
The pattern of food intake and essential expenditures for a household in rural Ethiopia

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The object of this desk study is to describe consumption patterns in rural households in Ethiopia. Normally, relief assistance is provided in a manner concerned with the physical survival of people, meaning that first priority is given to ensuring minimum required calorie intake as well as medical support.

Besides food there are a lot of other basic needs a household faces. People have to live somewhere, have to buy clothes and meet social obligations. This fact is sometimes forgotten when dealing with aid. To enlighten the structures of essential expenditures in rural Ethiopia the following questions are of interest:

- What is the percentage of different food items consumed by each rural Ethiopian ? Does this pattern vary according to the purchasing power of people?
- What are the other essential expenditures that a person/household faces? How does the pattern of these expenditures change with the different purchasing power?
- What is the ratio between food expenditures and other essential expenditures?

Equipped with this information it may be possible to figure out at what level of purchasing power a household could subsist without being extremely vulnerable to the effects of minor changes in income.

Data used in this study

The main source of this study is data obtained over the period of one year by the Central Statistical Authority¹ of Ethiopia. During this period, data was collected from household all over rural Ethiopia through conducting personal interviews. Each household was visited once every quarter of the year, spending a period of one month to obtain a broad spectrum of information.

¹ see Rural Household Income, consumption and Expenditure survey (May 1981-April 1982), Statistical Bulletin 61, Addis Ababa 1988.

Unfortunately the data is almost 15 years old and therefore the reliability of the figures for present day analysis cannot be completely relied upon. On the other hand, there has probably not been a big change in the habits of people in rural Ethiopia over the past years; relative figures can therefore still be relevant sources of information.

Another problem detected with this data is the fact that the survey covers the entire rural Ethiopia, where food intake patterns vary from region to region. In these areas cultural habits and per capita income is also different. Therefore, this desk study can only provide an overall general impression regarding consumption patterns in rural Ethiopia.

Percentages of different food intakes

The information obtained on the quantities of various food commodities consumed by households shows that rural Ethiopians depend primarily on cereals. Cereals together with *Kocho* (Ensete) and vegetables contribute 85 percent of the total food intake per person, per day.

Table 1: Percentages of different food intake (by weight) in rural Ethiopia

Commodity	% of intake	Commodity	% of gram
Cereals	54	Spices	1.1
<i>Kocho</i>	17.5	Meat	0.8
Vegetables	14.5	Fruits	0.4
Pulses unmilled	3.9	Oil seeds	0.15
Dairy products	3.2	Fish	0.5
Pulses milled and split	1.7	others ²	2.2

The following table shows how food intake percentages change among different income groups. As the data in this study was collected between 1981 and 1982 it is not possible to evaluate income groups classes by amount but rather by “high”, “medium” and “low income”.³

“High income” represents the average of the seven highest income groups mentioned in the report issued by the Central Statistic Authority. “Medium income” refers to an

² Wheat bread (traditional) 0.17%; sugar 0.076%; cooking oil 0.074% and salt 2.03%

³ The survey relates to cash income - in rural areas much is done on barter system - including exchange of goods for labour. Therefore referring to “high”, “medium” and “low” income makes better sense than a Ebirr equivalent.

average of the eight medium income groups, and “low income” stands for the average of the seven lowest income classes.

Table 2: Percentage of food intake by different level of income

	Low Income	Medium Income	High Income
Commodity	in % of gram intake	in % of gram intake	in % of gram intake
Cereals	33.1	54.3	71.2
<i>Kocho</i>	29.5	17.3	6.2
Vegetables	26.2	14.6	8.7
Pulses unmilled	3.1	3.6	3.2
Dairy products	2.0	3.8	3.8
Pulses milled / split	1.0	1.8	2.8
Spices	0.8	1.2	1.3
Meat	0.4	0.9	0.7
Fruits	0.1	0.4	0.3
Oilseeds	0.2	0.1	0.1
Fish	0.4	0.1	0.1
Others	3.3	1.9	1.6
Total	100	100	100

In all three income groups cereals, *Kocho* and vegetables contribute 85 percent of the daily intake.⁴ With raising income people seem to substitute *Kocho* and vegetables with cereals. *Kocho* and vegetables cover 55% of the daily intake in the low income group, whereas these commodities go down to 15 % in the high income group.

The intake of cereals more than doubles from low to high income. This corresponds with the common knowledge that *Kocho* is the food of the poor.

The pattern of protein rich food intake also changes with different purchasing power. In the low income group dairy products, meat and fish contribute 2.8 % of the daily diet, in the medium income group they account for 4.8 % and in the high income group 4.6%.

Surprising is the intake pattern in different income groups of unmilled pulses, meat and fruits. The intake of these commodities does not seem to follow any one particular pattern. The reason for this may be the fact that figures in Table 2 are relative, whereas absolute figures would show an increase of consumption from the medium to high income groups.

⁴ *Kocho* is mainly eaten in the Southwest of Ethiopia. Because of the high percentage *Kocho* represents for the daily diet, it looks like a mayor part of the survey was compiled from the Southwest of Ethiopia.

The consumption of meat increase from low to high income groups, and even doubles; the total, however, remains under one percent of the daily diet. This shows that meat is still a luxury item for the relatively higher income groups; in this regard the expression high income is slightly misleading.

Essential Expenditures besides food

Table 3: Expenditures as percentage of non-food items

Item	in % of non-food cons.	Item	in % of non-food cons.
Clothing and footwear	12.4	Services ⁵	11.4
Housing ⁶	31.1	Other consumption expenditure ⁷	8.4
Household equipment ⁸	2.7	Household non-consumption exp. ⁹	18
Household operations ¹⁰	1.1	Drinks and stimulants ¹¹	14.9

The most important part of non-food expenditures is housing; almost one third is spent on household requirements. Among the expenditures for housing the biggest is spent on energy (90%), and the remaining 10% on rent and water.

An indicator of household vulnerability may be “household non-consumption expenditures”. It covers almost one fifth of the non food expenditures. According to the report of the Central Statistical Authority the households which spent more than their income over the time of the survey was 36.4 per cent. Moreover, it seems that loans are an important part of the rural economy and are often utilised. If these debts are mainly seasonal (as a coping strategy) or regular can not be concluded from the survey.

The expenditure for drinks and stimulants seem to be rather high, even more than that on clothing and footwear. However, taking in account how important coffee and *tella* are for social life, especially when people are helping out on the farm or to build a

⁵ Including medical care and health, transportation, communications, education and recreation and entertainment.

⁶ Including rent, building materials, energy and water.

⁷ Including personal care, personal effects, burial ceremonies, marriage ceremonies and milling charges.

⁸ Including wooden furniture, household textile, straw and bamboo, earthen-, metal-, plastic- and glass ware.

⁹ Including Eke, loans given out and loans repaid.

¹⁰ Including soap and not closer defined items.

¹¹ Including *katikale* (local liquor), local beer, *tej*, coffee beans, coffee leaves, *chat* and tobacco.

house (self-help groups like *wonfel*, *debo* and *jigi*.) the percentage is not that astonishing anymore.

The following table gives a breakdown of the non-food expenditures by different income classes.

Table 4: Percentage of non-food expenditures by different income classes

	Low Income	Medium Income	High Income
Items			
Clothing and footwear	9.2	11.74	17.93
Housing	42.9	35.51	24.6
Household equipment	1.6	2.51	4.2
Household operation	1.7	1.0	1.42
Services	13.36	12.5	6
Other consumption expenditures	3.53	8.5	9.3
Non-consumption expenditures	9.1	13.85	23.2
Drinks and stimulants	18.6	14.25	13.28

Households with higher income tend to spend more on clothes, whereas the expenditures for housing (mainly energy) effects their budget a lot less in comparison to the medium and low income classes.

Drinks and stimulants remain a main expense of all the income classes; this is again an indicator of the social relevance of these expenditures.

Table 5 shows the ratio between food and non-food expenditures. This ratio does not vary a lot among different income classes. Conventional wisdom would suggest that with a higher income the percentage of expenditure for food would decline. An answer might be that the higher income groups consume more food and subsidize cheaper with more expensive food.

Table 5: Ratio between food and non-food expenditures

	Average Income	Low Income	Medium Income	High Income
Food	57.8	57.7	59.2	54.3
Non food	42.2	42.3	40.8	45.2
Total	100	100	100	100

Conclusion

It is assumed that the per capita food intake of 1,900 calories a day is sufficient for the long term sustenance of a population with light physical activity living in a warm climate.¹² In Ethiopia the recommended level of energy intake has been increased to 2,000 Kcal per person per day (according to the Government's relief distribution plan). This adjustment is mainly due to the fact that the average Ethiopian beneficiary has a higher physical activity (i.e. agricultural work) and lives in a colder climate. In order to reach this 2,000 calories a day, a person needs between 550 and 600 gram of cereal equivalents. (Over a one year period sufficient calorie intake of cereal equivalents is covered with 210 kgs of cereals per person.) According to Table 5 a household covers its food need with 60% of the income regardless of the purchasing power. Considering a medium price for a quintal of cereals (100 Birr/ Quintal),¹³ a household has to generate an extra income of 140 Birr per household member, per year in order to cover the essential non food expenditures.

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¹² see Nutritional Guidelines for Relief Rations, Early Warning Services, Addis Ababa 1989

¹³ see SCF (UK) Nutritional Surveillance Programme, Preliminary results summary Region 3, 25.3-27.4 1996