

REPORT: PHASE I



SOUTH AFRICA
MOHAIR
CLUSTER



SUSTAINABILITY
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projects

UNDERSTANDING SUSTAINABILITY OF MOHAIR VALUE CHAIN IN SOUTH AFRICA

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EXECUTIVE SUMMARY

South Africa is a key player in the global mohair production industry, and contributed 53% of global production in 2016. Given the important role of mohair production, in the IPAP 2016/17 - 2017/18, the Minister of Trade and Industry, Dr Rob Davis, named the Mohair Cluster among the clothing and textile sectors that would be promoted to enhance its competitiveness. To support the renewed interest for demand driven interventions, increased mohair production, and the promotion of overall competitiveness, this report presents a Mohair Primary Production Echelon Model (MoPPEM). The model was developed using the System Dynamics approach, to identify, *visualize and quantify the major components of the mohair production value chain, including an assessment of their interrelations, as described by industry stakeholders.*

The key messages and insights from the MoPPEM include the following:

General / overall insights

- Desirability of farming will improve if the boom and bust cycle of the mohair industry is stabilised. In times of unstable price, new farmers are the ones with high likelihood to leave the business or have the most significant financial loss. Creating a conducive environment to stabilise the price would be essential to support the young primary producers and those new to the industry.
- Broad-Based Black Economic Empowerment (B-BBEE) in mohair industry focuses on the Kapaters. MoPPEM was developed in such a way that Kapaters and Breeding Goats are represented separately. Going forward, this will provide the opportunity for future exploration on the role of B-BBEE in the mohair value chain.
- Mohair price appears to be on the rise. However, a decline in Angora goat production would lead to the erosion of the cost advantages that the primary producer obtains from scale of operation. Thus, the unit price change may not be necessarily proportional to the change in unit production cost.

Elke jaar is 'n maer jaar' (Every year is a lean year) scenario insights

- A long period of drought would drive the Angora primary producers out of business, which in turn may result in extinction of the industry. It is crucial to identify measures to make intensive farming profitable.

Genetic oriented scenario insights

- A genetic programme has the greatest long-term influence on Angora goat production relative to other scenarios and any other model parameter examined. Hence, a genetic programme represents an important leverage point for Angora goat production. A genetic programme is not a quick fix. Positive outcomes from such a programme can only be reaped after continuous, diligent farming over several years.

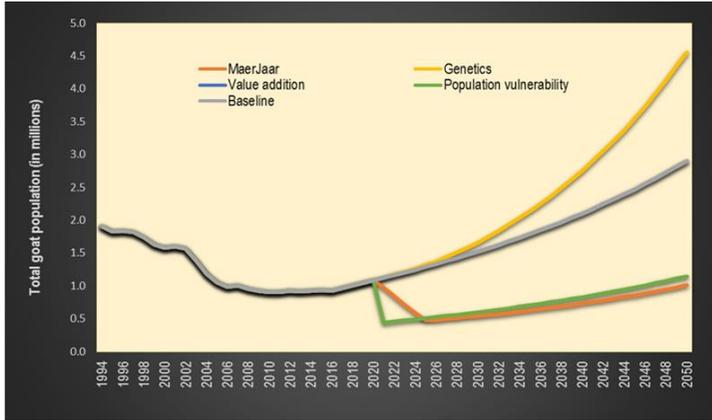
Total value addition scenario insights

- Extra income from meat, skin or related activities can contribute to improving the mohair quality without necessarily relying on mohair price. This is because mohair quality increases due to increase in demand per supply fraction. The demand per supply fraction is influenced by the carrying capacity as well as income from value adding related activities - meat and skin.

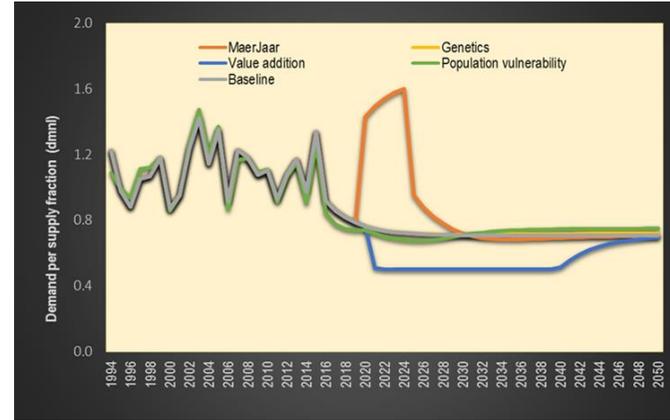
Population vulnerability scenario insights

- There are short-term vulnerabilities in the mohair industry that can have lasting effects on the sustainability of production. These vulnerabilities include predators, fires and theft. It is crucial for the industry as a whole to anticipate and manage these risks.

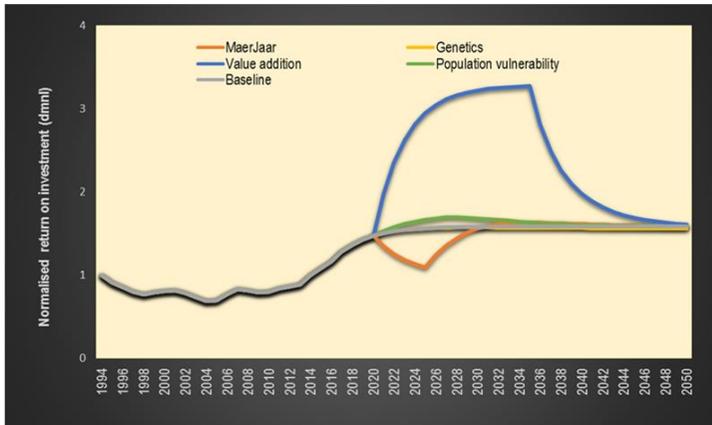
APPENDIX: SCENARIOS COMPARISON FOR KEY INDICATORS



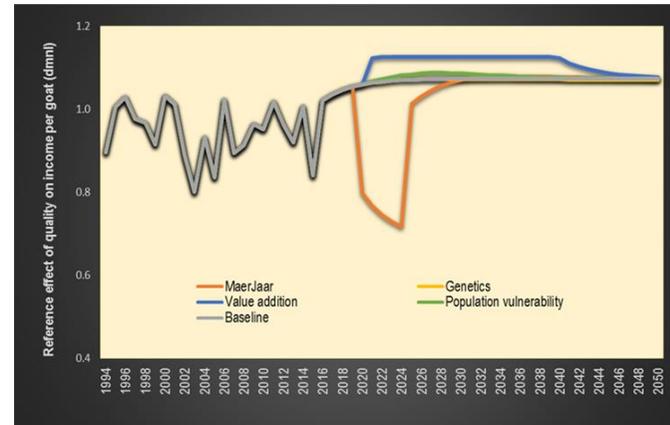
a) Total goat population scenarios comparison



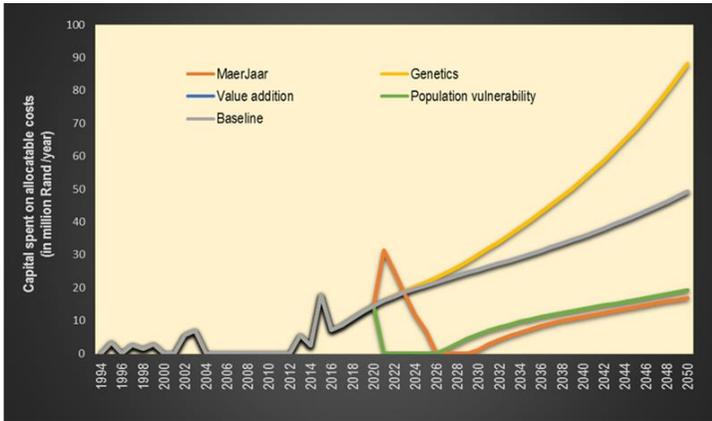
b) Demand per supply fraction scenarios comparison



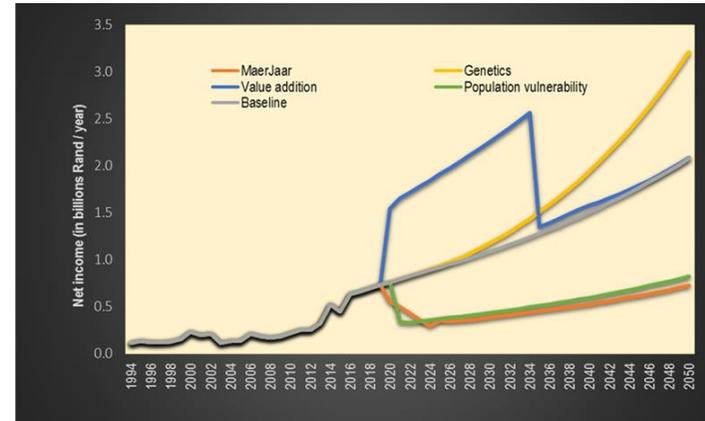
c) Normalised return on the investment scenarios comparison



d) Effect of quality on income per goat scenarios comparison



e) Capital spent on allocatable costs scenarios comparison



f) Net income scenarios comparison