

# Land reform: Look closer at subdivisions, adequate farm sizes, says researcher

The process of land redistribution can be made more successful if more attention is given to providing benefiting emerging farmers with farms that are of an adequate and manageable size. This means that current legislation with regards to the subdivision of agricultural land into economic units needs to be revised. This according to Dr Siphe Zantsi, who received his PhD in agricultural economics on the topic from Stellenbosch University during the institution's March graduation ceremony.



sandro mattei via [Unsplash](#)

Zantsi's studies formed part of a joint project between the SU Department of Agricultural Economics in the SU Faculty of AgriSciences and the Socio-Economic Research Group of Agroscope, the Swiss Confederation's centre of excellence for agricultural research. His supervisor was Prof Nick Vink of the SU Department of Agricultural Economics.

As part of his PhD work, Zantsi developed a new method called agent-based modelling (ABM) to find better solutions for implementing land reform.

Through his research, Zantsi identified five main reasons why land redistribution in South Africa has failed in the past.

**These include:**

- Inadequate support services to new entrants into farming;

- Poor beneficiary selection;
- The handing over of commercial farms that are too large for new entrants to manage;
- Lack of farming skills among the beneficiaries, and
- The reluctance of the state to provide beneficiaries with freehold titles.

Zantsi's studies took particular note of finding solutions to improve beneficiary selection and solving the issue of the size of commercial farms. These issues must be solved, as they were already raised in the Land Reform and Agricultural Advisory Panel of the South African government in 2019.

Regarding beneficiary selection, the study developed a farm advertisement template that should be placed in the media as part of standard operating procedures. This will reduce the opportunities for elite capture and the chances of the selection of ill-suited beneficiaries.

"If implemented, this method will promote transparency and accountability while capturing beneficiary aspirations," says Zantsi. "This will also address the lack of human capacity in the Department of Agriculture, Land Reform and Rural Development and make the work of land reform committees proposed in the National Development Plan easier," says study supervisor and agricultural economist Prof Nick Vink of SU.

According to Zantsi, current commercial farm sizes are too large for new and inexperienced emerging farmers to effectively manage. However, the Subdivision of Agricultural Land Act of 1970 is still effective. It prohibits the subdivision of agricultural land into sizes that are not considered to be a viable economic unit.

As part of his research, Zantsi considered what a viable farm size would be for emerging farmers who are benefiting from land redistribution. He first calculated a viable farm size for different types of emerging farm households by using the income aspiration of emerging farm households as a benchmark. Low, moderate and high aspirant emerging farm households were included in his study.

## **Subdividing optimally among emerging farmers**

For all the three types of emerging farm households, he found that farms smaller than current commercial farms would be of value for high-value enterprises such as orchard farms. Farm sizes will have to be larger than this for field crops and extensive livestock farms, but still smaller than current commercial farms, except in the case of farmers with high-income aspirations, where current commercial farms meet their needs.

The farm sizes were used as subdivision factors to explore how commercial farms intended for redistribution can be subdivided optimally among emerging farmers. These subdivision factors were applied to the agent-based model that Zantsi developed to model South African land redistribution.

The results show that it would be possible to subdivide land redistribution farms in a manner that satisfies the aspirations of emerging farmers, in terms of viable farm size and farm enterprise.

"These findings provide practical help in the development of farm subdivision policies as recommended in the Land Reform and Agricultural Advisory Panel delegated by the presidency in 2019," says Zantsi.