# Appendix

## Introduction

The South African Advertising Research Foundation, or SAARF, LSM (Living Standards Measure) has become the most widely used marketing research tool in Southern Africa. It divides the population into eight LSM groups, 8 (highest) to 1 (lowest). LSM-7 and LSM-8 are divided into Low and High respectively

The SAARF LSM is a unique means of segmenting the South African market. It cuts across race and other outmoded techniques of categorising people, and instead groups people according to their living standards using criteria such as degree of urbanisation and ownership of cars and major appliances.

## The first SAARF Living Standards Measure (LSM)

In the late 1980s, SAARF set out to devise an index using a combination of variables which would be stronger than any single variable and thus more useful to marketers for market segmentation. In conjunction with ACNielsen Media International, and their statistical consultant, Dr Jacky Galpin, they looked for variables already measured in the SAARF AMPS survey that would be strong discriminators which could be used to segment the population.

After considerable testing of an initial list of 71 characteristics, or variables (from which the population group and media usage were deliberately excluded) thirteen were finally selected for their combined power in differentiating between respondents. Not only did they differentiate well, but they did so in a consistent way when tested on a second set of SAARF AMPS results. This kind of stability was of course a key requirement, while on the other hand, the measure should also be sensitive to changes in the market place. The LSMs have already proved in the early years to have this characteristic. In an attempt to improve this measure, an exercise was undertaken to force income and education into the index variables. However, it was found that neither of these two variables contributed sufficiently to warrant inclusion.

Once the cluster of indicator variables had been chosen, the term 'Living Standards Measure' was coined to describe the scale they created.

The LSMs were included for the first time in the SAARF AMPS 1989/90 reports.

The original 13 variables that were used were the following:

1. Polisher/vacuum cleaner	8. Sewing machine
2. Fridge/freezer	9. Non-supermarket shopper
3. TV set	10. Rural dweller (outside PWV & W. Cape)
4. Water/electricity	11. No domestic servant
5. Washing machine	12. No VCR set
6. No car in household	13. No tumble drier
7. Hi-fi/music centre	

From AMPS 89/90 to AMPS 92 we adjusted the LSM-weights and changed the variables where necessary to provide the best fit to the data. This meant that the results were not comparable year-on-year and trending was impossible. As from AMPS 93, in order to overcome the above problems, we decided not to adjust the variables annually unless large changes were required.

## 1993 SAARF LSMs

1. Fridge/freezer	8. Rural dweller (outside PWV & W. Cape)
2. Water or electricity	9. Hi-fi/music centre
3. Polisher/vacuum cleaner	10. No domestic servant
4. Non-supermarket shopper	11. Washing machine
5. No car in household	12. Sewing machine
6. TV set	13. Metropolitan dweller *
7. Microwave oven *	

<sup>\*</sup> New. VCR and tumble drier no longer used.

Each variable carries a different weight, some positive, others negative, and the respondent's position on the SAARF LSM scale is arrived at by adding together the weights of the variables that she/he possesses. A constant is also added to the total score to remove negative total scores.

## Later developments of the LSM concept

In the mid-nineties, the feeling gained ground that the SAARF LSM concept could be improved by increasing the number and range of the variables which went into it. Some users were concerned that there seemed to be too great a reliance on the ownership of certain durables, and too little attention paid to other variables that looked, subjectively, as though they ought to be significant reflections or manifestations of a person's 'Living Standard'.

A further 39 variables were 'added to the pot' of original characteristics, some of them based on new questions added to the SAARF AMPS questionnaire specifically for this purpose. Analysis of this expanded set of data generated a new list of (this time) 20 indicator variables. Interestingly, eleven of the original thirteen variables reappeared in this new list - striking evidence of the original measure's fundamental strength and stability.

This extended list was applied for the first time to the 1995 SAARF AMPS survey results. A recheck each year from 1996 to 1999 confirmed its continuing validity.

This table shows the twenty variables, which were first published on the 1996 database, and used up until 1999.

## 1995 SAARF LSMs

1.	Flush toilet **	11. Dishwashing liquid **
2.	Polisher/vacuum cleaner	12. Household supermarket shopper **
3.	Non-supermarket shopper (personal)	13. Hot running water **
4.	Fridge/freezer	14. No credit facility **
5.	No car in household	15. TV set
6.	No financial services used **	16. Microwave oven
7.	Neither water nor electricity	17. Rural dweller (outside Gauteng & W. Cape)
8.	No insurance policy **	18. Washing machine
9.	Hi-fi/music centre	19. Hut dweller **
10.	Telephone in home **	20. No domestic servant

<sup>\*\*</sup> New. Sewing machine and metropolitan dweller no longer used.

The next market-driven development was to extract more detail at the important 'top end' of the market. SAARF LSM segments 7 and 8 were each divided into an upper and lower stratum. These sub-divisions (7L & 7H, and 8L & 8H) were first employed in the late 1997 reports. ('L' stands for 'low' and 'H' for 'high'.)

As customary, the variables analysed for the SAARF LSMs were reviewed for the SAARF AMPS 2000A survey. In addition, a number of new variables were included to assist with top-end differentiation. The result of this exercise is that the SAARF LSMs have changed with 16 variables remaining the same and 4 being replaced by new ones. The following table lists the 2000 SAARF LSM variables which have been created on the 2000A SAARF AMPS database:

#### 2000 SAARF LSMs

1.	Built-in kitchen sink *	11.	Stove/hotplate (electric) *
2.	No car in household	12.	Polisher/vacuum cleaner
3.	Flush toilet	13.	No insurance policy
4.	Supermarket shopper (personal)	14.	Hi-fi/music centre
5.	Microwave oven	15.	Video cassette recorder *
6.	Credit facility including retail card	16.	No domestic servant
7.	Fridge/freezer	17.	TV set
8.	Washing machine	18.	Car/sedan/beach-buggy/hatchback/ 2 seater coupe *
9.	No financial services used	19.	Hot running water
10.	Hut	20.	Home telephone

<sup>\*</sup> Four new variables included for the first time in the 2000 SAARF LSMs. Dishwashing liquid, water or electricity, rural dweller and household supermarket shopper no longer used.

### The SAARF Universal LSM

During 2001 SAARF decided to create an improved Living Standards Measure and simultaneously with the release of AMPS 2001A, launched the new SAARF Universal LSM.

One of the main reasons for these improvements was that the LSM used for AMPS/RAMS on the one hand, and for TAMS on the other, were not comparable and this had lead to much confusion in the past. There was also a conflict between the way the original LSM was devised and the need for such a measure to be able to show trends and be sensitive to societal changes. In addition, the LSM variables from 1995 onwards included personal variables, which introduced certain biases.

The new SAARF Universal LSM as introduced from AMPS/RAMS 2001A is based on universally applicable variables only. This means that all respondents can answer all the LSM questions leading to a new universal index applicable to all adults of age 16+, without introducing a bias such as for example the one created by "supermarket shopper" in the past, which sometimes lead to a husband and wife not being in the same LSM category.

The new SAARF Universal LSM was introduced to the SAARF TAMS panel at the end of August 2001 (week 34), which means that whether you use AMPS, RAMS or TAMS, the same LSM is now used throughout all of the SAARF surveys, bringing to an end the confusion of the past.

The new SAARF Universal LSM is similar to the older version, but starts out with 10 groups. What were previously referred to as LSM 7 low, 7 high, 8 low and 8 high are now known as groups 7, 8, 9 and 10 respectively. As South African society develops, the SAARF Universal LSM has the ability to be extended beyond 10, and groups 11, 12, etc will be added as time goes by.

Out of the original list of 20 variables used to determine a person's LSM category in the previous LSM, 15 household variables have been carried through to the SAARF Universal LSM. In addition, the total number of variables has been extended to 29 to give finer definition to the scale.

#### The 29 variables are as follows:

## SAARF Universal LSM

1.	Hot running water	16.	Less than 2 radio sets in household
2.	Fridge/freezer	17.	Hi-fi/music centre
3.	Microwave oven	18.	Rural outside Gauteng/W. Cape
4.	Flush toilet in/outside house	19.	Built-in kitchen sink
5.	No domestic in household	20.	Home security service
6.	VCR	21.	Deep freezer
7.	Vacuum cleaner/floor polisher	22.	Water in home/on plot
8.	No cell phone in household	23.	M-Net/DSTV subscription
9.	Traditional hut	24.	Dishwasher
10.	Washing machine	25.	Electricity
11.	PC in home	26.	Sewing machine
12.	Electric stove	27.	Gauteng
13.	TV set	28.	Western Cape
14.	Tumble dryer	29.	Motor vehicle in household
15.	Home telephone		

Changes to the LSM weightings from time to time in the past made long-term trending of data impossible.

Societal changes experienced in South Africa since the first democratic elections made the need to change the weight of certain variables in the older LSM unavoidable, and the loss of trending was something that had to be accepted in the old LSM in order to keep the tool relevant to South Africa's changing circumstances.

The SAARF Universal LSM, however, allows us to change the tool to remain up to date with society, without losing the ability to trend. It is sensitive to change, and will reflect the South African market better than ever before, whilst allowing users to track the changing makeup of the various LSM groups over the years.

For further information: www.saarf.co.za