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THE FEASIBILITY OF A BLACK COMMUNITY HEALTH CENTRE PROPOSED FOR A SITE AT MACAYAMA :

An Interim Research Report from the Ongoing Study

P. STOPFORTH

DOCUMENT AND MEMORANDUM SERIES

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PREFACE

At the present time the Centre for Applied Social Sciences is conducting a survey in the peri-urban region south of the Durban Metropolitan Area with the financial sponsorship of the Black Communities Programmes Ltd. We have called this a 'Diet and Health Survey' because in one sense this reflects the greater part of the empirical design of the study and because a survey on eating patterns and health provides a legitimate role for our field staff. There are two other senses in which the survey may be considered to be of relevance to the sponsoring organisation and to some extent for social studies in general: the first, which subsumes the diet and health study, is a test of feasibility for a proposed community health centre in the area, and the second, a family and household study among a peri-urban population. Apart from the primary focus of feasibility we will attempt, *inter alia*, to provide prospective medical and health personnel in the area with an overview of the community in which they will practice their various professions.

This is an interim report. However, a sufficient part of the survey in the main target area, the old Amanzimtoti Mission Reserve, had been completed at the time of preparing this report to allow reasonably substantial statements confirming the feasibility of the proposed health centre at Macayama. Chapter VI contains a summary of our interim findings which may be useful to any who are unable to spare the time to read the whole document. Much of the content of survey findings to date is not reported in the chapters following only because the necessity to prepare this report as quickly as possible has not allowed time for the necessary analysis - field work for the present survey commenced on the 19th August 1976.

In the course of conducting social surveys many debts are incurred in a way which cannot be repaid except by expressions of appreciation and thanks. Although the survey has yet to be completed we find ourselves indebted to the Rev. Dlamini of the United Congregational Church, Mr. A.N. Makanya and Mr. B. Langa all of Adams Mission, to whom we convey our heartfelt thanks. The unfortunate closure of the University of Zululand released Mr. Dumisani Ncala and Miss Nokwazi Khumalo, who have conducted the field work of the survey and while we sympathise that their studies have been interrupted, their services to the present survey are very much appreciated.

P. STOPFORTH,
SENIOR RESEARCH FELLOW.

CHAPTER I

THE SCOPE OF THE STUDY AND PROGRESS TO DATE

At the present time there is no medical service available to the people of rural Umbumbulu. A building designed to house a clinic has been erected at Umbumbulu 'village' but has not been used for this purpose yet. This lack of medical service has come to the attention of the Black Communities Programmes Ltd., (BCP) under whose auspices a programme to establish a community health centre has been devised. Their proposal is an ambitious one entailing the erection of suitable buildings where doctors and nursing staff may treat patients, as well as the intention to expand the operation to include an ambulance service and outstation facilities for the greater community: in other words a substantial capital outlay and current expenditure. The present study is an attempt to establish the practicability or feasibility of this proposed project in order to justify the large amount of money that will ultimately be spent.

In a memorandum submitted to BCP during May earlier this year we suggested some minimum conditions that an applied research study must confirm if the proposed health centre is to be a viable proposition. These conditions of feasibility are set out below:

i) primarily, a population large enough to ensure that the medical service will be fully utilised so warranting the substantial expenditure;

ii) that this population should manifest a general need with regard to standards of morbidity and public health;

iii) the assurance that no parallel or alternative agency is adequately providing the services deemed to be necessary; and

iv) an indication that the health centre is accessible to the local population.

The immediate purpose of this study is to confirm or to refute in an empirical manner what might be commonly and intuitively held about conditions pertaining in peri-urban regions contiguous with the Durban metropolitan area. For example, as it is commonly accepted that 'homeland' populations are densely settled and that there is a shortage of urban housing it is likely that populations near the city will be large; it is a matter of record that there is no medical service in the rural district of Umbumbulu and people have to travel

to the urban areas for this suggesting that standards of health are likely to be somewhat depressed; and, just as people travel some distance to town by bus or taxi to receive medical attention, so they can travel the shorter distance, in many cases, to Macayama which is on a bus route.

An empirical design for social science study does not, however, appear as an independent entity: it is dependent on theoretical notions and statements which, when investigated, give rise to statements concerning a variety of hypotheses generated by those theoretical orientations. It is probably unnecessary to say that it is the very social scientific approach to community study which allows efficacious applied statements. As this is an interim report, based only on a section of as yet incompleted fieldwork, it is sufficient to state that various theoretical notions applying to urbanisation, social change and household patterns plus recent research at the centre concerning a peri-urban community have provided the guide lines to our approach. Transcending the immediate purpose of this report is the aim to provide as much information as possible on the population which the personnel of a medical service will confront in the near future.

The site Macayama consists of ca. 12,8 hectares which lies within the old Amanzimtoti Mission Reserve just south of the church glebe land. The general area is known as Adams Mission which occupies an interstitial zone in the socio-demography of rural/urban settlement. In the east a township known as Kwa Makuta has mushroomed on the border of the old reserve and the "White" coastal boroughs of Umbogintwini and Amanzimtoti are nearby. East and north-east are the industrial areas of Umbogintwini and Durban respectively with the Indian town of Isipingo in between. In the west Adams Mission is open to rural settlement of greater and lesser densities, some of which have the appearance of peri-urban settlement as does the mission itself.

The potential population and area which a health centre at Macayama can serve is very dispersed. The scope and budget of the study is small which makes probability sampling - a difficult exercise in rural South Africa - almost impossible. For the purpose at hand we therefore decided to survey three areas, selected on grounds of variable distance from Macayama and showing different settlement patterns and peri-urban contexts. Briefly, these areas are as follows :-

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(i) Adams Mission or the area known as Amanzimtoti Mission Reserve itself. For this area of the sample we were able to draw a 10% systematic sample from 470 lots, the information supplied by the Kwa Zulu Agricultural Office for Umbumbulu. Interviews are conducted in only one household per lot and therefore the sample is not an unqualified systematic one. At the time of beginning the tabulations for this report 34 complete interviews of the possible 47 for this area were available and these comprise the data for this interim exercise.

(ii) Toleni. This is an area ca. 4 Kms from Umbumbulu village lying away from the main road to Pietermaritzburg though on a secondary road serviced by a bus route. Field work in this area has already begun and the intention is to enumerate data from households which will be shown on a map in the final report. No attempt at probability sampling is made here.

(iii) A densely settled area south of Kwa Makuta township yet to be selected.*

The design of the empirical study is built about a team of two field-workers, one of each sex, who visit selected homesteads and administer a questionnaire schedule to target respondents, wives, or any other responsible adult in the home. The questionnaire schedule comes in two physical parts (to facilitate dual interviewing of the respondent) and is divided into three sections or topic areas which may be scrutinised at Appendix A. Section 1 is entitled Household Composition and this part of the design elicits information on household size and structure, place and description of occupations as well as information on children. Section 2 is devoted to patterns of meals, dietaries and nutrition and constitutes an attempt to provide an overview for medical personnel concerning the nutritional standards of their future patients. Here we also attempt to show the dependence of households on retail outlets as the source of their food rather than on agricultural production. This, of course, is linked to urban employment patterns which can be analysed from Section 1. Section 3 combines data on the present use of medical services, wherever they may be, the attitude to a proposed health centre (clinic) at Macayama, an approach to outline the epidemiology of the population and some attitudes to connections between health and nutrition.

In this interim report we restrict our discussion to the immediate priority of stating arguments concerning the conditions of feasibility for a Community Health Centre at Macayama. This discussion is drawn from a partially fulfilled sample of households settled in the area of the old Amanzimtoti Mission Reserve which gives rise to certain qualifications to the substantive findings reported in the following chapters. Firstly, the results from the outstanding Mission Reserve sample cases (ca. 28%) might very well change the general

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* The area [illegible]

picture we can build at present. Secondly, either or both of the other survey areas might show different patterns which will complicate the final view of feasibility. Accepting that the substantive data for the Mission Reserve area will not be drastically altered by outstanding information and that Adams Mission is the immediate area of concern both for BCP and the successful launching of a health centre, then this interim report should provide a sound indication of the likely return for the money that is to be expended on the project.

CHAPTER II

POPULATION AND HOUSEHOLD PATTERNS

The most accurate method for determining the size of a population is to define it and then to conduct a census or enumeration of all people within the defined boundary. This is in effect the exercise which is conducted by the Department of Statistics for the Population Census usually in decennial intervals, the last having occurred during 1970. Clearly such an undertaking is beyond the means of the present study. The usual alternative method is to sample households in a population on a probability basis and then to use mean household size as a multiplier over all households which yields an estimate of the population size with a computed range of error. We have already stated that probability sampling is not practicable in the present case. Further, it would be difficult to define with any accuracy the total population of interest in this study. However, with the aid of aerial photographs to gauge densities of homesteads in the general area and the results of a household survey allowing 'estimates' of household size in a variety of particular communities it should be possible to make certain types of numerical statement about population size in the vicinity.

In this report we wish to stress findings to date which indicate the likely size of a household multiplier for the Adams Mission area and to discuss the composition of the households surveyed. These will be fitted to data from aerial photography in the final report. Before advancing figures on survey household size it is as well to define the concept of household which constitutes the unit of analysis in this study. The concept used is that of the domestic group or family household and in defining the boundaries of this unit we follow the conventions of Laslett and Hammel.[1] Essentially, "The domestic group, ... consists ... of those who share the same physical space for the purposes of eating, sleeping and taking rest and leisure, growing up, child rearing and procreation."[2] As the authors state this definition is determined by three main considerations: sharing of space or a locational criterion; sharing of

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1) Laslett, P. (1972). "Introduction: The History of the Family", in Laslett, P. (Ed.) *Household and Family in Past Time*, Cambridge, The University Press. Hammel, E.A. and P. Laslett (1974). "Comparing Household Structure Over Time and Between Cultures", *Comparative Studies in Society and History*. 16, 73-103.

2) *Ibid*, p.76.

activities or a functional criterion; and, relationship by blood or marriage, a kinship criterion. The focus is therefore on the Coresident Domestic Group. This is a minimal domestic group and it excludes children who have left home (and in the present study dependent children who are being educated elsewhere or at boarding school) as well as kin and affines residing close by. Hammel and Laslett further discuss the question of inmates[1] (visitors, guests, lodgers, boarders) and assign them to a broader category of houseful. In the present study there are very few cases of unrelated 'lodgers' residing in coresident domestic groups and we will not differentiate them at this stage. Any other lodgers and boarders will meet the kinship criterion for the domestic group. Only one servant has been encountered in the survey to date.

The data at our disposal pose something of a problem with regard to the locational criterion. While most earners in households return to the place of domicile daily from their places of employment, some return only at week-ends and a very few only at intervals of some months. These last we have defined out of the coresident domestic unit but have retained, for the purpose of constructing household composition, the weekly commuters. As far as numbers or size of household are concerned we do give alternative figures accounting for this phenomenon.

The design for collecting household information on the questionnaire schedule (see Appendix A, Section 1) allowed not only for the description of the *de facto* members of the coresident domestic unit but for description of absent wage earners, dependents and other sometime members of the domestic group usually residing elsewhere. This design is purposive as, on the basis of previous research in the Centre, we have as an hypothesis that household size among Africans in peri-urban areas has increased in the past decades. The reasons for this, if it is in fact true, might be left to a more complete research report. However, on the basis of an apparent increase in the size of households in an area near Botha's Hill between the periods 1958 and 1972 which we attributed in part to peri-urban location,[2] and given that the vicinity of Adams Mission has similar general peri-urban characteristics, we predicted that

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1) *Ibid.*, p.78.

2) Stopforth, P. (Unpublished June 1975). "Changes in Household Structure from 1958 to 1972 in an African Peri-urban Area near Durban". Paper prepared for the Sixth Annual Congress of the A.S.S.A. (mimeo).
Stopforth, P. and K. Mack (Unpublished July 1975). "Socio-cultural Background and Household Nutrition among Africans in the Vicinity of 'The Valley Trust', Natal." Centre for Applied Social Sciences, University of Natal. (Forthcoming).

family households or coresident domestic units in the area would be large and that they would have increased since an earlier date. In the earlier research we were not able to differentiate *de facto* coresidence from intermittent residence and hence were not certain whether the greater size was caused by overinclusion of non-resident kin: the results below show in the present study that non-resident kin do not swell, as it were, the mean size of the coresident group unduly.

Table 1 shows three alternative household size multipliers which might be employed given that the data is as yet incomplete. We suggest that a multiplier of 9,3 persons be adopted for the purpose of 'estimating' population in the area at this interim stage which is the mean household size computed by enumerating all coresidents including those that return every week-end to the domestic group. In any event, whichever of the figures in Table 1 is adopted as a multiplier the mean size of household is large by any standard and the first part of our hypothesis as well as the condition of feasibility (large population) is confirmed to some extent.

TABLE 1

ALTERNATIVE MEAN SIZES FOR CORESIDENT DOMESTIC GROUPS (HOUSEHOLDS) ON THREE DEFINITIONS OF INCLUSION

Alternative Groups	No. of Persons	Range
Mean Size of the Coresident Domestic Unit Enumerating Members Present on All Days of the Week	8,91	3-16
Mean Size of the Coresident Domestic Unit Enumerating Members Present During the Week and at Week-ends	9,30	3-17
Possible Size of the Domestic Group During Holiday Periods of the Year	10,1	4-19

The second part of the hypothesis holds that if large households are evident, then this will represent an increase in size over an earlier period In our study near Botha's Hill we computed an increase in household size of ca. 3,5 persons which we argued was probably too large a difference and should be corrected to ca. 2,5 persons on the grounds that too many non-residents had been included in the domestic group. Using the Population Census of 1951 Reader[1)] calculated an average of 7 persons per kraal in the Mission Reserve

1) Reader, D.H. (1966). *Zulu Tribe in Transition*, Manchester University Press. p.76.

with apparently very few absent adults - a situation similar to our own. Given that census information on African populations is somewhat crude, nevertheless this allows some basis for comparison. In the intervening period of twenty-five years between 1951 and 1976, household size appears, on the available evidence, to have increased by a factor of 2,3 persons per household calculated as a mean.

This increase can be accounted for by an apparent lack of fission in the process of the developmental cycle of the domestic group. That is, very few families of the elementary or conjugal type take up separate residence. Other factors such as prevalent illegitimacy or 'lack of marriage of mothers', survival of elderly people etc., can be analysed from the ideographs which have been constructed for each survey family but which will not be discussed at this early stage. At the earlier period Reader claims that 45% of families in the Mission Reserve exhibited the characteristics of the elementary family - i.e., spouses and children (p.77). Our own findings to date show that this incidence has changed to 3%. Table 2 shows the distribution of household composition for the survey in the Mission Reserve to date, based on the classification developed by Hammel and Laslett which we do not explain here but will include at a later date. For various reasons then (underurbanisation, shortage of land, preference for rural residence, lack of security in town, influx control, etc.) household structure appears to have been increasing in complexity in recent time indicating among other things an increase in population - the issue of this chapter.

TABLE 2

PERCENTAGE DISTRIBUTION OF THE CLASSIFICATION OF CORESIDENT DOMESTIC UNITS ACCORDING TO THE CLASSIFICATION OF HAMMEL AND LASLETT: ONLY BROAD CLASSES SHOWN

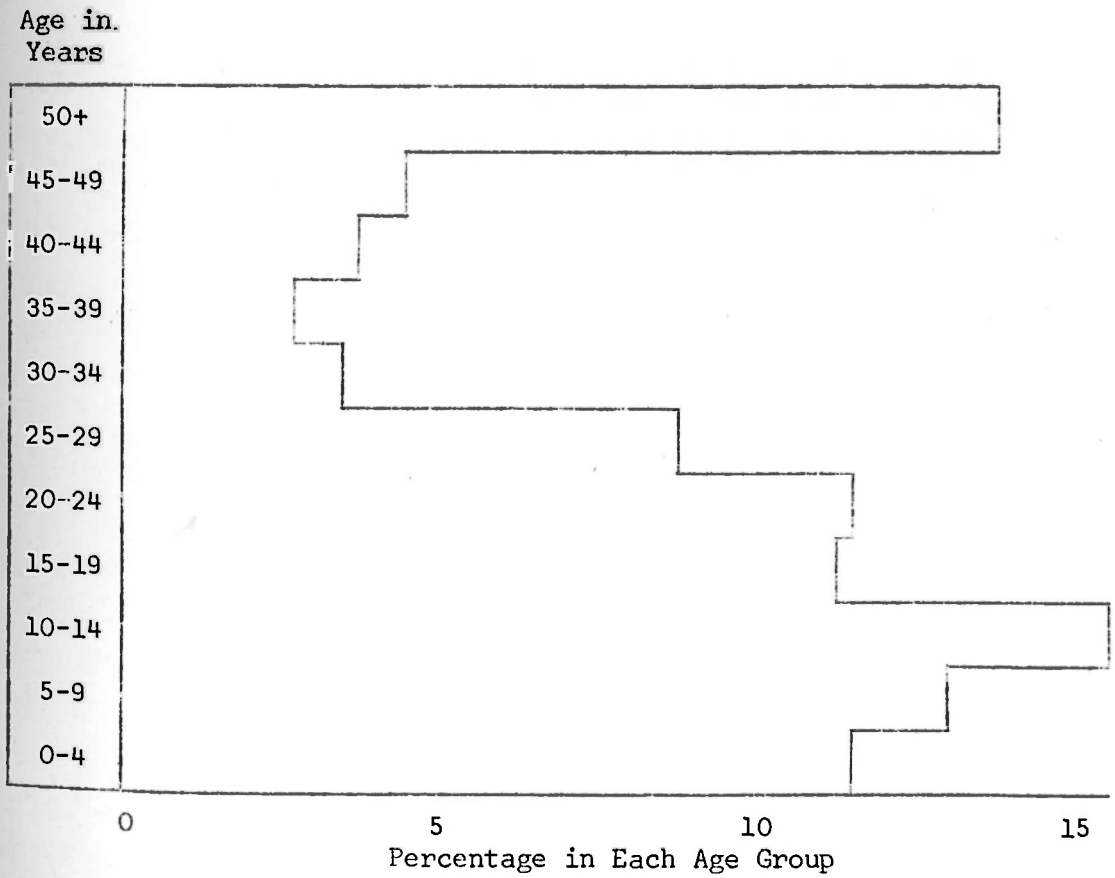
Coresident Domestic Units	Percentage
No Family Grouping	5,9
Simple Family	2,9
Extended	29,4
Multiple	61,8

N = 34

Now if we have entered the situation where the impossible situation of sychronised development over all domestic groups pertains, that most are in the expansion phase, then arguments resting on household composition would fall away. However, the arguments concerning size of the population would still pertain. A brief look at the age distribution of the members of the 34 survey households shows that it is not merely the birth-rate that accounts for increased household size in the last two decades. From Fig (i) we can see that the very young are not over-represented suggesting that the birth-rate is not extra-ordinary. It is further evident that there are many young and not so young people in households representing unmarried mothers in some cases and unmarried children and relatives working near Durban in others and even some not working but merely residing. The interesting feature is the large proportion of aging and elderly people in the distribution. It is as well that this fact has emerged because it appears that any prospective health service will have to cope with a full range of ill-health in a population and not only the pressing needs of infant ailments.

FIG (i)

PERCENTAGE AGE DISTRIBUTION OF MEMBERS OF 34 HOUSEHOLDS



There can be no doubt that on the grounds of population size a community health centre at Macayama is a feasible project. Concentrating on the Mission Reserve only, which is a very small area in the possible influence that a health centre can exert, we find that the population is probably in the region of 5 000 people, 24% of whom are likely to be under 10 years of age and 14% of whom are over 50 years of age. We base this on a figure of only 500 households on the Mission Reserve: there are 470 lots some of which are given over to non-residential use (e.g. Church) but many lots now support more than one household apiece which would bring the number of households higher than 470. Our selection of households is somewhat systematic and there is no reason to believe that we have selected only large households in the area (see the range of size in Table 1). The survey in two other areas will allow a statement about the likely size of the population in areas surrounding the Mission Reserve.

CHAPTER III

HEALTH AND NUTRITION

The 'sample' of 34 households is a very small one on which to base morbidity statistics, and the total 'sample' for the study, when it is complete, will then not be large enough for this purpose. This has been anticipated in the design of the study and in an attempt to get some indication of the prevalent types of disease we have posed a general question about illness in the vicinity (Appendix A: Section 3, Question 8): we have also attempted to get the incidence of illness within each household for ca. one year prior to the survey (Section 3, Question 9). In both cases data have been collected separately for infants and children, boys and girls 16 years and under, and adults (in retrospect it appears that we would have been wise to include a special category for elderly people). It should, of course, be recognised that our respondents (women of varying ages and statuses) are not expert diagnosticians nor are many even familiar with the type of information sought. Taking this into account, the information received has been surprisingly unequivocal and the content easily identifiable.

Tables 3, 4 and 5 describe the general situation with regard to morbidity as we have received it from our respondents together with the incidence of morbidity as it has occurred within households over a period of ca. one year. Reports of disease occurring generally in the area are listed in the tables in order of the number of times mentioned in the survey while the specific occurrence in households is reported as it occurs over the range of household members covered by the survey.

If we compare the reported view of general disease among the three age groups contained in Tables 3,4 and 5 and restrict our discussion to the first five diseases appearing in each order, then two general patterns appear to emerge: one, similar for small and older children, the other particular to adults (and it would seem to fit older adults). While small children are reported as suffering more often from measles, diarrhoea, whooping cough, influenza and bilharzia older children are reported as suffering less from diarrhoea, appear to be more prone to bronchitis and bilharzia is thought of as reasonably common. Among adults backache, hypertension, T.B., heart ailments and chest pains (possibly heart conditions) are the diseases commonly thought to be prevalent in the population.

TABLE 3

GENERAL VIEW AND INCIDENCE OF DISEASE AMONG INFANTS AND CHILDREN UNDER 5 YEARS OF AGE. A TOTAL OF 36 CHILDREN

Order of Disease by Number of Times Mentioned by Respondents	Number of Persons Suffering from Disease in Past Year
Measles — 𝍸 𝍸 || 22	
Diarrhoea — |||| +15	3
Whooping Cough — |||| 14	8
Influenza + | 8	
Bilharzia — 3	
Colds + || 4	
Bronchitis + 2	3
Worms 2	1
Sores, Rash — 𝍸 |||| 8	~~1~~ + 2
Vomiting |	
Asthma — |	1
Typhoid — |	
Polio |	
Nasal Blocking + +	
Toothache |	Malnutrition 1

+15

TABLE 4

GENERAL VIEW AND INCIDENCE OF DISEASE AMONG BOYS AND GIRLS UP TO 16 YEARS OF AGE. TOTAL OF CA. 104 CHILDREN

Order of Disease by Number of Times Mentioned by Respondents	Number of Persons Suffering from Disease in Past Year
Bilharzia — 𝍸 𝍸 || 28	3
Influenza — |||| + 9	3
Whooping Cough — 2	1
Bronchitis — + 2	1
Measles — 2	1
Typhoid — 2	2
Stomach Ache | 3	2
Sores, Rash — || 5	5 𝍸
Diarrhoea — +	
Asthma — +	1
Athlete's Foot |	1
Eye Problems |	1
Headaches || 2	Epileptic Seizures 2
Epileptic seizures 1	Swollen Feet 2
	T.B. 1

TABLE 5

GENERAL VIEW AND INCIDENCE OF DISEASE AMONG ADULTS.
TOTAL OF CA. 177 PERSONS

	Order of Disease by Number of Times Mentioned by Respondents		Number of Persons Suffering from Disease in Past Year	
1	Backache	16	3	
3	High Blood Pressure	10	5+6	
2	T.B.	11	2	
4	Heart Ailment	5	4	
6	Chest Pains	4		
7	Influenza +	4		
8	Headaches	4	1	
9	Kidney Ailment	3		
10	Fatigue	2		
	Coughing +	1		
	Ulcers	+	+	
	Sore Throat +	1		
5	Painful Knees	5	2	
	Swollen Feet	1		
10	Asthma	3	2+3	
12	Diabetes	1	Sores, Rash	2
		11	Diabetic	1+1
			Eye Problem	1
	Sores		Abdominal Pains	1+3
	Epilepsy	1	Epileptic Seizures	1
			Whooping Cough	1
			Cramp	1
			Mental Disturbance	1
			Intestinal Obstruction	1
			Iphika	1
			Gynaecological complication	+
	+/6		Bilharzia	1

These distributions receive some measure of confirmation if we turn to the actual incidence of disease during the past year. Small children do seem to be prone to whooping cough and diarrhoea and bronchitis occurs probably with some frequency. Older children appear to suffer from bilharzia and influenza and during the past year both typhoid and T.B. have visited at least one child each in the 'sample'. Hypertension, heart ailments, backaches and T.B. have occurred among adults and they show an interesting assortment of ailments (including a traditional disease) not recorded for younger household members.

On the evidence available it is impossible to make a definitive statement concerning morbidity in the vicinity of the Mission Reserve. This we suspect will only become possible once a health centre is operating in the area. We can say, however, that our respondents perceive a variety of diseases,

some very serious ones, and that many of these diseases have been manifest in households in recent time. Only two children have died during the last year but when it is considered that there are very few children of under one year old in the 'sample' this might be a high incidence if it could be converted to common infant mortality statistics. In the past year only two gainfully employed persons have lost time from work through illness, neither complaint very serious, and this is an encouraging sign of 'relative well-being' in the community. However, many people are unemployed and it is not known to what extent chronic illness is the cause of this, especially among older household members. Only one case of malnutrition was reported (apparently diagnosed at King Edward VIII Hospital) which is heartening. At this early stage enough information is available to convince that a community health centre could play an important role in the general health of the people of the Mission Reserve.

The main emphasis of our research design has been on household nutrition and the pattern of daily dietaries. Our intention here is to provide any prospective medical service with as full an account as possible of the nutritional status in the community so as to facilitate both treatment of disease and the devising of preventive health programmes. The task of analysis is an onerous and lengthy one in this section and is deferred for a final report. However we wish to emphasise the staple pattern of diet culled from Section 2, Question 9 of our questionnaire. Table 6 describes the frequency of use of 102 food items among the 34 households being considered here; we include the whole table as a matter of interest for any reader who wishes a closer scrutiny of this information at present. For our own purpose we have culled a staple dietary from the data in Table 6 by accepting daily and between 5 and 6 days per week consumption of any food item as representing staples if the percentage of consumption among the 34 households is 85% of households or more consuming at the stated daily frequency.

TABLE 6

DISTRIBUTION OF THE FREQUENCY OF CONSUMPTION OF A NUMBER OF FOOD ITEMS AMONG 34 HOUSEHOLDS AT ADAM'S MISSION. PERCENTAGE DISTRIBUTION IN PARENTHESES.

Food Item	Daily	Between 5-6 Days Per Week	Between 3-4 Days Per Week	Between 1-2 Days Per Week	About Once Every Two Weeks	At Least Once A Month	Very Infrequently	Never
Mealie Meal	33 (97)	1 (3)						
Samp	2 (6)	13 (38)	13 (38)	4 (12)				2 (6)
Mealie Rice		2 (6)	12 (35)	3 (9)	1 (3)	1 (3)	1 (3)	14 (41)
Rice	2 (6)	2 (6)	3 (9)	14 (41)	10 (29)	3 (9)		
Bread Bought - White or Brown	32 (94)	1 (3)	1 (3)					
Bread Made		1 (3)		11 (32)	4 (12)	8 (24)	4 (12)	6 (17)
Breakfast Cereals	1 (3)		1 (3)	1 (3)	1 (3)			30 (88)
Oats	1 (3)			1 (3)	1 (3)		1 (3)	30 (88)
Bread Flour		3 (9)	6 (17)	10 (29)	6 (17)	4 (12)	3 (9)	2 (6)
Self-raising Flour			1 (3)	3 (9)	7 (21)	6 (17)	5 (15)	12 (35)
Cakes		2 (6)	2 (6)	3 (9)	1 (3)	5 (15)	7 (21)	14 (41)
Biscuits		1 (3)	1 (3)	16 (47)	4 (12)	4 (12)	6 (17)	2 (6)
Rusks			1 (3)		1 (3)		1 (3)	31 (91)
"Pasta"		1 (3)		2 (6)	1 (3)	2 (6)	2 (6)	26 (76)
Green Mealies	1 (3)	6 (17)	1 (3)	2 (6)		2 (6)	20 (59)	2 (6)
Sorghum							1 (3)	33 (97)
Mahewu	1 (3)	2 (6)	3 (9)	3 (9)	1 (3)	3 (9)	2 (6)	19 (56)
Potatoes	17 (50)	12 (35)	4 (12)	1 (3)				
Sweet Potatoes		2 (6)	4 (12)	6 (17)	7 (21)	5 (15)	7 (21)	3 (9)
Amadumbe		2 (6)	4 (12)	7 (21)	11 (32)	5 (15)	4 (12)	1 (3)
Dried Beans	1 (3)	10 (29)	9 (26)	12 (35)	1 (3)			1 (3)
Dried Peas		1 (3)		2 (6)	1 (3)		3 (9)	27 (79)
Lentils				3 (9)		1 (3)		30 (88)
Peanuts	1 (3)			6 (17)	4 (12)	5 (15)	6 (17)	12 (35)
Peanut Butter	1 (3)	6 (17)	8 (24)	6 (17)	5 (15)		4 (12)	4 (12)
Onions	17 (50)	13 (38)	1 (3)	2 (6)	1 (3)			
Tomatoes	17 (50)	14 (41)	2 (6)	1 (3)				
Carrots		5 (15)	5 (15)	4 (12)	3 (9)	1 (3)	5 (15)	11 (32)

Continued

TABLE 6 CONTINUED

Food Item	Daily	Between 5-6 Days Per Week	Between 3-4 Days Per Week	Between 1-2 Days Per Week	About Once Every Two Weeks	At Least Once A Month	Very Infrequently	Never
Cabbage	2 (6)	11 (32)	6 (17)	14 (41)		1 (3)		
Pumpkin		5 (15)	5 (15)	10 (29)	6 (17)	2 (6)	5 (15)	1 (3)
Squash		1 (3)	1 (3)	2 (6)	1 (3)	1 (3)	2 (6)	26 (76)
Beetroot	1 (3)	3 (9)	3 (9)	4 (12)	5 (15)	3 (9)	2 (6)	13 (38)
Spinach		4 (12)	1 (3)	7 (21)	3 (9)	3 (9)	4 (12)	12 (35)
Imfino		8 (24)	4 (12)	6 (17)	3 (9)	11 (32)	2 (6)	
Green Peas			3 (9)	5 (15)	4 (12)	3 (9)	3 (9)	16 (47)
Green Beans			5 (15)	5 (15)	5 (15)	4 (12)	7 (21)	8 (24)
Green Peppers	3 (9)	3 (9)		7 (21)	4 (12)	3 (9)	1 (3)	13 (38)
Other Fresh Vegetables		3 (9)		2 (6)	1 (3)		1 (3)	27 (79)
Baked Beans		1 (3)	3 (9)	5 (15)	1 (3)	2 (6)	8 (24)	14 (41)
Tinned Vegetables		1 (3)	2 (6)	2 (6)	5 (15)	1 (3)	3 (9)	20 (59)
Oranges	4 (12)	8 (24)	3 (9)	12 (35)	4 (12)	2 (6)	1 (3)	
Naartjies		3 (9)	1 (3)	4 (12)	2 (6)	2 (6)	4 (12)	18 (53)
Bananas	4 (12)	10 (29)	5 (15)	8 (24)	3 (9)	4 (12)		
Avocado Pears		6 (17)	1 (3)	2 (6)	4 (12)	6 (17)	10 (29)	5 (15)
Paw-paw		3 (9)	4 (12)	5 (15)	1 (3)	4 (12)	7 (21)	10 (29)
Pineapple		2 (6)		6 (17)	1 (3)	11 (32)	8 (24)	6 (17)
Deciduous Fruit		5 (15)	3 (9)	11 (32)	4 (12)	5 (15)	6 (17)	
Tinned Fruit		2 (6)	4 (12)	10 (29)	5 (15)	3 (9)	5 (15)	5 (15)
Beef - Brisket		1 (3)						33 (97)
Beef - Other Cuts	1 (3)	5 (15)	10 (29)	14 (41)	2 (6)	1 (3)	1 (3)	
Mutton		3 (9)	3 (9)	8 (24)	2 (6)	4 (12)	5 (15)	9 (26)
Pork				2 (6)	2 (6)	7 (21)	3 (9)	20 (59)
Goat	1 (3)						27 (79)	6 (17)
Chicken		2 (6)	2 (6)	18 (53)	9 (26)	3 (9)		
Sausage		3 (9)	3 (9)	6 (17)	6 (17)	6 (17)	4 (12)	6 (17)
Tripe		1 (3)	1 (3)	10 (29)	11 (32)	4 (12)	1 (3)	6 (17)
Offal (Intestine)			3 (9)	4 (12)	9 (26)	5 (15)	1 (3)	12 (35)
Lungs				3 (9)	2 (6)		1 (3)	28 (82)
Vienna Sausage				1 (3)			3 (9)	30 (88)
Polony			1 (3)	7 (21)		4 (12)	6 (17)	16 (47)

Continued

TABLE 6 CONTINUED

Food Item	Daily	Between 5-6 Days Per Week	Between 3-4 Days Per Week	Between 1-2 Days Per Week	About Once Every Two Weeks	At Least Once A Month	Very Infrequently	Never
Tinned Meat		2 (6)		12 (35)	2 (6)	2 (6)	6 (17)	10 (29)
Fresh Fish		1 (3)	1 (3)		1 (3)	2 (6)	4 (12)	25 (74)
Tinned Pilchards	1 (3)	5 (15)	5 (15)	14 (41)	4 (12)	3 (9)	1 (3)	1 (3)
Fish Paste	1 (3)	2 (6)		3 (9)	1 (3)	2 (6)	3 (9)	22 (65)
Marmite	1 (3)	1 (3)					1 (3)	31 (91)
Eggs	5 (15)	6 (17)	8 (24)	2 (6)	6 (17)	4 (12)	2 (6)	1 (3)
Fresh Milk	11 (32)	4 (12)	2 (6)	3 (9)		2 (6)	2 (6)	10 (29)
Amasi		7 (21)	6 (17)	7 (21)	6 (17)	3 (9)	4 (12)	1 (3)
Buttermilk								34 (100)
Milk Powder	5 (15)	6 (17)	4 (12)	2 (6)		2 (6)	3 (9)	12 (35)
Sweetened Condensed Milk	4 (12)	4 (12)	2 (6)	7 (21)		3 (9)	3 (9)	11 (32)
Tinned Cream	1 (3)	2 (6)	1 (3)	4 (12)	6 (17)	4 (12)	2 (6)	14 (41)
Steri-milk	3 (9)	3 (9)	2 (6)	1 (3)	3 (9)	5 (15)	1 (3)	16 (47)
Cheese	1 (3)		1 (3)	4 (12)	4 (12)	6 (17)	5 (15)	13 (38)
Ice Cream		8 (24)		6 (17)	4 (12)	1 (3)	8 (24)	7 (21)
Sugar	33 (97)							1 (3)
Syrup		1 (3)			1 (3)	1 (3)	1 (3)	30 (88)
Honey					1 (3)		3 (9)	30 (88)
Jam/Marmalade	2 (6)	13 (38)	6 (17)	6 (17)	2 (6)	2 (6)	2 (6)	3 (9)
Jelly/Custard		1 (3)	4 (12)	11 (32)	4 (12)	1 (3)	6 (17)	7 (21)
Chocolate	1 (3)	2 (6)		3 (9)	1 (3)	3 (9)	5 (15)	19 (56)
Sweets/Chewing Gum		10 (29)	1 (3)	2 (6)	8 (24)	5 (15)	6 (17)	2 (6)
Butter	2 (6)	7 (21)	6 (17)	2 (6)		1 (3)	1 (3)	15 (44)
Lard (Bacon Fat)							1 (3)	33 (97)
Dripping	1 (3)	3 (9)		3 (9)	2 (6)	1 (3)	5 (15)	19 (56)
Sheep Fat		1 (3)				1 (3)		32 (94)
Chicken Fat		2 (6)		1 (3)		2 (6)		29 (85)
Cooking Oil	4 (12)	11 (32)	1 (3)	3 (9)	2 (6)	1 (3)		12 (35)
Sunflower Seed Oil	9 (26)	5 (15)			1 (3)			19 (56)
Margarine	23 (68)	8 (24)	1 (3)		2 (6)			
Tea	27 (79)	2 (6)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	

Continued

TABLE 6 CONTINUED

Food Item	Daily	Between 5-6 Days Per Week	Between 3-4 Days Per Week	Between 1-2 Days Per Week	About Once Every Two Weeks	At Least Once A Month	Very Infrequently	Never
Coffee	16 (47)	6 (17)	1 (3)	3 (9)			1 (3)	7 (21)
Minerals		4 (12)	4 (12)	9 (26)	4 (12)	2 (6)	8 (24)	3 (9)
Milk Beverages e.g. Milo	8 (24)	9 (26)	1 (3)	3 (9)	2 (6)		2 (6)	9 (26)
Salt	33 (97)	1 (3)						
Pepper	1 (3)	5 (15)	3 (9)	2 (6)	1 (3)			22 (65)
Curry Powder	14 (41)	16 (47)	4 (12)					
Vinegar		2 (6)	2 (6)	8 (24)	3 (9)	4 (12)	2 (6)	13 (38)
Tartaric Acid	2 (6)	3 (9)		4 (12)	3 (9)	1 (3)	3 (9)	18 (53)
Baking Powder		1 (3)	6 (17)	14 (41)	5 (15)	3 (9)	2 (6)	3 (9)
Flavouring	1 (3)	1 (3)	1 (3)	2 (6)	1 (3)	1 (3)	1 (3)	26 (76)
Yeast	1 (3)			6 (17)	5 (15)	8 (24)	4 (12)	10 (29)

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The resulting staple (daily or near daily) dietary has no surprises for anyone familiar with African eating patterns in the urban or peri-urban areas of Natal. The foods consumed most frequently by the greatest number of households are grouped below :

Household Consumption Between 5-7 Days Per Week	Percentage of Households
Mealie Meal	100
Bread	97
Margarine	92
Potatoes	85
Onions	88
Tomatoes	91
Curry Powder	88
Tea (Coffee 64)	85
Sugar	97
Salt	100

Among other foods then, most families on the Mission Reserve consume daily, or near daily, mealie meal, bread and margarine, tea or coffee and sugar, and the now ubiquitous curried stew with, it would appear, meat once or twice a week in most cases. We may add to this diet legumes in the form of dried beans consumed in 93% of households at least once a week and in many cases more often than this. Scrutiny of Table 6 will show a heartening pattern of vegetable consumption especially cabbage and pumpkin and to a lesser extent imfino and spinach. Until we have analysed the details of reported daily dietaries for each household it is impossible to say with what frequency vegetables in addition to potatoes, onions and tomatoes are consumed among the households at the mission: at this early stage we are prepared to say that vegetable consumption is probably greater than is commonly assumed but not sufficiently regular to meet demands of sound nutritional practice. The early findings in this study are in line with changes in eating habits and patterns analysed in our study near Botha's Hill.[1)]

So far we have described a rather typical pattern for African health and nutrition. We can now, however, report a preliminary finding of the utmost importance to health practitioners and educators. There are substantial indicators that, in many households in the survey, the concept of NUTRITION as a link between food consumed and consequent health and ill-health has taken

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1) Stopforth and Mack, *op.cit.*

root. The question of whether or not this knowledge is put to practical use will have to be deferred for further analysis. Nevertheless, nearly 60% of respondents in the survey were able to give insightful answers on two questions which posed loosely the issue relating food-nutrition-health. This is a far cry from the results obtained in a small random sample survey of households in Umlazi where only 11% of women were able to demonstrate an understanding of the link between food and health (reported by the Centre during 1975).[1] The trend is similar (if not firmer) to one reported in our research near Botha's Hill where we stated that "... while the traditional reliance on maize-based food is predominant there is substantial indication of a diversified view of nutrition connected with food and health ...".[2] The distributions of responses to Questions 11 and 12 in Section 3 of the questionnaire schedule (Appendix A) are shown in Table 7 followed by a short discussion.

TABLE 7

OPEN-ENDED RESPONSE TO THE IMPORTANCE OF FOOD FOR HEALTH AMONG BABIES AND SMALL CHILDREN

Questions Posed	Positive Recognition of the Nutrition Principle Linking Food with Health	Intermediate Response: Some Recognition That Food and Health Are Connected	Negative Response: No Recognition of Any Intervening Nutrition Principle
"In what ways can food affect the health of babies and young children?"	20 (59%)	9 (26%)	5 (15%)
"In what ways can food cause ill-health (sickness) in babies and young children?"	19 (56%)	9 (26%)	6 (18%)

N = 34

The data appearing in Table 7 are the transmutations of individual responses to judgements made by the researcher in each of the relevant

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1) Schlemmer, L. and P. Stopforth (1975). "Nqutu - The Malnutrition Story", *Sash*, 17, 4, 5-8, p.7.

2) Stopforth and Mack, *op.cit.*

questions - each group of responses was then content analysed the results of which can be found below. The questions are posed with respect to infants and young children because nutrition is particularly important at this stage of the life cycle and because it is surmised that if the link between food and health is made for children any change in nutritional status that actually results will have the most efficacy in the long term. The general picture is one where, as mentioned above, nearly 60% of respondents in households positively recognise both that food affects the health of children and more pointedly that (poor) diet can cause ill-health in children (both questions were posed in order to check consistency of response; scrutiny of Table 7 shows the response to be consistent). Twenty-six percent of respondents manifest an intermediate position with regard to conceptualising the process of nutrition: that is they appear to recognise that food is related in some way to health but are rather vague in their reported responses. Fifteen per cent or more of respondents appear to be ignorant in any 'modern' sense of the relationship between food and health though they do evince attitudes about food and well-being.

The content of the responses shown in Table 7 is illuminating. Among those responding with some insight into the process of nutrition the idea of a balanced diet appears to have taken hold and some mention vegetables, protein, vitamins and milk quite freely. The idea that lack of nutrients (as above) cause illness (and in two cases kwashiorkor was stipulated by name) is commonplace. Those regarded as filling the intermediate position on this question dwell on the phrase 'translated' as 'well cooked food'. If this means properly prepared food then this group swings somewhat to the positive pole of the distribution; if, however, this means thoroughly cooked food then the swing is probably the other way - this point will be clarified at a later date. Typical responses among the small negative group are that some foods cause 'weak blood', constipation, *inyoni*, etc.

If these interim results are a reflection in any way of the final findings of the survey then we are able to inform anyone involved in health (and nutrition education) that they will be able to sow on fertile ground among more than half the households in the Mission Reserve - further that among the nearly 60% of positively oriented respondents that we interviewed little difficulty will be experienced in recruiting community workers with an already well developed notion of the role of nutrition in health. Of the balance it would appear, following our analogy, that a modicum of fertiliser will bring a further ca. 26% of respondents into the way of more positive orientations to

the issue of nutrition. There are, however, a substantial percentage of respondents who appear not to recognise the efficacy of diet for standards of health who will require close attention if the aim of preventive medicine is directed at the whole community.

There can be little doubt that there is a general need for a health service in the vicinity as regards manifestations of morbidity among people of all ages. The view of dietaries outlined above shows some improvement over a 'starch only' diet but it is clear that public health can be greatly improved by any improvement to eating patterns; hopefully to be accomplished by nutrition education as part of the role of a community health centre. It is further encouraging that there appears to be an already existing receptivity to the notion that nutrition is the link between food and health. The feasibility of a community health centre at Macayama on the basis of conditions of morbidity and potential for nutrition education is not in doubt.

CHAPTER IV

THE PRESENT STATE OF MEDICAL SERVICES

This chapter need be only one sentence long - there is no medical service available in rural Umbumbulu. There is a SANTA institution in the vicinity of the Mission Reserve but this is clearly very specialised. There is a clinic at nearby Kwa Makuta township but by all accounts it is difficult to get treatment there and a doctor is on duty only one day a week. There is a building at Umbumbulu village which is destined to become a clinic but in the way that these things happen this might yet take some time. But people do need medical attention from time to time and in the case of the community at Adams Mission they have to go some way, at a cost, to get it. The cost is mostly in transport which is characteristically a bus or taxi.

It would appear as though people from this community travel either to Isipingo or Durban when they require medical attention (when they are sick enough to see a doctor). We asked respondents to report on where people commonly sought medical attention. The initial response showed Isipingo (50%) as the most popular source of medical attention followed by King Edward VIII Hospital in Durban (38%); the balance of response suggesting Kwa Makuta clinic with one respondent naming Malandeni. Prompted to give a second choice on this question Isipingo and King Edward VIII Hospital were characteristically named as alternatives (depending on which of these two were named as a first response). Asked, "The last time somebody from this 'household' was sick enough to see a doctor where did they go?", respondents replied as follows:

	n	%
King Edward VIII	16	47
Isipingo	12	35
Clairwood Hospital	2	6
Kwa Makuta	1	3
Malandeni	1	3
Umbumbulu (private doctor)	1	3
Umkomaas	1	3

There can be little doubt therefore that people in this community do, and have to go, a fair distance to get medical attention. There are also difficulties about receiving medical attention for people outside the Durban

area which will be discussed more fully at a later date.

One inference that can be drawn from the picture above is the deleterious likelihood that recourse is had to medical attention only when this becomes absolutely necessary and a condition is sufficiently severe to warrant the required expenditure on transport and practical difficulty of receiving attention, having arrived at the destination. If this is at all true then it would be consistent to posit that there is chronic 'near morbidity' among many people in the community which, unless it becomes florid, seldom sees the light of medical attention.

As regards medical service a community health centre is not merely a subject of feasibility, it is an outstanding necessity.

CHAPTER V

ATTITUDES TO THE SITE AT MACAYAMA

Clearly a community health centre must be accessible to the community it is designed to serve. In an urban centre large hospitals and clinics are usually on public transport routes or public transport can be re-routed to service such institutions. In a peri-urban area like the vicinity of Adams Mission while population densities are high, the community is much more widely dispersed than in towns and any facility is likely to be used by a 'community' much larger than the immediate one. The issue of accessibility is therefore an important one. The site at Macayama is on top of a hill and to one used to private transport for all occasions it appears to be somewhat off the beaten track. However, the views of the respondents in our survey suggest the opposite and as we will show below, the interim finding on the accessibility of the site is an overwhelmingly positive one.

Only one respondent out of 34 thought that the bus transport routed past Macayama was too poor to allow people to get there easily. Two respondents qualified, correctly, their reasonably positive response by saying that it would be more difficult for people further afield than for those in proximity to Adams Mission. The balance, 91% of the sample, were positive that the site was easily accessible to the community. When taxed with the question of how people would get to Macayama, 79% of respondents mentioned bus transport, 38% thought it would be feasible to walk and ca. 9% mentioned taxis (some multiple responses). In the view of respondents on the Mission Reserve the site at Macayama is eminently accessible. The views of people further afield might well be different but we can only guess at this stage.

The site must be accessible but probably more important is to know that no internal body of opinion is set against a particular site for a project as crucial as a health centre. In order to confirm that the site at Macayama is politically acceptable to the local community we asked two questions :

> "When the 'clinic' is built at Macayama will they have a lot of people going there?"
>
> "Who wont go there?"

In answer to the first of the questions, 82% of respondents were very positive

that a lot of people would go to Macayama, a further 6% were positive, and 6% were undecided. Only one respondent was negative and one failed to reply to the question. The content of the total positive response is summarised by respondents' views that the site is near to people's homes, many can get there on foot, money will be saved on transport and where necessary, it will be easy to take a bus. In the other small categories of response qualification or negation are couched in terms of access to transport; nowhere is there a suggestion in the data that latent, internal political issues will focus on the matter of the proposed 'clinic' at Macayama. The now defunct dispensary which used to exist near the minister's house is remembered wistfully by some respondents.

The question of accessibility and positive orientation to the site at Macayama is confirmed when the results of the negative question "Who wont go there (Macayama)?" are scrutinised. They are set out below :

	Response n		Response %	
Positive Response				
Everybody will go	27		79	
Everybody except real traditionals	2	31	6	91
Some might prefer Kwa Makuta	1		3	
Some might prefer private doctor	1		3	
Qualified Response				
Some transport difficulties	2		6	
Negative Response				
Nobody (unexplained)	1		3	

The support is as unequivocal as can possibly be expected from a human population.

We contend that (in the views expressed by most respondents in the first part of our survey) the site at Macayama is an accessible one and it is clear that at present there is overwhelming support for a medical centre of some type in the vicinity. Objectively, Macayama is on a bus route, it is accessible to a large number of people, it is clearly much closer than 'adequate alternative' services and it will save people money on transport costs. On these grounds the proposed programme is definitely feasible.

CHAPTER VI

THE PROPOSED SCHEME IS FEASIBLE

In the last four chapters we have argued consistently that the proposed community health centre at Macayama is a feasible project. This has not occurred as a result of fitting data to a preconceived notion of the result required but has flowed out of the data collected to confirm or reject four basic conditions posited as tests of feasibility in our survey. On the other hand we have confirmed what is clearly apparent to any informed observer - that is, that health and medical facilities are sorely needed in rural Umbumbulu. There is no reason to be apologetic about this because a sizeable moiety of scientific endeavour must be to substantively confirm things that are generally, if impressionistically, held to be true.

This final chapter is designed to be read by the busy decision-maker who requires evidence to be immediately apparent in order to facilitate rapid and judicious decision-making. The arguments made in Chapters II through to V are summarised below in staccato form. The applied social science answer to the questions posed initiating this survey is that the scheme to embark on a community Health Centre at Macayama proposed by BCP is a feasible one.

CONDITION OF FEASIBILITY	SUBSTANTIVE TRAITS OF FEASIBILITY
1. POPULATION SIZE	
	1.1 Large mean household size.
	1.2 Complex household composition.
	1.3 Predicted dense settlement.
	1.4 Consequently a large population.
2. HEALTH AND NUTRITION	
	2.1 Perceived and manifest morbidity.
	2.2 Improved dietaries necessary.
	2.3 Sound potential for nutrition education.
	2.4 Grounds for comprehensive medical service.
3. LACK OF MEDICAL SERVICE	
	3.1 No alternative medical service in rural Umbumbulu.
	3.2 Accessible alternatives at a distance.
	3.3 Likelihood of untreated disease.
	3.4 Clear-cut case of feasibility.
4. THE PROPOSED SITE	
	4.1 The site is accessible.
	4.2 The proposed health centre is supported.
	4.3 The site is an objectively feasible one.
	4.4 People will use the facilities.

These findings reflect only part of the story determined by an incomplete survey. However, while the results of the completed survey might well deviate, especially in certain details, from the present interim view of the situation, it is most unlikely that deviation will be sufficient to make it necessary to revise the position regarding feasibility. In any event, as the interim findings are drawn from a nearly complete sample survey of the Mission Reserve they reflect by and large the likely final picture of this community which is the focal one for a health centre and we have shown that the Adams Mission community is large enough to sustain a health centre on its own. The interim nature of this report does not, therefore, qualify the feasibility of a health centre to the extent that might at first be thought. The remainder of the survey being conducted in two other areas at varying distances from Macayama will, however, allow a statement as to the conditions of a wider population.

APPENDIX A?

SPECIMEN QUESTIONNAIRE SCHEDULE

CASS 23/76.

STRICTLY CONFIDENTIAL

CENTRE FOR APPLIED SOCIAL SCIENCES
University of Natal
Durban

D I E T A N D H E A L T H S U R V E Y

Feasibility Study for the Proposed Community Health Centre at Macayama

General Area	Location of Homestead

Visit	Date	Outcome
1st		
2nd		
3rd		
4th		
5th		

SECTION 1. HOUSEHOLD COMPOSITION

1. "Who eats at this 'house' every day?"

(This includes all people who are usually coresident throughout the week and at week-ends - related adults and children as well as unrelated 'lodging' adults and children).

Instruction: Target respondent is person usually responsible for housekeeping duties; but any responsible member of the household will suffice as a respondent if the housewife refuses an interview or if she (he) is infirm or too old.

Identify respondent as EGO and record members of the coresident domestic unit by the kin relationship to ego in the column provided opposite. Preferred order of recording household composition: descending through senior spouses, then their dependent children, then less senior spouses and their dependent children, etc.

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2. "Who usually eats at this 'house' only at week-ends (Saturday and Sunday) and during holidays?"

---

3. "Who always comes to this 'house' when they have holidays and eats here?"

(Not dependents)

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4. "Are there any people (e.g. parents, children, brothers, sisters, etc.) who live elsewhere but are supported regularly (with money) by members of this 'household'?"

General: Place of Work = Area, e.g., Isipingo, Durban, etc.

Questions 2, 3 and 4 above require the same general conventions as question 1 above.

No.	Household Composition	Sex M or F	Age	Children at School [X]	Brief Description of Occupation	Place of Work	Meals at School/Work [X]
1.	EGO						
2.							
3.							
4.							

FOR OFFICE USE ONLY

CDU (WD)		Max. CDU		Total Dependency R	
CDU (WE)		CDU Dependency R		No. CFU (in CDU)	

SECTION 2. PATTERN OF MEALS

1. Record General Pattern of Meals (this includes all occasions of eating and drinking.

Time of Day	Week-day Meals		Week-end Meals	
	Brief description of meal taken by various household members	Very Important : Record members of the household taking meal	Saturday	Sunday
Very Early Morning				
Early Morning				
Morning				
Midday Hours				
Afternoon				
Evening				
Night				

PATTERN OF MENUS (a) WEEK-DAYS

2 (a) Record General Pattern of Menus for the Various Meals Appearing on Schedule 1 of this Section. (Write in morning meal, evening meal, early morning tea, etc.)

	EQ		EQ		EQ		EQ		EQ

EQ = Estimated Quantities: Use common household measures. Where estimate is quantity per person (e.g. 2 spoons of sugar) record the measure and write pp. (e.g. 2 spoons pp.).

PATTERN OF MENUS (b) SATURDAYS

2 (b) Record General Pattern of Menus for the Various Meals Appearing on Schedule 1 of this Section. (Write in morning meal, evening meal, early morning tea, etc.).

	EQ		EQ		EQ		EQ		EQ

EQ = Estimated Quantities. Use common household measures. Where estimate is quantity per person (e.g. 2 spoons of sugar) record the measure and write pp. (e.g. 2 spoons pp.).

PATTERN OF MENUS (c) SUNDAYS

2 (c) Record General Pattern of Menus for the Various Meals Appearing on Schedule 1 of this Section. (Write in morning meal, evening meal, early morning tea, etc.).

	EQ		EQ		EQ		EQ		EQ

EQ = Estimated Quantities. Use common household measures. Where estimate is quantity per person (e.g. 2 spoons of sugar) record the measure and write pp. (e.g. 2 spoons pp.).

3. "Of the adults who sleep at home every night and have meals away from home during the day, e.g. at work, do they ..."

Adults	Buy Food	Take Food	Free Meal	What do they usually eat
1.				
2.				
3.				

4. "What food do children take to school/or what food do they buy when they are at school?"

Take [X]		
Buy [X]		

5. "If any children get meals at the school, what do they usually get to eat?"

6.a. "How much pocket money do children usually get (e.g. to buy food at school)?" Write amount per day, week, etc.

---

b. "What do they buy with pocket money that they get?"

---

7. BABIES: "When (at what age) do children start eating the same food as adults?" (I.E., participate in adult meals).

---

8. BABIES: "What foods do babies eat?"

1. Before they have any teeth (say six months)?

---

2. After they get some teeth (say after six months)?

---

9. CHECK LIST OF FOODS

Household Consumption Code (CC)

Daily use	1
Between 6-5 days per week	2
Between 4-3 days per week	3
Between 2-1 days per week	4
About once every two weeks	5
At least once a month	6
Very infrequently	7
Never	8

Food Item	CC	Quantity in Common Household Measures	Source of Ingredients Store (S) / Home (H)	Notes
Mealie Meal				
Samp				
Mealie Rice				
Rice				
Bread Bought W or B				
Bread Made				
Breakfast Cereals				
Oats				
Bread Flour				
Self-raising Flour				
Cakes				
Biscuits				

Food Item	CC	Quantity in Common Household Measures	Source of Ingredients Store (S) / Home (H)	Notes
Rusks				
"Pasta"				
Green Mealies				
Sorghum				
Mahewu				
Potatoes				
Sweet Potatoes				
Amadumbe				
Dried Beans				
Dried Peas				
Lentils				
Peanuts				
Peanut Butter				
Onions				
Tomatoes				
Carrots				
Cabbage				
Pumpkin				

Food Item	CC	Quantity in Common Household Measures	Source of Ingredients Store (S) / Home (H)	Notes
Squash				
Beetroot				
Spinach				
Imfino				
Green Peas				
Green Beans				
Green Peppers				
Other Fresh Vegetables				
Baked Beans (tins)				
Tinned Vegetables				
Oranges				
Naartjies				
Bananas				
Avocado Pears				
Paw-paw				
Pineapple				
Deciduous Fruit: Apples Peaches, Pears, etc.				
Tinned Fruit				

Food Item	CC	Quantity in Common Household Measures	Source of Ingredients Store (S) / Home (H)	Notes
Beef - Brisket				
Beef - Other Cuts				
Mutton				
Pork				
Goat				
Chicken				
Sausage				
Tripe				
Offal (Intestines)				
Lungs				
Vienna Sausage				
Polony				
Tinned Meat				
Fresh Fish				
Tinned Pilchards				
Fish Paste				
Marmite				
Eggs				

Food Item	CC	Quantity in Common Household Measures	Source of Ingredients Store (S) / Home (H)	Notes
Fresh Milk				
Amasi				
Buttermilk				
Milk Powder				
Sweetened Condensed Milk				
Tinned Cream				
Steri-milk				
Cheese				
Ice Cream				
Sugar				
Syrup				
Honey				
Jam and Marmalade				
Jelly				
Chocolate				
Sweets and Chewing Gum				
Butter				
Lard (Bacon Fat)				

Food Item	CC	Quantity in Common Household Measures	Source of Ingredients Store (S) / Home (H)	Notes
Dripping				
Sheep Fat				
Chicken Fat				
Cooking Oil				
Sunflower Seed Oil				
Margarine				
Tea				
Coffee				
Minerals				
Milk Beverages e.g. Milo				
Salt				
Pepper				
Curry Powder				
Vinegar				
Tartaric Acid				
Baking Powder				
Flavouring				
Yeast				

Food Item	CC	Quantity in Common Household Measures	Source of Ingredients Store (S) / Home (H)	Notes
General Groceries				
Patent Cures and Leaf/Root Remedies				
Alcohol - only if forthcoming				

SECTION 3. MEDICAL SERVICES AND HEALTH

1. Where do the people who live in this area usually go if they are sick enough to see a doctor?

   First response: _____

   Second response: _____

2. How do they usually get to

   First destination: _____

   Second destination: _____

3. The last time somebody from this 'household' was sick enough to see a doctor where did they go?

   _____

   _____

4. How did they get there?

   _____

   _____

   _____

Now it is known that there is going to be a "CLINIC" with a doctor at MACAYAMA - right next to the church on top of the hill near the road.....

5. Do you think that people will be able to get there quite easily?

   _____

   _____

6. How will they get there?

   _____

   _____

7.a. When the "clinic" is built at Macayama will they have a lot of people going there? (Record full response).

   _____

   _____

   _____

   _____

   _____

   _____

7.b./...

7.b. Who won't go there?

---

8. What sicknesses do (INSERT FROM BELOW) usually get in this area?

Children Under 5 Years	Boys and Girls (up to 16 years)	Adults and Older Children

9. Which (adults and older children) in this household have been sick at any time since WINTER last year (1975).

People	See Sec.1	Name or Type of Sickness	Where Received Medical Attention (if any)	Indicate Which of these People Still Sick
Infants and Children (Under 5 years)				
Boys and Girls (Under 16 years)				
Adults and Older Children				

10. Did anybody in this household have to stop work (loss of income) since last winter (1975) because they were sick?

Who? (See Sec.1): _____

_____

_____

_____

11. In what ways can food affect the health of babies and young children?

_____

_____

_____

_____

_____

_____

_____

_____

12. In what ways can food cause ill health (sickness) in babies and young children?

_____

_____

_____

_____

_____

_____

13. Have any children died in this household during the last year (roughly since the end of winter 1975)?

Record number and age (at birth; six months, two years; etc.)

_____

_____

_____

_____

_____