THE VOCATIONAL REHABILITATION PROGRAMME IN KENYA: AN EXAMINATION OF ITS EFFECTIVENESS AS AN AGENCY PROVIDING TRAINING AND EMPLOYMENT FOR DISABLED PERSONS

BY

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The vocational rehabilitation
DECLARATION

This dissertation is my original work and has not been presented for a degree in any other university.

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This Doctor of Philosophy dissertation has been submitted for examination with our approval as supervisors.

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ABSTRACT

The study sets out to examine the economic viability of training and resettling disabled persons in self employment as carried out by the Vocational Rehabilitation Programme in the Ministry of Culture and Social Services in Kenya. The training of residual capacities of disabled persons with the aim of making them economically productive and socially self supporting and integrated in the mainstream of the community is discussed in the light of human capital theory as an illustration of a programme designed to develop human resources in an overall effort in promoting national development. Conceptual justification is attempted with the use of literary citations, and technical terms used in vocational rehabilitation are defined before narrowing down to a discussion of Kenya's programme. The thesis, thus, addresses the concern of Economics of Education, which in the case is the viability of expending scarce resources on training and employment for disabled persons.

In the literature review, the rationale of linking training and education with employment, provision of vocational education and, finally, research, efficiency and evaluation in Vocational Rehabilitation, is surveyed at the global and Kenyan level. The sampling and follow-up procedure of the self-employed graduates of Rural Vocational Rehabilitation Centres is explained and the data is analysed using percentages to ascertain cost-benefit ratio and rate-of-return.
calculations. The conclusions and recommendations outlined at the end of the thesis support the argument throughout the study that it is remunerating both economically and socially for the Kenya Government to engage in the training and subsequent self-employment of disabled persons. The private and social rates of return on investment in the programme are extremely high as compared to other projects (55% and 26.3% respectively). Implications for further research in the Kenyan Vocational Rehabilitation Programme are indicated at the end of the study.

A bibliography covering works and publications consulted is compiled and the questionnaire used in the follow-up of the disabled ex-trainees together with the International Labour Organization's Recommendation Number 168 of 1983 on the Vocational Rehabilitation and Employment of Disabled Persons are attached as appendices.
Disability and Human Resource Development

The contribution of human resources in the process of the social and economic development of a country has come to be widely recognized (World Bank, 1980). Increasing attention has, over the years, been focussed on efforts aimed at enhancing the capability of human beings to participate in productive activities. Recognition has been taken of the variability in human potential arising from physiological characteristics and environmental influence with regard to their productivity (Conley, 1973). Concerning the disabled, Hammerman and Maikowski (1981, IX) have observed that

A society which shuts out any segment of its people from full participation and contribution is indeed an impoverished society.

Eminent Economists have devoted their attention to the subject of human resources and its role in a country's overall development. Harbison and Myers (1964, 1) have observed that

Human resource development is the process of increasing the knowledge, the skills, and the capacities of all the people in the society. In economic terms, it could be described as the accumulation of human capital and its effective
investment in the development of an economy. In political terms, human resource development prepares people for adult participation in political processes, particularly as citizens in a democracy. From the social and cultural points of view, the development of human resources helps people to lead fuller and richer lives, less bound by tradition. In short, the processes of human resource development unlock the door to modernization.

At the threshold of the concepts of human resources development is the theory of human capital as expounded by Shultz (1960) in his presidential address to the American Economic Association in 1960. Shultz urges that human capability in production be conceived in the same line as physical capital which has to be invested in and developed and whose contribution to production can be quantified in the form of earnings and returns. Other Economists joined Shultz in identifying education as a significant area of human capital investment, such as Becker and Weisbrod (Levin & Shank, 1970), or Brown (Blaug, 1968). Denison, (1962) calculated the proportion of national income of the United States of America which he referred to as the "residual" or factor of ignorance and attributed it to education.

The economic value of education in economic thought, reached heightened prominence in the early 1960s, culminating in the designation of Economics of Education as a distinct discipline. Its concern among leading economists over the years can be traced back to Petty in the 17th Century

This thesis sets out to examine the value of the residual productive capacities of the disabled which society has come to recognize as human assets requiring development through education and training in the same way as Economists of Education have advocated.

BACKGROUND TO THE PROBLEM

The Government of Kenya has demonstrated a remarkable commitment to the alleviation of the plight of disabled persons. Since 1968 when the legislative framework was instituted, thus bringing into existence the national Vocational Rehabilitation Programme in the Sessional Paper Number 5 of that year, a consistency has been maintained in providing social welfare services and the development of human resources as advocated by scholars such as Harbison (1961) when he talked about 'The Strategy of Human Resource Development in Modernizing Economies.'

The need for direct government involvement in the provision of services for disabled persons came to prominence immediately
after independence with the setting up of a national committee chaired by the Minister for Labour and Social Services in 1965 with the aim of surveying the problem of disability in the country and recommending action to be taken by the Government. It was on the basis of the recommendations that the Sessional Paper Number 5 of 1968 entitled *The Care and Rehabilitation of Disabled Persons* (Kenya, 1968), was based. In the paper, the Government (Kenya: 1968), asserts that

In considering the costs, the Government would like to point out that these can be justified, not only on humanitarian grounds, but for economic reasons. Most disabled persons are capable of doing work of one kind or another. They are potentially a national asset, but without training, they remain a liability to family and state. It is in the country's best interests to see that they, too, like the rest of Kenya's citizens have a claim to that increase in human dignity which independence brings.

Following the legislation by Kenya's Parliament, technical assistance from the International Labour Organization was mobilized to start a national vocational rehabilitation programme, charged with the responsibility of

i) identifying,
ii) training, and
iii) settling or resettling disabled Kenyans aged between 16 and 45 years. The programme was established on the principles
of International Labour Organization (ILO, 1967 and 1964) of conducting training and employment programmes for the disabled with the guidance of an international expert. The expert in Vocational Rehabilitation who was instrumental in the establishment of the Kenyan programme between 1968 and 1972 had it fashioned very much in the international context, similar to comparable programmes elsewhere, such as Uganda (which was the immediate preceding assignment of the same expert). It was, however, tailored to the local, social, economic and political situation.

In its explicit recognition of providing vocational rehabilitation services to the disabled Kenyan population on both humanitarian and economic grounds, the Government can be seen to have rationally spelled out the classic twin rationale of providing education and training as a consumption and investment good. It meant that whereas the main objective of the programme was training the disabled for productive employment, other non-economic ends such as social integration or raising quality of life would be served also. Shultz (Ward, 1974:51) has succinctly propounded the view when he writes

In accounting for the benefits from education, it is not sufficient to look only at the higher earnings associated with more education. There are private satisfactions associated with more education. It is appropriate to think of these as cultural satisfactions that accrue to a student over his life time. Although they are
non-pecuniary rewards that defy estimation, they must nevertheless be kept in mind.

Economists are generally favourable taking into account non-quantifiable benefits while undertaking expenditures in human resources development. Piatier (UNESCO, 1968, 241) while discussing "Human Accounting" notes that

Many objections will probably be raised to the idea of human profit and loss account. It will be suggested that calculations of this kind offend human dignity and that they give proof of a distasteful materialist outlook, since they attempt to reduce everything which gives value to civilization to minor quantifiable factors.

The World Bank (Psacharopoulos & Woodhall, 1985, V) which is inclined to taking economic considerations into account in its lending policy to sectors of the economy, recognizes unmeasurable benefits of education as lending justification when Habte, the Director of its Education and Training Department observes

Investment in education is a key element of the development process. Its importance is reflected in the growing recognition, since the early 1960s, that investing in both formal and informal education and training provides and enhances the skills, knowledge, attitudes, and motivation necessary for economic and social development.
In its major sector Policy Paper on Education in 1980 (World Bank, 1980, 10), the fourth out of the five lending guiding principles is spelt out that:

Education should be related to work and environment in order to improve, quantitatively and qualitatively, the knowledge and skills necessary for performing economic, social, and other development functions.

The author of this thesis while recognizing the primacy of the quantifiable benefits accruing to individual disabled persons, their families and society as a result of education and training argues that other non-quantifiable and neighbourhood or positive externalities are also worthwhile ends.

Education, Training and Employment of the Disabled:

Education and training which have been greatly sought services owing to their efficacy in furnishing their clientele with desirable employment characteristics, serve the same role, with even greater need, for disabled persons. Carnoy, the Education Economist, (1977, 17) echoes the crucial role of employment and the potential for reaching consequences of its lack when he notes that:

..... unemployment and educated unemployment in and of themselves are important issues separable from the issue of poverty or even economic growth, since they have psychological
and distributional ramifications that go beyond the problem of economic efficiency.

Policies for the provision of education and training to any segment of a country's population have come to link them very closely to employment opportunities and the World of work. Weiler (Carnoy, 1977, 7) who was the Director of United Nations Educational, Scientific and Cultural Organization's (UNESCO) International Institute for Educational Planning (IIEP) observed that

The relationship between education and employment has always been one of the major preoccupations of educational planning. In fact, one of the main reasons why some form of educational planning was adopted in many countries was the desire to achieve a better match between the graduates of the different levels and sectors of the educational system and the needs and capabilities of the labour market.

The problem has reached crisis proportions especially in developing countries as the analyses by leading Educationists and Economists have shown (Coombs, 1968, III, Dore, 1976, Blaug, 1973). There is pressing need to relate educational inputs to the outputs in the form of fitness of needs. Escalation in the value of irrelevant certificated educational acquisition has to be discouraged and a pragmatic labour market related education need to be designed. In response to such felt needs, the Kenya Government reformed the structure of its educational system to vocationalize and ruralize the curriculum content with an aim to orienting the graduate
of the system at various terminal levels to coping with prevailing work and living conditions (Kenya, 1984). The 8-4-4 educational system is now being implemented and results are yet to be assessed. Tanzania with its policy of 'Education for Self Reliance' (Nyerere, 1967) had a similar initiative and the outcome is becoming apparent now.

The importance of providing work oriented education and training in Kenya has been borne in mind over the years. The International Labour Organization (ILO, 1972) in its much publicized report on employment in Kenya, while focussing on the need for relevant education, featured non-formal education and training and the informal employment sector as requiring more attention in the subsequent years. With the cherised emphasis the Jua Kali (Open air) artisans are receiving currently in the country, it is clear that insights of Economists who have carried out studies into the utility of non-formal education and vocational training bear clear relation to our situation (Metcalf, 1985, Hunter, Borus and Mannan, 1974 Castro, 1987, Evans, 1981 and Simmon, 1975).

In a recent educational policy release reviewing its thinking for Sub-Saharan Africa, the World Bank (1988, 62) has restated its belief in the mobilization of educational resources for vocational competence. The report observes

*Of central importance to a country's total factor productivity and economic growth is*
the stock of human capital embodied in the country's working population. Investment in human capital includes in addition to learning general cognitive skills and maintaining good health-acquiring, specific job-related skills and developing reliable work habits and positive attitudes towards work of all kinds. All of these attributes are important to an individual's successful integration into the labour market and lifetime performance at work.

For Kenya, the overall problem of employment at the macro level is receiving considerable government priority. A Presidential Commission had been appointed to address the problem and the consequent Sessional Paper Number 2 of 1985 had spelt out measures aimed at tackling the problem (Kenya, 1985). Coombs (1971) in his description and analysis presents a situation analogous to Kenya's. The creation of two new ministries in March, 1988 dealing with Employment and Manpower on the one hand and Training and Technology on the other, in addition to the hitherto existing Ministries of Labour, and Education respectively and the Directorate of Personnel Management which used to perform these functions, has underscored the problem (Kenya, 1988).

In this foregoing perspective, it could be appreciated that the disabled should not be left aside as a burden and liability to their families and the nation. Education and training would make them realize their full productive
potential as individuals (Friense, 1981).

The development of residual working capacities of disabled individuals, and ensuring they are equipped with appropriate job related skills makes vocational rehabilitation merit consideration as non-formal education and training service with a labour market affinity. Expenditures on vocational rehabilitation should pay off in the form of life-time earnings in the same way other educational investments are expected to bring returns as earnings and other neighbourhood effects (or positive spillovers). The economic relevance of and economic approach to analysing provision of education in general should be applied to vocational rehabilitation programmes as well (O'Donoghue, 1971 and Psacharopoulos, 1975 and 1973). Similarly, vocational rehabilitation programmes should be subjected to accountability to facilitate the maximum utilization of the resources it claims from the economy (Thias and Carnoy, 1972; Berg, 1973 and Kogan 1986). The political economy model of investigation should encompass programmes of training and employment of the disabled (Vaizey, 1972 and Ayodo, 1977).

Special education can also be seen as provision of remedial education which takes into account the principle of compensation, optimal development (UNESCO 1974) and rehabilitation considerations in preparing disabled persons for subsequent career orientation and training (Hansen, 1980). Current emphasis of provision of Special Education as a prerequisite
rehabilitation service in what is now conceived in the overall totality of comprehensive rehabilitation, leading to subsequent integration of disabled person into social and economic mainstream of the community is contained in UNESCO reports (UNESCO, 1979) and research publications (UNESCO, 1973). Through United Nations Children's Educational Fund (UNICEF) highlights on the educational and rehabilitation requirements of children have found expression (UNESCO, 1980, and Noble, 1981). In a joint project with UNICEF, Rehabilitation International underscored the need for prevention and prompt rehabilitation of disability in children (Rehabilitation International, 1980).

To cater for the employment needs of disabled persons, the International Labour Organization started Vocational Rehabilitation as a specialized service. It avails technical assistance in the form of expertise and equipment to needy member states to establish and sustain such programmes.

The Vocational Rehabilitation Programme in Kenya's Economy

The Vocational Rehabilitation and the related Special Education Programmes in Kenya form an integral part of the economic planning activities of the country. The end
product of the two programmes is the social and economic integration of disabled Kenyans into the society's mainstream. That is echoed through employment for the clientele.

In the Kenya Government's outlook for economic trends as it faces the year 2000, note is taken of the constraints of the modern sector in providing employment and distributive justice. The document *Economic Management for Renewed Economic Growth* (Kenya, 1986, 54) states that

> The third component of the strategy for balanced rural-urban development addresses the growth of non-farm activities, particularly the informal sector. Historically, educated youth have sought urban, often white collar employment. Although this tendency will certainly continue, it is clear that the modern sector will be unable to raise enough capital to employ more than a fraction of Kenya's workers from now to the end of the century.... Unquestionably, the majority of future non-farm job opportunities will be in the informal sector—in small scale manufacturing, marketing, repairs and other service activities—located mostly in market centres and moderate sized towns throughout Kenya.

Recent statistics contained in "Economic Survey" (Kenya, 1988, 3) indicate that small scale enterprises are creating more additional job opportunities than the modern sector wage employment, as is reflected below

> Fewer new jobs were created in modern sector wage employment in 1987 relative to 1986. Of
the 76,600 new jobs created, modern sector wage employment contributed 42,800 jobs, reflecting a job creation of 3.5 per cent. Small scale enterprises created an additional 31,100 new jobs; an increase of 11.1 per cent over 1986. Self-employment and unpaid family workers increased by 2,700.

The kind of employment and resettlement services catered for under the Vocational Rehabilitation Programme in Kenya is mainly rural based, small scale self-employment artisan enterprises. There are currently eleven operational Vocational Rehabilitation Centres in the country which are administered by the Department of Social Services located in Bura, Kabarnet, Embu, Muriranjas, Nyandarua, Kericho, Kisii, Kakamega, Itando, Odiado and Nairobi. Only the one in Nairobi on Mbagathi Road is an Industrial Rehabilitation Centre which trains rehabilitees for modern wage employment in urban settings. The trades it offers which include Metal Work, Secretarial Services (Shorthand, Typing, Commercial English, Elementary Book-Keeping; Telephony), Book Printing, Tailoring and Dressmaking, Carpentry, Leatherwork and Jewellery reflect that bias. On the other hand, the remaining ten institutions are Rural Vocational Rehabilitation Centres which train rehabilitees in skills useful for self-employment in Kenyan rural environments. After the eighteen months' training period, the graduates are awarded an attendance certificate and are
provided, at government expense, with a complete working tool kit and materials necessary to start an enterprise on their own in the rural trading centres. The skills offered include Traditional Crafts, Agriculture, Leatherwork, Carpentry, Tailoring and Dressmaking, Home Science and Cloth Printing. This is in marked contrast from the Nairobi situated Industrial Rehabilitation Centre graduates who get certificates from the Ministry of Labour and who are assisted to find wage employment by a Placement Officer seconded from the Ministry of Labour (Kenya, 1980).

Over 80% of Kenya’s population lives in rural areas (Kenya, 1986, 3) and the country's development strategy stresses that resources should be channeled accordingly when it declares that

The development strategy outlined in this paper puts great stress on the rural economy. Yet this is not a blue print for an agrarian society. For the next fifteen years, government's strategy for industrialisation must concentrate on two approaches. First, the domestic market for manufactured goods must be expanded markedly and this can only be done if incomes in the rural areas, where over 80% of the people live, rise rapidly.

It is clear, therefore that the Kenyan Vocational Rehabilitation Programme was conceived and has continued to function within the national economic framework. Over the last
nine years, increasing concern has been shown by the government for the welfare of the disabled population in the country. His Excellency President Daniel Arap Moi, declared 1980 the "National Year of the Disabled" and the culmination of activities planned to celebrate and mark it was when the President led the whole nation in a historic fund raising drive, in the typical Kenyan "Harambee" (Let us pull together) fashion, at which over KShs. 21 million was collected to cater for the welfare of the disabled on a continuing basis (Sunday Nation and Sunday Standard, 5th October, 1980).

The fund was turned into a Trust and used to purchase a renowned local hotel building in the heart of Nairobi, the New Stanley House, now renamed 'Rehema (Blessed) House.'

The rent collected from the premise is distributed periodically each year to projects for disabled persons. A similar record breaking public fund raising event was spear headed by the President in 1989 at which over KShs. 70 million was collected and added to the Fund.

The following year, 1981, Kenya as a member state of the United Nations Organization, celebrated the International Year of Disabled Persons, with a series of activities (Kenya, 1981). In 1984, Kenya was the second country in the world, following India, to launch the "IMPACT" programme which is aimed at eradicating avoidable disablement, with the support of the United Nations Development Programme (The Standard, 9th November, 1984, Sunday Nation, 11th November, 1984 and Kenya Times, 10th November, 1984, 6).
In the 1979/83 Development Plan which gravitated around alleviation of poverty and the provision of basic needs, the handicapped were identified as a special target group requiring special provision of educational and vocational rehabilitation services aimed at their socio-economic self-reliance and community integration (Kenya, 1979. 159-160, 183-184). In the fifth Development Plan, (Kenya, 1984), the Government envisaged a substantial increase in special schools and an intensification of integrationist initiatives when it declares (Kenya, 1984, 152).

The Government will intensify the integration of the disabled children into the regular school system, peripatetic services and community based programmes with greater parental involvement.


The budgetary pattern reflects the consistent pronounced policy commitments of the Kenya government with respect to tackling the problem of disabled persons. For the ten years, budgetary allocation for both Development and recurrent votes on Special Education and Vocational Rehabilitation had been substantial, taking into account the percentage out of Kenya's total population affected.
This study examines and, thereby, attempts to throw more light on the linkage, between training, self-employment and earnings in the face of the prevalent unemployment and pervading economic constraints with special reference to the Kenyan Vocational Rehabilitation Programme. The close and continuing interest as shown by the technical assistance of the programme from the International Labour Organisation since its inception in 1969 coincided with launching of the World Employment Programme. It bore close reference to the Organization's concepts and practices which have influenced its structure and operation. The underlying rationale of the programme can be visualized as being the eradication of poverty, deprivation and unemployment of disabled Kenyans through relevant vocational training programmes.

Costs and Efficiency of Kenya's Vocational Rehabilitation Programme.

From the preceding analysis of the Kenya Government's budgetary allocation on Vocational Rehabilitation and Special Education Programmes over the last ten years, a pertinent question worth asking is the efficient use of the resources. The theme of efficient management of programmes and resources is quite live in Kenya today, with the Government taking action to close down organizations whose profitability are questionable
Table 1:1 Total Government Development Expenditure Compared to Allocation for Special Education and Vocational Rehabilitation Programmes, 1980/81, 1989/90 in K£

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<th>FINANCIAL YEAR</th>
<th>TOTAL GOVT EXPENDITURE</th>
<th>ALLOCATION FOR SPECIAL EDUCATION</th>
<th>ALLOCATION FOR VOCATIONAL REHABILITATION</th>
<th>AGGREGATE FOR SPECIAL EDUC. &amp; VOC. REHAB.</th>
<th>SPECIAL EDUCATION &amp; REHAB. AS % OF TOTAL GOVERNMENT EXPENDITURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980/81</td>
<td>243,765,245</td>
<td>165,000</td>
<td>481,390</td>
<td>464,390</td>
<td>0.25</td>
</tr>
<tr>
<td>1981/82</td>
<td>253,517,281</td>
<td>165,000</td>
<td>737,000</td>
<td>902,000</td>
<td>0.35</td>
</tr>
<tr>
<td>1982/83</td>
<td>279,121,801</td>
<td>185,000</td>
<td>990,000</td>
<td>1,175,000</td>
<td>0.43</td>
</tr>
<tr>
<td>1983/84</td>
<td>193,822,820</td>
<td>187,380</td>
<td>512,540</td>
<td>699,920</td>
<td>0.35</td>
</tr>
<tr>
<td>1984/85</td>
<td>189,991,536</td>
<td>220,000</td>
<td>811,945</td>
<td>1,031,945</td>
<td>0.54</td>
</tr>
<tr>
<td>1985/86</td>
<td>295,294,552</td>
<td>258,000</td>
<td>522,550</td>
<td>780,550</td>
<td>0.26</td>
</tr>
<tr>
<td>1986/87</td>
<td>292,603,900</td>
<td>320,000</td>
<td>587,000</td>
<td>907,000</td>
<td>0.30</td>
</tr>
<tr>
<td>1987/88</td>
<td>335,243,851</td>
<td>447,000</td>
<td>496,000</td>
<td>943,000</td>
<td>0.28</td>
</tr>
<tr>
<td>1988/89</td>
<td>305,399,730</td>
<td>361,300</td>
<td>402,500</td>
<td>763,800</td>
<td>0.25</td>
</tr>
<tr>
<td>1989/90</td>
<td>369,348,030</td>
<td>414,000</td>
<td>397,000</td>
<td>811,000</td>
<td>0.22</td>
</tr>
</tbody>
</table>

Table 1: Total Government Recurrent Expenditure Compared to Allocation for Special Education and Vocational Rehabilitation Programmes, 1980/81 To 1989/90 in K£

<table>
<thead>
<tr>
<th>FINANCIAL YEAR</th>
<th>TOTAL GOVT. EXPENDITURE</th>
<th>ALLOCATION FOR SPECIAL EDUCATION</th>
<th>ALLOCATION FOR VOC. REHAB.</th>
<th>AGGREGATE FOR SPECIAL ED. &amp; VOC. REHAB.</th>
<th>SPEC. ED. &amp; VOC. REHAB. AS % OF TOTAL GOVT. EXPENDITURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980/81</td>
<td>616,370,004</td>
<td>605,200</td>
<td>873,024</td>
<td>1,478,224</td>
<td>0.23</td>
</tr>
<tr>
<td>1981/82</td>
<td>720,242,082</td>
<td>666,000</td>
<td>446,600</td>
<td>1,112,600</td>
<td>0.15</td>
</tr>
<tr>
<td>1982/83</td>
<td>368,161,085</td>
<td>869,000</td>
<td>439,891</td>
<td>1,308,891</td>
<td>0.35</td>
</tr>
<tr>
<td>1983/84</td>
<td>1,030,147,685</td>
<td>923,964</td>
<td>214,700</td>
<td>1,138,664</td>
<td>0.11</td>
</tr>
<tr>
<td>1984/85</td>
<td>1,062,568,586</td>
<td>1,015,033</td>
<td>403,389</td>
<td>1,418,422</td>
<td>0.13</td>
</tr>
<tr>
<td>1985/86</td>
<td>1,221,385,282</td>
<td>1,418,821</td>
<td>499,646</td>
<td>1,918,458</td>
<td>0.15</td>
</tr>
<tr>
<td>1986/87</td>
<td>1,581,579,481</td>
<td>1,619,158</td>
<td>596,270</td>
<td>2,215,428</td>
<td>0.14</td>
</tr>
<tr>
<td>1987/88</td>
<td>1,971,183,092</td>
<td>2,248,030</td>
<td>523,913</td>
<td>2,771,943</td>
<td>0.15</td>
</tr>
<tr>
<td>1988/89</td>
<td>2,238,449,184</td>
<td>3,369,540</td>
<td>554,855</td>
<td>3,924,398</td>
<td>0.17</td>
</tr>
<tr>
<td>1989/90</td>
<td>2,288,161,297</td>
<td>3,488,550</td>
<td>584,200</td>
<td>4,072,750</td>
<td>0.17</td>
</tr>
</tbody>
</table>

Accountability in project management, featuring objective achievement and financial controls have been intensified during this decade of the 1980s. The International Labour Organization's report to the Kenya Government on Increasing the Efficiency of Planning in Kenya recommended elevation of the role of planning, monitoring and evaluation (I.L.O., 1983: 399-439). With the introduction and implementation of the District Focus for Rural Development since 1983, planning, co-ordination, financial and personnel management, monitoring and evaluation have been highlighted (Kenya, 1987 and Makokha, 1985). The theme is featuring in the budget rationalization emphasized in the current 1989/93 Development Plan (Kenya, 1989).

The Central Bureau of Statistics in a report on a household survey it had conducted in 1977 (Kenya, 1978) had raised the question of extent of Government's involvement in problems of disabled persons taking into consideration the entire Kenyan population and economy. In its evaluation report of the three year I.L.O./U.N.D.P. Technical Assistance Project to the Government of Kenya, KEN/78/004 on, 'Vocational Rehabilitation of Disabled Persons,' running from 1982 to 1985, the I.L.O. advanced the view that the Kenya Programme should be more conscious of costs in lavishing resettlement expenditure in the form of free toolkits to graduates of Rural Vocational Rehabilitation Centres (U.N.D.P., 1984). In an attempt to address the issue, the International Labour Organization recommended some kind of loaning scheme. Such
views are comparable to those carried in the Session Number 6 of 1988 on Education and Manpower Training Next Decade and Beyond (Kenya, 1988) concerning local schemes for educational purposes whose effect would be the reduction of rate-of-return to individual benefactors while availing the funds for further circulation for benefit of future needy clients.

Having Vocational Rehabilitation Programmes run on effective basis in the face of scarcity of resources allocated to other competing sectors of the economy, this is a global problem with graver implications for less developed nations than it is bound to have for developed, industrialized countries. When the British Manpower Services Commission set up a review task force for the employment situation in 1979, one of the five terms of reference (Services Commission 191, 2) was

To examine and report on the future role of the Manpower Service Commission in employment rehabilitation, taking into account constraint on resources and the need for maximum cost-efficiency.

The Polish Invalids' Co-operatives which are paraorganizations catering for the Vocational Rehabilitation of the disabled in Poland is a success story, runnning on a cost-effective basis (Grzybourski and Laundenski, 1980). For other Government provided social security benefi...
for the disabled, the Social Insurance Institute is responsible. (Poland, 1980). Through a study tour fellowship, the author of this thesis visited both the British and Polish programs for employment of disabled persons and drew comparison and contrasts with the Kenyan Vocational Rehabilitation programme (Ayodo, 1986). In a highly developed country such as the United States of America, even human service programmes have come under close cost-effective scrutiny under the Programme Planning and Budgeting System (Levin and Shank, 1970, IV, Compton and Galaway, 1979, 12).

Policy makers and programme implementers have found cost-benefit analysis a very useful tool, notwithstanding its operational limitations in effecting efficiency. Rehabilitation International and United Nations Organizations (Hammerman and Maikowski, 1981, 101-112) International Labour Organizations (I.L.O., 1981), and Cultural Organizations (U.N.E.S.C.O, 1975 and Indian Journal of Administration 1981) have all acknowledged its utilization in assessing the effectiveness of rehabilitation programmes. In measuring the efficiency of educational systems, cost-benefits, also referred to as systems analysis, has long been found a useful tool by academics and educational practitioners or policy makers. (U.N.E.S.C.O.-R.E.E., 1971 Section VIII, Cohn, 1975 Ch. 6, Stoikov, 1975, Blaug, 1968 Part 3, and Woodhall, 1975). In this analysis of the Kenyan Vocational Rehabilitation Programme, an attempt will be made to use the cost-benefit and rate-of-return methods.
STATEMENT OF THE PROBLEM

Societies have come to realization of the potential economic importance of disabled persons. The Government of Kenya on its part, has been paying appreciable attention to the identification of disabled persons and in trying to effect policy measures which compensate for their relative disadvantaged social and economic position as compared to the rest of the non-disabled population. In an official publication (Kenya, 1980, 7), the disabled person in Kenya is depicted thus:

A disabled person in Kenya generally encounters the same problems, the same hopes and fears, the same frustrations and aspirations of disabled persons anywhere in the World. Because of physical or mental incapacity which is frequently complicated by educational, social and cultural handicaps, his earning ability is severely affected. He is usually dependent on relatives for support. His economic plight is worse if he has his own family to provide for. It is not therefore surprising that many of them resort to begging as a means of livelihood. Kenyan society is not yet fully enlightened concerning the potential capabilities of disabled persons and the tendency is to keep them isolated from the rest of the community. Certain tribes keep their disabled members hidden from public view, thus denying them access to educational, social cultural and other facilities which are necessary for personal development. Superstition, fear, shame, and prejudice are major factors affecting public attitude towards the disabled. As a result, the disabled person
becomes obsessed with a crippling sense of inadequacy. He feels inferior and rejected and loses confidence in himself to perform any worthwhile function.

The conscience of the World is awakening to the problem of disabled persons with a perceptibly accelerated sense. The problems posed by the incidence of disablement in human society have exhibited an important feature of the human condition - albeit, with varied degrees of recognition and concern focused on it since time immemorial. In recent years, this awareness was manifested in the initiative by the United Nations Organization at its General Assembly in 1976 that the year 1981 would be the International Year of Disabled Persons. The theme of the Year was "participation and equality" with the following few objectives (U.N., 1980)

(a) Helping disabled persons in their physical and psychological adjustment to society.

(b) Promoting all national and international efforts to provide disabled persons with proper assistance, training, care, guidance, to make available opportunities for suitable work and to ensure their integration in society.

(c) Encouraging study and research projects designed to facilitate the participation of disabled persons
life, for example, by improving their access to public buildings and transportation system;

(d) Educating and informing the public of the rights of disabled persons to participate in and contribute to various aspects of economic, social and political life;

(e) Promoting effective measures for the prevention of disability and for the rehabilitation of disabled persons;

In a publication aimed at sensitizing the World Community to the problem of disability, the United Nations Organization (U.N, 1981, 5) noted

The spectre of disability has haunted the human race since the beginning of time, as is illustrated in the folklore and the history of all nations. Sometimes the deprived human being has been a figure of fun; sometimes a cause of embarrassment, and occasionally even regarded as a token of divine displeasure. In general, however, humans have cared for their less fortunate fellows and nurtured them just as most still do. What has been lacking has been a concerted attempt to face the problem squarely - despite our new understanding that much can now be done to offset the misery and indignity which is too often the lot of the disabled - and to exploit their potential contribution to the
communal life for the community's benefit and the disabled person's happiness.

The widely publicized concern for disabled persons has been meant to focus attention on the enjoyment by disabled persons of rights and opportunities in order to ensure their full participation and integration into society. This has necessitated taking into consideration the finding of solutions to the problem of disabled persons as an integral part of national development strategies (U.N. 1980).

The increased concern for disabled persons is accentuated by agonized pronouncements articulated by victims of disability such as Battye (1974, 99) when he observes

The cripple is an object of Christian charity, a socio-medical problem, a stumbling nuisance, and an embarrassment to the girls he falls in love with. He is a Vocation or a Saint, a livelihood for manufacturers of wheelchairs, a target for busy-bodies, and a means by which prosperous citizens assuage their consciences. He is at the mercy of overworked doctors and nurses and underworked bureaucrats and social investigators. He is pitied and ignored, helped and patronized, understood and stared at. But he is hardly ever taken seriously as a man....

It has been estimated that 10% of the World's population which comes to around 500 million people, is disabled (W.H.O., 1981, 10). It has, further, been estimated that 80%
of disabled persons live in developing countries where less than 1% received any specialized help (Rehabilitation International, 1981, 6). The United Nations Organization (U.N., 1983, 13) says that in some developing countries, as high as 20% of the population is disabled while 50% of the total population is adversely affected by disability. Lack of adequate attention to the problems of disabled persons as seen in developing countries has been remarkable and has attracted the interest of global organizations. In a training manual for community based rehabilitation workers (W.H.O., 1980, i), the World Health Organization stated that

Improving the fate of the disabled who live in developing countries today is a difficult and challenging task. Many factors militate against such improvement. Governments are not inclined to believe that disability in the community is a problem, and rehabilitation is generally viewed as a luxury because it is almost exclusively left to the care of charitable institutions - with apparently high expenditure. Nor is there anything very dramatic or eye catching about government action aimed at improving the situation for the estimated 10% of any population who suffer from disablement. The poor, the dependent, the vulnerable disabled speak either with a humble voice or with none at all. They have no influence and carry no political weight. Today, we estimate that 99% of them are totally neglected in developing countries - a percentage that is even higher than it was 25 years ago.
The occurrence of disability is often accompanied by the presence of undesirable characteristics which the modern society most probably would wish to eliminate. Among the significant qualities are the functional limitation and the resultant social and psychological handicaps it imposes on the victim (Albrecht, 1976, I.

By its very conceptualization, disability implies deviation from the norm and therein lies society's concern. Difference from members of society and the consequent (imposed) roles with them peculiar problems to both the deviant, the victim, and at a larger level, the community. Dependence on others becomes a characteristic result. Often, physical suffering and inconvenience is accompanied by reduced capacity to carry out basic need and also alienation from other people (Boisier and Jacques, 1979). To safeguard against the innumerable consequences to which abuses to disability exposes victims, the United Nations Organization in 1975 came up with a declaration at enhancing their quality of life as human beings reintegration into the mainstream of society (U.N., 197

Having, thus, taken cognizance of the hitherto unsatisfactory social and economic condition which has been the prevalent life style of the vast majority of disabled persons, in Kenya but in developing countries as a whole, and in developed societies, as well, the author of this thesis considers it important to try to assess the result of measures made by the Government to improve the standard of living.
disabled. The contention in the thesis is that expenditure incurred by the Government on education, training and employment of disabled persons can be viewed as social investment in the development of human resources and that there are commensurate private and societal returns which can be regarded as sufficient justification for the public costs met by the tax payer. It is further argued in the thesis that neglecting the condition of disabled persons entail expenditure still on the part of society in the form of welfare payments and the opportunity cost estimated in the form of earnings foregone by non disabled persons who have to take care of the disabled.

Relevance of the Research Problem

As already indicated and will be further reinforced in the next chapter in the review of literature, the problem of disabled persons has come to be recognized as a pressing socio-economic challenge which governments have to contend with. Although the intensity of government involvement varies from country to country, it is dawning on society that it is incumbent upon it to facilitate the rehabilitation and full integration of disabled persons into its mainstream. It has been illustrated in this chapter how the Kenya Government, on its part, has tackled the problem of disabled persons.

Being a developing country, Kenya has many developmental challenges which are characterized by economic constraints.
However well meaning the Government may be for the welfare of its disabled population, the humanitarian motive has to be viewed along side economic realities. The costs of vocational rehabilitation of disabled persons are high in all countries and far exceed the expenditure on education and training for non-disabled persons of comparable age cohort. Granted, therefore, that due attention has to be paid to the disabled in order to make them live self-fulfilling and self-reliant lives in the community, it is important that with the resources allocated to the Vocational Rehabilitation Programme, as many of the eligible disabled persons as is feasible should benefit. At a time when the Kenya Government is demonstrating concern for efficiency in all its programmes, it is clear that consciousness for efficiency in meeting programme objectives in an area such as vocational rehabilitation would be desirable. Records held in Vocational Rehabilitation Centres show an acute shortage of training places at the existing eleven institutions. The total training capacity is 15 clients while the trainee waiting list stands at 5,000. Programme accountability as conceived in developed countries like the United States of America and also currently effected by United Nations Organization's donor agencies ought not to be viewed as an unattainable ideal for developing countries for much longer. For every unit of expenditure, there should be a maximization of utility derived, measurable in efficaciousness of undertakings.
In the wake of equitability pursuit in resource allocation, aimed to be achieved through the implementation of the district focus for rural development, it is to be expected that the disabled who, according to already cited World estimates, affects 2.1 million (10%) of Kenya's population, would get a proportionate share of the national cake and be also subjected to public accountability. The success of a Vocational Rehabilitation Programme is measured in terms of the number of rehabilitees who become successfully settled in employment after enjoying the services of the programme. It is for this reason that the researcher thought of gearing this study to evaluation with follow-up of former disabled trainees of Vocational Rehabilitation Centres as a leading feature in the tracer study model (Psacharopoulos and Woodhall, 1985, 38 - 39). Unemployment is a threatening socio-economic problem in developing countries among the able bodied and takes more devastating dimensions among disabled persons whose chances of getting jobs are further reduced because of negative attitudes of the public towards them. It is the acknowledgement of this disadvantage to disabled persons that justifies the initiation of a compensatory programme such as vocational rehabilitation to equip disabled persons with employable skill training. Such a programme compares closely with a programme like the Youth Polytechnic which until recently has been managed by the same Department of Social Services and whose purpose is to provide employable skills to young school leavers.
For over seven years while working in the Department of Social Services from 1987 as a Vocational Rehabilitation Officer, the researcher's assignment included Research, Evaluation, Publicity and Placement. In the course of executing his duties, he saw need to conduct an empirical study which, while meeting academic requirements for a doctoral degree, would prove useful to the Kenyan Vocational Rehabilitation Programme. Apart from provoking an awareness for efficiency in the programme, there is the pressing need for literature on rehabilitation by personnel working in the programme and also for the public, students of education and related human services programmes. As can be seen from literature reviewed in Chapter Two on rehabilitation of the disabled in Kenya, very little work of academic standing has been done in the form of studies which could assist policy makers and other administrators of vocational rehabilitation programmes. It has been in the light of the foregoing that the researcher decided to embark on this study which is expected to be an eye opener and will provoke other scholars into more serious work in the discipline.

In view of the contemporary global calls for socio-economic equity as a development goal, this study provides an example of a determined attempt to provide compensatory human resource development to a disadvantaged target group. Besides, the study provides discussion of an example of the vocational approach to the alleviation of a Socio-economic problem to be
contrasted with the charitable handling out of relief of distress which are consumable goods and services, with no envisaged future returns.

The many voluntary organizations serving the disabled in Kenya will, hopefully, find the study a useful guide in formulating their programmes. The study will be a contribution to the live debate on a relevant education and training, linked to employment prospects in Kenya.

OBJECTIVES OF THE STUDY

This study is an empirical examination of the Kenya Vocational Rehabilitation Programme with a view to

(a) providing local reference literature on Vocational Rehabilitation and the general political economy of disabled persons.

(b) examining its efficacy in resettling the rehabilitees

(c) attempt a cost-benefit analysis of Government involvement in the Programme.

HYPOTHESES TO BE TESTED

Two hypotheses will be tested in the course of the study:

1) There is a significant difference in the form of returns accruing to trained disabled persons from their lifetime earnings as compared with their untrained counterparts.
ii) There is marked difference between the returns from earnings accruing to a trained disabled person and that from an able bodied person in a comparable programme.

VARIABLES TO BE EXAMINED

The major dependent variable to be examined will be the returns accruing to trained disabled persons following resettlement in self-employment. The independent variables which are mainly government and donor inputs into the programme will include

i) Budgetary allocation

ii) The Training Curriculum

iii) Settlement/Resettlement support


Definition of Terms

In an effort by society to address itself to the problems posed by the occurrence of disability, specialized international service organizations of the United Nations Organizations have formulated definitions of disability which, in turn, have become widely adopted throughout the World. The World Health Organization (W.H.O. 1982, 8), for instance defines disability as

Any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being.
In the same document, the World Health Organization (W.H.O. 1982, 8) also defines the closely related 'handicap' as

A disadvantage for a given individual, resulting from an impairment or disability, that limits or prevents the fulfilment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual.

Ameliorative action to combat the undesirable effects of disablement have found expression in the concept of 'rehabilitation,' which the United Nations Organization (U.N., 1983, 3) defines as

A goal-oriented and time limited process aimed at enabling an impaired person to reach an optimum mental, physical and/or social functional level, thus providing her or him with the tools to change her or his own life. It can involve measures intended to compensate for a loss of function or functional limitation (for example by technical aids) and other measures intended to facilitate social adjustment or readjustment.

McGowan and Porter (1967, 4) have defined 'rehabilitation' as the process of restoring the handicapped individual to the fullest physical, mental, social, vocational, and economic usefulness of which he or she is capable. Cull, Hardy, Peter II, Peters and Gandy (1980, 7) endorse this concept of rehabilitation.
For many years, prior to the aforementioned revised World Health Organization's definition of 1982, the word 'rehabilitation' of the disabled had been in use to refer to the restorative services aimed at integrating the disabled into the regular life stream of the society. In a characteristic vein, the World Health Organization (W.H.O., 1969) had defined it as

The combined and co-ordinated use of medical, social, educational and vocational measures for the training or retraining of the individual to the highest possible level of functional ability.

Over the years, there has been cultivated a growing recognition to meet the needs of disabled persons through the development of their residual capacities and therefore engaging them in productive activities, taking into account the humanitarian dimension. The provision of vocational rehabilitation services to the disabled, therefore, should be seen in the context, discussed at the beginning of this chapter, of human capital theory and the Economics of Education. In the process of providing education, training, employment, medical and other resettlement services aimed at the total integration of disabled persons in the community, full utilization of available human resources in a country are being mobilized into creation of national wealth.
When Wright, a leading contemporary rehabilitation scholar in his textbook on comprehensive rehabilitation in which he discusses at length the value of independent living skills, refers to the ultimate premise of rehabilitation philosophy as being an all encompassing concern for the handicapped individual (Wright, 1980) the implication is what Weisbrod identifies as 'positive' spill-over effects of education and training (Weisbrod, 1964). Psacharopoulos and Woodhall (1985) refer to them in their World Bank Publication as externalities, and can be seen to accrue to society as a result of educating and training disabled persons into self-reliance so that instead of an economy concentrating on transfer payments for their maintenance, they are able to earn their own livelihood, thus enabling their families and community to engage in productive work.

While the provision of such services as vocational rehabilitation are components of the development and full utilization of human resources in a country, decision makers are faced with the prevailing strain put on the World's resources by needs of the able-bodied population which is cheaper to sustain as it requires little in the form of special needs. The cost of dependency on the economically active non-disabled population by uneducated, untrained and unemployed disabled persons has to be contended with; it amounts to the economic cost of doing nothing to the condition of the disabled. As all this involves the allocation of scarce national resources to a section of the population, I will further explore implications and practices.
Terms Relating to Vocational Rehabilitation.

For the purposes of this study the definitions of I.L.O. are adopted for the following words:—

(i) Vocational Rehabilitation

In its recommendation No. 99 of 1955, the International Labour Organization has defined Vocational Rehabilitation (I.L.O. 1984, 5) as:

That part of the continuous and co-ordinated process of rehabilitation which involves provision of those vocational services, e.g. vocational training and selective placement, designed to enable a disabled person to secure and retain suitable employment.

In a later Recommendation Number 168 of 1983 the International Labour Organization further explained that the purpose of vocational rehabilitation should (I.L.O., 1983, 14) to be:

Enable a disabled person to secure, retain and advance in suitable employment and thereby to further such person's integration or reintegration into society.

(ii) Disabled Person

For the purpose of Vocational Rehabilitation International Labour Organization conceives a 'disabled Person' slightly differently from the World Health Organization (I.L.O., 1983, 1), thus

An individual whose prospects of securing retaining and advancing in suitable employment are substantially reduced as a result of a duly recognized physical or mental impairment.
The provision of vocational rehabilitation services to disabled persons is based on the inherent right of disabled persons to be part of the labour force, and, thereby, derive the social, economic and psychological satisfaction that exertion in meaningful and gainful activities imply to human beings. Acton, former Secretary General of Rehabilitation International (1981, 4) sums up as follows

"...we may draw some tentative conclusions about the employment for disabled people and the criteria it should satisfy. To help meet the economic need that usually exists, employment should be gainful. To satisfy the culturally determined work ethic, by which most people have been conditioned, be productive and at a level that, in keeping with the individuals' capabilities, represents achievement. To facilitate the social integration of the disabled individual, the job should be in a setting where other people are also working. And to give some form and discipline to life, employment should be regular and continuous. As is true of the population at large, there are among people with disabilities those who have only some or even none of the needs...."

Cull and Hardy (1972, 63) reinforce the need for work for disabled persons when they note that

Historically, not working has been looked upon as a sign of personal incompetence or deficiency. Work has fulfilled unsatisfied needs for self esteem and self actualization, and the possibility for fulfilling these needs outside of some type
of institutional setting are limited. Not only are these unsatisfied needs personally disruptive but socially as well.

The emphasis on the work ethic in relation to the welfare of disabled persons is further underscored by many other authoritative sources in specialist publications. U.N.E.S.C.O. (1977, 177-186), for instance, highlighted the significance of vocational education as a component of Special Education and also touching on the optimal development of potential vocational faculties of disabled persons through adequately synchronized Special Education and training programme.

The regional meeting of African Foreign Ministers of the Organization of Africa Unity (O.A.U, 1980) brought the point home when it resolved that

Reference should be made to the principle of the right to work and fact stressed that the disabled had the same right to independent work as other individuals and .... The right to education, training and information should be included among the fundamental principles since it is a pre-requisite of the full participation of the disabled.

At the 1980 World Congress of Rehabilitation International, a disabled participant, Lindquist (1980, 17) echoed the same sentiments in a paper he presented when he asserted that
Everybody must feel that they have something to offer to others. To have a job or a meaningful role, to feel that one contributes to one's family and to one's society, is the right of every individual. We all know to-day that right is denied the majority of disabled people in the World, not only in the developing countries but also in highly developed countries such as Canada and Sweden .... Through work rehabilitation, we disabled can increase our capacity and, thereby, become more attractive to the Labour market. There are shining examples of people throughout the World with severe disabilities who have gained and retained important positions in the Labour market. They have achieved their positions through their own talents and through successful rehabilitation.

In a symposium held in 1980 with the theme of 'Work For the Disabled' (I.L.O., 1980. 193-207) Cooper, who was the then Chief of I.L.O. Vocational Rehabilitation Training Branch in Geneva, in the preceding vein, elaborated upon the Organization's preoccupation with technical assistance to programmes of disabled persons, covering 64 countries in 1979 alone. For the purposes of this thesis the author prefers the above International Labour Organization (I.L.O.) definitions of 'disabled person' and 'vocational rehabilitation.'

LIMITATIONS OF THE STUDY

This study has been carried out with two major constraints the researcher has had to contend with
(a) **Researcher competence**

The educational background and training of the researcher did not include disciplines such as Psychology, Counselling, Labour Studies, Special Education and Rehabilitation which go in to reinforce the other ingredients of training and experience of an administrator or academic in the area of Vocational Rehabilitation as cited in the review of relevant texts in chapter two. It was fortunate that at the end of the study an opportunity to align the study closer to the Economics of Education availed itself at the Kenyatta and Moi Universities. For two months during the period of the study, the researcher had the practical experience of comparative European Vocational Rehabilitation Programmes. The incorporation of the bent towards Economics of Education, therefore, has enhanced the competence of the researcher, thus relegating into insignificance the earlier anticipated fears.

(b) Visiting ex-trainees of all the Vocational Rehabilitation Centres has been an exacting task for the researcher who has, over the years, had to have the assistance of field officers of the Department of Social Services augment his efforts. Frequent and unannounced movement of a large number of ex-trainees from one working site to another and, also, in some cases, complete lack of information on the whereabouts of the ex-trainees reduced the expected number of respondents.
Organization of the Rest of the Thesis

In chapter two, relevant literature is reviewed under the three headings: Linking Training and Education with Employment, Vocational Education, and Research, Efficiency and Evaluation in Vocational Rehabilitation. Chapter Three explains the research methodology and sampling procedure while the tabulated results are reported and analysed in Chapter Four. Chapter Five outlines the conclusions and recommendations of the study.
While the researcher has been able to have access locally to literature on topics such as Economics of Education, Vocational Training and Employment all of which constitute education disciplines at Kenyatta University, difficulty has been experienced during the period of the study in obtaining literature which would conform to a minimum requirement to equip an investigator in an area like Vocational Rehabilitation with satisfactory familiarity with concepts of the discipline. The literature reviewed in this chapter, other than those on disabled persons in Kenya, was largely acquired by special arrangement by the researcher from overseas sources. A limited number of titles have been available at local university libraries at Kenyatta University, University of Nairobi and at the Medical School at Kenyatta Hospital.

The review covers three major areas, thus

- Linking Training and Education with Employment
- Vocational Education
- Research, Efficiency and Evaluation in Vocational Rehabilitation.
LINKING EMPLOYMENT AND EDUCATION

There exists plenty of literature which deals with the subject of education and employment in a country's developmental context.

For Kenya, the introduction of the '8-4-4 Educational System' (Kenya, 1984) can be seen as the climax in recent years of attempts to redress the mismatch between what the educational system produces in the form of graduates at different cycles and the realities of the employment situation. The increased emphasis on vocational, technical and work-skill infused curriculum prescribed in the document, which Kenya is implementing, is meant to prepare students for the world of work, taking into account the rural predominance in the Kenyan economy. The document advocates increased use of continuous assessment of students as opposed to sole reliance on end-of-course examination which may not take into account individual aptitudes. The International Labour Organization in its survey report on Employment, Incomes and Equality (I.L.O., 1972, 65-70) discussed the school leaver or educated unemployment problem. Killick (1981, 266) in the papers he edited on the Kenyan economy has summarized the education-job mismatch in a characteristic fashion when he writes

One reason for low and declining returns from educational investments is that the system has remained primarily geared to meeting the manpower needs of the modern sector of the economy, with the great
majority of those graduating from the system, at all levels, aspiring to wage- or salary-paying jobs in the towns. But the number of jobs in the modern sector is not expanding nearly as rapidly enough to absorb each year's output of fresh graduates.

The Sessional Paper Number 2 of 1985 has outlined the important role which rural based and informal sector employment opportunities will continue to play in the overall employment strategy in Kenya. The ruralization and localization of the school curriculum postulated in the 8-4-4 education system is consistent with this employment strategy.

Leading scholars and international donor agencies have articulated views on the link between education, training and employment. Blaug has given a thorough analysis of the problem as seen in developing countries and has ended up with suggestions of possible ameliorative policies in his book Education and Employment Problem in Developing Countries (Blaug, 1974). Davis sees the education and work link as vital as a primary consideration in planning educational systems (Davis, 1980 Ch.10) when he observes (Davis, 1980, 207) that

Though the direct link between education and productivity was not usually studied or validated, indirect evidence in the form of higher earnings accompanying more education seemed to validate the theories of the economists and the supposition of educators
and political leaders. In very recent years the direct evidence to support the argument began to appear shaky. Educated unemployment began to appear in West and East Africa, in South East Asia and massive in India. With no jobs, there were no earnings. As the number of people with educational credentials grew, competition for the few jobs which required educated people increased and the differential which had been paid for modest levels of education began to decline.

Carnoy, (1975), discussing 'Schooling and Unemployment' and Clignet (1975) on 'Education and Employment in Developing Nations' at a donor seminar on investment in education, had joined Blaug (1975) who addressed the issue of 'Education and Employment' to explore the subject. The International Labour Organization's approach is to treat the problem of Education and employment in the context of a comprehensive employment approach strategy (I.L.O., 1973) which closely corresponds to the macro economic context the World Bank has adopted in tackling the same problem (World Bank, 1980 Ch.5) of education and work. In its recent policy study on education for Sub-Saharan Africa, the World Bank (1988, V) has restated its belief in the function of education in promoting economic development through the provision of requisite skills and attitudes. It notes

Without education, development will not occur. Only an educated people can command the skills necessary for sustainable economic growth and for a better quality of life.
Recognizing this, African governments have placed heavy emphasis on expanding educational opportunities from primary school through University in the two or three decades since their independence.

Relating education and occupations in an economy is seen by Parnes (1964) and United National Educational, Scientific and Cultural Organization (U.N.E.S.C.O., 1968 Section X) as the ground for the rationale for manpower forecasting and handling the supply of required human skills. Ensuring that graduates of an educational system are equipped to cope with the challenges brought about by employment needs, skills and aptitudes up dating on a continuing basis through the provision of in-service training has been explored and recommended by Staikov (1975) in the Economics of Recurrent Education and Training (U.N.E.S.C.O., 1983, 86) in what it regards as 'Combining Education and Productive Work.' In a research report on Training and Productivity in Eastern Africa, Maliyamkono, et al. (1982, 4) have observed that

Empirical evidence suggests that there is a relationship between education and productivity, which implies that more education achievement results in higher levels of productivity more than other types; further, whether an emphasis on this type of education would also increase equality.

Silberman (1982) has edited a collection of essays on Education and Work from the United States of America's viewpoint which emphasize the need for relating education
to work. Little (1986) has concisely covered these in an article 'From Educating and Employing to Learning and Working' in which she outlines important current concepts and propositions for the debate. Psacharopoulos and Woodhall (1985) in their joint publication on Education for Development have incorporated World Bank current views on the desirability of relating education and gainful employment as a development objective. Coombs, (1968 Ch.III) in his classic discussion of what he called the World Education Crisis had outlined in one-chapter the required fitness of the outputs of educational systems for manpower requirements and attitudes congenial to social change. Carnoy (1977) has appraised the duration and employment relation and has recommended policy measures for planners in his Education and Employment: A Critical Appraisal. The widely discussed close tie between Education and Jobs as seen by Berg (1970) are all part of the pertinent literature. A forceful indictment underscoring the significance of the desirable link of education to work is that of Dore's (1976) Diploma Disease which condemns the prevalent obsession with acquisition of certificates whose value, in the course of time, deteriorate as competition for them escalates.

Providing Special Education and Vocational Rehabilitation training to disabled persons needs to be considered in the light of the foregoing review of the literature linking education and work. The process of preparation of disabled persons for work includes a considerable element of psychological toning up which needs inclusion in this literature review.
A leading publication on disabled persons produced by United Nations Organization is *World Programme of Action Concerning Disabled Persons* (U.N., 1983). It outlines details of the organization's summary of international consensus on objectives, current situation and implementation proposals on the disabled. It is intended to be a guide to member nations in formulation of their separate plans of action for the 'Decade of the Disabled, 1982 - 1991.' Another publication *Disabled Persons Bulletin* disseminating information on developments on the international scene since the International Year of Disabled Persons, 1981 (U.N., 1982, 4) notes

As a result of the Year, more people now accept that disabled persons are important and potentially productive members of society. Attention has been focused on the abilities of persons with disabilities.

United Nations Educational, Scientific and Cultural Organization sees the introduction of skill training as an integral component of the Special Education curriculum as discussed in the publication *Integration of Technical and Vocational Education into Special Education* (U.N.E.S.C.O., 1977). Using New Zealand, Czechoslovakia, and United States of America as case studies, another U.N.E.S.C.O publication *Economic Aspects of Special Education* (U.N.E.S.C.O., 1978) is designed to demonstrate to policy makers, educational planners and teachers the long run returns to investment in Special Education. In the preface it observes
National policies with regard to Special Education should be directed towards providing equal access to education and integrating all citizens into the economic and social life of the community. The aim of Special Education for those who suffer from mental, sensorial, physical or emotional handicap is similar to that of education in general, namely to offer the child the maximum opportunity to develop cognitive, scholastic and social skills to the highest possible level.

The social and psychological aspects of rehabilitation is a well documented area and among interesting works consulted is Albrecht's *The Sociology of Disability and Rehabilitation* (1976). Boswell and Wingrove (1974) in their jointly edited *The Handicapped Person in the Community* have put together into a textbook used by the open university, a collection of diversified articles on issues relating to disabled persons in a British setting. Robinault and Weisinger (1979) have presented an example of a community based rehabilitation facility, comparable to the I.L.O. experiments in Indonesia and Kenya, in their co-authored book *Mobilization of Community Resource*. The Mary E. Sweitzer Memorial Seminar reports have addressed specific topics in rehabilitation. Edited by Perlman, they have tackled, for instance, *The Role of Vocational Rehabilitation in the 1980s: Serving Those With Invisible Handicaps* (1978), *International Aspects of Rehabilitation* (1981) and *Rehabilitation of the Older Blind Persons* (1977). The proceedings of the third European regional
conference of Rehabilitation International is an illuminating collection of *The Handicapped Person: in Society* (1981) on diverse aspects of rehabilitation. In *The Psychophysical and Social Impact of Physical Disability*, Marinelli and Orto have further developed the theme of Albretch which has already been referred to. Penetrating accounts of the disabled person and his/her psycho-social needs for adjustment and rehabilitation are elucidated upon by Bolton and Jaques (1979) in *The Rehabilitation Client* and by Roessler and Bolton (1978) in *Psycho-Social Adjustment to Disability*. Cull, et. al. have joined other authors in bringing to readers an overview of rehabilitation services provided by different countries from all over the world in the book they have jointly edited, entitled *International Rehabilitation: Approaches and Programmes* (1980). University Affiliated Children's Hospital of Los Angeles organizes annual conferences on *Piagetian Theory and its Implications for the Helping Professions* (1980) whose proceedings exhibit the interdisciplinary approach to handling rehabilitation problems. Hale's *Source Book for the Disabled* (1979) is an invaluable practical guide to independent living and restoration of confidence for disabled persons.

In rehabilitation, the theme of competence excites conflicting, thought provoking and, even, inspiring reactions. Reference to Social Darwinistic notions in relation to justification of service provision at public expense raise philosophical questions worth digressing into. Hoffman (1975, 419) in an article in the *Journal of Special Education* summarizes
Social Darwinism thus

Basing his theories on Darwin's biological formulations, Spencer developed a philosophy of social selection which agreed that only the most fit of the human species should be permitted to survive, so that mankind as a whole might advance; the weaker members of humanity, through their innate inferiority, detracted from the biological progress of the race and hence posed a threat to the future of mankind. Consequently, Spencer condemned not only poor laws but also public health and public educational facilities, since these institutions sustained many of the individuals seen as innately inferior. Eventually, it was believed, nature would weed out through natural selection all such undesirables, and there would be no further social problems. The rich were that way because of their superior natural acumen and intelligence; the poor and infirm were simply those members of the species who has lost out in the evolutionary race owing to their innate disabilities. To attempt a programme of public aid for such persons was deemed ridiculous as well as grossly unscientific. What was logical and sensible, according to social Darwinistic thought, was eugenics.
This is the manifestation of the trend of thought by authors like Machiavelli, in his famous book *Th* (1950) who see might as equated with right. Or, organization level, Rothery's *Survival By Compet* is a relevant reinforcement. Literature has exe portraits illustrating a prevalent social disinc to disabled individuals such as in Lawrence's *La* Lover (1956). In a masterly portrait, the 'Stig: Richard, Duke of Gloucester, the infamous arch v Shakespeare's (1970) creation articulates the so Villainy - as the response to the imperfectionist has of him on account of his disability - and hi. resolution to seek self gratification. In his floquay, he ponders

Well say there is no Kingdom then for Ri What other pleasure can the World afford I'll make my heaven in a lady's lap, And deck my body in gay ornaments, And witch sweet ladies with my words and 0 miserable thought and more unlikely Than to accomplish twenty golden Crowns. Why, love forswore me in my mother's wom And for I should not deal in her soft la She did corrupt frail nature with some br To shrink mine arm up like a wither'd shr To make an envious mountain on my back! Where sits deformity to mock my body! To shape my legs of an unequal size: To dispropotion me in every part. Like chaos, or an unlicked bear - whelp That carries no impression like the dam. And am I then, a man to be beloved?
O monstrous fault to harbour such a thought!
Then, since this earth affords no joy to me
But to command, to check, to O'bear such
As are of better person than myself,
I'll make my heaven to dream of the crown.
And while I live't account this world be hell!
Untill my mishap'd trunk thank bears this head
Be round impaled with a glorious Crown.

A more positive and optimistic philosophy is covered by such
authors as Bleakley in her work series Despite Disability
(1974) in which she presents factual accounts of career
achievement by handicapped people. From the standpoint of
a pastor, Wilkes, who is himself disabled, has inspiring
reflections compressed in Creating the Caring Congregation
(1981). Milton, the British Statesman who became blind in his
later life and turned to serious writing, summarizes the
inherent optimism in his continued existence even in the face
of handicapping disability in his renowned sonnet On His
Blindness (1966) when he ponders

When I consider how my light is spent
Ere half my days in this dark world and wide,
And that one talent which is death to hide,
Lodged with me useless, though my soul more bent
To serve therewith my Maker, and present
my true account, lest He returning chide;
"Doth God exact day labour, light denied?
I foundly ask. But patience, to prevent
That murmur, soon replies, "God doth not need
Either man's work or his own gifts. Who best
Bear his mild yoke, they serve him best. His state
Is kingly. Thousands at his bidding speed
And post o'er Land and Ocean without rest;
They also serve who only stand and wait.


Currently, interest in sport and recreation has increased as part of the comprehensive rehabilitation services disabled persons require. This is seen as helping disabled individuals to live balanced, independent lives. In a publication entitled Leisure, Sports Activities and Holidays For Disabled People (1984), the picture is given of the development in the area in Europe. Rehab Brief (1981. 1) reports that

Sports benefit both disabled and able bodied individuals by developing competitive spirits, self Discipline, Self respect, and comradeship attitudes that are essential for the disabled person's successful reintegration into the community. Through recreational pursuits, disabled persons derive pleasure and personal satisfaction, a feeling of physical fitness, and just plain fun. Also, group activities help the disabled person make friends and grow socially.
A publication which has discussed the socio-economic viability of disabled persons is Rehabilitation International's *The Economics of Disability* edited by Hammerman and Maikowski (1981). It is based on the 90 paragraph recommendations of the findings of the United Nations Expert Group meeting on the socio-economic implications of investments in Rehabilitation for disabled persons submitted in December, 1977. The editors have incorporated theoretical exposition, backed with extensive summaries of literature on disability, rehabilitation, economic and social issues, cost-benefit analysis, labour market and manpower policies, social security and disability benefit systems. The book is written from an empirical perspective and has proved invaluable in the formulation of this study.

This review of literature has tended to defy confinement to problems of essentially Vocational Rehabilitation and employment provision for disabled persons only because of the need to treat the vocationally handicapped person in totality taking into account the pertinent characteristic problems which feature in efforts to integrate them into the society's socio-economic mainstream. In their overview text on *Vocational Rehabilitation of the Disabled*, Malikin and Rusalem (1972) have underscored the due weight which should be apportioned to the diverse needs of the disabled. In the text Di Michael (15) remarks in a typical mode that
In vocational rehabilitation, remunerative employment is one of the primary goals, but not the exclusive one. To some people it is like waving a red flag before a bull to speak of remunerative employment as a goal of special importance. Before beginning to look like the charging bull to such matadors and receiving the verbal coup de grace, we should hasten to add that by this time it must be clear that there is no personal antipathy to the complete desirability of "Comprehensive rehabilitation," "independent living rehabilitation," the basic unassailable value of "human dignity" and all the other precepts. We must however, give serious thought to such a goal in keeping with the nature of man, the value of work, and the vitality of the vocational rehabilitation programme to-date.

Several texts on rehabilitation of the disabled have adopted this totalist view. A leading Rehabilitation Scholar, Wright (1980) in his book Total Rehabilitation discusses resources assessment, counselling, and placement. Golderson, Dunham and Dunham (1978) in their jointly edited text Disability and Rehabilitation Handbook have also taken a wide ranging view of the subject. Cull and Hardy (1972) have presented, like the aforementioned Malikin and Rusalem, an American view of Vocational Rehabilitation: Profession and Process in their book which throws background light on vocational rehabilitation, starting with its history which, in the United States of America, dates back to the 1920s.
It articulates philosophical considerations, expounding on the rehabilitation process before turning to the Rehabilitation Counsellor who is the chief architect and supervisor of service provision to the rehabilitation client. Like Wrig Malikin, Rusalem and Goldenson et. al., in the mentioned texts, the joint authors explain the role and requisite educational and training qualifications of rehabilitation professionals. Part five of the book gives an illuminating account of the rehabilitation client, adjustment to disabi and ends with a discussion of the needs of the older adult. Part six of the book deals with interdisciplinary aspects of the rehabilitation process.

Other authors on rehabilitation treat several individual t Bolton and Jacques (1978) have systematically compiled all articles appearing in different publications and journals over several years and have used them to make a case of the evolutionary founding of the profession of Rehabilitation Counselling with its unique approaches and certification on the one hand, and defining the scope and subject matter, on other, in Rehabilitation Counselling: Theory and Practice Carnes treated the subject from the European standpoint. He discusses into appreciable detail European programmes in Great Britain, Sweden, The Netherlands, France and Yugoslavia. A comparable study relating Vocational Rehabilitation programs in Great Britain, Norway, Denmark and Poland to the Kenyan carried out by Ayodo (1986).
market. Specific programmes for target groups in the position have been started. In response to the swelling problem which has become worse with the passage of time of teen primary and secondary school leavers, the National Christian Council of Kenya and with subsequent support and co-ordination of the Government, started the Youth Polytechnic Movement. The aim was to provide craft training and eventual self-employment for the school leaver population who had no option of continuing with formal education or being absorbed in established public vocational training programmes. The rationale for their establishment was set out in the document *After School What?* (N.C.C.K., 1966). The Vocational Rehabilitation Programme, also mooted about the same time, the Government of Kenya with the assistance of International Labour Organization had the objective of providing skill training to disabled working age Kenyans for gainful employment as explained in *Sessional Paper Number 5 of 1968* (Kenya, 1968), *Towards Restoration of Security* (Kenya, 1980) and *The Vocational Rehabilitation Programme in Kenya* (Kenya, 1980).

The validity of both the Vocational Rehabilitation and youth (formerly village) Polytechnic Programmes are reviewed respectively, the International Labour Organization (I.L.O., 1987) and Ayot (1987). The role of non-formal training and employment programmes in Kenya's economy has been well recognized. The celebrated I.L.O. employment report *On Kenya* (I.L.O. 1972), for instance, singled the informal sector as having immense potential for employment...
creation. King (1977) further investigated the role of the informal sector vis-a-vis education in Kenya. An in depth discussion of The Informal Sector In Kenya was conducted by the Institute of Development Studies (1977) at the University of Nairobi. Since the large majority of Rural Vocational Rehabilitation Centres' graduates are meant to work on small scale self employment projects as artisans with the tool kit provided to them by the Government, the ex-trainees can be seen as having joined the Kenyan informal employment sector. Ndua and Ng'ethe (1984) in their consultancy report Education, Training and Welfare in the Informal Sector have recommended invigorated Government financial support to this sector which they found to be economically viable. Makau (1985) in Educational Planning and Development in Kenya has reflected upon the self employment objectives of the new educational curriculum. Kinyanjui (1988) has underlined the concept of ensuring provision of a relevant curriculum for women to enhance their participation in socio-economic development, in a corresponding way to the special provisions advocated for disabled persons.

Economists whose writings have touched on the role of vocational education, non formal education and employment have been Foster (1966) whose Vocational School Fallacy in Development Planning has provided a reference point in the debate on academic as opposed to vocational education in developing countries; Corassini (1977) on When Should Vocational Education Begin; Hunter, Borus, and Mannan (19
on Economics of Non Formal Education and the Report of Conference and Workshop on Non-Formal Education and the Rural Poor (Niehoff, 1976). Recently, Metcalf (1985) in Economics of Vocational Training attempted the same by measurement of outputs. A critical view reminiscent of that of Foster, has been recently expressed by Castro (1987, 603) when he notes

Vocational education appears to be in the hands of people and institutions responsible for other aspects of labour market policy. And so, pre-occupied as they are the dismal employment prospects facing most countries, rich and poor, it is unemployment rather than training that gets most attention.

Another reason is the poor performance of several vocational education and training programmes, particularly in the Third World. When these fail - and sometimes they do - the failures are highly visible. The mismatch between what is offered and what is expected by graduates and employers has been documented in numerous well researched studies, and the short-comings of vocational education and training have been subjected to much critical analysis. General education may not be faring any better, but its dysfunction is not as obvious.

Court and Kinyanjui (1988) have given a contemporary contextual reflection on the role of vocational education and training in their comprehensive review of Education and Development in Sub Sahara Africa: The
Operation And Impact of Educational Systems. The review carries close resemblance to the recent World Bank policy paper already cited. Evans (1981, 11) poses pertinent questions to be taken into consideration when formulating a non-formal education programme when he observes

Non-formal education presents a challenging problem for today's educational planners. The diversified nature of the activities included in non formal education poses difficult questions for those wishing to apply systematic traditional planning procedures to this field. What purpose can and should non formal education serve? How should these activities be related to formal education? Can non formal education be effectively planned, and if so, in what ways and by whom? With increasing attention and resources being given to non formal education in many countries today the competences of educational planners must be developed and expanded to include effective methods of working in this area of educational planning.

Taking the case of rural development, Coombs (1971) has illustrated from programmes from different countries how non formal education has been utilized in working to eliminate rural poverty.

Since Vocational Rehabilitation Programmes as known in developing countries are the creation of, and are operated in very close consultation with, the International Labour
Organization, the researcher's first attention to the subject was drawn to the publications emanating from that source, giving information on the disabled, and specifications on conducting their programmes. **International Labour Standards on Vocational Rehabilitation (I.L.O., 1984)** is a basic text. The programme of Vocational Rehabilitation was instituted by the I.L.O Recommendation No.168 of 20th June, 1983 entitled **Vocational Rehabilitation and Employment (Disabled Persons) Recommendation, 1983**. The full text is attached in this thesis as an appendix. Convention Number 159 of the same title and date was also passed (I.L.O., 1983). All the three International Labour Organization instruments with explanatory notes for implementation are contained in the single publication.

Abe (1986, 19-20) has summarized the main features of the International Labour Organization standards as

- equality of opportunity and treatment for all categories of disabled people - men and women.
- concrete measures to create jobs for disabled people, including financial incentives to employers, support for the creation of production workshops, various types of sheltered workshops, small-scale industries and co-operatives of disabled people; and the elimination of physical and communication barriers;
- organizing services for disabled people, with the fullest possible community participation, particularly by associations for employers, workers and disabled people;
- training of rehabilitation personnel;
- promotion of rural services by means of mobile rehabilitation units, training of community rehabilitation workers, loans and grants to encourage the formation of co-operatives and self employment;
- equal employment policies;
- disabled people and their organizations to be consulted on planning and implementation of policies affecting them;
- social security schemes should assume responsibility for the development and running of vocational rehabilitation services.

A how-to-do-it text is I.L.O.s (1982) Basic Principles of Vocational Rehabilitation of the Disabled largely used a handbook by I.L.O. experts on Vocational Rehabilitation working in different parts of the world. In its five chapters, the publication throws light on the concept and development of Vocational Rehabilitation, then Vocational Assessment and Work Conditioning, Vocational Guidance, Vocational Training and Retraining, Placement and right through to employment of disabled persons.

The methods of organizing a vocational rehabilitation centre are set out in Vocational Assessment and Work Preparation Centres for the Disabled (I.L.O., 1974).
The standardized terminology used in Vocational Rehabilitation is all compiled and defined in the three main United Nations Organizations Languages: English, Spanish, and French is a single glossary entitled Vocational Rehabilitation and the Employment of the Disabled: Glossary (I.L.O., 1981). Legislation from over 100 countries from various parts of the world on Vocational Rehabilitation is reviewed in Vocational Rehabilitation Services for Disabled Persons: Legislative Provisions (I.L.O., 1983). A publication dealing with a related subject is Comparative Study on Legislation, Organization and Administration of Rehabilitation Services for the Disabled (U.N., 1976). This publication, however, does not confine its subject to Vocational Rehabilitation only; it deals with medical and social rehabilitation as well.

The importance attached to the subject of employment as the goal of Vocational Rehabilitation is underscored by the sizeable number of International Labour Organization publications. The Manual on Selective Placement (1984) which was first published in 1965, has appeared in a revised edition as the authoritative text for placement officers for the disabled. Adaptation of Work for the Disabled (I.L.O., 1973) was published in an effort to try to widen the employment possibilities for the disabled as recommended in the already referred to I.L.O.: Recommendation Number 99 of 1955.

In addition to the publications already cited, the journal *International Labour Review* sometimes carries quality articles on vocational rehabilitation and employment of disabled persons.

Publications on Kenya's Rehabilitation Programme

Most of the publications on Kenya which were consulted during this research were not confined to Vocational Rehabilitation. They covered all aspects of disability problems and programmes. As already mentioned, the legal basis for the establishment of the Vocational Rehabilitation Programme is the *Sessional Paper Number 5 of 1968* (Kenya, 1968). Closely related to it was the account of progress recounted in *Towards Restoration of Security* (Kenya, 1970) which includes brief descriptions of the work leading charitable organizations such as the Association of the Physically Disabled of Kenya, Kenya Society for the Blind, Salvation Army, Kenya Society for Deaf Children and the Kenya Society for Mentally Handicapped Children have done for the disabled.

In 1976, the *International League of Societies for the Mentally Handicapped* (Sterns, 1976) published a report of a survey covering selected developed and developing countries, which included Kenya, of the social and economic conditions of the mentally retarded. The country report on Kenya covers locally run programmes for the disabled.
up to 1971. The summary of findings is in part two on the developing countries.

Addressing itself to the prevention of disability before it plays havoc with the life of Kenyans is the report of the International IMPACT (KENYA) seminar which was conducted during the launching of the programme in Kenya in November, 1984. The report summarizes The Nairobi Declaration (U.N.D.P., 1985) and recommends emphasis on provision of primary health services, secondary prevention, attention to water associated disabilities and accidents as the strategy for eliminating avoidable disablement and, thus, enhancing the existence of a disability free, healthy population capable of engaging in productive work. The Declaration records disability incidence as follows:

- Blind persons 180,000
- Physically Disabled Persons 400,000
- Deaf Persons 300,000

One very curious observation in the disability incidence data is that the professionals, while conceding that the number of the mentally retarded persons is most probably higher than for other disabilities, they have not supplied a guesstimate. The Declaration quotes President Daniel arap Moi's IMPACT (KENYA) launching speech on the need for
A new approach and dimension in fighting disability through the deliberate efforts to prevent its occurrence in our society.

In 1980, the Norwegian Agency for International Development had a short survey conducted on services for the disabled, mainly relating to its technical assistance to the Association for the Physically Disabled of Kenya (Pausewang and Sobones, 1980). While in the first place it concentrates on the recipient association, it goes on to take into account other organizations of the handicapped and recommends increased provision for the disabled in the form of educational and vocational rehabilitation opportunities on the lines provided by the Government, public education to cultivate a more favourable attitude towards the disabled, and intensification of efforts on disability prevention.

The Kenya National Council of Social Service which is the parastatal organization charged with responsibility of co-ordinating all the charitable organizations in the country, has been responsible for the organization of several seminars and the issue of useful publications through its standing committee on the handicapped. The Directory of Voluntary Organization in Kenya (K.N.C.S.S., 1988) contains information on charitable organizations, including those serving the disabled, most of them affiliated to the Council. The Social and Vocational Rehabilitation
Resources Vol.1 (I.L.O., 1984, 63-77) carries information on rehabilitation facilities on Kenya. Many of the entries require updating, however. A precise description of Kenya's approach to rehabilitation, with reference to the rural areas, and covering the experimental community based rehabilitation is contained in Attitudes and Approach Towards Rehabilitation in Kenya with an Emphasis on Rural Areas (Ayodo, 1985). A study by Kamau (1986) addressed the occupational aspirations of the physically handicapped and recommended increased efforts on creating public awareness and more realistic occupational guidance institutions.

Majewski (1985) has produced A Manual for Community Rehabilitation Workers which is a modified version of the World Health Organization's Manual on Community Based Rehabilitation. The first twenty pages give in detail the approach the Department of Social Services was adopting in its introduction of community Based Rehabilitation. The report on the National Workshop on Training Needs of the Disabled conducted by the National Council of Social Service at Kakamega (K.N..C.S.S., 1981) consists of papers presented by participants and has resolutions aimed at improving services for disabled persons addressed to Government Ministries, the council itself and Civic bodies. The same year, 1982, saw two more workshops organized by the Kenya National Council of Social Service on the subjects of Mental Handicap
Two papers on services for the blind in Kenya are included in the *Proceedings of the Quennal Conference* (International Council of the Visually Handicapped, 1983). Fitzpatrick concentrates on the teachers of the blind programme at Highridge Teachers' College while Mwangi (267-272) presents the plight of the disabled in Kenya from the viewpoint of a helper.

The Special Education Section produced a report on the Disabled (Auka and McKeel, 1980) for the Ministry of Education, Health and Social Services, and Voluntary Organisations. It contains suggestions aimed at improving the condition of the disabled both in the country and at the national level. These publications are listed at the end of the document.

Several publications on Vocational Rehabilitation Welfare of the disabled have been published and circulated by the Division of Vocational Rehabilitation of the Department of Social Services over the past half of this decade. They are of interest to those involved in rehabilitation in Kenya because they are coordinated by the Secretariat of the National Rehabilitation Council which co-ordinates all the services for the disabled.
rendered by Government Ministries and Voluntary Organizations. The official publications reflect Government policy on the disabled and also outline the plans of implementation.

An outline of the role played by the Division of Vocational Rehabilitation in providing training and resettlement facilities for the disabled is given in the booklet *The Vocational Rehabilitation Programme in Kenya* (Kenya, 1980). Apart from the information it gives on the vocational rehabilitation centres, it gives a justification for the programme and an estimation of the incidence of disability, based on international estimates. The publication, which needs updating, is the most informative single publication on Vocational Rehabilitation in Kenya. A summary of the Kenyan vocational Rehabilitation Programme is given in the *African Rehabilitation Journal* of November, 1986 (Ayodo, 1986).

The deliberations of the 1981 workshop and subsequent conference on the Disabled are summarized in a single publication (Kenya, 1984). The recommendations are incorporated in the *Plan of Action for the 1980s* (Kenya, 1983). The publication outlines programmes the Government intends to implement for the improvement of the welfare of the disabled for the period 1981 to 1990, in correspondence with the United Nations Organization's decade for the disabled.
The rationale for Kenya's outstanding participation in major national and international sporting events for the disabled is outlined in the speech of the Minister for Culture and Social Services, printed in the brochure *1890 Kenya's Olympic Disabled Team* (Ayodo, 1980). Significance has been given to programmes for the disabled in successive Government four year Development Plans. The 1979/83 Development Plan, apart from identifying the disabled as a handicapped socio-economic target group, also gave a detailed forecast for expansion (Kenya, 1979). Attention is given to the role of Vocational Rehabilitation Division and the plans for expanding vocational training and resettlement facilities for the disabled as part of the overall need for development of human resources in the 1984/88 Development Plan (Kenya, 1983).

**RESEARCH, EFFICIENCY AND EVALUATION IN VOCATIONAL REHABILITATION**

The problems posed by the provision of services for disabled persons call for a dire need for a constant examination into wide ranging subjects covering disabling conditions, incidence of disability, medical rehabilitation, special education, vocational rehabilitation, psychological and social rehabilitation, rehabilitation programme administration, selective job placement and activities of daily living. During the course of this study, the researcher came across a good number of publications
and monographs dealing with investigative efforts aimed at improvement of services for disabled persons. The researcher made special efforts to obtain the bulk of the research literature from the United States of America and they have a bias on Vocational Rehabilitation.

A text found to be valuable was Wright and Trotter's (1968) *Rehabilitation Research* which gives an outline of the various traditional areas of rehabilitation research up to 1965. Areas dealt with are cardio-vascular disease, cerebral-palsy epilepsy, mental and personality disorders, mental retardation, neurological disorders, orthopaedic disorders, respiratory and pulmonary conditions, aging and chronic illness, homebound disabled, rural disabled, workmen's compensation, workshops and centres, evaluation, prediction, counselling and counsellors, special studies, administrative or programme studies and additional projects in vocational rehabilitation. *Fundamentals of Evaluation Research in Vocational Rehabilitation* co-authored by Cook and Cooper (1978, 7) of Arkansas Rehabilitation Research and Training Centre is a standard text covering topics ranging from concepts to the mechanics of design and data processing. The researcher felt particularly intrigued with the authors' case for the need for programme evaluation and accountability in social action programmes when he asserts

Perhaps the greatest influence in spurring
the development and conduct of programme evaluation was, and is, a political awareness of dwindling of the vast sums of money spent on various social programmes. The current mood of "less is more" in government seems certain to carry over into the 1980's and programmes such as vocational rehabilitation will continue to be held accountable.

Bolton has written several books on rehabilitation research which introduce the concepts, methodology and case study illustrations. Bolton and Cooper (1980) in Readings in Rehabilitation Counselling Research, although having a slant for counselling, throws light on rehabilitation research theory, design, programme evaluation and research utilization in rehabilitation apart from specialized topics like assessment of outcomes, prediction of outcomes, factor analysis and case weighting systems. The book consists of articles contributed by various rehabilitation researchers. The authors say on page 5 concerning current issues in rehabilitation research, that

Rehabilitation research is a discipline concerned with the problem of adaption to disability and handicap. Rehabilitation research is a special discipline in that it possesses a basic knowledge of how to assess the medical and behavioural problems associated with disability. Rehabilitation is distinct from disciplines concerned with prevention of and treatment of disease or disorder....
Bolton (1979) in Rehabilitation Counselling Research has dealt with statistical evaluation in rehabilitation in addition to other topics mentioned in the preceding text. Weisinger, Robinault and Bennet (1975) of the Institute of Crippled and Disabled Rehabilitation and Research Centre in New York in Vocational Rehabilitation Programme Evaluation: Selected Readings, have edited a useful text on evaluation applicable to rehabilitation, written by several authors under the three sections; basic issues, models and approaches, and techniques in evaluation. Chapter 17 is devoted to cost-benefit analysis in vocational rehabilitation. A closely related publication from the same institution is Robinault and Weisnger's (1975) Programme and Evaluation: Selected Topics For Vocational Rehabilitation. Spaniol (1979) in Follow-up Studies: Selected abstracts had summarized model follow-up studies in Vocational Rehabilitation which are precursors to this study. Reagles (1979) in his masterly text A Handbook For Follow-Up Studies in the Human Services has provided an almost indispensable guide on follow-up studies where he discusses design, execution, and utilization of the research.

In the early stages of this study, the annual Research Directory of the Rehabilitation Research and Training Centres (1981) compiled by the National Institute of Handicapped Research proved a constructive indicator of examples of possible researches which could be
contemplated for young Vocational Rehabilitation Programme in a developing country like Kenya. The reported on-going, planned and completed research projects from the American Universities with Vocational Rehabilitation as core research area, were a particular attraction to this researcher. It is unfortunate that the directory has been out of publication since 1982.

Rehab Brief, already cited brings to the rehabilitation researcher and practitioners a focus on latest research in a shortened discussion Rehabilitation advances in the United States of America. This researcher found the back issues for 1983 and 1984 quite informative on a number of Vocational Rehabilitation topics. The Journal of Rehabilitation has provided interesting current researches from different parts of the world, thus introducing in this researcher's literature perusal an element of internationality as opposed to concentration on United States of America originated reasearch publications which have been relatively more accessible.

The African Rehabilitation Journal aims at publishing material useful to furthering the interest of, and improving the situation of disabled persons in the African region (July, 1984). The Australian Disability Review carries informative articles on rehabilitation (1984). Administration of rehabilitation programmes and facilities is the concern

At a more general level several publications are important in helping one to conceive a study of this nature in a wider perspective of evaluation research. Texts found useful were Suchman's (1967) Evaluative Research: Principles and Practice in Public Service and Social Action Programmes, Davis' (1974) Evaluating Educational Investment and Cooley, and Paul's (1967) Evaluation Research in Education.

The Proceedings of the Fifth Congress of the International Association For the Scientific Study of Mental Deficiency as edited by Mittler and De Jong (1981) presented a collection of research based papers delineating the frontiers of knowledge in mental retardation. The Keynote address by the Association's incumbent President, Dr. M. J. Begat on page XXI states, in part

Mental retardation is a universal problem. No society has as yet managed to escape its
social consequences. For the individual so handicapped, self fulfilment is often an unattainable goal. For the family, it is a psychological burden, often characterized by chronic stress with potentially devastating impact on family aspirations and stability. Communities and societies are no less vulnerable, because few can afford the wastage of human resources, their most precious asset. The cost of domiciliary care, of special programmes in education and training, of clinical diagnosis and biomedical treatment, and of under-achievement and under-productivity runs into billions of dollars annually. Even these staggering economic costs, however, pale into insignificance when compared to the effects of human trauma and misery.

In chapter One, reference has been made to the need for displaying efficiency in administering programmes for the disabled. Apart from the already mentioned I.L.O. project evaluation report on the Kenyan Vocational Rehabilitation Programme, the Association for the Physically Disabled of Kenya had two different reports on the running of its projects which have pointed to the need for increased efficiency. The first report (A.P.D.K., 1980) called for regard for cost-effectiveness in allocation of resources to institutions of the disabled. It singled out Bombolulu Gardens at the Coast Province as operating under fairyland conditions with inexhaustable funds at its disposal! In 1984, another report on the administration of the
Association of the physically Disabled of Kenya was produced, with recommendations for improved effectiveness, sponsored, as the other report was, by the Norwegian Agency for International Development, NORAD.

Kenya should not be seen to be alone when cost effectiveness is under discussion in connection with programmes for disabled persons. The grim economic situation facing all developing countries, characterized by dwindling resources in the face of escalating demand for goods and services, thus militating against the realization of optimum standards of living is reverberated by Marfo, Walker and Charles (1983) when they note that

The vast majority of the world's 450 million disabled persons live in developing countries today, and it is estimated that by the year 2000, the developing world will account for more than eighty percent of the world's disabled population.... Seen against the background of worsening economic, social and political problems in Africa, these statistics present a most gruesome picture. Governments are faced with an even greater challenge to find lasting solutions to the problems of disability at a time when global economic problems make it highly tempting to relegate social programmes, including services for the disabled, to a low priority status. The need for developing countries to pool together both human and material resources in a concerted effort to address the problem of disability has never before been greater.
In 1981, as part of the activities commemorating the International Year of Disabled Persons, the Ministry of Culture and Social Services commissioned the Institute of Development Studies of the University of Nairobi to conduct an evaluative research on the condition of the disabled and the institutions for the disabled (Nkinyangi and Mbwindyo, 1982). The study had a wide scope. Its report discussed incidence of disability, the need for increased educational, training and employment facilities and the general improvement of the social and economic condition of disabled persons in Kenya.

Two of the questionnaires used to elicit responses from educational and training institutions for the disabled and major employers in the country were meant to cover the entire potential respondents while the questionnaire for disabled persons was administered to a total of 1774 disabled persons from 14 selected districts and four major urban areas. Among the interesting findings of the survey is that on the incidence which appears on page 14:-
Table 2: Distribution of Disabled Persons by Nature of Disability

<table>
<thead>
<tr>
<th>Nature of Disability</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crippled, Lame, Deformed</td>
<td>1,171</td>
<td>66.8</td>
</tr>
<tr>
<td>Blind</td>
<td>268</td>
<td>15.3</td>
</tr>
<tr>
<td>Deaf and Mute</td>
<td>107</td>
<td>6.1</td>
</tr>
<tr>
<td>Mentally Retarded</td>
<td>62</td>
<td>3.5</td>
</tr>
<tr>
<td>Multiple Disability</td>
<td>75</td>
<td>4.3</td>
</tr>
<tr>
<td>Others</td>
<td>71</td>
<td>4.0</td>
</tr>
<tr>
<td>**TOTAL</td>
<td><strong>1,754</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Source: I.D.S. Consultancy Report No. 5 of 1982 P.14

The report discusses socio-economic characteristics of the sample and analyses the educational, training and employment situation of the disabled. An undue proportion is taken up with a digression on begging. The survey gives a critical view of the performance of the Vocational Rehabilitation Programme with regard to inadequate inputs into training and resettlement provisions.

An earlier survey of the magnitude of that conducted by the Institute of Development Studies was carried out in 1977 when the Bureau of Educational Research of the University of Nairobi spearheaded efforts to avail national data on the incidence of disability. The survey was finally carried out by the Central Bureau of Statistics (Kenya, 1978). The report starts with
a background to the need for data and then explains the method used. The household survey, conducted by the field enumerators of the Central Bureau of Statistics using an administered questionnaire. The country wide sample consisted of 142 sample areas, each containing 20 households, totalling up to 1,600 people. The survey reported an incidence rate of 2.2% which it emphatically asserts is lower than expected due to factors including complete omission of the mentally handicapped, reluctance of respondents to provide information, problems of recognizing certain handicaps and lack of suitable identifying personnel. Below is a summarized table of findings which appears on page 2 of the report.
Table 2:2
Percentage of the Handicapped Group Who Suffer From Various Disabilities

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needed Special Care/Unable to Carry Out Normal Tasks</td>
<td>31</td>
</tr>
<tr>
<td>Difficulty in Walking</td>
<td>16</td>
</tr>
<tr>
<td>Uses Walking Aid</td>
<td>17</td>
</tr>
<tr>
<td>Defective Hearing</td>
<td>16</td>
</tr>
<tr>
<td>Defective Vision</td>
<td>27</td>
</tr>
<tr>
<td>Defective Speech</td>
<td>13</td>
</tr>
<tr>
<td>Physical Handicaps</td>
<td></td>
</tr>
<tr>
<td>Arm</td>
<td>15</td>
</tr>
<tr>
<td>Leg</td>
<td>27</td>
</tr>
<tr>
<td>Back</td>
<td>15</td>
</tr>
<tr>
<td>Multiple Problems</td>
<td>26</td>
</tr>
<tr>
<td>Male</td>
<td>55</td>
</tr>
<tr>
<td>Female</td>
<td>45</td>
</tr>
<tr>
<td>Under 15</td>
<td>23</td>
</tr>
<tr>
<td>Over 15</td>
<td>77</td>
</tr>
</tbody>
</table>

Source: Social Perspectives Vol. 3 No. 3 of 1978
In its concluding remarks on page three, the report observes that the study

Has yielded for the first time a broad national picture of the situation and provides a basis for designing any future investigations which may be deemed necessary.... should further study prove necessary in the future, the present work has shown that sufficient information can be made available through a well developed sample survey programme, to provide data of sufficient accuracy and degree of disaggregation to aid social planning in this field.

The short survey seems to have been an eye opener in identification of the disabled studies in Kenya, especially in respect of the unresolved problems it did unearth.

Mbindyo and Mutere (1987) conducted Survey Studies in the pilot districts of Murang'a and Baringo where the Division of Vocational Rehabilitation, with the assistance of International Labour Organization, had introduced Community Based Rehabilitation. The project had been meant to provide services to the disabled within their living environments in contrast to the traditional one of institutionalization. The two separate reports which bear similar formats have come up with recommendations critical of the project and calling for a re-examination of its application. It is interesting to note that the two studies came up with very low disability incidence 0.34% for Murang'a District and 0.5% for Baringo District.
This is a sharp contrast from the 10% United Nations Organization estimates, and also of the Central Bureau of Statistics findings ten years before. The question of credibility of the surveys hitherto conducted, attempting to ascertain incidence of disability in Kenya calls for a need to carry out a comprehensive national survey which would provide reliable estimates to be used for purposes of planning provision of services for disabled persons.

Odeck (1988) has carried out a study in the follow-up model of the viability of self employment of trained disabled persons in five selected districts; Kericho, Kisii, Kisumu, Siaya and South Nyanza districts. Among the conclusions of the study are that there is a positive relationship between level of education of disabled persons and their resettlement success which should be enhanced and also that follow-up visits to the clients have a positive effect on their resettlement. Hughes (1987) had also conducted a follow-up study of university graduates to assess their settlement in the labour market. This study on the graduates of Kenya's Rural Vocational Rehabilitation Centres is on a similar tracer model and aims at investigating the socio-economic viability of governmental involvement in training and settling disabled persons in self employment. As shown in this chapter on literature review, while substantial work
has been done in developed countries to establish the socio-economic impact of programmes for the disabled, it is desirable that similar substantial research be undertaken in developing countries like Kenya in an effort to underscore the potential contribution of disabled persons to gross national product. The researcher expects this study on Kenya's Vocational Rehabilitation Programme will go a long way in helping to provide researched literature which would be useful in informed discussions on disabled persons. Use of cost-benefit analysis and rate-of-return considerations as the basis for policy initiatives in social intervention programmes such as Vocational Rehabilitation of the disabled in developing countries have been rare. It is the contention of the researcher that there is a pressing need for such studies to be utilized in the process of formulating policy initiatives so that the scarce developmental resources at the disposal of developing countries are utilized with maximum efficiency in all sectors of the economy.
CHAPTER THREE

METHODOLOGY OF THE STUDY

Study Population

The study covered all the seven rural provinces of Kenya where the graduates (ex-trainees) of the Rural Vocational Rehabilitation Centres have settled (or resettled) in employment, mainly self employment in their local environments with tool kits provided at the government's expense at the end of their residential training. A total of five thousand (5,000) disabled persons aged between 16 and 45 years had been trained in the Vocational Rehabilitation Centres from the inception of the programme to the time the study was complete at the end of 1989. The disabled trainees, also referred to as rehabilitees, were all awarded certificates of attendance by the Department of Social Services at the conclusion of the course which lasted eighteen months. The Department had ten operational Rural Vocational Rehabilitation Centres situated at Muriranjas, and Nyandarua in Murang'a and Nyandarua Districts in Central Province, Bura in Taita Taveta District in Coast Province, Embu in Embu District in Eastern Province, Kisii in Nyanza Province, Kericho and Kabarnet in Kericho and Baringo Districts respectively in Rift Valley Province, Kakamega and Itando both in Kakamega District and at Odiado in Busia District, all
three situated in Western Province. The courses offered in the Rural Vocational Rehabilitation Centres were Tailoring, Woodwork, Knitting, Leatherwork, Agriculture, Home Science, Traditional Crafts, Cloth Printing, and Spinning and Weaving. The location of the institutions are indicated in the map in the next page (page 93). As can be seen from the map, most of the institutions are concentrated in the central and western parts of the Republic.

The graduates of Industrial Vocational Rehabilitation Centre located in Nairobi who are training for wage employment in urban environments in industrial trades, namely, Typing, Book-keeping, Shorthand, Metalwork, Telephony and Book Princing in addition to Tailoring, Woodwork and Leatherwork, were not covered in the study, the majority of them working in Nairobi. Table 3:1 on pages 94 and 95 gives the location of the ten Vocational Rehabilitation Centres, their intake and the courses (trades) they offer. The average capacity for the Rural Vocational Rehabilitation Centre is 50 trainees. The industrial Vocational Rehabilitation Centre takes up to 100 trainees. Apart from Itando Rural Vocational Rehabilitation Centre which caters exclusively for disabled females, the other nine are mixed institutions.
<table>
<thead>
<tr>
<th>INSTITUTION</th>
<th>DISTRICT</th>
<th>PROVINCE</th>
<th>NO. ADMITTED</th>
<th>TRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muriranjas Rural Vocational Rehabilitation Cent.</td>
<td>Murang'a</td>
<td>Central</td>
<td>60</td>
<td>Tailoring, Traditional Crafts, Leatherwork, Agriculture, Woodwork and Knitting</td>
</tr>
<tr>
<td>Nyadarua Rural Vocational Rehabilitation Centre.</td>
<td>Nyandarua</td>
<td>Central</td>
<td>60</td>
<td>Spinning and Weaving, Leatherwork, Tailoring, and Agriculture.</td>
</tr>
<tr>
<td>Bura Rural Vocational Rehabilitation Centre</td>
<td>Taita Taveta</td>
<td>Coast</td>
<td>50</td>
<td>Tailoring, Woodwork, Leatherwork, Agriculture and Traditional Crafts</td>
</tr>
<tr>
<td>Embu Rural Vocational Rehabilitation Center</td>
<td>Embu</td>
<td>Eastern</td>
<td>50</td>
<td>Tailoring, Woodwork, Leatherwork, Leatherwork, Traditional Crafts, Agriculture</td>
</tr>
<tr>
<td>Kisii Rural Vocational Rehabilitation Centre</td>
<td>Kisii</td>
<td>Nyanza</td>
<td>65</td>
<td>Tailoring, Traditional Crafts, Leatherwork and Agriculture</td>
</tr>
<tr>
<td>Kericho Rural Vocational Rehabilitation Cnt.</td>
<td>Kericho</td>
<td>Rift Valley</td>
<td>50</td>
<td>Leatherwork, Agriculture, Traditional Crafts, Woodwork and Tailoring.</td>
</tr>
<tr>
<td>Kabarnet Rural Vocational Rehabilitation Centre.</td>
<td>Baringo</td>
<td>Rift Valley</td>
<td>50</td>
<td>Woodwork, Tailoring, Leatherwork, Metalwork, Traditional Crafts</td>
</tr>
</tbody>
</table>

....//Cont.
<table>
<thead>
<tr>
<th>Institution</th>
<th>District</th>
<th>Province</th>
<th>No. Admitted</th>
<th>Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kakamega Rural Vocational Rehabilitation Centre.</td>
<td>Kakamega</td>
<td>Western</td>
<td>50</td>
<td>Cloth Printing, Agriculture, Tailoring, Woodwork, Leatherwork, Traditional Crafts.</td>
</tr>
<tr>
<td>Itando Rural Vocational Rehabilitation Centre.</td>
<td>Kakamega</td>
<td>Western</td>
<td>50</td>
<td>Home Science, Leatherwork, Tailoring, Agriculture, Traditional Crafts.</td>
</tr>
<tr>
<td>Odiado Rural Vocational Rehabilitation Centre.</td>
<td>Busia</td>
<td>Western</td>
<td>50</td>
<td>Leatherwork, Woodwork, Agriculture, Tailoring.</td>
</tr>
<tr>
<td>Industrial Vocational Rehabilitation Centre</td>
<td>Nairobi</td>
<td>Nairobi</td>
<td>100</td>
<td>Typing, Shorthand, Telephony, Book-Keeping, Metalwork, Tailoring, Woodwork, Leatherwork, Book Printing.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>635</strong></td>
<td></td>
</tr>
</tbody>
</table>
A total of three hundred and fifty one (351) ex-trainees of Rural Vocational rehabilitation Centres were visited at random at their working places in their home environments. The follow-up covered a total of twenty one districts out of the total 41 districts in Kenya, namely Kiambu, Kirinyaga and Murang'a in Central Province; Kilifi, Kwale and Taita Taveta in Coast Province; Kitui and Machakos in Eastern Province; Kisii, Kisumu, Siaya and South Nyanza in Nyanza Province, Baringo, Elgeyo Marakwet, Kajiado, Laikipia and Trans Nzoia in Rift Valley Province; Bungoma, Busia and Kakamega in Western Province. Thus, at least one district was covered in all the seven rural provinces of Kenya where the disabled ex-trainees of the Rural Vocational Rehabilitation Centres are settled in self employment. The choice of districts visited, as well as that of the individual clients were done by simple random sampling. Several other districts were also visited but the researcher tried to trace the ex-trainees, also referred to as clients, without success. Location of the ex-trainees was made possible with the assistance of the extension officers of the Department of Social Services and Social Workers in local authorities.

The 351 clients who were interviewed cut across the geographical, ethnic and economic spectrum of rural Kenya as can be seen from the Table 3:2 below.
Table 3:2 Sample of Disabled Ex-Trainees Interviewed.

<table>
<thead>
<tr>
<th>PROVINCE</th>
<th>DISTRICT</th>
<th>NUMBER INTERVIEWED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Kiambu</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Kirinyaga</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Murang'a</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total</strong></td>
<td><strong>40</strong></td>
</tr>
<tr>
<td>Coast</td>
<td>Kilifi</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Kwale</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Taita Taveta</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td>Eastern</td>
<td>Kitui</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Machakos</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total</strong></td>
<td><strong>48</strong></td>
</tr>
<tr>
<td>North Eastern</td>
<td>Mandera</td>
<td>1</td>
</tr>
<tr>
<td>Nyanza</td>
<td>Kisii</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Kisumu</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Siaya</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>South Nyanza</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total</strong></td>
<td><strong>50</strong></td>
</tr>
<tr>
<td>Rift Valley</td>
<td>Baringo</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Elgeyo Marakwet</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Kajiado</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Laikipia</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Trans Nzoia</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total</strong></td>
<td><strong>48</strong></td>
</tr>
<tr>
<td>Western</td>
<td>Bungoma</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Busia</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Kakamega</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total</strong></td>
<td><strong>152</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Grand Total</strong></td>
<td><strong>352</strong></td>
</tr>
</tbody>
</table>
Research Instrument

A questionnaire was used in the follow-up study. It was divided into three sections: the first part solicited background demographic information of the ex-trainee, the second part the vocational rehabilitation training received while the last part concentrated on information about the employment position. The follow-up questionnaire was personally administered to the ex-trainees by the researcher with the assistance of the local Social Workers who, in most cases, were known to the clients. Reaching the ex-trainees proved time consuming and expensive because of special transport used and persons involved in location.

The questionnaires were administered to the 351 respondents over a period of six years, ending in 1989. During the period, the researcher had the support of the Ministry of Culture and Social Services, the National Council of Science and Technology, and Moi University, respectively.

The study was, essentially, a one-shot follow-up (or tracer) survey in which efforts were made to visit the disabled ex-trainees only once at their post vocational rehabilitation settlement or resettlement situation.

In order to test for the validity, the questionnaire was administered to a few ex-trainees whose responses indicated its efficacy in eliciting required data.

Method of Data Analysis

The data has been calculated manually by the researcher using a pocket calculator and the results are expressed in percentages.
In determining the profitability of the Vocational Rehabilitation Programme, the ratio of costs to benefits has been computed in cost-benefit model. An additional method used to determine the programme's worthwhileness is the rate-of-return analysis.

The formula used for calculating rate of return is:

\[
\sum_{t=1}^{n} \frac{B_t - C_t}{(1 \pm r)^t} = 0
\]

where

- \( n \) = Number of years income is earned
- \( B_t \) = net benefits of the project
- \( C_t \) = cost of the project
- \( T \) = time
- \((1 \pm r)^t\) = Rate of discount
CHAPTER FOUR

RESULTS AND DISCUSSION

In this chapter, the results obtained from the questionnaire responses which was administered to the disabled ex-trainees of the Rural Vocational Rehabilitation Centres are presented. The tabulated date is analysed and discussed with each independent variable influencing the ultimate resettlement position of the rehabilities focussed on separately.

An effort is made to relate the results to two objective of the study, namely:

(i) Examining the efficacy of the vocational rehabilitation programme in resettling the rehabilities.

(ii) Attempting a cost - benefit analysis of Government involvement in the Vocational Rehabilitation Programme.

The discussion attempts to test the two hypotheses that:

(i) There is a significant difference in the form of returns accruing to trained disabled persons from their lifetime earnings as compared with their untrained counterparts.

(ii) There is marked difference between the returns realized from earnings accruing to a trained disabled person and that from an able bodied person in a comparable programme.

The major dependent variable looked at by the study instrument is the settlement/resettlement status of the disabled ex-trainee as determined by the income accruing after vocational rehabilitation training. Some independent variables considered by the questionnaire are sex, the duration of training, the trade of specialization, income from regular trade, tool kit and additional income. Algebraically, it can be stated:

\[ \text{Income (Resettlement) Adequency} = f (\text{Sex, Training, Trade, Duration, Tool Kit, Additional income}) \]

In subsequent pages, an attempt is made to examine each variable.
Sex of Respondents

Of the 351 disabled ex-trainees interviewed 263 or 75% were males and only 88 or 25% were females. Most of the women tended to prefer Tailoring, Weaving, Spinning and Knitting, with very few opting for Woodwork, Leatherwork, Agriculture or Printing. Men, however, spread across all the six major trades, with a greater concentration on Leatherwork and Tailoring. Table 4:1 below summarizes the data.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>263</td>
<td>75%</td>
</tr>
<tr>
<td>Female</td>
<td>88</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>351</td>
<td>100%</td>
</tr>
</tbody>
</table>

Duration of Training

Most of the respondents, 198 which comprised of 56% indicated they had trained for two years while 143 which comprised of 40% showed they had spent one year in residential vocational rehabilitation training, 9 or 3% indicated they spent three years.
Table 4:2 below summarizes the data:

### Table 4:2  Length of Vocational Rehabilitation Training.

<table>
<thead>
<tr>
<th>Period</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Year</td>
<td>144</td>
<td>41%</td>
</tr>
<tr>
<td>Two Years</td>
<td>198</td>
<td>56%</td>
</tr>
<tr>
<td>Three Years</td>
<td>9</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>351</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Trade**

The respondents indicated they had trained in six major trades in the following descending numerical order: Leatherwork 146 or 42%, Tailoring 123 or 35%, Woodwork 54 or 15%, Weaving/Spinning or Knitting 14 or 4%, Agriculture 5 or 1% and Cloth Printing 4 or 1%. Some 10 or 3% of the respondents did not indicate they had trained in any of the trades for self-employment. The data is summarized in Table 4:3 below:
Table 4:3 Trade of Specialization of Respondents

<table>
<thead>
<tr>
<th>Trade</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leatherwork</td>
<td>146</td>
<td>42%</td>
</tr>
<tr>
<td>Tailoring</td>
<td>123</td>
<td>35%</td>
</tr>
<tr>
<td>Woodwork</td>
<td>54</td>
<td>15%</td>
</tr>
<tr>
<td>Weaving/Spinning/Knitting</td>
<td>14</td>
<td>4%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>5</td>
<td>1%</td>
</tr>
<tr>
<td>Printing</td>
<td>4</td>
<td>1%</td>
</tr>
<tr>
<td>None Indicated</td>
<td>10</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>351</td>
<td>100%</td>
</tr>
</tbody>
</table>

Tool Kit Adequacy

Nearly all the respondents indicated they had been provided with a tool kit at completion of vocational rehabilitation training. They, however, gave strikingly different responses when asked whether they considered the tool kit adequate in starting them off in self employment. While the majority, 51% or 51% found it satisfactory, 159 or 45% considered it insufficient. Some 13 respondents or 4% indicated they had not received any tool kit. The information is summarized in Table 4:4 below.
### Table 4:4 Adequacy of Tool Kit provided to Respondents

<table>
<thead>
<tr>
<th>Response</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate</td>
<td>179</td>
<td>51%</td>
</tr>
<tr>
<td>Not Adequate</td>
<td>159</td>
<td>45%</td>
</tr>
<tr>
<td>No Indication</td>
<td>13</td>
<td>4%</td>
</tr>
</tbody>
</table>

351 100%

### Additional Income

A large majority of the respondents, 284 or 81% indicated they rely on the income they earn from the regular self-employment in the trade in which they were trained at the Vocational Rehabilitation Centre and have no extra source. Some 67 or 19%, however, indicated they had supplementary income. Only few of them gave figures as to how much they earned from the extra sources. The Table 4:5 below summarizes the data:

### Table 4:5 Additional Source of Income For Respondents

<table>
<thead>
<tr>
<th>Response</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Income</td>
<td>67</td>
<td>19%</td>
</tr>
<tr>
<td>No Additional Income</td>
<td>284</td>
<td>81%</td>
</tr>
</tbody>
</table>

351 100%
Resettlement

When asked whether they regarded themselves as settled in self-employment, 199 or 57% of the respondents indicated they were settled while 152 or 43% saw themselves as not satisfactorily settled and gave reasons such as inadequacy of the tool kit, problems with finding affordable premises to work in, local charges and finding a market for finished products. The Table 4:6 below summarizes the data:

Table 4:6 Settlement Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settled</td>
<td>199</td>
<td>57%</td>
</tr>
<tr>
<td>Not Settled</td>
<td>152</td>
<td>43%</td>
</tr>
<tr>
<td></td>
<td>351</td>
<td>100%</td>
</tr>
</tbody>
</table>

Income From Regular Trade

An important determinant of self reliance in resettlement for the self employed disabled ex-trainees of Vocational Rehabilitation Centres is income accruing from the trade. Some 89 or 25% of the respondents indicated that they were earning an income of between KShs. 101/= to KShs. 200/= per month; 36 or 10% indicated they had a monthly income of between KShs. 201/= and KShs 300/=; 18 or 5% had a monthly income of between KShs. 301/= and KShs. 400/=; 5 or 1% had an income of between KShs.
401/= to Kshs.500 per month; 30 or 7% had an income of between Ksh.501 to Kshs.1,000 a month and only 9 or 3% indicated they had a monthly income of above Kshs.1,000.

A large number, 98 or 28% of the respondents gave no specific figures of their income. The Table 4:7 below gives a breakdown of the income figure, thus:

Table 4:7 Monthly Income of Respondents from Regular Trade.

<table>
<thead>
<tr>
<th>Amount of Income in KShs. per month</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 100</td>
<td>89</td>
<td>25%</td>
</tr>
<tr>
<td>101 - 200</td>
<td>75</td>
<td>21%</td>
</tr>
<tr>
<td>201 - 300</td>
<td>36</td>
<td>10%</td>
</tr>
<tr>
<td>301 - 400</td>
<td>18</td>
<td>5%</td>
</tr>
<tr>
<td>401 - 500</td>
<td>5</td>
<td>1%</td>
</tr>
<tr>
<td>501 - 600</td>
<td>10</td>
<td>3%</td>
</tr>
<tr>
<td>601 - 700</td>
<td>7</td>
<td>2%</td>
</tr>
<tr>
<td>701 and above</td>
<td>98</td>
<td>29%</td>
</tr>
<tr>
<td>no response</td>
<td>351</td>
<td>100%</td>
</tr>
</tbody>
</table>

351/
From the responses, it is apparent that information on income from the disabled ex-trainees of the Vocational Rehabilitation Centres was not easy to get.

Income Sufficiency

When asked to state whether or not the income they get from their self-employment was sufficient to maintain them and their dependants, only 62 or 18% of the respondents expressed satisfaction. The rest, 289 or 82% indicated it was not enough. Information is given in Table 4:8 below:

<table>
<thead>
<tr>
<th>Response</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate</td>
<td>62</td>
<td>18%</td>
</tr>
<tr>
<td>Inadequate</td>
<td>289</td>
<td>82%</td>
</tr>
<tr>
<td></td>
<td>351</td>
<td>100%</td>
</tr>
</tbody>
</table>

Age of Respondents:

Most of the respondents, 228 or 65% gave their age as being between 21 and 30 years, while 86 or 25% gave their age as being between 31 and 40 years. Only 18 or 5% were under 20 years.
old while those aged above 41 were 13 or 4%. The Table 4:9 below summarizes the data:

**Table 4:9 Age of Respondents**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 20 years</td>
<td>18</td>
<td>5%</td>
</tr>
<tr>
<td>21 - 30 years</td>
<td>228</td>
<td>65%</td>
</tr>
<tr>
<td>31 - 40 years</td>
<td>86</td>
<td>25%</td>
</tr>
<tr>
<td>41 - 50 years</td>
<td>13</td>
<td>4%</td>
</tr>
<tr>
<td>51 and above</td>
<td>1</td>
<td>02%</td>
</tr>
<tr>
<td>No Response</td>
<td>5</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>351</td>
<td>100%</td>
</tr>
</tbody>
</table>

**DISCUSSION**

**The Cost of Vocational Rehabilitation Training**

Direct investment in the vocational rehabilitation of disabled persons can be seen in terms of the expenditure incurred by the Department of Social Services in running the national programme. In the current financial year 1989/90 the Government allocated KShs. 11,684,000 to be spent on the programme's current expenses. The ten operational Vocational Rehabilitation Centres cater for a total of 635 disabled trainees with an average training period of 18 months (the ex-trainee responses gave 40% as having taken one year and 56% as having taken two years).
For each financial year, the Government therefore spends an average of KShs. 18,400/= for recurrent expenses per rehabili-
tee. For the average training period of 1½ years, that would come
to KShs. 27,600. The Expenditure figures are got from the
Annual Recurrent Estimates while the enrolment figures were
found in the Department of Social Services.

Since admission for Vocational Rehabilitation training does
not presuppose previous school attendance, the assumption
is that expenses on it constitute the only investment in
human resource development to take into account. When it
is found necessary to teach functional literacy to the rehabi-
liette, it is done within the context of their essentially
vocational rehabilitation training.

There is not much difference to the rehabilitees in terms
of training cost between the various trades because no fees
are paid for tuition, maintenance, or tool kits by them and
their families. Monthly allowance is provided to cater for
travel and out-of pocket expenses. A trade such as tailoring
becomes expensive at graduation because the sewing machine
which is a major component of the tool kit costs much more than
the components of the tool kits provided for the other trades.
A complete leatherwork tool kit, for instance, costs roughly
KShs. 5,000/= and so does a Woodwork, Agriculture or Knitting
and Weaving tool kit. A tailoring tool kit costs about KShs.
10,000.00. This, in effect, makes Tailoring bound to have a
lower social rate of return. The same would apply to a trade
like Metalwork with essential welding equipment costing over KShs. 14,000/= as a component of the tool kit. None of the respondents trained in Metalwork were interviewed, it being a course introduced over the last three years only in the Rural Vocational Rehabilitation Centres. It is the author's contention that for most of the fairly severely disabled persons undergoing training in Rural Vocational Rehabilitation Centres, the opportunity cost in terms of foregone earnings is not a major component of the total training cost.

As compared to vocational training of the non-disabled youth in the Youth Polytechnics, the cost of vocational rehabilitation training is bound to be much higher since, in addition to the provision of special equipment for mobility and availability of medical rehabilitation personnel such as nurses, physiotherapists or occupational therapists, the cost of whose services have to be included in the total training costs, boarding costs are also included. Youth Polytechnics are mostly non residential training institutions which are run by the Occupational Instructors and partial cost of purchases of training equipment. The trainees pay fees for tuition, and meet travel, accommodation and out of pocket expenses. Since the expenses of training are partially borne by the trainee and his/her family, it would mean that the private internal rate-of-return would be much lower than is the case with rehabilitees in Rural Vocational Rehabilitation Centres.
The able bodied youth of comparable education, age and socio-economic background can be regarded as potential recruits to the agrarian labour force and the loss of such earnings while undergoing Vocational training in the Youth Polytechnics is a valid opportunity cost to be added on to the other direct training costs. With the recently introduced cost-sharing strategy for most educational and vocational training institutions, it would appear that unless the prospect of providing vocational rehabilitation training entirely out Government expense is also reviewed, potential private returns to the disabled will be fairly high, thus encouraging more clients to participate in the programme.

Returns To Vocational Rehabilitation

The extent of success of vocational rehabilitation efforts judged by the earnings accruing from the self-employment ties of the ex-trainee. In a case where the ex-trainee no previous job prior to admission for vocational rehabilitation training, it is referred to as settlement. Where ex-trainee has a job which was interrupted by the onset disability, getting down to a post vocational rehabilitation training job is referred to as resettlement. Satisfactory settlement/resettlement can be seen to be largely determined by the amount of income earned by the ex-trainee. A disabled ex-trainee who earns an income from his/her regular job which would compare to a minimum income in
similar environment, thus ensuring enjoyment of a minimum standard of living, can be regarded as being satisfactorily resettled/settled. One such standard could be the minimum monthly wage in the rural areas as set by the government which is currently Kshs.600. Alternatively, the national income per capita per month coming to Kshs.500 can be used. The responses from the ex-trainees gave a disappointing picture of their resettlement/settlement position. Altogether, 61% of the respondents indicated they have an income of below Kshs.400 monthly. With a non-response from 98 interviewees, or 28% of the total number of respondents have incomes accruing from their post training self-employment which is above Kshs.500 per month.

Most of the respondents, 65%, indicated their ages ranged between 21 and 30 years and another 25% aged between 31 and 40 years. Assuming a normal working life of up to the age of 55 years which is Kenya's age of compulsory retirement in government, it can be estimated that many of the disabled in the vocational rehabilitation training programme start working from the age of about 20 years, which gives them a working life of approximately 35 years. That can be seen as the period when returns to investment in vocational rehabilitation training can be realized in the form of earnings from self-employment in the trades the rehabilitees had specialized in. Taking Kshs.200 per month as close to the mean earning of the respondents, the life-time earnings of the respondents can be Kshs.200x35x12 = Kshs.84,000. This would give a cost:
benefit ratio of 1:3. Thus over the life-time of the disabled ex-trainees, overall benefits as a result of vocational rehabilitation training outstrip the costs by 300%. This has, however, not taken into account the fact that the entire cost of vocational rehabilitation is borne by the society while the benefits accrue largely to individual disabled persons.

Social Rate of Return

With the stream of income calculations in the foregoing paragraph of KShs.200 per month for a period of 35 years and assuming a rate of interest charged by government parastatal funding establishments such as the Industrial Development Bank or The Kenya Industrial Estates at 14% and also assuming the cost of training one disabled person over a total period of one and a half (1½) years at Kshs.27,600, the social rate of return to investment in Vocational Rehabilitation training can be given by calculating the formula:

\[
\sum_{t=1}^{n} \frac{B_t - c_t}{(1 + r)^t} = 0
\]

Where

- \( n \) = Number of years income is earned
- \( B \) = net benefits of the project
- \( C \) = Cost of the project
- \( t \) = time
- \( 1 + r \) = Rate of discount
The social-rate-of-return to the investment in vocational rehabilitation training is comparable social rate-of-return to investment in education are 21.7% for primary, 19.2% for secondary and 8.8% for university. The private rate-of-return of investment in vocational rehabilitation training is 55%. Compared to other rate-of-return to investment in various levels of education in Kenya such as primary (32.7%), secondary (30%), university (27.4%) (Psacharopoulos, 1973, 59) it is apparent this is an attractive return rate. This is as a result of the almost zero expenditure incurred by the families of the disabled trainees while they are undergoing residential training and during resettlement in self employment. It is assumed also that no foregone earnings are involved as the alternative to training means a life of dependence for even basic activities of daily living on family members.

Since the training cost is borne solely by the government, it means, therefore, that the social rate-of-return to investment in vocational rehabilitation training in Kenya is much lower than the private rate-of-return. This means that with increased earnings accruing to the disabled ex-trainees from self employment, the profitability of investment to the government and the individual would be increased to quite attractive levels.
Looked at in a broader perspective, the total benefits the society realizes as a result of the economic self-reliance of the disabled can be seen as transforming them from perpetual dependants on society and families into productive individuals contributing to national income. Their consumption capability gets enhanced and with it, the indirect tax contribution. They are thus turned from economic liabilities to social and economic assets. Thus account needs to be taken of the costs of not providing vocational rehabilitation to disabled persons in a population. Thus account needs to be taken of the costs of not providing vocational rehabilitation to disabled persons in a population. Such costs would include assistance with activities of daily living and general maintenance such as provision of food, shelter and clothing, all of which would direct the family's and society's resources to meeting the costs of dependence. Depending on the severity of disability, a person or persons could be assigned to cater for the needs of the disabled member of the family. Apart from providing vocational training, vocational rehabilitation training prepares the rehabilitees to cope with their essential daily needs on their own. Although it may not be readily quantified, the economic value of those important components of vocational rehabilitation training, a ready comparison needs to be made with the view society has of the consumption dimensions of
education which is accommodated as an indispensable component of
the function of education for which society and families have to
generously in the face of competing demand for limited
resources by other sectors of the economy. Just like education,
vocational rehabilitation of the disabled can be treated as a
merit good, the provision of which needs to be ensured by
the Government so as to ensure some minimum basic needs and
standard of living for a sizable sector of the population.
When the costs and returns of education are being computed,
account is taken of the opportunity cost of the time of
students which they are spending on acquiring education but
which they could spend on doing productive work for which they
could be earning income. In the case of the disabled ex-
trainees of the rural vocational rehabilitation centres
covered in this study, the researcher assumed minimal earnings
foregone because of the physical toning up and development of
the rehabilitees' residual productive capacity. Without
vocational rehabilitation intervention, little economic value
was conceived of the productive potentialities of the reha-
bilitees. The value added to their residual vocational capa-
cities can be seen as conspicuous in a rural setting with the
acquisition of the level of income arrived at with the data
in this study.

Vocational Rehabilitation and Employment

The problem of finding employment for the disabled is addressed
by the Kenyan vocational rehabilitation programme. For the responses to the researcher's questionnaire, the ex-trainees have shown a general effort to settle/resettle in their trades and utilize the skills inculcated during the period of training and earn incomes through self employment in the rural areas. They acknowledge the problems which they experience in the process and wish them ameliorated, which also suggests appreciable psychological preparation for employment. It provides an example of a case where, in a rural situation, employment is being generated and where the kind of training offered is directly relevant for the potential job opportunities in the rural environment. This can be looked at in the light of the experience of the hitherto much discussed mismatch between the education provided to the youth and the available job opportunities, resulting in school leaver unemployment. The craze for the acquisition of certificates whose values have progressively deteriorated over time which has been a criticised characteristic of the Kenyan educational system has been absent in the rural vocational rehabilitation training where emphasis has been on attendance and skill acquisition. The advocacy for vocationalization of the formal education which is now acclaimed in the 8:4:4 educational system in Kenya is highlighted in the programme.

What seems apparent is the desire to have the settlement/resettlement resources enhanced so that the disabled ex-trainees realize a more sustaining income level comparable
to those prevailing in the rural small scale businesses run by artisans with government support such as Jua Kali (Open Air) enterprises. In their responses to the questionnaire, the disabled ex-trainees and Social Workers supervising their performance in resettlement have recommended increased assistance to secure business premises, loans, raw materials and marketing of their products.

Efficiency in Vocational Rehabilitation

From the questionnaire responses, it is clear that while the average training period in the Rural Vocational Rehabilitation Centres is one and half years, a good number of respondents indicated their training lasted one year only while some indicated as long as three years. Since the training curriculum for the institutions is uniform for the various trades except for Traditional Crafts, a review with a view to making the length of time uniform and shorter while maintaining skill level could be feasible.

The Rural Vocational Rehabilitation Centres are built to standard specifications in terms of physical structures for accommodation and training. Records held in the Department of Social Services and a personal visit to the institutions by the researcher confirmed this together with enrolment figures. The institutions could easily increase their intake of trainees.
an optimum operational capacity, thus greatly reducing the overhead costs of vocational rehabilitation training and at the same time increasing the supply of the sought for training opportunities. An optimum Occupational Instructor/trainee ratio could be considered.

In the questionnaire responses, the ex-trainees did not complain about the training given at the institutions and the facilities they enjoyed while there. With the apparent adequate facilities, there could be room for improving the potential competitiveness of the graduates of the Rural Vocational Rehabilitation Centres by ensuring high levels of skills attainment. The role of literacy in successful business operations, especially in record keeping could be critically looked at.

All these foregoing reflections could have the effect of maximizing the use of the available vocational rehabilitation resources and, thereby, ensuring the full utilization and return to every shilling spent on the training and employment of the disabled.

Equity In Vocational Rehabilitation

From the questionnaire responses, it can be observed that graduates of the Rural Vocational Rehabilitation Centres engage in income generating activities in the rural areas whose returns are quantifiable in terms of earnings per month.
The expenditure outlay lavished by the Government for the institutional training of the disabled constitutes an investment in human resources development. Because the costs of vocational rehabilitation training are fully borne by the Government and, like other similarly financed educational programmes, the larger proportion of returns accrue to the individual in the form of lifetime earnings, its income distribution potential could be considerable. It could be used to increase incomes for the poor whose ability to meet educational and training costs for themselves and their offsprings is limited. There is generally a direct relationship between disability and poverty in that disability limits an individual's productivity and at the same time calls for special expenditure to counteract its effects by the individual and the family, thus diverting scarce resources from other uses. To the rich, government financed vocational rehabilitation can be seen as tantamount to a subsidy from the tax payers in the same vein that free education has been criticized of unduly benefiting the rich at the expense of the poor.

If vocational rehabilitation were to be used in serving the ends of equity and distributive justice in the same way the education system in Kenya is currently being made to serve, attention could be focussed on the distribution trend of vocational rehabilitation institutions. From the questionnaire responses, it appears that apart from the disproportionate geographical concentration of disabled
ex-trainees, there is also a disproportionate representation of the sexes. The location of the operational Rural Vocational Rehabilitation Centres also reflect a disproportionate geographical concentration. By the time of completion of this study, construction work was underway at Garissa in North Eastern and Machakos in Eastern Provinces. Most of the respondents covered by this study had orthopaedic or physical disabilities. None of them had mental retardation while very few had visual handicap or deafness. Vocational rehabilitation services for these other disabilities need to be stepped up.
CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

This study has brought out to the researcher a number of issues which need focusing upon by policy makers, service providers, administrators and consumers of vocational rehabilitation services which are outlined below in this concluding chapter.

CONCLUSIONS:

1. Human Resources Development

The conceptualization and running of the Kenyan vocational rehabilitation programme and recognition of the productive value of disabled persons in an overall attempt to mobilize the entire manpower in the country into participation in productive work, thereby contributing towards creation of national wealth is underscored in the Literature review. Vocational rehabilitation training which aims not only at imparting working skills and attitudes but also at ensuring requisite medical rehabilitation and continued physical capability of the residual abilities of the disabled is a conscious effort to develop human capital by the Kenya Government. Apart from the desire to uphold dignity through provision of an essential service to a disadvantaged group in the population, investment considerations feature prominently in the provision of vocational rehabilitation for disabled Kenyans. The consistent budgetary expenditure pattern by the Government on the Special Education and Vocational Rehabilitation Programmes is a manifestation of commitment to uplift the welfare and productive capacity of the disabled.
2. Employment

The Kenyan vocational rehabilitation programme performs an effective training and resettlement role for the disabled. Most of the clients who went through the programme in the rural based institutions and were traced in this study ended up finding an occupation in which they have settled as self-employed persons with incomes. The training curriculum manages to equip them with relevant skills and attitudes for their self-employment in the rural areas. The programme's approach fits in with Kenya's policy of emphasizing creating employment opportunities in the rural areas especially in the small scale informal sector. It seems to be one strengthened in the general attack on unemployment in the country alongside others such as the youth polytechnic movement and the youth centres. It is encouraging to note that the Department of Social Services is trying to reinforce, with the assistance of the International Labour Organization, the programme by introducing supplementary initiatives such as the Community Based Rehabilitation which de-emphasizes the costly institutionalized training, sheltered employment schemes for groups of severely disabled rehabilitees, working co-operative movements and loaning facilities as borne out in the Literature review.

3. Earnings of Rural Vocational Rehabilitation Graduates

This study has come up with fairly low levels of earnings for the ex-trainees of Rural Vocational Rehabilitation Centres, approximately one third of the legal monthly minimum wage for rural areas. While the income is considered by the researcher as inadequate for maintaining a disabled graduate at a decent...
minimum standard of living in view of the reduced chances he has for engaging in complementary income earning activities, the researcher sees it as a substantial private return to the graduate who never met the cost for vocational rehabilitation training and whose earnings foregone during the period was negligible. The benefits in terms of total accruing lifetime earnings are treble the training costs met by the Government. There are other unquantifiable positive spill over effects to the community arising from the social and economic self reliance attained by the graduate which include enhanced participation in social activities, payment of taxes, or raising a family as in characteristic of all provision of education. This study has revealed significant high rates of return (55% private high rate -of-return to investment in vocational rehabilitation and 26.3% social) which are much higher than hitherto realized in education in Kenya.

4. Efficiency in the vocational Rehabilitation Programme
The cost of providing rural vocational rehabilitation training which stands at Kshs.27,600/= for the 1½ year training period is high and if it was to be borne by individual rehabilitees and their families, could be prohibitive. The survey of the enrolment pattern and the physical facilities in the rural vocational rehabilitation centres has shown that while each of the institutions has the capacity of accommodating one hundred disabled trainees, the current average enrolment is only fifty (50) while the programme has a waiting list of about 5,000 applicants. There is, therefore, a crucial need to increase the internal efficiency in the programme.
5. Equity Considerations

Vocational rehabilitation training is capable, as demonstrated in this study, of cultivating income earning capacity of disabled persons and also generating employment for them. This income distribution role can be utilized to reduce the poverty levels of the beneficiaries of the programme and their families. Allocation of the resources for the programme such as the location of the institutions has been shown in the study to be concentrated in certain geographical areas of the country and also that provision of the facilities have tended to favour men rather than women as seen from the trades offered and the enrolment patterns. It is noted from the study that the quality of training offered by the various institutions is the same and so are the standard tool kits provided for the same trades. This could have the effect of equalizing incomes of the rehabilitees, allowing only for individual physical and, or background differences.

6. Certification

The Rural Vocational Rehabilitation Centres' practice of gearing training to pre-conceived self employment market has made it possible to ignore the prevalent concern for a recognized national certificate at the end of each course. Disabled graduates traced in this study have not indicated disillusionment with the certificates of attendance issued by the Department of Social Services, whose value does not equate with the trade certificate issued by the Directorate of Industrial Training in the Ministry of Labour. This can be seen as an example of playing down the value and role of examinations and
certificates which critics of the formal education systems have been reiterating. But, most likely, with the increase of artisan competition for rural markets for their Jua Kali made products, a higher degree of skill mastery may be required to ensure markets for disabled extrainees of the Rural Vocational Rehabilitation Centres.

7. Disability Categories

From the responses in the questionnaire and also from the Literature survey services provided by the Government belong to the orthopeadic or physically handicapped category as contrasted with the deaf, blind and mentally handicapped.

RECOMMENDATIONS:

1. Follow-up activities for the disabled ex-trainees of Rural Vocational Rehabilitation centres need to be strengthened and the findings utilized as the basis for continued improvement of the general physical and productive condition of the disabled ex-trainees. These should include a general review of self reliance status as judged by the competence with which the Activities of Daily Living (A.D.L.) are discharged, on the one hand, and the in-service training to update vocational skills, on the other hand.

2. Initiatives aimed at providing self employment for disabled ex-trainees of rural vocational rehabilitation centres should also take into account arrangements for marketing their finished products and also consultancy services on how to sustain viable enterprises.
3. It is important that resettlement resources for the disabled ex-trainees of rural vocational rehabilitation centres be increased so that higher level of earnings can be realized, comparable to those earned by able bodied counterparts running small scale enterprises in the rural areas. It is desirable that the ex-trainees realize earning equivalent to the prevailing minimum wage. The high private rate of return indicates a need to introduce an element of cost sharing so that families meet some costs of training the disabled, in line with the contemporary structural adjustment initiatives.

4. The overhead training costs in the rural vocational rehabilitation centres can be reduced by increasing the internal efficiency of the programe. This can be done by increasing the number of trainees so that the existing physical facilities at the institutions are fully utilized. The training period can also be reduced while retaining the curriculum content. Some shorter courses can be introduced whose local marketability are proven. Cost effectiveness needs to be exhibited more in the process of training and resettling the rehabilitees. The existing Rural Vocational Rehabilitation Centres can almost double their trainee capacity without lowering the quality of instruction with the exercise of more stringent efficiency measures by administrators of the programme.

5. The location of rural vocational rehabilitation centres should take geographical considerations into account. Training curriculum and enrolment needs to cater for an increased proportion of disabled women.
6. The rural vocational rehabilitation centres should consider offering trade tests as a measure aimed at ensuring high level skills for the rehabilitees.

7. Rural Vocational Rehabilitation centres should be built for the deaf, blind and mentally handicapped persons so that the benefits of vocational rehabilitation training is spread to disabled persons of all the four major categories.

FURTHER RESEARCH IMPLICATIONS

From the conclusions and recommendations of this study, there is need to conduct further research in the following areas on the Kenya Vocational Rehabilitation Programme:-

(a) The rate-of-return to society and the individual beneficiaries of the Rural Vocational Rehabilitation Programme which has proved to be higher than in other educational programmes need further investigation, especially with a view to accommodating graduates of the Industrial Rehabilitation Centre who are earning standard wages in the open labour market.

(b) The relationship between the literacy and numeracy level of the disabled ex-trainees and their post training performance, especially in self employment requires illumination. This study has not covered the subject.

(c) Equity implications in the Vocational Rehabilitation Programme in respect of earnings and the benefits and level of participation for women require investigation.
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APPENDIX "A"

Questionnaire for follow-up of Ex-trainees of Vocational Rehabilitation Centres

SECTION A

Background Information

1. Name of Trainee (underline surname) __________________________

2. i) Age ________________ years
   ii) Sex: Male □ Female □

3. Marital Status: Single □ Married □
   Widowed □ Divorced □

4. Dependents:
   i) Number of children supported by trainee __________
   ii) Number of other people supported by trainee ______

5. i) Home address ______________________________
    ii) Sub-location _____________________________
    iii) Assistant Chief's Name _________________________
    iv) Location ________________________________
    v) Chief's Name ______________________________
    vi) District _____________________________
    vii) Province _____________________________
    viii) Postal address (if different from home address)
          ________________________________

6. i) Full name of father/guardian __________________________
    ii) Is father/guardian alive or dead?
        Alive □ Dead □
iii) Occupation of father/guardian __________________________
iv) Address of father/guardian __________________________
v) Full name of mother __________________________
vi) Is mother alive or dead? Alive □   Dead □
vii) Address of mother __________________________

7. Disability of trainee __________________________

SECTION B:
Training
1. Rehabilitation centre attended __________________________
2. Period of training: From __________ to __________
3. What trade did the trainee specialize in __________________________

SECTION C:
Resettlement
1. How has the trainee settled?
   i) In self employment   Yes □   No □
   ii) In wage earning employment   Yes □   No □
   iii) Was the trainee provided with a tool kit?   Yes □   No □
   iv) If (iii) if yes, is the tool kit adequate?   Yes □   No □
   v) Indicate if not yet settled: Settled □   Not Settled □
   vi) His/her estimated monthly income from regular occupation Kshs. _______ cts
   vii) Apart from the regular occupation for which he/she was trained, does the trainee have another source of income?   Yes □   No □
   viii) If answer to question (vii) above is yes, estimate the amount of extra income per month Kshs. _______ cts
ix) If trainee has an employer, give the name and address of employer ____________________

2. i) What kind of occupation is the trainee involved in at the moment? ____________________

ii) What problems does the trainee experience in his/her work? _______________________

(Use the back of this sheet if space provided is not enough)

iii) Are there any charges levied by the local authority? Yes [ ] No [ ]

iv) Please indicate the amount charged Shs. __________

v) Does he/she experience any problems in obtaining a licence? Yes [ ] No [ ]

vi) If (v) above is yes, then please explain ____________________________

vii) Is the income earned from the occupation sufficient to maintain the trainee? Yes [ ] No [ ]

viii) What development and or investments has the training made since settling? __________

ix) Since he/she left the Rehabilitation Centre, how many times has the trainee been visited by a Government Officer? ________________

3. Recommendation/comment of interviewing officer __________________

(use the back of this sheet if space provided is not sufficient)

Name of interviewing officer __________________

Signature __________________________________

Designation _________________________________

Date ________________________________________
The General Conference of the International Labour Organisation
Having been convened at Geneva by the Governing Body of
the International Labour Office and having met in its Sixty-
ninth Session on 1 June 1983, and
Noting the existing international standards contained in
the Vocational Rehabilitation (Disabled) Recommendation, 1955, and
Noting that since the adoption of the Vocational Rehabilitation
(Disabled) Recommendation, 1955, significant developments have occurred
in the understanding of rehabilitation needs, the scope
and organisation of rehabilitation services, and the law
and practice of many Members on the questions covered by
that Recommendation, and
Considering that the year 1981 was declared by the United
Nations General Assembly the International Year of Disabled
Persons, with the theme "full participation and equality"
and that a comprehensive World Programme of Action concerning
Disabled Persons is to provide effective measures at the
international and national levels for the realisation of
the goals of "full participation" of disabled persons in
social life and development, and of "equality", and
Considering that these developments have made it appropriate
to adopt new international standards on the subject which
take account, in particular, of the need to ensure equality of opportunity and treatment to all categories of disabled persons, in both rural and urban areas for employment and integration into the community, and

Having decided upon the adoption of certain proposals with regard to vocational rehabilitation which is the fourth item on the agenda of the session, and

Having determined that these proposals shall take the form of a Recommendation supplementing the Vocational Rehabilitation and Employment (Disabled Persons) Convention, 1983, and the Vocational Rehabilitation (Disabled) Recommendation, 1955,

adopts this twentieth day of June of the year one thousand nine hundred and eighty-three the following Recommendation, which may be cited as the Vocational Rehabilitation and Employment (Disabled Persons) Recommendation, 1983.

1. **Definitions and Scope**

   In applying this Recommendation, as well as the Vocational Rehabilitation (Disabled) Recommendation, 1955, Members should consider the term "disabled person" as meaning an individual whose prospects of securing, retaining and advancing in suitable employment are substantially reduced as a result of a duly recognised physical or mental impairment.

2. In applying this Recommendation, as well as the Vocational Rehabilitation (Disabled) Recommendation, 1955, Members
should consider the purpose of vocational rehabilitation, as defined in the latter Recommendation, as being to enable a disabled person to secure, retain and advance in suitable employment and thereby to further such person's integration or reintegration into society.

3. The provisions of this Recommendation should be applied by Members through measures which are appropriate to national conditions and consistent with national practice.

4. Vocational rehabilitation measures should be made available to all categories of disabled persons.

5. In planning and providing services for the vocational rehabilitation and employment of disabled persons, existing vocational guidance, vocational training, placement employment and related services for workers generally should, wherever possible, be used with any necessary adaptations.

6. Vocational rehabilitation should be started as early as possible. For this purpose, health-care systems and other bodies responsible for medical and social rehabilitation should co-operate with those responsible for vocational rehabilitation.

II. Vocational Rehabilitation and Employment Opportunities

7. Disabled persons should enjoy equality of opportunity and treatment in respect of access to, retention of and advancement in employment which, wherever possible, corresponds to their own choice and takes account of
their individual suitability for such employment.

8. In providing vocational rehabilitation and employment assistance to disabled persons, the principle of equality of opportunity and treatment for men and women workers should be respected.

9. Special positive measures aimed at effective equality of opportunity and treatment between disabled workers and other workers should not be regarded as discriminating against other workers.

10. Measures should be taken to promote employment opportunities for disabled persons which conform to the employment and salary standards applicable to workers generally.

11. Such measures, in addition to those enumerated in Part VII of the Vocational Rehabilitation (Disabled) Recommendation, 1955, should include:

(a) appropriate measures to create job opportunities on the open labour market, including financial incentives to employers to encourage them to provide training and subsequent employment for disabled persons, as well as to make reasonable adaptations to workplaces, job design tools, machinery and work organisation to facilitate such training and employment;

(b) appropriate government support for the establishment of various types of sheltered employment for disabled persons for whom access to open employment is not practicable;
(c) encouragement of co-operation between sheltered and production workshops on organisation and management questions so as to improve the employment situation of their disabled workers and, wherever possible, to help prepare them for employment under normal conditions;

(d) appropriate government support to vocational training, vocational guidance, sheltered employment and placement services for disabled persons run by non-governmental organisation;

(e) encouragement of the establishment and development of co-operatives by and for disabled persons and, if appropriate, open to workers generally;

(f) appropriate government support for the establishment and development of small-scale industry, co-operative and other types of production workshops by and for disabled persons (and, if appropriate, open to workers generally), provided such workshops meet defined minimum standards;

(g) elimination, by stages if necessary, of physical, communication and architectural barriers and obstacles affecting transport and access to and free movement in premises for the training and employment of disabled persons; appropriate standards should be taken into account for new public buildings and facilities;

(h) wherever possible and appropriate, facilitation of adequate means of transport to and from the
places of rehabilitation and work according to the needs of disabled persons;

(i) encouragement of the dissemination of information on examples of actual and successful instances of the integration of disabled persons in employment;

(j) exemption from the levy of internal taxes or other internal charges of any kind, imposed at the time of importation or subsequently on specified articles, training materials and equipment required for rehabilitation centres, workshops, employers and disabled persons, and on specified aids and devices required to assist disabled persons in securing and retaining employment;

(k) provision of part-time employment and other job arrangements, in accordance with the capabilities of the individual disabled person for whom full-time employment is not immediately and may not ever be, practicable;

(l) research and the possible application of its results to various types of disability in order to further the participation of disabled persons in ordinary working life;

(m) appropriate government support to eliminate the potential for exploitation within the framework of vocational training and sheltered employment and to facilitate transition to the open labour market.
12. In devising programmes for the integration or reintegration of disabled persons into working life and society, all forms of training should be taken into consideration; these should include, where necessary and appropriate, vocational preparation and training, modular training, training in activities of daily living, in literacy and in other areas relevant to vocational rehabilitation.

13. To ensure the integration or reintegration of disabled persons into ordinary working life, and thereby into society, the need for special support measures should also be taken into consideration, including the provision of aids, devices and ongoing personal services to enable disabled persons to secure, retain and advance in suitable employment.

14. Vocational rehabilitation measures for disabled persons should be followed up in order to assess the results of these measures.

III. Community Participation

15. Vocational rehabilitation services in both urban and rural areas and in remote communities should be organised and operated with the fullest possible community participation, in particular with that of the representatives of employers', workers' and disabled persons' organisations.

16. Community participation in the organisation of vocational rehabilitation services for disabled persons should be facilitated by carefully planned public information measures with the aims of:
17. Community leaders and groups, including disabled persons themselves and their organisations, should co-operate with health, social welfare, education, labour and other relevant government authorities in identifying the needs of disabled persons in the community and in ensuring that, wherever possible, disabled persons are included in activities and services available generally.

18. Vocational rehabilitation and employment services for disabled persons should be integrated into the mainstream of community development and where appropriate receive financial, material and technical support.

19. Official recognition should be given to voluntary organisations which have a particularly good record of providing vocational rehabilitation services and enabling disabled persons to be integrated or re-integrated into the worklife of the community.

IV. Vocational Rehabilitation in Rural Areas

20. Particular efforts should be made to ensure that vocational rehabilitation services are provided for disabled persons in rural areas and in remote communities at the same level on the same terms as those provided for urban areas. The development of such services should be an integral part of general rural development policies.

21. To this end, measures should be taken, where appropriate, to:
(a) designate existing rural vocational rehabilitation services or, if these do not exist, vocational rehabilitation services in urban areas as focal points to train rehabilitation staff for rural areas;

(b) establish mobile vocational rehabilitation units to serve disabled persons in rural areas and to act as centres for the dissemination of information on rural training and employment opportunity for disabled persons;

(c) train rural development and community development workers in vocational rehabilitation techniques;

(d) provide loans, grants or tools and materials to help disabled persons in rural communities to establish and manage co-operatives or to work on their own account in cottage industry or in agricultural, craft or other activities;

(e) incorporate assistance to disabled persons into existing or planned general rural development activities;

(f) facilitate disabled persons' access to housing within reasonable reach of the workplace.

V. Training of Staff

22. In addition to professionally trained rehabilitation counsellors and specialists, all other persons who are involved in the vocational rehabilitation of disabled persons and the development of employment opportunities should be given training or orientation
in rehabilitation issues.

23. Persons engaged in vocational guidance, vocational training and placement of workers generally should have an adequate knowledge of disabilities and their limiting effects, as well as a knowledge of the support services available to facilitate a disabled person's integration into active economic and social life. Opportunities should be provided for such persons to update their knowledge and extend their experience in these fields.

24. The training, qualifications and remuneration of staff engaged in the vocational rehabilitation and training of disabled persons should be comparable to those of persons engaged in general vocational training who have similar duties and responsibilities; career opportunities should be comparable for both groups of specialists and transfers of staff between vocational rehabilitation and general vocational training should be encouraged.

25. Staff on vocational rehabilitation, sheltered and production workshops should receive, as part of their general training and as appropriate, training in workshop management as well as in production and marketing techniques.

26. Wherever sufficient numbers of fully trained rehabilitation staff are not available, measures should be considered for recruiting and training vocational rehabilitation aides and auxiliaries. The use of such aides and
disabled persons and their organisations, should be able to contribute to the formulation of policies concerning the organisation and development of vocational rehabilitation services, as well as to carry out research and propose legislation in this field.

33. Wherever possible and appropriate, representatives of employers', workers' and disabled persons' organisations should be included in the membership of the boards and committees of vocational rehabilitation and training centres used by disabled persons, which make decisions on policy and technical matters, with a view to ensuring that the vocational rehabilitation programmes correspond to the requirements of the various economic sectors.

34. Wherever possible and appropriate, employers and workers' representatives in the undertaking should co-operate with appropriate specialists in considering the possibilities for vocational rehabilitation and job reallocation of disabled persons employed by that undertaking and for giving employment to other disabled persons.

35. Wherever possible and appropriate, undertakings should be encouraged to establish or maintain their own vocational rehabilitation services, including various types of sheltered employment, in close co-operation with community-based and other rehabilitation services.

36. Wherever possible and appropriate, employers' organisations should take steps to:

(a) advise their members on vocational rehabilitation
auxiliaries should not be resorted to as a permanent substitute for fully trained staff. Wherever possible, provision should be made for further training of such personnel in order to integrate them fully into the trained staff.

27. Where appropriate, the establishment of regional and subregional vocational rehabilitation staff training centres should be encouraged.

28. Staff engaged in vocational guidance, vocational training, placement and employment support of disabled persons may experience and, within their competence, deal with the resulting needs.

29. Where appropriate, measures should be taken to encourage disabled persons to undergo training as vocational rehabilitation personnel and to facilitate their entry into employment in the rehabilitation field.

30. Disabled persons and their organisations should be consulted in the development, provision and evaluation of training programmes for vocational rehabilitation staff.

VI. The Contribution of Employers' and Workers' Organisations to the Development of Vocational Rehabilitation Services

31. Employers' and workers' organisations should adopt a policy for the promotion of training and suitable employment of disabled persons on an equal footing with other workers.

32. Employers' and workers' organisations, together with
services which could be made available to disabled workers;

(b) co-operate with bodies and institutions which promote the reintegration of disabled persons into active life by providing, for instance, information on working conditions and job requirements which disabled persons have to meet;

(c) advise their members on adjustments which could be made for disabled workers to the essential duties or requirements of suitable jobs;

(d) advise their members to consider the impact that reorganising production methods might have, so that disabled persons are not inadvertently displaced.

37. Wherever possible and appropriate, workers' organisations should take steps to:

(a) promote the participation of disabled workers in discussions at the shop-floor level and in works councils or any other body representing the workers;

(b) propose guidelines for the vocational rehabilitation and protection of workers who become disabled through sickness or accident, whether work-related or not, and have such guidelines included in collective agreements, regulations, arbitration awards or other appropriate instruments;

(c) offer advice on shop-floor arrangements affecting disabled workers, including job adaptation, special work organisation, trial and employment and the
fixing of work norms;

(d) raise the problems of vocational rehabilitation and employment of disabled persons at trade union meetings and inform their members, through publications and seminars, of the problems of and possibilities for the vocational rehabilitation and employment of disabled persons.

VII. The Contribution of Disabled Persons and Their Organisations to the Development of Vocational Rehabilitation Services

38. In addition to the participation of disabled persons, their representatives and organisations in rehabilitation activities referred to in paragraphs 15, 17, 30, 32 and 33 of this Recommendation, measures to involve disabled persons and their organisations in the development of vocational rehabilitation services should include:

(a) encouragement of disabled persons and their organisations to participate in the development of community activities aimed at vocational rehabilitation of disabled persons so as to further their employment and their integration or reintegration into society;

(b) appropriate government support to promote the development of organisations of and for disabled persons and their involvement in vocational rehabilitation and employment services, including support for the provision of training programmes in self-advocacy for disabled persons;
(c) appropriate government support to these organisations to undertake public education programmes which project a positive image of the abilities of disabled persons.

VIII. Vocational Rehabilitation Under Social Security Schemes

39. In applying the provisions of this Recommendation, Members should also be guided by the provisions of Article 35 of the Social Security (Minimum Standards) Convention, 1952, of Article 26 of the Employment Injury Benefits Convention, 1964, and of Article 13 of the Invalidity, Old-age and Survivors' Benefits Convention, 1967, in so far as they are not bound by obligations arising out of ratification of these instruments.

40. Wherever possible and appropriate, social security schemes should provide, or contribute to the organisation, development and financing of training, placement and employment (including sheltered employment) programmes and vocational rehabilitation services for disabled persons, including rehabilitation counselling.

41. These schemes should also provide incentives to disabled persons to seek employment and measures to facilitate transition into the open labour market.

IX. Co-ordination

42. Measures should be taken to ensure, as far as practicable,
that policies and programmes concerning vocational rehabilitation are co-ordinated with policies and programmes of social and economic development (including scientific research and advanced technology) affecting labour administration, general employment policy and promotion, vocational training, social integration, social security, co-operatives, rural development, small-scale industry and crafts, safety and health at work, adaptation of methods and organisation of work to the needs of the individual and the improvement of working conditions.