National Wool Growers Association Support Programme

Programme Evaluation: Eastern Cape

2015 survey

1. Background

ComMark Trust (**Com**mercial **Mark**eting) Trust was set up and funded by DfID in 2003. It is now defunct, but its purpose was to demonstrate that the output and value of agricultural products from the rural areas could be increased through connection to the organised market. By this was meant both improving the products at source and creating functioning links to the formal market system across a broad range of agricultural enterprises including wool and meat. It approached the National Wool Growers Association (NWGA) to collaborate in a series of three annual surveys to determine the impact the Association's efforts are having on the value of the wool clip from the rural areas and on the effect on the welfare of the participants. The NWGA already had a support programme under way in the region based on:

- short-term grant assistance to improve production technology;
- access to the formal market for producers; and
- the necessary infrastructure such as shearing sheds and equipment.

Since its objectives so closely paralleled those of the NWGA, the surveys would in effect present a case study of its premise. For reasons that are not clear, these surveys were referred to as "Poverty Assessments", which now does not seem particularly appropriate. This report therefore is presented as an evaluation of the impact of the NWGA's support programme for wool producers in the Eastern Cape's rural regions: this is what it has been in effect all along.

In terms of its obligations to DfID, ComMark required that the impact of its investment be evaluated over a medium- to long-term time frame. The baseline values were established in the study of 2004 and were updated in 2005, 2006 and 2009. The funds for the current survey were sourced by NWGA via Cape Wools from the Wool Trust. This report is therefore the fourth re-assessment, coming six years after the last. It is NWGA's intention to repeat the survey at three to five year intervals into the future as funds can be obtained, so it has been necessary to make minor modifications to the methodology, which will be covered in the next section.

2. Methodology

2.1 Questionnaire

The survey was based on the 2004 questionnaire, designed for the very specific purpose of gaining base-line data. Adhering to the original questionnaire ensured that the variables were comparable over time, without which the output would have had reduced value.

The design considerations were:

- The questions were intended to identify key pieces of information, not to paint a picture of poverty. It was intended to identify specifically useful pieces of data, rather than use a broad-based approach. While the approach was participatory, the survey instrument was very quantitative, because the nature of the indicators sought are quantitative.
- The Household Structure section was originally intended to chart changes in household demography over time - as income rises, so households tend to grow. Data obtained in the surveys to date suggest that this assumption was not valid: household size is a fairly random variable, responsive to events outside the household economy in the rural areas. While the household data has been gathered in this survey it is not indicative of any trend so it is proposed that it be eliminated from future questionnaires.
- The Income data section is intended to capture the income from wool, mohair and other animal products (Internal Income) and to place it within a context of cash income earned or received from social grants (External Income). It is often argued that social transfers are the main sources of income for poor communities, but this could simply be because the data are easy to capture accurately.
- An attempt was made in the 2004 survey to capture the expenses of farming, for comparison with the income from it. In the event the figures obtained were very dubious and incomplete, as was the case in 2005 as well. On the other hand, the data gained did give a clear idea of the set of farming practices used by the respondents, which is useful data, especially for the NWGA, as it indicates the degree to which its extension efforts are succeeding. The data have therefore been converted to a binary response, to determine whether or not the respondent used that particular practice or not. For comparative purposes the 2004 data were also converted, as can be seen in the raw data tables.
- It is received wisdom that among rural communities, disposable income is first directed to the purchase of more animals – quite a sensible decision in reality. If this is held to be true, then

increasing purchases of livestock would be a proxy for increased disposable income, from whatever source. The data on flock and herd size is intended to track this trend.

- Investing in farming assets is an important contribution to long-term economic sustainability of the household. If they are able to do this, then surplus funds for investment are available, another indication of increasing wealth. Although data from all the surveys indicate that cropping has a low priority to wool growers and the primary assets are livestock, these data will continue to be collected for continuity.
- Similarly, households being able to invest in assets that will improve their quality of life can be considered a proxy for increasing discretionary income.
- The general and social questions arise out of insights gained from qualitative surveys done in Amahlati and Intsika Yethu and by FARM-Africa. These were key factors that differentiated between poor and better off households, as identified by focus groups.
- The number of questions might seem excessive, but they are almost all simple and require little interaction to obtain the data.

2.2 Sample

The original sample drawn consisted of 51 respondents, divided approximately equally between four NWGA Districts. There has been wastage of respondents over time, due to deaths, individuals moving out of the survey area and dispersal or loss of the flock through theft. The 2009 survey was based on the total remaining sample of 44, which is a significant reduction. In view of this, it was determined that for this and future surveys, missing respondents should be replaced by substitutes, chosen to represent as far as possible the respondents they replace. Further, Region 25 has also been included in the present survey, bringing the total sample size to 57.

In this year, more so than in the past, producers have complained about stock theft. Several past respondents have ceased wool production all together as a consequence of the loss of their flock to theft and there were several requests for “the government” to do something about eliminating it.

3. Field work

The field work was conducted by Mr Sizwe Gaga, a resident of Nolukanyo Township at Bathurst, who has experience in the process through conducting the surveys from 2006 onwards. He matriculated fifteen years ago and has been unemployed since then. He quickly grasped the essentials of the survey procedure and in the end proved to be an able and efficient enumerator. The completion of field work in this project is entirely dependent on the Production Advisors of the NWGA and once again they have been extremely helpful and positive in the execution of the project. Their help is greatly appreciated.

4. Market analysis

Data provided by the NWGA show interesting trends in the market performance of the communal area wool producers, relative to national figures. Table 1 below provides the comparison.

Table 1: Wool sales through the formal market and value of sales from communal area producers in the Eastern Cape.

Marketing Season	Kilogram wool	Value (R)	National Average Price of Wool(c/kg)	Communal Areas Average Price of Wool (c/kg)
03/04	2 029 556	17 768 955	2 109	876
05/06	2 222 883	14 954 931	1 695	673
06/07	2 345 991	30 791 496	2 594	1 313
07/08	2 809 551	45 514 726	3 239	1 620
08/09	2 756 441	43 149 706	2 548	1 257
09/10	2 807 161	64 676 989	3 222	2 304
10/11	2 890 062	69 124 707	4 015	2 404
11/12	3 555 077	113 015 898	5 236	3 179
12/13	3 461 937	131 842 578	5 537	3 803
13/14	3 806 993	137 919 367	6 016	3 623

Source: NWGA

The data show three marked trends over the period the surveys have been conducted:

1. There has been a steady increase in the size of the clip from 2.03 million kilogrammes in 2004 to 3.81 million kilogrammes in 2014, an increase of 87 percent.
2. The value of the clip has increased remarkably, from R17.77 million in 2004 to R137.92 million in 2014, a 676 percent increase over the period. This is due to both the increasing size of the clip and the price, which has increased by four times over the period.
3. Despite the fact that the wool price has increased so markedly in the communal areas, it is still consistently up to 40% lower than that achieved by commercial farmers.

These trends illustrate quite clearly the value added to the economy of the communal areas by the programme. They also explain why, despite frequent complaints about low prices, the size of the clip and the numbers of sheep continue to rise as will be seen in the next section

5. Comment on responses to questionnaire

The responses to the questionnaires are summarised in the raw data tables that accompany this report. Because of the problems of printing such large and complicate files, they are available in electronic form on the disc that accompanies this report. This section provides some comment and analysis on the responses to each of the variables listed in the questionnaire.

It should be noted that there are gaps in the data for 2009. This is because due to the frailty of data stored on electronic data bases, the full set of data for that year is not available. Only fragmentary data discovered on a working file are available; hence there are no totals for individual source of income, only the full totals. This is the case for all the charts that follow.

5.1 External income

External income is defined as that income derived from sources external to the community, such as social transfers and other off-farm income, for comparison with income from farming and other local activities, called “Internal income” in the questionnaire. This provides a set of data against which income from wool production can be compared.

The sources of external income, with the variable name indicated in brackets are:

- Pensions (Pension);
- Child grants (Child);

- Full time employment (FTE); and
- Part time employment (PTE).

Earlier surveys included Disability Grants, but this category was dropped because none were receiving them. The Total External Income has the variable name “Ext. inc.”

The summary of data obtained in the five surveys is provided as Figure 5.1

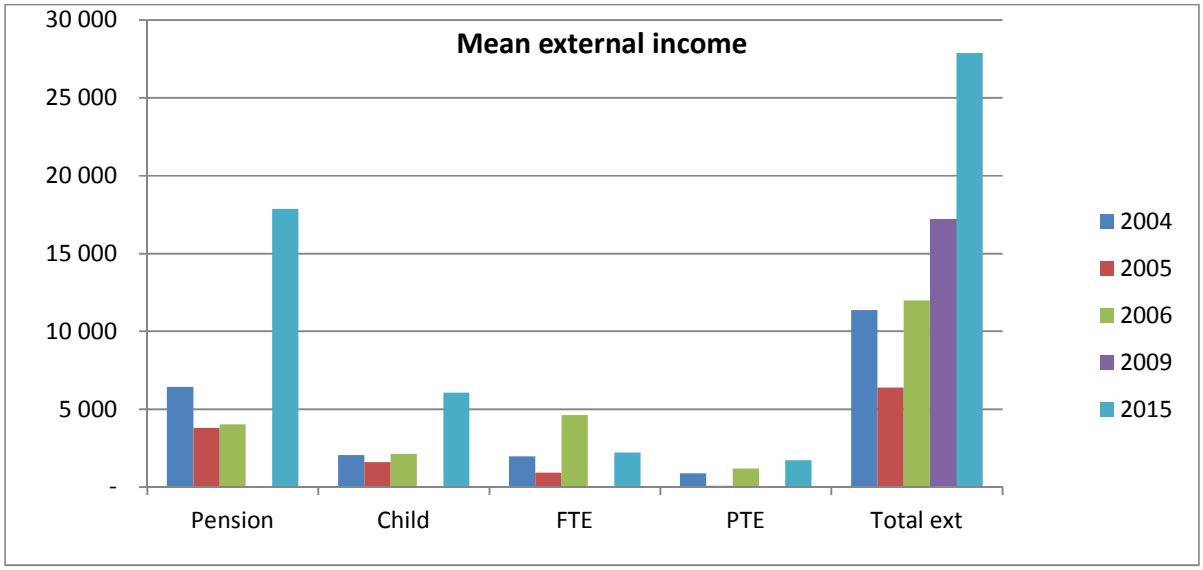

Fig. 5.1: Mean annual external income 2004 – 2015

The main finding here is that social transfers have increased significantly each year since 2005, consistent with the increasing spread of the social grant system. The values for full time employment (FTE) and part time employment (PTE) remain low, indicating that employment does not provide a valuable option in the rural areas.

The average annual household income from social transfers is now R23 900, a very considerable increase over earlier years and a valuable contribution to household income. The range of total income values runs from R7 920 to R84 000, with a median value of R27 480. This is close enough to the mean to suggest that the distribution is not severely skewed.

5.2 Internal income

The internal income for the sample is derived from a number of sources, which is consistent with the survival strategies rural households employ. The sources of internal income, with the variable name in brackets, are as follows:

- Sale of wool (Wool);
- Sale of sheep (Sheep);
- Sale of goats (Goats);
- Sale of cattle (Cattle);
- Sale of various types of produce (Produce); and
- Trade such as handicrafts or skills (Trade)

The total income from sheep including wool and animals amounts to R7 100: adding the sales for goats and cattle brings the total for R12 300. The range of values for internal income is from R620 to R204 000 with a median value of R9 200, which suggests that the distribution is skewed towards the higher levels of income. In contrast, the value of sales from produce amounts to only R670, which serves to show how little agriculture contributes to household income in the wool-producing areas and why it appears to receive so little attention. Many of the households have ploughs and cultivators, which it seems might be used for production for household consumption but the very low ownership of functioning tractors suggest that commercial agriculture is of limited concern to sheep owners.

Figure 5.3 below shows that total sheep income has consistently amounted to approximately half of total internal income and that income from sheep has increased consistently over the years. The large jump in 2015 reflects the growth over six years since the last survey, therefore looks more exaggerated than it actually is.

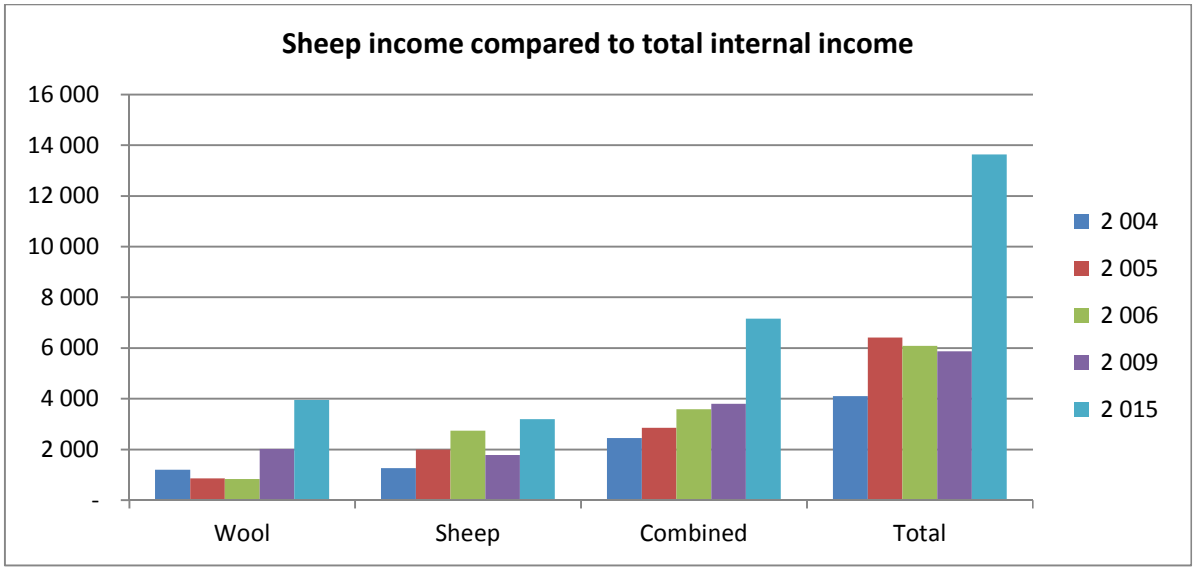

Figure 5.3 Comparison of sheep product sales to total internal income 2004-2015

It also illustrates the steady increase over the period of the combined income from sheep, as well as the fact that 2009 is the first year since 2004 when income from wool has exceeded that from the sale of sheep. Both forms of income are valid uses of sheep and the practices used to increase one will simultaneously benefit the other.

Figure 5.7 below shows that sheep numbers declined by about 10% from 2005 to 2009, so it is interesting that over the same period combined income from sheep either increased (2005, 2006) or only slightly decreased (2009). Taken overall, the income from sheep has increased significantly, while numbers have decreased. This can only have been achieved if the overall performance efficiency of the flock has increased. The declining trend is reversed in 2015, with a marked increase in stock numbers and therefore income.

5.3 Total income

Figure 5.4 below shows that total income has increased steadily from 2005 to 2015, which will be reflected in the comments on the social factors below.

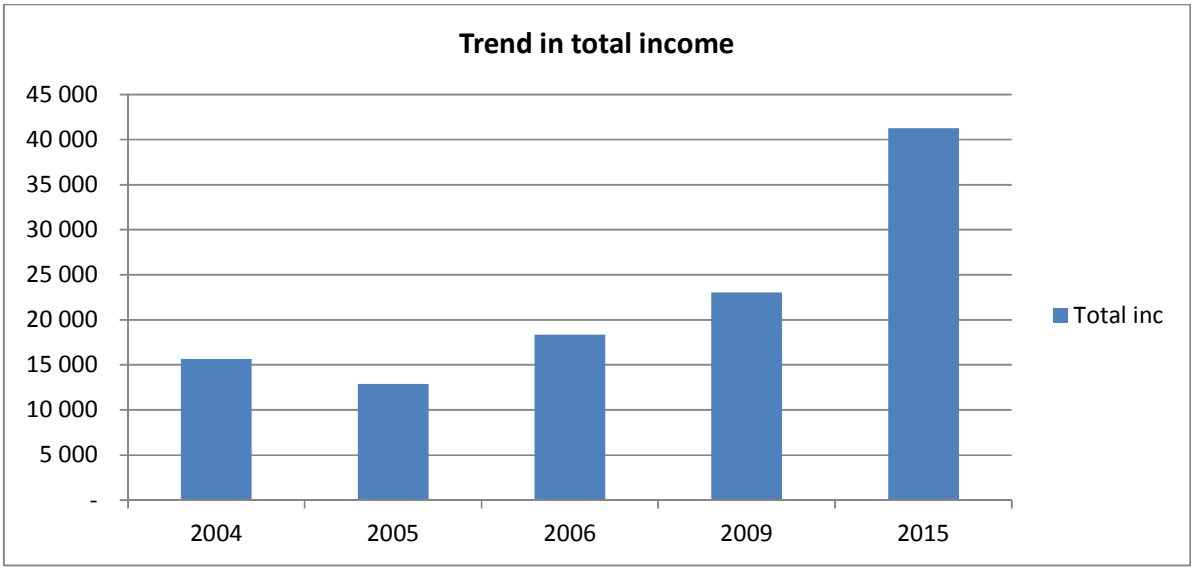

Figure 5.4: Trend in total income to sample 2004 – 2015

This is a consequence of increases in both external and internal income with the external income the dominating factor, primarily because of increases in social transfers. This is a consequence of increases in both external and internal income with the external income the dominating factor, primarily because of increases in social transfers. The range of values for 2015 is from R15 340 to R228 920 with a median income of R41 970, very close to the mean

5.4 Summary of income data

The income data do not show any unexpectedly large downward trends, except that sales of produce have shown a steady decline since the start of the surveys. Latterly this could be due to drought, but agricultural production for the market has always been a “last-resort” type of activity because of the many constraints that affect it, not the least the problem of excluding livestock from the gardens or crops. It is possible that this source of income, always small, has declined as other less problematic sources increased.

Total income has increased steadily since 2005. There is evidence that this has resulted in the easing of financial constraints and the reduction of indications of stress in household finances. These are discussed further under Section 5.8 below.

5.5 Farming practices

The listing of farming practices was intended to illustrate any improvement in management of the sheep flock. However, from the beginning in 2004 the data have suggested a very high existing level adoption of the important management practices and the trend has continued, showing some improvement in 2015.

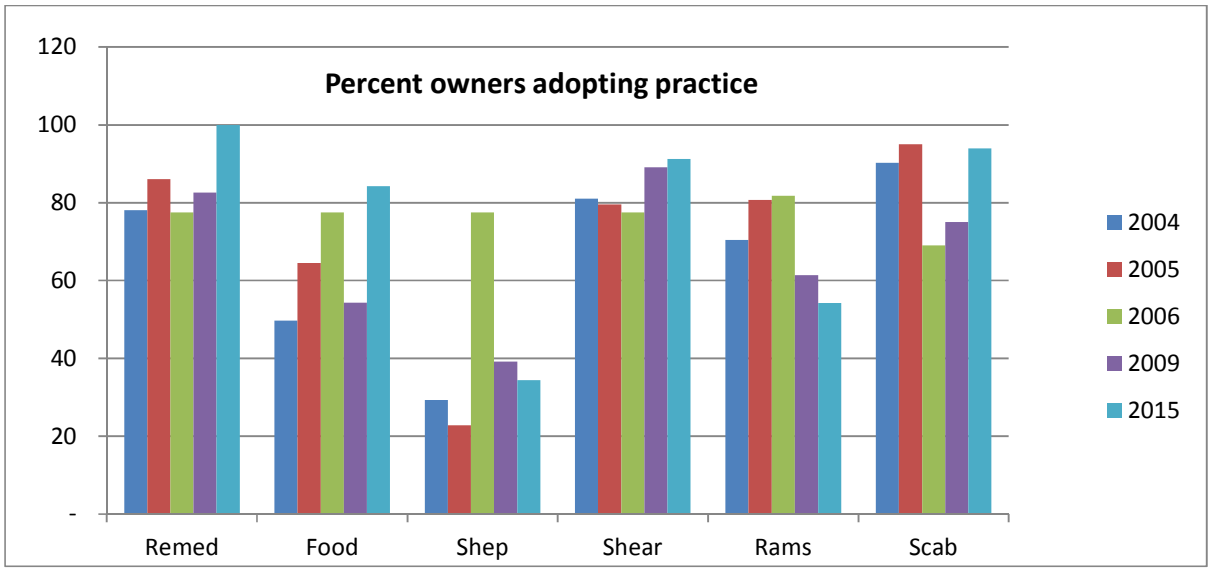

Fig. 5.5: Percent farmers adopting practices 2004-2015

The more important practices in terms of increased quality and quality of clip are:

- **The use of remedies (Remed):** Remedies had consistently been used at a level around eighty percent till 2015, when usage climbed to one hundred percent, suggesting that the use of standard range of remedies is sufficient to sustain the present high levels of production.
- **Supplementary feeding (Food):** The use of supplementary feeding is probably related to grazing conditions, so not too much can be read into these data.
- **The use of improved NWGA rams (Rams)**: The use of improved rams while still at a high level, has shown a steady decline since 2006. This does not necessarily reflect a reduction in the use of quality rams as it is possible that growers are either buying their rams themselves or using progeny of NWGA rams to maintain their genetic levels.
- **Treating scab (Scab):** After a decline in the previous two surveys treatment of scab has recovered to its previously high level

The levels of adoption of key management practices are considerably higher than it was before this programme started and the appearance of the many sheep seen during travel in the area reflects this. Historically, genetic inadequacies and a generally advanced stage of scab infestation was the standard vision of Transkei sheep, in contrast to the present impression of good management practices and quality of the stock. The high levels of adoption of management practices mask one of the outputs that might have been expected from the project, namely the transfer of technology. Given the already high levels of adoption as revealed in the 2004 base-line study, the potential for further technology transfer is limited and in fact it is now a matter of maintaining these high levels.

The use of shepherds and shearers is less critical, and using shearers organised by the shearing sheds is a standard practice and little can be deduced from the data.

5.6 Farming assets

A basic set of farming equipment is necessary to function in agriculture and equally, an increase in the number of assets would reflect investment of surplus cash in farming infrastructure. The expectation would be that as extra funds become available, which they have, there would be investment in farm assets to improve the farm business. Figure 5.6 below, which shows the mean number of each asset class per household, suggests that this has not been the result. Without exception, the trend in farm assets has been effectively level. In the case of poultry[1], there is considerable variability from year to year, consistent with how subsistence flocks are exposed both to predation and disease outbreaks. In some years large numbers of chicks are hatched and raised and in others losses occur as a result of epidemics like Newcastle disease. The variation in numbers does not therefore necessarily reflect deliberate investment or disinvestment in poultry.

What is remarkable is the low number of farming assets owned by households. Only in the case of wheelbarrows (Barrow) does ownership approach one per household. The number of hand tools (Hand) is reasonable, including as it does spades, rakes, picks and hoes, probably sufficient to hand weed a small field or vegetable garden. Even items as essential for subsistence agriculture as animal drawn ploughs and cultivators are not owned by all respondents, in fact by

[1] Because the number of poultry owned by the respondents was so much higher than any of the other assets, the poultry totals were divided by ten, to allow the scale to be more indicative. Thus, where in 2004 the number of poultry owned is shown as around 2.1 per household, the actual number is 21.

2009 only approximately a half of the respondents had them and this continues. These data are another confirmation of the difficulty of sustaining subsistence agriculture even in an environment suited to it, as all of the regions of the study area are. The residents appear to be unable to exploit favourable natural resources because they lack the equipment and finance to do it and the state has yet to develop an effective support programme.

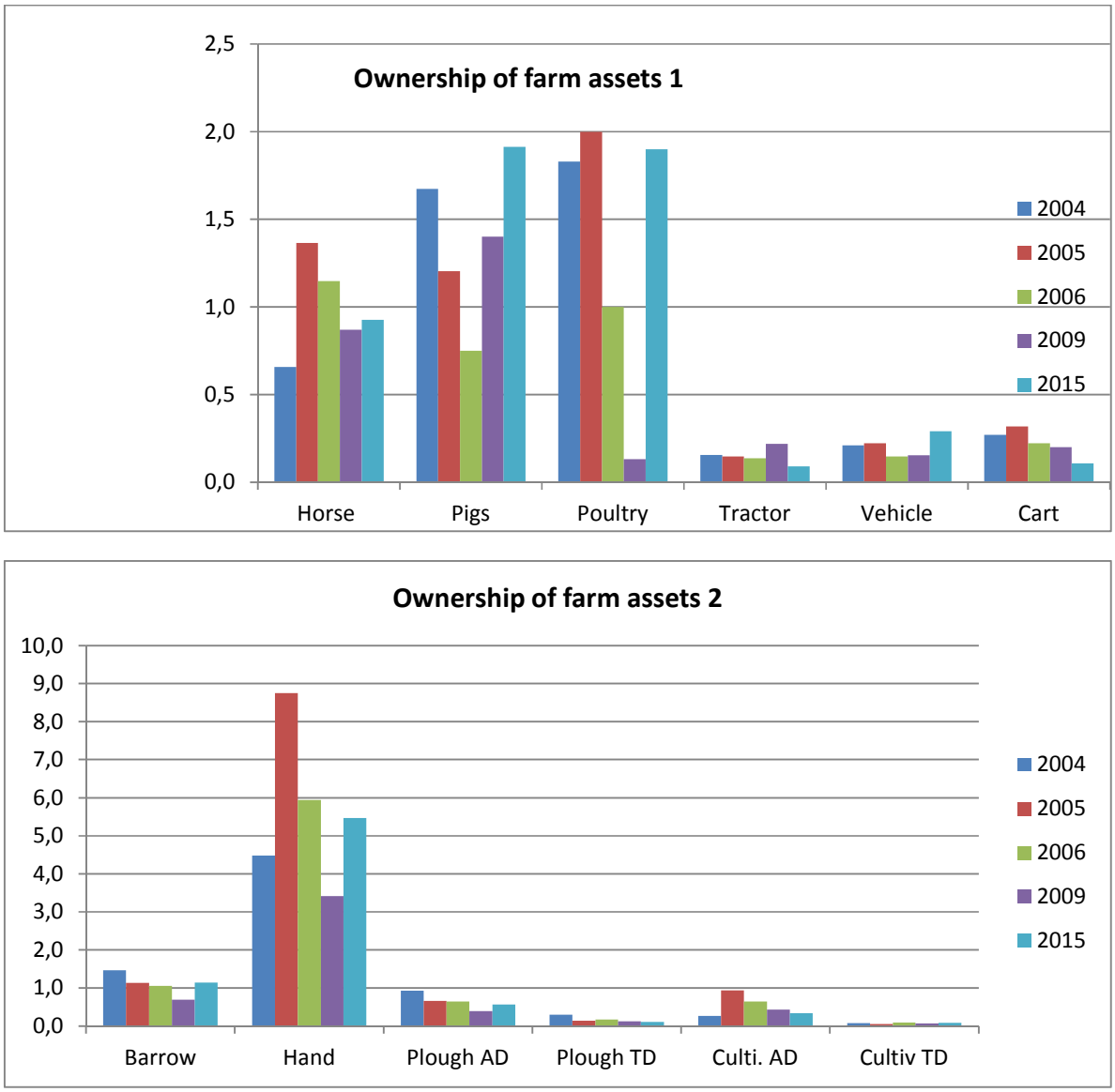

Fig 5.6: Mean farm assets per household 2004-2015

5.7 Livestock numbers

Cattle herd and goat flock sizes have stayed constant at between ten and twenty per household over the eleven years of the survey. The sheep flock had decreased by about 10% between 2005 and 2009 but in this survey has shown a marked increase to an average of over a hundred per household. At no stage was the decrease in flock size accompanied by a decrease in output, which means that flock efficiency must have improved over the period. Figure 5.7 confirms that this trend continues.

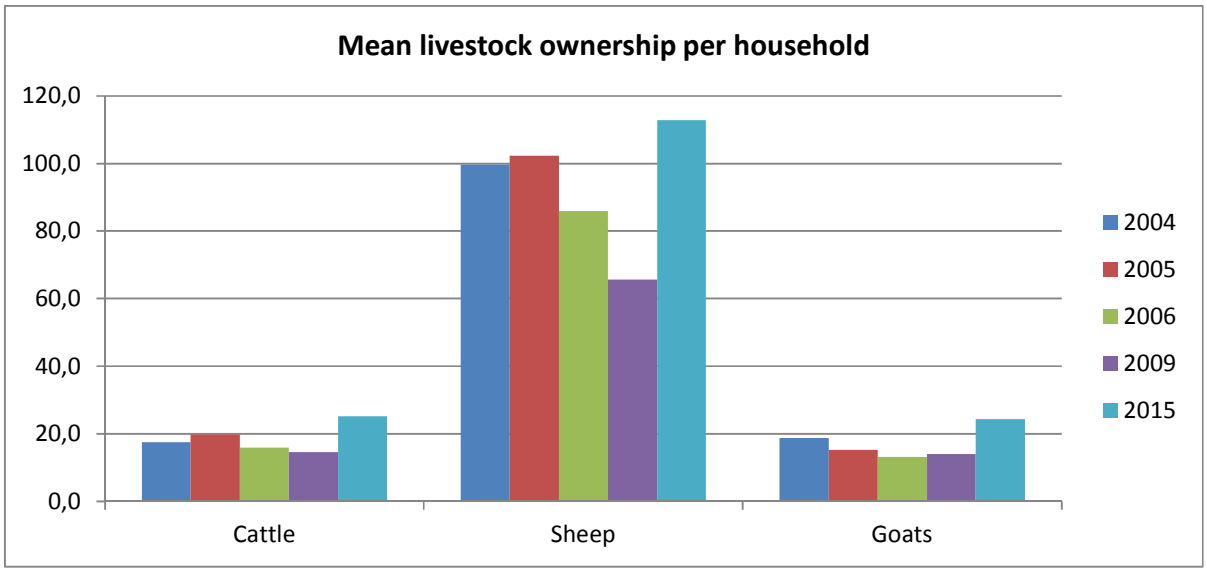

Fig. 5.7: Mean herd and flock size per household 2004-2015

The range of values, medians and means for 2015 are:

Class	Minimum	Maximum	Median	Mean
Cattle	0	65	9	25
Sheep	5	276	91	113
Goats	0	91	0	24

Comparisons of the mean and median value suggest that livestock ownership is skewed, particularly for cattle and goats.

5.8 Social indicators

There are several key indicators in the data for this section which suggest that there has been a significant easing of financial pressure among the households in the survey.

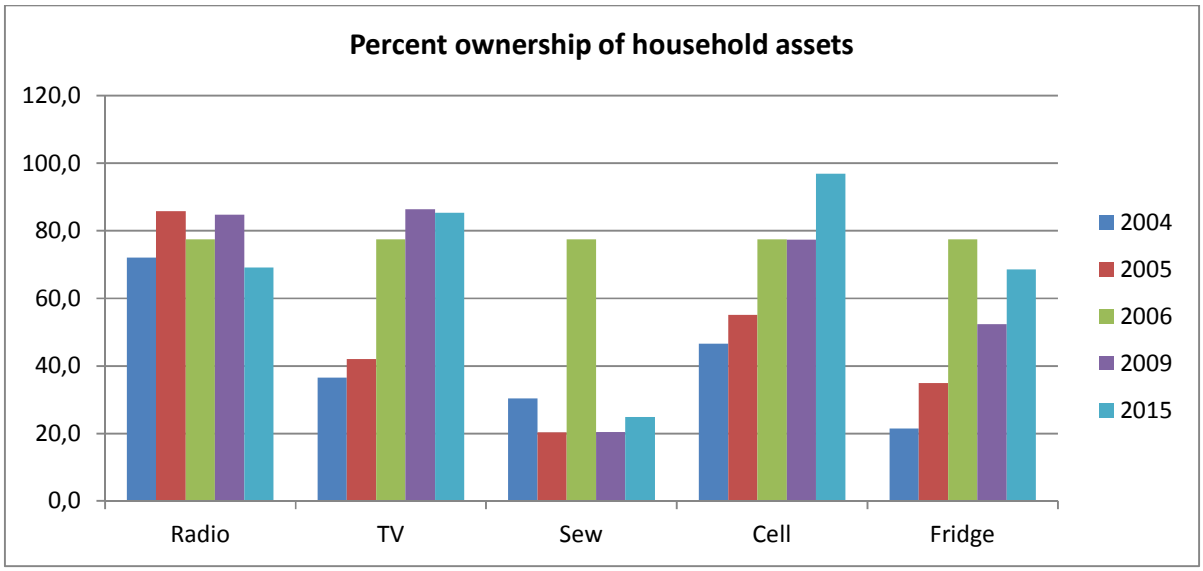

Fig. 5.8: Percent ownership of household assets 2004-2015

Figure 5.8 shows that there was a marked increase in the ownership of television sets (TV) to 86.4% in 2009 and the numbers have been sustained until now. In those villages where electricity is available, ownership of TVs approaches 100% and since the 2009 survey the number of refrigerators has also increased. These are costly items, indicating that the households have enjoyed an increase in disposable income allowing them, when electricity is available to purchase what are in effect luxuries. The decrease in radios is probably associated with the increase in televisions sets, owned now by over 80% of households. The penetration of cell phones (Cell) remains high, approaching 100% but with households owning multiple cell phones there are actually more phones than there are households. The penetration of cell phones into the deep rural areas is still one of the most remarkable rural phenomena of the past decade.

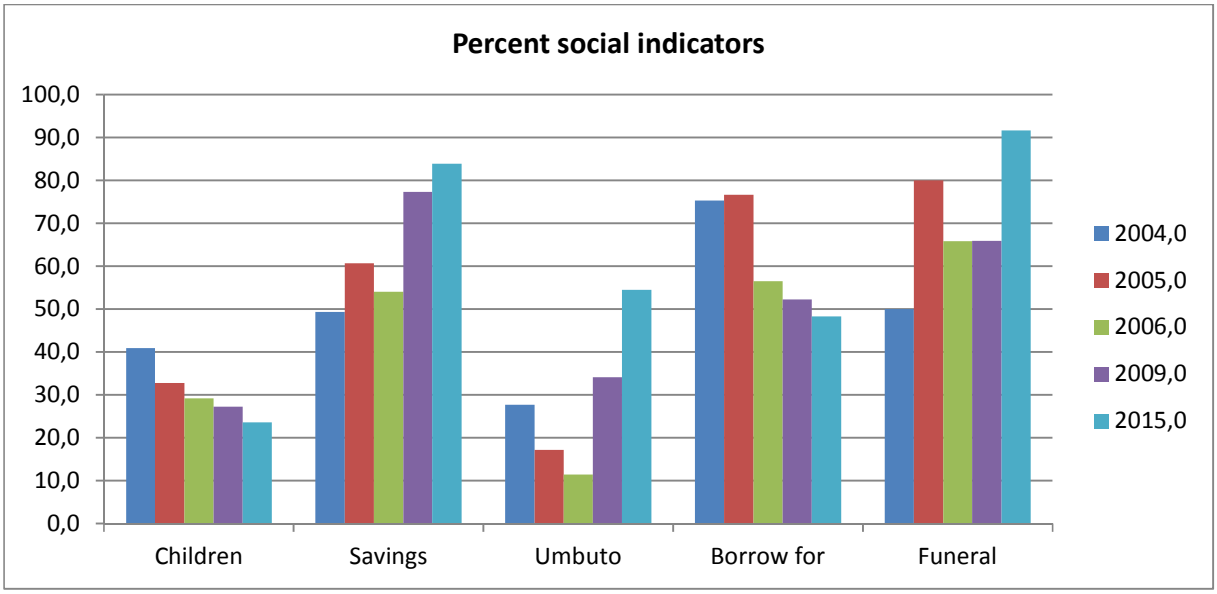

Fig. 5.9: Trends in social indicators 2004-2015

Three sets of data in this Figure 5.9 illustrate probably the most significant changes that have taken place in household welfare over the period of the surveys. These are:

- The number of households with children going to bed hungry (Children) has *declined* from 41% in 2004 to 24% in 2015 and appears set to continue downwards.
- The number of households with savings accounts (Savings) has *increased* from 49% in 2004 to 84% in 2015 and seems set to continue upwards.
- The number of households having to borrow money for school fees (Borrow for) has *decreased* from 77% in 2005 to 48% in 2015.

These three indicators, together with those from Figure 5.8 are potent indicators that NWGA has contributed significantly to improving the welfare of wool growers. They illustrate communities that are making significant steps to gain an equitable standard of living. The qualitative responses received from question 51 “Why did the household join the woolgrowers association?” provide interesting broader support for this statement. The 50 responses received (there were some multiple responses) segregated clearly into three categories:

- To gain more income through access to the formal market – 22 responses.

- To improve the quality of my wool through technical improvements, - 8 responses. The purpose of this group of respondents could well be attributed to a desire to increase their income through improving their wool quality.
- For strengthened institutions – 20. The responses were rendered for example as “for co-operation” or “to develop by association with others”.

These responses suggest that the broader objectives than simple increases in output are being achieved by the NWGA programme.

6. Summary

The 2015 survey has confirmed the trends established in the four previous surveys. There is a steady significant improvement in the income derived from wool and sheep that has contributed in important ways to improving the welfare of rural communities. Although there is obviously a wide range in the levels of benefit derived from the programme, it can be said that the majority of the respondents can no longer be described as poverty-stricken.

Perusal of the raw data tables might indicate aspects and Regions that deserve extra attention. Stock theft appears to be reaching levels where it could have a serious impact on the industry but it is difficult to see how the NWGA could act effectively against it.

The experience in farmer support programmes is generally that the benefits do not persist and both the participants and the sponsoring institution lose interest. It is a common experience to visit the site of a support project after several years have elapsed, to find that there is no surviving sign of the project and that the participants have largely forgotten what it was about. The strongest indicator of the value of the NWGA programme is that it has persisted now over a long period and has expanded rapidly, while not losing focus and impact. This is probably the most important indirect finding of the survey.