



South Africa

Republic of South Africa



Key facts: Agriculture in South Africa



Agriculture generates valuable export revenues through a variety of products.



Almost 80% of South Africa's land area is used for agriculture, but only a small share is considered arable and even less with a high agricultural potential.



South Africa has lost 25% of its tree cover since the year 2000, also due to agricultural land expansion. Since the early 2010s, forest area has started to increase again.

Key areas with high mitigation potential

Three mitigation options are highlighted here that are important in the national context due to the share of emissions produced from the activity, the magnitude of possible emissions savings, and feasibility of implementation. These 3 measures form part of a broader set of measures that would be needed to address agricultural emissions in the country, especially demand side measures that reduce the consumption of animal products as well as well as increase carbon sinks.

CO_2 Restoration of degraded pastures

Improving livestock management practices, e.g. through rotational grazing systems and managing the stocking rate, intensity, and duration of grazing.

CO_2 No-till cropping systems

Shifting from conventional tillage systems, where soil is turned to control for weeds and pests and for seeding preparation, to low- or no-till systems with minimal to no soil and residue disturbance, for increased soil organic carbon stocks and decreased on-farm energy use.

N_2O CH_4 Livestock emissions intensity reduction

Improving management practices for health monitoring, disease prevention, breeding, diet, and manure handling.

Key challenges for implementing mitigation measures



Access to financial and information services to improve farming practices, particularly for smallholder farmers.



Climate change impacts exacerbate poor quality forage conditions and pest and disease outbreaks, potentially limiting the adoption of good practices.



Socio-economic structures and poor design and implementation of policies and programmes, particularly to reach Black farmers.

Recommendations for enhancing mitigation in the agricultural sector



Expand knowledge dissemination on sustainable practices, particularly to smallholder farmers.



Plan agricultural production under increased frequency of droughts, to increase the resilience of the sector and decrease volatility of food supply.



Strengthen cooperations with exporters of sustainable products, which can often generate higher revenues and they are likely a growing market going forward.



Leverage international support, including capacity building and technology transfer.

Sources for data on emissions: FAO (2022): Emissions Totals [Dataset]. <https://www.fao.org/faostat/en/#data/GT>; Gutschow, J., Günther, A., & Pflüger, M. (2021). The PRIMAP-hist national historical emissions time series v2.3 (1750-2019). <https://doi.org/10.5281/zenodo.517515>.