

DEPARTMENT SCIENCE & TECHNOLOGY

Poverty Alleviation

CASHMERE IS KING

Phase Report April 2005

TITLE OF PROJECT: CASHMERE IS KING

1. EXECUTIVE SUMMARY

The objective of the Cashmere Programme is to establish a sustainable labour intensive cashmere agro- industry, thereby creating much needed employment and income generating opportunities in the high unemployment and poverty stricken rural areas of South Africa. This is to be achieved by upgrading the large number of indigenous goats through selective breeding, farmer training in farm and goat management and combing and by establishing a dehairing facility and SMEs to convert the processed yarn into high value cashmere garments and other products principally for the tourist and export markets. The project was launched in two provinces, namely the Eastern Cape and North West Provinces, where most of the indigenous goats are found, Since the implementation of the project in these areas was successful it was decided to extend the upgrading of the indigenous goats in two other areas in the Eastern Cape, namely at Lady Frere, Whittlesea, Thornhill, Nqamakwe and Zwelitsha.

Small farmers have been trained in better goat farming practices and systems as well as in the harvesting of cashmere fibre down from indigenous goats. A programme for upgrading the indigenous goats has been implemented. This involved setting up crossbreeding programmes in which indigenous goats are crossed with high yielding cashmere goats so as to increase the quality and yield of the fine down fibres.

Two pilot SMEs (one in each province) have been set up and training given in basic and advanced technical know how and skills in knitting to enable them to convert processed yarn into value added products. Infrastructure and other facilities have also been provided for the farmers and pilot SMEs. The two pilot SMEs are located at Hlomendlini in the Maluti area (Eastern Cape) and at Klipkuil in the Madikwe / Mankwe area (North West).

During the second quarter of the financial year Sustainable Villages Africa conducted an audit on behalf of DST on the projects, making certain recommendations concerning the future of the project.

The project was frozen at the end of November 2004 and has been incorporated into the Wool Beneficiation project. However, commitments made to stakeholders and to suppliers prior to this date have been honoured.

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2. INTRODUCTION

Cashmere, being the second finest animal fibre produced in fairly large quantities, has become the world's most sought after animal fibre today. This is because of its superb softness and comfort which are largely a consequence of its fineness, its average fibre diameter ranging between about 14 and 18,5 micron.

Cashmere harvesting is highly labour intensive and is ideally suited for small farmers who have a small number of goats and have close contact with their animals, enabling them to identify those animals with good cashmere producing potential and to know exactly when optimum shedding takes place at which stage the goats should then be combed. The utilization of the fibres as an additional source of income would make the goat flocks more profitable. Furthermore, the establishment of small agro-industries, which convert the fibre into the final product, with specific emphasis on tourist and export textiles, increase income generating and employment opportunities in rural areas substantially. For example, a knitted cashmere garment weighing 600 grams retails at between R800 to R1500, i.e. effectively about R2000 per kg. of fibre.

In 1996, the National Cashmere Working Group was formed in support of a growing awareness of the economic potential from adding value to down fibres from South Africa's indigenous goats. Since then, scientists and researchers from member organisations have been meeting several times to decide research priorities, review, analyse and compare research results from fibre samples collected countrywide, and discuss the overall viability and direction of the programme. After the first three years, the research team reported that the cashmere production industry had great potential in SA if the fibre quality and yield could be improved without a large capital outlay. The recommendation was the selective cross-breeding of indigenous goats using higher yielding cashmere producing goats. Cross breeding of this kind has been undertaken in the country since 1997, crossing imported Gorno Altai and Saffer goats with indigenous goats.

During the research period the project was funded by the CSIR and in 2001 the Poverty Alleviation programme of the Department of Science and Technology (DST) became involved in the project. The project was funded by DST to the amount of R5700 over a period of four years. The primary objective was to establish a cashmere industry in South Africa by involving and training sufficiently large number of farmers and by a selective/upgrading programme in order to produce higher yields of better quality cashmere fibre together with the establishment of small agro-industries which convert the fibre into final products.

3. OVERVIEW

The primary objective of the cashmere project is to establish a viable cashmere industry in SA, based on South Africa's rich indigenous goat population of around six million goats, of which 80% are in the possession of the poor. In order to achieve this objective it was firstly necessary to stimulate the quality, production and utilisation of the fine down of cashmere fibres as an additional source of income by encouraging and facilitating the upgrading of the animals owned by emerging farmers, so as to improve fine down fibre yield and quality and in the process to create much needed employment. It was also necessary to involve a sufficient number of emerging farmers in the harvesting of the fibre and to create SMEs which could convert the fibre into marketable products in the manufacturing of the yarn and marketing of unique South African character. A selective cross breeding programme of indigenous goats in each of the selected areas has been ongoing, using higher yielding and upgraded cashmere producing rams. Combs for combing the goats were provided to new stakeholders (farmers) who wanted to participate in the project. Animal health medicine and spraying equipment to spray the goats for lice and ticks were also provided to participating communities. In the process, skills upliftment of goat owners, who are mostly unskilled and unemployed rural people, took place particularly in terms of breeding improved goats, farm management and fibre harvesting. The two pilot SMEs, at Hlomendlini in the Maluti area (Eastern Cape) and at Klipkuil in the Madikwe / Mankwe area (North West), have received yarn for training purposes as well as to enable them to do their own knitting between training sessions.

At the end of last year the Maluti knitting group had to evacuate the classroom of the local school which they had occupied for four years and had no alternative but to store the knitting equipment in a safe place, waiting for a suitable venue to be provided. The knitting group at Klipkuil, which is occupy a building on the premises of the Research Station of the Department of Agriculture of North West are also in need of a permanent venue.

The 500 kilograms of imported dehaired fibre has been converted into a 60% cashmere/40% wool blend yarn, for knitting purposes. The yarn is to be supplied to the SMEs at Maluti and Klipkuil.

The finer and shorter types of cashmere which had been dehaired overseas, can be processed together with the 2003 and 2004 combing seasons dehaired fibre.

An audit was carried out by SVA on behalf of DST, the audit report containing some valuable insights and recommendations.

3.1 Establishment of a market

Area/Activity	Market	Value
Maluti – EC - farmers	Cashmere fibre	R4 800
Other areas – EC farmers	Cashmere fibre	R17 800
Klipkuil - NW - SMEs	Knitted products	± R26 000
Maluti – EC - SMEs	Knitted products	± R26 000

3.2 Project employment

3.3 Opportunities

Localities	Activities	No. of Participants
Klipkuil - North West:	Farming	20
	SME	5
Maluti / Hlomendlini - Eastern Cape:	Farming	35
	SME	8
Other Areas - Eastern Cape Allen Water, Mount Arthur, Thornhill Nquamakwe and Buffalo City	Farming	80

4. Progress/Development

4.1 Achievements

1) Project Planning and Facilitation with Stakeholders and Community

- PMS and Project Planning were done using the allocated funds of kR 1500.
- Ongoing contact was maintained with existing stakeholders.
- Animal medicine, spraying equipment, machine spares and repairs to knitting machines were organised and provided.

- New stakeholders (150 goat owners) were encouraged to participate in the combing of their goats and to upgrade their existing animals to produce better fibre yield and quality

2) Farming - General

- The upgrading programme, involving the crossing of indigenous goats with higher yielding cashmere producing rams, was continued, the total number off-spring being increased from 670 to 1135.
- Sixteen pure cashmere rams which, were acquired during the previous financial year, have been released to various goatherds in the Eastern Cape for the upgrading of existing animals.
- Combs for combing the goats were provided to approximately 200 goat farmers.
- A growing number of emerging farmers (from 89 to 180) have harvested the cashmere from their goats.
- Harvested cashmere has increased steadily over the past four years reaching 120kg., during 2004 with the number of goats combed having increased from 2200 to 4000.
- The fibre quality (fineness and length) of the upgraded animals is substantially better than of the original goats.

3) Sub Projects

a) Klipkuil - North West:

- The upgrading programme, involving the crossing of indigenous goats with higher yielding cashmere producing rams was continued and approximately 17 farmers participated in the programme.
- Twenty five lambs were born during the past year.
- The knitting group received three weeks of aftercare support and training in knitting. The knitting group have also received training in new designs using cashmere/wool yarns
- The knitting group has also received ± 250 kilograms of knitting yarn enabling them to undertake their own knitting during and between the aftercare support. Knitting machine spares and repairs to the machines have been provided.

b) Maluti / Hlomendlini - Eastern Cape:

- The upgrading programme, involving the crossing indigenous of goats with higher yielding cashmere producing rams, was continued. Approximately 90 farmers participated.
- The total number of off-spring has increased from 670 to 1110.
- Supplementary dip and vaccine, supplied to the goat farmers for the dry spring and summer months, have resulted in a healthier goatherd and improved fibre quality.
- Twenty five cashmere farmers have produced 30 kg. of cashmere fibre from their ± 650 upgraded goats.
- The knitting group has also received ± 250 kilograms of knitting yarn enabling them to undertake their own knitting during and between the aftercare support services
- Machine spares and repairs to the machines have also been provided.

c) Other Areas - Allen Waters and Mt Arthur - Eastern Cape

- The EC Department of Agriculture has sponsored the acquisition of an additional number of upgraded rams for three farming communities in the EC, namely Allen Water, Mount Arthur and Nquamakwe
- In spite of the dry months (weather and sparse grazing conditions) the medicine (dip and vaccine) supplied to the farmers has contributed to the animals being in a healthy condition.
- From these areas, 70 cashmere producers have supplied a total of 80 kg. of combed hair during the 2004 season.

4) Processing

- The relatively long coarse quality, which makes up some 50% of the 200 kg. of dehaired fibre, which was dehaired overseas, has been successfully processed on the woollen system into a 30/70% cashmere/wool blended yarn
- Fibre yield determination and quality testing / evaluation were carried out on 860 samples received from producers for the 2004 combing season, so as to assess what improvements have taken place compared to the previous season.

- A second hand dehairing machine, which separates the fine down component (cashmere) from the coarse (guard hair) component, has been acquired and commissioned at the CSIR/NFTCC. where it is now being incubated.
- The 500 kilograms of imported dehaired fibre have been converted into a 60% cashmere/40% wool blend yarn, for knitting purposes. The yarn is to be supplied to the SMEs at Maluti and Klipkuil

4.2 Difficulties

- Obtaining a knitting venue for the Maluti group.

4.3 Participant figures (Table 3.1 of QR)

5. Project Activities

5.1 Training (Table 3.2 of QR)

5.2 Workshops

None

5.3 Handover Ceremonies

None

6. Outputs

6.1 Human Resource Development

- Transfer of technical skills to farmers, including goat farming practices, selection/upgrading of animals, combing of cashmere, animal health and breeding practices
- Transfer of technical knitting skills to knitting groups

6.2 Infrastructure and Equipment (Table 3.3 of QR)

7. Financial Report

Year	Budget	Expenditure	Roll over requested
2001/2	1000	786	
2002/3	900	581	
2003/4	2300	607	
2004/5	1500		

7.1 Inputs/Expenditure/Roll over (Table 2.2, 2.3 & 2.5 of QR)

8. CONCLUSIONS

- The implementation success of the project can be measured by the growing number of emerging farmers participating in harvesting their cashmere, the steady increase in the number of goats combed and fibre harvested , the number of animals being upgraded and the improvement in fibre quality.
- It represents a way of diversifying existing agricultural resources without a large capital outlay. The project provides the farmers with the opportunity to earn an additional income from the present animals by improving the present animals in such a way that they can earn an additional income from the hair harvested from the goats.
- Broadening the farming base and harvesting of cashmere into surrounding areas/provinces is essential for the economic viability of the envisaged dehairing plant, which would be capable of separating the fine cashmere fibres from the coarse guard hair. This will also ensure the sustainability of other downstream enterprises together with the research into new products and markets as well as supporting existing and newly established SMEs and their infrastructures.