

EQUAL ENVIRONMENT – YEAR 2030

Government committed to environmental rural development

Regional and national leaders realized in the early 2010s that the long-term foundation of South Africa's economic growth is reliant on the diversity of natural and social capital in the "Rainbow Nation". In 2015 they started a nation-wide campaign under the slogan 'Sustainable South Africa through Rural Investments for Poverty Alleviation' (SA-RIPE), showing their devotion to sustain the substantial natural resource base, by investing in the majority of the population living in rural areas. Over the past 15 years, there have therefore been massive investments in rural development in South Africa, including investments in agriculture, infrastructure (e.g. roads, internet and mobile networks), health care, water and sanitation systems and education. This has resulted in poverty alleviation and a growing middle-class, slightly reducing the gap between rich and poor.

Corruption at all levels in society has successfully been decreased over the past years. Consequently, in the year 2030, people in the Upper Thukela region generally have a large trust in, and respect for, decisions made by local, as well as national, governments. However, petty crime conducted by smaller groups or individuals, is still an issue influencing people's daily life negatively.

Many people take advantage of opportunities that the improved infrastructure provides. However, there is also a general perception that the substantial hand-outs and subsidies from the government have made people passive and their entrepreneurial and business spirit is weakened.

HIGHER COSTS FOR COMMERCIAL FARMERS

Agriculture is still the most important income source and occupation for the population in the Upper Thukela region. The situation is, however, quite challenging for the commercial farmers in the area. The regulations on the use of chemicals and GMO's have led to increased input costs and slightly reduced crop yields for commercial farmers. They are also negatively affected by higher tax-rates. Water use for irrigation is strictly controlled and the enforcement of the water laws has improved since the early 2010's. Water charges are high, as a measure to secure the country's long-term water supply, and increased electricity costs make irrigation equipment prohibitively expensive to run. Although small, there is a clear trend of commercial farmers selling their lands to neighboring farms, or to land claimants, as they turn to various kinds of businesses and employment, such as contracting of machines, consulting, mentoring of emerging farmers and running factories for food processing and packaging.

AGRICULTURAL SMALL-HOLDER BOOM SLOWS DOWN URBANIZATION

While some of the commercial farmers are struggling, small-holder farmers have increased their shares in the agricultural market throughout the country, in turn contributing more to the country's tax returns. Initially free or subsidized input products such as seeds, fertilizers and soil amendments, as well as mechanized support for planting and har-

vesting, have improved the productivity of the small-holder farms. The government's commitment to improving infrastructure and agricultural education in rural communities has slowed down the movement from rural to urban areas significantly, although higher education and better-paid jobs still attract some people to move to cities, for at least a period of their lives.

HEALTHIER GRASSLANDS AND HIGHER BIODIVERSITY

There have been clear environmental benefits of the SA-RIPE campaign. South Africa has, for example, become one of the world's leading countries when it comes to governing the use of chemicals and GMO crops. Despite substantial development and economic growth, the protection of national reserves has remained strong in these rural areas. A zoning system has been developed around the Drakenberg parks in the Upper Thukela, where communities living close to parks are involved in maintaining biodiversity and ecosystem values on their lands. There have also been many new governmental incentives, such as "payment for" and "working for" ecosystem services programs, creating financial incentives, and jobs, in order to manage land according to the country's new biodiversity conservation agenda.

This has improved grassland management through more regulated livestock keeping and fire management practices for both private and communal grazing lands, which has led to improved grasslands quality, where soil erosion has slowed down, resulting in better nutrient status, higher grass productivity, better quality water flows and higher carbon sequestration rates. Biodiversity loss in grasslands has slowed down and some grasslands are becoming richer in species diversity.

Many commercial, as well as small-scale, farmers in the Upper Thukela region have committed to the authorities' new agri-environmental scheme to secure biodiversity within and outside protected areas in the Drakensberg. This commitment involves reducing and controlling chemical use, creating buffer zones along water bodies, as well as providing natural habitats for pollination and pest controlling species adjacent to fields.

...ATTRACTS TOURISTS

The attractive nature of the area, together with upgraded tourist routes and tourism infrastructure, has led to a tourist boom in the region, mainly through international tourists, but also from within South Africa. This has the potential to create opportunities for both commercial and small-holder farmers to increase their income, but the interest in being involved in businesses outside agriculture is somewhat limited. Some commercial farmers, and a few smallholder farmers, have developed upmarket Bed & Breakfast establishments and other accommodation on their farms as an additional income source. :•:

WRITTEN BY REBECCA MALINGA, LINE GORDON AND REGINA LINDBORG, BASED ON INTERVIEWS AND WORKSHOPS WITH STAKEHOLDERS IN UPPER THUKELA, KWAZULU-NATAL

"This has improved grassland management through more regulated livestock keeping and fire management practices for both private and communal grazing lands."

Private investors drive rural development

The Upper Thukela region is one of the areas in South Africa that has benefited from global climate change. Higher rainfall and warmer winters have increased agricultural production and the region has become a significant supplier of agricultural goods to other parts of South Africa that have been detrimentally affected by climate change. This has led private national and international companies to invest in this profitable region. Most of the investments have gone to private, large-scale commercial landholders. The government is, however, being criticized by a large majority of the population for taking little responsibility of the country's development. Thus, private companies have over the past two decades carried out most of the investments to improve infrastructure, such as roads and communication technologies. General investments in health care and education have been lacking. There are clearly some people who are better off in 2030 than in 2010, but the huge inequalities in access to basic infrastructure, hospitals, water and sanitation, still persist.

Corruption among governmental officials and the police force is a significant problem, and political instability and weak enforcement of laws has created tension throughout the country, resulting in high crime levels.

COMMERCIAL FARMERS GO GENETIC OR ORGANIC

Commercial farmers benefit from improved weather conditions and investments in general. Many farmers have also developed their adaptability and improved the capacity to respond quickly to fluctuating demands through investments in more flexible agricultural infrastructure, as well as more diverse cropping systems. There are two simultaneous trends among the commercial large-scale farmers, leading to diversification of the produce coming from the Upper Thukela region. The dominant trend is one of increasingly high-tech and high-input crops (e.g. high levels of genetically-modified crops, fertilizers and pesticides), including biofuels. The other trend among a significant number of the commercial farmers is in response to a raised global demand for ethical and organic trade: the creation of the local niche market association "Drakensberg Sustainably Produced Agricultural Products".

The rise in organic produce shows an interesting mental shift from the early 2000's when there was a general skepticism towards chemical-free agriculture. This shift came after a success case in 2013, where a large food production chain, WALLEES, initiated a successful collaboration with one of the commercial farmers, who tested new ways of high-diversity organic farming. This project also started a training program for smallholder farmers surrounding the commercial farmer's property, developing into a unique collaboration among small-holders and large-scale farmers. The WALLEES organic farming training camps have led to substantially higher yields among participating farmers. Mechanisms to facilitate the export of agricultural goods have also improved, including new processing factories that have started taking in produce from both commercial and small-holder farmers in the region.

"Corruption among governmental officials and the police force is a significant problem, and political instability and weak enforcement of laws has created tension throughout the country resulting in high crime"

SUCCESSSES AND FAILURES FOR SMALL-HOLDER FARMERS

Despite a more favorable climate, there are many small-holder farmers who still struggle with low agricultural productivity, due to low investments in agricultural inputs, knowledge and technologies. Income levels in the rural communities are generally low and unreliable, and there is large migration from the region. Many people move to cities, take sporadic and seasonal employment, and relocate, to follow shifting commerce and businesses. However, the farmers that have managed to secure improved yields, have become quite successful and have extended their lands by taking over fields from migrating neighbors. This means that the average land holding for farmers in the area has grown, while the number of farmers has declined. The small, but relatively influential, group of successful small-scale farmers has become more agriculturally commercialized and is competing on the local market. These families generally have a higher level of education and a higher income.

GRASSLAND AND BIODIVERSITY CONSERVATION SECURE BUT THREATENED

National and global companies and individuals have taken increased responsibility for their greenhouse gas emissions, by making compensation payments through carbon offset programs. This has become a new source of funding for the protection and establishment of nature reserves in the region and has generally improved the protection of the biodiversity rich grasslands. In a few places, these carbon-offset funds are also used to create jobs for some local communities in the area, especially the ones located higher up in the catchments and adjacent to the protected areas. Soil erosion and water flows in these grazing lands are being managed through practices taught by researchers and practitioners from the nature reserves and carried out by community members. In the places where the program is run, the results are satisfactory. However, keeping livestock has also become more risky because of stock theft. The risk of stock theft, and the increased trade of cannabis, have driven livestock grazing higher up in the mountains, increasing erosion and threatening biodiversity in and outside national parks and nature reserves. It has also resulted in increased grazing closer to the villages, where high cattle numbers have accelerated erosion and land degradation, while some of the grazing lands are abandoned.

FENCED-IN TOURISM

Tourists are still attracted by the beauty of the national parks and nature reserves in the region and visitors are steadily increasing. The high crime level, however, means that the tourism is concentrated in fenced-off places with high security, hence very few of the local inhabitants can benefit from the increased number of visitors. ❄️

WRITTEN BY REBECCA MALINGA, LINE GORDON AND REGINA LINDBORG, BASED ON INTERVIEWS AND WORKSHOPS WITH STAKEHOLDERS IN UPPER THUKELA, KWAZULU-NATAL

Farmers join forces to adapt to climate change and reverse land degradation

”The collaborative spirit, together with increased engagement of local leaders, has also led to increased respect for laws and agreements.”

COLLABORATIVE FORCES CHANGED NEGATIVE TRENDS

The Upper Thukela has during the past 20 years suffered from several extreme weather events that have had huge influence on agricultural production. Frequent floods, long periods of droughts, lower winter temperatures and late frosts have caused repeated damages to both crops and livestock. The economically weak and largely corrupt national government has not been capable to fund the recovery of economic losses caused by these weather events. The local government lacks the ability and money to invest in development of the rural communities in the area and only very minimal efforts are carried out to maintain infrastructure and basic social services, such as schools and health care. Many years of crises and a low trust in the government has, however, brought together other forces to handle the difficulties and uncertainties of the society. National and international NGO's play an increasing role in the development and capacity-building among communities and the less wealthy part of the population. For example, XING, an international IT-company based in China, has made large investments in communication infrastructure, and has provided schools with Internet and e-learning tools. This has opened up some work opportunities for the younger generation in e.g. web design and web trade.

The collaborative spirit, together with increased engagement of local leaders, has also led to an increased respect for laws and agreements. Levels of criminality are kept stable in the communities, but overall in the society, crime remains a big problem. Family values and religion tend to grow stronger.

COMMERCIAL FARMERS MORE RESILIENT TO WEATHER FLUCTUATIONS

The commercial farmers are generally more resilient than the small-holder farmers to climate fluctuation, since they have access to large-scale irrigation systems and their grazing lands are healthier, with better management. Nevertheless, production has been very unreliable over the last 20 years. While farming is still profitable for many, there is a growing number of the farmers that give up and move to sub-urban settlements, overseas, or find alternative income sources and businesses. Collaboration and business partnership between commercial and small-holder farmers have become more noticeable, and some commercial farmers are involved with capacity-building and mentor programs in small-holder communities.

LOCAL INVOLVEMENT HELPS IMPROVING POVERTY AMONG SMALL-HOLDER FARMERS

The poor rural communities are the most vulnerable to the more variable and unfavorable climate. Although agriculture is still the most important livelihood for small-holder families, other income sources, such as handicrafts, tourism, teaching, nursing, seasonal commercial farm work and involvement with local organizations, have become increasingly important. Lack of job opportunities, insufficient social grants and low agricultural production mean that a large part of the population remains poor. Some people abandon agriculture as an oc-

cupation and move to cities and towns. To a large extent, most families rely on remittances from their migrated family members.

This tough situation has forced new collaboration among community members. Through common investment in supplementary irrigation systems and machines, and by cultivating larger fields together, some people have managed to increase the productivity of their lands. Cooperatives have emerged and community saving funds have become more important for many community members.

NGO's have supported establishment of gardens to the communal farmlands, integrating trees, flowers and vegetables, which has led to increased food security and species richness of flora and fauna. Strong efforts made by NGO's and local organizations, with a high participation of community members, have led to raised awareness among the population in the rural communities regarding sustainable farming and land management, where local traditional knowledge is successfully integrated with modern knowledge.

LATE, BUT IMPORTANT, RECOVERY OF DEGRADED GRASSLANDS

Cold winters, droughts and unusually dry springs during the years 2014 – 2018 had severe consequences for the livestock keepers, as many of the animals died. However, the rapid decline in grazing pressure has had a positive effect on recovery from erosion. Grazing management has become an important issue on the local agenda and some communities are successfully involved with payment for ecosystem services programs, where organizations are being paid by governmental and private funds to manage ecosystem services, such as water and soil erosion regulation. Locally constituted committees are being trained to run and monitor restoration and maintenance of degraded grasslands and gullies. The payment for the work is not always sufficient, nor efficiently handled, by authorities, due to corruption and the lack of government support, but the direct benefits of the work by the communities are so obvious that the program is nevertheless being continued and the commitment is high among the community members. The commercial cattle holders have also made collective efforts to adapt their grazing management as a response to the variable weather, with positive results for most farmers.

RURAL HOMESTAYS ATTRACT WORLD-TRAVELLERS

Tourism has become an increased source of income for many families in the region. International and national visitors travel mainly to the national parks and nature reserves, although more and more tourists are interested in visiting rural communities and the agricultural countryside. Reduced crime rates resulting from increased community involvement and loyalty, as well as land availability, have opened up opportunities for both large- and small-scale farmers to build B&B's in the rural communities and attract backpacker tourists with their 'traditional African homestays' in flourishing gardens. ✨

WRITTEN BY REBECCA MALINGA, LINE GORDON AND REGINA LINDBORG, BASED ON INTERVIEWS AND WORKSHOPS WITH STAKEHOLDERS IN UPPER THUKELA, KWAZULU-NATAL