1 OF/DE 3

28031

National Library
of CanadaBibliothèque nationale
du CanadaCANADIAN THESES
ON MICROFICHETHÈSES CANADIENNES
SUR MICROFICHE

NAME OF AUTHOR/NOM DE L'AUTEUR

BARBARA BROWN

TITLE OF THESIS/TITRE DE LA THÈSE

THE VIKING POLYTECHNIC -
AN EVALUATION

UNIVERSITY/UNIVERSITÉ

CARLETON

DEGREE FOR WHICH THESIS WAS PRESENTED/
GRADE POUR LEQUEL CETTE THÈSE FUT PRÉSENTÉE

M.A.

YEAR THIS DEGREE CONFERRED/ANNÉE D'OBTENTION DE CE GRADE

1976

NAME OF SUPERVISOR/NOM DU DIRECTEUR DE THÈSE

J-F CAUCIER

Permission is hereby granted to the NATIONAL LIBRARY OF
CANADA, to microfilm this thesis and to lend or sell copies
of the film.

L'autorisation est, par la présente, accordée à la BIBLIOTHÈ-
QUE NATIONALE DU CANADA de microfilmer cette thèse et
de prêter ou de vendre des exemplaires du film.

The author reserves other publication rights, and neither the
thesis nor extensive extracts from it may be printed or other-
wise reproduced without the author's written permission.

L'auteur se réserve les autres droits de publication; ni la
thèse ni de longs extraits de celle-ci ne doivent être imprimés
ou autrement reproduits sans l'autorisation écrite de l'auteur.

DATED/DATE

29-10-76

SIGNED/SIGNÉ

J. A. J. J. J.

PERMANENT ADDRESS/RÉSIDENCE FIXE

46 PATTERSON #3

OTTAWA, ONT

K1Y 0T0

INFORMATION TO USERS

THIS DISSERTATION HAS BEEN
MICROFILMED EXACTLY AS RECEIVED

This copy was produced from a microfiche copy of the original document. The quality of the copy is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

Canadian Theses Division
Cataloguing Branch
National Library of Canada
Ottawa, Canada K1A 0N4

AVIS AUX USAGERS

LA THESE A ETE MICROFILMEE
TELLE QUE NOUS L'AVONS RECUE

Cette copie a été faite à partir d'une microfiche du document original. La qualité de la copie dépend grandement de la qualité de la thèse soumise pour le microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

NOTA BENE: La qualité d'impression de certaines pages peut laisser à désirer. Microfilmée telle que nous l'avons reçue.

Division des thèses canadiennes
Direction du catalogage
Bibliothèque nationale du Canada
Ottawa, Canada K1A 0N4

THE VILLAGE POLYTECHNIC:
AN EVALUATION

by

Barbara A. Brown

A thesis submitted to the Faculty of
Graduate Studies and Research in partial
fulfilment of the requirements for the degree of
Master of Arts
in International Affairs

The Norman Paterson School of International Affairs
Carleton University
Ottawa, Ontario
Canada
November, 1976

© Barbara A. Brown 1976

8

The undersigned hereby recommend to the Faculty of
Graduate Studies and Research acceptance of this thesis, submitted
by Barbara Anne Brown, in partial fulfilment of the requirements for
the degree of Master of Arts.

Michael G. Fry, Director,
Norman Paterson School of International Affairs.

J-F. Saucier, Supervisor

ABSTRACT

In recent years what has been called non-formal or pre-vocational education has been espoused by international aid agencies as the panacea to the educational needs of the developing countries. This theory is, however, based on little first hand research into the effectiveness of current experiments in pre-vocational education. The aim of this paper is to study the success rate in terms of stated goals of one such experiment undertaken in Kenya: the Kenyan Village Polytechnic movement. The study was conducted in Kenya by the author from May to August 1974 and is based primarily on data gained from 100 intensive interviews with 'graduates' of the Village Polytechnic system.

The first chapters of the thesis provide a brief outline of the social and economic conditions which preceded the inception of the village polytechnic programme. The middle section analyses the results of the interviews and compares the results of groups differentiated on the basis of economic and educational background, regional origin and sex. The final chapters look specifically at the overall success rate of the 'graduates' in terms of the goals pursued by the Village Polytechnic movement and compare the data with other similar studies undertaken in previous years. The role of the village polytechnic within the Kenyan economic and educational systems is then discussed.

ACKNOWLEDGEMENTS

I would like to thank my supervisors Mr. S. Langdon, Mr. J.R. Nellis and Mr. J.F. Saucier for their many comments and support. In Kenya Mr. Robin Ford and Mr. E.M. Masale of the Ministry of Cooperatives and Social Services were of invaluable assistance in setting up appointments, offering advice and discussing with me their thoughts on the programme. As well the study would not have been possible without the assistance of the managers, instructors and instructresses who devoted many hours guiding me through the Kenyan countryside. In particular Mrs. E. Wambui made a special effort to locate her students for me and offered many insights into the issue of women's education. But my greatest thanks are due to the students who participated in the study and patiently answered all my questions. Finally I would like to thank the Canadian International Development Agency who afforded financial support both for my programme of studies in Canada and my work in Kenya.

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION.....	1
Footnotes.....	7
CHAPTER I THE DEVELOPMENT OF EDUCATION IN KENYA.....	8
Footnotes.....	22
CHAPTER II A BRIEF ECONOMIC HISTORY OF KENYA.....	24
Footnotes.....	41
CHAPTER III THE GROWTH OF THE VILLAGE POLYTECHNICS.....	43
Footnotes.....	60
CHAPTER IV THE NATURE OF THE STUDY.....	61
Other Methods of Investigation.....	72
Footnotes.....	74
CHAPTER V SUMMARY OF RESULTS.....	75
Personal Background of Respondents.....	75
Family Background.....	78
Education of Respondents.....	82
Work History of Respondents.....	90
Attitudes Towards the Training.....	91
Conclusion.....	95
Footnotes.....	97
CHAPTER VI FAMILY AND PERSONAL BACKGROUND OF THE LEAVERS.....	98
Effect of Family Economic and Educational Level on Formal Education and Work Activities.....	101
Summary.....	109
Effect of Family Educational and Economic Level on Attitudes and Goals.....	110
Summary.....	113
Effect of Student's own Education on Success in the Village Polytechnic, Work Experience and Future Aspirations.....	113
Summary.....	118
Footnotes.....	121

	<u>Page</u>
CHAPTER VII RELATIONSHIP OF REGIONAL DIFFERENCES TO TRAINEES' SUCCESS AND ATTITUDES.....	123
Footnotes.....	137
CHAPTER VIII COMPARISON OF THE MALE AND FEMALE GROUP.....	139
Summary.....	150
Footnotes.....	152
CHAPTER IX SUCCESS RATE OF LEAVERS AND OF VILLAGE POLYTECHNIC AS AN INSTITUTION.....	153
I The Area Served.....	154
II Level of Self-Reliance of Leavers.....	157
III Employment Rate of Leavers.....	158
Summary.....	168
Footnotes.....	171
CHAPTER X CONCLUSION.....	172
Footnotes.....	186
APPENDIX A BRIEF OUTLINE OF KENYAN EDUCATION SYSTEM.....	187
APPENDIX B INTERVIEW FORMS USED BY 1) ANDERSON 2) COURT 3) MINISTRY OF COOPERATIVES AND SOCIAL SERVICES 4) BROWN.....	188
APPENDIX C LEAVER TRACER QUESTIONNAIRE - FOR MANAGERS..	207
APPENDIX D POLICY RECOMMENDATIONS.....	212
APPENDIX E RESEARCH RECOMMENDATIONS.....	214
BIBLIOGRAPHY.....	215

LIST OF TABLES

<u>Table</u>		<u>Page</u>
I	Destination of 203 Male Leavers who attempted KPE in 1964	19
II	D. Court's Tabulation of the Village Polytechnic Ideal	57
III	Indicators of Father's Economic Background	79
IV	Ability of Trainees' Parents to Speak English	81
V	How Money was Raised for Primary School Fees	84
VI	Source of Primary School and Village Polytechnic Fees	86
VII	Primary Course Taken at Village Polytechnic	87
VIII	Trainees' Preferred Work	93
IX	Future Aspirations of Leavers	95
X	Breakdown of Economic and Educational Categories	101
XI	Percentage of Each Category Who Tried CPE	102
XII	Distribution of CPE Marks for Each Category	103
XIII	Percentage of Those Who Finished the Village Polytechnic Course by Category	106
XIV	Percentage of students a) who looked for work, b) who found work, by category	107
XV	No. of times self-employment was chosen as percentage of all other choices made by each group	111
XVI	Success and Aspirations of Students by Marks Received for CPE	116

<u>Table</u>		<u>Page</u>
XVII	Present Occupation of Leavers	118
XVIII	Differences in Family Economic and Educational Standing by Region	124
XIX	Present Occupation of Leavers by Region	128
XX	Job Seeking Characteristics of Males and Females by Marital Status	142
XXI	Age of Leavers by Sex and Region	145
XXII	Marriage Rates of Males and Females by Region	146
XXIIB	Job Seeking Characteristics of Males and Females by Region	148
XXIV	Present Occupation of Males and Females by Region	149
XXV	Locality Where Leavers are Employed	156
XXVI	Location of Work	156
XXVII	Self-Employment Rate of Leavers	158
XXVIII	Employment Rate of Leavers	159
XXIX	A. Present Occupation of Leavers - Male	160
	B. Present Occupation of Leavers - Female	161
	C. Present Occupation of Leavers - Both	161

INTRODUCTION

In recent years many people concerned with growing world economic disparities and world poverty, from western political analysts to politicians and civil servants from the poor countries themselves, have begun to devote more attention to the issue of rural development.¹ While the improvement of living conditions in the rural areas will not provide the ultimate solution to poverty, it is at the very least a necessity without which poorer countries cannot hope to improve their standards of living in general. In focussing on the problem of the rural areas, the poor countries are merely facing the inevitable. For many countries, 90% of their populations still live in a rural milieu and over 80% gain their living there from agriculture. In many cases people and land are the only resources which the country possesses. If a better material life is wanted these are the resources which must be exploited. Although this type of reasoning may now appear self-evident, this was not always the case. Economists first believed that the poor countries should concentrate investment primarily in the industrial sector.² The theory was that if the industrial sector flourished it would serve as a catalyst to the rest of the economy. Improving standards of living in poor countries has not proved to be so simple as these theorists of the 'leading sector' believed it would be. Those countries which have been

successful in raising better living standards for their people have found it necessary to concentrate their efforts on both the agricultural and industrial sectors. It is not a matter of chance, for instance, that Japan a hundred years ago and China today both put a great deal of attention to the solution of ruraly oriented problems and the improvement of agriculture.

If it is true that in general poor countries are forced by circumstance to concentrate on the development of the rural areas, this assertion is particularly relevant to the East African state of Kenya. In the first place Kenya has few mineral resources and thus does not attract major extractive investment of the type seen in Zambia and the Congo. With a large technically unskilled population and small market, only a limited number of industries can be induced to locate there or can be generated locally. On the other hand, Kenya's highland regions are good agricultural areas and her dry grasslands have proven excellent for cattle raising. Thus Kenya's hope for increasing the material standards of her people lies squarely in the rural areas where most of her people live: 'the land and the people are the prime assets of Kenya'.³

Yet since the establishment of Kenya as a British Colony and Protectorate, it appears that the politico-economic system has tended to draw people out of the rural areas and into the towns where the well-paid, high status

jobs are to be found. And from the very beginning the education system has reinforced this tendency. The history of European⁴ education in Kenya has often been a stormy one, since it was through the issue of educational equality for Africans that African leaders first brought to their people the broader issue of political and economic equality. During the 1920's, 1930's and 1940's, the demand for equal opportunities in education brought to the fore the demand for an equal share in the governing of the country. And it was partly because those groups such as the Luo and Kikuyu, who had had the most contact with Europeans, wanted education to serve short term political and economic goals, that the education system became divorced from the country's long term economic and social needs. Today Kenya has an education system wholly geared to producing white-collar administrators. During the colonial era when Africans saw the key to power as their ability to challenge the British administrators who controlled Kenya this kind of education system made infinite sense. At independence in 1963, the former British political and economic structures were taken over by Kenyans. To a great extent these structures have remained intact since then. Thus, in terms of the current economic structures, the rewards are high for the few who do manage to succeed within the present education system. The many who do not succeed, however, are largely excluded from the substantial benefits which the economy has to offer. Although the Kenya government

itself defines the country's goals in terms of an equal distribution of goods and services,⁵ the current economic structure and the education system which responds to it remain in most cases impotent to meet these goals.

The failure of Kenya's education system to meet her socio-economic needs, particularly as regards rural development, became a subject for official concern when, in 1965, the government asked the then University College, Nairobi to sponsor a conference on Education, Employment and Rural Development.⁶ Some members of the government had become aware of the rising number of school leavers who could not continue their education, could not find work in the urban areas and yet were unsuited or unwilling to work in the rural sector. The Conference was asked to focus on this issue among others and to make specific policy recommendations which might lead to the resolution of the problem. The Conference was convened in September 1966 at Kericho, a small town located about 140 miles north west of Nairobi in the heart of the tea estates. At the final session resolutions were passed concerning all three of the main issues and among these, conference participants gave full support to a National Christian Council of Kenya⁷ programme of Village Polytechnics. The Village Polytechnics were meant to provide one way of combatting the school leaver problem and that of development for rural Kenya. They had two basic goals: to train primary school leavers for employment in the rural areas and to improve community

services by producing a pool of skilled people who could perform artisan and service tasks.

Since the Kericho Conference the Village Polytechnic movement has grown considerably until, in 1974, there were more than 100 polytechnics spread throughout almost every district in Kenya.⁸ During this time the programme has undergone periodic evaluations particularly through tracing former trainees. While the Ministry of Cooperatives and Social Services⁹ has gathered its own statistics on the destination of leavers, the Institute for Development Studies of the University of Nairobi¹⁰ has, at government request, carried out more detailed leaver studies consisting of interviews with the leavers. My own study is the third such attempt to gauge the success of the programme by interviewing former village polytechnic trainees. It consists basically of a detailed follow-up of 100 leavers from 5 village polytechnics, 2 in Kiambu District in Central Province and 3 within the area of Kisumu in Nyanza. All 100 interviews were conducted between June and August of 1974.

Before considering in detail the results of the interviews themselves, I would like to look briefly at the history of education in Kenya in an attempt to clarify some of the issues which led to the formation of the Village Polytechnic movement. I will then trace the progress and growth of the polytechnics since their beginning in 1965. Moving to the data collected this past summer I will look at the background

of trainees in an effort to understand who is benefitting from the programme and why they have chosen to undertake this particular type of training. Have the trainees been satisfied with the programme? Would they have preferred to remain in the formal school system? Were they successful in finding work upon completion of their courses? Did they indeed stay in the rural areas as was intended? In the broader context of rural development and the formal education system, to what extent have the Village Polytechnics been able to resolve the problem of training people for skilled work in the rural areas? Finally, how far can any education system go by itself in correcting economic imbalances and achieving more general societal goals when the politico-economic system may not in fact be designed to achieve these goals?

INTRODUCTION FOOTNOTES

1. For example: I. Livingstone, 'Agriculture versus Industry in Economic Development' in Livingstone, ed., Economic Policy for Development, (Harmondsworth: Penguin Books, 1971) and T.W. Schultz, Transforming Traditional Agriculture, (New Haven: Yale University Press, 1964).
2. See, for instance: P.N. Rosenstein-Rodan, 'Problems of Industrialization of Eastern & South-Eastern Europe', Economic Journal, June-September, 1943 and W.A. Lewis, 'Economic Development with Unlimited Supplies of Labour', The Manchester School, May, 1954.
3. Kenya, Republic of, Development Plan, 1970-74, (Nairobi: Government Printers, 1969), p. 166. See also the ILO report, Employment, Incomes and Equality: a Strategy for Increasing Productive Employment in Kenya, (Geneva: ILO, 1972) and the 1974-78 Kenya Development Plan for a detailed description of Kenya's agricultural potential.
4. In East Africa the term 'European' refers to all peoples of European descent. The education system which was introduced into Kenya was modelled on the British example.
5. Kenya, Republic of, National Assembly: African Socialism and its Application to Planning in Kenya, Sessional Paper no. 10 of 1965.
6. For a full report of the proceedings of the conference see J. Sheffield, ed., Education, Employment and Rural Development, (Nairobi: East African Publishing House, 1967).
7. The NCCK is an alliance of Christian missionaries interested in fostering social action.
8. These are figures from the Ministry of Cooperatives and Social Services.
9. The government ministry responsible for the village polytechnic programme.
10. Until 1970 Nairobi University College of the University of East Africa.

CHAPTER I THE DEVELOPMENT OF EDUCATION IN KENYA

In all societies education is the process whereby children are instructed so that they are eventually capable of taking their place as full adult members of that society. Thus to a certain extent the goals of the society will be matched by the goals of the education system and the latter cannot be judged in isolation from the former. The extent to which educational and societal goals are in accord will directly affect the success of the education system.

Very little has been written about pre-colonial education systems in Kenya by Kenyans themselves. Fortunately two books have been written about the two major ethnic groups in Kenya, the Luo and the Kikuyu, who are of specific interest in my study. These two accounts give us some insight into both the philosophy and practice of education before these two societies began to be influenced by European incursion into their lands. The first of these was a study of the Kikuyu carried out by now president Kenyatta and recorded in his book, Facing Mt. Kenya. Although the book was no doubt coloured by the political situation of the time when it was written, it remains essentially a study of traditional Kikuyu society. Kenyatta describes Kikuyu education as a process which began 'at the time of birth and ends with death'.¹ It was intimately connected with the system of age-groups which characterized the social structure. Each period

of education consisted of instruction which allowed the child to move into the next age grouping. For instance the tiny infant was taught clan history and speech through the songs and stories his mother communicated to him; once the child could walk both mother and father took responsibility for instruction and the child learned by imitation of adult behavior through games of fighting, marriage and domestic tasks. At this time a boy's father would begin to initiate him into the economic activities of the family by showing him how to dig in the garden. If the father had a specialized skill such as bee-keeping or blacksmithing, he would also pass it on to his son. In the same way girls were taught how to dig the garden, how to grind corn and other similar domestic tasks. The mother continued her storytelling to both boys and girls for their instruction in the laws and customs of the family. From a very early age, then, the child was taught to cope with the physical and social environment in which he would eventually have to function as an adult. Throughout his childhood and adult years the Kikuyu 'citizen' was constantly learning how to adapt himself to both his physical and social milieu. The emphasis was on adaptation rather than change. Of the two aspects of training Kenyatta points out that the adaptation to social norms was of first importance: 'it is with personal relations rather than with natural phenomena, that the Kikuyu education is concerned right from the very beginning. Growing boys and girls learn

that they have one thing to learn which sums up all the others, and that is the manners and deportment proper to their station in the community. They see that their happiness in the homestead, their popularity with their playmates, their present comforts and their future prospects depend on knowing their place, having respect and obedience where it is due.'² 'Knowing their place' was intimately connected with the age group system whether it referred to infancy, young childhood, the period immediately preceding or following initiation into adulthood, married life or the position of a village elder. Each of these stages demanded certain knowledge, rights and duties and the system of instruction was specifically geared to preparing the individual for his entry into the next stage of life.

Although it was not written with this purpose in mind, some idea of Luo education can be gleaned from Oginga Odinga's autobiography Not Yet Uhuru.³ Written with specific political motives, the book is essentially a history of the Luo independence struggle. Some of the early chapters, however, do give an impression of an education structure similar in purpose if not in specific detail to that described by Kenyatta: 'when the evening meal was over we sat at the feet of the elders ... The elders might instruct us about our duties, or they might tell stories'. 'The stories of the elders were one of our two sources of education in the village. The other source was the harpists who played an important role

in the community. The harpists learnt at the feet of the elders and expressed the peoples' philosophy in musical and poetic language.⁴ Both early Luo and Kikuyu society present a picture of a carefully organized social structure which governed both the economic and social pursuits of the family. To contravene the rules, duties and obligations of this structure generally meant immediate punishment and if the contravention were extreme, expulsion from the homestead (which was equivalent to death). The education system, if indeed the term can be used in this context, was designed solely to bring the child to a full awareness and understanding of the social structure. His role was not to question or bring about change but rather to prepare himself to become part of a long-established social system.

Missionaries, who were the first Europeans to travel extensively in East Africa, saw African life in quite a different light. Admittedly the first missionaries often followed the slaving routes and thus did not penetrate either Luo or Kikuyu country to any extent. To a certain degree other traditional social systems were similar. Johan Krapf and Johan Rebmann, who worked from their mission at Rabai near Mombasa as early as 1844, saw the African as a fallen man.⁵ Livingstone, who in his journeys through the lake regions, had often been the witness of Arab slave raids, was horrified by the suffering which he saw and felt that European civilization could improve life through 'the wide

diffusion of better principles'.⁶ Although Livingstone was certainly more practical in his approach, neither he nor Krapf and Rebmann doubted for a moment that European civilization, commerce and religion had something superior to offer the 'poor suffering savages'. It is significant that the suffering savages themselves at first saw nothing superior in the European's civilization. With the exception of outcasts from local communities and freed slaves, the missions made few inroads into African life. As long as the tribal structure remained intact the missionary held little interest and the missions were kept separate from local populations.⁷ However, when African society began to be destroyed by outside economic and social forces, particularly after 1892 when the British government purchased the charter of the British East Africa Company and after 1901 when the Mombasa to Kisumu railway began to bring British settlers into the interior, Africans turned to the mission as the only source of advice and instruction in a changing world.⁸

Once the initial resistance to the European missions had been overcome, demand for mission services increased rapidly.⁹ Africans soon realized that not only were the missions useful as a go-between in helping them to cope with the British administration, but the missionaries were also able to impart to them the skills which would allow them to deal directly with this new power. They did not attempt to hide the fact that their interest in Christianity arose

particularly from their desire to learn the precious skills of reading and writing. The missions were delighted but they could hardly keep pace with African demands for schools. Because of the need to increase the number of African schools during this period, little thought was given to improving the quality of what was being taught. The issue of the purpose of education was confused by the fact that the missionary saw it as a means of attracting converts while the prospective converts in the main wanted skills which would be economically useful to them. They were aware that the Europeans in administrative or even in farming milieux put extreme importance on literary skills for themselves and for their children. Africans realized, therefore, that to challenge Europeans on their own terms they, too, must possess these skills. Thus very early in the history of European education in Kenya a trend was set in motion whereby literary education gained a status and importance which more practical skills in the industrial and agricultural fields could not match. This vision of the school as a means of escape from farming or from physical labour into high status and well-paid white collar jobs is by no means unique to Africa. Because this concept of the school is almost as strong today as it was 60 years ago in Kenya and because it is reinforced by an economic system which still offers the highest rewards to those with the most literary training but cannot absorb the numbers of people who in fact have such

training, the issue of practical training in the schools is one of the major problems facing the Kenyan education system today.

If during the first years of African acceptance of the European missions, the African students showed a preference for the literary subjects which the missions taught,¹⁰ subsequent actions on the part of the colonial administration and the British settlers did much to crystallize this attitude. Initially the colonial government was uninterested in education for Africans and although an Education Department was established in 1911, the government left most of the actual work to the missions.¹¹ It wasn't until the 1920's after the publication of the Phelps-Stokes reports¹² that the government agreed to be responsible for 'the major portion of the cost of education'.¹³ The Phelps-Stokes report and subsequent colonial government policy statements agreed that education for Africans should concentrate on teaching skills which would prepare them for life in rural communities. This policy gained the full support of the settler community who required unskilled and semi-skilled labourers to work on their farms. Too much or too literary an education would necessarily encourage people to leave the rural areas for the cities causing a shortage in supply of farm labour. The concept of keeping the Africans in the rural areas was reinforced by the debate as to whether Africans had the mental ability to cope with more sophisticated types of learning.

But as John Anderson has noted¹⁴ although it could be proven through aptitude tests that the question of African capabilities was irrelevant, officials were not interested. The Department of Education Annual Report of 1926 recommended three distinct types of education for Africans:

- 1) for those living in the villages and on the Reserves (the large majority of the people) -- a very basic training including child care, public health and sanitation for the women and agricultural and self-help skills for the men;
- 2) for a very limited group of artisans and craftsmen -- basic carpentry, masonry and blacksmith's skills;
- 3) for a small elite -- training in the skilled professions as required by the State and by Commerce.¹⁵

Although in part this policy reflected an actual need to train people in practical, industrial and agricultural skills, it was obvious to Africans that it was also an effective tool for maintaining the economic status quo. African reaction to their relegation to the bottom of the economic ladder was understandably bitter. They realized that the only way to fight this decision was through the education system itself. They thus rejected government inducements to give them technical or rural training and increasingly demanded of the missions that they be given academic instruction on a par with the European system. Much against the wishes of the settlers, the missions complied with these demands and opened the first African secondary school at Kikuyu in 1926. During the next 25 years the push for

secondary education particularly in Kikuyuland was overwhelming. When Africans felt that the missions were not keeping up, were putting too much emphasis on the religious aspect of education and were attempting to oppose traditional customs, they set up an independent school system of their own. After the Second World War, with the return of many Kenyan soldiers from abroad where they had been exposed to very different societies, the demand for education exploded: 'The enthusiasm of the people for subscribing funds, running sports meetings and having tea parties to raise finance for education outruns common sense'.¹⁶ With the exception of the Emergency¹⁷ in Kikuyuland it is safe to say that since the war this demand has not subsided. In fact so avid were people to build schools that during the first independence years it was found that local councils were expending most of their budgets on education to the detriment of other programmes; this was claimed as one of the official reasons for the central government takeover of local financing in 1970.

In spite of the African rejection of technical and agricultural education (the latter being reinforced by the government's prohibition for Africans to grow certain cash crops such as coffee) a review of the District Commissioner's reports from Murang'a District during the period of 1920 to 1950 shows that local councils were expressing concern for the need for more than an academic education.¹⁸ In general, experiments during this time in the direction of agricultural or industrial

training were not a success, however, and although schemes such as the Jeannes Schools¹⁹ met with initial approval they were ultimately destined to fail. This apparent interest in a more practically oriented education encouraged the DC Murang'a to remark in his annual report of 1949 that 'the time when the be-all and end-all of education was a job as a clerk or teacher is quickly passing into the limbo of the past'.²⁰ His remark was certainly more wishful thinking than a statement of reality, for there is little evidence, even today, to show that the concept of education as a means to a white-collar job has changed.

Events in Kenya immediately preceding and following independence in 1963 did much to confirm the vision of the school as a means towards high paying, influential jobs in Nairobi. Because many expatriates began to leave Kenya at that time and particularly because of the government's commitment to Africanize the Civil Service, a considerable short-term demand was created for white-collar workers. Thus the first Kenya Government Development Plan for the period of 1964 to 1970, which was put together before a Commission²¹ designated to study education could publish its report, was fearful that the education system would not be able to produce quickly enough the skilled manpower which Kenya required. In its report published in 1965, the Ominde Commission supported that concern, however, and the revised government plan of 1966 reiterated Kenya's education goals

as follows:

- 1) to provide universal primary education
- 2) to ensure enough places at the secondary and higher levels to educate those with recognized abilities and
- 3) to organize the education system to meet the country's manpower needs.²²

Since 1963 Kenya has gone a long way to meet the first two of these goals. The expansion of education has been formidable both from a qualitative and quantitative point of view.

Primary school enrolments have increased from 900,000 in 1963 to 1.5 million in 1970. Secondary school enrolments have risen by more than four times from 30,000 in 1963 to almost 130,000 in 1970. Not only is this an incredible quantitative step forward but enrolments at the higher levels have tended to increase more quickly than those at lower levels, indicating a considerable qualitative improvement as well.²³

Another interesting aspect of education in Kenya has been the harambee or self-help movement. Where the government has been unable to keep pace with the demand for education, local groups have funded schools on their own initiative and are now moving as well into the field of technical education. All this has lead to an enormous amount of resources being poured into education -- well over 20% of the annual government budget as well as all the funds raised through harambee and through school fees.

This tremendous expansion of the school system has

created considerable problems particularly at the end of standard 7 when the Certificate of Primary Education is attempted (for a brief outline of the Kenyan education system, see Appendix A). Already in 1966 when John Anderson conducted a study of primary school leavers the problem was becoming acute.²⁴ His study of 203 male leavers who completed primary school in 1964 showed the following results:

TABLE I
DESTINATION OF 203 MALE LEAVERS WHO ATTEMPTED
KPE IN 1964

<u>Destination in 1966</u>	<u>%</u>
Aided secondary school	17.5
Unaided secondary school	24.0
Primary school (repeating standard 7 in 1966)	15.5
Wage employment	9.0
Living at home or with relatives (no wage employment)	32.0
Unknown	<u>2.0</u>
TOTAL	100.0

Anderson's figures for those who continue in the education system either as repeaters or in secondary school (57.0%) are slightly less optimistic than the ILO estimates in its report on Employment, Incomes and Equality which quotes the figure at 63.0% (28% in secondary and 35% repeating primary school).²⁵

In both cases, however, it is obvious that those who do not continue in school must somehow be absorbed into either wage or informal types of employment. Anderson's figure of 32% 'at home' suggests that the economy is not capable of providing wage employment for them.

Since that time it has become evident that not only is there a primary school leaver problem but, with the expansion of the secondary school system, a secondary school leaver problem has developed as well. According to the ILO,²⁶ unemployment figures for a group of secondary school leavers rose from 1% for those who left school in 1967 to 15% in 1968 and 16% in 1969. Although the report goes on to say that after the leaver has been out of school for 3 or 4 years, unemployment rates drop considerably (from 15% to 9% for the 1968 group and from 16% to 4% for the 1969 group)²⁷ this information is hardly comforting since new groups of unemployed leavers are being added to the total each year.

In response to the realization that the industrial sector was simply not going to provide work for the majority of Kenyans, the 3rd Kenyan Development Plan began to place more emphasis on rural development and the 'need for training and education of the people in the rural areas which is relevant to their immediate tasks and which also opens new opportunities in the way of diversification of the rural economy'.²⁸ By the time the fourth Plan was published, rural development had ostensibly become the goal of the Kenyatta

government: 'the success of the strategy of accelerated development of the rural areas is fundamental to the success of this Plan as a whole.'²⁹ In the chapter on education, the Plan expresses concern about the 'appearance in ever-increasing numbers of individuals whom the formal education system has not equipped with the skills and qualities required by the economy'.³⁰ In accordance with an observation of the ILO report that the sector of the population which fell most readily into this category were those between 16 and 24³¹ the Plan proposed that a national youth policy be drawn up.

In reviewing the progress of the Kenyan economy since independence, it is ironic to note that the most recent government statements sound in some ways vaguely familiar to colonial government statements made in the 1920's and 1930's. Probably this is because in spite of the passage of some 50 years, similar economic and social problems persist. Under the present economic system in Kenya the only way that the majority of Kenyans can hope to make a living for themselves is in the rural areas either through agriculture or small scale industry. Since the Kericho Conference in 1966, this fact has become progressively more obvious. Whether, in fact, the government is willing to invest enough in rural Kenya to make it an attractive place economically remains to be seen.

CHAPTER I FOOTNOTES

1. J. Kenyatta, Facing Mount Kenya, (New York: Random House, 1962), p. 96.
2. Ibid., p. 102-103.
3. O. Odinga, Not Yet Uhuru, (New York: Hill and Wang, 1967).
4. Ibid., p. 9.
5. R.A. Oliver, The Missionary Factor in East Africa, (London: Longmans, 1969), p. 9.
6. Ibid., p. 10.
7. Ibid., p. 176.
8. Ibid., p. 200.
9. Ibid., p. 195.
10. As Anderson notes in The Struggle for the School 'reading and writing were seen as the keys to success, not gardening', p. 21.
11. J. Anderson, The Struggle for the School, (London: Longmans, 1970), p. 4.
12. The Phelps-Stokes Commission was a joint Anglo-American study set up to look at the content of mission education for Africans; it visited East Africa in 1924.
13. Kenya Education Department, Annual Report, 1925, p. 3.
14. Anderson, op.cit., p. 41.
15. ibid., p. 13.
16. S.M. Kimani and D.R.F. Taylor, Growth Centres and Rural Development in Kenya, (Thika: Maxim Printers, 1973), Appendix F, secondary data files, A-2, Missions and Education, from the report of the District Commissioner (Fort Hall), 1947, Kenya National Archives.
17. The British Government declared a period of Emergency in Kenya from 1952 to 1956, during the Mau Mau uprising.
18. District Commissioner's Reports, see note 16.

19. Established in Kenya in 1925, The Jeannes Schools were modelled on schools in the southern United States, set up by the Jeannes Fund. Man and wife teams were trained to work with teachers and wives to build local schools as centres of community leadership.
20. Extract from District Commissioner's (Fort Hall) Report, 1947. See note 16.
21. The Kenya Education Commission, Chaired by S. Ominde, published its first report in 1965.
22. Republic of Kenya, Development Plan for the Period 1965-66 to 1969-70, (Nairobi: Government Printers), p. 305.
23. ILO, Employment Incomes and Equality, op.cit., p. 233.
24. John Anderson, 'Primary School Leavers in Rural Areas', Institute for Development Studies, Nairobi, discussion paper no. 39A, Dec., 1966, p. 9.
25. ILO, Employment, Incomes and Equality, op.cit., p. 235-236.
26. Ibid., p. 66.
27. Ibid., p. 66.
28. Republic of Kenya, Development Plan, 1970 to 1974, (Nairobi: Government Printers, 1969), p. 172.
29. Republic of Kenya, Development Plan, 1974 to 1978, (Nairobi: Government Printers), p. 109.
30. Ibid., p. 404-405.
31. ILO, Employment, Incomes and Equality, op.cit., p. 59. Table 19.

CHAPTER II

It is beyond the scope of this study to undertake a complete analysis of the current economic structures in operation in Kenya. It would be useful, however, to look briefly at the history of the economic system to see how the present structures came into being. In this broader context it will be easier to understand the role that the village polytechnic movement can play given the economic constraints within which it must operate in Kenya today. If, as it would appear, the highest economic rewards in Kenya go to those employed in large scale industry and government, i.e. the urban areas, while the majority of people can only find opportunities to make a living in small scale industry and agriculture, i.e. in the rural areas and urban slums, how has this imbalance come about? Traditionally most of the ethnic groups in Kenya had minimal differentiation as to economic level among families. Certainly there were those who were better warriors, had more cattle and thus could afford more wives and a higher standard of living. Among the Kikuyu there existed a class of landless peasants or 'ahoi' who had to rent land from their more favoured kinsmen. But in most cases those with no land could always acquire some through traditional mechanisms and economic differences were small compared to those that exist today. Nowhere did one man own tracts of land of a thousand acres or more while his neighbour tried to eke out a living on a small shamba.

The transformation of Kenya into a British protectorate in 1895 and the completion of the Uganda railway as far as Kisumu on Lake Victoria in 1901 fundamentally altered this relatively egalitarian socio-economic structure. With the arrival of the first British settlers vast areas of some of Kenya's best agricultural and forest land were alienated to European farmers. In the early years, before 1910, land was granted free of charge except for the payment of survey fees. At this time people such as Lord Delamere accumulated huge estates, estimated by Norman Leys to be over 200,000 acres in size.¹ By 1924 many of these large tracts had been subdivided and sold as smaller farms but the total area of good farming land held by Europeans remained superior to that allowed the African population: "so we get the extraordinary contrast of 10,000 square miles alienated to Europeans, with 5,000 square miles, reserved, somewhat precariously, to nearly 2,000,000 Africans".²

This inequality in land holdings had necessarily to be reflected elsewhere in the economy. To begin with the Europeans who attempted to farm these vast areas of land had little knowledge themselves of tropical agriculture. In the absence of labour-saving farm machinery they needed African labour to work the land for them. But African farmers for their part were most needed at home at those times of year, during harvest and planting, when the European settlers also required their services. As well Africans were not accustomed

to working as farm labourers. Thus the colonial government was forced to introduce a system of hut and poll taxes whereby each adult male over a certain age was required to pay a fixed amount of money. This system ensured that Africans worked on European farms since in many cases they were barred from earning the tax in other ways such as cultivating cash crops. In addition to the tax system, the colonial administration tried directly and indirectly to force African farmers into working on European farms. In 1911 and 1920 labour circulars were sent to the District Officers urging them to encourage Africans to present themselves for work and threatening stronger methods if such encouragement was not successful.³ One particularly visible and despised aspect of the government's efforts to ensure plentiful and cheap labour for the settler farms was the kipande system. A little like the South African 'pass' system, it required Africans to carry a kipande or identification card with them at all times, so that the authorities could more easily trace individuals who broke their contracts of employment.

These measures and the eventual rise in African populations particularly among the Kikuyus both forced the African to seek work on European farms and at the same time permitted Europeans to maintain the low wage system, that was necessary if their farms were to be profitable. Even then, however, many of the early European farms failed and the government had to further support the settler population through a privileged access to markets and a system whereby the majority of services

in the form of roads, railways, schools and hospitals were provided to the European areas only. In the transportation sector, for instance, the construction of branch lines for the Mombasa/Kampala railway serves as a good example of the disproportionate degree to which European areas received government support. Between 1920 and 1932, of the 544 miles of railway line built, only 147 passed through African areas. Of these 147 miles, only one line, about fifty miles long, was built specifically with African interests in mind and this line was one of the last to be completed.⁴ The colonial government also took steps to ensure a protected market for the agricultural products produced by European farms. The Tariff Amendment Ordinance of 1923 introduced import duties on such items as flour, butter, bacon, tea and sugar. As well internal marketing boards such as the Kenya Farmers' Association for maize and wheat and the Kenya Co-operative Creameries for milk products were set up to control the buying and selling of local agricultural products.⁵

In reviewing the monopolistic system of this period and its effect on African production and wages, Colin Leys estimates that while until 1913 African production accounted for 70% of agricultural exports from Kenya, by 1928 the figure had dropped to 20%.⁶ He estimates as well that after World War I three quarters of the African wage bill was going towards the payment of taxes.⁷ This system continued to function until the beginning of World War II:

'monopoly, in the sense of a significant degree of exclusive control over some resource - land, labour, capital, technology (including crops), or markets -- generally conferred by the state through a law or through executive action, permeated the entire sphere of operations of European capital in Kenya'.⁸

The Second World War and the Mau Mau Rebellion of the 1950's altered both the economic and social structures which had functioned in the colony until this time. By the late 1930's Kenya was experiencing the full effects of the world slump in commodity and food prices and the economy was beginning to stagnate. But with the war Kenya became the centre of British operations in East Africa and the demand for her goods and services increased dramatically. When the war ended this demand was sustained and gained further impetus during the Emergency when large numbers of British troops were brought into the colony. During this period, from 1940 to 1960, the nature of the economy changed. New foreign commercial and industrial interests began to gain importance and to replace the prominence enjoyed by the mixed farm, settler-controlled sector in the 1920's and 1930's. It was these new interests, according to Colin Leys, who were instrumental in ensuring that the economic system which was still based on privilege and monopoly was passed on with as little change as possible to the new African leaders at the time of independence.

The Mau Mau uprising of the 1950's made it clear to the European community in Kenya that the colony was not going to

develop into another South Africa. Until the late 1940's European settlers in Kenya had spoken in terms of 50 and 100 years before African peoples would be ready to take part in the governing of the country. By the mid 1950's it was obvious that African political control would soon be a reality, probably within the next decade. Thus Africans were quickly trained to take over the senior administrative and political posts which would soon be open to them in a new independent government. The development of this African elite did not take place over night. Thanks to missionary efforts on behalf of African education a group of educated Africans had already emerged who, because of their ability to function within the European system, had become the spokesmen for African rights. Although this group may already have been alienated to a certain extent from the majority of uneducated Africans they were still the only means that Africans had to challenge European supremacy. The task of European economic interests in Kenya during the years immediately preceding and following independence was to ensure that this elite was brought to identify with and preserve existing economic structures.

During the years immediately following the granting of political independence in 1963, the Africanization of government services proceeded rapidly. By 1967 the Africanization of the Civil Service was well advanced: of 61,799 officers in the civil service as of November 1, 1966, only 6,682 were non-

C

citizens.⁹ This rapid Africanization had two effects. First, it created ethnic disparities which were to be continued and exacerbated as time went on. And secondly it made it all the more important that an African identity of interests with European economic pursuits be established since the economic structures themselves depended to a great extent on state intervention and support.¹⁰

The ethnic divergences arose mainly because certain ethnic groups were in a better position both in terms of skills and needs to take advantage of the opportunities which independence offered. For the first time restrictions were removed which had previously kept African teachers, clerks and traders from taking part in the European dominated economy. It was those groups, in particular the Kikuyu, who had had the greatest exposure to European society and thus had acquired the skills of that society, who were most able to take advantage of the new opportunities open to Africans. Of all the ethnic groups in Kenya, the Kikuyu had by far suffered the most from European occupation; yet this disadvantage worked in their favour not only in terms of teaching them European skills but also in terms of the overwhelming need which they experienced at the time of independence to expand into the new vacancies which were opening. During the Emergency Kikuyus had been prohibited from working in Nairobi. They had, more than any other group, felt the pressure of being confined to the limited land available in the reserves. It was natural,

therefore, that at independence they should be the first to buy up newly vacated land and to fill newly vacated government posts in Nairobi. This initial advantage has, if anything, grown since independence. 1972 figures indicating the percentages for ethnic groups in key government positions show 41.4% for Kikuyus whereas their overall percentage in the population is only 20.1%.¹¹

But more important for the economic structures of the country than who took them over was the way in which the take-over occurred. The farming sector is particularly indicative of this process. The rallying point of much of the Kikuyu nationalist movement and of other nationalist movements as well had been the return of land stolen by the British. While the Kikuyu had felt land pressure the most, other groups such as the Kalenjin, Luo, Abaluhya and Masai had also lost much of their traditional tribal areas to the European settlers. Thus land was more than an economic factor but became as well a symbol of the European domination of the African population. At the time of independence, therefore, there was concern to ensure that lands formerly occupied by European settlers were handed back to African peasant farmers. What actually happened was not quite what had been promised. In order to defuse the land issue, one million acres of land were purchased from European settlers by the new government and were redistributed to African smallholders. Most of the remaining land which had been run largely as mixed farms was eventually also

transferred to African ownership but 41% of this land was transferred as large farms either to individual Africans, co-operatives or the state.¹² Most of the ranches and plantations owned and run by multinational corporations were not touched at all. Thus only about one third of all land held by Europeans was ever returned to African small-scale farmers while the particularly profitable foreign owned commercial interests were preserved as they had been. In the farming sector, then, where it could be argued that there were the greatest economic need, political will and local skills to facilitate a general African take-over by economically less favoured Kenyans, redistribution did not take place on a scale commensurate with the amount of land available. Increasingly as the first years of independence were left behind, settlement schemes lost their prominence. An important rift grew between the more radical Kikuyu nationalists who favoured a greater distribution of land, particularly to the freedom fighters, and the conservative nationalists who were more cautious about radically disrupting the existing economic system in spite of all the imbalances it contained.¹³

What happened in the farming sector occurred to an even greater degree in the industrial and commercial sectors. Africans in Kenya had little experience in manufacturing and commerce. What trading had existed prior to the arrival of Europeans in the territory had soon been disrupted by them.¹⁴ During the colonial period Africans had not been encouraged to

engage in industrial or commercial activities; this sector was largely controlled by Asians on the local and small scale level, while the large scale operations were mainly European owned. At the time of independence, since Africans lacked the experience and skills necessary for commerce and industry, they concentrated instead on taking over government institutions where their formal education was of more use. Since these institutions included such parastatal bodies as the produce marketing boards and financial institutions, the government could exercise considerable control over trading operations. Although initially little Africanization took place in the business community, as time went on the government took more direct steps to ensure that profits from commercial enterprise were directed towards Africans. The experience of the Maize and Produce Board is a case in point. Their initial efforts to encourage the appointment of African distributors of maize meal were not successful and in 1967 the millers still relied to a large extent on Asian traders. The board therefore made a special effort to Africanize maize distribution by announcing that where Africans had been appointed as retailers Asians could not be appointed to neighbouring areas. This policy was largely successful and by 1968, 90% of the whole-sale and retail maize trade was controlled by Africans.¹⁵ Another instrument which the government used to further Africanization was the KNTC¹⁶ which had been set up in 1965 to channel other consumption goods to African traders. It

granted distribution rights for such goods as sugar, rice, textiles, soap, tea and other articles of daily use. By limiting distribution rights to Africans it made a considerable contribution to the Africanization of retail trade. In a further effort to foster African control of commerce, the government introduced the Trade Licencing Act in 1967.¹⁷ The Act advanced Africanization by excluding non-citizens both from trading in certain areas and from dealing in certain goods. In addition through the mechanism of trade licences the government has, over the past few years, gradually been moving to exclude non-citizens all together from retail and wholesale trade. In April 1967 the Transport Licencing Board decided to grant no new licences to small and medium-sized non-citizen firms. Although some objections were raised, the ruling was fairly strictly applied and by August 1967, 90% of passenger transportation was controlled by Africans.¹⁸ In all of these instances and in many others the Africanization of commerce in Kenya could only take place with the help of strong government intervention and continued protection. Thus the new African traders relied, much as the earlier European farming community had, on a system of government controlled services for their position in the business community.

During the colonial period a three-tiered commercial structure had functioned in Kenya. At the top were large European owned import/export firms, in the middle were Asian

retail merchants and at the bottom, African labourers. The entry of Africans into the top and middle levels of this system through such mechanisms as the KNTC threatened entrenched interests there and brought about modifications in these structures. The large trading companies began to lose business and in order to maintain profits diversified their operations into manufacturing. Although in the early days of the colony local manufacturing had been minimal, after the war and during the 1950's manufacturing had grown rapidly and this trend was maintained during the 1960's.¹⁹ In many cases the trading companies did not have the expertise to undertake this transfer on their own and so they merged with multinational companies who had more industrial and technical know-how. In addition multinationals who had formerly exported to Kenya realized that they would lose that part of their trade if they did not manufacture locally. They therefore moved to set up subsidiaries which could engage in import substitute production.

What emerged in Kenya in the years following independence, then, were minor shifts in the nature of the groups controlling the economic system with few major changes in the structure of the system itself. Africans moved fairly quickly into the Civil Service structures so that by 1967 the government could proudly announce itself to be 90% Africanized. Progress in this direction in the trading and manufacturing fields was not so easy. The government was eventually forced

to intervene with strict measures of control and protection to ensure the Africanization of retail and wholesale trading concerns. The reaction of the Asian and European firms who formerly engaged in these activities was mixed. Some set up partnerships with Africans, some moved to less threatened activities such as manufacturing, others simply left the country. In spite of these shifts of personnel, the structures of commerce and industry basically remained the same. Because the government has chosen to Africanize existing governmental and business structures rather than to alter them in a more radical way it has had both to maintain existing protective mechanisms which allowed these structures to survive and to establish even closer control over certain sectors in order to ensure Africanization.

Even if full Africanization had been possible, however, both in the administrative system and the trading sector only a limited number of vacancies were available to Africans. Once these vacancies were filled, the large majority of Africans found themselves in the same situation they had faced before independence: that of increasing poverty in contrast to the privileged few. Neither did the infant manufacturing and construction industries create jobs at the rate originally predicted. From 1964 total wage-earning employment grew at a rate of 1.9% per annum as opposed to a 3.3% increase in population.²⁰ Thus what has occurred is that those who were in a favourable position to take advantage of the Africanization

of the administrative and commercial institutions or who have managed to obtain high paying employment in the formal sector now occupy much envied positions of economic privilege. According to the ILO report estimates²¹ only 12.8% of the population earns over £200 per year while the majority, employed either as unskilled labourers or in agriculture, earn less than this with a large proportion of them earning less than 20£ per annum. Not only is the gap considerable between the groups in the upper end of this scale and those at the bottom, but those at the bottom have witnessed friends and relatives rise to these privileged positions within the last ten years. Thus there is an even greater impetus to seek high paying employment since it appears to be so available. When Africanization programmes both in government and commerce first began, there were opportunities for people with little training to take positions of relative importance. Now that these opportunities have been taken up and the positions filled, there are few new opportunities.

But the aspirations remain and in Kenya two phenomena in particular attest to the high premium placed on formal sector employment. The first of these, familiar to most countries where such a gap exists, is the continual migration of people to the city (in the case of Kenya to Nairobi in particular) in search of work and the urban shanty towns which have grown up as a result. The second of these is the seemingly insatiable appetite of the people for building and supporting

educational institutions. Having seen what an advantage even a primary school certificate was in the early 1960's, families make enormous sacrifices to ensure that their children go as far as possible in school. The formal school certificate has become the magic key which is supposed to open the door to high paying employment. But as more and more parents finance their children through secondary school, the problem of the unemployed primary school leaver becomes that of the unemployed secondary school leaver. As more school certificate holders come on the market, employers can be more particular about the qualifications of the people they hire. And so they demand higher formal school qualifications. The result of this 'educational spiral' can only be intense frustration not only for the student himself but also for the families who have made considerable sacrifices to finance their child's education.

The Kenya government is well aware of the growing numbers of unemployed whose aspirations for high paying jobs cannot be met. In response to this situation they have signed two tripartite agreements with unions and employers: one in 1964 and one in 1970. Under the first agreement the unions agreed to a one year wage freeze while private employers agreed to expand employment by 10% and the government by 15%. During the first two weeks of the 1st agreement over 200,000 people applied for work and 34,000 actually found jobs.²² Roughly the same situation occurred in 1970. Such measures are eventually self-defeating, however, since in most cases

employers simply advanced their hiring plans and then curtailed them when the agreement ended.

The village polytechnic programme was another response to the problem of the growing number of unemployed. By the late 1960's the government had recognized the need to provide school leavers with marketable skills and agreed to support the programme. By that time secondary school leavers were also beginning to have difficulty finding work. The 1972 ILO report singles out the school leaver group as requiring special attention and notes that

"for young persons, whether educated or not, to enter the labour force either with a frustrating round of job seeking or animated by resentment at missing opportunities which they feel they deserve is hardly a good way for them to acquire the experience and work attitudes required for a productive life, nor does it augur well for social stability".²³

As the report points out, the school leaver faces the problem not so much of not being able to find work but that of not being able to find the kind of work that he has been prepared to expect by his education.

The existing political and economic structures in Kenya support and maintain the imbalances discussed above: the disparity between job aspirations and the growing number of unemployed, the difference in living standards of the few who have well paid employment and the rest who do not, the enormous differences between the relatively well-off urban areas and the urban shanty towns and over-crowded rural areas.

This type of imbalance is an integral part of the economic structure and cannot be corrected through minor alterations in that structure. In this sense the village polytechnic programme cannot hope to change the system but only accord a minimal degree of relief to a potentially disruptive element, namely the school leaver. Because there seems little hope of a radical change in these structures, Frances Stewart argues that

2 "the most likely (economic and political) strategy (for Kenya) is therefore one broadly in line with past developments, with some modifications where imbalances have become so acute as to be dangerous, or at least uncomfortable. If Kenya continues to achieve a rapid rate of growth, this, together with a somewhat greater effort to help (or at least not hinder) the neglected three quarters of the population, might mean rising standards of living among them".²⁴

In this context the village polytechnic stands as a good example of an effort to help "the neglected three quarters of the population".

CHAPTER II FOOTNOTES

1. Norman Leys, Kenya, (London: The Hogarth Press, 1926), p. 173.
2. Ibid., p. 160.
3. E.A. Brett, Colonialism and Underdevelopment in East Africa, (London: Heinemann, 1972), p. 188.
4. Ibid., p. 200-201.
5. Ibid., p. 196.
6. Colin Leys, Underdevelopment in Kenya: the Political Economy of Neo-Colonialism, 1964-1971, (London: Heinemann, 1975), p. 31.
7. Ibid., p. 32.
8. Ibid., p. 35.
9. Brett, op.cit., p. 209.
10. For a more detailed account of state intervention in the Kenyan economy see C. Leys, 'The Limits of African Capitalism: the Formation of the Monopolistic Petty Bourgeoisie in Kenya', mimeograph and Underdevelopment in Kenya, op.cit.
11. J.R. Nellis, 'The Ethnic Composition of Leading Government Positions', Scandinavian Institute of African Studies, Research Report No. 24, Uppsala, 1974, p. 15.
12. S. Langdon, 'The Political Economy of Dependence: Notes Toward an Analysis of Multinational Corporations in Kenya', mimeograph, Oct., 1973, p. 24.
13. G. Wasserman, 'The Independence Bargain: Kenya Europeans and the Land Issue, 1960-1962', J. of Commonwealth Political Studies, vol. XI, no. 2, July, 1973, p. 116.
14. The first chapter of African Businessman by A. Somerset and P. Morris, (Nairobi: East African Publishing House, 1971), gives a particularly interesting account of early Kikuyu/Masai trade.
15. D. Rothchild, Racial Bargaining in Independent Kenya, (London: Oxford University Press, 1973), p. 258.
16. Kenya National Trading Corporation.

17. Rothchild, op.cit., p. 266.
18. Ibid., p. 270.
19. Manufacturing and building construction strengthened slightly as a percentage of GDP from 12.5% in 1964 to 14.0% in 1970, see the ILO report on Employment in Kenya, p. 89.
20. ILO, Employment, Incomes and Equality: a Strategy for Increasing Productive Employment in Kenya, (Geneva: ILO, 1972), p. 7.
21. Ibid., see table, p. 74.
22. Ibid., p. 91.
23. Ibid., p. 1.
24. Frances Stewart, 'Kenya: Strategies for Development', mimeograph, undated, p. 25. It should be noted that Stewart is not advocating this policy but merely predicting that it is inevitable.

CHAPTER III THE GROWTH OF THE VILLAGE POLYTECHNICS

Although both the 1972 ILO report on Employment and the third government Development Plan have focussed increasing attention on the issue of unemployed school leavers, in both urban and rural areas, the organization which originally brought attention to this field of concern was the National Christian Council of Kenya. In 1963, the Youth Department of the NCCCK passed a resolution at the Annual Youth Leaders Conference to set up a study on the employment and training of primary school leavers. In July 1964 a working party of the NCCCK published a preliminary report and in March, 1966 the final report entitled After School What was issued. Far from being restricted to church personnel, the working party attempted to solicit opinions from as broad a spectrum of people as possible. They extended invitations to join the working party to government officials, Kenya National Union of Teachers officials, social workers and any others who were concerned with the problems of youth in Kenya.

The report did not limit itself to youth training but rather looked at some of the specific causes underlying the primary school leaver problem. It began with a statement on the issue which it felt to be basic to the problem: that of population growth. With an annual population growth rate at over 3% (one of the highest in the world) Kenya might increase its number of primary school leavers from the 149,000 who sat

for KPE in 1965 to almost twice that number by 1980 (if the estimated 80% attendance could be achieved by that time).¹ Of these leavers, as previously noted, John Anderson shows that 32% remain without employment or opportunity for further training.² In answer to this particular aspect of the leaver problem the report urged that '... an annual growth rate (in population) of substantially below 2% would be a rate which would permit rapid economic growth in excess of population growth. This would mean an age group born in 1970, becoming 16 in 1986 of about 330,000 instead of 400,000 children'.³ The report also took a close look at the opportunities for employment in the monetary sector and expressed concern for the need to increase these opportunities. It urged that the issue of intermediate technology be examined and that the government encourage labour-intensive over capital-intensive types of production. It also examined the prime role that agriculture played as an employer and urged that more funds be deployed in improving agricultural methods so that farming would be a more attractive career for young people.

With the issues of population, agriculture and technology as a backdrop to the school leaver problem, the report then looked specifically at the problem of what it called 'the gap', that period after primary school and before the leaver was old enough either for work or further training. In answer to this specific problem the report recommended

that a system of village polytechnics be set up. The polytechnics would be simple, low-cost, post-primary training institutions to provide primary school leavers with the skills necessary for employment or self-employment in the rural areas. In training people in and for the rural areas they hoped to encourage community development both through employment and by keeping skilled people at home. But the report emphasized that the village polytechnics were only one way of resolving the leaver problem: 'the ultimate solution of the primary school leaver question lies in the rapid, overall balanced development of the economy of the country as a whole'.⁴ Even before the joint working party report was officially released in March of 1966, the first village polytechnic had enrolled a group of trainees at Nambale near Busia in western Kenya.

The village polytechnic idea again came under discussion at the Conference on Education, Employment and Rural Development held at Kericho in September, 1966. The Conference had two specific goals: that it be interdisciplinary and oriented towards policy formation. The group of 80 participants was divided into four panels: education, employment, rural development and finance. In particular a paper by Paul Fordham and James Sheffield on 'Continuing Education for Youth and Adults'⁵ reviewed the conclusions of After School What and gave support to the suggestion that a system of village polytechnics be set up on an experimental basis.

Although after the conference no immediate government funding was forthcoming for the establishment of village polytechnics, the idea had received a positive hearing and the NCCK moved ahead with its plan to set up 3 centres in addition to that at Nambale. Two of the 3 centres were near Nambale, one at Ndere about 80 km. outside of Kisumu and the other at Maseno. The third centre (the only one in Central Kenya) was Mucii wa Urata near Embu. Courses offered at all four centres included tailoring, masonry, carpentry, agriculture, poultry keeping and tractor driving. They varied in length from 12 to 24 months and were offered both on a residential and non-residential basis. In all, about 186 students were trained during the first years with 128 remaining in the local area after training and 58 seeking work or further opportunities elsewhere.⁶ After 1968 the movement grew slowly but steadily. By the end of 1969 the total number of village polytechnics had risen to 10 and by the end of 1970 to 18. In 1970 the first government financial assistance became available and thereafter the programme grew very rapidly from a total of 60 in 1971/72 to 75 in 1972/73 and 100 in 1974.⁷

In January 1970 the proposals contained in a memorandum on village polytechnics issued by the Ministry of Finance and Economic Planning were adopted by the National Rural Development Committee and as a result the ILO regional adviser on prevocational training, Robin Ford, was invited to come to Kenya to discuss the proposals and examine future government

involvement in the programme. The Ford report was extremely positive about the Village Polytechnic movement as a whole but urged caution in the manner in which the government should become involved. Its observations were as follows:

- a) village polytechnics are very diverse and at a very embryonic stage of development,
- b) the movement could collapse if the diverse elements were not drawn together and if too much was expected too soon,
- c) village polytechnics are not and cannot be the only answer to the gigantic school leaver problem,
- d) village polytechnics are operating at such a fundamental level in terms of the country's needs that mistakes with the development of a programme must be avoided,
- e) a suitable time span must be allowed for the development of an effective programme and the development of a capability within government,
- f) a prime consideration throughout from the mission's point of view has been, and should continue to be, the development of a Kenyan organization from the start.⁸

These six observations are indicative of the mission's concern that what had started as a locally-based programme might suffer if it were absorbed into the government administrative structure. The mission had little doubt that the village polytechnics were filling a real need in the rural areas but it saw clearly some of the dangers inherent in government involvement. In making its recommendations as to the steps that the government should take, it hoped to avoid some of the pitfalls it foresaw. First a Kenyan programme

director was to be appointed at the same time as an ILO adviser who would supervise the transition. Provision was to be made for an evaluation programme to be initiated from the beginning, possibly by the Institute for Development Studies, in order to provide continual information as to how the programme was progressing. New officers being hired into the government administration in charge of village polytechnics would undergo a year's intensive training before they took up their posts. A village polytechnic development plan was to be drawn up to safeguard the original philosophy of the movement. Village polytechnics were to remain locally financed, low-cost institutions, oriented towards training for employment and developing a realistic attitude towards work and living in a rural home environment. The church and voluntary support which had first launched the movement was to continue and even expand. The mission recommended, therefore, that the government finance staff salaries and training; local harambee and voluntary agencies would provide buildings and materials. The church would continue its support especially through launching new village polytechnics for which the government would undertake support once they had proved themselves to be viable. Finally the report urged that the unique nature of each village polytechnic be preserved. Courses offered by each village polytechnic would reflect the economic possibilities of the area it served and course length should reflect the time needed for training and not

some preconceived idea of how long a course should be.

Since the first official government grants to the village polytechnics in fiscal year 1971/72 the programme has experienced some difficulties. In part because of the rapid growth in the number of village polytechnics (from 20 at the end of 1970 to 100 in 1974) and partly because of the general state of the Kenyan economy, finances have become a problem. In 1973/74 approximately K£ 217,750 were granted by the government, and K£ 118,000 by external donors for recurrent expenditures.⁹ In addition local people contributed land, buildings and training materials. In extrapolating from NCKK statistics published in 1970, John Anderson estimates in his report of 1970 that total annual recurrent costs for a village polytechnic of 30 trainees are in the order of 15,000 shillings.¹⁰ Although this per head cost of 500 shillings per annum compares well with 1,000 shillings for secondary schools, because of the rapid expansion of the programme total recurrent costs will be in the area of K£ 500,000 for 1974 and possibly more after taking inflation into account. This expansion in the number of village polytechnics has necessarily meant that qualitative aspects such as staff training and research have suffered.

Another problem which rapid expansion has created is that of finding qualified Kenyan staff to maintain the quality of the programme. Originally the projects themselves were staffed by church members or volunteers; these were the

pioneers who initiated the programme and were willing to do much work for little pay partly because the programme was theirs and partly because they were supported by a larger organization such as the church. With an increased need for staff, it has been necessary to recruit more widely on the open market and as a consequence the original crusading enthusiasm has been impossible to retain.

It should be realized that a training centre of this type can stand or fall on the competence and commitment of its manager. The manager, for his part, has a demanding job to fill. He is responsible for 'selling' his institution to the local people both so that funds and support will be forthcoming and in order to ensure that local sons and daughters are interested in learning there. He has to manage the day-to-day problems, financial, staffing and others of the village polytechnic. He must also keep his eye open for contracts for his students to give them work experience before they leave the village polytechnic. Finally, he is supposed to assist leavers in their search for work and maintain contact with them whether they find jobs or not. All these tasks are carried out over a considerable geographical area in most cases with the sole aid of a bicycle as means of transportation. Although these conditions may be slightly exaggerated for some of the more fortunate village polytechnics, they are fairly accurate for two of what I would call the average village polytechnic that I visited. Some projects in

remote areas are in far less fortunate circumstances. It is small wonder, then, that it has not been easy to find staff who can meet these requirements. Much credit is due to those managers who do succeed in fulfilling satisfactorily their designated job.

The same problem of finding trained staff who are in sympathy with the village polytechnic movement has plagued the central administration of the programme. The Centre for Research and Training¹¹ in Nairobi is a good example. It was originally urged that Kenyan researchers be recruited at the same time as foreign (in this case recruited by Norway) advisers were brought in. Although the foreign advisers have been at the centre for almost 2 years now and have gained valuable experience of the problems of the village polytechnics through numerous field trips, no Kenyans have as yet been recruited. This has two major disadvantages: first, possible Kenyan recruits have lost an important opportunity to learn about the village polytechnics and exchange ideas with the advisers; secondly, the advisers have been less than 100% efficient since they had no Kenyan with them on their field trips who might have better explained to village polytechnic personnel the purpose of research and allayed fears about evaluations, reports to headquarters and possible firings.

Underlying the issue of staffing both at the project and the administrative level is the more general issue of to what extent the programme has remained or become a truly

Kenyan one. As far as the projects themselves are concerned there has been a general movement towards hiring Kenyan managers so that in 1974 almost all of them are Kenyan. The administrative structure has not fared so well. In numeric terms the Youth Development Division of the Ministry of Cooperatives and Social Services which is responsible for the programme is staffed almost entirely by Kenyans. But the history of government involvement shows that whenever something new or difficult is to be attempted a foreign adviser is hired. This policy was followed initially when the ILO supplied an adviser to orchestrate the first years of government involvement in village polytechnics. That neither the Kenyan government nor the ILO would entrust this job to a Kenyan has had serious repercussions for the programme. There is no question that the adviser who was eventually hired has done an excellent job: so good a job has he done in fact, that there is a general anxiety that when he leaves the movement will collapse. If a Kenyan with slightly less experience had done the job, it might have taken longer but at least there would have been a greater possibility that his experience gained would have stayed in Kenya. The same error has again been committed in setting up the Centre for Research and Training. The policies that allow foreigners to play such key roles in a programme which, as the Ford report says, 'is operating at such a fundamental level in terms of the country's needs',¹² should surely be more carefully examined.

If you cannot devise a system of foreign assistance as the Japanese did in the latter half of the nineteenth century, whereby Europeans came to Japan and passed on their skills to the Japanese, then it would be better to rely on your own skills and ingenuity.

The organizers of the village polytechnics, both church and government, have from the beginning recognized the need to carry out regular evaluations in order to identify problem areas such as the one discussed above. The first such study, conducted by John Anderson in 1970, made several recommendations which the government has been careful to heed. Anderson emphasized the need for research into rural economic opportunities and rural technology, a function which has now been designated to the Research and Training Centre. It was Anderson who outlined a possible format for government financing which in general terms was the one eventually adopted. Some other problems which his study focussed on have not proved so easy to deal with. The course content and particularly the role of agriculture in the village polytechnic were to be areas of concern. Anderson suggested that students be given more responsibility in the village polytechnics, that more time be spent in discussing student attitudes towards their training and developing multiple skills for use in the rural economy. He expressed a fear that there was tendency to giving courses because local workmen were available as instructors. Yet if the local workman had so much free time,

did that not suggest that the area was fairly well supplied with people of his skills? In spite of these warnings, however, since the Anderson study there seems to have been a trend towards the formalization of instruction, specialization and concentration on the traditional skills of carpentry, masonry and tailoring. A second question which Anderson raised in the study was that of the nature of the village polytechnic as an institution. In 1970, when the study was carried out there were 16 village polytechnics, some with stone buildings, dormitories and electricity, a few run on an extension basis with no central classroom or buildings whatsoever. Since that time more and more village polytechnics have tended towards the former variety. When local groups donate money, they want to see concrete (almost literally) results and it is very difficult to oppose this demand. While in many instances a good case can be made for having a certain number of permanent structures (for staff housing or materials storage, for instance) it is the preference for this type institution for all purposes which is disturbing. Initially the movement made an effort to adapt the polytechnic to the region in which it was located both as far as courses were concerned and with regard to the physical structures needed to house these courses. In areas of high temperatures or low rainfall for instance, simple lean-tos were put up to be used for the duration of the course and dismantled afterwards. In other areas no buildings are required at all. The investment

in permanent structures not only raises the cost of the village polytechnic programme but builds into it a permanence and rigidity which the movement initially hoped to avoid.

Using some of the data collected by John Anderson as well as his own data gained from a leaver survey conducted at Maseno village polytechnic in July 1972, David Court in a discussion paper written for IDS, has also analysed some of the problems facing the programme. In general he is positive about what the village polytechnics have accomplished so far but he warns that the programme will have to fight to develop into a unique non-institutionalized system: 'the major problems of village polytechnics have derived from the pervasiveness of the ethic of formal schooling ... part of the achievement and much of the potential of the village polytechnic movement lies in the extent to which polytechnics, in the face of this pervasive ethic, have still been able to exemplify significant new principles of education'.¹³ If the village polytechnics can manage to remain close to their original ideals they may eventually, in Court's opinion, serve as a model for reform in the formal school system.

In January of 1974 at the request of the Kenya government the Norwegian Government sponsored an evaluation team to carry out a general survey of the village polytechnic programme. Its terms of reference were as follows:

- 1) to review the working and organization of the village polytechnic programme

- 2) to assess the present effectiveness and future potential of the programme
- 3) to identify objectives and criteria for evaluating the performance of village polytechnics
- 4) to make recommendations regarding the desirable further development of village polytechnics.¹⁴

Considering the short amount of time which they had (Dec. 27 to Feb. 20, including time to complete the final report) they completed a fairly comprehensive survey of the main problems and prospects of the village polytechnics. In general the report was slightly more critical of the movement and in particular, as Court had done, they noted a tendency for the village polytechnics to become formalized institutions in response to student, parent and community pressure. In commenting on Court's analysis of the ideal of the village polytechnics in contrast to the reality (see Table II) they found some obvious strengths as well as some disturbing negative trends. Court cited the objective of the village polytechnic as being local self-employment and family improvement.¹⁵ The Norwegian study commented that while local self (or other) employment had been a success, family improvement was more difficult to gauge. The study agreed that the village polytechnic service area had tended to be local but criticized the high priority that had been assigned to dormitory building as an indication that this trend was changing. As far as recruitment criteria were concerned, the mission questioned seriously whether 'interest' had in fact

TABLE II

D. COURT'S TABULATION OF THE VILLAGE POLYTECHNIC DEAL

<u>DIMENSION</u>	<u>FORMAL SEC SCHOOL</u>	<u>VPS</u>
objectives of training	short term: graduation to next level. long term: wage employment in modern national economy.	local self employment and family improvement
catchment and service area	national	local
recruitment criteria	formal qualifications and ability to pay	interest
capital facilities	high cost institutional	low cost minimal
curriculum	standardized and group oriented	unbounded and individualised
medium of instruction	English	vernacular or Swahili
standard	national certification	self and local demand
form of instruction	classroom teaching	on-the-job learning
leadership	authoritarian	participatory-communal
organization	inflexible	flexible
time period	chronological sequence of pre-determined periods	time necessary to master skill
national administration	centralised, hierarchical	local autonomy
responsibility for leavers	vague societal	specific community

been the guiding principle. They found that in many cases an ability to pay the fees was more likely to decide whether a student was accepted or not. The mission did agree that the village polytechnics had managed to keep both recurrent and capital costs down but wondered whether the construction of dormitories might affect this. As far as the curriculum was concerned, the mission felt that the village polytechnics had strayed from their original ideal, often teaching 'solely' towards the achievement of a trade test standard. They were, however, impressed by village polytechnic efforts to include on-the-job learning as part of the training programme. Although the mission felt that leadership in village polytechnics tended to be authoritarian, they did comment that in view of the general trend in Kenyan administration the programme had achieved a considerable degree of flexibility. Thus while the study approved of the village polytechnic as a low cost institution which so far had succeeded in providing training leading to employment, they raised concerns about the nature of the curriculum and the criteria for accepting students. The long term effect of changing village polytechnics into permanent institutions with standardized curricula would be to subvert the original goals of the movement.

The Village Polytechnic movement has benefitted since its inception from this desire to evaluate and modify its own progress as the need arose, beginning with the Anderson study in 1970 and ending with the Norwegian evaluation in 1974.

My own study, I hope, will help to update statistics gathered by Anderson and Court and will also perhaps both reinforce some of their conclusions and bring some new insights into the nature of programme. With this specific purpose in mind I have retained as much as was feasible the original questionnaire used by Anderson. While this has given the advantage of past experience to one who was wholly inexperienced in designing questionnaires, it had many disadvantages which will be discussed later. Inaccuracies in the data are partly due to my own inexperience in data gathering and partly due to difficulties inherent in tracing a very mobile sector of society. In spite of the problems inherent in the method of investigation used and the quality of the investigator, I sincerely hope that the study will prove useful both to those directly concerned with the progress of the village polytechnic movement and to those more generally interested in experiments in non-formal education.

CHAPTER III FOOTNOTES

1. Kenya Census of Population, 1962 and Kenya Education Commission Report, 1965 as collated in 'After School What?', a Report by the NCKK, Nairobi, March, 1966.
2. Anderson, 'Primary School Leavers in Rural Areas', op.cit., p. 9.
3. 'After School What?', op.cit., p. 5.
4. 'After School What?', op.cit., p. 94.
5. Published in J.R. Sheffield (Ed.), op.cit.
6. John Anderson, 'The Village Polytechnic, an Evaluation Report', Institute for Development Studies, Nairobi, Aug. 10, 1970, p. 15.
7. Figures obtained during an interview with Edward Wanjala, NCKK, village polytechnic field officer, August, 1974.
8. R.J.C. Ford, 'Report on the Village Polytechnic Movement', ILO report no. 159-2-C-7-1-, Geneva, 1970, p. 10-11.
9. R.J.C. Ford, 'Summary Progress Report on the Village Polytechnic Programme in Kenya', March 1973-1974, p. 2.
10. \$1.00 Canadian equals approximately 7 Kenya shillings.
11. In 1973, the Norwegian government agreed to assist Kenya to provide staff for Research and Training Centre to serve the needs of the Village Polytechnic movement.
12. Ford report to ILO in 1970, op.cit., p. 11.
13. D. Court, 'Dilemmas of Development: the Village Polytechnic Movement as a Shadow System of Education in Kenya', Institute for Development Studies, Nairobi, discussion paper, no. 156, Nov. 1972, p. 18.
14. Anderson, 'The Village Polytechnic: an Evaluation Report', op.cit., p. 5.
15. Court should have included local wage employment.

CHAPTER IV THE NATURE OF THE STUDY

The NCKK handbook on How to Start a Village Polytechnic, issued in 1971, describes the village polytechnic as: "a low-cost training centre in a rural area. It aims at giving primary school leavers from that area skills, understanding and values which will make them able to look for money making opportunities where they live, and to contribute to rural development by building up the economic strength of their own communities".¹ The present study was undertaken in order to discover to what extent the village polytechnic programme was fulfilling these goals. The author spent from May to September 1974 in Kenya interviewing leavers from the village polytechnics, talking to government officials in the Youth Development Division of the Ministry of Cooperatives and Social Services, with field officers in the provinces, and with many others who were involved either directly or indirectly in the village polytechnic movement. The core of the study is centred around the 100 intensive interviews which I conducted personally with the leavers themselves. Other interviews and discussions were held on a more casual basis. The latter served to fill in some of the background and history of the movement and in some cases to clarify answers which the leavers had given. The Ministry staff in Nairobi and especially the village polytechnic instructors and managers spent endless hours talking with me about their work and in the latter

instance navigated with me over miles of country roads in search of leavers. But the main contribution to the study is from the leavers themselves who took time off from work to answer my questions. No one refused to be interviewed.

Because of the time constraint, it was decided to keep the sample of leavers as small as possible without undermining its validity. On the advice of my supervisor, I decided to limit the sample to 100. Within the total figure of 100, 4 groupings were established in order to allow for two types of comparison. First I chose to divide the total figure in half and interview fifty leavers each from Kenya's two principle ethnic groups, Luo and Kikuyu. Since the two groups live in two very different geographical areas, this type of comparison would allow me to study the different nature and needs of the two regions. In each of the groups of fifty, 25 female and 25 male leavers were to be interviewed to allow a comparison by sex as well as by region.

The Field Study Itself

Initially I tried to limit the source of leavers to two village polytechnics only, one in Central Province and one in Nyanza Province.² With the advice of Robin Ford, the UN/ILO adviser on youth development to the Ministry of Cooperatives and Social Services, two fairly well established and relatively

KENYA -- Village Polytechnics Included in the Study

1. Ndira
2. Ndere
3. Akado
4. Kirangari
5. Mangu

successful centres were chosen, one was Mangu village polytechnic about 14 miles from Thika and 30 miles north of Nairobi and the other was Ndere village polytechnic about 40 miles from Kisumu along the Kisumu/Busia road. Both were meant to be a reasonable distance away from a large centre and yet close enough so that the attractions of the city would represent a real alternative for people in the area. The two centres differ quite radically in their histories but this is typical of centres in Luo country as opposed to those in Kikuyuland. Mangu was established in 1957 as a Youth Centre by the Colonial Government. The Youth Centres were set up in Kikuyuland during the Emergency to train young men, specifically to keep them from becoming involved in political activities. After the Emergency, Mangu was still kept open as a training centre but was run down as funds from the District Council which was supporting it dwindled. Conditions at the centre worsened during the 1960's as the central government took most budgeting control from the provinces. It wasn't until the early 1970's when the Ministry integrated Mangu into the village polytechnic movement that it began to function again as a rural training centre. Ndere, on the other hand, was one of the first official village polytechnics to be started under the auspices of the NCK in 1968. As a result it has functioned as normal village polytechnic since that time, having enrolled its first class of trainees in May of that year. Thus Ndere has a much longer experience as a

village polytechnic and has, over the years, produced many more leavers. In comparing village polytechnics in Central and Nyanza Province, however, this kind of dichotomy was impossible to avoid since none of the early village polytechnics was in Central Province and in fact most were situated in western Kenya. It is only recently that village polytechnics in Central Province with a sufficient number of leavers to facilitate a study of this kind have come into existence.

Although an attempt was made to limit the study to two village polytechnics only it was not finally possible to meet the required number of 100 leavers in this way. Thus three other village polytechnics were selected as close to the original ones as possible.² In Central Province Kirangari village polytechnic, which had also previously been a youth centre, traced for me the remaining number of male and female respondents required. In the Nyanza sample, in order to trace the full complement of female leavers, girls from Akado village polytechnic and Ndira village polytechnic were interviewed. Again both village polytechnics were chosen to be as close to Ndere as was feasible. Like Ndere both were begun under the NCCCK. In spite of the difficulties found in locating a sufficient number of leavers to complete the survey it can safely be argued, I believe, that the sample finally obtained is fairly typical of the more successful village polytechnics in the two regions studied. None of the centres

was exceptional or had any assistance which could not be expected for an average village polytechnic. Village polytechnics such as Ahero which is heavily supported by the nearby Christian Brothers Mission, Mucii wa Urata, located close to a government rice scheme or Maseno, which enjoys ample funding (much of it from private sources) were avoided because it was felt that these centres enjoyed privileges which would not be characteristic of the movement as a whole. My results will be compared to those of John Anderson's study, to David Court's leaver survey carried out at Maseno in 1972 and to the government's own statistics gleaned from reports submitted by managers and instructors.

The questionnaire used was directly modelled on the ones used by Anderson and Court with the proviso that some questions were left slightly more open-ended. (The three questionnaires are attached in Appendix B.) It was designed to investigate four aspects of the respondent: his own background and training, his family history, his work experience since leaving the village polytechnic and his attitudes both towards the village polytechnic and to his own general goals. During the interview, depending on who was present, the leaver's peers, instructors from the village polytechnic or older relatives, different problems were encountered with different questions. When peers were present, inevitably the questions about schooling caused embarrassment, particularly the one demanding marks for the Certificate of Primary

Education. In some cases respondents pretended not to remember and when a rephrasing of the question failed to elicit an answer, this section was abandoned. Understandably enough, questions demanding opinions about the village polytechnic and the help it had given were avoided if a village polytechnic manager or instructor was present. Finally, in the presence of elder relatives questions concerning the father's economic status were viewed with suspicion. As a foreigner arriving from Nairobi, I was necessarily seen as a government official to whom information about land holdings and crops might be useful for tax purposes. Many of these difficulties were overcome as the interview proceeded, however, and the respondent and his family gained more confidence in the interviewer and answered questions more easily.

In general, it was extremely difficult to gain good answers to the questions which demanded opinions from respondents. Either total silence ensued which no amount of questioning could break or a memorized answer, obviously taken from a brochure or book, was offered. Probably only about 5% of the answers concerning future goals or the ideal village polytechnic were actually the original ideas of the respondent. Part of the problem was that the leavers were anxious to supply the 'right' answer so that when they were asked their goals, for instance, they inevitably replied that they wanted to set up their own business because this is what the village polytechnic tries to encourage them to do. As well it was

clear that in many cases, particularly for the female leavers, respondents had never previously given much consideration to questions demanding an opinion. It would probably have been better to have asked for these answers in writing so that respondents could have had more time to think. It is not certain, however, that this would have made for more honest answers. Obviously the Anderson and Court studies were aware of this problem because for many of the opinion questions they gave a list of suggestions and asked respondents to answer in order of preference. This approach again encourages the respondent to guess at what is the 'right' answer or to tick any choice so that he will have answered all the questions. In an attempt to correct for this some of the opinion questions were hidden in seemingly factual ones. Generally, however, there was not an overall good response and results for this type of question should be viewed with caution. Care will be taken to compare these results with those from the other studies in order to make them more useful.

Once it had been decided to limit the study to two basic village polytechnics, certain limitations were placed upon the method of choosing respondents. In theory village polytechnic managers and instructors are required as part of their work, to keep track of former students and, where possible, to maintain contact with them. In this way they are supposed to supply an extension service advising leavers

on job opportunities or assisting them with their businesses where required. As well the leavers themselves are supposed to inform the village polytechnic of their whereabouts and the nature of the work which they obtain. In practice instructors and managers have neither the time nor the money to carry out this very necessary part of their work. Almost none of the village polytechnics have a vehicle other than a bicycle and travel funds which might finance bus tickets usually disappear into the purchase of equipment or into other ends. Students on their part maintain contacts with the village polytechnic only where the experience has been a happy one for them. Thus although in theory it should have been relatively easy to trace 100 leavers, the task at times seemed impossible. Initially I proceeded by obtaining a list of leavers from the manager and chose at random an equal number of candidates from each graduating class. Since initial classes were smaller this tended to bias the results towards those leavers who had been out of the village polytechnic the longest. In only one instance did this method work even partially as it was intended, however. In the case of Ndere Village Polytechnic, the manager had complete lists of all leavers both male and female and as an instructor he, himself, knew where most of the trainees were, what they were doing and how to contact them. For the male leavers from Ndere, once I had chosen my random list, the manager made some alterations for those who had moved too far away to be reached

conveniently in a day's travel. We then proceeded to track them down. For the female leavers, since there were only about 25 in all, we attempted to trace all of them and fell short by 8. Thus it was that girls were also interviewed from Akado and from Ndira. For Mangu the problem was of a different order. Because most of the leavers with the exception of the carpentry group, had left the village polytechnic only very recently, many of them had not yet reported back and the manager had no record of their whereabouts. In spite of this the instructors were able to supply some names and made considerable efforts to locate the leavers. Because of the difficulties encountered in tracing students at Mangu and because they really had only two classes of leavers, all students who could be found, both male and female, were interviewed. Again when Kirangari was added to the Kikuyu study, almost all leavers that could be found were included.

In both the case of Mangu and that of Ndere even when information was readily available, the task of actually finding the students was gargantuan. Most of them, had no permanent address except for those women who were married. Because they were either looking for work or were involved in casual types of employment, they tended to move around a lot and often left only vague messages with friends or relatives concerning their whereabouts. In some cases it took an entire day to locate a single student's home only to discover that he had left to look for work the day before.

The task would have been impossible had it not been for the enormous efforts of managers and instructors to guide me through the maze of roads and villages in the Kenyan countryside. At all of the village polytechnics staff devoted entire days and weekends to help me look for students. It was an excellent way of proving, I think, that the task of tracing leavers and maintaining active contact with them is not something the manager can do in his spare time on a bicycle.

The reliance on managers and instructors as guides in finding students, while necessary, had some disadvantages. First since a staff member acted as guide and usually explained to the leaver and his family what I was doing, he necessarily was often present during the interview. In many cases this could not be avoided and as mentioned earlier it sometimes inhibited certain of the answers. On the other hand the presence in the room of someone whom the student knew and trusted often served to break the ice, relax the respondent and make matters proceed smoothly. The second disadvantage for the study was that, since we worked from the village polytechnic concerned, driving out every day to look for students, it meant that the survey has concentrated mostly on those leavers who are within one day's drive of the centre. Necessarily those who had moved to Mombasa or Tanzania, for instance, were excluded. Thus the results will be biased in favour of those who have remained in the home area.

With these two provisos in mind in most cases the

interviews were conducted very openly. In spite of the inhibiting presence of other members of the family, instructors, curious children, dogs, chickens and in some instances rain pounding on a tin roof, the leavers were in general anxious to answer the questions to the best of their ability and were fairly candid in their answers. Particular difficulties were encountered with some of the female respondents who were quite shy and took some time to summon up enough courage to reply to the questions. Over all, however, the shyness disappeared after a certain amount of time had elapsed and in the end most of the questions were answered in considerable detail. Considering the barriers to tracing the leavers both in terms of information, time limitations and physical access, the interviews were reasonably successful.

Other Methods of Investigation

My first point of contact on arriving in Kenya was through Robin Ford, the ILO adviser to the Ministry of Cooperatives and Social Services on youth development. Through numerous discussions both with him and with Mr. Masale, the Director of the Division, I gained a considerable amount of information both about the history of government involvement in village polytechnics and the current growing pains that the movement was undergoing. I also spent some time at the NCKK talking about the early church involvement with village polytechnics. In Nairobi some time was spent with other donor

agencies, notably NORAD³ and UNICEF both of which have an interest in the village polytechnics. UNICEF is particularly concerned with assisting women in the rural areas; NORAD is providing technical assistance to the Centre for Research and Training. At the time of my own research project, the NORAD researchers at the Centre had just returned from visiting most of the village polytechnics in Kenya in an attempt to establish a basic profile for each project. Finally I maintained contact with David Court at the Institute for Development Studies, Nairobi, and was assisted by his more detached view of the movement. Outside of Nairobi the district and provincial staff were of some assistance but my main source of information was of course the village polytechnic managers and instructors themselves. In the course of our long journeys in search of students, our conversations taught me much about their own attitudes towards their work, the students and the village polytechnic movement in general.

In summary the study has attempted to compensate for gaps and problems encountered during the interviews with leavers by comparing results gained from similar studies. As I have stated earlier it is my hope that the work which has been carried out so far will be more than an academic exercise and will be of some help to those who are involved in building the village polytechnic movement into a worthwhile tool for rural development.

CHAPTER IV FOOTNOTES

1. NCCK, 'How to Start a Village Polytechnic', Nairobi, 1971, p. 4.
 2. See map on page 63 for exact location.
 3. The Norwegian Aid Agency.
-

CHAPTER V

In this chapter I want to present a brief summary of the general results of the field study. Future chapters will then focus in more detail on those factors which affect the success rate of the respondents in terms of finding money making opportunities after the completion of their training. To date a considerable amount of data has been collected concerning village polytechnic leavers but very little of it has been analysed in any depth. The following chapters will constitute a first attempt at a more detailed analysis of the nature and success rate of the village polytechnic programme.

Personal Background of Respondents

Aside from the homogeneity which was planned into the study in terms of regional origin and sex, the group turned out to be surprisingly homogeneous as far as age was concerned. 84% of the trainees fell within the 18 to 24 year age group while only 2% were younger and 13% older than this group.¹ Although a certain degree of homogeneity was to be expected, since for most village polytechnic leavers the earliest possible completion year would have been 1970,² this tendency was probably exaggerated by the high number of very recent leavers from 1974 in the Kiambu group. In general the longer a trainee had been away from the institution the less likely the manager or instructor would be to know his current

occupation or whereabouts. Thus the method of choosing respondents through the manager favoured a homogeneous age grouping.

The Kiambu sample was younger than the Siaya group and within the Kiambu grouping the girls were younger than the male trainees. The age difference between the two regional groups is probably due to the fact that while two of the three village polytechnics in Siaya began classes in 1968, the Kiambu village polytechnics did not open until 1972. Although a few former youth centre trainees were interviewed most of the Kiambu leavers had only recently completed the course. Since in the majority of cases we are looking at leavers who have only been away from the village polytechnic for a maximum of two years (82%), the figures on age suggest that the village polytechnic is catering to a slightly older group than was originally envisaged by the NCCK. In After School What? the NCCK recommended that the village polytechnics should be established for the 16 to 17 year old age group who would subsequently be ready for the job market by the time they had completed training at 18 or 19.³ The survey suggests that the majority of the trainees (about 70%) enter the village polytechnic when they are 18 or over and thus leave when they are in their twenties.

As one would expect from such a young group and one with relatively few financial resources, only 33% of the sample were married. Of these more of the female (18%) than

male (15%) cohorts were married partly because many of the males did not have the finances to afford a wife and partly because the female Luo group contained a large proportion of older married women who had attended the village polytechnic for training in homecraft. It is possible as well that the village polytechnic certificate would immediately make the women more eligible wives while the men would become more eligible as husbands only after they had found work and earned some money. The data on children indicate that most of the marriages were fairly recent. Almost all had three children or fewer and the average age of the children was under five years. What is surprising is the appearance of two leavers with 6 and 7 children whose average age was over five years. This suggests that the village polytechnic is also catering to a very limited number of adults with fairly mature families who are looking for retraining programmes. Most of the respondents, themselves, came from large families; in some cases their fathers had more than one wife. When asked how many children there were in their father's family only 21% said there were 4 or less, 55% said that there were between 5 and 8 and 24% said there were 9 or more. Although by no means all of the fathers had more than one wife some were obviously prosperous enough to support several families and one girl reported that her father had more than 50 children all together.

Family Background

In Kenya other than looking at the occupation of an individual, one of the best ways of gauging both his economic and social status is to look at the amount of land and live-stock which he owns. For the trainees themselves a very high proportion owned no land at all (67%) but almost two thirds of this number were the female trainees who except in rare cases did not own land.⁴ Thus almost 50% of the males owned at least some land although in most cases the land was one acre or less. The availability of land seemed more common in the Siaya group where more people owned land (50% as opposed to 10% for the Kiambu group) and the average size was greater (less than 1 acre for Kiambu, slightly less than 3 acres for Siaya).

In looking at the landholdings of the trainees' fathers, only two reported that their father owned no land at all (both were from Kiambu). The size of holdings tended to be small, however, 70% of the sample reporting that their fathers had 6 acres or less. What was surprising is that 18% reported holdings of over 10 acres and 2, one in Kiambu, one in Siaya, over 20 acres. This fairly large proportion of people owning what for Kenya are bigger than average⁵ farms suggests that a good proportion of trainees originate from relatively well off rural families. Similarly, approximately one quarter of the sample reported that their fathers owned more than five local cattle, bred sheep and owned more than

15 chickens, all of which suggest both comparative personal wealth and a commercialization of the livestock. 36% of the fathers were said to be engaged in wage employment as their prime source of income while a further 3% reported permanent wages as a secondary source of income. In addition 59% of the sample reported growing cash crops, coffee being the most popular, with vegetables, usually the surplus from subsistence farming, being the next most common. In comparing these figures with those gathered by John Anderson in 1970, I find that the respondents in my survey score slightly higher in the economic scale in all categories with the exception of cash crops. (See Table III, below.)

TABLE III

Indicators of Father's Economic Background

	<u>Anderson</u> ⁶ (1970)	<u>Brown</u> (1974)
% in paid employment	34	39
% landowners	81	92
% owning more than 5 acres (4 acres for my figures)	34	49
% owning more than 5 local cattle	15	25
% growing cash crops	74	59
number in sample	328	100

David Court who recorded Anderson's data⁶ is somewhat ambiguous in defining the 'paid employment' category since he does not indicate whether casual farm labour or self run businesses figure in this number. In the former case the incidence of casual farm labour tends to indicate that the family cannot support itself on its own farm and thus reflects individuals at the low end of the economic ladder. The 'own business' category suggests the opposite since the more prosperous but untrained farmers tend to buy small shops or businesses with their surplus. If the 'own business' category is added to my figures a percentage of 47 in monetary employment results. If casual farm labour is then removed the result is to reduce the total by 2 to 45%, as compared to Anderson's 34%. The only figure which is lower in my group is the one for cash crops where 39% of my sample reported that the family grew no crops for sale while only 26% of Anderson's survey reported similar results.⁷

As would be expected, the educational level of the trainees' fathers and their level of understanding of English was much higher than for their mothers. While 46% of fathers were reported to have no education at all, 79% of the mothers had had no schooling. Most of the fathers, however, had only had literacy training or a few years in primary school while only 15% reported that their fathers had completed primary schooling. In only 5 cases had mothers attended upper primary school and none had gone on to secondary education. In

general about one third of the trainees' fathers spoke at least some English while only a few of their mothers were as familiar with the language. The results of the language questions are summarized in Table IV.

TABLE IV
Ability of Trainees' Parents to Speak
English (%)

	<u>Well</u>	<u>a little</u>	<u>not at all</u>	<u>total</u>
father	15	20	62	97
mother	1	10	87	98

Although Anderson records no data on the educational level and English language ability of the trainees' mothers, his figures for fathers in these categories are fairly close to my own. Finally, as Court reports from Anderson's figures, most of the fathers do not hold positions of importance in their home area. Of those that do the most frequent are school committee members (20%) and church committee members (5%).⁸

My impression is that the data on the economic status of the trainees' family suggest two things. First, many of the candidates do not come from the poorest rural families. Only two can be described as members of a landless class and a high proportion earn a wage as well as running a farm. Secondly, the Siaya group are from more prosperous families

than the Kiambu group. They own more land and more livestock, particularly cattle, and more of them hold some kind of official position in their home areas. From the educational level of both parents it again appears that the village polytechnic leavers are not an 'average' group. That over 50% of the fathers are reported as having had some kind of formal schooling indicates a fairly high level of parental education. Neither of these two results is altogether surprising. Rural families with some degree of formal schooling would tend to place a higher premium on education in general and would probably be more anxious that their children continue with some sort of post primary schooling even if secondary school were no longer a possibility. Those families who had better financial resources would also be more likely to continue their children's education; the village polytechnic fees, although minimal, are superior to primary school fees and would tend to eliminate children from very poor families.

Education of Respondents

It is the goal of the village polytechnic programme to attract students who have completed their primary education. While this goal is often not realized, the village polytechnics in the sample came remarkably close to doing so. 83% of those interviewed had completed their Certificate of Primary Education and 69% of these 83 respondents received a

mark of C- or better. The figure of 69% may be slightly high since 9 of the 83 'could not remember' their marks and it is probable that these nine had grades in the D- and E range. Even with this factor taken into account, however, over 50% of the leavers received a better than C- average. All of the students reported that they had had some primary education and only four had not gone further than standard 5. The average number of years spent by each student in primary school was eight, which suggests that a certain amount of repeating occurred. For most of the respondents, education in the formal system ceased at the end of primary school. In spite of the fairly high average CPE mark only 53% of those who passed the examination applied for a place in secondary school and only 19% were successful with their applications. It is quite possible that more than 53% actually did apply but since they were not successful were unwilling to admit having tried in the first place. Finally only twelve students went on to secondary education, some staying in secondary school for one term only and one going as far as his GCE '0'9 levels where he failed to pass the examination. Most of the students cited a lack of money for fees as the main reason why they did not apply to secondary school, did not attend or were eventually forced to quit. That money was probably the deciding factor is also indicated by the fact that the average marks for those who did attend were not appreciably higher than for the group as a whole.

In the large majority of the cases primary school fees were fairly low since only two students out of the sample reported having gone to boarding schools. 95% of the respondents reported having paid 100Ks (\$14.00) or less per year for their primary education. In almost all of the cases the fees were paid either by father, mother or the two jointly. In general money for fees was generated through agricultural pursuits either by selling crops or by working on a day labour basis on larger farms. (See Table V.)

TABLE V
How Money was Raised for Primary
School Fees

	No.
sale of farm produce	43
day farm labour	17
wages	35
private business	4
harambee ¹⁰	1
TOTAL	<u>100</u>

What is surprising about the figures is that a rather large proportion of the trainees' immediate family (either father or mother, in some cases a brother) have a steady source of non-agricultural income. This reinforces the suspicion concerning the family economic standing which suggests that

the trainees do not come from the poorest families in their respective home districts.

It is the policy of the village polytechnic programme to set its fee structure slightly higher than that of primary school so that it does not attract students seeking a primary education and yet not so high that they are out of range for most primary school graduates. Fees for the village polytechnics included in the sample follow this policy to a large extent. In Kiambu district the fees were slightly over 100Ks per year while in Siaya the figure was a little higher, around 150Ks not including the cost of boarding facilities. Neither of these figures is necessarily typical of the Village Polytechnic movement as a whole; some centres such as Maseno charge as much as 240Ks for the year with no boarding facilities. Elsewhere¹¹ it has been pointed out that village polytechnic costs and fees seem to vary enormously from centre to centre. Anderson's average cost figures were about 500Ks per student per year which suggests that students at the centres included in the survey are paying about one quarter to one fifth of the cost of their training. In paying the village polytechnic fees, the parents are still the most frequent contributors although other relatives play a more important role than in the case of primary school fees (see Table VI).

TABLE VISource of Primary School and Village Polytechnic Fees

	<u>Primary School</u>	<u>Village Polytechnic</u>
father	64	52
mother	15	10
both parents	6	4
relatives (most often brother)	13	16
self	2	6
husband	0	10
TOTAL	100	98

Obviously the village polytechnic is viewed by some as a place to train better wives since in 10% of the sample husbands had paid for their wives' fees and yet very few of the married women (only 17%) looked for work when their training was complete.

The stated purpose of the Village Polytechnic movement is to offer to trainees skills which are in demand locally. In theory the village polytechnic attempts to carry out a local economic survey to establish which skills it should teach. In practice village polytechnics with only a few exceptions begin by offering the traditional rural crafts of carpentry, masonry and tailoring. This trend is borne out by the results of the survey as shown in Table VII below.

TABLE IX

buy tools and/or open own shop	66
buy land and/or livestock	34
spend it on family	14
buy clothes, car, bicycle	9
save it	5
get married	4
build a house	4
look for work	2
go to school	1

Conclusion

The general survey of the sample points to several areas which require a more detailed study. One of these is the divergence in economic levels between the two regional groups; a second is the difference in the success rates for male and female leavers. The failure of women to become involved in monetary activities could well mean that the village polytechnic goals need redefining. The principle effect of the overview, however, has been to focus attention on the general purpose and nature of the village polytechnic programme itself and whether or not the programme is moving away from the original concept. The fairly high academic standing of the village polytechnic leavers and the number of leavers from prosperous rural families suggest that marks and ability to pay may be the major selection criteria for

TABLE VII

Primary Course Taken at Village Polytechnic

	<u>male</u>	<u>female</u>	<u>total</u>
tailoring	0	42	42
typing/accounting	2	8	10
carpentry	22	0	22
masonry	14	0	14
leather	9	0	9
metal	3	0	3
TOTAL			100

Since all of the village polytechnic staff members at the centres in the survey are working on a permanent basis, there is little to encourage them to introduce new skills into the school. When speaking to me instructors expressed fears that the survey would show that their own trainees were not finding work; as a result they worried that the skill which they taught and therefore their services would be discontinued. Because of this fear and because of the tendency to begin with the better known and understood skills the village polytechnic's approach to course offerings is conservative and the village polytechnic is in danger of becoming a kind of post-primary trade school. This tendency becomes even more evident when the figures on the secondary courses undertaken by trainees are taken into account. Originally agriculture was to have

occupied a major part of the curriculum and to be offered at all the centres. Only one of the five village polytechnics under study had ever had a course in agriculture, however, and since the departure of the British agriculture instructor efforts in this direction had been neglected. Similarly since the village polytechnic is supposed to train the students to run their own businesses, some kind of simple accounting and business management was to be taught to all classes. As the data show, very little of this theory is put into practice: 78% of the students had not been exposed to a second course; only 18% had been given training in agriculture and only 3% in accounting. Thus not only are these village polytechnics failing to innovate in the choice of skills to be taught, but they neglect as well to provide the trainees with supplementary skills which would be useful for rural development. The trend toward the standardization of village polytechnics again shows up in the length of time that students spend at the centre: 76% reported spending 18 months or more in training. A few admitted that shorter courses were available to them elsewhere but they preferred the longer training period because they felt it was better. Although it is not surprising that students (and probably prospective employers) equate skill level with the time spent in training, the village polytechnics themselves do not appear to be making any effort to change this attitude.

Two other factors which run counter to stated village

polytechnic goals are the dropout rate for female trainees and the catchment area served by each centre. To deal with the latter first, the goal of the village polytechnic is to train people while divorcing them from their home environment as little as possible. Yet in spite of this theoretical goal, the polytechnics recruit students from a wide area, and further encourage emigration by building dormitory facilities. The village polytechnics in my survey appear to be following this model: 54% of the leavers' homes were 8 miles or more from the centre. If the goal of local involvement is to be retained, perhaps the best solution is to resist pressures for dormitory facilities. If on the other hand the village polytechnics are desperate for students and thus must take outsiders, then the problem is a more serious one.

The high dropout rate for female leavers (50%) suggests that the courses being offered are not useful to the girls or are not adapted to their social situation. Of the 25 who left before completing their training 14 cited family responsibilities (pregnancy, marriage, children) as the reason for their leaving. As well, 7 stated that they were not able to meet the fee commitment. Both these reasons suggest that an institutionalized two year course is not appropriate to the role which rural women in Kenya are expected to fill. Especially for the girls' programmes imagination is needed in developing a form of training which will still give the women time to meet family responsibilities. An extension system

like that at Soy or a work group structure where the women could come in and work for a few hours a day may be more appropriate.

Work History of Respondents

The majority of the leavers had had no previous experience in wage employment before they attended the village polytechnic. Most of those who had worked had hired themselves out as day labourers on the larger farms in their area either to earn money for school fees or to supplement the general family income. Thus after finishing their training programme most of the leavers were seeking jobs for the first time. A surprising number of those who completed the course did not look for work at all, some because they had already been offered work, but others, particularly the women, because they did not consider the village polytechnic training to be leading to employment. Of those who did seek work only one third restricted themselves to looking in the rural areas while 40% confined themselves exclusively to urban areas and 30% looked for work both in the towns and the countryside. Eventually the male leavers were considerably more successful in finding work than the females. 80% of the male leavers had found wage employment while only 16% of the females were in a similar position.

Attitudes Towards the Training

The questionnaire format proved to be particularly inadequate in giving any accurate picture of what the students felt about the training which they had received. Although almost all of the group replied that they felt they had gained a lot from the village polytechnic, when they were asked why, a third of them did not know. This would seem to indicate that the respondent was trying to please both his instructor (who was often present at the interview), the government and me, who for all they knew represented the government. The positive reply was probably, therefore, a function of politeness rather than an indication of what the trainee really thought of the village polytechnic. For those who could express why they felt they had gained something from their training the responses should be viewed with caution. In many cases students wanted to give the 'right' answer and were, therefore, quick to quote village polytechnic goals back to me whether these were necessarily in agreement with their own ideas about the programme or not. In spite of a general reluctance to criticize the programme, however, about one third of the students did offer suggestions as to how the village polytechnic could be improved. It is revealing that most of these suggestions were in the direction of turning the village polytechnic into a permanent, more academic institution. Students wanted more courses of a higher level (electrical engineering was one suggestion);

they felt that the centres should have better facilities and better equipment in the form of machines, dormitories and more classrooms. Only five of the 36 students who offered any suggestions about how the village polytechnic could be improved seemed in accord with the village polytechnic goals. These five felt that the manager and instructors should assist students more both in looking for work and in setting up small businesses.

In an attempt to correct for the respondents' reluctance to criticize the village polytechnics, I asked the trainees what sort of education they hoped their children would eventually gain in the belief that their answers would reveal what type of education they really felt to be more useful. The results for this question are revealing: 68 of the respondents opted clearly for an academic training while as many as 35 hoped their children would go on to some type of post secondary education. Only 21 of the hundred opted for some kind of technical training and very few indeed felt that their child should go to a village polytechnic. Only 6 of the sample would not answer the question while only 5 felt that the child should choose the kind of education that he wanted for himself. When asked why they had made a particular choice for their children, the reply was almost always the same: 'so that they can find good work'. Thus it appears that the respondents felt that the highest economic rewards in Kenya went to those who had the most advanced

academic training and not those with some kind of practical skill.

In spite of the unrealistic aspirations which many of the respondents held for their children, when it came to discussing their own future plans most of the leavers spoke in terms of options which were conceivably available to them. Almost half of them mentioned that they would eventually like to open a small business or expand their current business. A large proportion said that they hoped to buy some land and another sizeable group expressed a desire to return to school. In replying to the question about what job they would prefer most of the respondents restricted themselves to jobs requiring skills which they already had (see Table VIII).

TABLE VIII

Trainees' Preferred Work

no answer	6
skilled trade	44
teacher	18
own business	14
clerical or secretarial	9
medical	4
farming	2
police	1
other	2
TOTAL	100

Most of the trainees answered this question by saying that they hoped to work with the skill they had acquired at the village polytechnic. Those who expressed a wish to teach usually specified that they would like to teach their own skills to others, either privately or through the village polytechnic system. Finally the number of students aspiring for clerical and secretarial work (9) corresponds closely to the number who followed this option in training (10). Thus with the exception of those who expressed a desire to become doctors or nurses, almost all of the trainees aspired to jobs which were reasonably realistic. The surprising response is the limited number who showed any interest in farming. Perhaps this was partly because the students were asked specifically what 'job' they wanted and since for most of them farming is a way of life, it may not have occurred to them to consider it as a 'job'.

Finally in an attempt to push them beyond their normal possibilities, I asked the leavers what they would do if they had a lot of money. Although some gave the standard reply of 'have my own business' many put some thought into the question and gave details of what machines they would buy for their shop or how they would go about setting up a farm. Below are summarized the results of this particular question. Where students gave more than one answer these have been recorded.

TABLE IX

buy tools and/or open own shop	66
buy land and/or livestock	34
spend it on family	14
buy clothes, car, bicycle	9
save it	5
get married	4
build a house	4
look for work	2
go to school	1

Conclusion

The general survey of the sample points to several areas which require a more detailed study. One of these is the divergence in economic levels between the two regional groups; a second is the difference in the success rates for male and female leavers. The failure of women to become involved in monetary activities could well mean that the village polytechnic goals need redefining. The principle effect of the overview, however, has been to focus attention on the general purpose and nature of the village polytechnic programme itself and whether or not the programme is moving away from the original concept. The fairly high academic standing of the village polytechnic leavers and the number of leavers from prosperous rural families suggest that marks and ability to pay may be the major selection criteria for

trainees. While this fact in itself may be of only minor importance, what is significant is that the trainees' attitudes both before and during training appear to be of little interest to instructors and managers. Thus little is done during training to change the focus of students who come from an academic and highly structured system and yet are expected at the end of their training to be self-reliant and oriented to practical tasks. The village polytechnic as a centre of community development, producing trainees with not only a specific skill but also a more generalized ability to function in the community appears to be giving way to the village polytechnic as a post primary trades training institution. In the next few chapters I will look at the effect of family background, regional origin and sex both on the trainee's success and on his attitude to the village polytechnic programme. In addition I will try to establish what effect the trainee's attitude has had on his choice of occupation after leaving the village polytechnic and upon his ability to function in the rural community.

CHAPTER V FOOTNOTES

1. This excludes one highly questionable response of '15' from a respondent who looked to be 20.
2. With the exclusion of a very few youth centres leavers in the Mangu group.
3. NCCK, After School What?, p. 53.
4. I was surprised to find that some of the women did own land; 10 of the 50 reported that they did. Usually these were widows or daughters of families which had no sons. In some cases husbands had transferred land titles to their wives.
5. In Kiambu 57% of landholdings are 5 acres (2 hectares) or less; in Siaya 62.2% of holdings fall into this category. See the ILO report on Employment in Kenya, 1972, p. 335.
6. David Court, 'Some Background and Attitude Characteristics of Trainees at Village Polytechnics', Institute for Development Studies, Nairobi, staff paper no. 110, July 1971, table 3, p. 10.
7. Ibid., p. 10.
8. Anderson's figures show 18% for church elder and 14% for primary school committee member. See D. Court, 'Some Background ...', p. 3.
9. General Certificate of Education, Ordinary Level, awarded upon successful completion of an examination after four years of secondary school.
10. 'Harambee' is the swahili word for 'let us all pull together'; it has become President Kenyatta's rallying cry and is commonly used to refer to self-help projects.
11. John Anderson, 'The Village Polytechnic: an Evaluation Report', p. 24-25.

CHAPTER VI

The purpose of this chapter is to examine to what extent the respondent's family background and own personal background are related to three areas of concern: his success in the formal education system, his work activities both prior to and after the village polytechnic training and his attitudes and future aspirations. Is the village polytechnic establishing a trend whereby it is recruiting its trainees from the better educated and relatively more wealthy rural families? Within the sample itself do those who come from the better educationally and economically endowed families stand a greater chance of understanding village polytechnic goals and fulfilling them? Since primary school grades and ability to pay appear to be the chief criteria for accepting trainees into the course do those students with greater educational and financial resources of their own better fulfill the expectations of the Village Polytechnic movement?¹

In order to examine the relationship between the economic and educational endowments of the trainees' families, I have reconstructed from the interviews two composite indicators, one educational and one economic. Both were intended to divide the sample into three groups, high, medium and low depending only upon the relative economic and educational endowment within the group under study. Eventually the educational indicator was reduced to two categories because of

the small number who fell into the 'high' group. For the educational indicator trainees' families were considered to be highly educated if the father spoke English well and had at least completed a primary school education and if the mother spoke English well and had some education beyond standard four. Those in the 'medium' group spoke some English and had some formal education; while those in the 'low' group spoke no English and had no formal schooling. Since in the end the upper two groups were collapsed (only 3 candidates fell into the 'high' category), the indicator simply shows those who have at least some formal schooling or familiarity with English as opposed to those who have none. The fact that 40% of the sample fall into the 2 upper categories while 59% report that their parents have no education or familiarity with English, coupled with the fact that only 52% of the fathers and 79% of the mothers have no formal education suggest that the sample is better educated than average. Figures from the 1969 population census for Siaya and Kiambu districts show that for those people aged 40 or over, 83.9% have had no formal education. When this figure is broken down on the basis of sex the percentages of uneducated are 60.2 for males and 86.2 for females.²

The family economic indicator was slightly more complex and took into account the amount of land and livestock the father owned, whether he had a wage earning job, whether he grew cash crops and whether he held any position of importance

in the local community. In general families with less than an acre of land, no or little livestock and few money earning capacities whether from wages or the sale of cash crops were rated in the 'low' category. Those who had from one to six acres of land, one to five cows, some other livestock and at least one means of gaining a cash income were rated as average. Those with more than six acres of land, six or more cattle, other livestock and fairly lucrative cash possibilities fell into the high potential group. Within the sample 26% were rated high, 57% average and 17% low. Average figures for Kiambu and Siaya districts for landholdings suggest that the sample represents a slightly below average group for Kiambu and slightly above average group for Siaya. (In Kiambu 57% of landholdings are less than 5 acres while in Siaya 62.2% fall into the same category.³ In the sample 70% of the Kiambu landholdings were less than 5 acres and 60% of the Siaya group fell within the same category. (See Table X for a breakdown of the educational and economic indicators.)

TABLE XBreakdown of Economic and Educational Categories

	<u>characteristics</u>	<u>no. in group</u>
students from 'low' educational background	- mother and father speak no English, have no formal education	59
students from 'high' educational background	- mother and/or father speak some English or have some formal education	40
total:		<u>99</u>
students from relatively poor families	- family has: - less than 1 acre of land - one or no cows - few money earning possibilities	17
students from average families	- family has: - 1 to 6 acres of land - 1 to 5 cows - at least one means of gaining cash income	57
students from relatively wealthy families	- family has: - more than 6 acres - 6 or more cattle - several cash earning possibilities	26
total:		<u>100</u>

Effect of Family Economic and Educational Level on Formal
Education and Work Activities

In looking only at the differences within the sample itself the data appears to indicate a stronger relationship between the family economic background of the trainee and his

educational performance than is true for his family educational background. In primary school this dichotomy is less obvious. Neither family education nor relative wealth appears to have any influence on whether a student will get as far as the CPE. The percentages of students from high and low family educational groups were identical to the percentages of these students in the group who had sat for the CPE. For the economic indicator slightly fewer students from the 'low' group had tried CPE than the overall percentage of students in the group, while the middle was slightly more strongly represented. Since the differences are only minimal it would appear that neither indicators had much effect on the students' chances of trying the CPE. (See Table XI.)

TABLE XI

Percentage of Each Category Who Tried CPE

	<u>%</u>
'low' educational	82.5
'high' educational	83.1
'low' economic	70.6
'average' economic	86.0
'high' economic	84.6

If we look at the results of the CPE, the higher marks definitely go to those from the better educated families and the lower marks to those from a poorer educational environment but in the average mark area educational environment appears to

have little effect. With the economic indicator the results were a little different. (See Table XII.) Again the highest marks went to those from the better off families and the lowest marks to those from poorer families. In the middle the better off students scored better with 70% gaining a 'C' or better, while only 46.5% of the 'middle' group and 45.5% of the 'low' group fell into this category.⁴ In looking at the number of years that each of the students spent in primary school we find that the results are also fairly inconclusive. The better educated group shows a slightly lower tendency to repeat standards while the high and low economic group show a higher tendency to repeat. This latter trend may be the result of a greater opportunity to repeat for those from well off families and a greater need on the part of the poorer families.

TABLE XII

Distribution of CPE Marks for Each Category (%)

	<u>C or better</u>	<u>C- or worse</u>
'low' educational	55.9	44.2
'high' educational	46.6	53.3
'low' economic	45.5	54.5
'average' economic	46.5	53.5
'high' economic	70.0	30.0

In general, then, neither the educational nor economic status of the student's family appears to have much effect on either

whether he will get as far as the CPE or how long he will stay in primary school. The only positive relationship is that between the economic status of the family and the student's CPE marks. In the sample the 'high' economic group had better results than the other groups.

The students' economic and educational background show little effect on whether he will apply to secondary school. Slightly more of those who applied were from the better educated group than their representation in the sample but the economic groups are represented almost exactly among the applicants as they are in the sample as a whole. For those who were successful with their applications, i.e. were offered a school place, the educational 'high' group showed a slight advantage over the 'low' group while almost 50% of the successful applicants fell into the economically well-off group. Of those who actually attended secondary school only one student came from an economically poor background. This was a Kikuyu girl who showed a particular determination to continue her schooling: she had gone as far as form 4 but had failed the final examination. She was paying for her own fees at the village polytechnic and had plans to raise chickens to make money which would allow her to return to school. The rest of those who had gone to secondary school came primarily from relatively well-off families. Finally if we take a brief look at the results for training outside of primary or secondary school⁵ some of the previous trends are continued.

Slightly more of the students from better educated families reported that they had taken further training of some sort after their formal schooling. The economic indicator was particularly revealing here as about half of those with further training came from the well-off group, half from the average group while none of those from poorer families had been able to take other training.⁶ Thus as far as attendance at secondary school or other (non-village polytechnic) post primary training is concerned the results of the sample show an advantage to students from relatively well-off families. Students from better educated families appeared to have a slightly better chance of going on to post primary (non-village polytechnic) training but the difference was not large enough to be significant.

The use of both indicators in relation to the village polytechnic course itself produced some rather surprising results. Almost 90% of those from poorly educated families and from economically poor families completed the village polytechnic course. Only 55% of those from well educated families finished the course. In the economic grouping the 'average' group showed the next greatest propensity to finish with 74% and those who were least likely to do so were the well-to-do group with only 69% completing. (See Table XIII.) The only possible explanation which comes to mind is that the need to finish for students from poorer families was the greatest. Since almost all of those who did not finish were

TABLE XIII

Percentage of Those Who Finished the Village Polytechnic
Course by Category

	<u>finished village</u> <u>polytechnic course</u>
'low' educational	88
'high' educational	55
'low' economic	88
'average' economic	74
'high' economic	69

women it suggests that the course was more of a status symbol than a real necessity for those who did not finish.

As would be expected those from poorer families had the longest work experience with almost all of those who had sought work after primary school coming from this group. When it came to seeking work after the completion of the village polytechnic training the economically better off students show less inclination to do so. In the economic grouping only 12% of the 'poor' group did not look for work, as opposed to 36% for the average group and 46% for the well off group. This does not mean, however, that the wealthy group was less inclined to work but rather that more work opportunities were offered to them without their having to make an effort. This observation is born out by the figures for those who actually found work. (See Table XIV)

TABLE XIV

Percentage of students a) who looked for work, b) who
found work, by category
 (actual numbers in brackets)

	<u>looked for work</u>	<u>found work</u>
'low' educational	67 (40)	56 (18)
'high' educational	62 (25)	45 (33)
'low' economic	88 (15)	47 (8)
'average' economic	65 (36)	47 (27)
'high' economic	54 (14)	65 (17)

Two thirds of the wealthy group found a job while slightly less than one half of both the average and poor groups were similarly successful.⁷ For the educational indicator, those from the 'low' group were slightly more successful in finding work than those from the 'high' group although the difference was minimal: 56% as opposed to 45%.

The relationship between economic and educational levels and the type of work found is varied. Strangely enough students from poorly educated families gained more of the high wage jobs: 74% were earning more than 5ks per day while only 56% of the highly educated group were in the same category.⁸ Family economic levels appear to have little effect on the trainee's wage level; only the average group scored lower than the other two. The time which a trainee had spent on his current job is a better indicator of job quality. In the sample it was tied more closely to economic

than to educational background: 34% of the highly educated group had been more than 6 months on the job while only 19% of the 'low' group were in a similar position. Contrasts for the economic indicator were more sharply drawn: 42% of the 'high' group had worked in their current job for more than 6 months as opposed to 15% for 'average' and 14% for 'low'.⁹ In addition all of those who had been in their present occupation for more than a year came from the 'high' economic grouping. This suggests that a strong educational and economic background are helpful in assisting the trainee to find more permanent work. The relationships between education, economics and the type of employment are particularly interesting. Only one of the 'highly educated' group was involved in self-employment activities; the others being drawn entirely from the 'low' group. Again for the economic indicator a higher proportion of the low group was either 'self-employed' or 'self-employed in a group' than was true for either of the other two groups.¹⁰

Thus again the links between the educational level of the student's family and his behavior on the job market are minimal. High and low groups show the same propensity to look for work and almost the same ability to find work. Slightly more from well educated families found more permanent jobs but the differences are too small to be significant. The only significant connection between education and job choice was in relation to self employment where a significant number of

students from poorly educated families chose this type of work. The data did reveal a link between the economic background of the student and his work history. Students from relatively poor families were more enterprising in looking for work. Students from relatively wealthy families were more likely to find work and their jobs tended to be more permanent. Again more students from relatively poor families chose to be self-employed.

Summary

The relationship of the trainees' family's economic and educational level to his formal schooling and work performance show few surprising trends. It is interesting to note that students from relatively poor and uneducated families in the sample appeared to have the same chance of writing the CPE examination as did those from relatively well-off and well educated families. As far as entering secondary school or gaining some other (besides the village polytechnic) form of post primary education was concerned, however, the relatively well-off students proved to have a distinct advantage. Again on the job market students from wealthier families spent less time looking for work than poorer students. Yet they were more likely to find wage employment and although this was not necessarily highly paid, it was more likely to be of a permanent nature. Only students from poorly educated and relatively poor families, however,

showed much interest in self-employment. Thus while the students from educationally and economically disadvantaged families in the sample had equal opportunities until the end of primary school, after that point more opportunities were available to the better-off students both vis-a-vis formal education and in relation to wage employment.

Effect of Family Educational and Economic Level on Attitudes and Goals

I will preface this section by saying again that most of the questions dealing with trainee attitudes were answered with hesitation if at all and thus any conclusions from this part of the study should be viewed with caution.

In general when the trainees spoke about their future plans and hopes, they made frequent mention of their desire to 'have their own business'. The distribution of this particular response for the attitude questions is quite interesting. Both when the trainees were asked why they had attended the village polytechnic and why, upon finishing, they felt the course had been useful, the high and medium economic groups and the high educational group answered more frequently than the lower groups that the course was good because it led to self-employment. When the students were asked to describe their future goals in a general way the self-employment category was given most frequent attention, comprising about 50% of responses for all groups (educational and economic) as a

first choice and dropping off to around 25% as a second choice. It was only when the trainees were asked specifically to state what job they preferred that their responses finally began to approach reality, i.e. the work that they had actually found for themselves. Table XV shows how frequently each group mentioned the 'own business' category first in speaking of future goals and secondly in speaking of preferred jobs and compares these to the current occupation of the trainees. It should be remembered that all the questions were open-ended so that the students had to come up with their own ideas.

TABLE XV

No. of times self-employment was chosen as percentage of all other choices made by each group

(actual numbers are shown in brackets)

	<u>Goals</u>	<u>preferred job</u>	<u>present occupation</u>
'low' educational	49.2 (29)	20.0 (11)	11.9 (7)
'high' educational	48.6 (18)	7.9 (3)	2.5 (1)
'low' economic	47.1 (8)	25.0 (4)	23.5 (4)
'average' economic	50.9 (28)	15.1 (8)	3.5 (2)
'high' economic	44.0 (11)	8.0 (2)	7.6 (2)

It appears, then, that as long as the question remained general, the trainees were quite willing to give what they knew to be the 'right' answer and show their interest in self-employment. When asked specifically to choose the work they preferred,

however, their interest in having their own business fell. Figures for the 'own business' category as a preferred job compare more closely to the 'own business' category as an actual occupation as Table XV shows. This would lead one to believe that the question asking about preferred jobs is a more reliable indicator of the students' aspirations than the questions in which students are asked to describe future goals in more general terms. The fact that all of the five groups showed almost an identical preference for the 'own business' category in speaking of general goals also reinforces the suspicion that the students were trying to give the 'right' answer in responding to this question. In speaking of the work which they preferred the students matched their aspirations fairly closely to the skills which they had. Only 12 out of the 100 made such ambitious choices as doctor, nurse or electrical engineer. Interestingly enough none of the 12 students came from families which were relatively well-off. Since the numbers are small this may not be significant but it does reinforce the suspicion that the choices of the relatively poor group had little chance of being realized.

Finally the attitudes of the different economic and educational groups towards buying land are worth noting. Both the medium and low economic groups mentioned much more frequently than their more favoured counterparts that one of their goals was to acquire more land. Interestingly enough of all the groups the medium economic group mentioned this

choice more often than any of the other groups.¹¹ There was some tendency within the educational groupings for the 'low' category to show a greater interest in buying land but the difference between the two groups was not great enough to be significant.

Summary

Thus although the data on goals and preferences should be treated with caution it does bring into focus three observations which should be mentioned. The first relates to the nature of the questionnaire itself and the preference which students appeared to show for setting up their own business. A careful analysis of the responses suggests that while students may say that they want to be self-employed, this particular choice is not very popular and reflects a desire to supply the correct answer rather than a real preference. Secondly the student's stated job preference in most cases is a fairly realistic reflection of his training. This suggests that students are well aware of what jobs are open to them. Finally the desire to acquire land was a frequent goal among all five groups but appeared to be related to economic background and was most popular among those in the average economic grouping.

Effect of Student's own Education on Success in the Village Polytechnic, Work Experience and Future Aspirations

Until now I have looked exclusively at how students

from different economic and educational backgrounds function differently in the school system, on the job market and in relation to their aspirations for the future. Now I would like to look briefly at the relationship between the students' own educational performance and each of these three variables. The questionnaires provide four increasingly exclusive groups which I will use for the analysis: first the sample is divided into those who completed primary school and those who did not; second, those who did complete are differentiated on the basis of their CPE marks; the group narrows again when only those who applied for a secondary school place are considered and again for those who actually attended secondary school.

In the first instance whether the trainee completed primary school or not appears to have little effect either on his likelihood of completing the village polytechnic course or his ability to find work afterwards: 17% of all the students had not sat for CPE and 70% of these finished the village polytechnic course. Of those who did sit for CPE 76% finished the village polytechnic course. Similarly 59% of those with no CPE found work after finishing while 51% of those who had done CPE found work. The numbers are close enough to indicate that neither the CPE nor non-CPE group appears to have an advantage in these two categories. The CPE group did show a greater tendency to seek alternate types of training and this as well as their CPE certificate may have given them some advantage in finding more permanent work.

As one might expect, those who had finished primary school seemed better to understand the goals of the Village Polytechnic movement. In discussing their own goals as well they much more frequently mentioned the desire to have their own business than did the non-CPE group. When they were replying specifically to what job they preferred, however, both groups showed only a moderate interest in eventually becoming self-employed. Finally, and again as one might expect, the CPE group tended to opt for having smaller families once they married although they by far surpassed the non-CPE group in choosing technical schooling for their children: 25% of the CPE group opted for technical education as opposed to 6% (only one individual) of the non-CPE group.¹²

In order to look in more detail at those who did sit for CPE, I have divided the group into three groups according to their marks: B- or better representing the top 12½% of the group, C to D representing the middle 75% and D or less representing the bottom 12½%. As would be expected both those who applied to secondary school and those who went tended to come from the upper group but to no extent was this exclusively so. Three quarters of the top group applied, while slightly fewer than one half attended; one half of the middle group applied, while 15% attended; one third of the lower group applied, while 10% (again only one individual) attended. While the exact percentages are of some importance what is most significant is that those with very poor marks felt they had

some chance of attending secondary school and were justified in doing so.

The effect of good CPE marks on success within the village polytechnic system appears to be a positive one. (See Table XVI.) All of the upper group completed the course and the lower group showed the greatest tendency not to finish. The upper group also showed a greater ability to find work upon completion of the course with the other two groups demonstrating about equal success in finding jobs.¹³

TABLE XVI

Success and Aspirations of Students by Marks Received for CPE

(% of each group)

<u>CPE Mark</u>	<u>Finished Village Poly-technic Course</u>	<u>Found Work</u>	<u>Poor Under-standing of village poly-technic goals</u>	<u>Chose technical education for children</u>
A+ to B-	100	78	11	44
B+ to D+	73	46	15	21
D to F	60	50	0	25

In their understanding of the village polytechnic goals, the bottom group scored better than the other two with none of the respondents for this group falling into the poor category. In discussing their own goals the upper groups again made frequent mention of setting up their own business yet when preferred jobs were discussed the 'own business' category was again

treated with equally moderate interest by all groups. In choosing preferred education for their children, the upper group opted more strongly for technical education, while the two lower groups showed an equal preference for technical training. In general, then, it appears that those who receive good marks for the CPE stand a better chance of succeeding in the village polytechnic system.

Contrary to what I thought might happen, the differentiation of the group according to whether the trainee had or had not applied to secondary school had little effect on any of the variables. For most variables of major importance, the non-applicants were represented in the proportions they held for the sample as a whole. The only striking exception to this was that those who had applied to secondary school showed less interest, when asked which job they preferred, in becoming self-employed. Everywhere else, in their ability to find work, their length of time on the job and their understanding of village polytechnic goals, for instance, both groups scored equally.

The same was not true when the sample was separated into those who had actually attended secondary school and those who had not. The secondary school group was distinguished by where they sought work, with at least 77% of them having visited urban areas for this purpose. Only 40% of those who did not attend secondary school looked for work in the city. Perhaps the most interesting piece of information here is that

almost 40% of the non-secondary group did not look for work at all while only one of the secondary school group was found in the same category.¹⁴ Those who had attended secondary school were ultimately more successful in finding work.¹⁵ Again interesting differences appear when the present occupation of the two groups is considered. Most of the secondary school group are currently working for an employer while none are self-employed, this latter category being occupied by the non-secondary group (see Table XVII).

TABLE XVII

<u>Did you attend sec. school?</u>	<u>present occupation</u>				<u>T.</u>
	<u>at home or looking for work</u>	<u>self- empl.</u>	<u>at school</u>	<u>wrk. for empl.</u>	
Yes	3	0	1	9	13
No	47	8	1	31	87

The results of the comparison of the group who went to secondary school and those who did not are best viewed with the sexual breakdown of the sample in mind. Since most of those who attended secondary school were male (10 out of 13) the difference between the two groups may be a sexual rather than an educational one.

Summary

When the data is examined according to economic and

educational categories, the results suggest that two groups have an advantage both in terms of finishing their course at the village polytechnic and in relation to finding work of a more permanent nature afterwards. It becomes increasingly obvious as more of the data is analysed that students from economically well-off families have a better chance both to continue in the formal education system and to find work after their village polytechnic training. It also appears that those students who have gone farther in the formal school system and have done better there have, over all, a better chance to find work. Although the numbers in the sample are small, significance tests of the data show strong probability that the first of these hypotheses is valid with a slightly less probability level for the second of the two. There is no doubt that in their selection of candidates, the village polytechnics in the sample favoured these two groups, the economically well-off and those who had good results in the formal school system. In doing so, then, one could argue that these village polytechnics were reinforcing their chances of being successful in the sense of having their leavers find employment. At the same time one might also ask whether in favouring these two groups the village polytechnics are not neglecting the less favoured groups who find it more difficult to gain wage employment because of their poorer formal education and lack of suitable family contacts.

From the data it also appears that the role of self-

employment as a village polytechnic goal needs more careful examination. Few of the students seemed to be particularly enthusiastic about starting their own businesses. To a great extent only students from the less favoured economic group had gone into business for themselves which suggests that it is a last choice when all else fails. This reluctance on the student's part may result from a judgement that self-employment in the rural areas tends to be small scale, low profit and high risk. In general in this and other respects the students were fairly realistic about what kind of jobs they might aspire to with the skills they had. A few made suggestions which, considering their formal education, age and economic resources, were probably not realizable but these few were a small minority. Over all, it was not possible to trace any significant relationship between the economic and educational group of the students and their attitudes towards the village polytechnic and its goals. While the more favoured groups had no better understanding of what the village polytechnic aims to accomplish, they certainly were no less aware in this respect than the less favoured groups.

CHAPTER VI FOOTNOTES

1. It must be remembered that the total number of individuals in the sample is small. Thus when the sample is broken into groups the numbers naturally become even smaller. I have attempted to correct for this by carrying out statistical tests on all the numbers which have contributed to my conclusions. Even so my results should be treated with caution. In testing I have in general used .05 as the level above which results are not significant. Although I did not formulate specific hypotheses before carrying out the field study, where a preliminary examination of the data suggests a directional conclusion I have used the one-tailed test.
2. Republic of Kenya, Population Census, 1962, volume III, (Nairobi, 1969), p. 4 (for Nairobi), p. 30 (for Kenya).
3. ILO, Employment, Incomes and Equality: a strategy for increasing productive employment in Kenya. (ILO: Geneva, 1972), p. 335.
4. The economic groups were collapsed into two categories 'high' and 'not high'. χ^2 significance tests for whether these groups received a C or better for the CPE result in a value of $\chi^2 = 2.4$ or a level of rejection of the null hypothesis at 0.1 to .05 at $df = 1$ for a one-tailed test.
5. This could be almost anything from correspondence courses at the secondary school level, to trades training, to handicrafts.
6. When economic groups are considered as to their propensity to take other training after primary school χ^2 significance tests show a value for $\chi^2 = 4.8$, which, at $df = 2$, indicates a level of rejection of the null hypothesis at .05 - .02 for a one-tailed test.
7. When economic groups are considered as to their propensity to look for work χ^2 significance tests show a value of $\chi^2 = 5.5$ which, at $df = 2$, indicates a level of rejection of the null hypothesis at .05 to .02 for a one-tailed test. When economic groups are considered as to their ability to find work χ^2 significance tests show a value of $\chi^2 = 1.8$ which, at $df = 1$, (the two lower groups were again grouped together), indicates a level of rejection of the null hypothesis at 0.1 to .05 for a one-tailed test.
8. When the two educational groups are considered according to the salary they were earning χ^2 significance tests show a value of $\chi^2 = 1.2$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at 0.2 to 0.1 for a one-tailed test.

9. When economic groups (with the two lower groups combined) are considered according to the time they have spent on their present job χ^2 significance show a value of $\chi^2 = 2.8$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .05 to .02 for a one-tailed test.

When educational groups are considered according to the time spent on the job χ^2 significance tests show a value of $\chi^2 = 0.6$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at 0.3 to 0.2 for a one-tailed test.

10. When the two educational groups are considered as to their propensity for self-employment χ^2 significance tests show a value for $\chi^2 = 3.6$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .05 to .02 for a one-tailed test.

When the economic groups (the two upper groups were grouped together) are considered as to their propensity for self-employment χ^2 significance tests show a value of $\chi^2 = 5.07$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .02 to .01 for a one-tailed test.

11. When the economic groups are considered according to their desire to buy land χ^2 significance show a value of $\chi^2 = 5.2$ which at $df = 2$ indicates a level of rejection of the null hypothesis at 0.1 to .05 for a two-tailed test.
12. When the level of primary education of the leavers is compared to the education which they wish their children to have χ^2 significance tests show a value of $\chi^2 = 1.86$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at 0.2 to 0.1 for a two-tailed test.
13. When the level of primary education of the leavers is compared to their ability to find work χ^2 significance tests show $\chi^2 = 2.0$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at 0.1 to .05 for a one-tailed test.
14. When the level of secondary education of the leavers is compared to their propensity to look for work χ^2 significance tests show $\chi^2 = 3.45$ which at $df = 1$, indicates a level of rejection of the null hypothesis at 0.1 to .05 for a two-tailed test.
15. When the level of secondary education of the leavers is compared to their ability to find work χ^2 significance tests show $\chi^2 = 1.7$ which at $df = 1$, indicates a level of rejection of the null hypothesis at 0.1 to .05 for a one-tailed test.

CHAPTER VII

RELATIONSHIP OF REGIONAL DIFFERENCES TO TRAINEES' SUCCESS AND ATTITUDES

So far the data has revealed that the group of students from Kiambu district comes from a very different economic and educational background than does the Siaya group. To begin with average landholdings for families in the sample are approximately the same in the Kiambu group as they are for Kiambu district as a whole. Yet the Siaya families in the sample have slightly larger than average holdings. In addition, although according to government figures there is a much greater tendency to grow cash crops in Kiambu than in Siaya,¹ 21 of the Kiambu trainees said that their families did not grow cash crops while only 18 of the Siaya sample said the same. Secondly both groups show a higher level of education for the parents of the sample group than the district average, with figures from Siaya being so much higher as to suggest that the group may be a rural educated elite. When we begin to look at the sample without making outside comparisons, differences are as marked if not more so. As Table XVIII shows, in terms of both the economic and educational indicators developed in Chapter VI, the Siaya group has a considerable advantage over the Kiambu sample.²

TABLE XVIII

Differences in Family Economic and Educational Standing by
Region (actual numbers)

<u>Region</u>	<u>Economic Standing</u>			<u>Educational Standing</u>		
	<u>high</u>	<u>medium</u>	<u>low</u>	<u>high</u>	<u>medium</u>	<u>low</u>
Kiambu	6	28	16	0	15	34
Siaya	20	29	1	3	22	25

Thus while 32% of the Kiambu families fall into the low economic group only 2% of the Siaya group can be similarly classified. Although 30.6% of the Kiambu group indicate that either their fathers or mothers have some formal education, 50% of the Siaya group make the same claim. Perhaps the greatest economic differences are evident when the students own landholdings are considered. In Kiambu only 5 students reported that they themselves owned any land while 28, or more than 50% of the Siaya group held at least some land, however small.³ The family responsibilities of the two groups are quite different as well. While only 20% of the Kiambu group were married 46% of the Siaya group were in a similar position.⁴ As a corollary to this the Siaya trainees had more and older children. The two regional groupings, then, are different in educational and economic endowment both in comparison to regional averages and in comparison to each other. The relationship of the regional variables to the other variables in the survey should be considered with these initial differences borne in mind.

Taking these differences into consideration, what is the relationship between the regional origin of the trainee and 1) his success in the formal education system, 2) his ability to find work and 3) his aspirations for the future? Performance within the formal school system was varied for the two groups. Somewhat more of those from Kiambu district tried the CPE examination but the better marks definitely went to the Siaya group. 22% of the students from Siaya gained a B- or better for CPE while only 5% of the Kiambu group did the same. At the low end of the scale 17% of the Kiambu trainees earned a D or worse for CPE while only 9% of the Siaya group fell within this category.⁵ Understandably, then, over half of the Siaya students applied to attend secondary school as opposed to one third of the Kiambu students, yet more students from Kiambu were successful in gaining a school place and twice as many actually attended secondary school. None of this information comes as much of a surprise if one compares the number of primary and secondary school places for each area. For both levels of schooling Central Province has more opportunities for students to gain an education. The ILO report, quoting government figures, credits 24.9% of primary school enrolment to Central Province which has 15.3% of the total Kenyan population as opposed to 16.1% of enrolment in Nyanza which has 19.4% of the population. At the secondary level the differences are more marked. Central Province accounts for 22.9% of secondary school enrolment while Nyanza

accounts for 13.1%.⁶ With this difference in educational opportunities between the two areas it is natural that a second chance institution such as the village polytechnic should attract a more academically successful group of students in Siaya than it does in Kiambu.

The difference in the academic record of the entrants is not reflected in their ability to find work, since about 50% of each group was successful in finding work after they had finished their village polytechnic training. They did show different tendencies, however, in regards to where they sought work. Over 63% of the Kiambu group went to the city to seek work and only 16% did not look for work. As would be expected only 28% of the Siaya group sought work in the city but a surprising 52% did not look for work at all.⁷ The greater attraction of the city for students from Kiambu may simply show the greater general opportunities in Nairobi as opposed to Kisumu. It is also possibly a function of the fact that the Kiambu students were from poorer families and thus had to go farther afield to get work. Students from Kiambu may also be more ready to move from their homes in search of work. Certainly the high percentage of those who did not seek work in Siaya is not reflected in the number of those who actually found work since the results for both areas were approximately the same. It is worthwhile here to break the groups down into their sexual components whereupon it becomes obvious that the great proportion of those who did not seek

work in Siaya were the women. But many men in Siaya did not look for work either; they told me that they had been offered jobs before they completed the village polytechnic course, usually through family connections, sometimes through village polytechnic contacts and sometimes directly by the Village Polytechnic movement itself. This did not seem to occur in the Kiambu group who were left much more on their own when it came to looking for work.

In terms of job quality it appears that the Siaya group had gained more secure, although not necessarily better paying, employment. 40% of them had been in the same job for more than six months where only 7% of the Kiambu group were in the same position.⁸ While the survey is biased against the Kiambu students, since a greater proportion had not been out of the village polytechnic for six months at the time they were interviewed, (60% for Kiambu, 40% for Siaya) the ratio is still large enough to indicate an advantage for the Siaya group. The location of the work found was different for the two groups as well. While 56% of the Kiambu group said they were working in an urban area, only 24% of the Siaya group had found work in the city.⁹ Similarly 55% of the Kiambu group were working at a distance of more than ten miles either from the village polytechnic or from their home while only 38% of the Siaya group were in the same category.¹⁰ Once again these figures suggest that students from Kiambu were both more mobile and more eager to work in an urban area. This may well show that the

Kiambu group had fewer opportunities to work around their homes since they often reiterated that they were willing to move almost anywhere, if they could find work in doing so. If anything, comments from students indicated a bias to stay out of the city if it was at all possible. Very few students seemed particularly excited about going to Nairobi, rather they viewed it as an unpleasant necessity in terms of finding work. In qualifying the nature of the work found there are few differences between the two groups except for the fact that the Kiambu group has six trainees in the 'self employed in a group' category while the Siaya group had none. As Table XIX shows, the variable showing the trainees' present occupation is remarkable for the similarities it indicates rather than the differences.

TABLE XIX

Present Occupation of Leavers by Region

	<u>at home</u>	<u>self-empl</u>	<u>looking for work</u>	<u>self-empl in group</u>	<u>at school</u>	<u>working for empl</u>
Kiambu	20	1	2	6	1	20
Siaya	25	1	3	0	1	20

Some interesting contrasts appear between the two regions when the students articulate their personal and family aspirations for the future. Both in terms of goals and preferred work the Kiambu group show the greatest interest in having their own businesses, a tendency which is borne out in

fact as Table XIX shows. The Kiambu group was the only one which mentioned going to the city as a specific goal; they also represented almost exclusively those who wanted to take up administrative work. This latter interest is probably a function of the fact that typing was offered only at the Kiambu village polytechnic in the survey. Since courses were supposedly offered in response to needs the typing course could well be seen as an effect rather than a cause, however, indicating the wide range of opportunities available in Nairobi for students with secretarial skills. These opportunities are matched to some extent in Kisumu as Court shows in his study of Maseno village polytechnic where typing students were highly successful in finding jobs. The pull of Nairobi, however, cannot compare with that of Nairobi and probably does not yet exercise much influence 80 km. away at Idere. The Siaya trainees were distinguished by their desire to return to school and their preference for teaching as a job. They mentioned both of these options almost three times as often as did trainees from Kiambu. Both of these preferences may partly be a result of the fact that the Siaya group was academically a more capable group and thus perhaps more oriented towards school. The 'return to school' goal is also a function of the high drop-out rate amongst the Siaya women and shows their interest in returning to complete their training at the village polytechnic. Lastly, family considerations show some divergencies: slightly more students from

Siaya opted for larger families than their Kiambu counterparts and were more interested in seeing their children gain some sort of practical or technical education.¹¹ The desire for large families may well be a question of having a higher economic status. Many of the Kikuyu girls who were eager to limit their family size seemed to feel that they could not afford to have many children. The option of technical education chosen by the Siaya group may simply be a function of location. Where Nairobi still offers limited opportunities to those with a strictly academic background, apart from teaching, students in the Kisumu area may have discovered that those with technical skills are the ones who are most likely to find work.

Since the economic and educational endowment of the two regional groups were so different it would be useful to control for each of these variables to see if the high, medium and low groups behaved differently for the two regional categories. If we look first at the performance of the trainee within the formal school system, it appears to be more closely linked with the economic level of the family in Kiambu, than is true for Siaya. For the 'high' and 'medium' economic groups there is a much greater tendency for Kiambu students to sit for CPE than is true for students in Siaya.¹² While about one third of the students who did not try CPE in Siaya came from the 'high' group with the rest coming from the 'medium' group, one sixth of the students who did not try in Kiambu came from the 'medium' group

and the remainder from the 'low' group. There is some suggestion here that a greater premium is placed on a primary school graduation certificate in Kiambu than in Siaya. Since most of those who did not try the CPE were women from Siaya, it is probable that although families in Siaya might have the money to send their girls to school, they do not consider this to be a priority as far as the family budget is concerned. As far as the CPE results were concerned the high and medium economic groups were much the same for both regional groupings showing approximately the same percentage of good and poor marks. The better overall results on CPE for students from Siaya may well be the result of the general economic advantages of the Siaya group. Families could probably afford to send their children to better primary schools where their chances of success would be greater.

When we look at the trainees' success in finding work, the regional groups do not behave at all the same within each economic grouping. In the 'high' group one third of the Kiambu group found work while three quarters of the Siaya group did the same. In the 'medium' group 60% of the Kiambu group found work while 35% of the Siaya group did so. These results show that while in Siaya there is a positive relationship between family economic level and the ability to find work, the same is not true for Kiambu.¹³ In Kiambu more of the students from poorer families were successful in finding wage employment. If more Kikuyu women had found work than Luo

women one could perhaps explain this anomaly by saying that it would be more likely for the poorer families to have women working. But figures for working women for the two groups are similar. Thus the reason lies elsewhere. It may be that students from Siaya relied more on family and personal contacts in finding work as the data on job hunting suggests. Thus it would be natural for the wealthier students to have more and better connections and be better able to find good jobs. Since the Kiambu students appear to have relied more on their own initiative in looking for jobs, their family economic standing probably had less effect on the results of their efforts.

If we disaggregate the educational indicator in the same way as has been done for the economic indicator differences again appear between the two regions although in a slightly less definite form. It becomes evident in looking at the school record for the two groups that family educational background has more influence on the Kiambu group than on the Siaya group. Both insofar as the completion of primary school and attendance at secondary school are concerned the group from educated families in Kiambu scores slightly better than the group from uneducated families. For the students from Siaya the same relationship does not emerge. Both high and low educational groups score the same as far as primary school completion is concerned and the educated group scores marginally better with regard to secondary school attendance. In looking at the

results for the CPE examination we find that the Siaya students from educated and uneducated groups scored equally as well, while if anything the students from uneducated families in Kiambu scored better than those from educated families. In disaggregating the data in this way it appears that where performance in the formal school system is concerned, students from educated families in Kiambu may have a slight advantage while in Siaya those from educated milieux fare little better than those whose families are uneducated.

With respect to having success in finding work the educational indicator reveals little for the two areas. For the Siaya students, 50% of both educated and uneducated groups found work while in Kiambu more of the uneducated group was successful in finding employment. For this particular category, however, the numbers are distorted because of the high percentage of women in the 'no work' grouping. Since the women generally came from better educated families than the men the fact that the 'educated' group fared poorly on the work market may simply be because the women fared poorly there.

Possibly more than anything else, the results of this chapter emphasize the need for the Village Polytechnic movement to keep to its ideal of maintaining each village polytechnic as a distinct institution, offering training particular to the area where the school is located. Because of the different educational opportunities in the two areas after primary school, the village polytechnic is appealing to two distinct groups of

people: in Kiambu, students from poorer families and with a poorer educational record; in Siaya students from average or relatively well-off families and with a better academic record. Because of the different history of the two areas, with Kiambu having been uprooted from pre-European traditions to the greatest extent and for the longest period, economic and social conditions including attitudes to women and training for women are different. This type of difference, which will no doubt occur throughout Kenya, must be of prime concern before training programmes are designed. Work opportunities are quite obviously not the same in the two areas. The greater European economic penetration into Kikuyuland has meant that there are a greater variety of wage earning opportunities there although these may not be of a permanent nature. The trainee leaving Mangu or Kirangari village polytechnic can choose between trying his luck in Nairobi, going to Thika or visiting nearby plantations in search of a job. At Ndere, his choices are more limited. He could decide to look for work in Kisumu or even go farther to Nairobi but this latter choice is likely to be a major traumatic decision. He is more likely, if he has some practical skills, to make the rounds of the local markets to see if any of the local fundis¹⁴ is in need of help. If he is lucky someone in his family may have a friend who needs workers and who is willing to take him on on a semi-permanent basis.

The Kiambu group, both male and female, give the

impression of being willing to move from their homes, not highly reliant on family assistance and less concerned with economic security or permanent work. The Siaya group, on the whole, seemed more settled, more tied to the family, both in terms of responsibilities due and assistance expected, and more economically secure. Thus not only must the village polytechnics prepare their trainees to function under different economic and social conditions when they have completed the course but they also have to deal with a different group of people to begin with. Unfortunately little attention is given at all to preparing the student to function under any economic or social condition. The course concentrates almost entirely on how to acquire a given skill and rarely deals with what the student can do with that skill after he has finished his training. For the women the course is even more of a failure in this respect. Because of the social circumstances in which the women find themselves they are particularly in need of assistance in matching the skills they gain at the village polytechnic to their primary role as mothers and wives. Yet the women's programmes have an uphill battle even to survive let alone to become truly useful to their trainees. In one instance I can recall, the village polytechnic manager had sent his wife to take a two year dressmaking course yet had in no way assisted her afterwards to make use of her skills. If the manager acts in this way, what can be expected of the general population? Not only, then, do the village polytechnics

need to respond to unique regional needs but they must face more openly the different requirements of male and female trainees. In the next chapter I examine the sample from this latter point of view.

CHAPTER VII FOOTNOTES

1. ILO, Employment, Incomes and Equality: a strategy for increasing productive employment in Kenya. (ILO: Geneva, 1972), p. 338.
2. When economic levels are compared to regional origin χ^2 significance tests show $\chi^2 = 8.78$ which, at $df = 2$, indicates a level of rejection of the null hypothesis at .01 to .001 for a two-tailed test.

When educational levels are compared to regional origin χ^2 significance tests show $\chi^2 = 3.09$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .05 to .02 for a one-tailed test.
3. Where the amount of land owned by the leaver is compared to regional origin χ^2 significance tests show $\chi^2 = 21.0$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .01 to .001 for a two-tailed test.
4. When regional origin is compared to marital status χ^2 significance tests show $\chi^2 = 6.18$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .02 to .01 for a two-tailed test.
5. When the CP3 results are compared to regional origin χ^2 significance tests show $\chi^2 = 1.5$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at 0.1 to .05 for a one-tailed test.
6. ILO, op.cit., p. 512-514.
7. When regional origin is compared to where work was sought χ^2 significance tests show $\chi^2 = 1.38$, which at $df = 1$, indicates a level of rejection of the null hypothesis at 0.2 to 0.1 for a one-tailed test.

When regional origin is compared to the propensity to look for work χ^2 significance tests show $\chi^2 = 12.4$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .01 to .001 for a two-tailed test.
8. When regional origin is compared to the time spent on the job χ^2 significance tests show $\chi^2 = 5.3$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .02 - .01 for a one-tailed test.
9. When regional origin is compared to where the trainee was working χ^2 significance tests show $\chi^2 = 4.13$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .02 to .01 for a one-tailed test.

10. When regional origin is compared to the distance of the trainee's work from his home χ^2 significance tests show $\chi^2 = 1.01$, which at $df = 1$, indicates a level of rejection of the null hypothesis at 0.2 to 0.1 for a one-tailed test.
11. When regional origin is compared to the number of children desired by each leaver χ^2 significance tests show $\chi^2 = 0.65$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at 0.3 to 0.2 for a one-tailed test.

When regional origin is compared to the desire of leavers to have their children gain technical education χ^2 significance tests show $\chi^2 = 5.59$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .02 to .01 for a two-tailed test.
12. When the Kiambu students are considered as to their economic group in comparison to their propensity to try the CPE χ^2 significance tests show $\chi^2 = 4.69$, which at $df = 2$, indicates a level of rejection of the null hypothesis at .02 to .01 for a one-tailed test.
13. When the Siaya leavers only are considered as to their economic level in comparison to their ability to find work, χ^2 significance tests show $\chi^2 = 6.25$ which, at $df = 2$, indicates a level of rejection of the null hypothesis at .01 to .001 for a one-tailed test.
14. 'Fundi' is a swahili word now generally used to signify 'workman'.

CHAPTER VIII COMPARISON OF THE MALE AND FEMALE GROUPS

Probably the most striking differences between groups within the sample are those to be found between the male and female leavers. Since both of the groups are evenly distributed as to the economic level of the family, there appears to be little bias in that sense which might contribute to the differences. There is difference in the educational background of the two groups, however: 30% of the men come from families with some education while 50% of the women are in the same category. One factor which has probably exacerbated the contrast between the groups is that while the sample consists of 50% male leavers and 50% female, the village polytechnics themselves enrol approximately one fifth female trainees and four fifths male. Thus the female group in the sample is more representative of the female group as a whole; this may be part of the reason for the lower results in the female group since it was not so easy to 'hide' the failures. The age composition of the two groups was slightly different. The women tended to be younger than the men with 62% of them being 20 or younger while only 34% of the men were in the same category. In spite of this more women were married than men although the difference was minimal: 15 men being married as opposed to 18 women.

In school the women appear to have had an equal opportunity to get as far as the CPE examination. This fact alone

shows that the group is not a typical one, since in general girls have fewer opportunities of going to primary school, and fewer yet of sitting for the CPE. In 1970, according to the Ministry of Education Annual Report, there were 110,000 boys enrolled in standard 7 in Kenya as opposed to 54,000 girls.¹ In general the male leavers in the study performed better in the examination, gaining most of the high marks, but the female leavers had a high percentage of candidates with average marks and fewer low marks than the men. The differentiation for CPE marks is perhaps partly responsible for the fact that fewer girls applied to secondary school than men. While over 50% of the male group tried for a secondary school place, only slightly more than a third of the females did the same. As one would expect very few of the girls actually went on to secondary school; the males in this category outnumber the females in a ratio of four to one. Yet in secondary school in Kiambu boys outnumber girls only in a ratio of 8 to 5 and in Siaya a ratio of 2 to 1.² Thus the girls in the sample have moved from the position of being in a privileged group in relation to the norm in primary school to being well below the norm as far as secondary school attendance is concerned. Surprisingly enough, however, as many women as men indicate that they have undertaken training beyond their primary education; this group represents about one fifth of each cohort.

In moving on to consider the performance of the two

groups in the village polytechnic itself we find that one of the remarkable characteristics of the female group was its high tendency not to complete the course. Almost 50% of the female trainees did not finish the course whereas only one male trainee did not finish.³ The most frequent reason given for not completing was one connected in some way to family responsibilities: either pregnancy, marriage or the care of children. The second most common reply was that there was no money to pay the village polytechnic fee. This second reason suggests that the village polytechnic course for women was not considered to be a high priority by the family. It should be remembered, however, that the difference between the two groups is most likely to be exaggerated for this category. Because of the low number of female leavers available all, even dropouts, were interviewed. Since the same difficulty was not usually encountered in tracing the male leavers, the dropout group was generally avoided.⁴ Because for a large number of females their training was incomplete, it is not surprising that slightly over 50% of the women did not look for work. Only 16% of the men were in the same position. The two groups were differentiated according to where they eventually found work. Almost half of the men who found work were working in the city while only one of the 8 women who had jobs was working in an urban area.⁵

It is useful here to look at the job hunting characteristics of the two groups on the basis of whether the individual

concerned is married or single. The single male and female groups reveal similar traits in their search for work. While slightly more single women have not looked for work than single men, those women who have looked show as great a tendency to go to the city in search of work. (see Table XX)

TABLE XX
Job Seeking Characteristics of Males and Females
by Marital Status

	Place where work sought				
	<u>urban</u>	<u>rural</u>	<u>both</u>	<u>did not</u> <u>look</u>	<u>total</u>
	no. (%)	no. (%)	no. (%)	no. (%)	no. (%)
single males	11 (31)	10 (29)	7 (20)	7 (20)	35 (100)
s. females	7 (23)	7 (23)	5 (17)	11 (37)	30 (100)
m. males	8 (53)	2 (13)	4 (27)	1 (7)	15 (100)
m. females	0 (0)	0 (0)	3 (17)	15 (83)	18 (100)

As Table XX reveals the contrast between male and female groupings in this respect shows up in the married category. The married men show the greatest tendency to seek work and seem most interested in going to the city for this purpose. Of the married women, on the other hand, 83% said that they had not looked for work at all. Thus the poor performance of the women may well stem from their heavy responsibilities as wives and mothers.

The male leavers were far more successful in finding jobs than the females. Only 12% of the males reported that they had not found work as opposed to 84% for the female group. Of all those who were not working only 4 males and 1 female listed themselves as being actively in search of work which suggests, especially for the women, that they were fully occupied with domestic tasks at home. As one would expect those women who were working were receiving much lower wages than the men. None of the women were making more than 9 shillings a day while 40% of the men were earning more than this sum.⁶

There were, however, few differences between the two groups as far as their goals and attitudes were concerned. Almost as many women as men indicated that they would be willing to move from their current place of residence especially if they could find work in doing so. In speaking of their general goals, both groups mentioned the desire to set up a business fairly frequently. The only striking differences were that the women mentioned the desire to return to school fairly often, not surprising since so many of them had not completed the village polytechnic course. The men were the most inclined to want to buy land, as one would expect in a country where it is unusual for a woman to hold a land title. When the trainees spoke more precisely of what type of work they preferred, however, some differences did emerge between the two groups. The women opted more strongly for teaching

and administrative jobs and were relatively uninterested in running their own businesses. The most frequent choices for the men were the 'skilled trade' and 'own business' categories. Finally in discussing future plans regarding their family life, the women in general chose to have smaller families but they also chose more academically oriented education for their children: 36% of the male leavers mentioned that they would like their children to have some sort of technical training while only 8% of the women made a similar choice.⁷

Because of the regional differences described in Chapter VII, it is likely that if the sexual groupings are broken down on a regional basis we would gain a better understanding of why such radical differences occur in some categories. To begin with a breakdown of the age groups shows that while the female group is younger than the male group, this is due almost entirely to the relative youth of the Kikuyu girls. As Table XXI shows, the Kikuyu men and Luo women fall into approximately the same age grouping, the Luo men have a slightly higher percentage of older individuals while 84% of the Kikuyu women are aged 20 or under.

TABLE XXI
Age of Leavers by Sex and Region

	<u>20 or under</u>		<u>over 20</u>		<u>total</u>	
	<u>no.</u>	<u>(%)</u>	<u>no.</u>	<u>(%)</u>	<u>no.</u>	<u>(%)</u>
females - Kiambu	21	(84)	4	(16)	25	(100)
females - Siaya	10	(40)	15	(60)	25	(100)
males - Kiambu	10	(40)	15	(60)	25	(100)
males - Siaya	7	(28)	18	(72)	25	(100)

The differences in the age distribution of the two regional groupings is reflected in the marriage rate. As would be expected because of the relative youth of the Kikuyu female group all but one of this group are unmarried. Although the age distribution of the Kikuyu men and Luo women is similar, marriage patterns are not the same. While about twice as many Luo women are married as are single the opposite is true for the Kikuyu men (see Table XXII). This difference is probably more due to sexual differences than regional ones since the Luo men who are slightly older than the Kikuyu men show a slightly lower tendency to get married.

TABLE XXII
Marriage Rates of Males and Females by Region

	<u>single</u>		<u>married</u>		<u>total</u>	
	<u>no.</u>	<u>(%)</u>	<u>no.</u>	<u>(%)</u>	<u>no.</u>	<u>(%)</u>
females - Kiambu	23	(96)	1	(4)	24	(100)
females - Siaya	8	(32)	17	(68)	25	(100)
males - Kiambu	16	(64)	9	(36)	25	(100)
males - Siaya	19	(76)	6	(24)	25	(100)

Thus one might argue that the needs, as far as age and family responsibilities are concerned, are similar for men from Siaya and from Kiambu. This could be one basis for designing similar courses. It is equally obvious that the same cannot be said for the two female groups. In the case of Kiambu one is dealing largely with a young unmarried group. It could be assumed that this group would be more mobile, might leave home to work or might soon be leaving home to marry. Courses could be designed with these needs and perspectives in mind. The women in Siaya are for the most part in quite a different situation. They are already married and have families to care for. They will necessarily be tied to their husbands' farms and will spend much of their time farming and looking after their children. Courses would have to take into account this kind of limitation, not only insofar as content is concerned but also in respect to course length. Since the highest dropout rate from the village polytechnic is among Luo women (60%)

something obviously needs to be done to allow women to train and discharge their family responsibilities at the same time. When the Luo women have completed their training they will return to their household duties so that money earning opportunities need also to be developed with this constraint in mind.

The data show that as far as the Kiambu group is concerned the village polytechnic is attracting an academically more successful group of girls than boys. More of the girls from Kiambu had completed primary school and they had as a group received better marks for the CPE examination than their male counterparts. Predictably, however, twice as many boys from Kiambu as girls went on to secondary school. As previously noted this ratio is slightly higher than average for the district. In Siaya the results are different: more of the men than women have completed primary school and the men have gained better results for the CPE examination. In addition to this none of the women in Siaya attended secondary school. This suggests that the women from Kiambu in the sample have more equal opportunities with men in the formal school system than do the women from Siaya.

Differences between the two sexual groupings in the two regions become more pronounced in the area of work. Only a quarter of the women from Kiambu did not look for work while 80% of the Siaya women did not. Table XXIII shows the difference of focus among the four groups in their search

for work.

TABLE XXIII

Job Seeking Characteristics of Males and Females by Region

	<u>Place where work sought</u>					<u>did you find?</u>	
	<u>urban</u>	<u>rural</u>	<u>both</u>	<u>did not look</u>		<u>yes</u>	<u>no</u>
females - Kiambu	6	6	6	6		5	20
females - Siaya	1	2	2	20		3	22
males - Kiambu	18	4	1	2		22	3
males - Siaya	1	8	10	6		22	3

Thus the group that was most likely to look for work was the Kiambu men and those least interested in doing so were the women in Siaya. In spite of this contrast the Kiambu males were no more successful in finding work than were those in Siaya and Kikuyu women were only slightly more so than their Luo-counterparts. These differences are revealed again when the current occupation of each of the four groups is broken down by category. The paucity of options open to the Luo women in the sample becomes obvious. While the other groups have at least one individual in most of the categories, the Luo women are either 'at home' or 'working for an employer'. (see Table XXIV)

TABLE XXIV

Present Occupation of Males and Females by Region

	<u>at home</u>	<u>at school</u>	<u>looking for work</u>	<u>self- empl</u>	<u>working for empl</u>	<u>total</u>
female - Kiambu	18	1	1	4	1	25
female - Siaya	22	0	0	0	3	25
male - Kiambu	2	0	1	3	19	25
male - Siaya	3	1	3	1	17	25

The breakdown of the sample by sexual and regional groupings shows some interesting differences in the choice of goals among the four groups. The group which showed by far the narrowest range of choices is the Kikuyu men. Both they and the Luo women appeared to be the least imaginative and least mobile of the four groups. These results suggest that rather than being a regional or sexual difference, the limited choice reflects the fact that these two groups have the largest proportion of married individuals in them. Certainly both the Luo men and Kikuyu women showed a broader range of interest in speaking of their goals. Of all the groups the Kikuyu women seemed most eager to move from their current residence; of all four groups they were the only ones who mentioned going to the city as a specific goal. Considering the low age and marriage rate of this group it is not surprising that they are the most mobile. What the data does point to in this respect is that the women had as many non-domestic aspirations

as the men and were as varied in their responses as their male counterparts.

When the trainees spoke more specifically of the jobs they would prefer to have, the Kikuyu women again showed the broadest range of choices. While for each of the other groups 80% of the group fell in one of two categories, ('skilled trade', and 'own business' for Kikuyu men; 'teacher' and 'skilled trade' for Luo men and women) the female Kikuyu responses were spread more evenly over six different categories. The extent of this range may be a result of the youthfulness of the group. Some of the choices which they made such as 'medical' are most likely a case of wishful thinking. It is probable that the other groups, being older, are more realistic about their options and thus are more limited in their designation of preferred jobs.

Summary

As far as the education-related variables in the study are concerned there are few surprises in the data. The women are atypical in that they come from reasonably well educated families and appear to have a better opportunity to enter and stay in primary school than girls do on an average basis. This advantageous position disappears at the end of primary school, however, where fewer than the average number of girls have a chance to attend secondary school. On the job market, radical differences appear between the male and

female groups. The men are more enterprising in looking for work and are more likely to go into the city to do so. The most striking differences are, of course, in the success rate of each group in finding employment. For a wide range of reasons, including the high female dropout rate from the course and the family responsibilities of the female group, the women were considerably less successful in finding work than the men. But this did not necessarily mean that they were less interested in working outside the home; if anything they had a wider range of job aspirations than did the men.

CHAPTER VIII FOOTNOTES

1. Republic of Kenya, Ministry of Education, Annual Report, 1970, (Nairobi, 1970), p. 32-33.
2. Ibid., p. 56-57.
3. When the leaver's sex is compared to his propensity to finish the village polytechnic course, χ^2 significance tests show $\chi^2 = 25.7$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .01 to .001 for a two-tailed test.
4. This was a bias on the part of the village polytechnic managers and because of the manner in which leavers were traced could not be avoided.
5. When the leaver's sex is compared to where he was working χ^2 significance tests show $\chi^2 = 1.9$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at 0.1 to .05 for a one-tailed test.

When the leaver's sex is compared to where he looked for work χ^2 significance tests show $\chi^2 = 13.5$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .01 to .001 for a two-tailed test.
6. When the leaver's sex was compared to his salary level χ^2 significance tests show $\chi^2 = 3.26$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .05 to .02 for a one-tailed test.
7. When the leaver's sex is compared to the type of education he prefers for his children χ^2 significance tests show $\chi^2 = 8.8$ which, at $df = 1$, indicates a level of rejection of the null hypothesis at .01 to .001 for a two-tailed test.

CHAPTER IX

Finally we come to what was the essential purpose of the study and what, I hope, will prove to be the most useful section for those actually working in the Village Polytechnic movement. In this chapter I will examine the success rate of village polytechnic trainees and of the village polytechnic as an institution in relation to the goals which the movement sets for itself.¹ I will compare my own results with the four other surveys which have attempted to trace leavers as I did. These surveys are, in order of chronology:

- 1) data collected by John Anderson in 1970 and collated by Anderson in "The Village Polytechnic Movement: an Evaluation Report, 1970" and by David Court in his paper on "Some Background and Attitude Characteristics of Trainees at Village Polytechnics";
- 2) data collected by John Anderson in his report for the Ministry of Co-operatives and Social Services in 1971;²
- 3) data collected by Court himself at Maseno village polytechnic in 1972 and recorded in his paper entitled "Village Polytechnic Leavers: the Maseno Story"; and finally
- 4) data collected by the Norwegian Aid Agency team at the Centre for Research and Training and recorded by Robin Ford of the Ministry of Co-operatives and Social Services.

The questionnaires used for all these surveys are attached in Appendix B.

Let us look first at the results of my own survey with reference to the goals of the Village Polytechnic movement. The original goals set out by the Village Polytechnic movement

itself have been outlined as follows:

"a village polytechnic is a low-cost training centre in a rural area. It aims at giving primary school leavers from that area skills, understanding and values which will make them able to look for money-making opportunities where they live and to contribute to rural development by building up the economic strength of their own community".³

For the moment let us concentrate specifically on three aspects of this definition: 1) the village polytechnic as a centre to serve local and therefore rural needs (since the centres are almost all located in rural areas) 2) the desire to train students to become better aware of the economic opportunities in their home areas, to become self-reliant and to seek opportunities for self-employment 3) the desire to improve students' chances of finding any kind of money-making opportunities, to become part of the money economy.

I The Area Served

In spite of the village polytechnics' aspirations to concentrate on local needs, the centres in my survey show that only 50% of the students lived within walking distance of the village polytechnic which they attended: 50.6% said they lived 7 miles or less from the centre which means that some students may have spent almost 4 hours a day simply walking to and from school. Of those who lived 8 miles or more from the village polytechnic, most found temporary accommodation nearer to the centre. Only 59% of all the students said that they lived in

their own home (either with their parents, with their husband or on their own land) while they were training. The remaining 41% either rented accommodation or came to stay with friends or relatives. How does this compare with the other surveys? The Anderson figures reported by David Court are the only other record that we have of this trend. Court reports that 63% of the students live at home while the rest have found some sort of temporary accommodation nearer the village polytechnic.⁴ Thus it appears that both in Anderson's survey and my own a considerable percentage of students at the village polytechnic were not from the immediate locality.

The results which show where the trainees eventually found work indicate that about 50% are remaining close to home and about 60% are staying to work in the rural areas. For both of these categories my figures show a higher proportion of leavers moving away from their home areas as well as moving into urban areas. Some difficulties of comparison occur because I have defined 'home area' as being anything within 10 miles of the leaver's home while most of the other surveys do not specify what they have used as an indicator. For the urban/rural definition I have defined urban to mean Nairobi, Nakuru, Mombasa, Kisumu and Kakamega as Court and Anderson have done. The only major divergence between Anderson's 1971 figures and my own is for female leavers, for whom Anderson shows a larger percentage working in urban areas. (See Table XXV)

TABLE XXVLocality Where Leavers are Employed (%)

	<u>Anderson</u> (1971) ⁵	<u>Brown</u> (1974)
males - urban	37	46
rural	63	54
females - urban	47	13
rural	53	87

The disparity for the female figures may possibly be explained by the fact that only one half of the female group (the Kianbu group) in my survey had available to it training in an urban oriented skill, i.e. in typing. The village polytechnics recorded by Anderson may well have offered a greater number and variety of urban skills to females.

All four of the studies have reported the number of students who stayed in the local area to work but only Court's Maseno study and my own have defined 'local area' to mean 'within 10 miles of home'. The results for this particular category are recorded below:

TABLE XXVILocation of Work (%)

	<u>Anderson</u> (1970)	<u>Court</u> (1972)	<u>Government</u> (1973)	<u>Brown</u> (1974)
within local area	69	67	82	53
outside local area	31	34	18	47

Again these figures, with the exception of the government data, may suggest a trend away from staying in the home area to work.

II Level of Self-Reliance of Leavers

It is interesting to take a look at how the leavers in my survey went about seeking work. Most of them said that they had visited firms (82%), some had written letters (14%), a few had relied solely on friends or relatives for assistance. This suggests that most were willing to go out on their own in search of work. These efforts did not prove highly successful, however, and 59% cited the intervention of friends, family or village polytechnic staff on their behalf as instrumental in getting them a job. Thus while the students appear to have made a considerable effort to be self-reliant in this respect, such efforts were not as useful as personal contacts.

Probably one of the best indicators of how self-reliant students have been trained to be is the number who have actually gone into business for themselves whether alone or in a group. In this particular category my own figures diverge to a considerable extent from the other studies in question (see Table XXVII below).

TABLE XXVII

	<u>Self-Employment⁶ Rate of Leavers (%)</u>			
	<u>Anderson (1971)</u>	<u>Court (1972)</u>	<u>Government (1973)</u>	<u>Brown (1974)</u>
male	17	37	46	8
female	16	23	45	8

The only similarity is that within each study both male and female groups show about the same tendency to be self-employed.

III Employment Rate of Leavers

As the self-employment figures above begin to indicate and other data corroborate, where the findings of my survey differ most fundamentally from the other studies is in the number of leavers who found work immediately after leaving the centre or who are now working. To the question 'did you find work after leaving the village polytechnic?' 48% replied 'no' and 42 of these were from the female group. Of all male leavers 80% are currently working, 12% are unemployed but are not looking for work and only 10% have not been employed since leaving the village polytechnic. For the females the figures are reversed with 84% being unemployed and only 16% having found some sort of money-making pursuit. Both Court and the government figures show a higher employment rate particularly for the women, (See Table XXVIII) while Anderson's 1971 figures show a lower employment rate for males.

TABLE XXVIIIEmployment Rate of Leavers (%)

	<u>Anderson</u> <u>(1971)</u>	<u>Court</u> <u>(1972)</u>	<u>Government</u> <u>(1973)</u>	<u>Brown</u> <u>(1974)</u>
male	53	83	94	80
female	35	64	80	16

Although my figures for male employment rates are comparable to Court's, my female employment rates are considerably lower. One of the reasons may be that my sample was larger (50 as opposed to Court's 22). Since I insisted in each area on seeing a minimum of 25 girls, managers and instructresses went out of their way to find every female student who had attended the village polytechnics in question. Thus for the female leavers a far greater effort was made to contact difficult-to-find trainees, a method which may have brought out a greater percentage of dropouts and unemployed. If this is so and the same effort were made to track down all male trainees, the percentages of employed could be altered considerably. The Ministry figures do not compare to either Court's or my own for male and female leavers. As mentioned before this is probably because the numbers have been supplied by managers eager to report the success of their project. Ministry figures for females are particularly misleading since each manager interpreted 'employment' in a different way, some equating it to wage or monetary employment (as I have done)

while others tried to assess whether the girl had become 'more useful at home' through her village polytechnic training. As well the Ministry data do not include those who did not complete their training.

In addition to the aggregate figures, my breakdown of the trainees' current occupations also does not compare with Anderson's, Court's, or the Ministry figures as Table XXIX shows.

TABLE XXIX

A. Present Occupation of Leavers - Male (%)

	<u>Anderson (1971)</u>	<u>Court (1972)</u>	<u>Government (1973)</u>	<u>Brown (1974)</u>
at home	18	17	5	10
looking for work	2	-	-	8
at school	<u>12</u>	<u>-</u>	<u>1</u>	<u>2</u>
<u>Sub-Total</u>	<u>32</u>	<u>17</u>	<u>6</u>	<u>20</u>
'self-employed'	17	37	46	8
working for an employer	<u>36</u>	<u>46</u>	<u>38</u>	<u>72</u>
<u>Sub-Total</u>	<u>53</u>	<u>83</u>	<u>84</u>	<u>80</u>
unknown	<u>15</u>	<u>-</u>	<u>10</u>	<u>-</u>
<u>TOTAL</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

B. Present Occupation of Leavers - Female (%)

	<u>Anderson</u> <u>(1971)</u>	<u>Court</u> <u>(1972)</u>	<u>Government</u> <u>(1973)</u>	<u>Brown</u> <u>(1974)</u>
at home	33	36	15	80
looking for work	-	-	-	2
at school	$\frac{9}{42}$	$\frac{-}{36}$	$\frac{1}{16}$	$\frac{2}{84}$
<u>Sub-Total</u>	<u>42</u>	<u>36</u>	<u>16</u>	<u>84</u>
'self-employed'	16	23	45	8
working for employer	$\frac{19}{35}$	$\frac{41}{64}$	$\frac{21}{66}$	$\frac{8}{16}$
<u>Sub-Total</u>	<u>35</u>	<u>64</u>	<u>66</u>	<u>16</u>
unknown	$\frac{23}{100}$	$\frac{-}{100}$	$\frac{17}{99}$	$\frac{-}{100}$
<u>TOTAL</u>	<u>100</u>	<u>100</u>	<u>99</u>	<u>100</u>

C. Present Occupation of Leavers - Both (%)

at home	21	23	10	45
looking for work	2	-	-	5
at school	$\frac{11}{34}$	$\frac{-}{23}$	$\frac{1}{11}$	$\frac{2}{52}$
<u>Sub-Total</u>	<u>34</u>	<u>23</u>	<u>11</u>	<u>52</u>
'self-employed'	17	33	45	8
working for employer	$\frac{32}{49}$	$\frac{44}{77}$	$\frac{29}{85}$	$\frac{40}{48}$
<u>Sub-Total</u>	<u>49</u>	<u>77</u>	<u>85</u>	<u>48</u>
unknown	$\frac{17}{100}$	$\frac{-}{100}$	$\frac{13}{100}$	$\frac{-}{100}$
<u>TOTAL</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

As mentioned earlier for the male leavers the greatest divergence between Court and myself occurs in the 'self-employment' category. Part of the reason for this difference may be that he has included here farmers who use their skill on a part time basis only. In my figures anyone who was currently employed by a local contractor, whether he had a farm or not, was included in the 'working for employer' category. Since only about 10% of the Kikuyu sample had any land this will not affect them very much, however, over 50% of Luo held land so that numbers in this group will be affected. The major problem, however, still lies with the discrepancies in female employment success rates. Part of this, as discussed previously, may be due to the method used in selecting the trainees for interviews. As well, Court notes in his paper that employment rates for girls were high for typists and low for those who had taken dressmaking or leather work. Since almost all of the girls whom I interviewed had been trained in dressmaking, this too may explain why Court's figures are high in comparison to mine. Although Anderson's earlier and more generalized figures are close to mine for female employment they are still considerably higher. Again since managers' records were relied upon, I suspect that course dropouts were not included and this explains part of the reason behind the difference. For future studies all these categories and differences in definition should be clarified and standardized so that results can be compared with less

guesswork involved.

For various reasons all of the sources which I have quoted from above, like my own study, suffer from inaccuracies caused by difficulties in collecting data. I have already discussed in Chapter III the problems which I, myself, encountered with several of the questions in the interview form which I used. Since I had no experience in designing questionnaires nor in interviewing and since my time in the field was quite limited, I chose to reply on the format of previous surveys. Although this largely served my purposes it turned out that some information was neglected and many extraneous details were included. In essence the current questionnaire suffers from trying to serve two purposes at once. Those who work within the Village Polytechnic movement and are concerned with the day by day problems and progress of the programme are mainly interested in such information as the dropout rate of students, and the difficulties which trainees encounter after leaving the village polytechnic, for instance. Yet to serve the purposes of researchers interested in gaining a broader understanding of the movement the evaluation questionnaire currently in use contains questions which provide a myriad of detail about the student's family and educational background, the crops his family grows, the size of the family farm and other background details which are of no real assistance as far as short-term planning is concerned. For the immediate purposes of those who work within the village

polytechnic movement, then, the questionnaire is too long and cumbersome. In Appendix C I have designed a shorter simplified version which, I hope, will be more useful. For the long term purposes which social science research serves the questionnaire again needs improvement in order to make it a more useful record of what the respondent really thinks of the village polytechnic and why he goes there. In his report presented to the Ministry of Co-operatives and Social Services in 1971 John Anderson raises this same problem of leaver studies which attempt both to gauge the short term success and problems of the Village Polytechnic movement while at the same time trying to serve the needs of academic research.⁷ What appears to have happened so far is that studies have been carried out as if they were intended to fulfill academic needs but the results of the studies have in the main been used only as a means of gauging practical results in the movement. My own study falls into the same trap although I intend to split the two purposes and write a shorter more condensed report for the use of those who are directly concerned with making the village polytechnics a success.

The second difficulty which I encountered in undertaking the study was that in setting out to do a quantitative survey of this kind, I immediately became aware of the limitations of the questionnaire as a research tool in the African context. It was, as I have explained earlier,

impossible to choose interviewees at random. I was lucky in many cases to find the leavers at all. It was equally impossible in most cases to conduct a private interview. In rural Kenya one does not ask senior members of the family or husbands to leave the house while junior members or wives are being interviewed. You can hardly request that the teacher who has just guided you to a particular student wait outside the car in the pouring rain while the interview takes place in private. As well in Kenya in particular, where Europeans⁸ are often viewed with mistrust, it is questionable to what degree a European interviewer can hope to gain any kind of accuracy unless he has had long experience working in a particular area.

My study can certainly also be criticized for the significant difference in the representative nature of the male and female groups. Since the same absolute numbers were interviewed for each cohort even though the males represent a much larger proportion of total village polytechnic enrolment, the female sample necessarily more accurately reflects the female village polytechnic leavers as a whole. As well it would probably have been better to concentrate on all available leavers from two, or perhaps four, institutions. At first it appeared that the two original village polytechnics, Mangu and Ndere, would be capable of providing the numbers of leavers required; it was only at the last minute that it became obvious that other schools would have to be included. Thus, and

this is particularly true in the case of Ndere, leavers come mainly from one village polytechnic with vacancies being made up from other village polytechnics located close to the original centre. It would have been more representative, I believe, if leavers had been drawn on a proportional basis from all of the village polytechnics which eventually contributed to the study.

Each of the other leaver studies which I have mentioned above also suffered from their own special problems. In his 1970 study, John Anderson collected data by sending questionnaires to the village polytechnics and asking managers to have leavers fill them in. Thus although he could cover a broader range of institutions in this way (a total of 16 in all) he could exercise less control over who took part in the survey and under what conditions the forms were filled out. In addition the data collected were never really analysed. Anderson had an opportunity to make only a preliminary record of the interview results. Although a more detailed record was eventually made by David Court, in discussions with me he expressed his reservations about interpreting data collected by someone else.

David Court's own survey suffered most of all from a lack of time. He spent three weeks at Maseno village polytechnic near Kisumu interviewing students who came into the village polytechnic to talk to him. Thus only students who were relatively close to the village polytechnic and who were

eager enough to be interviewed to make the journey from home were included in the survey. As well, as I have argued before, Maseno is the exception rather than the rule among village polytechnics. It has electricity, running water, several permanent buildings and expensive equipment. It is also close to shops and businesses in Kisumu and is one of only a few trades training centres in the area. Thus it is likely that employment figures for Maseno will be much better than average figures for the whole movement.

Of all the surveys, the government study was the most ambitious and thus, because it is of so little help, the most disappointing. If it had succeeded it would have offered a unique opportunity to gain a general overview of the entire village polytechnic programme. In the first place the questionnaire used was confusing and too complex. Secondly managers and instructors were left largely to complete the forms on their own with little help from the researchers who visited the centres. This is probably due to the fact that many of the researchers had just arrived in Kenya (and for that matter in Africa) for the first time and were not aware of the difficulties that a complex form would present to rural instructors with little formal education.⁹ For these two reasons the forms were in general poorly completed: numbers conflicted with each other, information was inaccurate or missing altogether and many of the answers had to be corrected or supplied later at headquarters. The Ministry

figures should, therefore, be read with special caution.

All of the village polytechnic leaver studies and reports which attempt to collate available data on leavers suffer from various difficulties. Data may be highly inaccurate since in many cases researchers had to rely on managers' and instructors' memories. Biases enter the study when both those who supply the information and those who collect it are eager to prove the Village Polytechnic movement a success. The use of questionnaires as a method of gathering information can be criticized in the African context since custom may demand that one please the interviewer rather than give a wholly accurate answer. Finally, as Anderson has pointed out, survey research can provide a given result at a specific point in time but until changes are recorded over a reasonably long time period results will be highly speculative. To date the earliest data was collected in 1970 and the most recent in 1974; this rather short time span can lead to only tentative conclusions.

Summary

In this chapter I have focussed first on the problems which all of the surveys have encountered. I suggest that the purpose of subsequent surveys be more narrowly defined so that short term operational needs are separated to some extent from long term planning needs. There is a definite need both to redesign questionnaires and to standardize

terminology such as 'local', 'urban', and 'self-employed'. Interviewing methods should also be more carefully controlled as well as the method of selecting candidates. A corollary to all of this, of course, is that both managers and instructors need to keep better track of leavers. While all of the surveys so far undertaken have several weak points, they also have their own particular strong points. Anderson gathered data from a wide variety of village polytechnics and in his 1971 report added as well data gathered by Court and the NCCK; the Ministry figures also gain in usefulness because they cover almost all the village polytechnics in operation at the time of the study; David Court's Maseno study is useful in that it looks at a large number of leavers from one centre; my own study was the first to actively seek out leavers in their homes and the first to include such a large number of female respondents. In designing future studies these strong points should be given as much attention as the studies' flaws.¹⁰

In reviewing the village polytechnic performance in relation to its goals my own survey, with the exception of Anderson's 1971 male employment figures, appears to be the most pessimistic of the five data sources. The village polytechnic is supposed to serve the rural needs of the locality where it has been set up. The results of all of the studies show that a fair proportion of village polytechnic trainees do not come from the local area nor do they remain there or go to another rural area when they have finished training.

My data show that only 59% of the trainees attending the village polytechnic are from the local area (Court, 63%). After completing training only 60% of them remained in rural areas (Court, 85%), and only 50% remained in their home area (other surveys showed 70 to 80%). As far as training students for self-reliance is concerned, my figures trail far behind the other surveys with only a few trainees setting up businesses for themselves or in groups after training is completed. Finally my data is far more pessimistic insofar as employment for females is concerned. At 16% my results are half of what Anderson found and do not compare at all with the Ministry's 66%. Male employment in my survey coincided with Court's survey (about 80%) being more optimistic than Anderson (53%) and less so than government figures (94%). What then are the implications of these results for the individual who attends the village polytechnic and for the Village Polytechnic movement as it now defines itself?

CHAPTER IX FOOTNOTES

1. In Appendix D I have drawn together a list of policy recommendations resulting from the study.
2. This adds to Anderson's 1970 data, information collected by David Court and by Wolfgang Mai and Edward Wanjala of the NCCK.
3. Republic of Kenya, Ministry of Cooperatives and Social Services, How to Start a Village Polytechnic, 1971, p. 4.
4. D. Court, 'Some Background and Attitude Characteristics of Trainees at Village Polytechnics', Institute for Development Studies, University of Nairobi, Staff paper no. 110, July, 1971, p. 8.
5. J.E. Anderson, 'The Evaluation of Pre-Vocational Youth Training in Kenya', a report for the Ministry of Cooperatives and Social Services, Nov. 1971, p. 13-14.
6. There is no single definition for 'self-employment'; each of the managers who supplied data for the government survey interpreted it in his own way as it appears have Court, myself and Anderson.
7. J.E. Anderson, 'The Evaluation of Pre-Vocational Youth Training in Kenya', p. 17.
8. All individuals of European origin are called 'Europeans' in Kenya.
9. This was not really the instructors' fault; I believe anyone would have had difficulty completing the forms.
10. See Appendix E for a brief list of some research recommendations.

CHAPTER X

When the NCCK working party produced its report on the village polytechnic concept in 1966,¹ it was hoping to make an attack on two problems which it saw emerging in the Kenyan economy. It felt that the primary school system was neither capable of teaching skills which would be useful in seeking wage employment nor of preparing students to accept the kind of life which they would probably lead when they left school. The working party envisaged a growing group of 16 to 20 year olds, completing primary school with basic skills in reading and writing, who would take the logical step of moving to the towns in search of work to match their skills. Of those who went to the city few would find the kind of work they wanted or any wage employment at all. These unemployed leavers would then become an enormous social problem for the towns to cope with and they themselves would be left to eke out a miserable existence as best they could. The rural areas would suffer as their youngest, educated and most enterprising people were siphoned off to the cities. If this urban drift were allowed to continue the rural areas would become even more unattractive as a place of employment. Certainly for the few who did manage to gain employment in town the rewards would be considerable but already in 1966 the NCCK saw that the possibility of this occurring was minimal. Thus it appeared that in the end all parties were the losers: the leaver himself,

frustrated in his attempt to find work, the urban centres which would become increasingly incapable of dealing with large numbers of unemployed and the rural areas denuded of their most active and enterprising workers.

When they proposed the idea of the village polytechnic the working party had no illusions that the village polytechnic alone would provide a solution to the dual problems of urban migration and unemployment. The village polytechnic was only one of 53 recommendations in their report. They did hope, however, that by designing the polytechnics to be as simple as possible and by grounding them firmly in the community, they would become popular and easily repeatable throughout Kenya. The polytechnics were to be locally organized and controlled; they were to be low-cost with a minimum of buildings; since they were designed to serve the local area only they would have no need of expensive dormitory facilities; the training they provided was meant specifically to serve the needs of the immediate community. Students would acquire skills which ideally would allow them to produce goods and services for their own community. Less ideally they might gain sufficient skills to be able to hire themselves out to local workmen. Since the training was to be oriented towards employment it would not be of any specified length but only long enough to impart the skill in question. Training offered by the village polytechnic would not be the same year after year but would change as community needs were filled and

new ones arose.²

As the data from my leaver survey and from the other surveys which have been undertaken show, the reality of the village polytechnic falls short of the ideal. In the village polytechnics which I surveyed students are usually recruited on the basis of their ability to pay and their success in the primary school system. In my survey there is some reason to believe that those students who come from relatively better-off families and who have been successful in primary school are more likely to find work. But these two groups were certainly not any more aware of what the village polytechnic was trying to achieve nor more in sympathy with village polytechnic goals than were other groups. Since those students with fewer financial resources are already less likely to have done well in primary school this type of selection criterion doubly discriminates against them. Although the data do not give any indication of this, it is questionable whether a good CPE mark is any measure of how enterprising or skilled a student is likely to become.* It is understandable, however, that future employers or even future customers may initially need some indication of the trainee's skill level when training has been completed. For this reason either trade tests or rigorous skill testing by the village polytechnic itself can serve a useful purpose. Whether testing at the end of training is initiated or not, the village polytechnics need to reconsider their recruitment criteria.

The village polytechnics in my survey made a considerable effort to keep the training programmes as practical as possible. Considering the experience and training of the instructors, they had designed some interesting programmes. At most of the centres groups of students were out working on contracts for clients in the area. When one considers the resistance of students in the formal school system to manual work this in itself is quite an achievement. Where all of the centres fell down, however, was in the supplementary training accorded to students. Some students mentioned that they had been given instruction in accounting for a short time but that it had been discontinued. Most said that they had been given no instruction other than the specific skill which they had originally chosen. If the village polytechnic hopes to train students for self-employment, this situation must change. It is fairly evident from the results of my survey that self-employment is not a favourite source of revenue. Very few students made this choice and most who did so were from less fortunate milieux. Certainly it is much more difficult for a trainee to set up shop on his own with little more than a manual skill to help him than it would be for him to hire himself out to a local workman or business. Thus if self-employment is to continue as a village polytechnic goal some kind of small business training must be an integral part of the programme for all students. One of the major difficulties in including business skills in the village polytechnic

programme is that those who might serve as instructors, either local businessmen or village polytechnic instructors who themselves want to go into business, are likely to see students as potential rivals and be reluctant to encourage them to start up businesses on their own. Along with the problem of teaching business skills which may be reasonably easy to identify and include in the village polytechnic programme is the more elusive problem of how to 'teach' entrepreneurship. It is possible that initial entrance procedures geared to selecting those individuals who are more likely to be self-reliant would go a long way in resolving this difficulty. Teaching methods designed to force the student to take responsibility during his training at the village polytechnic would also be useful. Finally, extension assistance after training like the 'work group' concept would be helpful in supporting students during their first months in business. It is obvious that there is no easy solution to the problem of training for self-employment but if this particular goal is to be retained, village polytechnics will have to look more directly at the difficulties of encouraging students to start their own businesses.

Another area of instruction which was generally neglected in the village polytechnics which I visited (about 10 in all) was instruction in agriculture. The NCKK working party originally planned that since agriculture was the mainstay of the rural economy, it was to be taught as a second

subject of instruction at all of the village polytechnics. This decision creates two major problems: first the difficulty of finding instructors who have the skills and can devote some time to agricultural instruction and secondly, the general resistance of students in any school to instruction in agriculture. It is beyond the scope of this study to consider the debate about how best to improve rural farming skills³ but two observations are worth noting here. As I have outlined in Chapter I, the school has been viewed traditionally as a means of escape from farming. In trying to resist this attitude the village polytechnics will encounter considerable opposition both on the part of students and parents. Secondly much of the actual farm work in rural areas is done by women although they may not be the decision-makers. Thus in the one village polytechnic which had a shamba⁴ (rapidly going to seed since the British agriculture instructor had left) the girls were the only ones who did much cultivating, although whether they were learning any new farming techniques which they could apply later is doubtful. The role of women vis-a-vis farming is further complicated by the fact that where cash and subsistence crops are distinct (this is not always so - crops such as maize may be grown for family consumption and surpluses sold for cash) women are often responsible for the subsistence crops and men for the cash crops. It is a waste of resources, therefore, to instruct women in how to cultivate pineapples and coffee when they will most likely not grow

these crops at home. Both student resistance to agricultural training in the schools and the role of women in agriculture make the inclusion of this subject in the village polytechnic programme a complicated proposition. As is true for the decision to train students for self-employment, the teaching of agriculture should be looked at more carefully. If it is to remain as a village polytechnic policy much more thought and effort, not to mention financial resources, will have to go into the programme.

Where the village polytechnic programme has been successful so far is in decentralizing the management and control of the programme. In theory the finances and policy of each village polytechnic are controlled by a management committee consisting of local businessmen, farmers and teachers. There is a danger, however, that local control is decreasing. When the government takes over support of a new institution, management committees, instructors and managers tend to become confused about who actually has authority over the project. And in many cases it is not clear who in fact has such authority. As a result individual instructors and managers sometimes make appeals for assistance and advice directly to Nairobi. As the government bureaucracy grows with the growing number of provincial youth officers⁵ the tendency will increase for decision-making to move to Nairobi.

Perhaps the most formidable battle that the village polytechnic has had to wage, and has not really won, is the

attempt to keep costs as low as possible. This policy entails reducing to a minimum capital costs for items such as dormitories and permanent buildings, resisting the pressure to buy expensive equipment and to outfit the students in school uniforms. This policy was established partly with an eye to cost, but also from a desire to keep the village polytechnic as simple and flexible as possible. Needless to say it has been virtually impossible to maintain. Permanent buildings, uniforms and expensive equipment are viewed by students, parents, instructors and prospective employers alike as a measure of success. Not all village polytechnics have been able to afford lavish accoutrements but there was not a single centre among those I visited whose manager did not proudly display his latest construction project and express the regret that there was no money to do more. It must be admitted, however, that polytechnic costs are still relatively low. Whether it will be possible to keep up this trend is open to question.

As my data show, a good argument can be made for maintaining the regional uniqueness of each centre. Not only do regions differ as to the goods and services they may require but each area tends to attract a different type of trainee with different responsibilities and needs. Unfortunately several factors have a tendency to push the polytechnics towards standardizing their courses. In the first place it takes imagination and energy to actually go out and ascertain the

economic needs of the community. Even given that, it is possible to do so and to keep track of changes over time, it then takes a considerable degree of personal conviction on the part of the manager or instructor and confidence on the part of the community to turn this kind of knowledge into training courses. It is comparatively easy to persuade a community to support, both financially and by sending its sons and daughters there, an institution which teaches something familiar, like masonry, carpentry or tailoring. It is not quite so easy to persuade them to support instruction in bread-making or bee-keeping. Thus it is easy to understand why all of the village polytechnics that I saw began by establishing one course in carpentry and one in tailoring whether local economic needs justified it or not. Of all the policies which the movement seeks to maintain, this one is perhaps the most crucial to the programme. If the polytechnics standardize their courses they will soon see their initial success, in terms of employment rates, disappear as they too are faced with their own leaver problem.

Possibly the most disappointing aspect of the movement was the women's programmes. Both at the administrative end and at the centres themselves, the women's groups suffered from neglect. The very fact that there are more women than men in the rural areas while only one fifth of village polytechnic enrolment is women in itself reveals much about the movement. In Nairobi only one person is occupied directly with

women's programmes. She is a Peace Corps volunteer who by virtue of her status as a volunteer and her age and experience was already at a disadvantage vis-a-vis the administration. The evaluation team sponsored by the Norwegian Government did not include any women, either foreign or Kenyan and few of the village polytechnic management committees have any women members. Yet it is probably more essential in Kenya than it would be elsewhere for there to be female researchers and female administrators in the village polytechnic programme. Because in Kenyan society male responsibilities are separated from female responsibilities, it has proven difficult for instructresses to have a voice in the operation of the polytechnic, until now a male responsibility. One way to improve this situation is by giving women more support from headquarters and this support is unlikely to come unless there are more women in positions of authority there.

Another area of concern in regard to the women's programmes is the nature of the courses offered to women. As I have argued in Chapter VIII, women need to have more flexibility designed into their training. At the present moment and for a long time in the future, the prime role of women in rural areas will be as wives and mothers. The high dropout rate of the female group in my survey and the reasons given attest to this fact. More than any other group women would benefit from part time training or work groups. More than the women need assistance from the polytechnic in getting

started in business or in looking for work. In looking at the very low employment rate of the women in my sample, I am forced to conclude that the training for women now offered by the village polytechnic is simply not worth the cost of the programme. Unless it is viewed as a rural social club I cannot see what the programme is accomplishing.

Although it may seem that the Village Polytechnic movement has fallen short of its goals it must be remembered that many of these goals fly in the face of short-term economic reality. That this is so can readily be seen in the leavers' attitudes towards the village polytechnic. Although most of them were fairly realistic about the work that they could expect to find with the training they had, very few expressed any desire to let their children take the same type of training. They were only too aware that the best way to give their children a chance to earn a good wage was to let them go as far as possible in the formal school system. Their comments about how to improve the village polytechnic itself were equally revealing. They wanted boarding facilities, more classrooms, better equipment, more advanced courses; in short they wanted the village polytechnic to become a sophisticated technical school. And they knew that if it did so, they themselves would have a better chance of finding good jobs. In this sense the Village Polytechnic movement is perhaps a classic example of a programme designed to cure a symptom without really being capable of affecting the disease itself.

The village polytechnic was suggested to help solve the dual problems of urban migration and unemployment; it did not seek to affect the underlying cause of the problem but only hoped to alleviate the visible signs. As a result a fundamental conflict emerges between students and parents on the one hand and the goals of the Village Polytechnic movement on the other. The movement seeks to maintain its simplicity, flexibility and orientation to the rural community. The students see these goals as being counterproductive. They have, by their own admission, no desire to move to the city per se. If they could stay at home and find work they probably would. But they know that there are few jobs and little money in the rural areas; they know that they are more likely to find work in the city and so they leave. From this perspective, then, the village polytechnic is destined to fail. The unemployment and urban migration which it seeks to curb are a result of a complicated set of factors rooted firmly in the economic and social structures now operating in Kenya. And it does not seem likely that these structures will experience any radical change in the near future. As Frances Stewart has argued⁶ changes will only be peripheral in response to the need to maintain the stability of the current economic system.

So far I have been fairly critical of the Village Polytechnic movement but I should like to end this discussion on a more positive note. It seems obvious to me that the fundamental problems which the movement faces are essentially

3 3

OF/DE

beyond its control. These problems are of an economic and political nature and cannot be altered simply by a change in the education system. That the village polytechnic was not an ultimate solution was fully recognized by its instigators and does not mean that the polytechnics serve no purpose whatsoever. At the very least the programme functions as a second chance institution for primary school leavers. The reasonably high employment rate for male leavers (approximately 75%) attests to the fact that it is doing a worthwhile job. It is better to have some opportunity of increasing skill levels than none at all. As well the programme seeks to establish and put into practice new principles of education. It has managed to have students participate in classroom activities (and this was true of even the worst village polytechnics that I saw). Instead of spending their time copying down everything that the teacher says students are usually busy making things either for use in the school or for sale. In a country where students are often expected to be seen but not heard this in itself is a real achievement. The village polytechnics have also had some success in making their institutions function as part of the community. Students regularly go out into the community to work on houses or sell food and clothes at the local market. This system of contract work for students functions in direct opposition to the traditional school which seeks to cut the student off as much as possible from community life. Village polytechnics have

also been successful in ensuring that staff at most levels are Kenyan. Although there has been too much reliance on expatriates at the decision-making levels, in comparison to other rural development programmes, the village polytechnic programme has been fairly successful in attracting indigenous staff. Finally the programme has invited and encouraged outside evaluation. As long as it continues to be self-critical the movement will have a better chance of prospering within the economic and political limits which govern it. The village polytechnic has succeeded, then, in the development and implementation of new principles of education and in its function as a second chance institution. It cannot, however, hope to compete with the formal school system and will have to wage continual battle against the formal school ethic. Until the socio-economic system in Kenya undergoes some radical changes village polytechnics will have to be satisfied with this peripheral role. In conclusion I must agree with David Court that an institution such as the village polytechnic 'will have to await modifications in the present social structure linking schooling and wage incentives before it can begin to have an extensive impact upon educational philosophy and practice in Kenya'.⁷

CHAPTER X FOOTNOTES

1. NCKK, After School What?, report of a working party, (Nairobi, 1966).
2. David Court has best summed up the village polytechnic ideal, see Table II.
3. See Jon Moris, 'Agriculture in the Schools', unpublished manuscript, for a detailed analysis of this issue.
4. Swahili word meaning 'garden' or 'small farm'.
5. The provincial youth officers are a new position created by the Ministry of Cooperatives and Social Services. They work from offices located in each provincial headquarters but report directly to Nairobi.
6. Frances Stewart, 'Kenya: Strategies for Development', mimeo, undated.
7. David Court, 'Dilemmas of Development: the Village Polytechnic Movement as Shadow System of Education in Kenya', Institute for Development Studies, University of Nairobi, discussion paper, no. 156, Nov. 1972, p. 16.

APPENDIX A BRIEF OUTLINE OF KENYAN EDUCATION SYSTEM

249 SL. 611

1) Anderson Questionnaire (1970)

Name: PROTAIS ODERII Sex: MALE Village Polytechnic:

Class: VII Tribe: LVO Age: SIXTEEN

1. Which District is your home in? SIAYA
 Which Division is your home in? UKWALA
 Which Location is your home in? UHALO IN USEINI
 Which Sub-Location is your home in? ASHIVIO

2. During school term, some pupils live away from home to be closer to the school. Do you live at HOME, or AWAY FROM HOME in school term? Put a tick in one of the boxes)

☐

I Live at HOME in school term.

☒

I live AWAY FROM HOME in school term.

3. If you live away from home in school term, where do you live? (Put a tick in of the boxes)

☐

I live with relatives.

☒

I board at the school.

☐

I live with friends.

☐

I live in a rented room near school.

☐

I live in school.

☐

I live somewhere else (where?)

4. What is your religion? (Put a tick in one of the boxes)

Catholic

Muslim

Protestant

Other

☒
☐
☐

state which denomination

☐

5. Did you pass K.P.E. or C.P.E.? ☐ Yes ☒ No

What grades did you get? English: C+ Maths: D

6. Does your father (or guardian) have paid employment?

☐

Yes

☒

No

If 'Yes' what sort of work does he do?

7. Does he get a pension because he once did another job?

☐

Yes

☒

No

If 'Yes' what job did he do?

8. Who pays your school fees? (Write down all the people who help to pay your fees; and explain how they get the money, in the first column put down the title they have the relationship to you. (e.g. father, brother, father's friend etc). In the second show how they get the money, from work, selling crops etc.

Relationship to you	How they get money for fees
FATHER	SELLING CROPS

9. Does your father hold any important positions in your area?

- ☒ NO Church Elder (Which church?)
- ☒ NO Location Councillor
- ☒ NO Primary School Committee (which school?)
- ☒ NO Secondary School Committee (which school?)
- ☒ NO Co-operative Society Committee member (which society?)
- ☒ NO Other (Describe the position)

10. Does your father own or have a share in a business (businesses)?

☐ Yes ☒ No

If 'yes' describe it.

11. Does your father own any land? ☒ Yes ☐ No

If 'Yes' how many acres does he own? 2 1/2 ACRES

Who works on this land? FATHER, PUS, MY SELF DURING THE HOLIDAYS

12. Does your father own any cattle? ☒ Yes ☐ No

If 'Yes' how many non-grade (local) cattle does he own? 3 CATTLE

How many grade (exotic) cattle does he own? 100

- 3 -

13. Does your father (or your mother) grow any crops to sell for money?

☒

Yes

☐

No

If 'Yes' which crops

☐

Coffee

☐

Tea

☐

Pyrethrum

☒

Cotton

☐

Other
(which ones)
.....

14. Did your father ever go to School? ☐ Yes

☒

No

☐

I don't know if my father went to school

If 'Yes' how long was your father at school? (put a tick in one of the boxes below)

☒

He went to primary school for a few years

☒

He finished primary school

☒

He went to secondary school or teacher training college

☒

I don't know how long my father was at school.

15. Does your father speak any English?

☒

He speaks English well

☒

He speaks English a little

☒

He does not speak English.

16. How long is the course which you are doing? *TWO YEARS*

17. What subjects are you doing? *MASONRY & CARPENTRY*

18. What do you expect to do when you leave? Give your reasons for your answer. *I expect to join another...*

*...masonry college. It's possible because I...
...would like to know more about what I am...
...studying.*

19. Do you think that all students at a village polytechnic should learn agriculture as well as their subjects?

☒ Yes

☐ No

Why do you think this?

But it is according to
...Somebody's Suggestion

20. If changes could be made at your village polytechnic, what new things would you like to do?

..I would like Government to set up
..Engineering & P.W.S. Electricists to be in

21. Is there anything you would like to leave out?

No

22. What other comments would you like to make about village polytechnics.

if I were the Government of Kenya
I would have brought A motor car for
Teaching Pupils how to drive

- 5 -

23. If a man has only a little money and he wishes to help his son when the son finishes Standard VII, which of the following things should he do first for his son? Put a tick in the box in front of the first thing he should do.

- ☐ get him assistance to go to town and look for employment
- ☐ get him pay a place on a settlement scheme
- ☐ help him pay his bride price for a wife later on
- ☐ buy some land nearby where the son can begin farming
- ☐ get his son a small job helping a businessman
- ☐ pay his fees to attend a Harambee School
- ☒ enrol his son in a correspondence course

Why is this the best choice? *because you can suggest any course you like*

24. The Government only has limited funds for development projects. Which of the following things do you think are the most important ones to concentrate on. Choose 3 items put a 1 for the most important, and 2 for the second most important and a 3 for the third most important.

- ☐ Help to develop large factories in the big towns.
- ☐ Improve and expand primary education,
- ☐ Give more assistance to progressive farmers.
- ☒ 1 Start more technical training courses like those at the Kenya Polytechnic.
- ☐ Establish more settlement schemes.
- ☒ 3 Help to start industries in the rural areas.
- ☐ To give more assistance to farmers cooperative societies.
- ☐ Develop more Secondary Schools.
- ☒ 2 Provide more training centres to help people in the rural areas improve their farming and the way of life.
- ☐ Start more projects like the National Youth Service.

APPENDIX B

193.

2) Court Questionnaire (1972)

MASENO VILLAGE POLYTECHNIC LEAVERS SURVEY

A. PERSONAL BACKGROUND

1. What is your name? _____
2. Age? _____ 3. Sex? _____ 4. Tribe? _____
5. What district is your home in? _____
 Division? _____
 Location? _____
 Sub-location? _____
6. What is your father's occupation? _____
7. How many acres of land does your father own? _____ acres
8. How much land do you expect to receive or do you have now?
 _____ acres.
9. How many children does your father have? _____ sons _____
 daughters _____
10. What standard schooling had you finished when you entered
 the VP? _____ Standard
11. When you finished primary schooling, how long did you wait before
 going to the VP? _____
 During this time did you look for work? (Tick) Yes _____ No _____
 (IF YES) where did you look for work? _____
 Did you find work? (Tick) Yes _____ No _____
 What kind of work _____
12. What was your main course at Maseno VP? _____
13. When did you leave the VP? _____ month _____ year
14. When you left Maseno had you completed the programme? Yes _____ No _____
15. If you DID NOT complete the programme what was the reason?

16. Have you taken any Trade Test? Yes _____ No _____
 IF YES, Which one? _____ What was the result? _____

- 2 -

17. Where do you live NOW? (Tick the correct space)

☐ at my parents home
☒ with other relatives - Where? _____
☐ with friends - Where? _____
☐ in a rented room - Where? _____
☐ other - Where? _____

B. WORK AFTER LEAVING VP

18. Have you succeeded in getting any paid employment since leaving Maseno?

Yes _____ No _____

If you have not obtained any work why do you think this is?

Give any reasons _____

If you have had paid work since leaving Maseno please list each of your jobs, the place the length of time you had it, and reasons for leaving it.

	<u>Name of job</u>	<u>Place</u>	<u>Length of time in the job</u>	<u>Reason for leaving</u>
a.	_____	_____	_____	_____
b.	_____	_____	_____	_____
c.	_____	_____	_____	_____
d.	_____	_____	_____	_____
e.	_____	_____	_____	_____

19. Please describe as carefully as you can the kind of work you are now doing. If you are at home, describe your main activities

20. Tick the space which best describes your present position.

_____ I work for an employer
 _____ I am self employed on my own
 _____ I am self employed in a partnership or work group.
 _____ I am at home
 _____ Other

Where is your work? What town or place _____

Did you need money to start your work? Yes _____ No _____

Where did you get the money? _____

Did you need any tools or equipment to start your work? |

Yes _____ No _____ Where did you get them? _____

21. How did you get your present work? (Tick the correct space)

_____ Answering advertisements
 _____ Visiting a firm or office
 _____ Writing to a firm
 _____ Joining with friends
 _____ Starting on my own
 _____ Other methods what? _____

22. Did anyone help you get this job? Yes _____ No _____

Who helped you? _____ How did this person help you?

23. How much do you receive in your present work? _____ Shs per month.

24. How long did it take you to find work after leaving Maseno
 VP? _____

25. What are the best ways to go about looking for work?

26. How did you begin looking for work? (Tick the correct space)

_____ Answering advertisements

_____ Visiting firms and offices

_____ Writing to employers

_____ Asking friends

_____ Other methods What? _____

27. Did you look for work in different parts of Kenya or just one place? (Tick). _____ Different parts

_____ One place Where? _____

Which places did you visit looking for work? _____

28. Have you been continuing with further study or training in your spare time since you left the VP? Yes _____ No _____

29. Are you a member of any partnership, work group or cooperative society? Yes _____ No _____ (IF YES) Are the other members also VP leavers? Yes _____ No _____

30. Has the VP ever provided you with any help in your work or in your search for work? Yes _____ No _____ (IF YES) What kind of help? _____

31. What are the main difficulties you face in your work or in your search for work? _____

32. In what ways could these difficulties be overcome? _____

C. OTHER QUESTIONS

33. IF YOU ARE LIVING ON A FARM, who owns the farm? _____

List the activities which you help with on the farm? _____

How many days did you work on the farm last month? _____

34. How often do you go to Kisumu? _____ Why do you go there?

35. Why did you go to a VP instead of to a Harambee Secondary School?

36. If a man has only a little money and he wants to help his son when the son finishes Standard VII, which of the following things should he do? Choose three things and put a 1 for the best one, 2 for the second best, and 3 for the third best.

_____ Get him assistance to go to town and look for employment

_____ Get him a place in a settlement scheme

_____ Help him pay his bride price for a wife later on

_____ Buy some land nearby where the son can begin farming

_____ Get the son a small job helping a businessman

_____ Pay his fees to attend a Harambee Secondary School

_____ Enrol his son in a correspondence course

_____ Other what? _____

37. The Government has only limited funds for development projects. Which of the following things do you think are the most important ones to concentrate on. Choose three items and put a 1 for the most important, 2 for the second most important, and 3 for the third most important.

_____ Help to develop large factories in big towns

_____ Improve and expand primary education

_____ Give more assistance to progressive farmers

_____ Start more technical training courses like those at the Kenya Polytechnic

_____ Help to start industries in rural areas

_____ Give more assistance to farmers' cooperative societies

_____ Develop more secondary schools

_____ Provide more training centres to help people in rural areas improve their farming and way of life

_____ Start more projects like the National Youth Service

38. What is the best size for a family (sons and daughters) in Kenya today? _____ How many children do you want to have? _____

_____ Reasons for your choice _____

- 6 -

39. Which of the following statements best describes your feelings about your experience at the VP: (Tick one) --

 a) I gained little from attending the VP

 b) I gained much from attending the VP.

REASONS for your answer: _____

40. Please write here any comments about the problems of leavers from Haseno VP which you think would be helpful for the planners of VP projects to know _____

Ref. No. CD/5/1/2

27th August, 1973

3) Ministry Questionnaire (1973)

VILLAGE POLYTECHNIC PROGRAMME EVALUATIONPRELIMINARY QUESTIONNAIRE

NOTE: This Form is to be completed by Provincial Youth Training Officers (or the Provincial Director of Social Services where no Youth Officer is appointed). One form should be used for each Project in each Province.

1. PROJECT DETAILS:

- a) Project Name.....
b) District c) Province.....

2. TRAINEES:

- a) Date of intake of first trainees (since Government assistance).....
b) Number of Trainees at Present

Name of Course	Boys	Girls
(i)		
(ii)		
(iii)		
(iv)		
(v)		
(vi)		
(vii)		
(viii)		

3. LEAVERS

- a) How many trainees have already left this Village Polytechnic? (from 1971 to the Present)

(i) Boys (ii) Girls

- b) Give the following details on those trainees who have already left this Village Polytechnic. **NOTE:** Items (i) to (v) and (viii) and (ix) refer to trainees who completed a full training cycle.

	Boys	Girls
(i) Number self-employed		
(ii) Number employed by others locally		
(iii) Number employed in rural areas outside the local area		
(iv) Number employed in towns		
(v) Number in further training		
(vi) Number of Drop-outs employed		
(vii) Number of Drop-outs unemployed		
(viii) Number unemployed		
(ix) Number unknown		

- c) What is the possible number of leavers between now and December 31, 1973? (i) Boys..... (ii) Girls.....
d) If the answers to a), b) and c) above are NIL - when will the first trainees leave this Project? (i) Date.....
(ii) Number of Boys.....(iii) Number of Girls.....

- a) Other comments (if any) on leavers:
-
-

4. RESEARCH PROGRAMME

- a) What items is this Village Polytechnic producing for sale?

(i).....(viii).....(xv).....

(ii).....(ix).....(xvi).....

(iii).....(x).....(xvii).....

(iv).....(xi).....(xviii).....

(v).....(xii).....(xix).....

(vi).....(xiii).....(xx).....

(vii).....(xiv).....(xxi).....

- b) What items would this Village Polytechnic like to produce?

<u>Item</u>	<u>Reason why not produced</u>
(i).....	
(ii).....	
(iii).....	
(iv).....	
(v).....	
(vi).....	

- c) Does this Village Polytechnic have an Agricultural programme? Yes ☐ No ☐

- d) Is the Agricultural Programme for Boys? Yes ☐ No ☐
(check / the Appropriate box) " Girls? Yes ☐ No ☐

- e) What does the Agricultural Programme consist of?

	<u>Theory</u>	<u>Practical</u>
(i).....		
(ii).....		
(iii).....		
(iv).....		
(v).....		
(vi).....		

- f) Has this Project completed the Programme and Planning Guide? Yes ☐ No ☐

- g) Has this Project completed Work opportunities Guides?
Yes ☒ No ☐

- h) Has this Project used the game "What Happens to Money in Rural Communities"? Yes ☐ No ☐

5. STAFF AND TRAINING

- a) Would you rate the Manager as (check / the appropriate Box) Excellent ☐ Good ☐ Fair ☐ Weak ☐

- b) Would you say that the Manager has benefitted from our training: Very much ☐ to some extent ☐ Not at all ☐

- c) List the Instructors by courses and indicate with a ✓ how you would rate them

Course	Very Good	Good	Average	Weak	Hopeless
(i).....					
(ii).....					
(iii).....					
(iv).....					
(v).....					
(vi).....					
(vii).....					
(viii).....					

- d) Is the Management Committee Good ☐ Reasonable ☐ Ineffective ☐
- e) Does the Management Committee understand the purpose of the Village Polytechnic Programme Well ☐ Reasonably ☐ Very little ☐ Not at all ☐
- f) What in your opinion are the priority training needs of the Village Polytechnic Staff and the Management Committee at this Project?
- (i).....
- (ii).....
- (iii).....
- (iv).....
- (v).....

6. FINANCES

- a) Would you say that this Project is using Government Grants-in-Aid: Well ☐ Fairly well ☐ Inadequately ☐
- b) Is the preparation of budgets and the keeping of financial records: Good ☐ Fair ☐ Weak ☐
- c) Have local self-help collections and labour for the project been: Good ☐ Reasonable ☐ Very little ☐ Non-existent ☐
- d) Do other self-help activities hamper the development of the Village Polytechnic? Very much ☐ to some extent ☐ very little ☐ not at all ☐

7. GENERAL QUESTIONS

- a) What and How are other Government Ministries and Departments and Voluntary Agencies involved in this Project?

Name	Financial help	Finance and Material Help	Advisory
(i).....			
(ii).....			
(iii).....			
(iv).....			
(v).....			
(vi).....			

- b) Add here any other comments you may wish to make about the effectiveness or otherwise of this Village Polytechnic.. (Use the reverse side if necessary).
-
-
-
-

APPENDIX B

4) Brown Questionnaire (1974)

VILLAGE POLYTECHNIC LEAVERS SURVEYA. PERSONAL BACKGROUND

1. Name _____ 2. Sex _____ 3. Age _____
4. Place of birth _____ 5. District _____
6. Division _____ 7. Location _____
8. Sub-location _____ 9. Now living at home _____
 with relatives _____ with friends _____ on your own land _____
 other (specify) _____
10. Where? _____
11. marital status _____ 12. No. of wives? _____ 13. no. of children _____
14. Ages of children _____ 15. other dependents (list) _____
16. No. of brothers _____ 17. No. of sisters _____ 18. rank in family _____
-

B. EDUCATION

19. Primary schools attended _____
20. CPE complete? _____ 21. Last standard completed _____ 22. grades _____
23. Age on entry _____ 24. Age on completion _____
25. boarder / day student? 26. Who paid fees? _____
27. How was the money raised? _____
28. When you finished primary school how long did you wait before
 going to the V.P.? _____ (MONTHS)
29. During this time did you look for work? _____
30. Where? _____
31. Did you find work? _____ 32. Describe, giving salary and length
 of time spent on each job _____
33. Did you apply for a place in secondary school? _____
34. Were you successful? _____ 35. Give reasons for not attending _____
36. Date of entry to VP _____ 37. Age _____
38. What courses did you take at the VP? _____

-2-

39. Length _____ 40. Date of leaving _____ 41. Age _____
42. Did you complete the course? _____
43. Why not? _____
44. Have you taken any trade test? _____ 45. Which one? _____
46. Result? _____ 47. What did the VP course cost? _____
48. Who paid your fees? _____
49. While attending the VP did you live at home? _____ with friends _____
with relatives? _____ other? _____
50. Have ever had any other training? _____ 51. Specify _____
52. How did you learn about the VP? _____
53. Why did you decide to attend? _____
-

C. WORK HISTORY

54. Have you succeeded in getting any paid employment since leaving the VP? _____ 55. What type of job? _____
56. Revenue? _____ 57. Place? _____
58. Length of time in job? _____
59. Present work? _____
60. Revenue? _____ 61. Place? _____
62. Do you plan to continue with this job? _____
63. What are your long term goals? _____
64. Do they include self-employment? _____
65. If you are at home, describe your main activities _____
66. Are you at present working for an employer? _____ self-employed on your own? _____ self-employed in a group? _____ at home? _____ other? _____
67. Did you need money to start your work? _____ 68. How much? _____
69. Where did you get the money? _____

-3-

70. Did you need tools to start your work? _____
71. Where did you get them? _____
72. How did you get your present work? answering ads? _____ visiting a firm? _____ writing to a firm? _____ joining with friends _____ through family contacts _____ on my own _____ other? _____
73. Did anyone help you get this job? _____ 74. Who? _____
75. How did he help? _____
76. How long did it take you to find work after leaving the VP? _____
77. How did you begin looking for work? _____
78. Did you look for work indifferent parts of Kenya? _____ or just one part? _____
79. Where did you look? _____
80. Have you continued with further study since you left the VP? _____
81. What type of study? _____
82. Are you a member of any partnership, work group or cooperative? _____
83. Specify _____
84. Has the VP ever provided you with any help in your work or in your search for work? _____
85. What kind of help? _____
86. Are you looking for work now? _____ 86. Why? _____
87. Do you plan to continue to live where you are now? _____
88. Do you intend to take further training? _____
89. What kind of training? _____

D. FAMILY BACKGROUND

90. Do you own any land? _____ 91. How much? _____
92. Is it possible to buy land near your home? _____
93. Would you buy land if you could? _____
94. Do you expect to receive land from your father? _____

-4-

95. How much? _____

96. How much land does your father own? _____ 97. How many cattle?

_____ 98. grade cattle? _____

99. What is your father's occupation? _____

100. Other sources of income? _____

101. What is your mother's occupation? _____

102. Does your father (or your mother) grow any crops to sell for
money? _____ 103. Which crops? coffee ___ tea ___ cotton ___

pyrethrum ___ other _____

104. Father's education _____

105. Mother's education _____

106. Does your father speak English? well ___ a little ___ not at all

___ 107. Does your mother speak English? well ___ a little ___ not
at all, _____108. Does your father hold any official position in your area? _____
church elder _____ location councillor _____ primary school committee _____
secondary school committee _____ co-operative society (committee) _____
other _____

109. Describe your house _____

110. If you are living on a farm, who owns the farm? _____

111. List all the activities with which you help on the farm? _____

112. How many days did you work on the farm last month? _____

E. GENERAL QUESTIONS

113. How much did you ~~gain~~ from attending the VP? much___ little ___
nothing ___

114. Explain _____

115. What is a VP? _____

116. Describe an ideal VP. _____

117. If you had a choice, what kind of job would you like to have ?

118. What kind of education do you want your children to have? _____

119. Why? _____

120. If you had a lot of money, what would you do with it? _____

121. What do you think the government should do with its money? _____

APPENDIX CLEAVER TRACER QUESTIONNAIRE - FOR MANAGERS

1. When did the centre first begin courses?

MONTHYEAR

2. When did the government agree to support the centre?

MONTHYEAR

3. Including the manager how many staff are employed at the centre?

FULL TIMEPART TIMETOTAL

4. In each year since the centre opened how many students have enrolled?

YEARMALEFEMALETOTALGRAND TOTAL (A)

5. In each year since the first students completed the course, how many students have finished?

<u>YEAR</u>	<u>MALE</u>	<u>FEMALE</u>	<u>TOTAL</u>
-------------	-------------	---------------	--------------

GRAND TOTAL (B)

6. What is the present occupation of those trainees who completed the course? (Please read carefully instructions which will explain each group for you)

<u>MALES</u>	<u>YEARS</u>	<u>NUMBERS</u>
<u>WORKING FOR EMPLOYER</u>		
1) <u>Using Skill</u>	—	—
2) <u>Not Using Skill</u>	—	—
<u>SELF EMPLOYED</u>		
1) <u>Using Skill</u>	—	—
2) <u>Not Using Skill</u>	—	—
<u>AT SCHOOL</u>	—	—
<u>AT HOME</u>	—	—
<u>LOOKING FOR WORK</u>	—	—
<u>UNKNOWN</u>	—	—
<u>TOTAL</u>	—	—

<u>REMALES</u>	<u>YEARS</u>	<u>NUMBERS</u>
<u>WORKING FOR EMPLOYER</u>		
1) <u>Using Skill</u>	—	—
2) <u>Not Using Skill</u>	—	—
<u>SELF EMPLOYED</u>		
1) <u>Using Skill</u>	—	—
2) <u>Not Using Skill</u>	—	—
<u>AT SCHOOL</u>	—	—
<u>AT HOME</u>	—	—
<u>LOOKING FOR WORK</u>	—	—
<u>UNKNOWN</u>	—	—
<u>TOTAL</u>	—	—

GRAND TOTAL (C)

(note that total B must be the
same as total C)

7. What is the present occupation of those who did not complete the course?

<u>MALES</u>	<u>YEARS</u>	<u>NUMBERS</u>
<u>WORKING FOR EMPLOYER</u>		
1) <u>Using Skill</u>	—	—
2) <u>Not Using Skill</u>	—	—
<u>SELF EMPLOYED</u>		
1) <u>Using Skill</u>	—	—
2) <u>Not Using Skill</u>	—	—
<u>AT SCHOOL</u>	—	—
<u>AT HOME</u>	—	—

	<u>YEARS</u>	<u>NUMBERS</u>
<u>LOOKING FOR WORK</u>	—	—
<u>UNKNOWN</u>	—	—
<u>TOTAL</u>	—	—

<u>FEMALES</u>	<u>YEARS</u>	<u>NUMBERS</u>
<u>WORKING FOR EMPLOYER</u>		
1) <u>Using Skill</u>	—	—
2) <u>Not Using Skill</u>	—	—
<u>SELF EMPLOYED</u>		
1) <u>Using Skill</u>	—	—
2) <u>Not Using Skill</u>	—	—
<u>AT SCHOOL</u>	—	—
<u>AT HOME</u>	—	—
<u>LOOKING FOR WORK</u>	—	—
<u>UNKNOWN</u>	—	—
<u>TOTAL</u>	—	—

GRAND TOTAL (D)

(total D plus total B must be the same as total A)

Notes: This questionnaire is not meant to be definitive but attempts to show how questionnaires which are supposed to meet limited policy goals should be designed. In making up the questionnaire, I have tried to adhere to the following principles:

- 1) the purpose of the questionnaire is limited; it seeks to find out the enrolment of trainees, the number of dropouts and the number who completed their training and what their current occupation is.
- 2) the questionnaire is anonymous - in the instructions it should be explained that this is not an evaluation of any specific centre but rather of the village polytechnic programme as a whole; its purpose is to improve not eliminate. The manager should be asked to make no indication of which village polytechnic he is reporting on.
- 3) the questions are simple and require number answers only. Sufficient space should be provided for the answer requested.
- 4) instructions accompanying the questionnaire should define for the managers what each occupational category means - the ones I have listed are not exhaustive - but each category must be clearly defined.
- 5) In spite of the above where possible someone should assist the manager to complete the questionnaire so that totals tally as explained.
- 6) I have not included the list of terminology definitions referred to in question 6. How terms are ultimately defined is not the issue here. What is important is that they be defined.

APPENDIX D POLICY RECOMMENDATIONS

1. Recruitment criteria for trainees should concentrate on their attitudes, aptitudes and entrepreneurial ability rather than simply their ability to pay and primary school marks.
2. There is a need to maintain the unique nature of each institution both with regard to the training offered and the length of courses but courses must be in response to real economic opportunities so that students and families can see the reason for this.
3. Greater emphasis should be placed on a) how to run small businesses b) how to look for work c) how to approach employers, i.e. on preparing students for job hunting and eventual employment of any kind.
4. Major rethinking should be done about the role of agriculture in the village polytechnic. If, as Jon Moris suggests, small-hold agriculture is one of the most difficult to run successfully, then foreign volunteers and amateurs are not the ones to teach it. Agriculture has a low status in rural Kenya and this too needs to be taken into account. Perhaps the Taiwanese or Japanese who have been very successful in developing small scale farming should be appealed to for advice.
5. The women's programmes need more study and assistance. Managers tend to forget that they exist as does the

Ministry. Instruction has to be more closely geared to what women are free to do given their domestic responsibilities. Instructresses themselves need better training and more authority within the village polytechnic.

6. Self-reliance and self-employment as village polytechnic goals should be examined and either abandoned or dealt with more openly in training programmes. In this sense instructors will be of no help if they themselves have no experience in running a business. Some African businessmen do exist; their resources could be drawn upon.
7. Students must continue to interact with the community so that they understand the economic possibilities and problems. Work groups and contracts are excellent but students should participate more in looking for the contracts and organizing the work.
8. Staff travel and leaver assistance and follow-up should be given more attention. This is an essential part of the programme and needs more time and effort than most people assume.
9. The role of each administrative level of the village polytechnic programme should be more carefully defined. How should the provincial youth officer interact with the district development officer, for instance? The function of the research and training centre at Karen needs to be explained to managers, instructors and management committees.

APPENDIX E RESEARCH RECOMMENDATIONS

1. The purpose of the evaluation study should be more closely defined so that time is not wasted gathering unnecessary information.
2. Better questionnaires need to be developed to answer the specific needs of the study.
3. Candidates should be interviewed in person and preferably in their own language.
4. The terminology used in the questionnaire should be standardized (e.g. 'self-employed', 'local', 'urban', 'rural').
5. The data that is collected should be analysed and, if possible, stored so that others may have access to it.

BIBLIOGRAPHY

Agarwala, A.N. and Singh, S.P., eds. The Economics of Underdevelopment. London: Oxford University Press, 1958.

Ahmed, M. and Coombs, P.H. Education for Rural Development: Case Studies for Planners. New York: Praeger, 1975.

Anderson, J.E. 'Primary School Leavers in Rural Areas'. Nairobi: Institute for Development Studies, U. of Nairobi, discussion paper no. 39A, Dec., 1966.

_____. 'Report on the Conference of Harambee School Headmasters'. Nairobi: Institute for Development Studies, U. of Nairobi, discussion paper no. 95, Aug., 1966.

_____. 'The Village Polytechnic: an Evaluation Report for the Ministry of Cooperatives and Social Services'. Nairobi: Institute for Development Studies, U. of Nairobi, Aug., 1970.

_____. 'Socialization and Selection: Incompatible Functions for Schools in Developing Countries'. Nairobi: Institute for Development Studies, U. of Nairobi, staff paper no. 65, Feb., 1970.

_____. The Struggle for the School. London: Longmans, 1970.

_____. 'The Evaluation of Pre-vocational Youth Training in Kenya'. A Report for the Ministry of Cooperatives and Social Services. Nov., 1971.

_____. 'Some Proposals for Reform in Education, Training and Youth Work in Kenya'. (mimeograph), 1972.

Brett, E.A. Colonialism and Underdevelopment in East Africa. London: Heinemann, 1972.

Brownstein, L. 'Preliminary Results of a Survey of 1964 K.P.E. Candidates in Embu, Kitui, Kericho and Nyanza'. Nairobi: Institute for Development Studies, U. of Nairobi, discussion paper no. 58, Nov., 1967.

_____. Education and Development in Rural Kenya: a Study of Primary School Graduates. New York: Praeger, 1972.

Castle, E.B. Growing Up in East Africa. London: Oxford University Press, 1966.

Chambers, R. 'Planning for Rural Areas in East Africa: Experience and Prescriptions'. Nairobi: Institute for Development Studies, U. of Nairobi, 1971.

Commonwealth Secretariat. Education in Rural Areas. Report of the Commonwealth Conference on Education in Rural Areas, U. of Ghana, Legon, Mar. 23 to Apr. 2, 1970.

Court, D. 'Some Background and Attitude Characteristics of Trainees at Village Polytechnics'. Nairobi: Institute for Development Studies, U. of Nairobi, staff paper no. 110, July, 1971.

_____. 'Village Polytechnic Leavers: the Maseno Story'. Nairobi: Institute for Development Studies, U. of Nairobi, working paper no. 72, Nov., 1972.

_____. 'Dilemmas of Development: the Village Polytechnic Movement as a Shadow System of Education in Kenya'. Nairobi: Institute for Development Studies, U. of Nairobi, discussion paper no. 156, Nov., 1972.

_____. 'The Social Function of Formal Schooling, the Views of Foster and the Experience of Tanzania'. Nairobi: Institute for Development Studies, U. of Nairobi, discussion paper no. 128, Jan., 1972.

Court, D. and Prewitt, K. 'Nation versus Region: Social Learning in Kenyan Secondary Schools'. Nairobi: Institute for Development Studies, U. of Nairobi, discussion paper no. 155, Nov., 1972.

Fields, G.S. 'Private and Social Returns to Education in Labour Surplus Economies'. Nairobi: Institute for Development Studies, U. of Nairobi, discussion paper no. 104, Apr., 1971.

_____. 'The Educational System of Kenya: an Economist's View'. Nairobi: Institute for Development Studies, U. of Nairobi, discussion paper no. 103, Apr., 1971.

Ford, R.J.C. Report on the Village Polytechnic Programme. Report to the ILO, #159-2-C-7-1, Geneva: ILO, 1970.

_____. 'The Pre-vocational (youth) Training Programme in Kenya: an Experience with an Educational Activity Outside the Formal School System'. Paper presented to the Universities of Eastern Africa Conference on Teacher Education. October, 1971.

_____. 'Planning and Programming for Youth Training Programmes Related to the Needs and Possibilities of Rural Areas'. Paper presented to round table on out of school and work oriented education, Dakar, Senegal, Feb., 1972.

_____. 'Summary Progress Report on the Village Polytechnic Programme in Kenya, March 1973-1974'. (mimeograph) undated.

Gatheru, M. Child of Two Worlds. Nairobi: Heineman, 1966.

Gertzel, C. The Politics of Independent Kenya, 1963-68. Nairobi: East African Publishing House, 1970.

Heyer, J., Ireri, D. and Moris, J. Rural Development in Kenya. Nairobi: East African Publishing House, 1971.

Hyden, G., Jackson, R. and Okumu, J. Development Administration: the Kenyan Experience. Nairobi: Oxford University Press, 1970.

I.L.O. Employment, Incomes and Equality: a Strategy for Increasing Productive Employment in Kenya. Geneva: I.L.O., 1972.

Institute for Development Studies. 'An Overall Examination of the Special Rural Development Programme'. Nairobi: Institute for Development Studies, U. of Nairobi, 1971.

_____. 'Strategies for Improving Rural Welfare'. Nairobi: Institute for Development Studies, U. of Nairobi, 1971.

Inukai, I. and Okelo, J. 'Rural Enterprise Survey in Nyeri District, Kenya'. Report of the Consultants to DANIDA. Nairobi: 1972.

_____. 'Problems of Rural Industries: Case Study of Kakamega District, Western Province, Kenya'. Paper presented at the Annual Social Science Conference of the East African Universities, Dar es Salaam, Dec. 18 to 23, 1973.

Jolly, R. Planning Education for African Development, Economic and Manpower Perspectives. Nairobi: East African Publishing House, 1969.

_____. Education in Africa: Research and Action. Nairobi: East African Publishing House, 1969.

Kenya, Colony and Protectorate of. Education Department. Annual Report, 1925. Nairobi.

_____. Education Department. Annual Report, 1926. Nairobi.

Kenya, Republic of. Education Commission Report Part II. Nairobi: Government Printer, 1964.

_____. Ministry of Cooperatives and Social Services. How to Start a Village Polytechnic. Nairobi, 1971.

_____. Ministry of Cooperatives and Social Services.
Handbook for Village Polytechnic and Youth Centre Instructors.
Nairobi, 1972.

_____. Ministry of Cooperatives and Social Services.
How to Start a Work Group. Nairobi, 1972.

_____. Ministry of Cooperatives and Social Services.
Annual Report of the Youth Development Division, 1972. (mimeograph).

_____. Ministry of Cooperatives and Social Services.
Village Polytechnic Programme: Progress Report to June, 1972.
(mimeograph).

_____. Ministry of Cooperatives and Social Services.
Village Polytechnics: Evaluation of Projects. Nairobi, 1973.
(internal memorandum).

_____. Ministry of Cooperatives and Social Services.
Annual Report of the Youth Development Division, 1973. (mimeo-
graph) April, 1974.

_____. Ministry of Economic Planning and Development.
Development Plan, July, 1964 to June 30, 1970. Nairobi.

_____. Ministry of Economic Planning and Development.
Development Plan for 1965/66 to 1969/70. Nairobi, 1966.

_____. Ministry of Education. Annual Report, 1970.
Nairobi, 1970.

_____. Ministry of Finance and Economic Planning.
Development Plan, 1970 to 1974. Nairobi.

_____. Ministry of Finance and Economic Planning. Develop-
ment Plan, 1974 to 1978. Nairobi.

_____. National Assembly. Sessional Paper No. 1: 'Obser-
vations on the Report of an Economic Survey Mission from the
IBRD'. Nairobi, 1963.

_____. National Assembly. Sessional Paper no. 10: 'African
Socialism and its Application to Planning in Kenya'. Nairobi,
1965.

_____. National Assembly. Report of the Select Committee
on Unemployment. Nairobi, Dec., 1970.

_____. Population Census, 1969. Nairobi, Nov. 1970.

_____. Report of the Commission of Inquiry. Nairobi:
Government Printer, 1971.

_____. Report on Training. Nairobi.

Kenyatta, J. Facing Mount Kenya. New York: Random House, 1962.

King, K. 'Primary Schools in Kenya: Some Critical Constraints on their Effectiveness'. Nairobi: Institute for Development Studies, U. of Nairobi, discussion paper no. 130, May, 1972.

_____. 'New Light in Africa: Kenya's Candlemakers'. Paper presented at the Appropriate Technology Conference, University of Edinburgh, Sept., 1973.

_____. 'Kenya's Informal Machine-makers: a Study of Small Scale Industry in Kenya's Emergent Artisan Society'. Centre of African Studies, Edinburgh University. (mimeograph) March, 1974.

Kimani, S.M. and Taylor, D.R.F. Growth Centres and Rural Development in Kenya. Maxim Printers: Thika, 1973.

Langdon, S. 'Multinational Corporations, Taste Transfer and Underdevelopment: a Case Study from Kenya'. (mimeograph)

_____. 'The Political Economy of Dependence: Notes Toward an Analysis of Multinational Corporations in Kenya'. (unpublished paper) October, 1973.

_____. 'The Multi-national Corporation in Kenya'. Material for a case study discussion at the Institute for International Cooperation, University of Ottawa, Nov., 1974.

Leakey, L.S.B. White African, Cambridge, Mass.: Schenkman Publishing Co. Inc., 1966.

Lewis, W.A. 'Economic Development with Unlimited Supplies of Labour'. The Manchester School, May, 1954.

Leonard, D.K., ed. Rural Administration in Kenya. Nairobi: East African Literature Bureau, 1973.

Leys, Colin. 'Politics in Kenya: the Development of Peasant Society'. British Journal of Political Science. vol. 1, no. 3, 1971.

_____. 'The Limits of African Capitalism: the Formation of the Monopolistic Petty Bourgeoisie in Kenya'. mimeograph, undated.

_____. 'Interpreting African Underdevelopment: Reflections on the ILO Report on Employment, Incomes and Equality in Kenya'. University of London, Institute of Commonwealth Studies, Post-graduate Seminar, March 7, 1973.

_____. Underdevelopment in Kenya: the Political Economy of Neo-colonialism, 1964-1971. London: Heineman, 1975.

Leys, Norman. Kenya. London: the Hogarth Press, 1926.

Livingstone, I., ed. Economic Policy for Development. Harmondsworth: Penguin Books, 1971.

Livingstone, I. and Ord, H.W. An Introduction to Economics for East Africa. London: Heineman, 1968.

Marris, P. and Somerset, A. African Businessman. Nairobi: East African Publishing House, 1971.

Mbiliniji, W.J. 'The Participation of Women in African Economics'. Economic Research Bureau, University of Dar es Salaam, ERB paper no. 71.12.

_____. 'The Education of Girls in Tanzania'. Institute of Education, University College, Dar es Salaam, 1969.

Mbithi, P. 'Issues in Rural Development in Kenya'. Nairobi: Institute for Development Studies, University of Nairobi, 1971.

Meier, T.M. Leading Issues in Economic Development. London: Oxford University Press, 1964 (2nd edition).

Moock, Joyce L. 'Pragmatism and the Primary School: the Case of a Non-rural Village'. Nairobi: Institute for Development Studies, University of Nairobi, discussion paper no. 135, March, 1972.

Moris, J.R. Agriculture in the Schools: the East African Experience. unpublished manuscript.

National Christian Council of Kenya. After School What? A report on the Further Education, Training and Employment of Primary School Leavers. Nairobi, March, 1966.

_____. Who Controls Industry in Kenya? Report of a Working Party. Nairobi: East African Publishing House, 1968.

_____. The Village Polytechnic: Report of a Consultation. (mimeograph), May, 1969.

_____. Village Polytechnic Handbook. Nairobi, 1970.

_____. Reports for 1971. Presented to the Annual General Meeting, July, 1972.

_____. Reports for 1972. Presented to the Annual General Meeting, July, 1973.

Nellis, J.R. 'The Ethnic Composition of Leading Government Positions'. Scandinavian Institute of African Studies, Research Report no. 24, Uppsala, 1974.

Norwegian Agency for International Development, 'The Kenya Village Polytechnic Programme'. A report by an evaluation mission of the Government of Kenya and the Norwegian Agency for International Development, January-February, 1974. Nairobi, 1974.

Odinga, O. Not Yet Uhuru. New York: Hill and Wang, 1967.

Oliver, R.A. The Missionary Factor in East Africa. London: Longmans, 1969.

Oyugi, O. 'Participation in Development Planning at the Local Level'. Nairobi: Institute for Development Studies, U. of Nairobi, 1973.

Pala, A.O. 'The Role of African Women in Rural Development: Research Priorities'. Nairobi: Institute for Development Studies, University of Nairobi. Discussion paper no. 203, June 1974.

Raju, B.M. Education in Kenya: Problems and Perspectives in Educational Planning and Administration. Nairobi: Heinemann, 1973.

Rosenstein-Rodan, P.N. 'Problems of Industrialization of Eastern and South Eastern Europe'. Economic Journal, June-September, 1943.

Rothchild, D. Racial Bargaining in Independent Kenya. London: Oxford University Press, 1973.

Schultz, T.W. Transforming Traditional Agriculture. New Haven, 1964.

Sheffield, James R., ed. Education, Employment and Rural Development. Nairobi: East African Publishing House, 1967.

Sheffield, James R., and Diejomach, Victor P. Non-Formal Education in African Development. New York: African-American Institute, 1972.

Sheffield, J.R. Education in the Republic of Kenya. Washington: U.S. Government Printing Office, 1971.

Shields, J.J. Education in Community Development: its Function in Technical Assistance. New York: Praeger, 1962.

Siegel, S. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill, 1956.

Singer, H. and Jolly, R. 'Unemployment in an African Setting: Lessons of the Employment Strategy Mission to Kenya'. International Labour Review. vol. 107, Feb., 1973.

Somerset, H.C.A. 'Educational Research in Kenya: a personal viewpoint'. Nairobi: Institute for Development Studies, University of Nairobi. Discussion paper no. 97, Oct., 1970.

Stabler, Ernest. Education Since Uhuru, The Schools of Kenya. Middletown: Wesley University Press, 1969.

Stewart, Frances. 'Kenya: Strategies for Development'. mimeograph, undated.

UNICEF. Children, Youth, Women and Development Plans in West and Central Africa. Report of the conference of ministers, Lome, Togo. May, 1972. Abidjan: UNICEF.

Youth Development Division. 'Proposal for Donors for a Research Training Centre'. Internal memo, March, 1971.

_____. 'Policy Statement'. Mimeograph, Feb., 1971.

_____. 'Summary Progress Report on the Village Polytechnic Programme in Kenya, March 1973 - March, 1974'. Mimeograph.

_____. 'Statistics on Village Polytechnic Leavers from Feb. to June, 1974 Field Survey'. Internal memo.

Wanjala, E.A. 'The Village Polytechnic Movement in Kenya'. NCKK newsletter, Feb., 1974.

Wasserman, G. 'The Independence Bargain: Kenya Europeans and the Land Issue, 1960-1962'. J. of Commonwealth Political Studies. vol. XI, no. 2, July, 1973.

_____. 'Continuity and Counter-Insurgency: the Role of Land Reform in Decolonizing Kenya, 1962-1970'. Canadian Journal of African Studies. vol. III, no. I, 1973.

Watts, E.R., ed. New Hope for Rural Africa. Proceedings of a conference held at Kikuyu, Kenya, Sept., 1967. Nairobi: East African Publishing House, 1969.

Weeks, J. 'Imbalance Between the Centre and the Periphery in Kenya: a Diagnosis and a Strategy', unpublished paper, 1971.

END

24 03 77

FIN