# Johannes Jacobus (Hannes) Gerber

NAME OF FIRM: OABS	Development (Pty) Ltd
NAME OF STAFF: Johan	nnes Jacobus (Hannes) Gerber
PROFESSION: Agrice	ultural Scientist
DATE OF BIRTH: 21 No	v 1964
NATIONALITY: South	African



#### QUALIFICATIONS

1986 1987 1990	<ul><li>B.Sc. (Botany, Geology), Nelson Mandela University (then University of Port Elizabeth)</li><li>B.Sc. Hons (Botany), Nelson Mandela University (then University of Port Elizabeth)</li><li>Post Graduate Diploma in Terrain Evaluation, North-West University (then Potchefstroom Universiteit vir</li></ul>
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1994	M.Sc. (Botany), University of KwaZulu-Natal (then University of Natal, Durban Campus)
1998	Diploma in Agricultural Policy Analysis, University of Stellenbosch
2002	Diploma in Public Service Management, University of Witwatersrand.

### EXPERIENCE

Mr Gerber started his career in 1988 as an Agricultural Scientist based at the Grootfontein Agricultural Development Institute in Middelburg EC. From 2003 to 2011 he held the position of Deputy Director for Research in the Northern Cape Department of Agriculture, Land Reform and Rural Development, based in Upington.

From 2011 to the start of 2024, he held the position of Scientfic Manager (B) in the Department. He left the Department at the start of 2024 and established himself as an agro-ecological advisor.

Through his career, he has been actively involved in a variety of research projects and programmes in the arid Northern Cape over a period of more than 36 years, working for the Northern Cape Department of Agriculture, Land Reform and Rural Development. These range from studies on the carbon metabolism of indicator karroid species to long term grazing trials to research on cultivated crops including grapes, lucerne and cotton. He has been involved in Rooibos research in collaboration with various research institutions since 2009.

Due to the vastness of the Northern Cape Province, he invested a great amount of time to the development and establishment of remote sensing technologies and applications for agriculture in the Northern Cape Province. He established a network of reference farms in collaboration with Agri Northern Cape and through this assembled a strong long term vegetation condition and rainfall database.

He made numerous presentations at scientific congresses, information and farmer days and are regularly invited for presentations at Agri-Northern Cape events. He ccontributed several articles in scientific and popular publications. The most recent being "TREND ANALYSIS OF LONG-TERM RAINFALL DATA IN THE UPPER KAROO OF SOUTH AFRICA, Transactions of the Royal Society of South Africa, 2020" and "EVALUATING SEVERAL VEGETATION INDECES DERIVED FROM SENTINEL-2 IMAGERY FOR QUANTIFICATION OF LOCALIZED

### CURRICULUM VITAE

## Johannes Jacobus (Hannes) Gerber

OVERGRAZING IN A SEMI-ARID REGION OF SOUTH AFRICA, Journal of Remote Sensing Special Issue, April 2022 "Monitoring Crops and Rangelands Using Remote Sensing".

He is co-author of a recent study "ENVIRONMENTAL BASELINE REVIEW OF THE CORE AREA AND SURROUNDS OF THE SQUARE KILOMETRE ARRAY (SKA) SAEON TECHNICAL REPORT, FEBRUARY 2021" Through his research, strong linkages have been forged with Universities, Research Institutions, Commodity Organizations and farmers. Information generated over time has been used in the drafting of numerous large scale agricultural development plans with the aim of unlocking the potential of new and emerging farmers through agricultural production. Some of the many projects include:

- 1) Richtersveld agricultural development of Alexcor Farms along the Orange River
- 2) Goodhouse Paprika Development
- 3) Witbank Lucerne Development
- 4) Riemvasmaak development plan
- 5) BLOCUSO Vineyard Development
- 6) Nieuwoudtville Rooibos Processing Plant
- 7) Styrkraal date and raisin development

He has also been involved in projects at Kono, Manyeding, Moshaweng and Heuningvlei. left the Department of Agriculture, Land Reform and Rural Development at the start of 2024 after 36 years of service.

Mr Gerber has recently completed an Oppeheimer Foundation funded study on the "Historical relationship between fire regime and vegetation structure on Tswalu Wildlife Reserve" where remotely sensed data were used to map veld fires and bush density from 1988 to 2023. He is currently involved in a Southern African Science Service Centre for Climate Change and Adaptive Land Management (SASSCAL) project in collaboration with the University of North West.

### MEMBERSHIP OF PROFESSIONAL ASSOCIATIONS:

Grassland Society of Southern Africa (GSSA)