

## Using earlier poverty lines for Malawi with household welfare information from the Malawi Integrated Household Survey, 1997-98

The Integrated Household Survey (IHS) was a comprehensive socio-economic survey of the living standards of households in all districts of Malawi. The survey was designed so that the information gathered could be used for an assessment of the incidence of poverty in the population at the district level and above.

In this paper of a series detailing the initial poverty analysis of the IHS, an attempt is made to bring to bear absolute poverty lines which have been used in Malawi in the past on the household welfare information in the IHS. The earlier poverty analyses were done on data sets which were not as comprehensive as the IHS. However, some rough idea of trends in the poverty status of Malawian households might possibly be apparent by comparing the poverty head counts from the IHS using these poverty lines with the head counts that were calculated when they were first used some years ago.

### Earlier poverty lines

Several poverty lines for Malawi have been generated in the past. The following table sketches out the basis for these lines, together with the poverty head counts generated.

| Poverty line                | Source           | Note  | Year    | MK poverty line                                    | Poverty head count      |
|-----------------------------|------------------|---|---------|--|-------------------------|
| \$40 per person per year    | World Bank, 1990 | Corresponds to cost of 200 kg maize in 1990, plus proportional non-food component (food cost accounts for 65% of total expenditures in rural areas; 55% in urban)                                 | 1989    | rural: MK93/person/year<br>urban: MK96/person/year | rural: 60%<br>urban: 9% |
| Calorie needs line          | World Bank, 1995 | Extreme poverty line – cost of 200 kg of maize – annual per capita calorie requirement.<br>-used National Sample Survey of Agriculture (NSSA) <u>income</u> data to assess. Only for rural zone.. | 1992/93 | rural: MK98/AE/year                                | rural: 30%              |
| Basic needs line            | World Bank, 1995 | Cost of 200 kg of maize, plus cost of minimum non-food essentials.<br>-used NSSA <u>income</u> data to assess. Only for rural zone.   | 1992/93 | rural: MK151/AE/year                               | rural: 43%              |
| 1990 Reference line         | World Bank, 1995 | CPI adjustment of 1990 poverty line.<br>-used NSSA <u>income</u> data to assess. Only for rural zone.   | 1992/93 | rural: MK172/AE/year                               | rural: 54%              |
| 40 <sup>th</sup> percentile | World Bank, 1995 | Below 40 <sup>th</sup> percentile of households ranked by annual income per capita.<br>-used NSSA data to assess. Only for rural zone.  | 1992/93 | rural: MK117/AE/year                               | rural: 40%              |
| 20 <sup>th</sup> percentile | World Bank, 1995 | Below 20 <sup>th</sup> percentile of households ranked by annual income per capita.<br>-used NSSA data to assess. Only for rural zone.  | 1992/93 | rural: MK54/AE/year                                | rural: 20%              |

### Using these poverty lines with the household welfare indicator computed from the IHS

These earlier poverty lines were converted into April 1998 prices using CPIs. If the poverty line was weighted by food and non-food expenditure, separate food and non-food CPIs were applied

in making the conversion. The 1990 poverty line was adjusted separately by three methods: the CPI, the US dollar exchange rate, and the cost of 200 kg of maize.

These updated poverty lines were then used to generate poverty headcounts using the IHS data.<sup>1</sup>

| Poverty line   | Source             | MK poverty line                                    | Year    | Corresponding 1998 MK poverty line   | Original poverty head count | 1998 IHS-based poverty head count |
|--|--------------------|--|---------|--|-----------------------------|-----------------------------------|
| Preliminary IHS poverty analysis                           | June 2000 PMS docs | --   | 1997/98 | Southern rural: 2833;<br>Central rural: 3384;<br>Northern rural: 4074<br>Urban: 9265.<br>(in MK/person/year) | --                          | rural: 60.6%<br>urban: 50.8%      |
| \$40 per person per year – CPI adjusted                    | World Bank, 1990   | rural: MK93/person/year<br>urban: MK96/person/year | 1989    | rural: 789<br>urban: 965   | rural: 60%<br>urban: 9%     | rural: 3.7%<br>urban: 0.0%        |
| \$40 per person per year – adjusted by US\$ exchange rate  | World Bank, 1990   | rural: MK93/per./year<br>urban: MK96/per./yr.      | 1989    | rural: 1018<br>urban: 1018   | rural: 60%<br>urban: 9%     | rural: 6.8%<br>urban: 0.1%        |
| \$40 per person per year – adjusted by cost of 200kg maize | World Bank, 1990   | rural: MK93/per./year<br>urban: MK96/per./yr.      | 1989    | rural: 2617<br>urban: 3092   | rural: 60%<br>urban: 9%     | rural: 48.3%<br>urban: 6.1%       |
| Calorie needs line – CPI adjusted                          | World Bank, 1995   | rural: MK98/AE/year                                | 1992/93 | rural: 546   | rural: 30%                  | rural: 0.5%                       |
| Basic needs line – CPI adjusted                            | World Bank, 1995   | rural: MK151/AE/year                               | 1992/93 | rural: 842   | rural: 43%                  | rural: 2.7%                       |
| 1990 Reference line – CPI adjusted                         | World Bank, 1995   | rural: MK172/AE/year                               | 1992/93 | rural: 959   | rural: 54%                  | rural: 3.9%                       |
| 40 <sup>th</sup> percentile – CPI adjusted                 | World Bank, 1995   | rural: MK117/AE/year                               | 1992/93 | rural: 652   | rural: 40%                  | rural: 1.2%                       |
| 20 <sup>th</sup> percentile – CPI adjusted                 | World Bank, 1995   | rural: MK54/AE/year                                | 1992/93 | rural: 301   | rural: 20%                  | rural: 0.0%                       |

### Assessment

In the manner presented here, the poverty line work of 1990 and 1995 cannot be compared to the IHS analysis. The household welfare indicators used in the earlier works are significantly different from the household welfare indicator used in the preliminary IHS poverty analysis: per capita total consumption and expenditure. Adjustments will need to be made to the IHS welfare indicator if it is to be used for a poverty trend analysis with these earlier poverty analyses.

The only earlier poverty line which is at all comparable is the 1990 poverty line which is based on the cost of 200 kg of maize, with a non-food component added (60% rural poverty head count).<sup>2</sup> This 1990 line is the equivalent of the 1995 Basic Needs line (43% rural poverty head count). When this poverty line is adjusted for use with the IHS data using the prevailing maize consumer price in 1998, a rural poverty head count of 48.3% results. However, the caveat expressed in the preceding paragraph still holds.

In sum, further work is needed on the IHS before any conclusions on trends in poverty in Malawi can be drawn from it.

<sup>1</sup> If the poverty line was based on adult equivalents, an adult equivalent-based household welfare indicator was computed from the IHS and used to generate the poverty head count.

<sup>2</sup> The cost of 200 kg of maize constituted 65% of the poverty line in rural areas, 55% in urban areas.