISCOSTEEL considers its training center to be a "Center of Excellence" able to train staff from all over Africa. Training has been provided free of charge to Ethiopia, Angola, Mozambique and Kenya. At the training center there is a big problem of high staff turn-over which also caused problems in the training center and the plant where there is a shortage of chemists and metallurgists. A large number of remaining staff are untrainable.

141. UNIDO/UNDP assisted ZISCOSTEEL in upgrading personnel in the maintenance of high technology equipment through a sub-contractor. The programme was considered to have been successful. Another project to modernize the rod rolling mill was also considered to have had a beneficial impact. The project first identified problems in the mill. Based on this analysis UNIDO provided experts, whereas ZISCOSTEEL provided most of the hardware and counterpart staff. The new system was successfully installed. Training included study tours for three engineers of the United Kingdom, the United States of America and Sweden. The study tours were considered useful to convince management on the utility of the new technologies to be introduced. Overall management felt that the technology was mastered and that the results achieved are a "show piece" at ZISCOSTEEL.

142. Another UNIDO/UNDP project intended to improve metallurgical quality control procedures at ZISCOSTEEL. Management felt that the project provided the company with a good technical report. However, a number of recommendations could not be implemented due to the lack of money. The lectures given by the CTA created awareness amongst ZISCOSTEEL staff of the importance of metallurgical quality control. The importance of raw material and primary process quality control was stressed and had an impact amongst the staff responsible for these shortages of production. Some of the analytical equipment recommended by the expert were purchased by the company. Many of the staff trained in metallurgical analysis have left the company however.

143. UNIDO has been active in strengthening ZISCOSTEEL in developing a group training programme for upgrading the knowledge and skills of maintenance supervisors and engineers in ZISCOSTEEL itself and in the PTA countries. The programme over the years has built up a capacity at ZISCOSTEEL to conduct these courses on a self-reliant basis. The programme was based on a training needs assessment including a follow-up assessment. The approach followed in this group training programme is laudable in that a regional capacity to train has been created which meets the needs of Eastern and Southern Africa. The quality of training provided could not be assessed by the mission.

144. UNIDO has provided support to small scale and rural industries through a project, of which a major outcome was the establishment of SEDCO, the Small Enterprise Development Corporation. SEDCO has now existed for a number of years, and provides small scale registered enterprises with credit, and technical and business advice. For the latter, it mainly acts as intermediary as the actual training is carried out by other institutions. SEDCO restricts itself to the clients that come to it; it does not actively develop a plan to identify particular target groups within the small scale business sector, nor particular groups of entrepreneurs, such as women entrepreneurs⁵⁶.

145. When SEDCO was interviewed UNIDO was considered to also have assisted with setting up a computer system and in providing an advisor on industry incubators. SEDCO is receiving major assistance from the International Enterprise Foundation, CIDA and ILO.

146. Another donor financed project implemented by UNIDO benefitted the Standards Association of Zimbabwe. The project was designed to strengthen the institutional framework of SAZ and its technical services. In the first phase of the programme the staff of SAZ were

⁵⁶ This does not imply that SEDCO does not help women entrepreneurs. However, SEDCO has not developed specific strategies to improve their outreach towards women, so that they approach their stated goal of % women.

trained in new technical services such as 'train the trainer' activity, with a view to developing further internal training programmes for other staff members. HRD needs have thus been identified for SAZ; it was not clear to what extent specific assessment and strategies had been developed for external outreach. Gender-specific strategies had not been taken into consideration by management, neither internally nor externally.

147. However, overall SAZ was not fully happy with the assistance provided by UNIDO. Problems arose partly due to an unfortunate choice for the CTA of the project. The project designers did not consider the existing capabilities at SAZ. According to SAZ management the project assumed the lowest common denominator and followed a standardized training approach. Moreover, it was claimed that UNIDO showed little flexibility in programming the equipment and expert component. Recently training was recommended by UNIDO for which no equipment exists at the center. The center is of the opinion that the assistance provided did not respond to the needs of SAZ. SAZ is also assisted in a major way by ITC, Sweden, the Netherlands, Denmark, Italy, Norway, and Finland.

148. A UNIDO programme to train women entrepreneurs in the food-processing industry developed at headquarters had an HRD institution building spin-off in Zimbabwe. The programme was introduced to and is regularly used by the Ranche House College, a private training institution in response to extensive demand. This project is a good model, in which UNIDO:

- identified a training need,
- searched for local resources to meet the need,
- when not available, sought donor support to develop state of the art package,
- introduced, validated, up-dated to as many institutes (and countries) as possible.

149. Although the Ranche House College field tested the training programme the first time it was held, difficulties were experienced in identifying the appropriate target group, this was overcome when the programme was repeated. Currently UNIDO's involvement is no longer required, and the course has become the core course of a department of rural training programmes which is being set up at Ranche House College, given the extensive demand for this course.

150. UNIDO has provided assistance to the Zimbabwe Development Bank by training its staff on UNIDO's methodology for pre-investment studies. The training provided was considered to have been extremely useful. However, many of the staff who were trained have taken jobs with other national and international banks. A critical mass of pre-investment study training skills was therefore not achieved and the bank continues to send staff out on similar training courses offered by other institutions. The desk top publishing programme provided to the bank under the same project was appreciated by its management.

151. Zimbabwe's leather and leather products industry has benefitted in a major way through UNIDO's East Africa leather and leather products programme. Beside the provision of technical expertise and equipment to enterprises the Leather Institute of Zimbabwe has benefitted from the provision of fellowships, training materials and training equipment. A major input was the provision of CAD hard- and software for the design of shoes. An associate expert was also provided to train training staff on the new system. Overall with the help of UNIDO, complemented by ODA assistance fifteen technologists from industry are currently overseas for training.

152. Another UNIDO project in Zimbabwe (TF/INT/86/001), which was separately evaluated, is of great interest to this country case study. The project was to assess the current role of women in the process of Zimbabwe's industrial development; assess the implications of emerging industrialization issues on HRD and women's participation in industry; and outlining policies and measures conducive to enhancing the role of women.

153. In the evaluation of this project, the strong point of the projects implementation was the extensive coverage of women's activities in the informal sector. The main shortcomings were the quality of the field surveys due to inadequately trained enumerators and the lack of analysis of the data generated due to the lack of data processing facilities. Moreover, the studies took two years instead of the nine months planned for the exercise.

154. The study prepared under the project provides an inconsistent description of women's current participation in industry. The study lacks a comprehensive discussion of the Zimbabwean context within which women work. The report should have focused more on qualitative assessments.

155. The training and education policies, the trends and needs of industry employers and the role of private training institutions were insufficiently analyzed.

156. The recommendations of the report were never systematically taken up in Zimbabwe, despite a presentation of the report at a National Workshop in Zimbabwe.

157. The evaluation report recommends the posting of an associate expert in the country to promote women in industrial development programmes to follow-up on the study and also create awareness amongst industry that not discriminating against women is not enough. Gender outreach strategies and support programmes could be promoted by the expert on behalf of UNIDO.

Input HRD

158. Input HRD includes the fellowships, study tours and group training programmes carried out. Generally the feelings expressed concerning the contents, duration, and quality of training was satisfactory. However, UNIDO was seen to be only one of many providers. The Confederation of Zimbabwe Industries, however, expressed the view that Group Training Programmes conducted for selected Zimbabweans in other countries have only a marginal impact since the required critical mass of trained employees cannot be achieved. The impact is therefore considered to be marginal. Training of larger groups in the country or in the region is the preferred approach. Enterprises would provide facilities if they saw any benefit in the training being offered. Especially in view of the ESAP programme human resource skill requirements will increase yet there are few skill up-grading programmes available in Zimbabwe.

159. The effectiveness of the training programs could only be ascertained from in-depth project evaluation reports, as it was not feasible to carry out tracer studies in a sufficiently representative manner. Such reports indicated that the effectiveness of implementing the results of training depended not only the training received directly, but also the importance given to new ideas by higher management. This indicates an important issue: direct training is not sufficient to guarantee that results will be implemented - the people forming the context of implementation should also be included in a more 'systemic' training programme.

UNIDO Policy

160. In none of the discussions held with those participating in UNIDO training programmes was there an expression of an awareness of UNIDO's overall HRD and/or training policy or approach. UNIDO was considered to be one of many donor/implementing agencies and often seemed to be used interchangeably with other UN agencies. Little if any knowledge of the wide range of services UNIDO could offer to assist in alleviating the many problems industry was facing was evident during the interviews conducted in Zimbabwe.

B. UNIDO AND OTHER INTERNATIONAL ASSISTANCE TO HRD IN ZIMBABWE

161. The UNDP Development Cooperation Report for 1990 (DCR) (published in October 1991) indicates that total external assistance to Zimbabwe amounted to US\$ 319 million in 1990. Of this amount, 23 bilateral donors accounted for 81.1% of the amount. Other organizations contributed with US\$ 32 million, the UN system (US\$ 16.9 million), and 22 NGOs with US\$ 11.3 million. The major donors (including the UK, the EEC, Germany, the USA, Canada, Denmark, Norway, Sweden and the Netherlands) financed projects in almost all the UNDP sectors covered under the DCR. The major sectors were Development Administration, Human Resources Development, International Trade in Goods and Services, Agriculture, Forestry and Fisheries, and Industry⁵⁷. The following table shows the financial divisions among the sectors covered. HRD received 16% of the total external assistance given to Zimbabwe⁵⁸.

Table 12: Sectoral Division of External Assistance

Sector	funding in US\$ (million)
Development Administration	66.4
Human resources Development	51.3
Agriculture, Forestry, Fisheries	40.1
Industry	39.9
Int. trade in goods and services	47.3

Source: "UNDP Development Cooperation Report Zimbabwe 1990", 1991.

Projects and Aid

162. Although the amounts are not reported USAID has helped Zimbabwe with a large Basic Education and Skills Training Programme (BEST) which came to an end in June 1990. This programme also had a Ministry of Higher Education staff development component.

163. The Swedish International Development Agency (SIDA) is assisting with the development of a Bachelor of Education Technical Subjects programme. SIDA is also assisting with staff development courses and study tours, including an MA degree programme in Sweden.

164. Canadian International Development Agency (CIDA) provides support to Vocational and Technical Education with extensions of technical services. A General Training Facility (GTF) was introduced to strengthen the manpower development programmes.

165. The European Economic Community (EEC) was involved in the upgrading of a Technical College and provided support to the School of Mines distance learning project.

166. The German government agreed to provide funds for Technical College development and for the provision of equipment in the technical departments. Assistance included the training of lecturers. The Chinese are helping with the construction of a Teachers' College. Several volunteer services representing many countries are providing lecturers to the education and training system.

167. According to the UNDP 1990 Development Cooperation Report, published October 1991, the major financial donors in Zimbabwe are the United Kingdom (21.0%), EEC

⁵⁷ "UNDP Development Report Zimbabwe 1990", 1991, p.23.

⁵⁸ See paragraph ... "Financing HRD" of this report for a more detailed discussion on donor contributions to HRD in Zimbabwe.

(13.4%), USAID (12.0%), Germany (11.9%), SIDA (8.7%), FINNIDA (8.5%), French Aid (7.78%), NORAD (7.23%), Netherlands (5.08%), DANIDA (4.5%). The major sectors for external financing during 1990 were for Development Administration (US\$ 66.4 million), Human Resources Development (US\$ 51.3 million), International Trade (US\$ 47.3), Agriculture (US\$ 40.1 million), and Industry (US\$ 39.4 million)⁵⁹.

168. While Development Administration and Human Resources Development recorded large increases 30% and 23.2% respectively, Industry decreased by 41.4%. Under the Human Resource Development sub-sector aid is broken down into the following categories:

1990 US\$ million

Sector Policy and Planning	13.917
Secondary Schooling	1.203
Tertiary Education	17.306
Technical and Managerial Education and Training	16.829
Non-formal Education	<u>2.264</u>
Total	<u>51.319</u>

Source: UNDP 1990 Development Cooperation Report

169. The human resource development activity which takes place under the other sub-sectors such as Industry, Health, Agriculture etc. is not captured in the UNDP Development Cooperation Report. Under the heading of Human Resources Development the sub-sector of Sector Policy and Planning there were nine ongoing donor/UN projects during 1990. Major expenditures included a USAID disbursement of US\$ 9.171 million out of a US\$ 45 million total commitment to provide the government with additional budgetary resources to carry out private sector educational and training reforms. The programme ended during 1990.

170. Although no money was disbursed during 1990 SIDA between 1980 and 1991 had a total commitment of US\$ 43.716 million to support efforts to improve the quality of education and strengthen the education administration at all levels. The programme was addressed at primary and secondary education. Major commitments by Germany under this sub-sector include US\$ 2.674 million to support the establishment of a vocational training center at Masvingo, and \$ 4.558 million to promote vocational training. Under the sub-sector of secondary schooling major commitments include US\$ 3.932 million from CIDA to improve rural education by providing basic equipment and teachers. The tertiary education sub-sector is receiving major support from donors as follows: China has granted US\$ 849 million and loaned \$ 9 million to construct a teachers' college; USAID has committed US\$ 13.139 million to the University of Zimbabwe to improve the HRD infrastructure and US\$ 5 million to strengthen private sector productivity and increase economic growth; the former USSR and Cuba have provided Zimbabwe with massive amounts of money to finance scholarships. The former USSR disbursed US\$ 4.8 million during 1990 out of a 10 year (1981-90) US\$ 48 million commitment, while Cuba had no disbursement under a 1986 to 1994 US\$ 11.2 million commitment.

171. Several other countries have committed funds for fellowships including for the Ministry of Agriculture, Ministry of State Public Service, National Railways. Fellowships are also provided to train staff of the teacher training colleges (EEC). A major grant has also been

⁵⁹ UNDP 1990 Development Cooperation Report

given by the Italian government (US\$ 13.6 million) to set up a Woodworking Industries Training Center for the SADACC countries.

172. Under the sub-sector Technical and Managerial Education and Training major commitments include: a US\$ 1.098 million UNV programme to alleviate manpower shortages; US\$ 13.246 million to the Ministry of Higher Education from the EEC to support activities related to export promotion, tourism development, science teacher training and general human resources development; a US\$ 15.265 million SIDA personnel and consultancy fund to alleviate manpower shortages; a US\$ 2.169 million commitment from CIDA to strengthen public service capacities through training and a US\$ 6.506 million commitment to assist the Ministry of Higher Education to overcome manpower constraints in the industrial and educational sections, and US\$ 11.479 million to improve Zimbabwe's HRD constraints by enhancing its ability to administer scholarships and enhance Zimbabwean institutions to design and deliver short-term courses; Germany over the period 1989-90 had offered US\$ 3.511 million to the Ministry of Finance, Economic Planning and Development for fellowships, study tours and experts and US\$ 5.793 million for the same period for the promotion of vocational training. Several other donors are providing substantial sums for various fellowship programmes.

173. The UNDP Development Report indicates that in the Human Resources Development Projects ongoing in 1990, UNIDO is hardly represented by projects, neither under the heading "sector policy and planning" nor under the heading "technical and managerial education and training". This demonstrates that UNIDO is not involved with higher level HRD activities, even at the level where UNIDO has a natural niche. Large donors active in the area of "technical and managerial education and training" include Germany, the EEC, and UNDP.

174. While the UN system disbursed US\$ 16.9 million for technical cooperation activities during 1990 UNIDO only disbursed US\$ 42,000 for industry projects representing a reduction of 80.3% over 1989 where US\$ 213,000 was implemented. Whereas other UN agencies delivered US\$ 264,000 of technical cooperation to the industry sector during 1990.

5. UNIDO'S POTENTIAL CONTRIBUTION TO HRD ZIMBABWE

Conclusions and Recommendations

175. Zimbabwe can be characterized as a country with a problematic infrastructure, low quality and appropriateness of education and training, deficient capability and capacity in research and development and in the sciences. Industry in the pursuit of competitiveness is unlikely to invest sufficiently in these areas because of lack of awareness and resource (manpower and financial) constraints.

176. Problems identified include:

- a. A labour market which does not supply adequately qualified personnel at all levels of employment in the managerial, financial, marketing and technical fields.
- b. Zimbabwe's industrialists expressed the view that industry needs to develop a learning culture. Although training was thought to be a good thing companies hardly spend 1% of their turn-over for training. The training provided is often of low quality. The trainers are inexperienced and poorly trained themselves.
- c. A strong need to develop a professional cadre of company level HRD managers was identified. Such managers must understand business and be able to translate the issues driving business into programmes which will develop the quality of skills, knowledge and know-how required.
- d. Tendency to under-invest in training at all levels, including technological and managerial capacity and capability building by firms.
- e. Inadequate provision of quality training.
- f. Missing industrial science and technology infrastructure.
- g. Technology skills and knowledge transfer takes place mostly through foreign industrial cooperation agreements which creates knowledge on how things work and not on why.
- h. Lack of critical complementary of skills required by industry.

177. Despite the fact that the ESAP in Zimbabwe heavily relies on incentive factors the programme is underestimating the significance of structural factors. In addition to the installation of export oriented incentives there is a strong need to build up human capital. More emphasis is required in this area and also on the need to build up national technological capabilities. Massive investment in technological and managerial capacities and capabilities skill building are required which call for improved government as well as private industry policies and measures.

178. Market oriented policies do not provide a number of strategic answers. A more comprehensive and detailed strategy and concept at the industry sub-sectoral level is required. Policies and programmes policy should be more need based and specific. They should be built on a better understanding of micro level processes and of the investment required to create the skills required.

179. There is a lack of knowledge and analysis on how existing firms build up their competitive strengths. There is a need to study the dynamics of capability acquisition in Zimbabwe. This is required to develop insights into how industry can develop or maximize competitive advantages. This would require access to information on technological progress

internationally which would guide policies and programmes to develop necessary skills and the technological and institutional needs for optimal support to industry on the other hand and specific human resource needs assessment of Zimbabwe's industry on the other. With respect to UNIDO there is a prevailing lack of knowledge of UNIDO's capabilities in Zimbabwe, including in the Ministry of Industry, which could help address the problems summarized above.

180. Although the lack of skilled manpower is considered to be the greatest limiting factor in industry, industrial success will depend on the interplay of three sets of factors of which HRD encompasses all of them. The three factors are incentives, capabilities and institutions.

181. The ESAP programme in Zimbabwe is making great strides in setting the incentives at the macro level, however, industries ability to respond is hampered by a lack of knowledge on how it can respond in developing competitive capabilities. Awareness of the need to do something in this direction is there, yet strategies and coherent programmes within the industry and actions required in cooperation with Government is at an early stage of discussion. Only limited and often unintegrated actions have been undertaken so far. NAMACO should be used to a greater extent to resolve these problems, including at the policy level.

182. Zimbabwe's industry if it is to become international competitive will need to go beyond running plants with basic managerial and operational skills. There is a need to build up state of the art skills in production and managerial practices. In short Zimbabwe's manufacturing enterprises will need to become efficient and competitive while meeting market demand. This will require, *inter alia*, that the university system including the newly established NUST is fully aware of and is placed in a position to respond to these skill requirements through closer cooperation with industry.

183. It is clear that interventions in the human capital factor market need to continue and be expanded. Particularly for vocational technical and higher level engineering training. However, financial and manpower resource constraints both public and private require selectivity in the areas of training which should receive priority support. Selection should be based on activities which have a good chance of helping Zimbabwe to reach regional and international competitiveness in a reasonable time.

184. Improved industrial HRD will require: finance, trained trainers, training facilities, equipment, consumables, curricula, training materials, training standards, certification, better geared to meet the needs of industry. The situation in Zimbabwe indicates severe shortcomings and problems in all of the above elements.

185. Problems with respect to the above are caused by misdirected efforts on the part of Government resulting from a policy of providing extensive training to a maximum number of its citizens at the expense of intensity and quality. Moreover, thousands are being educated and trained in fields where demand has been saturated. In the field of applied science and technology and in most technical and managerial areas there is an acute shortage of manpower able to productivity contribute to the industrial sector.

186. There is a lack of skills, knowledge and strategy in Government and industry on what is required to address the problems of productivity and competitiveness of industry not only in the field of HRD. Massive resources, in relation to Zimbabwe's GDP are being spent on general education and training. The problem of the availability of skilled technical and managerial manpower remains despite these investments. Under-investment in critical areas prevail, external factors (brain-drain), inadequate incentives, inappropriate training etc. has resulted in a tremendous waste of scarce resources.

187. In fact, whereas two years ago lack of manpower capability was considered to be the fourth or fifth constraining factor to industrial success by industry. During interviews with industrial leaders, they unanimously expressed the view that the lack of qualified manpower is the single most important problem in industry today.

188. On the more positive side a good physical infrastructure for vocational and technical training, apart from the availability of spare parts and consumables, is considered to be in place. Government and industry need to cooperate to improve lecturer salaries and fringe benefits; develop standardized curricula which meets the needs of industry, overhaul the training and education certification schemes, ensure spare parts and consumables in a timely fashion, and introduce critical qualification courses which are not currently available, e.g. quality management, textile, foundry, tool making, surveying electronics, CAD/CAM, and accounting.

189. Strides in this direction are being made and the willingness of Government and industry to cooperate in the resolution of these problems is apparent in several sub-sectors of industry. Such cooperation needs to be expanded in those sub-sectors and areas where such cooperation is still problematical.

190. In the area of industrial science and technology at the university undergraduate and graduate level Zimbabwe is at a low level of development. A National University of Science and Technology has been only recently created and deserves the full support and attention of Government and the donor/financing community. Plans to establish a national industrial research and development cum service facilities is also welcomed and desperately needed if Zimbabwe is to maintain and further develop its industrial capacity and capability. Efforts in this direction need to ensure that they are industry need based which will require a greater involvement of industry.

191. Overall there is a need for UNIDO to provide Ministries, Institutions, and industry with a much better overview of the services UNIDO can offer. UNIDO was hardly seen as a source of assistance when industry problems were discussed.

192. Zimbabwe's education systems needs to rapidly build up technical skills at all levels, (primary, secondary and tertiary education). Awareness of this need at higher levels was the rationale behind the establishment of the National University of Science and Technology.

193. Too many reports mostly from donor/financing agency are prepared merely point out the non-availability of educated and trained manpower to achieve competitiveness. Advice on how industry should respond to this problem is lacking.

194. Zimbabwe receives large amount of HRD assistance. Overall more effective aid coordination and cooperation mechanisms are required.

195. Zimbabwe lacks an comprehensive strategy and programme for industrialization which relates or links industrialization to human capital and technological effort.

196. The mission is not aware of an integrated strategy to develop sub-sectoral capabilities which links education, training and technology support, infrastructure and the like to industrial trends and emerging technology requirements. The specific requirements for pre- and in-service training, as well as management training still needs to be addressed since ESAP's can only work if efficient and effective attention is given to industrial HRD requirements.

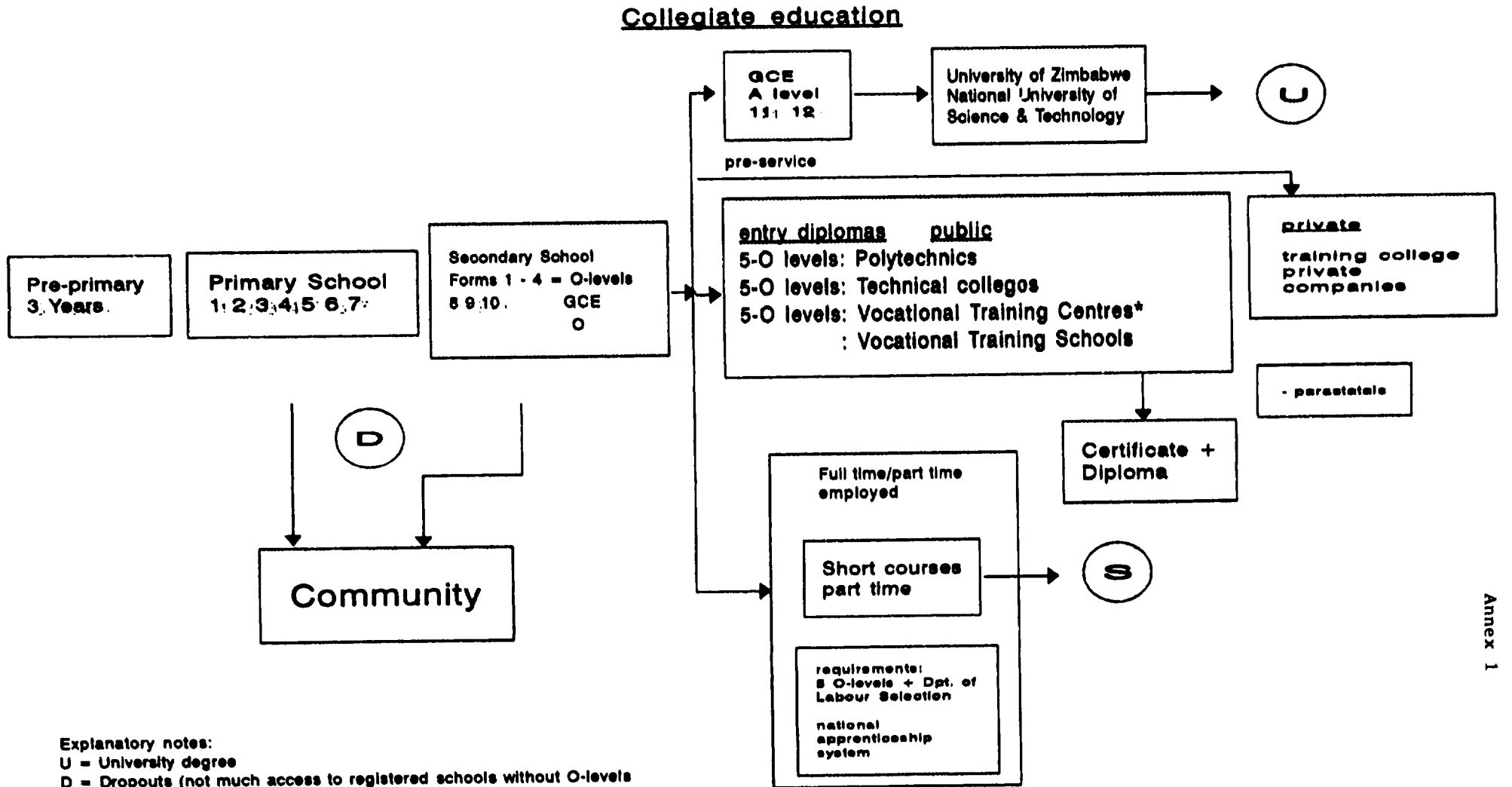
197. Industrial promotion activity in Zimbabwe has to be integrated. Not only the analysis of issues related to infrastructure regulatory and business environment and the financial sectors, but also of local capabilities of institutions and enterprises need greater attention.

198. More technical training employment outreach programmes for women in non-traditional areas are required.

199. UNIDO when programming HRD activities will need to take up contact with the Ministry of Higher Education since it is responsible for all technical and vocational training in Zimbabwe. Moreover, at the industry level a close working relationship with the industrial associations, particularly with the Confederation of Zimbabwe Industry should be developed to help them initiate, coordinate and implement their industrial HRD programmes.

Diagram 1

Structure of Technical/Vocational Education in Zimbabwe



Explanatory notes:

U = University degree

D = Dropouts (not much access to registered schools without O-levels)

S = certificate of completion

* for certificates only O-levels required, for diplomas A-levels

OPERATIONAL AND COMPLETED UNIDO PROJECTS IN ZIMBABWE**Republic of ZIMBABWE**

Project Number	Backstopping Responsibility	Project Title
US/ZIM/84/232*	IO/IIS/INFR Mr. Kozlov	Strengthening of the Standards Association of Central Africa (SACA)
US/ZIM/87/212*	IO/T/CHEM Mr. Ramsay	Biomethanation (anaerobic digestion) of agro-industrial wastes
US/ZIM/88/100*	IO/T/AGRO Ms. Calabro	National hides and skins, leather and leather products improvement scheme - East Africa (related to US/RAF/88/100)
DP/ZIM/89/003*	IO/T/ENG Mr. Kaulfersch	Manufacture and diffusion of low-cost rural transport devices
TF/ZIM/90/001	IO/T/AGRO Mr. Schmel	Associate expert (Mr. Hof)
DP/ZIM/90/005*	IO/IIS/INFR Mr. Hisakawa/Ms. Gregor	Support to small-scale industries and enhancement of indigenous ownership
XA/ZIM/92/609	IPCT II/FEAS	Feasibility study for the establishment of a citrus fruit and tomato processing plant in Zimbabwe
XP/ZIM/93/010	IO/T/MET Mr. Buckle	Assistance to Almin Metal Industries Ltd. in preparing an in-house training programme in the areas of foundry and die making and assistance to other die casting industries

* Large-scale project (= total allotment \$150,000 or above)

** Total allotment \$1 million or above

ZIM

UNIDO's Completed Technical Cooperation Projects

Republic of ZIMBABWE (1)
(ZIM)

<u>Project Number</u>	<u>Backstopping Responsibility</u>	<u>Project Title</u>
UC/ZIM/82/228	IO/IIS/INFR	Assistance to the Standards Association of Central Africa, Zimbabwe
DP/ZIM/80/020	IO/IIS/INFR	Small-scale and rural-based industries support services (continued under DP/ZIM/83/016)
DP/ZIM/83/016	IO/IIS/INFR	Rural-based small industries support services - Small Enterprise Development Corporation (SEDCO) (phase II) (continuation of DP/ZIM/80/020)
TF/ZIM/87/001	IO/IIS/INFR	Associate expert (Mr. Breitwieser) (multifund to DP/ZIM/83/016)
UC/ZIM/82/202	IO/IIS/IMR	Assistance to the Industrial Development Corporation
SI/ZIM/82/801	IO/T/MET	Assistance in the processing of ores of light non-ferrous metals
SI/ZIM/84/801	IO/T/MET	Assistance to ZISCOSTEEL in electrical maintenance of iron-making, steel-making and rolling mill equipment
DP/ZIM/85/007	IO/T/MET	Bar rod rolling mill at ZISCOSTEEL (continued under DP/ZIM/87/001)
DP/ZIM/86/004	IO/T/MET	Assistance to ZISCOSTEEL in improvement of metallurgical quality control
DG/ZIM/86/023	IO/T/MET	Establishment of a physical metallurgy section at the Department of Metallurgy
DP/ZIM/87/001	IO/T/MET	Assistance in modernization of electrical/automatical and technological equipment of the bar rod rolling mill at ZISCOSTEEL (continuation of DP/ZIM/85/007)
SI/ZIM/88/801	IO/T/MET	Assessment of the second-hand Steckel hot strip mill at Surahammar
SI/ZIM/89/802	IO/T/MET	Assistance to Messrs. Non-Ferrous Die Casting (Pvt.) Ltd.
SI/ZIM/89/803	IO/T/MET	Assistance to Messrs. All Metal Founders (Pvt.) Ltd.
SI/ZIM/89/801	IO/T/ENG	Assistance to Cochrane Stork Zimbabwe (Pvt.) Ltd.
SI/ZIM/84/802	IO/T/CHEM	Pharmaceutical industry development adviser
UC/ZIM/85/244	IO/T/CHEM	Preparatory assistance towards the establishment of an institute for research and development of traditional medicine
RP/ZIM/82/002	IO/T/CHEM	Assistance in the establishment of a refractory brick plant
DP/ZIM/83/006	IO/T/CHEM	Strengthening Government support services in the non-metallic mineral sector
RP/ZIM/84/001	IO/T/CHEM	Assistance in the establishment of a refractory brick plant

UNIDO's Completed Technical Cooperation Projects

Republic of ZIMBABWE (2)
(ZIM)

<u>Project Number</u>	<u>Backstopping Responsibility</u>	<u>Project Title</u>
UC/ZIM/85/199	IO/T/CHEM	Assistance in laboratory scale investigations on magnesite ore and magnesite bricks
XP/ZIM/90/080	IO/OS/IHRD	Fellowships for training in management
US/ZIM/83/102	IO/OS/IHRD	In-plant group training programme in the field of iron and steel industry for Zimbabwe (Austria)
UC/ZIM/86/261	IO/OS/IHRD	Energy auditing training course for Zimbabwe (multifund to DP/ZIM/88/005 and EA/ZIM/88/E01)
EA/ZIM/88/E01	IO/OS/IHRD	Energy auditing training course for Zimbabwe (multifund to UC/ZIM/86/261 and DP/ZIM/88/005)
DP/ZIM/88/005	IO/OS/IHRD	Energy auditing training course for Zimbabwe (multifund to UC/ZIM/86/261 and EA/ZIM/88/E01)
DP/ZIM/84/018	PPD IPP/REG	Study of the manufacturing sector
TF/ZIM/87/002	PPD ICFM/ICMS	Survey of the pharmaceutical sector in Zimbabwe
XP/ZIM/91/014	PPD SMA/ECDC	Study tour to Ghana and Senegal for two Zimbabwe Women's Finance Trust (ZWFT) members
DG/ZIM/84/028	IPCT II/FEAS	Assistance to Zimbabwe Development Bank
DG/ZIM/87/012	IPCT II/FEAS	Zimbabwe Development Bank management staff training
US/ZIM/87/117	IPCT II/FEAS	Feasibility study for increasing the oil production capacity (in co-operation with IO/T/AGRO and IPCT/II)
US/ZIM/87/243	IPCT II/FEAS	Feasibility study for the production of chrome tanning salts (in co-operation with IO/T/AGRO and IO/T/CHEM)
RP/ZIM/82/001	EPL REL/PROT	Visit of the Under-Secretary, Ministry of Industry, Zimbabwe

LIST OF PERSONS MET

**C.M. Akhosi, Regional Coordinator
UNIFEM**

**F. Bango, UNIDO Liaison Officer
Ministry of Industry and Commerce**

**L.B. Bere, Project Analyst
Zimbabwe Women's Finance Trust**

**P.J. Broadway, President
Zimbabwe Institute of Management**

**Mr. Bruce, Training Manager
Zimbabwe Institute of Management**

**C. Chahweta, Trainer Women's Desk
ILO Improve Your Business Project**

**Mr. Cheri, Deputy Secretary
President Office**

**H.B. Chigudu, Consultant
UNIDO, WID expert**

**M.W. Chihuri, Executive Director
Indigenous Business Development Center**

**C.G. Chivanda, Director
Policy and Planning, Ministry of Higher Education**

**C. Costa, Managing Director
Superior Footwear Industries**

**D. Dragic, Resident Representative
UNDP**

**J. Gallagher, CAD Technician
Leather Institute of Zimbabwe, Bulawayo**

**M.M. Gavhure, Manager Technical Services
ZISCOSTEEL**

**K.G. Godwin, Assistant Director General
Standards Association of Zimbabwe**

**G. Gono, General Manager
Zimbabwe Development Bank**

**S.M. Hadebe, Deputy Secretary
Educational Development, Ministry of Education**

**P.D. Harding, Chairman
Confederation of Zimbabwe Industries Labour and Manpower Standing Committee**

**A. Hauge, JPO
UNIDO**

**Mr. Hofisi, Assistant Director Training
Confederation of Zimbabwe Industries**

**M. Jennings
Corporate Human Resources Executive, PG Industries**

**M.T. Kariwo, Registrar
National University of Science and Technology**

**S. Kazhanje, General Works Manager
ZISCOSTEEL**

**D.J. Locke
Bush Boake Allen, Bulawayo**

**E.P. Manyuchi, Chief Education Officer
Research and Evaluation, Ministry of Higher Education**

**P.C.C. Moyo, Group Legal Advisor
ZISCOSTEEL**

**T. Msipa
Merlin Ltd., Bulawayo**

**B.S. Msora, Director of Programs
Ranch House College**

**Ms. Mtero
Women in Business**

**T.Z. Mudzi, Deputy Chief Education Officer
Research and Evaluation, Ministry of Higher Education**

**D.T. Mugwara, Director
Business Extension Services IBDC**

**S.C. Mumbengegwi, Deputy Secretary
Ministry of Higher Education**

**M.N.N. Munetsi, Director
Industrial Training, Ministry of Higher Education**

**L.E. Munjanganja, Deputy Secretary
Manpower Planning and Employment, Ministry of Higher Education**

**Mr. Munodawafa
Industrial Training Unit, Ministry of Higher Education**

**P.J. Musa
Pith Helmet Industries, Bulawayo**

**Mr. J. Musabayana, Small Enterprise Development Officer
ILO
Mr. Musiyiwa, Registrar Apprenticeships
Ministry of Higher Education**

**M.T.A. Mutezo, Training Manager
Zimbabwe Development Bank**

**G.R. Ndoro-Mkombachoto
EMPRETEC**

J.J. Newton
DATLARS, Bulawayo

C. Nhari, Fellowships Coordinator
Ministry of Industry and Commerce

M. Noon, Secretary
Institute of Foundrymen

Ms. Nyoni
Women's Affairs, Ministry of National Affairs

R.L. O'Shaugnessy
UNIDO Project Director Bulawayo

C. Pasi, Training Manager
ZISCOSTEEL

L.H. Pazvakavambwa, Chairman
National Manpower Advisory Council (NAMACO),
General Manager, Insurance Company of Zimbabwe

T.M. Sankange, Chief Educational Officer
Ministry of Education

A.P.S. Sheridan, Deputy General Manager
SEDCO

F. Siddiqui, Chief Technical Advisor
ILO, Employment and Manpower Planning Project

Mr. Sonnenberg
GTZ Vocational Training Schemes Zimbabwe

J.G. Stowes
Matabeleland, Chamber of Industries

K. Thomas, Managing Director
Organizational Training and Development Ltd (OTD Training Center)

J. Torond, President
Zimbabwe National Chamber of Commerce

D.G. Townsend
Morewear Industries, Bulawayo

C. Ushewokunze
Minister of Industry and Commerce

M. Vera
Treger Industries, Bulawayo

J. Wadhams, Manager
Engineering Training Center (Delta Corporation)

E.H. Williams, Director General
Standards Association of Zimbabwe

L. Zembe, Deputy Chairman
National Manpower Advisory Council

COMPOSITION AND DATES OF THE MISSION

**Ms. I.S.A. BAUD, Consultant
Mr. H.H. HEEP, Evaluation Staff**

31 August - 18 September 1992