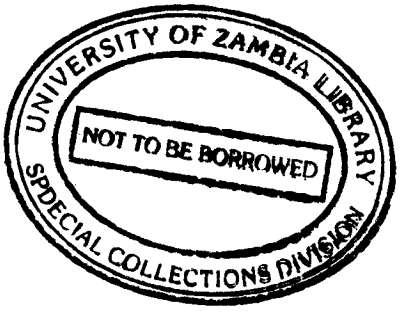
FACTORS CONTRIBUTING TO MALNUTRITION IN SOLWEZI URBAN OF NORTH WESTERN PROVINCE

BY
KADIMA CATHERINE



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DEDICATION

To my son Saidi and beloved daughter Sauseji, Sosala for the encouragement and patience given during my research period.

ACKNOWLEDGEMENT

The author would like to express her gratitude to Doctor Sibalwa for encouraging us to do the research and making us feel confident as University student.

ABSTRACT

This study was a case study on the problem of malnutrition in Solwezi Urban District. The study looked at how different members of the cooperatives, non government organisation and government institution, as well as the community itself individual were coordinating and trying to bring about development.

A survey method was used both qualitative and quantitative method. Questionnaires were used to collect data or information from the respondents.

The observation of the respondents were analysed in the report with recommendations on how best to improve the situation.

CHAPTER ONE

INTRODUCTION

According to the World Health Organisation, (1992), in its report, "World Declaration and Plan Action for Nutrition," the World falls short of the goal of adequate food and nutrition for all. Over 840 million people are estimated not have access to enough food rich in both micronutrients and macronutrients, to meet their basic daily needs, and more than one third of the World's children are stunted due to diets inadequate in quality and quantity (Combs, et al 1996:3).

The problem is worse in developing countries like Zambia. It is therefore important to carryout a study in Solwezi District to find out whether the problem of malnutrition is known to the community, what other organisation the community in the area are doing to remedy the situation. Also to help come up with a good policy or structure were people participate.

PROBLEMS STATEMENT

Zambia is faced with a health crisis malnutrition was a talk of the day and increasing, most of the people die. About 86% death caused by Kwashiorkor, marasmus. Other diseases such as AIDS/HIV, malaria, diarrhoea, anaemia also contribute or cause malnutrition. Maheba in Solwezi is a camp for refugees hence we have many refugees in Zambia compound, Chawama Compound increasing the population for our country.

In Solwezi urban most of the people are not educated . The highest education attainment is below grade 7, hence illiteracy rate is high. The majority of women are not employed and have low education level. 80% of our women are married and unemployed about 63.2% this shows or clear indication that they depend on their husband's salary, not involved in income generating activities. The cause of

malnutrition is said to be lack of food and low salary. All people are affected with this disease both in large or small family, its just a disease. But the most affected are women, children and old people.

In Zambia compound people manage to have a meal per day, while urban compound 3 meals per day followed by 2 times meal per day. Even workers civil servants at least they manage to have 3 or 2 times meal per day with out snacks or other food in between the main meal. Sometimes snacks are included as part of the main meal. Finally, no surplus food 64% in Solwezi urban.

PURPOSE OF THE STUDY

The purpose of the study was to find out whether the community had knowledge about the nutritious food and how to prepare it.

Also to find out whether there are programmes to fight malnutrition and who is vulnerable to malnutrition. Also to find out if unemployment, low income, illiteracy was the cause of under-nutrition. Furthermore, to investigate whether people do not grow enough food and a variety of it, or is it refugees which bring about malnutrition.

OBJECTIVES OF THE STUDY

The objectives of the study were as follows:

- To determine whether people have knowledge about nutritious food.
- To determine if poor people are more vulnerable to malnutrition than the rich.
- Also to determine whether programmes are there to fight malnutrition or illiteracy are more under nutrition or more malnurished.

- To determine whether people are growing enough variety of food and eating the right type of food. Refugees, are they the only people affected by this problem or they are the people contributing to this problem.
- To find out if unemployment cause this?

ASSUMPTIONS OF THE STUDY

The assumptions about this study were that;

- The programmes to support malnutrition are there though some few individual say they were not aware for example Catholics.
- The government also support such programmes for example through Agriculture, PAM and Ministry of Health.
- Employers are ready to support malnutrition activities to reduce on the problem.
- The community also support or would like to work jointly with organization which support the same to regulate or reduce the disease.

RELEVANCE OF THE STUDY

The study was important because it reviewed why Solwezi has the highest percentage of malnutrition. The Community, the Donors and the Government decision makers also support the programme and would like to improve on it. For instance, fertilizer is being distributed on time and prices reduced at list this year in Solwezi district there was bumper harvest especially maize even prices went down a metor was going at K1000 kwacha only. The poor would manage or afford to buy.

People in Solwezi must be aware that they would be able to fight this problem especially the local people in Solwezi should be involved to fight this because different areas with different causes of the problem. The nutrient use of food must be monitored.

LIMITATION OF THE STUDY

This study was also confined to Solwezi urban area in particular Zambia compound and Urban compound near the clinic, Ministry of Agriculture, Health and PAM. However, only specified areas were picked because of lack of funds, no transport and time for it inspite of the obstacles the study was carried on smoothly.

DEFINITION OF TERMS

Balanced diet - Means a diet that provides the correct amount of nutrients for the needs of an individual Mumba (1982).

Food - According to Mumba (1982) Food is any edible substance, either solid or liquid and provides body energy, material for growth, maintenance, repair the body. Also to protect the body and control body processes after its swallowed.

Nutrition - (ibid) is the science that deals with food we eat and how the body uses that food, Eating right kind of food leads to a good nutrional status of the body. According to Tull (1996) nutrition is the study of nutrients and their relationship with food and living things.

Malnutrition - Mumba (1982) argues that it is protein-energy malnutrition. It also means an incorrect or unbalanced intake of nutrients (Tull, 1996).

Under-nutrition - means an incorrect or unbalanced intake of nutrients (ibid 1996).

CHAPTER TWO

Literature Review

It is understood that almost one quarter of the world's undernourished are in sub-Saharan Africa, which is the region with the highest proportion of its population undernourished. The situation is especially severe in Central, Eastern and Southern Africa, were 44 percent of the total population are undernourished (Food and Agricultural Organisation, 1999:5). Women and children form the majority of the worst affected, and live at risk to diseases resulting from deficiencies micronutrients (vitamins and other minerals), and macronutrients (protein and energy).

It is important to note that, nutrition and poverty are interrelated (Osamin 1997:54). The World Bank (2001) report, "World Development Report", argues that 49.7 percent of sub-Saharan Africa's population lives below the poverty line of US$1/day. In absolute figures, just over 304 million poor people live in sub-Saharan Africa, a picture closely resembling the trends in global malnutrition.

The estimated more than 250 million children world-wide are at risk to vitamin A deficiency. In 1991, 14 million pre-schools were estimated to have clinical eye disease (Xerophthalmia) due to vitamin A deficiency. Vitamin A deficiency is thought to cause blindness in 250,000 to 500,000 children each year (Combs et al 1996:3). Iron deficiency is also the most prevalent micronutrient deficiency, affecting over 2 billion people, particularly women of reproductive age and pre-school children living in LGCs. Iron deficiency leads to several outcome such as anemia, reduced work capacity, impaired learning ability, increased susceptibility to infections and increased risk of death associated with pregnancy and child birth. Also an estimated one billion people live in iodine deficient areas. Iodine deficience result into goiter, affecting some 200 million people (Combs, et al 1996:4).

In Zambia, the present and deteriorating prevalence of malnutrition is the result of two decades of decline in the economy, in public services and in virtually all walks of life (GRZ and UN 1996:3-4). Most of the failure is attributed the poor past policies and an unbalanced and unsustainable economic structure. Decline has been accompanied by stagnation and collapse in people's livelihoods and in available forms of social support, and the impact of recurrent droughts has significantly increased the trends in malnutrition, poverty and food insecurity especially for the rural households. Malnutrition in Zambia dates back to 1967, when National Food and Nutrition Commission (NEFNC) has been constrained by lack of resources.

Policy and programmes regarding government commitment to reducing malnutrition in Zambia dates back to 1967, when Nutrition commission and Nation Food (NFNC) provides food and advice the government. In accordance with this mandate, NFNC among the major nutrition interventions integrated in the primary health care include: National breastfeeding programme, Growth monitoring and promotion, and Universal child immunization; micronutrient control (including Vitamin A supplementation programme sugar fortification. Other programmes include supplementary feeding for malnourished children and integrated management of childhood illness (IMCI), but are not inclusive (Ministry of Finance and National Planning 2002:87-88). It is believed that in Zambia, all three micronutrient deficiencies exist at all levels of public health significances and that this phenomenon is largely due to the fact that the majority of the people suffer from weak purchasing power, homelessness and insufficient access to basic necessities such as education, health, food and clean water which is poverty.

According to Chongo (1999) Chronic malnutrition is the major nutrition problem and has been increasing since 1991 from 41% to 48% in 1993 and 50% in 1996.

The rate of increase however, appears to be declining, apparently due to improvements in coping strategies and macroeconomic stabilization.

Malnutrition is still worse in rural areas. This is true for both Chronic malnutrition and underweight but not wasting (acute malnutrition).

There are significant increases in inter and intra-provincial rates of malnutrition. There has been no change in the relative standing of the provinces in terms of malnutrition. Northern, Luapula, North-Western and Eastern still remain the worst hit. Southern province suffered the worst increase in malnutrition between 1993 and 1996, mainly due to droughts.

Zambia heat with hunger 10th September 2001 food crops and shortages No. 4 reported cereal production affected by heavy continuous severe dry sun decline in production maize rise in June.

Zimbabwe also renewed violence, increase in furel price. Malnutrition cases recorded. Zambia is not the only country affected also Mozambique last year were worst affected by severe flood household exhausted 20,000 people experience food difficulties.

World Food Programme considered chronically food insecure. Namibia last year had a dry spell poor harvest and reported vulnerable cases in urban areas.

Congo Democratic Republic also insecurity eastern parts of Congo worsened violence incidents near Bukavu, Soukiku province loss of civilian lives and displacement of population as a result of civil conflicts 2,050,000 continues to increase. Nutritional and Health of these people gives a serious concern. Half number of the population have no food. Recent report indicate that severe

malnutrition rates among children under 5(five), twenty five percentage or 25% in Eastern part of the country. Critical food situation in Kinshasa and surrounding areas.

16 million people have critical food needs as a result of displacement, isolation, lack of market, price increase, 50,000 refugees from Democratic Republic of Congo. 120,000 in Brazzaville, 580,000 displaced and other vulnerable groups 596,299 vulnerable group Burundi.

Furthermore heavy rains and floods caused loss of life and damaged crops.

Army - worm out break bird infestation in south caused local damage of crops accounts for 7-60% aggregate cereal production.

In additional Eritrea reports luck of food 6.5m people affected by severe drought last 2 years and war with neighbouring (Food Agriculture 2001).

Programme Aaginst Malnutrition (PAM) help with food security following drought 1991/1992 to 1993 registered by NGO enhancing house hold food security to reduce vulnerable in rural area.

World Food Programme report of July 2001, "Malnutrition casts long shadows, affecting to 800 million people 20% of all the people in the developing World."

It is not only Solwezi which is affected by malnutrition in Zambia other places like Luapula, Northern Zambia reported rates 9 chronic malnutrition and micronutrients deceit are high. Household food security results (FA and Nutrition Division April 1977).

Hunger afflicts most parts of the World today malnutrition are everyday phenomenon (Univ. 1994:63-73) due to absolute scarcity of food. Contracts food product or growing in development countries is more rapidly than their population and even more quickly than production in developing countries. (Univ. 1994:41-45) evidence study of humanitarian emergencies in which starvation is a major course.

Analytical keep in mind that food crisis are first place distributional conflicts. Society crisis induced by the dissolution of custom availability of and access to staple food of a scale sufficient to cause starvation among individual (Watts 1983:131).

In 1994 the Agriculture sector as a whole accounted for 13-14% of total imports and contributed only a negligible 1% to export (Republic of Zambia 1974:6-31).

The increasing dependence of Zambia on imported food to feed her population. From 14.3 million was spent on food imports in 1964 by 1974 the figure had risen to K34, 8million.

Rural participation and by extension the mobilization politics the performance of the rural cooperative societies in innovation and the marketing of Agriculture commodities was spectacularly disappointing, despite the massive government inputs directed towards promotion. Societies become morbid as a result of diminishing membership or voluntary liquidation. Cooperatives become least successful of the rural cooperatives restrict their activities to hift and learn professional charcoal burners. Other cooperatives misunderstand while other successes. Department of Agriculture (1975).

Large percentage of the population are subsistence farmers and those live in rural areas. Where the Ministry of Agriculture Health and Education provide service.

The Nutrition Food the Nutrition Commission has been set up throughout the country. The commission assist the Government in formulating a Nation Food, National and Agriculture policy.

Volunteers groups from Canada, Norway and the Netherlands teams have come to help in this drive. Agencies World Health Orgainsation, The Food and Agriculture Organisation, UN. Children's fund (UNICEF) collaborating in this programme.

Train workers especially Ministry of Health. Aim of Health to make people positive health. Nation Nutritional Council regularly used in primary school teaching methods using the papers that led to the formulation of the National Nutrition Council as material in past of their curriculum. The way in which the commission was organised and set up how it is run and how it faces its many day-to-day problems will become familiars with them example, the use in learning how to run any government department. People were told to change their eating habits. The commission encourages cooperatives. Zambia's plan at work (1966-1970).

Finally Solwezi urban is not the only area with malnutrition. In Lusaka World food Programme. A project Nutrition in Ministry of Education called School Health and Nutrition (SHN). This is one of the components of the Basic Education sub sector investment programme. BESSIP in initiative taken by government of the Republic of Zambia Abusetism of school child as a result of hunger SHN (2003) introduction of feed programme with World Food

Programme. This came as a result of 2001-2002 drought by Diaster management matizarion unit (DMMU) order the department of Ministry of the Vice-President children stopped school no food.

Aim of the project to expand on production unit. People to work together parents in the community. Encourage of cooperatives. Example parents mould bricks for a storage bin or house. This is just in Lusaka but as time goes it will be expanded to other places.

CHAPTER THREE

METHODOLOGY

POPULATION

Population was heterogeneous. It involved all types of people from different background. The population comprised 64 residents or people of Solwezi urban district, in particular Zambia compound, urban area, Ministry of Agriculture Health and PAM.

SAMPLE POPULATION

The population of the study was 64 people of Solwezi urban district. The population of the study was divided as follows:

(a) Agriculture 12 (b) Health 10 (c) PAM 2

(d) Zambia Compound 20 (e) Urban area 20

Total population was 64.

SAMPLING TECHNIQUE

A random method was used. Small pieces of paper with equal size written Yes and No with number 1,2,3,4,5. Random without replacement method. Each household was told to pick one.

INSTRUMENT

The data collection was done by questionnaires and interview guide.

RESEARCH DESIGN

The researcher investigated or got data by administering questionnaires one for the community and the other for the members of staff. Also descriptive research method was used in analysing and solving the problem.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

Data presentation and analysis was done by grouping the information into frequencies. Frequencies, percentages were calculated. The presentation and data analysis was based on the information collected. Some of the questions were not answered others answered. The frequency distribution of the respondent were prepared in a table form and the percentages were shown.

TABLE 1 SAMPLE OF SEX SELECTED SAMPLE COMPOSITION

TOWNSHIP	FREQUENCY			PERCENTAGE (%)		
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
PAM	1	0	1	100	0	100
Agriculture	6	1	7	85.7	14.3	100
Health	3	3	6	50	50	100
Urban Compound	2	16	18	11.1	88.9	100
Zambia Compound	5	14	19	26.3	73.7	100
Total	**17**	**34**	**51**	**273.1**	**226.9**	**500**

From the table above PAM had the highest male respondent percentage 100% male. Then followed by Agriculture 82.7% male. The lowest male respondent was urban compound with 11.1% male. Female the highest respondent was urban compound with88.9% female followed by Zambia compound with 73.7% female second from urban. The lowest female sample was collected from PAM 0% female. The second lowest was Agriculture with 14.3% female.

TABLE 2 A. HIGHEST EDUCATION ATTAINMENT

ATTAINMENT	FREQUENCY	PERCENTAGE
Grade 7	7	13.5
Below Grade 7	11	21.2
Junior Secondary	10	19.2
School certificate	6	11.5
College certificate	5	9.6
College diploma	5	9.6
University degree	3	5.8
None	4	7.7
Total	**52**	**100**

The highest education attainment is below grade 7 which is 21.2% and number of sample was 11. Some of the people left the question blank or they would not answer. Second highest percentage is junior secondary school 19.2%. The lowest education attainment was university attainment which was university degree 5.8% only 3 respondents.

TABLE 2B

THE HIGHEST ATTAINMENT PER ORGANISATION AND COMPOUND

GANI TION	G. 7	%	Below G. 7	%	Junior Sec.	%	Sch. Cert.	%	College Cert	%	Coll ege Dip.	%	UNZA Deg	%	None
													1	100	
			1	12.5	1	12.5			2	25			2	25	1
							1	16.7	2	33.5	3	50			
C.	1	5.6	3	16.7	7	38.9	3	16.7	1	56	2	11.1			1
aC.	6	31.6	7	36.8	2	10.5	2	10.5							2

Only PAM with 1 respondent 100% male with a University Degree and Agriculture 2 respondents with University Degree 25%. Furthering of Education is not an easy thing in Zambia today with this poverty and poor economic status of the country. Urban and Zambia compound most of the respondents went up to junior secondary school. Urban compound 38.9% as he highest educational attainment, Zambia compound below grade 7, 36.8% as the highest educational attainment followed by Grade 7, 31.6% of schooled level. Many women are illiterate and have no employment for instance Agriculture one female with very low qualification compared to men who are more educated, most employed.

Urban compound and Zambia compound many female were interviewed showing that they were not involved in any business or employed while their husbands were employed.

TABLE 2C. AGRICULTUREGCE PERCENTAGE

ORGANISATION	G.C.E	PERCENTAGE (%)
AGRICULTURE	1	12.5

Agriculture has only 12.5 percent a respondent with G.C.E.

TABLE 3: MARITAL STATUS OF THE SAMPLE POPULATION

MARITAL STATUS	FREQUENCY	PERCENTAGE %
MARRIED	41	80
SINGLE	6	11.8
WIDOWED	2	4
DIVORCED	2	4
TOTAL	**51**	**100**

The highest marital status is married 41 with 80%, followed by single 11.8%. The lowest was 2 divorced and 2 widower both sample was 4%.

TABLE 4: DISTRIBUTION OF THE RESPONDENTS

AGE GROUP RANGE (Interval 10)	FREQUENCY	PERCENTAGE (%)
18-28	14	27
29-39	19	36
40-50	13	25
51-61	5	10
62-72	1	2
Total	**52**	**100**

Table 4 above illustrate the composition of the sample in terms of age. People between the age of 29-39 has the highest percentage in the diagram 36%, followed by 18-28 years age group with 27%. The lowest is 62 - 72 years with 2%, second lowest is 51-61 years age group with 10%. The age group 29-39 are the most active group to participate in production, economic, political, culture and social production.

TABLE 5. AWARENESS OF MALNUTRITION IN SOLWEZI URBAN

RESPONDENTS	FREQUENCY	PERCENTAGE
No	7	14
Yes	43	86
Total	**50**	**100**

Most of the people are aware that there is malnutrition in Solwezi urban. 86% are aware of the problem in the area. 14% are not sure.

TABLE 6A: OCCUPATION DISTRIBUTION DATA OF THE POPULATION SAMPLE

OCCUPATION	FREQUENCY	PERCENTAGE
Farmer	2	4
Driver	1	2
Tailor	0	0
Teacher	0	0
Trader	4	7.8
Public Servant	16	31
Unemployed	26	51
No answer	2	4
Total	**51**	**100**

The highest sample was the unemployed which was 51% from the table, followed by Public Servant 31%. The lowest sample was Tailor and Teacher with 0% both, followed by Driver 2%. Some few respondents would not answer 4%. The most employer is the Government in Zambia.

TABLE 6B: OCCUPATION FREQUENCY IN URBAN AND ZAMBIA COMPOUND

URBAN COMPOUND

OCCUPATION	FREQUENCY	PERCENTAGE
Farmer	1	6
Public Servant	3	18
Unemployed	11	65
No answer	2	11
Total	**17**	**100**

In urban compound highest was unemployed 65% last was farmers 6%. Hence no cultivation done and no jobs.

According to the sample collected the highest causes of malnutrition was low salary and lack of food with the same percentage of 35.7%. Followed by not working 14.3%. The lowest is Taboos 0%. The second lowest is Food is expensive and no people to look after old people, orphans, children then lack of food follows was 1.8%.

TABLE 8A: NUMBER OF MEALS PEOPLE HAVE PER DAY: FREQUENCY OF EATING AT HOME

FREQUENCY	URBAN		ZAMBIA		HEALTH		AGRICULTURE		TOTAL	
1 time	5	28%	9	47%	0	0%	1	12.5%	15	29%
2 times	6	33.3%	8	42%	1	17%	4	50%	19	37%
3 times	7	39%	2	10.5%	5	83%	3	37.5%	17	33%
4 times	0	0%	0	0	0	0%	0	0%	0	0%
	18	100%	19	100%	6	100%	8	100%	51	100%

Health highest frequency of eating meal per day is 3 times per day 83% and the lowest is 1 time and 4times 0%. Agriculture highest eating frequency per day is 2 times 50% followed by 3 times 37.5%. The lowest is 4 times which is 0% followed by 1 time 12.5% per day. Urban compound highest frequency of eating was 3 times 39% followed by 2 times, 33.3%.

TABLE 8B: FREQUENCY OF EATING ALL SAMPLE URBAN ZAMBIA AGRICULTURE HEALTH PAM.

TIMES	MEALS PER DAY	PERCENTAGE
1	15	29
2	19	37
3	17	33.3
4	0	0
5	0	0
Total	**51**	**100%**

Comparison between Zambia and Urban frequency of eating highest 37% 2 times frequency of eating. Lowest was 4 and 5 times with 0percent.
The lowest eating frequency (urban) was 4 times 0% followed by 1 time 28%.

Zambia compound the highest eating frequency per day was 1 time 47% next highest 2 times 42%. The lowest was 4 times, 0% followed by 3 times 10.5%.

Furthermore for all sample data collected and according to the above table 8: the highest eating frequency is 2 times which is 37% followed by 3 times, 33.3%. The lowest eating frequency per day was 5 and 4 times which is 0%.

At least public servant workers are able to have 2 to 3 times meal per day. Compared to people in Zambia compound who have 1 or 2 time meal per day.

Women do not contribute to the wellbeing of the family most of them just depend on the salary for their husbands. Most women are married and not working or unemployed.

TABLE 9: THE PROBLEM OF MALNUTRITION IN SOLWEZI URBAN

PROBLEM	FREQUENCY	PERCENTAGE
Severe	16	31
Moderate	18	34.6
Not very severe	13	25
No aware	5	10
Total	**52**	**100**

The highest percentage is 34.6% the problem is moderate followed by 31% severe. The lowest was not ware 10% then not very severe 25%. The highest problem of malnutrition in Solwezi urban is caused by low salary, lack of food

according to table 5 sample collected from the field. Secondly its caused by not working which is 14.3%.

TABLE 10: ILLITERACY IS A RELATIVELY SMALL PROBLEM IN SOLWEZI IN TERMS OF ITS SOCIAL AND ECONOMICAL CONSEQUENCES

	FREQUENCY	PERCENTAGE %
Strongly agree	22	47
Do not know	5	11
Strongly disagree	19	40
Agree	1	2
Total	**47**	**100**

Strongly agree is the highest with 47%. Hence people do not know their social and economical consequences. Followed by strongly disagree which almost at pa 40% which says people are aware of their social and economical consequences. The lowest being agree 2%, then don't know 11%.

TABLE 11: IN SOLWEZI URBAN NUMBER MOST AFFECTED WITH MALNUTRITION

TARGET PEOPLE MOST AFFECTED	FREQUENCY	PERCENTAGE %
Children	7	19
Children, women	18	49
Children, pregnant women	2	5
Men	0	0
Old people	2	5
Pregnant women, children, old people	5	14
Children, women, old people	2	5
All people are affected	3	8
Total	**37**	**100**

The most affected with malnutrition was children, women 49% followed by children 19%. The lowest affected was men 0%, followed by children, pregnant women, children, women, old people and old people with 5%.

TABLE 12: PEOPLE HAVING VEGETABLES AND FRUITS EVERYDAY IN THEIR MENU

	FREQUENCY	PERCENTAGE %
Yes	14	26
No	19	35
Vegetable Yes but no fruits	18	33
Sometimes not always	4	7
Total	**55**	**100**

Source: questionnaire

The highest percentage is 35% most of the people in Solwezi do not have vegetables and fruits everyday. No wander most people lack vitamin C which brings severe deficiency leading to the disease scurvy. E.g. cuts and wounds fail to heal properly. Followed by 33% where they have vegetables everyday but no fruits. The lowest was 7% where they have vegetables and fruits sometimes not always. This shows that people eat when they have money to buy or when they see it.

TABLE 13: MALNUTRITION IS FOUND WHERE THERE WAS A BIG OR LARGE FAMILY

MALNUTRITION FOUND IN LARGE FAMILY	FREQUENCY	PERCENTAGE
Yes	9	25
No	1	3
Both (Large or small)	26	72
Total	**36**	**100**

The largest percentage is 72% which shows that malnutrition was found in both. It does not matter whether you have a small family or not malnutrition can still be there. Seconded by 25% Yes it was found where there was a large family. Lastly 3% which says malnutrition is not found where there was a small family.

TABLE 14A: HAVE YOU GET SURPLUS FOOD; ZAMBIA COMPOUND

SURPLUS FOOD	FREQUENCY	PERCENTAGE %
No	3	23
Yes	10	77
Total	**13**	**100**

Highest percentage is 77% Yes people with surplus food. While lowest is 23% people without surplus food in Zambia compound.

TABLE 14B: URBAN COMPOUND

SURPLUS FOOD	FREQUENCY	PERCENTAGE %
No	14	93
Yes	1	7
Total	**15**	**100**

In urban compound the highest is 93% no surplus food and 7% Yes people with surplus food which means majority depend on their salary.

TALE 14C: HEALTH

SURPLUS FOOD	FREQUENCY	PERCENTAGE %
No	27	64
Yes	15	36
Total	42	100

Ministry of Health the highest is 64% people with surplus food and 36% smallest figure people without surplus food.

TABLE 14D: AGRICULTURE

SURPLUS FOOD	FREQUENCY	PERCENTAGE %
No	4	50
Yes	40	50
Total	**8**	**100**

Ministry of Agriculture and PAM both is 50%. People have surplus food 50% no surplus food 50%.

TABLE 14E: SURPLUS FOR ALL ABOVE OR ALL AREAS: ZAMBIA, URBAN, AGRICULTURE AND HEALTH

SURPLUS FOOD	FREQUENCY	PERCENTAGE %
No	27	64
Yes	15	36
Total	**42**	**100**

The diagram above shows that most people do not have surplus food 64%. Last 36% people who have surplus food. Zambia compound 77% people with surplus food highest. While urban compound with 93% people do not have surplus food. Health 36% people have surplus food, agriculture 50% surplus food.

TABLE 15: THE RELATIONSHIP WITH OTHER ORGANISATIONS

	FREQUENCY	PERCENTAGE %
Warm	29	94
Bad	2	7
Total	**31**	**100**

The largest figure is 94% warm relationship with other organisations. Bad 7% poor relationship with other organisations. So people know how to socialise with other organisations.

TABLE 16: THE WORKING ENVIRONMENT IN YOUR DEPARTMENT

	FREQUENCY	PERCENTAGE %
Very good	3	21
Good	5	36
Fair	5	36
Poor	1	7
Very poor	0	0
Total	**14**	**100**

The views of the workers or organisation worker were as tabulated. The highest was 36% with both good and fair working environment in their department. The lowest was 0% very poor followed by poor 7%. Hence this shows that there is good and fair working environment.

TABLE 17 A: DESCRIBE THE CALIBRE OF THE WORKERS IN THE MINISTRY OF HEALTH, AGRICULTURE AND PAM

	FREQUENCY	PERCENTAGE %
Very good	2	14.3
Good	7	50
Fair	2	14.3
Poor	3	21.4
Very poor	0	0
Total	14	100

The highest was 50% good calibre, followed by 21.4% poor calibre of workers. The lowest was 0% very poor calibre second lowest was poor and very good 14.3%.

TABLE 17B: HEALTH

CALIBRE OF WORKERS	FREQUENCY	PERCENTAGE %
Very good	1	17
Good	2	33.3
Fair	0	0
Poor	3	50
Very poor	0	0
Total	**6**	**100**

Health highest was 50% poor calibre of the workers. Lowest was 0% fair. Second lowest was 17% very good.

TABLE 17C: AGRICULURE CALIBRE OF WORKERS

CALIBRE OF WORKERS	FREQUENCY	PERCENTAGE %
Very good	1	12.5
Good	5	62.5
Fair	2	25
Poor	0	0
Very poor	0	0
Total	**8**	**100**

Agriculture highest percentage was 62.5% good calibre of the workers and the lowest percentage was 0% poor calibre of workers.

TABLE 17D: PAM

CALIBRE OF WORKERS	FREQUENCY	PERCENTAGE %
Very good	1	100
Good	0	0
Fair	0	0
Poor	0	0
Very poor	0	0
Total	**1**	**100**

PAM highest was 100% very good calibre then the lowest with 0% good, fair, poor and very poor.

The tables above indicate the number of respondents describing the calibre of the workers in the Ministry. The table says 50% says the highest good next 14.3% fair. The lowest has 0% very poor followed by 14.3% both fair and very good.

The reasons why there are many factors which contribute to good calibre of the workers the management type, how they treat each other, the working condition and motivation. Ministry of Health the calibre of the workers is poor indicate 50% highest last 0% very poor. Agriculture highest 62.5% good calibre the lowest was very poor and poor both 0% while PAM has 100% very good calibre.

TABLE 18: EXPERIENCE OF DEATH FROM DISEASES SUCH AS KWASHIOKOR, MARASMUS AND OTHER RELATED DISEASES

DEATH	FREQUENCY	PERCENTAGE
Yes	37	86
No	6	14
Total	**43**	**100**

As the above table shows most respondents saying says 86% death experience from diseases such as kwashiorkor, marasmus and other related diseases. The lowest was 14% No death experience.

TABLE 19: HAVING SOME OTHER SOURCE OF INCOME

ZAMBIA COMPOUND

OTHER SOURCE	FREQUENCY	PERCENTAGE
Yes	6	33.3
No	12	66.6
Total	18	100

66.6% was the highest people without other source of income. Lowest 33.3% with other source of income. 77% surplus food. 63.2 highest no employment.

URBAN COMPOUND

OTHER SOURCE	FREQUENCY	PERCENTAGE
Yes	4	31
No	9	69
Total	**13**	**100**

Urban compound highest was 69% people without other source of income and 93% no surplus food. 65% unemployed. The lowest 31% with some other source of income.

ZAMBIA AND URBAN COMPOUND

OTHER SOURCE	FREQUENCY	PERCENTAGE
Yes	10	32
No	21	68
Total	**31**	**100**

Highes3t 68% no other source of income lowest 32% with other source of income. This was quite a sensitive question others were even annoyed or refused to answer. Anyhow the biggest was 68% No, they did not have extra source of income. Last 32% with extra source of income.

Zambia Compound with 66.6% No, other source of income and 33.3% with other source of income. Urban Compound 69% No, other source of income. 31% with other source of income. One would wonder how they survive without employment and no other source of income and no surplus food for their families. Depending on their working husbands for everything. And most of those are women who where found at home.

ANALYSIS

The major findings of the research study support that there was malnutrition in Solwezi urban and North western province, and a lot of people die from this disease. About 86% agreed that malnutrition kills research findings.

Protein-energy malnutrition (PEM), which is the most widespread form of malnutrition in Zambia, has both social and economic implications. In its severe form malnutrition contributes to high morbility and mortality among young children. Children suffering from PEM are more vulnerable to infections ranging from malaria, measles, acute respiratory infections and diarrhea. The information system of the Ministry of Health estimates that at least 30 percent of reported childhood mortality is directly attributed to malnutrition (quoted by Phiri 1996:8). This exerts a drain on meager public resource in terms of costs of hospitalisation. It therefore, follows that, good nutrition will generally improve the body's immune response against infections thereby, lowering the health care costs because of fewer health complications and illness. Malnutrition during the stage of brain formation and development, early in life is associated with mental

retardation in children. This results in poor learning capacity during school years and subsequently, in adult with unexplained mental physical potential.

This is particularly the case as children who suffer from chronic malnutrition experience retardation in their physical growth, resulting in adults with limited capacity for work performance which limits their income earning potential and further fosters poverty and consequently underdevelopment.

Thus, it is a sad fact that the very situation of malnutrition, which is intensified by the presence of poverty and food insecurity in Zambia in turn, leads to increase in morbility and mortality in children and women. This is one ore reason why poverty eradication must be seen as central to any treatment of malnutrition in Zambia today.

Most of the female were interviewed age between 29 to 39 years followed by 18 to 28 years of age. Most of the people are unemployed and their highest educational attainment is below grade 7 followed by junior secondary school holders.

According to Eckstein increasingly, nutritional risk has been recognised as one commulative and aggregated effect of a complex of factors that include psychosocial status, previous health, health practices, quality of health care received, dietary practices, motivational status, and exposure to environmental hazards. The high nutritional risk to nutritional risk. High risk is associated with a high probability of complication or mortality for both the mother and infant. The results form table 11 children, women are the most affected with malnutrition. While major findings urban medical centres in the united states report a number of patients admitted for malnutrition were children, elderly who suffer from the severe forms of malnutrition that are life-threatening. Even

pregnant mothers or women have the same problem in areas like Zambia today. Usually its because of anemia in pregnant women because of not eating good balanced diet especially foods rich in iron, protein and vitamins. Sometimes it is caused by malaria, diarrhea (Tull, 1996).

The researcher's finding AIDS, malaria, anemia, tuberculosis, diarrhea and insufficient food and lack of resources are the main cause of malnutrition today in Zambia. This is so because of poor nutrition. People cannot afford to buy food, they eat when they found food. The have no choose to what type of food to eat. Lack of food and low salaries contribute to poverty level according the participant. Zambia is under poverty datum line calculated using the consumer price index for lower-income urban families produced by central statistical office for Zambia.

While the preach flee primary education, secondary school fees in urban areas were raised. In addition, examination fees were raised. Electricity charges rose. Bus fare rose by 45% to 50% per year. Payments for various services, therefore, make competing demands on low incomes. Misuse of funds by government, politicians channeled or not meeting the target group rural areas. For the majority of women, not in formal employment, tensions increased with wage-earning husbands who continued to engage in private spending rather than on household needs, even if this tension had not resulted in overt conflict. The implications of these changes for women and for their households are almost entirely negative.

The research also provides some contrasting findings to those of many Latin American studies which found an increase in the participation of women in the labour force during crisis and structural adjustment. The informal sector where most women are involved provide low income. Plans to support this sector do

not take into account women's disadvantaged position in terms of skills and access to capital let alone the way in which women's time for such activities is constrained by their household responsibilities. Gender should be considered in all activities no age, no race, no political people or community all should work together or participate starting from problem identification planning, decision making, implementing, analysis up to evaluation, replan together as a community see where they have gone wrong collect mistake then go ahead. To improve the lives to bring good health of the poor men and women should collaborate.

Findings from research most respondent did not have other sources of income and no surplus foods. How do they depend on a low salary or income without other activity to survive on? To fight this disease people should be creative and use initiative to increase production. To create better lives and wellbeing for members of the family, local community and society as a whole.

Solwezi 2002/2003 had production increased maize expected production was about 51560 ha, sweet potatoes, ground nuts. The maize price reduced to K1000 per kameta. Now the question is who grows this? Only few people from Solwezi urban have fields, a lot of it is coming out of Solwezi urban, but within North Western Province and Solwezi District.

Most respondents said that there was too much flow of maize this year compared to last year hence reduced price. We give credit to the new deal government for encouraging Agriculture and reduced input prices in the country. For encouraging Zambia to grow their own food not to depend on imported food from other country but as a we are supposed to country export more from our own industries and companies run and control by ourselves.

Rural and urban malnutrition has seen a rapid increase in recent years. This is due to increase in disease such as Aids, diarrhea, malaria, T.B , anemia and poor water (sanitation) and insufficient food and promotion of maize as stable food.

On the effect of education while for education provide harmony and understanding (socialisation) done at family level national and international.
It also makes people have skills, knowledge change attitude to live efficiently and effectively in their own environment. For education suppresses traditional education.

The community education initiates the individuals into publicly accepted knowledge its form and structure it also give a source of belonging to the society. Regulates and controls morals. Community education makes people be responsible of programmes make their own decisions, ideas, plans and accept what is good and reject what they think is not good for their community and continue.

According to Muyoba's notes liberal Adult Education creates awareness through conscientisation and makes people change. They analyse things as they come. Make people use their local resources. It encourages peoples or everybody to participate in development programmes then people accept it and develop a sense of ownership.

CHAPTER FIVE

CONCLUSION

In conclusion chronic malnutrition is the major nutrition problem and has been increasing since 1991 from 41% to 48% in 1993 and 50% in 1995. Malnutrition is still worse in rural areas such as Solwezi rural. As in Table 18 shows death from malnutrition about 86%. 67% from Table 19 people without extra source of income. 63.2% people with no employment Table 6:C from Zambia compound. Urban Table 6:B 51% unemployed people. Only people in sub rural area manage to have surplus food (Zambia Compound at least 77% surplus food) Table 19 but most the them are unemployed and no other source of income.

The picture below shows that children and women are most affected. No employment most malnourished. This also shows that it is not only food which contribute to this disease but also diseases like AIDS, diarrhoea, malaria and TB and so on.

Further Research

If the same research is done in other Districts and Provinces like Northern, Luapula, North-Western and Eastern can still remain the worst hit. This can also help to find out the causes and problems faced by other areas.

Protein energy malnutrition is the most disease affecting children in Solwezi urban (Kwashiokor and Maramuss).

Picture 2

In Solwezi it was found that women are the most vulnerable to malnutrition. The above woman has soles to show that she is lacking some vitamins especially vitamin C.

RECOMMENDATION AND SUGGESTIONS FROM PARTICIPANTS

- The government to be supporting the children and women programmes in terms of food and nutrition so that the nutrition programme create awareness on how to combat malnutrition and improve income generation or educate the community.
- More community malnutrition programmes should be encouraged and also collaboration by the various stakeholders. To respond to the need of community, also to improve community nutrition and food security. Since food is expensive for low income group and those who are unemployed the government need to empower the poor families with more inputs through loans, also water system should be improved to reduce on diarrhea and cholera (diseases).
- Discourage selling of all produce encourage people only to increase production.
- Avoid dependence on a salary only (diversify sources of food). While others say salary should be increased and prices of food reduced.
- People should learn to preserve legume food so that they are able to have a balanced diet throughout the year than have certain food at a particular time.
- Encourage people to buy vitamin al the family to eat to keep well and keep good hygiene.
- The targeted people are not helped and left to suffer hence this should be looked into or targeted group should be helped. Change the structure the needs to be helped.
- The cooperation between organisation should be improved and evaluated by all involved parties this means community to participate also starting from the beginning to the end.
- The government and hospital to give food to children with malnutrition also young girls who have children should be given food for their children.

Furthermore advise people to eat a variety of food. Let people look for money.

- Since most of the partners have no jobs or not work encourage them to grow more food.
- The government to take or bring food, give good salary, create employment (government). Medicine in the hospital to be provided by government, give medication right to patients. Also good clear water should be provided.
- Rice, maize and mealie meal should be given to people. Assist in terms of money.
- As a nation should have food medicine in hospitals.
- Parents should stop leaving their families alone especially children under five years. Those are marketors , business women. Also orphans should be looked after.
- Communities should be helped in terms of roads, sanitation, schools, workers should go in rural areas to help, herps also provided after problem identification.
- Also family planning to be encouraged.
- Food is available but most households have no capacity to buy it, due to low income, protein foods are too expensive.
- Organisations to help give work to people (food for work). Also all people to work together in cooperatives to bring about development.

RECOMMENDATIONS FROM THE RESEARCHER

Development is mental, spiritual, emotional, social,, morally, psychological richness. To develop let everyone be free to dialogue, have faith in human being, love each other, humility relationship of which mutual trust between the dialoguers is the logical consequence. People should consult each other.

Culture should be kept not commercialised to bring development. Culture is food they eat, the way they walk, dress, behavior towards each other with respect. Example children should eat food when they feel hungry. Also should eat a mixed diet, food should be enough. The food build and develops the body and protects the body from diseases. In Zambia culture is commercialized and this has brought about prostitution not to forget the increased percentage of AIDS. AIDS also has increased malnutrition percentage see picture 2.

The family, community, nation should participate work jointly for the depend on each other (interdependence) for development to occur within a home, community. To have self reliant.

Development determined by external factor

No universal models of development

Development is an integrated, multi-dimensional dialectical process that differs form one society each society must attempt to define its own strategy for development.

Development is holistic. Includes social economic cultural and religious aspects.

Each person to identify his/her own need and make solution for that problem.

The researcher was not to give answers to problems that affect malnutrition. The people themselves should know their problems and how to solve them in collaboration with the government, non-governmental organisations and the church. Everyone should be involved starting from planning, problem

Picture 2

ın Solwezi it was found that women are the most vulnerable to malnutrition. The above woman has soles to show that she is lacking some vitamins especially vitamin C.

identification, implementation, monitor evaluate. People should grow more and variety of food, work hard not just depend on salary. Engage themselves in generating activities. Use of initiative and creativity is needed. Development is social thus water, health, education then political and economical factor. All those should be looked at for one to develop.

To fight those problems associated with poverty, poor environmental conditions vulnerability arising from commercialisation, social stress and conflicts with state authority. People in the country or community should be aware of who they are and the changes around them work together. Men and women to have a voice subjective participate starting from the poorest to the rich in development activities. An integrated strategy, which aims to deal with social, economic, political and environmental problems in coordinative way. Imports controls and promotion of exports. Manufactured goods within the country. Stop the dependency syndrome also encourage use of local material.. Above all man need to be conscientised with deep attitude of awareness that he is a soul. The all problems will be unheard. He will be able to work for himself no stealing, no jealous and no crime.

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APPENDIX A

QUESTIONNAIRES FOR PARTICIPANTS

Instructions

You are required not to write your name on this questionnaire.

Please be honest in answering all the questions, as this will be treated with high confidentiality.

Put a tick (√) in the space provided against your answer and explain views in the space provided.

Section A : Personal Questions

1. SEX

   (a) Male ( )
   (b) Female ( )

2. What is your highest education attainment?

   (a) Grade 7 ( )
   (b) Below grade 7 ( )
   (c) School certificate ( )
   (d) Junior secondary school ( )
   (e) G.C.E ( )
   (f) University degree ( )
   (g) College diploma ( )
   (h) College certificate ( )
   (i) Masters ( )
   (j) PhD ( )
   (k) None ( )

   If the above does not apply please specify .....
   .....

3. Age.....

4. Marital Status

   (a) Single ( )
   (b) Divorced ( )
   (c) Married ( )
   (d) Widower ( )

5. Are you aware that there is malnutrition in Solwezi urban?
   (a) Yes ( )
   (b) No ( )

Section B : Questions on Malnutrition

6. Type of occupation?
   (a) Farmer ( )
   (b) Driver ( )
   (c) Tailor ( )
   (d) Teacher ( )
   (e) Trader ( )
   (f) Public servant ( )
   (g) Unemployed ( )

   If any other mention.....

7. What do you think are the causes of malnutrition in Solwezi?
   (a) Low salary ( )
   (b) Lack of food ( )
   (c) Not working ( )
   (d) Illiteracy ( )
   (e) Taboos ( )

8. How many meals do you have per day? Frequency of eating at home.
   (a) 1 time ( )
   (b) 2 times ( )
   (c) 3 times ( )
   (d) 4 times ( )
   (e) 5 times ( )
   (f) 6 times ( )
   (g) 7 times ( )
   (h) 8 meals ( )

9. How severe is the problem malnutrition in Solwezi Urban?
   (a) Severe ( )
   (b) Moderate ( )
   (c) Not very severe ( )

10. What is the response of the community in relation to malnutrition?.....
    .....
    .....

11. Illiteracy is a relatively small problem in Solwezi in terms of its social and economical consequences
    (a) Strongly Agree ( )

(b) Don't Know ( )
(c) Strongly Disagree ( )

12. In Slowezi Urban which number is more affected with malnutrition?
(a) Children, women ( )
(b) Men, ( )
(c) Old people ( )
(d) Pregnant women, children, old people ( )

13. (a) Apart from the main meals what other food do you take between the main meals?.....
.....

(b) How much of those foods?.....

.....

14. What do you think are the types of food people eat in Solwezi Urban?.....
.....

15. In your menu do you have vegetables and fruits everyday?
(a) Yes ( )
(b) No ( )

16. What food crops do you grow?
.....
.....
.....

17. After harvest how long do your stalk last or stored food last?
.....
.....

18. Do you have surplus food?
(a) No ( )
(c) Yes ( )

If yes where do take the surplus food?.....
.....
.....

19. Which period of the year do you experience hunger in the area/Solwezi Urban.....
.....

20. What other alternative food do you have in the period of hunger? .....
.....

21. What is the name of your organisation?.....
.....
.....

22. In your organisation what do you promote against malnutrition?
.....
.....

23. What role does your ministry play to help those people with malnutrition? .....
.....
.....

24. Why have nutrition programme in the community?.....
.....
.....

25. How is the relationship with other organisations?.....
.....
(a) Warm ( )
(b) Bad ( )

26. How is your working relationship with other organisations and the community?.....
.....
.....

27. Do you have other methods or approaches in helping people about malnutrition?.....
.....

28. How long have you been working in Solwezi Urban?.....
.....

29. What is your field of specialisation?.....
.....
.....

30. How is the working environment in your department?
(a) Very good ( )
(b) Good ( )
(c) Fair ( )
(d) Poor ( )
(e) Very poor ( )

31. Give reasons for your answer in question 30.....
.....
.....

32. How do you describe the calibre of the workers in the ministry?
(a) Very good ( )
(b) Good ( )
(c) Fair ( )
(d) Poor ( )
(e) Very poor ( )

33. Do you experience death from diseases such as kwashiorkor, Marasmus and other related diseases?
(a) Yes ( )
(b) No ( )

32. What is your opinion about food and nutrition (suggestions)?
.....
.....
.....

Thank you

APPENDIX B

QUESTIONNAIRES FOR PARTICIPANTS

Instructions

Kindly furnish me with the necessary details by ticking (√) in the space provided against your answer and explain views in the space provided.

This will be treated with high confidentiality.

Section A: Personal Questions

1. SEX

   (a) Male ( )
   (b) Female ( )

2. What is your highest education attainment?

   (a) Grade 7 ( )
   (b) Below grade 7 ( )
   (c) School certificate ( )
   (d) Junior secondary school ( )
   (e) G.C.E ( )
   (f) University degree ( )
   (g) College diploma ( )
   (h) College certificate ( )
   (i) Masters ( )
   (j) PhD ( )
   (k) None

   If the above does not apply please specify
   .....
   .....
   .....

3. Marital Status

   (a) Single ( )
   (b) Divorced ( )
   (c) Married ( )
   (d) Widower ( )

4. Age.....

5. Type of occupation or tell me what do you normally do in your life to earn a living?

(a) Farmer ( )
(b) Driver ( )
(c) Tailor ( )
(d) Teacher ( )
(e) Trader ( )
(f) Public servant ( )
(g) Unemployed ( )

If any other mention.....

6. Are you aware that there is malnutrition in Solwezi urban?
(a) Yes ( )
(b) No ( )

7. What do you think are the causes of malnutrition in Solwezi?
(a) Low salary ( )
(b) Lack of food ( )
(c) Not working ( )
(d) Illiteracy ( )

Any .....

8. Do you think malnutrition is found where there is a large family?
(a) Yes
(c) No

9. Do you have some other sources of income?
(a) Yes ( )
(b) No ( )

10. How many meals do you have per day? Frequency of eating at home.
(a) 1 time ( )
(b) 2 times ( )
(c) 3 times ( )
(d) 4 times ( )
(e) 5 times ( )
(f) 6 times ( )
(g) 7 times ( )

11. (a) Apart from the main meals what other food do you take between the main meals?.....
.....

(b) How much of those foods?.....

.....

12. What do you think are the types of food people eat in Solwezi

Urban?.....
.....

13. Do people observe taboos in Solwezi Urban?
(a) Yes ( )
(b) No ( )

Reasons for observing.....
.....
.....

14. In your manual do you have vegetables and fruits everyday?
(a) Yes ( )
(b) No ( )

15. What food crops do you grow?
.....
.....
.....

16. After harvest how long do your stalk last or stored food last?
.....
.....

17. Do you have surplus food?
(a) Yes ( )
(b) No ( )

If yes where do you take the surplus.....
.....
.....

18. Is this house female or male headed household?.....
.....

19. Which period of the year do you experience hunger in the area/Solwezi Urban.....
.....

20. What other alternative food do you have in the period of hunger? .....
.....

21. How many members are in the family?.....
If female.....

22. Do you normally breast feed your children?
(a) Yes ( )
(b) No ( )

If the answer is no, give reasons.....

.....

23. Are they any organisations which assists you fight against malnutrition?.....
.....
(a) Yes ( )
(b) No ( )

24. How is the relationship with other organisations?.....
.....
(a) Warm ( )
(b) Bad ( )

25. How severe is the problem malnutrition in Solwezi Urban?
(a) Very severe ( )
(b) Moderate ( )
(c) Not severe ( )

26. Who is most affected by the prevalence of malnutrition amongst the most vulnerable population?
(a) Children ( )
(b) Men ( )
(c) Old people ( )
(d) Pregnant women, children, old people ( )

27. Do you experience death from diseases such as Kwashiorkor, Marasums and other related diseases
(a) Yes ( )
(b) No ( )

28. Illiteracy is a relatively small problem in Solwezi in terms of its social and economical consequences.....
.....

(a) Strongly Agree ( )
(b) Don't Know ( )
(c) Strongly Disagree ( )

29. What suggestion or what is your opinion about food and malnutrition?.....
.....

Thank you

THE UNIVERSITY OF ZAMBIA

SCHOOL OF EDUCATION

DEPARTMENT OF ADULT EDUCATION AND EXTENSION STUDIES

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Your Ref:

29TH June, 2004

TO WHOM IT MAY CONCERN

RE: RESEARCH UNDERTAKING

The bearer(s) of this letter is a student in the Diploma/Degree in Adult Education. He/she has been requested to undertake research in your organization as part of his/her learning experience. Your help and cooperation in this regard will be highly appreciated by the department, as this will enable the student to link theory work, which is offered in the class, and practical work, which can only be obtained from organizations like yours.

I look forward very much to a favourable response in this regard.

Yours faithfully

for D.M. Sibalwa (Dr.)
ACTING HEAD OF DEPARTMENT
ADULT EDUCATION AND EXTENSION STUDIES.