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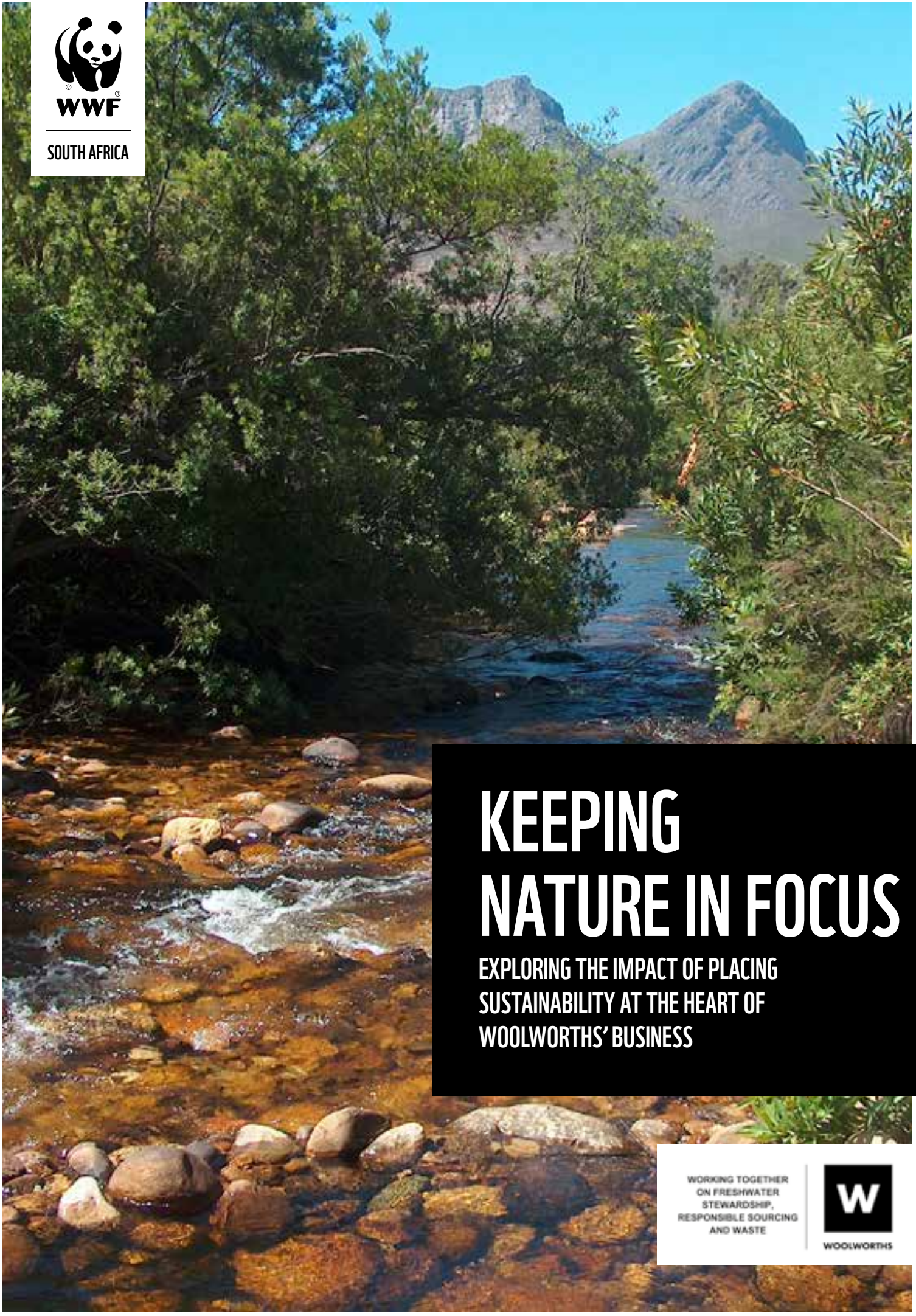
SOUTH AFRICA



KEEPING NATURE IN FOCUS

EXPLORING THE IMPACT OF PLACING SUSTAINABILITY AT THE HEART OF WOOLWORTHS' BUSINESS

WORKING TOGETHER ON FRESHWATER STEWARDSHIP, RESPONSIBLE SOURCING AND WASTE

WOOLWORTHS

Collaborators
Marine: Pavitray Pillay, Monica Stassen*
Freshwater Stewardship: Helen Stuart, Klaudia Schachtschneider*
Sustainable Agriculture: Shelly Fuller, Mkhululi Silandela
Supply Chain and Consumption: Mkhululi Silandela, Luyanda Njanjala, Tatjana von Bormann*
* No longer at WWF South Africa

WWF editorial team
Wanika Davids, Pavitray Pillay

Text editor
Marlene Rose

Proofreader
Lindsaye Mc Gregor

Design and layout
Karen Lilje at karenliljedesign.com

Cover photo
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For more information, contact Pavs Pillay at ppillay@wwf.org.za or info@wwf.org.za

WWF is one of the world's largest and most experienced independent conservation organisations with over 6 million supporters and a global network active in more than 100 countries. WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable and promoting the reduction of pollution and wasteful consumption.

WWF South Africa is a national office in the global WWF network. Started in South Africa in 1968, we are a local NGO with a vision of building a sustainable and equitable future in which humans and nature thrive. We work to champion the Earth's capacity to provide a source of inspiration, sustainable food, fresh water and clean energy for all. For Nature. For You.

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ABBREVIATIONS AND ACRONYMS

ASC	Aquaculture Stewardship Council
BCI	Better Cotton Initiative
BGCMA	Breede Gouritz Catchment Management Agency
BWT	Breedekloof Wine and Tourism
cfu	Colony forming unit
E. coli	*Escherichia coli*
FCP	Fisheries Conservation Project
FIP	Fishery Improvement Project
GBJ	Good Business Journey
GEF	Global Environment Facility
GHG	Greenhouse gas
IAP	Invasive alien plant
IUCMA	Inkomati-Usuthu Catchment Management Agency
LCA	Life Cycle Analysis
MoA	Memorandum of Agreement
MoU	Memorandum of Understanding
MSC	Marine Stewardship Council
NGO	Non-governmental organisation
OPRL	On-pack recycling label
PES	Paying for Ecosystem Services
RSPO	Roundtable on Sustainable Palm Oil
SABS	South African Bureau of Standards
SADSTIA	South African Deep-Sea Trawling Industry Association
SANBI	South African National Biodiversity Institute
SIZA	Sustainability Initiative of South Africa
UCP	UmZimvubu Catchment Partnership Programme
WRAP	Waste and Resources Action Programme
WSA	Water Source Area
WWUA	Wolseley Water User Association

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KEY PARTNERSHIP FACTS

Woolworths and WWF South Africa have worked together since 2016 on sustainable farming and sourcing, water, carbon and waste to drive efficiencies and reduce negative environmental and social impacts in the entire supply chain and operations.

This report examines Phase 2 of the WWF-Woolworths Transformational Partnership, spanning from 2016 to 2021. Its primary aim is to reflect upon the key lessons learnt and impacts achieved during this period. The report highlights the various collaborative work streams undertaken and incorporates insights from the staff members involved in the partnership. It aims to celebrate the successes attained through the partnership while summarising the breadth and outcomes of the initiatives, which built upon the achievements of Phase 1. The report serves as a foundation for the future ambitions of the partnership, outlining the baseline for the upcoming Phase 3 that will extend for an additional five years.

The key focus areas of the strategic 2016–2021 technical WWF-Woolworths partnership were:

- Improving the stewardship of water resources nationally
- Reducing the potentially negative impacts of agriculture
- Improving seafood; in particular, aquaculture sourcing
- Exploring low-carbon pathways
- Reducing food waste throughout the supply chain.

WWF South Africa has six conservation goals. Three goals, namely those pertaining to food, climate and energy, and water, are directly served by some of the high-level targets recently set by the Woolworths Good Business Journey. These targets are:

- Making a community contribution of over R3,5 billion over five years
- Having responsible sourcing strategies in place for all the group's key commodities by 2020
- Ensuring that all directly sourced products have at least one sustainable attribute by 2020
- Obtaining all the group's energy from renewable energy sources by 2030.

Partnering with Woolworths and supporting the retailer to meet these targets is just one approach WWF South Africa takes to achieve its conservation goals, so that all South Africans can enjoy the benefits of:

- Sustainable food systems that promote biodiversity conservation and food security
- A climate-resilient, low-carbon living environment that enables equitable and inclusive growth
- Well-managed water resources in water source areas, production landscapes and cities that deliver benefits to people and nature.


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MESSAGE FROM WWF'S CEO

In December 2022, the United Nations Convention on Biological Diversity approved the Kunming-Montreal Global Biodiversity Framework. This framework commits to halting and reducing the loss of biodiversity by 2030, with the aim of conserving a minimum of 30% of the world's lands, freshwater systems and oceans within the next seven years. This target represents the largest conservation commitment ever made, encompassing both land and oceans.

Meeting this goal will require substantial efforts in South Africa as we are barely halfway to reaching the target on land, and even further adrift in the oceans.

WWF South Africa, with over 50 years of experience and expertise in applied research, conservation and policy work, is well positioned to collaborate on a global and local scale. As a science-based organisation operating in 100 countries, WWF aims to find nature-positive solutions to conservation challenges such as land degradation, biodiversity loss, over-fishing, water scarcity and climate change.

At the global level, the World Economic Forum predicts that the top four risks to the global economy in the next decade will all be environmental in nature. These risks include the failure to mitigate climate change, the failure to adapt to climate change, natural disasters and extreme weather events, as well as biodiversity loss and ecosystem collapse. It is now evident that human well-being is intrinsically tied to the well-being of nature, highlighting the crucial need to restore, strengthen and enhance natural systems.

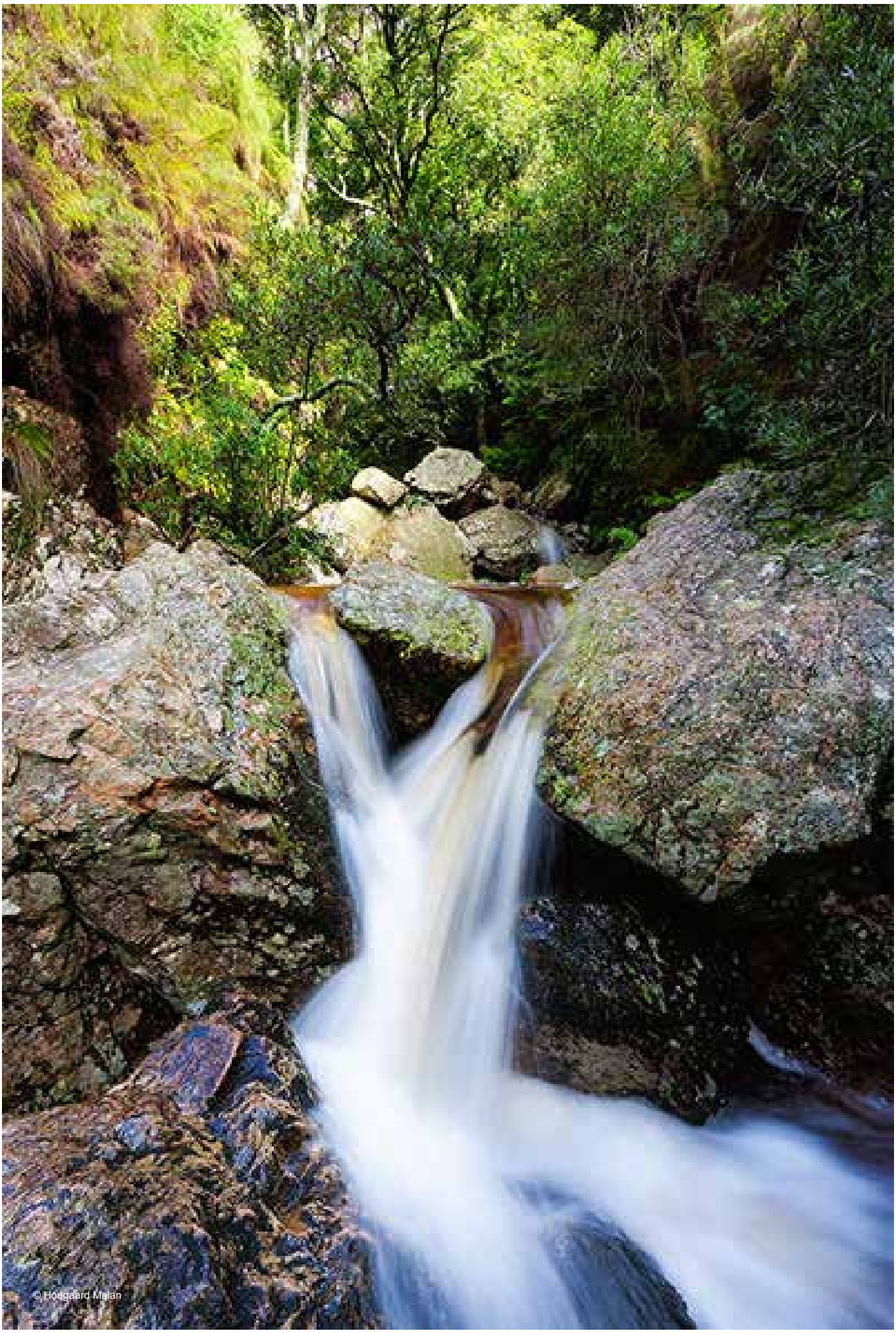
Reversing the loss of nature requires various approaches, including ambitious conservation efforts, regenerative agriculture, transitioning to circular economies, sustainable development and community engagement. Achieving the 2030 goal necessitates collaboration among all sectors of society, including for-profit and not-for-profit organisations, government stakeholders and civil society.

Businesses play a significant role as the main driver of the global economy. Natural capital, which comprises essential ecosystem goods and services, forms the foundation of all economies. Therefore, businesses have a responsibility to invest in and restore nature, thereby addressing these challenges. Sustainable and nature-positive utilisation of natural resources and ecosystems is a specific responsibility of businesses.

Nature-positive solutions require a collaborative and long-term approach. Quick fixes are not feasible. Long-term partnerships with businesses can help to achieve an equitable and inclusive nature-positive and carbon-neutral world. Modifying supply chains and business practices is complex work, but it is essential to reverse the decline of nature to simultaneously mitigate significant business risks while also creating new opportunities. Leading businesses such as Woolworths are already taking steps to become "nature positive" by transforming their operations and supply chains, and contributing to the overall improvement of the sector and the protection of nature.

For 15 years, WWF has been partnering with Woolworths, adopting a landscape and seascape approach to address key environmental challenges. This collaboration has facilitated better production and responsible sourcing of raw materials, joint engagement on public policy, equitable sharing of natural resources, establishment of key forums such as the South African Plastics Pact, pioneering life cycle assessment research, raising awareness about responsible consumption, and protecting ecologically important areas in South Africa. This partnership is our longest-running retailer partnership, and WWF looks forward to the achievements it can bring in the next five years.

Dr Morné du Plessis
Chief Executive Officer
WWF South Africa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MESSAGE FROM WOOLWORTHS' CEO

At Woolworths, we believe that we have a responsibility to use the platform we have as a business to make a broader contribution to the world around us. We believe that sustainability is not a choice but an imperative that we owe to ourselves, our customers, future generations, and the planet as a whole. By prioritising sustainability, we not only contribute to positive environmental and social impacts, but also fortify our business resilience and adaptability in the face of change.

Sustainability is one of Woolworths' core values in that it affects literally everything that we do. We have made it an integral part of our culture, and this translates into action through our Good Business Journey (GBJ) programme.

Since its inception in 2007, our pioneering GBJ has encompassed all aspects of sustainability, offering a consistent approach to addressing and managing sustainability challenges across the entire Woolworths Group. The programme supports our overarching vision of being one of the world's most responsible retailers by tackling the complex and interconnected issues and opportunities we face both today and in the future. Our GBJ programme focuses on eight key areas: people, social development, health and wellness, sustainable farming, ethical sourcing, packaging and waste, water and energy, and climate change. Each focus area is supported by a set of goals.

In 2021, we renewed and relaunched our GBJ strategy with related group-wide goals, known as our Vision 2025+. These goals not only ensure that our GBJ programme remains at the forefront of sustainability leadership, but also inspire us to continually innovate and collaborate with others for the greater good. We firmly believe that profound and sustainable impact requires deliberate collaboration among all stakeholders.

Our partnership with WWF South Africa solidifies and strengthens our commitment to sustainability and our shared vision for a planet-positive future. Woolworths is proud to be the first and only retailer collaborating with WWF on its sustainability journey for 15 years. What began as a humble bilateral agreement in 2008 has evolved into a long-term transformational partnership. Together, we have worked diligently and successfully with our suppliers, partners and customers to foster a culture of sustainability.

Through the years, this collaboration has been instrumental to the success of our GBJ, and it will continue to play a critical role in helping us achieve our ambitious Vision 2025+ sustainability goals. We are dedicated to pioneering change, within and beyond the partnership, as we strive to drive wider systemic change on a broader scale, and create a more sustainable, planet-positive future for generations to come.

Roy Bagattini
Group CEO
Woolworths Holdings Limited

PARTNERSHIP TIMELINE

The Woolworths-WWF Transformational Partnership goes beyond just business and supply chains. It looks further at how to influence and help transform the sector by normalising best practices through transparency, circularity, innovation and collaboration.

BILATERAL PARTNERSHIP

2008

SIGNING OF THE WWF SUSTAINABLE SEAFOOD CHARTER

Woolworths becomes one of the first retailers to:

- Sign the WWF Sustainable Seafood Charter
- Make commitments towards transforming its seafood supply chain by joining the WWF Southern African Sustainable Seafood Initiative (SASSI).

TRANSFORMATIONAL PARTNERSHIP

2012-2015

PHASE 1

- Nine Woolworths stone fruit supply farms take part in water stewardship to better understand good water practice.
- A Dairy Life Cycle Analysis (LCA) is conducted and global standards are reviewed. Principles and indicators are used to inform an in-house dairy production code.
- Woolworths is the first retailer to join the Water Balance Programme, which transitioned into the Strategic Water Source Area Programme, and is a founding partner in WWF's water stewardship work.
- An LCA for textiles results in shifting Woolworths' textile sourcing to be more sustainable. The goals are:
  - At least 60% sustainable cotton by 2020, and work on sustainable viscose
  - The production of jeans using recycled polyester as the most environmentally sustainable textile choice
  - 48% of Woolworths' clothing items are to be produced with energy and water savings.
- Woolworths integrates water supply risk into its operational strategy.
- WWF's partnership with Woolworths helps to fund the development of a Water Risk Filter for South African conditions.
- In 2010, Woolworths becomes the first retailer to stop selling Cape salmon (geelbek) because the stock is depleted.
- In 2015, Woolworths becomes the first retailer to stock and sell Aquaculture Stewardship Council-certified products.
- A study to determine waste from farm to consumer, possibly the first in the retailer world, is conducted, using multiple stock-keeping units (SKUs), over 50 in the case of spinach. The study proved that the highest levels of food loss and waste occur at farm level, where in extreme cases up to 60% of a crop could be ploughed back into the soil. As a result, Woolworths adopted a fairly fluid approach to specifications, adapting these regularly to accommodate issues of quality and the effect of weather conditions.

2016-2021

PHASE 2

- Woolworths supports the water source area (WSA) coordinator model to catalyse major partners in the for-profit, NGO and government sectors to co-invest in WSAs:
  - Woolworths contributes to over 5 383 ha being cleared of invasive alien plants and maintained in a healthy state; this equates to a saving of about 811 900 m^3 or 8 119 megalitres of water if the area remains clear
  - Over R48 million is raised for catchment restoration
  - 120 farmers commit to stewardship contracts
  - More than 150 people are employed in WSAs, equalling 28 000 days of employment.
- Woolworths invests in a second WSA in the Mpumalanga Drakensberg, which results in key research on faecal contamination in the Sabie/Crocodile river systems.
- Woolworths is instrumental in the establishment of the South African Plastics Pact and on-pack recycling label (OPRL) system.
- The first smallholder farmer cotton pilot project is launched to assist existing sugar farmers to transition to cotton production and give them market access through the Woolworths supply chain.
- Woolworths is one of the first retailers to co-fund the offshore Fishery Improvement Project with the fishing industry (SADSTIA). This has enabled the industry to make significant changes to be more responsible. SADSTIA commits to funding another two years of the project.
- Woolworths is the first retailer to invest in a seafood-naming project through WWF and other partners, including the SABS. The result has been the voluntary seafood-naming standard SANS1647.
- Woolworths joins the African Climate Alliance.

2023-2028

PHASE 3

- Woolworths will continue to invest in WSAs and build on the tremendous momentum achieved so far. The focus will be on developing and supporting a community of practice of water stewardship coordinators and water user associations to strengthen local and regional platforms.
- The partnership will expand on faecal research done in the Sabie/Crocodile region to include upstream work with local communities. The aim is to shift behaviour to use reusable nappies instead of disposable ones.
- The partnership will pioneer work on using cleared invasive alien vegetation for in-store furniture and homeware items (wooden hangers/clothes pegs).
- Other projects include, among others:
  - Understanding water risk in the textile value chain and identifying hotspots, possibly focusing on South African mills
  - Continuing to support Fishery Improvement Projects and striving to meet 100% of the WWF-SASSI commitments
  - Launching a multi-year project that quantifies Woolworths Scope 3 emissions with a blueprint to reduce these in hotspot areas
  - Working towards supporting small-scale producers.

PEOPLE, PLANET AND PRIORITIES

The Woolworths work is driven by three core themes: people, planet and priorities. This report examines the different priority projects within each theme and their respective accomplishments. The collaboration between Woolworths and WWF South Africa is a comprehensive and diverse partnership aimed at enhancing sustainability across Woolworths' products and operations.

PEOPLE

During this phase of the partnership, the supported projects have primarily focused on the impact on people in local communities – from empowering and building the capacity of local farmers to influencing consumer behaviour. WWF and Woolworths are both committed to fostering a culture of sustainability among South African consumers and meeting this demand.

PLANET

The long-term goal of the engagement is to leverage Woolworths and WWF's respective capacities to reduce the impacts of production and consumption on water, carbon, biodiversity and land use. The approach is multi-faceted and aimed at both products and people.

PRIORITY PROJECTS

The projects supported during Phase 2 of the partnership are classified into four major categories: marine, freshwater, sustainable agriculture, and supply chain and consumption (Figure 1). The supply chain and consumption category is twofold: reducing food waste, and exploring low-carbon pathways through supply chain best practice, from farm to table.

The projects undertaken during Phase 2 have achieved notable success in aligning with the long-term goals of reducing the environmental impact of the agricultural supply chain, improving water stewardship and community benefits, minimising food waste throughout the supply chain, and reducing carbon emissions and energy consumption.

Accomplishments include the successful transition of sugarcane farmers to cotton, the development of a South African version of the Water Risk Filter tool, funding for the creation of a new seafood-naming standard, alien clearing along with freshwater replenishment, and significant improvements in water stewardship in strategic water source areas.

The partnership embraced a comprehensive land and seascape approach, which entailed the integrated and holistic management of oceans, water, land and natural resources in a specific geographic region. This approach recognises the interdependencies between ecological, social and economic factors in order to foster sustainable, equitable and inclusive development. In Phase 2 of the partnership, the Woolworths projects encompassed two strategically significant water source areas, namely the Boland Mountains, Groot Winterhoek and the Mpumalanga Drakensberg, and prioritised the protection and enhancement of the Benguela and Agulhas ocean regions.

LOCATION OF PHASE 2 PROJECTS

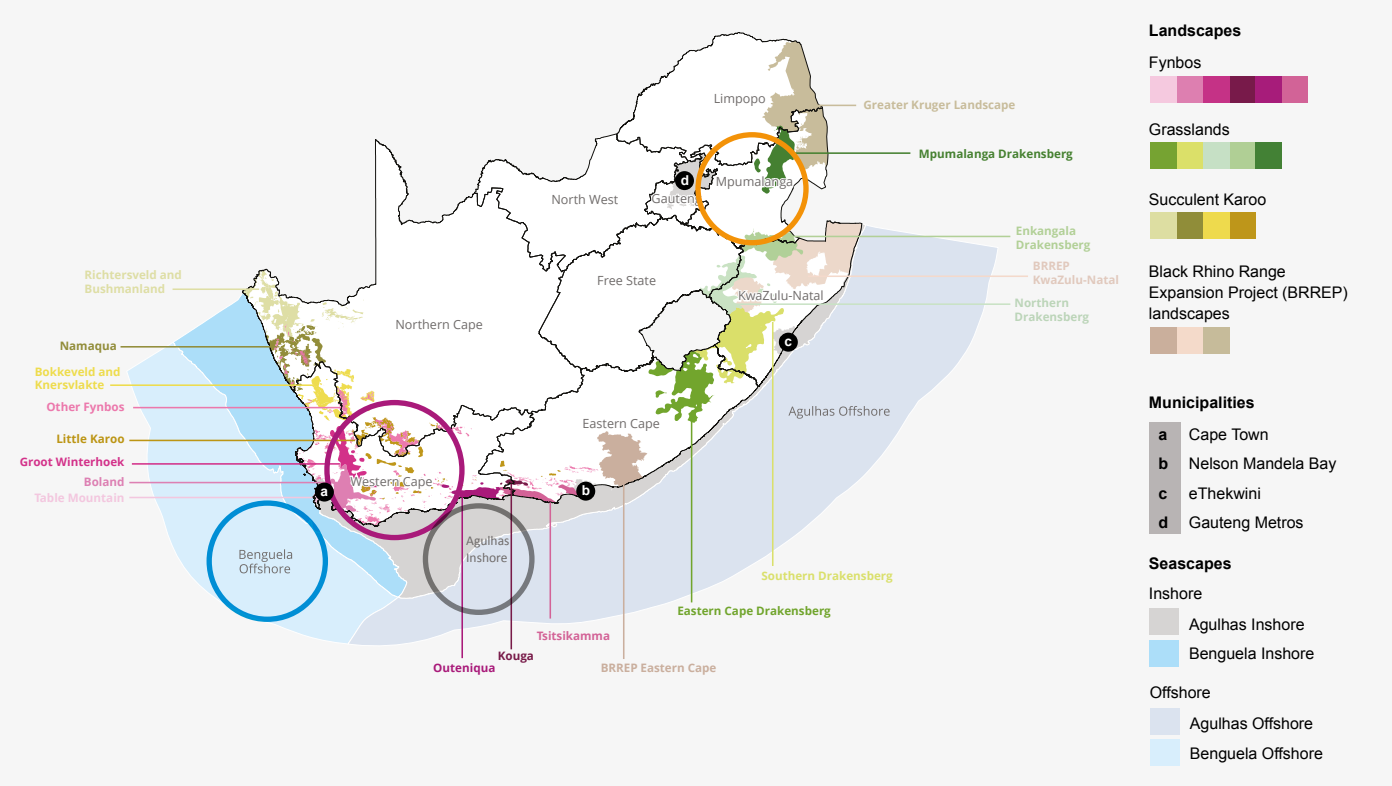

Figure 1: Phase 2 focus areas of the WWF-Woolworths partnership

MARINE

IMPROVING SEAFOOD AND AQUACULTURE SOURCING

Seafood is a vital source of protein for billions of people. At present, over 42% of commercially valuable fisheries in South Africa are over-exploited and there is increasing degradation of marine ecosystems. Woolworths has been prioritising this concern for several years through its work with WWF and WWF-SASSI.

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Woolworths has committed to procuring all seafood from sustainable fisheries and responsible farming operations to ensure that all its seafood is responsibly sourced and can be traced to how it was caught or to the farm where it came from. This commitment includes working with local and international seafood sustainability awareness and certification programmes such as the Marine Stewardship Council (MSC), WWF South Africa's Southern African Sustainable Seafood Initiative (WWF-SASSI) and the Aquaculture Stewardship Council (ASC).

SUSTAINABLE SEAFOOD WITH WWF-SASSI

Woolworths has been at the forefront of retail industry leaders by becoming an early adopter of the Sustainable Seafood Charter and making a formal commitment to the WWF-SASSI programme. The company has dedicated extensive efforts to transforming its seafood supply chain, pushing the boundaries in terms of traceability, engaging with the fishery and aquaculture industry, and implementing comprehensive labelling practices.

SEAFOOD SOLD BY WOOLWORTHS

89%
MEETS WOOLWORTHS' SEAFOOD COMMITMENTS

45%
IS WWF-SASSI CERTIFIED

85%
HAS BEEN ASSESSED FOR SUSTAINABILITY

100%
IS ALIGNED WITH THE SANS1647 SEAFOOD LABELLING STANDARD

COMMITMENT

The partnership's work with WWF-SASSI focused on improving the sustainability of seafood in the Woolworths supply chain. Woolworths' commitment was that by 2020, all aquaculture species sold would be:

- From aquaculture operations that are engaged in a credible, time-bound improvement project; or
- WWF-SASSI Green listed; or
- Certified by the ASC or equivalent.

All wild-caught species sold would be:

- WWF-SASSI Green listed; or
- Certified by the MSC; or
- Part of a credible Fishery Improvement Project.

All Woolworths seafood product labelling would be:

- Aligned with the voluntary labelling requirements of SANS1647 (SABS-approved naming standard).

IMPACTS FOR THE REPORTING PERIOD

- Woolworths demonstrates a firm commitment to sustainable seafood sourcing, as evidenced by the assessment conducted by WWF-SASSI. Of all the species sold by Woolworths and evaluated by WWF-SASSI, an impressive 89% meet the company's seafood commitments, regardless of whether they are wild-caught or farmed. Woolworths maintains a consistent focus on improving its seafood procurement practices, continuously striving for progress in this area.
- Regarding formally certified species, a significant 45% of the seafood sold by Woolworths is certified by WWF-SASSI-recognised eco-labels such as the MSC or the ASC. Woolworths has made significant efforts to ensure that over 85% of the seafood it procures undergoes assessment based on these sustainability categories, ensuring transparency and accountability in its sourcing practices.
- By volume, Woolworths has achieved an outstanding 94% compliance with its seafood commitments criteria, positioning the company as a leading retailer within the WWF-SASSI programme. This remarkable achievement reflects Woolworths' strong dedication to sustainable seafood practices and its ongoing efforts to meet and exceed industry standards in this crucial area.
- Woolworths has provided financial support to WWF for its representation in the South African Bureau of Standards (SABS) working group, tasked with developing a national seafood-labelling standard (SANS1647). Because of these efforts, South Africa now has its first seafood-labelling standard.
- Woolworths proudly led the way by being the first retailer to fully align the labelling of all its seafood products with the requirements outlined in SANS1647.


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FISHING FOR THE FUTURE

The Fishing for the Future programme is a comprehensive and sustainable seafood-sourcing strategy. Its aim is to ensure responsible fishing/farming practices and the long-term viability of fish stocks and fish farms. This programme commits Woolworths to sourcing seafood products that meet stringent sustainability criteria. These include sourcing from fisheries that are well managed, certified by reputable third-party organisations such as the Marine Stewardship Council (MSC) or the Aquaculture Stewardship Council (ASC), or align with credible sustainability standards such as the WWF-SASSI programme.

COMMITMENT

Woolworths' commitment was that by 2019, interactions of the Fishing for the Future initiative with small-scale fisheries would be aligned with the WWF South Africa strategy on engagement with small-scale fishers, where relevant.

- Woolworths committed to contribute to WWF South Africa's engagement with small-scale fishers to inform a strategy on how to engage small-scale fishers in sustainable production and food security issues.
- To help shift the seafood sector towards sustainability, Woolworths committed to supporting Fishery Improvement Projects and procurement strategies that are relevant to wild-capture species in seafood procurement streams.


© Mark Chipps

IMPACTS FOR THE REPORTING PERIOD

- Through collaboration with the WWF Small-scale Fisheries manager, a significant effort was made to engage with the Lamberts Bay and Kogelberg fisher communities.
- Although establishing market access for small-scale fishers through these initiatives proved challenging, Woolworths has been providing support to the Abalobi small-scale fishers.
- Woolworths' funding has played a crucial role in catalysing and co-funding engagements with small-scale fishers in coastal communities, in collaboration with the WWF-SASSI programme. National workshops were conducted to introduce the Common Assessment Methodology, which forms the foundation of the WWF-SASSI sustainability rating system. As a result, WWF-SASSI and WWF International have revised the methodology to include two questions addressing human rights abuses. This revision provides a framework for a more comprehensive assessment that considers both ecological and social factors.
- Recognising the importance of the retail sector's proactive engagement with the fishing industry and the use of its buying power to drive positive change, Woolworths took the lead as the first retailer to prioritise this approach. In collaboration with the South African Deep-Sea Trawling Industry Association (SADSTIA), Woolworths co-funded the Offshore Trawl Bycatch Fisheries Conservation Project (FCP), which concluded in 2019.
- The success of the FCP led to the establishment of a second phase known as the Fishery Improvement Project (FIP). Woolworths has made significant investments in supporting the offshore FIP. This support has been demonstrated through market access provided by the procurement of species such as kingklip, angelfish and monkfish, which fall within the FIP.
- This proactive engagement has served as an incentive for the fishing industry to implement and harmonise responsible and improved practices across all aspects of its operations.

Recognising the importance of the retail sector's proactive engagement with the fishing industry and the use of its buying power to drive positive change, Woolworths took the lead as the first retailer to prioritise this approach.

FRESHWATER

IMPROVING WATER STEWARDSHIP, CATCHMENT MANAGEMENT AND COMMUNITY BENEFITS THROUGH COLLECTIVE ACTION

People, wildlife and businesses all rely on fresh water to survive and thrive. Strategic water source areas, including catchments, are vital areas for food, water, economic growth and energy security. The lack of access to fresh water presents one of the greatest risks to both the global and the local economy.

In South Africa, 10% of the land area provides 50% of the surface water, which supports 50% of the country's population, 64% of its economy and 70% of its irrigated agriculture. As a result, South Africa's freshwater ecosystems are under increasing pressure. With 98% of the country's stored water resources already allocated, there is less water available than ever before, and what is left is getting dirtier as the protection of rivers, lakes and streams lags behind.

For Woolworths, water is a primary ingredient in every product. Water is also at the top of the WWF list of conservation priorities in South Africa. On average, globally, it takes one litre of water to produce one calorie of food. Water is also essential for sustainable communities. Access to clean, fresh water is a first-order humanitarian, environmental and business priority.

WATER STEWARDSHIP AND COMMUNITY BENEFITS

Woolworths has played a pivotal role as a founding partner in WWF's water stewardship initiatives. The WWF Water Stewardship programme provides a platform for companies and their supply chains to collaborate with local stakeholders, including communities and governance institutions, to address water-related risks in specific regions. For both WWF and Woolworths, water stewardship encompasses more than just efficient water use. It involves fostering cooperation and collective action among the private sector, government entities, other businesses, NGOs, communities and individuals to safeguard shared freshwater resources.

The sustainability of South Africa's water catchment areas has been threatened by droughts and other water-related risks in recent years. Allowing invasive alien plants that take up vast quantities of water to flourish exacerbates the problem. The rehabilitation of these catchments is an important initiative to ensure that they thrive once again, and that they can sustain the ecosystem services they provide. Figure 2 gives an overview of the water stewardship projects in the Western Cape.

COMMITMENT

WWF and Woolworths are dedicated to enhancing water stewardship and community benefits in strategically important water source areas, such as the Boland Mountains and Groot Winterhoek water source areas. These areas align with regions from which Woolworths sources its produce, particularly along the upper Breede River.

Building upon the achievements of the Water Stewardship project in Phase 1, Woolworths embarked on Phase 2 with the goal of ensuring long-lasting positive outcomes.

The renewed water stewardship investment in Phase 2 identified the following deliverables:

- Continue the on-the-ground support to the pioneering Ceres Breede River fruit suppliers
- Keep focusing on water stewardship inclusion in Farming for the Future.

IMPACTS FOR THE REPORTING PERIOD

- To drive the clearing activities and handle associated administrative tasks for clearing initiatives on farms in the Ceres/Wolseley Water Stewardship Area, Woolworths appointed a project manager. This appointment aimed to establish sustainable benefits in the region.
- Simultaneously, WWF committed to securing additional funding for this position and leveraging it to achieve future targets related to clearing invasive alien species. The alien-clearing coordinator has been exceptionally successful.
- The model of a coordinator has now been replicated five times in other areas.
- The project has resulted in the following:
  - Clearing 5 383 ha and 88 km of riverbanks of alien invasive plants and maintaining them in a healthy state, which equates to about 811 900 m^3, which is 8 119 megalitres of water since the clearing started, provided that the areas remain managed
  - Raising more than R48 million for restoration from various partners (NGOs, businesses, national government departments, such as the Department of Environment, Forestry and Fisheries, and national and local agencies)
  - Getting 120 farmers to commit to stewardship contracts
  - Employing more than 150 people, which equates to 28 000 days of employment.
- This project has catalysed multiple funding streams, enabling the coordinator to arrange clearing and follow-up over an increasingly larger area.
- Funding for future clearing has been secured beyond the Woolworths funding. This commitment has built strong cooperation and trust with landowners and other water users.

OVERVIEW OF WATER STEWARDSHIP PROJECTS IN THE WESTERN CAPE

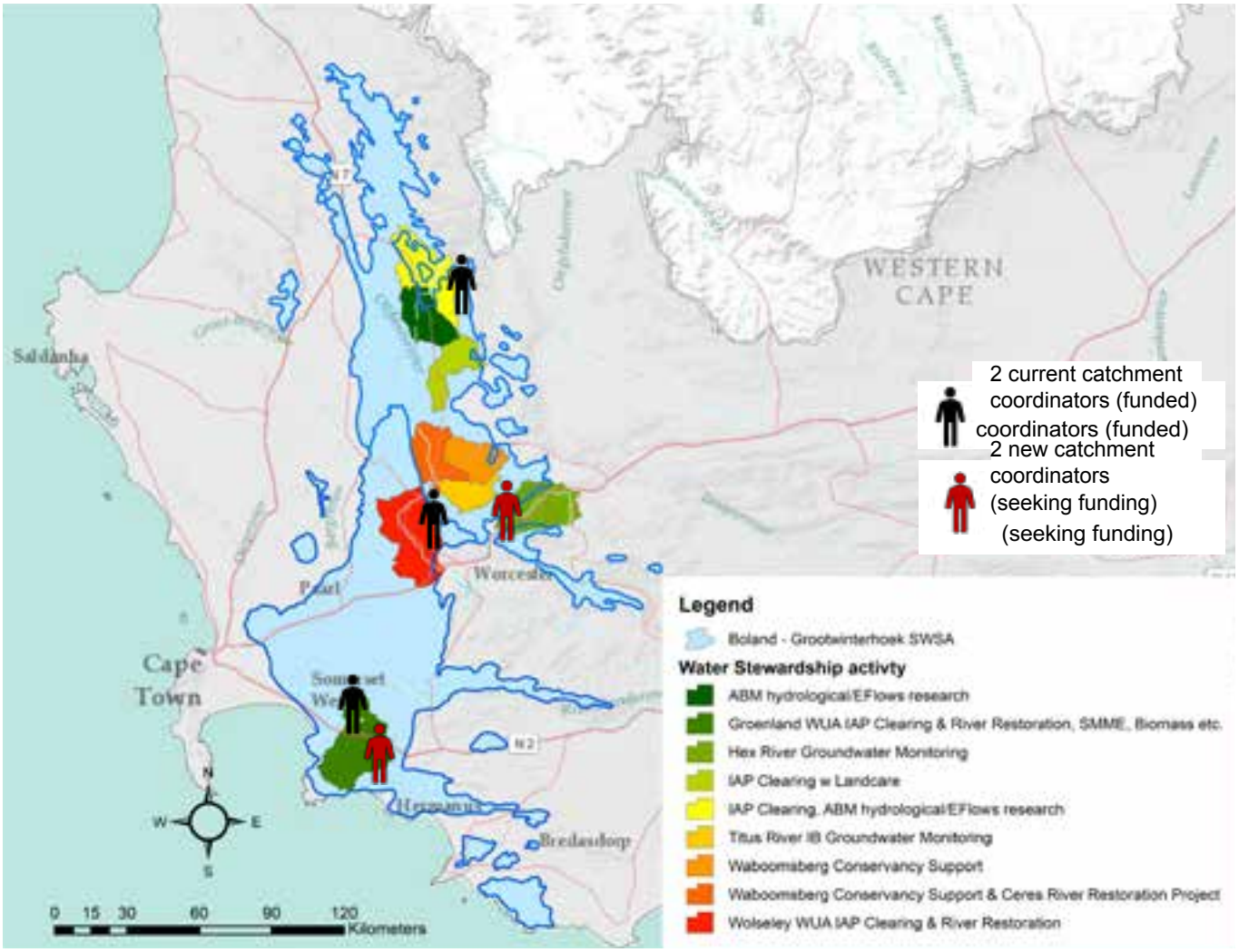

Figure 2: Map showing the focus of water stewardship activities in the Boland Mountains and Groot Winterhoek water source areas

"Farmers now take ownership of improving the ecological infrastructure on their land, and that is a big win for sustainable agriculture. The job creation and development of small enterprises ... have added a critical social upliftment element to this successful alien removal programme, which we are replicating in other areas."

– Rudolph Roscher, Manager: Western Cape Department or Agriculture


© WWF

COMMUNITY BENEFITS FROM THE GROOT WINTERHOEK WATER STEWARDSHIP PROJECT

Ryno Pienaar
THE RYNO PIENAAR COORDINATOR MODEL

WATER STEWARDSHIP IN ACTION

Invasive alien vegetation reproduces and spreads rapidly, and it is thirsty. In South Africa, it has reduced water yields by at least 6,5%. The clearing of alien invasive vegetation is vital for South Africa's water security.

In the Western Cape, the unemployment rate lies at 22%. However, there are opportunities for new job creation in the catchment economy.

Corporate funding of one salary for a key position in an existing landscape organisation has the potential to address both issues.

MEET THE WOLSELEY WATER STEWARD

Ryno Pienaar started work at the Wolseley Water User Association in **2017** and leads **9 alien-clearing** teams in the Breede River catchment area.

His work in this area has secured employment for over **150 people**.

This initiative has boosted and scaled up a system of unprecedented collaboration between multiple NGOs, government departments and over **120 landowners**.

KEY SUCESSES

Ryno is involved with rehabilitation experts and helps to re-establish indigenous vegetation along riverbanks.

- **5 383 ha** cleared and kept clear
- **811 900 m³** or 8119 megalitres of water saved since clearing started and if the areas remain managed
- **88 km** of riverbank cleared
- Ryno has fundraised **R48 392 648 million** towards clearing in the area
- **7 SMMEs** established by various funders
- **120 farmers** committed to water stewardship contracts
- **28 000 days** of employment in the area
- **>20 funders** involved in water stewardship projects
- **5 replicated projects**

"Having Ryno on the ground to liaise with farmers and all the various stakeholders involved has meant that the volume and extent of our farming and funding network has grown exponentially. Farmers now take ownership of improving the ecological infrastructure on their land, and that is a big win for sustainable agriculture. The job creation and development of small enterprises, thanks to the funding that Ryno secured, have added a critical social upliftment element to this successful alien removal programme, which we are replicating in other areas."

– Rudolph Roscher, Manager: Western Cape Department of Agriculture

The positioning of water stewards has been made possible with close multi-partner cooperation, as well as corporate funding from Woolworths and other WWF corporate partners.

In 2017, Ryno Pienaar was appointed as catchment coordinator in Wolseley in the Western Cape. The post was funded through the WWF-Woolworths partnership and housed by the Wolseley Water User Association (WWUA). It was only a few months before the neighbourhood and coordinating government departments lauded this "Ryno model", named after the coordinator.

Ryno has been involved in the clearing of alien vegetation in this part of the province for over seven years. His most recent work has been a clearing and restoration project along the Dwars River just outside Ceres. Within a year, they completed the clearing of woody alien invasive trees from a 25 ha stretch of river-flanked land and restored the riverbank area with indigenous trees.

Removing problematic woody trees

"Both sides of the river were wall-to-wall with alien trees, such as black wattle, red river gum, poplar and Port Jackson willow, before the clearing work began," said Ryno. "This prevented the indigenous plants from getting enough light and growing."

Ryno shared how many of the majestic indigenous trees that first populated the forested banks of the Dwars River, such as the Breede River yellowwood, wild olive and wild almond, have since disappeared because of the infestation of opportunistic alien trees. This rampant spread of alien vegetation is happening in a significant water-producing landscape – the Groot Winterhoek Water Source Area, which is the origin of the Breede River. The Breede River flows past Worcester and Robertson and through key agricultural areas of the Western Cape.

Strategically removing water-thirsty alien plants upstream allows more water to reach lower catchment areas.

The comforting part of Ryno's story is that these problematic trees are being removed through a coordinated landscape approach, and indigenous ones are being planted in their place.

Working together for the goodness of nature and people

Ryno spoke passionately and proudly of the Dwars River project. One thing he is grateful for is the successful collaboration and continuous support throughout the project from the owners of Crispy Farm. Ryno also shared how he loves his job and the various projects that he coordinates in the wider Ceres area, particularly because it creates employment for local community members, many of whom are unemployed.

Although a lot of work still needs to be done in getting rid of alien vegetation in the wider Ceres area, roles like Ryno's bring a lot of hope. Through the WWF-Woolworths partnership, Ryno is well placed in the Breede River landscape to continue this much needed clearing work to improve the water flow in this region. The role of the catchment coordinator underscores the power of collaboration among funders, farmers, coordinators and community members, and the immense environmental and social benefits from well-coordinated clearing and restoration work.

"We need people in the community to care ... Everyone must get involved so that the community will be clean and free of sickness."

– Shaun Moses, member of the Witzenberg Water Savers

THE WITZENBERG WATER SAVERS

Known as the Witzenberg Water Savers and formed in 2015, groups of volunteers from informal settlements are taking a proactive, hands-on approach to tackling key water-related issues in the Western Cape's Ceres Valley.

This has been an important step in an approach to involve urban residents in pressing water-quality issues in the upper Breede catchment. Both the Nduli and Prince Alfred Hamlet settlements are connected to rivers and drainage channels of the Breede River, which feed local dams. These dams are used to irrigate stone fruit and other local produce – something that many depend on for work. A growing population and expanding urban areas often put additional pressure on local resources and might lead to poor water quality affecting catchments, canals and tributaries.

A community approach to water stewardship

In identifying the source of these potential threats to water quality, through its partnership with Woolworths, WWF South Africa has been working with farming communities and stakeholders to improve water stewardship. This would benefit not only the communities but also the greater business and agriculture sector.

As part of a community door-to-door initiative, volunteers regularly visit residents to talk about water problems that need addressing, such as leaks, overflowing sewer holes and the causes, the high levels of litter in stormwater drains and riverbeds, or the need for improved health and dignity by keeping communal toilets clean. They also organise their own river and neighbourhood litter clean-ups and have rapid-alert systems to notify the local Witzenberg Municipality in case of leaks or sewage spillages.

Shaun Moses, a member of the group, said he became involved with the project because he saw a benefit for the broader community and believes in leading by example.

On the ground

One of the first initiatives implemented by the volunteers was the cleaning up of the heavily polluted Wabooms River. A river assessment revealed contamination resulting from uncontrolled stormwater discharge and informal agriculture practices. In Prince Alfred Hamlet, where there are more formal housing structures, the focus has been on litter and pollution. The door-to-door outreach was started to get a better understanding of the on-the-ground challenges and to find potential solutions to their water-related concerns.

In Nduli, where there are fewer formal structures, the Witzenberg Water Savers have started a vegetable garden at a local school, formed a toilet committee to monitor communal facilities, developed a sewer hole-monitoring system to enable a rapid response system for municipal plumbers to react to blockages and bursts, and implemented a clean-up campaign.

This Woolworths project has made a lasting impact on the landscape through Witzenberg Municipality adopting the activities that the Witzenberg Water Savers started.


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GROUNDWATER MONITORING IN THE TITUS RIVER VALLEY

The Titus River groundwater-monitoring initiative aims to systematically track and analyse water levels and quality in the underground aquifers of the region. By monitoring the groundwater resources in the Titus River valley, important data can be collected to assess the sustainability and health of the water source. The information obtained from this initiative serves as a valuable resource for making informed decisions regarding water resource management, planning sustainable water-use practices, and ensuring the long-term availability and quality of groundwater in the region.

The initiative has grown into a self-sustaining, long-term collaborative project. The pioneering efforts in implementing collective action for groundwater management in the Titus River region have been highly successful, and this model can be expanded to other areas where it can provide value. WWF acknowledges Woolworths' crucial role in enabling this pioneering work in water stewardship.

2019–2020

- To initiate long-term groundwater monitoring in the Titus River area, geohydrologists DeltaH were contracted for a year.
- Five data loggers were bought, and suitable boreholes were identified with permission obtained from farmers.
- Funding was secured from a minimum number of UK retailers through the Courtauld Agreement (see Box 1) to kick-start the project.
- The first step was to advertise the catchment coordinator position, which replicates the successful Woolworths-funded coordinator role held by Ryno Pienaar. This coordinator would be stationed in the Koue Bokkeveld Water User Association area.

2020–2021

- Groundwater monitoring in the Titus River valley continued, and initial readings in October and December provided valuable information on trends.
- Through the Courtauld partnership, an extension officer was deployed to the Koue Bokkeveld region, taking over the groundwater-monitoring responsibilities from October onwards.
- The officer's data is shared with the DeltaH geohydrologists, who were contracted to provide the annual report by March 2021.
- The Titus River Irrigation Board is actively engaging with farmers to enhance water-use measurements, including groundwater.
- The Breede Gouritz Catchment Management Agency re-engaged with WWF in February 2021, as they had filled the position of geohydrologist in their organisation.

Peter Rooi CREATING LIVELIHOOD OPPORTUNITIES

Peter Rooi's humble beginnings show how projects that improve the well-being of nature can also benefit people.

For Peter, Ryno Pienaar's focused clearing project at Dwars River was an opportunity to create jobs for his community. Peter had been working as a seasonal fruit picker in the Ceres area for most of his life, and never imagined having a business. Since receiving training through a LandCare programme to become an alien-clearing contractor a few years ago, he could start a business clearing alien plants and provide work for others. For this project, Peter could employ 25 local people to remove the alien trees and plant indigenous ones in their place. This provided a year's income for himself and his team.

"Many of the people I employed told me they would not have been able to find employment elsewhere because of their past bad choices and that I was their only hope. I helped them to become reliable hard workers who can put food on the table and look forward to their future," Peter said.

BOX 1: THE COURTAULD AGREEMENT

The Courtauld Agreement is a voluntary commitment made by organisations in the food and drink sector to improve their environmental performance. It originated in the United Kingdom and is named after the Courtauld Institute of Art, where the initial agreement was signed in 2005.

The agreement aims to address issues such as waste reduction, resource efficiency and greenhouse gas (GHG) emissions throughout the supply chain. It encourages signatories to set targets and take measurable actions to reduce waste, improve packaging design, optimise water and energy use, and promote sustainable sourcing practices.

The Courtauld Agreement is structured in phases, with each phase setting specific targets and time frames for signatories to achieve. It involves collaboration between government bodies, industry organisations and businesses to drive positive change and achieve sustainable outcomes.

By signing the Courtauld Agreement, organisations commit to working towards a more sustainable and circular economy, where resources are used efficiently, waste is minimised and the environmental impact is reduced. This voluntary approach allows businesses to take collective responsibility and show their commitment to environmental stewardship.

For more information on the Courtauld Agreement, click here or scan the QR code.

SANBI'S PAYING FOR ECOSYSTEM SERVICES PROJECT

The South African National Biodiversity Institute (SANBI) Paying for Ecosystem Services (PES) project focused on the Slanghoek and Wabooms River areas, supplementing the existing project by the Department of Environment, Forestry and Fisheries in the Breede River valley and building on the project funded by Woolworths. It also included work on new farms to ensure that landowners could sustain the clearing efforts and maximise the benefits from the Wolseley Water User Association (WWUA).

2020–2021

- In November 2020, the SANBI PES project was initiated. In January 2021, the Department of Environmental Affairs and Development Planning provided funding to continue the Kluitjieskraal wetland work that had been carried out by the Coca-Cola project in 2020.
- The ongoing project funded by Hilton Hotels was in the rehabilitation phase.
- A new rehabilitation project funded by a French organisation started in March 2021, focusing on creating forest patches in fire refuge areas in the Berg and Breede River regions.
- The Breede Gouritz Catchment Management Agency (BGCMA) provided funding of R495 000 to the WWUA for follow-up work in the Wyzersdrift area during the 2020/21 financial year. This funding was part of a Memorandum of Agreement (MoA) between BGCMA and WWUA, serving as the last of three instalments. The BGCMA funding played a crucial role in bridging funding gaps and ensuring the project's continuity.
- The District Fire Department assisted in the burning of biomass stacks from the previous year's work, mainly targeting black wattle and river red gum.
- The Department of Agriculture's LandCare/Breedekloof Wine and Tourism (BWT) projects were carried out below the N1, following the MoA between BWT and the Department of Agriculture. In the 2019/2020 financial year, approximately R5 million was allocated through the LandCare/BWT projects. However, for the 2020/21 period, the LandCare funding was significantly reduced (to approximately R600 000) and was used to follow up on the work done in 2019.

Woolworths co-funded *A practical guide to managing invasive alien plants: A concise handbook for land users in the Cape Floral Region*, which was completed and launched in May 2021. The guide is also available in Afrikaans as *'n Praktiese gids vir die beheer van uitheemse indringerplante: 'n Opsommende handleiding vir gebruikers in die Kaapse Blommeryk*. Over the period from end May to end June 2021, the guide was downloaded more than a thousand times.

For the English version, click here or scan the QR code below left.

For the Afrikaans version, click here or scan the QR code below right.

COLLECTIVE ACTION IN THE MPUMALANGA DRAKENSBERG WATER SOURCE AREA

Farmers in Mpumalanga are key subtropical fruit, sugar and citrus suppliers to Woolworths. In collaboration with Woolworths, WWF identified the Sabie and Crocodile River catchments, both originating in the Mpumalanga Drakensberg Water Source Area, as focal points based on the number of Woolworths suppliers.

The aim of this project was to understand the health risks and economic implications that increasing faecal pollution poses to the irrigated agriculture sector.

COMMITMENT

Woolworths committed to invest in an additional water source area in Phase 2 as part of its water stewardship commitments. The project in Mpumalanga was aimed at fostering collective action and community engagement to address water quality and quantity, the status of freshwater environments, and social and regulatory water matters.

Farmers in Mpumalanga had not yet been engaged in the water stewardship approach. The Sabie/Crocodile catchment was identified based on the number of Woolworths suppliers and the level of risk. The focus was:

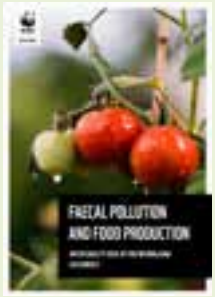
- Assessment of suppliers' water and other key risks
- Scoping and guidance, including identification of other organisations active in the catchment that can provide implementation support.

"South Africa is facing a water crisis caused by insufficient water infrastructure maintenance and investment, recurrent droughts driven by climatic variation, inequities in access to water and sanitation, deteriorating water quality, and a lack of skilled water engineers. This crisis is already having significant impacts on economic growth and on the well-being of everyone in South Africa."

– National Water and Sanitation Master Plan

IMPACTS FOR THE REPORTING PERIOD

- WWF formulated ideas based on the results from the Sabie/Crocodile catchment study (see Box 2). Some of these were actioned in Phase 2 of the WWF-Woolworths partnership, and some will receive attention in Phase 3.
- In Mpumalanga, the backlog of adequate access to water and sanitation, and the decay of the limited existing water infrastructure, affect not only river water quality but also the quality of irrigation water for agriculture.
- *E. coli* data from the Inkomati-Usuthu Catchment Management Agency suggests that 40% of all monitoring points in the Sabie catchment and 30% in the Crocodile catchment consistently show *E. coli* concentrations above 1 000 cfu/100 ml. Irrigation water standards prescribe a maximum *E. coli* concentration level of 100 cfu/100 ml for most crop types, although crops vary in their sensitivity to faecal contamination.
- Green beans are the riskiest crop, followed by green leafy vegetables and slow-growing vegetables. Tropical fruit, nuts and sugar are less at risk due to fruit skins, shells or rigorous processing.
- Commercial farmers who subscribe to production standards carefully select crop types to grow and adhere to targeted farming practices, which are applied to further reduce the risk of exposure to faecal contamination.
- The costs to individual farmers can be as high as R13 200/ha/year to treat water to a potable standard.
- Whereas commercial farmers already carry the economic burden of faecal pollution, subsistence farmers face a serious health risk because of faecal pollution.



BOX 2: EFFECTS OF FAECAL POLLUTION IN THE SABIE AND CROCODILE CATCHMENTS

In 2021, a technical report titled *Faecal pollution and food production: Water quality risks in two Mpumalanga catchments* documented the results of the study. Highlights from the report were:

Commercial farmers already carry the economic burden of faecal pollution

The key crops for commercial farmers in the Sabie and Crocodile catchments are macadamia nuts and subtropical fruit cultivated in orchards (avocado, citrus, banana, papaya, mango and litchi). The risk of exposure to faecal contamination is buffered by the type of crop. Targeted farming practices further reduce the risk of exposure, such as the pre-treatment of irrigation water, the use of groundwater for irrigation close to harvest, keeping water spray off the fruit and washing the fruit in clean water after harvesting. These treatments are applied purposely to avoid health risks to consumers and to remain in line with certification standards such as GlobalG.A.P.8, or holistic and scientific farming approaches such as Farming for the Future from Woolworths. Not complying with production or certification standards would pose the risk of losing access to international and national markets.

All these safety precautions come at an economic cost. Added to this is the cost of having to do additional maintenance when algae clog the irrigation equipment because algae grow prolifically under the nutrient-rich conditions that are created by faecal pollution.

The following cost estimates for different treatment scenarios were recorded:

- Filter replacements to prevent algae from clogging irrigation equipment: R24 000/year per river water intake point.
- In the neighbouring Olifants catchment, farmers incurred costs between R2 410/ha/year and R3 700/ha/year for irrigated land. This included replacing filters, treating water with copper sulphate, having to do increased maintenance and replacing equipment from source to irrigation nozzles.
- R64 800/year per intake point for material costs of additional chlorination (excluding labour costs).
- R13 200/ha/year as a minimum cost estimate for treatment of all irrigation water to potable quality if water can be treated at a cost of R2/m^3, and 6 600 m^3/ha is supplied every year.

A commercial farm may incur any or a combination of the above costs, depending on the local situation.

Costs for other practices (e.g. building retention dams, washing crops and providing personal protective equipment to farm staff) could not be quantified.

Subsistence farmers face a serious health risk due to faecal pollution

Commercial farmers, through the use of low-risk crops, are at a far lower health and reputational risk from *E. coli* pollution than emerging farmers. Investing in added treatments is a necessity if production standards are to be met. The typical scale of commercial operations makes this investment possible, even if it is burdensome.

Emerging farmers are stuck in their battle to access larger commercial markets because of their limited ability to safeguard their crops against pollution from contaminated water, unless they focus on cultivating safer crop types. Specific support would be required for them to improve the safety of their irrigation water so that they can enter the market with safely produced crops. Extension officers should be mindful of this limitation when advising emerging farmers on their crop choice.

Small-scale farming areas are often in densely populated areas with sanitation challenges. The South African National Land-Cover data indicates that much farming in the Bushbuckridge, Mbombela and Nkomazi local municipalities is subsistence farming. In fact, between 35% and 70% of households in these local municipalities are involved in subsistence agriculture. Annual crops such as cabbage and green leafy vegetables or butternut typically fall into the more vulnerable category for *E. coli* pollution.

Because of the crop type and a limited financial buffer, subsistence households and local food supply chains are the most exposed to health risks from faecal pollution and subsequent waterborne diseases and diarrhoea.

Although this stakeholder group has limited options, the reduction of faecal pollution in the catchment and the improvement of river water quality are essential for them. To safeguard health, it is imperative that different levels of government and water service providers fulfil their mandates to provide proper sanitation, among others.

A way forward

WWF would like to cooperate with other water stewardship stakeholders to foster and grow a more formal partnership through which more water stewardship actions on the ground can be collectively overseen and implemented.

The following ideas either emanated from the initial 2019 workshop or were added because of insights gained from the technical report:

- Forming a Steering Committee for the partnership that should represent the community, the public and private sectors and other stakeholders concerned with water quality and the economic growth of agriculture in the Sabie and Crocodile catchments.
- Starting a collective action project on baby nappies to change behaviour towards using reusable nappies instead of disposable ones, based on the format and learning of the successful Durban nappy project.
- Conducting further research – focusing specifically on unmonitored regions and subsistence farming areas with high-risk crops – to add a layer of empirical data to validate the findings of the report.
- Appointing an extension officer who can focus on key issues of concern to complement the skills of existing extension officers in the landscape.
- Holding training sessions on water management issues for farmers and extension officers.
- Investigating the possibility of a rapid response system to communicate high-risk spill events from wastewater treatment works.
- Determining the water uses for different crops, given that water is already over-allocated in the Sabie and Crocodile catchments.

LINKING TO THE HEALTHY CATCHMENT ALLIANCE

The Healthy Catchment Alliance is an official collaboration comprising South African NGOs. It strives to safeguard and facilitate the sustainable governance of significant river catchments, including the Umgeni and UmZimvubu. The work of the Healthy Catchment Alliance aligns with Woolworths' goal of increasing its footprint in water source areas.

Woolworths provided seed funding that created a spread of benefits to other organisations and NGOs that focus on the effective management and community beneficiation of catchment areas.

The work of the Healthy Catchment Alliance aligns with Woolworths' goal of increasing its footprint in water source areas.

COMMITMENT

Through the Woolworths partnership:

- WWF is to implement a measurable approach to build capacity in other institutions to address water source management objectives (catchment focuses potentially the Umgeni and UmZimvubu).

IMPACTS FOR THE REPORTING PERIOD

- The UmZimvubu Catchment Partnership (UCP) programme continues to effectively engage local partners and identify new opportunities for improving the catchment and the livelihoods of those who live in it.
- The Woolworths funding catalysed other funding. Partners in the Healthy Catchment Alliance are now receiving funding from a range of different organisations, including Nedbank, First Rand Foundation, Coca-Cola, Nedbank Green Trust, Finish and PepsiCo. This funding is covering a complementary suite of activities aimed at better livelihoods by improving landscape management.
- Funding has been secured to protect 36 natural springs. These springs are the sole water source for many people in the area and protecting them will improve access to potable water for about 5 000 people.
- The project now holds Conservation Agreements with six grazing associations covering approximately 28 000 ha. The communities have set aside 4 750 ha for rest in the last two years.
- Activities conducted in the area to improve catchment management include convening the UCP, alien tree clearing, working with grazing associations to improve rangeland management practices, providing those associations with access to markets and veterinary services, and expanding protected areas.
- The area has now been certified by the Forestry Stewardship Council to deliver sustainably produced charcoal. This is a first for a communal landscape in Africa. Young entrepreneurs who graduated from a WWF-funded UCP internship have started their own businesses and are producing enough charcoal to create livelihoods for 10 people.

SUSTAINABLE AGRICULTURE

REDUCING THE NEGATIVE ENVIRONMENTAL IMPACTS OF AGRICULTURE

South Africa's food system, despite its high productivity, has caused greater harm to the natural environment compared to any other human endeavour. Among all human activities, food production stands as the primary driver of biodiversity loss, deforestation, desertification and soil degradation. Moreover, it exacerbates water scarcity, deteriorates water quality and inflicts extensive damage upon marine ecosystems.

WWF and Woolworths share the understanding that robust ecosystems serve as the bedrock for a sustainable food source, and that building resilience at the production level is crucial for the overall regeneration of the food system. This approach is essential to provide South Africa with wholesome and nourishing food in the present and for generations to come.

Since 2009, Woolworths has acknowledged the unsustainability of many farming methods in South Africa. Through the Farming for the Future initiative, Woolworths aims to drive a positive change away from irresponsible farming practices by encouraging the implementation of best-practice farming techniques tailored to specific soil, climate and crop combinations.

SUPPLIER BEST PRACTICE

At the heart of the Farming for the Future programme is the intention of lowering a farm's footprint through using regenerative agriculture principles. This concerns both the environment and the people who produce the food. Woolworths has only a few farmers who grow exclusively for them. Some of these farmers also supply other retailers with the same crops raised according to the Farming for the Future guidelines, thereby helping to shift the sector to be more responsible.

Click here or scan the QR code to view the 10-year WWF-Woolworths partnership celebration video.


© Sue Northam-Ras / WWF

COMMITMENT

During Phase 2 of the WWF-Woolworths partnership, work streams focused on creating thought-leadership and knowledge-sharing tools to ensure that Farming for the Future reached a wider audience.

- The targeted suppliers for this initiative include those involved in vegetable, fruit and dairy production.
- The objective is to gather insights from highly successful suppliers participating in the Farming for the Future programme, covering various indicators.
- By conducting a comprehensive analysis of energy, water, waste and social transformation aspects, the project aims to learn from these knowledgeable suppliers and extend the support to all suppliers.

IMPACTS FOR THE REPORTING PERIOD

- The Farming for the Future programme was created by, and for, farmers, to educate and empower farmers on growing their crops sustainably – to grow more food while using less energy, less water and less land.
- Farmers were taught how to evaluate their own farms and assess areas they could improve for greater sustainability.
- Farmers were given credit for their hard work and efforts to create sustainable farms.
- To optimise the learning from the Farming for the Future programme, a video was created to celebrate the 10-year WWF-Woolworths partnership milestone and to recruit even more farms to the programme.

A review of the Farming for the Future guidance material to specifically enhance the biodiversity assessment and monitoring components was proposed. This would have included a review of terminology or criteria to more accurately reflect the Farming for the Future principles and practices that are promoting and enhancing ecosystem services, and are thus regenerative actions to be recognised.

It was jointly agreed that this review would be carried over into the next phase of the partnership (Phase 3), with a more dedicated focus on the biodiversity elements aligned with regenerative agriculture practices.

Stefan Theron
"THE RYNO PIENAAR COORDINATOR MODEL", REPLICATED AND SCALED AGAIN

Given the success of the "Ryno Pienaar Coordinator Model" (see page 24), the idea of using a similar model in the Koue Bokkeveld, a significant sourcing region for Woolworths' fruit and vegetable suppliers, was explored. Stefan Theron was appointed as the Koue Bokkeveld coordinator. His position was funded for two years by UK retailers with the goal of expanding the above and below groundwater management in the Koue Bokkeveld area. Stefan operates out of the Waboomsberg Conservancy, which is based at Koelfontein farm. Together with Nooitgedacht farm, Koelfontein is a significant Woolworths supplier.

Stefan met with Wolseley Water User Association coordinator Ryno Pienaar and has since expanded the alien-clearing projects in the conservancy and in the Twee Rivieren area in the northern Koue Bokkeveld. He received training on groundwater monitoring for the Titus River valley (see page 27) and is now responsible for the data gathering and analysis of the groundwater loggers.

Between March and June 2020, 220 ha of lightly infested land in this area was cleared (34 person days) with funding from LandCare to the value of R170 000. The WWF Sustainable Agriculture extension officer co-developed a detailed alien-clearing plan for the conservancy, which will provide guidance for future clearing when additional funding becomes available to continue the work.

In December 2020, an opportunity came about to use the remaining GEF-5 funds in the Waboomsberg Conservancy for alien clearing at Koelfontein and Nooitgedacht farms. This work provided 325 person days, which was much needed given the delay in government funding for these teams. The teams cleared 84,5 ha of black wattle on the upper slopes of the Waboomsberg, which will benefit both these farms by reducing fire risk and improving water availability.

In the newly established Twee Rivieren Nature Reserve, Stefan's presence and his ability to coordinate funds and alien-clearing teams have catalysed the clearing of an additional 28 ha of black wattle in the critical upper Groot Winterhoek catchment. This area represents 9 400 ha of critical biodiversity-rich fynbos habitat at the start of the Doring and Olifants rivers, which has now been officially secured with a formal 99-year stewardship agreement.

Future projects in the area will be to expand the water-monitoring tool that is being developed in partnership with LandCare, the Freshwater Research Centre and the Institute for Water Research (IWR). This tool will enhance the accuracy of water measurement by installing more weather stations and stream-flow devices, among others, to improve the management of water in this critical catchment. It will drive shared water management and will be available for farmers to use within the Twee Rivieren catchment where several Woolworths suppliers are based.

325
PERSON DAYS FOR ALIEN CLEARING

84,5 ha
CLEARED OF BLACK WATTLE IN THE WABOOMSBERG

220 ha
OF LIGHTLY INFESTED LAND CLEARED USING LANDCARE FUNDING

A water-monitoring tool is being developed in partnership with LandCare, the Freshwater Research Centre and the IWR to enhance the accuracy of water measurement.

SUSTAINABLE WINE PRODUCTION: CONSERVATION CHAMPIONS

Climate change will have tangible effects on biodiversity and food security in Africa. The alarming effects of this persistent problem will be felt from farm to table, including in the wine industry. In the 2000s, the vineyard footprint expanded into conservation habitats of concern, notably the Cape Floral Kingdom (Fynbos biome) and the Succulent Karoo biome.

Over 95% of South African wine is produced in the Cape Floral Kingdom, the smallest and richest in the world. The Fynbos biome covers an area of 37 000 km². Altogether 68% of the 7 300 plant species that grow here occur nowhere else on Earth. In parallel, the Succulent Karoo biome is home to 4 000 plant species, 2 500 of which are endemic. These biodiversity hotspots are experiencing the threat of dwindling winter rain because of climate change.

Since 2004, WWF has partnered with the wine industry in various initiatives focusing on water and biodiversity. WWF Conservation Champions are wine farms that implement regenerative farming practices and are committed to conserving previously unprotected and critically endangered ecosystems. In doing this, they are creating and maintaining healthy ecosystems that provide crucial ecosystem services, such as the increased flow of freshwater, healthy soil, clean air, and a habitat for many rare and endangered species which, if left unprotected, may be lost forever.

There is room to improve the number of Conservation Champion farms during Phase 3 of the partnership, as the farms listed have assessments that include water, carbon and waste information, as well as a more detailed biodiversity conservation assessment (Integrated Production of Wine (IPW) + Farming for the Future Wine + Conservation Champion). Reviewing the Farming for the Future wine farms list is possibly a good way to evaluate the "sustainable wine" target.

COMMITMENT

Woolworths' commitments for this reporting period were:

- To be the leading innovator by 2020
- To focus on farm audits for water, carbon and waste through the WWF Conservation Champions programme.

IMPACTS FOR THE REPORTING PERIOD

- Consumers are increasingly becoming more conscious of their choices, wanting to know more about their products and where they come from. This trend is an opportunity to illustrate what the Conservation Champion farms are doing. It will promote Woolworths as a responsible retailer and give recognition to the suppliers for their environmental commitments.
- Since December 2020, three Woolworths supplier farms have joined the WWF Conservation Champion programme.
- Approximately 25% of the Woolworths Top Tier wine suppliers are Conservation Champions.

95%

OF SOUTH AFRICA'S WINE IS PRODUCED IN THE CAPE FLORAL KINGDOM

SUSTAINABLE SUGAR

The farming of sugar can contribute to various environmental problems, including soil degradation, excessive water consumption and pollution, chemical use and pesticide residues, and GHG emissions because of the burning of sugarcane fields before the harvest. Addressing these environmental issues requires implementing regenerative agricultural practices or techniques, responsible water management, reduced chemical inputs, and land-use planning that considers biodiversity and ecosystem protection. Certification programmes, such as BONSUCRO, can help to promote sustainable practices.

BONSUCRO is a global non-profit organisation that focuses specifically on the sustainable production of sugarcane. It provides a certification system for sugarcane farmers, mills and traders, ensuring that they meet specific sustainability standards. BONSUCRO certification covers various aspects of sugarcane production, including environmental management, social responsibility and economic viability. By promoting sustainable practices in the sugarcane industry, BONSUCRO aims to reduce the environmental impact of sugarcane production and improve the livelihoods of farmers.

The Sustainable Agriculture Initiative South Africa (SUSFARMS®) is a programme that promotes sustainable farming practices in South Africa. It aims to support and encourage farmers to adopt environmentally friendly and socially responsible practices, including efficient resource management, biodiversity conservation and fair labour conditions. The programme provides guidelines, training and certification to farmers to ensure that their agricultural practices align with sustainability principles.

WWF and Woolworths identified the environmental challenges in the sugar industry early in the partnership. Since Phase 1, Woolworths has been supporting SUSFARMS® and BONSUCRO at the production and retail levels.

SUSFARMS® Version 4 has two useful resources:

- A **manual** to guide to growers on how to implement practices that reduce negative impacts on the environment and maintain worker health and safety while encouraging financial compliance.
- A **progress tracker** as an Excel spreadsheet that allows growers to perform a self-assessment. This helps to establish the extent to which best practices have been implemented.

Growers can access an e-version of the manual and the associated progress tracker at: www.sasri.org.za/susfarms.

Source: https://sasri.org.za/susfarms-version-4-now-available

COMMITMENT

Woolworths committed to buying sustainably produced sugar to support the Collaborative Sugar Supply Chain process.

IMPACTS FOR THE REPORTING PERIOD

- Woolworths has been intervening at various levels to transform sugar production, by:
  - Participating as an observer partner on the SUSFARMS® Collaborative Sugar Supply Chain Steering Committee and being part of the cross-industry alignment with SUSFARMS® and the Sustainability Initiative of South Africa (SIZA).
  - Supporting SUSFARMS® to embark on ethical trade compliance through the SIZA labour standard.
  - Providing the poster loop for the 240 bio-diversity posters that were distributed to and by SUSFARMS® members.
  - Supporting the translation, printing and distribution of 1 000 pest and disease pocket guides as part of the Small-scale Growers project.
- In 2019, WWF linked the SIZA labour standard with the SUSFARMS® platform coordinator and funded the development of a SIZA pilot with five SUSFARMS® farmers.
- In April 2021, SIZA and SUSFARMS® undertook an equivalence rating of SIZA and SUSFARMS® standards. This led to industry support for SUSFARMS® to embark on ethical trade compliance through the SIZA labour standard.
- SUSFARMS® will be rolled out to the KwaZulu-Natal South Coast. Members (farmers and mills), such as Illovo and UCL, have adopted a user-pay model to continue delivering SUSFARMS® sugar. This will increase possible procurement opportunities for Woolworths.
- WWF linked BONSUCRO to Woolworths, Tongaat Hulett, Nedbank and Tetra Pak to explore a pilot project for developing recyclable plastic from sugarcane, and to convene a Roundtable for Sustainable Biofuels to explore the manufacture of biofuel from sugarcane with SA Canegrowers.
- SUSFARMS® Version 4, the fourth edition of the SUSFARMS® manual and progress tracker, has been completed and is being managed by the South African Sugarcane Research Institute (SASRI) (see box left). This will help SUSFARMS® members who want to diversify their products to supply Woolworths with sustainable plastic packaging made from SUSFARMS® grown and sourced sugar.

SUSTAINABLE COTTON

WWF and Cotton SA are exploring a pilot project to support smallholder farmers in the Nkomazi-Lomati Water Source area in Mpumalanga who are switching from sugarcane to cotton, or using intercropping. Both Cotton SA and Woolworths are aligned to the Better Cotton Initiative (BCI), which endorses fewer chemicals and sustainable, ethical production. WWF and Woolworths agreed that the pilot project would be the ideal start to help emerging smallholder producers to farm responsibly and benefit from access to market.

COMMITMENT

Woolworths is committed to:

- Supporting local sustainable cotton production
- Supporting smallholder producers to help build resilience in local supply chains.

IMPACTS FOR THE REPORTING PERIOD

- By late 2020, project contracts had been signed for the pilot project, a cane-growing emerging farmer selected, and Cotton SA was brought in by WWF as an expert mentor.
- The emerging farmer is 34-year-old Mfundo Msimango from Mangweni in the Nkomazi District of Mpumalanga. He grew up in rural Mpumalanga and is a strong entrepreneur with an appetite for risk. He had bought a 9 ha sugarcane field that was using a lot of water but giving poor yields.
- Mfundo's plot is being used by Cotton SA to train other irrigation smallholders on how to cultivate cotton and demonstrate to sugarcane farmers the practices needed to switch to cotton production. The cotton harvest will be delivered to Loskop Cotton Gin and supplied to the Woolworths supply chain, with a guaranteed offtake agreement by the gin.
- The potential yield for the area is more than 5 000 kg seed cotton per hectare. The first crop harvest was more than 3 500 kg per hectare. It was successfully harvested despite damage from floods in the area, which cost Mfundo 0,4% of his potential harvest.
- The project has attracted interest from Nedbank and the Department of Agriculture.
- The success of this pilot has resulted in a second project with a second farmer. Planting took place in June 2023.

BOX 3: COTTON FARMING FOR THE FUTURE

In the north-eastern corner of South Africa, close to the border crossing into Mozambique, lies the ecologically important Komati landscape. This is sugarcane country. Driving through these tarred roads, one can't miss the large-scale irrigation systems blasting water over one-foot sugarcane fields. It is not an easy sight, knowing that South Africa is a water-scarce country, and this region has recently experienced drought.

However, because there is usually more rain in this Komati part of the Mpumalanga Lowveld than South Africa's average rainfall, enduring crops – such as sugarcane and cotton – do well in this climate.

While sugarcane is an important cash crop for this area it is not indigenous, and this exotic crop consumes far more water than even this region can support. When on these roads, one passes an abundance of high, open-top, double-trailer trucks carrying the burnt leaves of freshly harvested sugarcane. Occasionally there is the odd plantation of banana trees, but mostly, field-upon-field of water-intensive sugarcane.

In the midst of plentiful sugarcane fields lies a low field of pure cotton in its raw, on-the-plant form. This is the land of 34-year-old Mfundo Msimango from Mangweni in the Nkomazi District of Mpumalanga.

In 2019, WWF was involved in an ISEAL multi-stakeholder project meeting on sustainable finance in this drought-hit Mpumalanga landscape. While there, it came to light that smallholder canegrowers were exploring options beyond sugarcane and needed assistance to trial cotton growing as an option.

Based on the global Better Cotton Initiative (BCI), piloting a smallholder cotton project in a sugarcane field would not only enhance these smallholders' livelihoods while improving the soil, but it could ultimately create a South African market too: locally grown, sustainable cotton available to local retailers.

At the time, Woolworths had recently committed to source locally grown sustainable cotton for its clothing business. Together, WWF and Woolworths agreed that this pilot project would be the ideal start to help emerging smallholder producers to farm responsibly and benefit from access to market.

By 2020, project contracts had been signed, a cane-growing smallholder selected, and WWF brought in Cotton SA as an expert mentor. Both Cotton SA and Woolworths are aligned to the BCI, which endorses fewer chemicals, and both sustainable and ethical production.

The pilot project objectives were clear: to test the case for a local smallholder cotton crop, with the incentive for emerging farmers to intercrop sugarcane with cotton and reap profit and soil benefits.

In terms of environmental benefits, cotton gives back to nature in two main ways. First, far less water is needed to grow cotton compared with water-thirsty sugarcane. Second, good land preparation before planting cotton seeds goes a long way to help open the soil. The long taproot of the cotton plant continues to loosen the soil further, plus the nutrient-rich cotton leaves can be ploughed back into the soil after harvest.

If this pilot is scaled, it can add to the case for creating a local cotton processing plant – known as a gin – which is on the potential cards. The closest gin is 400 km away, in Limpopo.

While many hard lessons were learnt during this pilot, there are glimmers of opportunity. Both for nature and a local cotton industry. Cotton can offer a diversified livelihood and a quick turnaround crop for smallholder producers, plus part-time work for seasonal cotton pickers compared to the machine harvesting of sugarcane.

Good preparation of the ground combined with restoration of nutrient-depleted soil means that intercropping cane with cotton will enable healthier soil, more productive fields and better future yields, whether planting sugar, cotton or vegetables. Vastly improved soil is a big value-add in the farming world, especially for a field that was producing a low yield. Plus, cotton uses less water and could help to replenish the wider catchment, which is under immense stress.

The Komati region is a landscape of abundant possibility: receiving higher rainfall, connected to an important water source area and home to many wild and wide rivers. It goes without saying that these factors are essential for growing food and enabling local livelihoods, as well as for wildlife and nature-based tourism. And WWF is keen to continue working with Woolworths to ensure that important landscapes like this one, are safeguarded from rampant unsafe practices – for people and nature.

Mfundo Msimango
SWITCHING FROM SUGARCANE TO COTTON

Mfundo Msimango from Mangweni was selected as the emerging farmer for the pilot project. He grew up in rural Mpumalanga and is a strong entrepreneur with an appetite for risk. He had recently bought a 9-hectare sugarcane field that wasn't giving good yields, yet was using a lot of water.

Canegrower Mfundo had heard that cotton likes sandy soil and is a good rotator crop. He was keen to take the chance and be the first smallholder farmer in the WWF cotton pilot project. Using the field that wasn't giving good sugar yields, he put forward the required five hectares for the project site and put in the time and effort to prepare the field.

Mfundo studied quantity surveying (QS) after school but ended up following the farming life like his father. When his dad passed away in 2004, Mfundo inherited 10 hectares of sugarcane land and had to learn the sugar business. While working as a QS, he also tried his hand at poultry for a brief patch but by 2015 he had fully switched to sugar farming.

Seven years later, Mfundo has 77 hectares of sugarcane. He has put in the hard work and made profit. He has invested consistently, buying new land whenever he had surplus to do so.

Within only five to six months, the cotton was ready to be harvested. The process was not without struggle. There were delays in planting due to unexpected heavy December rains, followed by more heavy rains in early 2021 when Cyclone Eloise made landfall in Mozambique. Plus, a longer rainy stretch than normal for the time of year resulted in waterlogged fields. But many of the seeds took and sprouted.

Mfundo recalls with great joy the day they spotted the first flowers. Once the creamy-white cotton flowers are pollinated they turn purple, and then they turn into a green bud-like "boll". This boll is the magic casing inside which the cotton grows.

Adapted from the WWF blog, "Cotton farming for the future" by Sue Northam-Ras

REDUCING FOOD WASTE IN THE SUPPLY CHAIN

REDUCING LOSS AND FOOD WASTE THROUGHOUT THE SUPPLY CHAIN

It has been estimated that 1,3 billion tonnes of food goes to waste globally each year – about a third of all food produced worldwide. Not only is the food going to waste, but the resources used to produce the food are being wasted too.

Food waste is costing the global economy about $1 trillion annually, according to the United Nations Food and Agriculture Organization and the United Nations Environment Programme. The South African National Policy on Food and Nutrition Security estimates that approximately 10,3 million tonnes of food is wasted annually in South Africa, which equates to R75 billion lost. This is alarming, given that food security is a national key priority.

REDUCING FOOD WASTE

OVER 9 MILLION TONNES OF FOOD VALUED AT R61,5 BILLION WASTED EVERY YEAR IN SOUTH AFRICA

Enough to fill Cape Town Stadium more than 5 times

Represents 600 000 ℓ of embedded water

Represents enough energy to power the city of Johannesburg for 20 years

COMMITMENT

Woolworths and WWF have worked together to address the sources of food waste across the value chain by:

- Publishing a partnership-branded food waste report and continuing supply chain research and action
- Performing a Life Cycle Analysis (LCA) to promote an understanding of supply chain hotspots for water, energy and waste
- Focusing on raspberries and cucumbers as key commodities to pilot food waste measurement models and reduction interventions.

IMPACTS FOR THE REPORTING PERIOD

- WWF made the introductions between its Foods team and the chair of the Post-harvest Waste Department at Stellenbosch University. The aim is to assist Woolworths suppliers in reducing food loss and waste on farms by participating in the department's research and learning.
- An LCA was performed for raspberries and cucumbers.
- The *Agri-food Systems: Facts and Futures* report was published as part of the partnership.

Click here or scan the QR code for the *Agri-food Systems: Facts and Futures* report.

LIFE CYCLE ANALYSIS FOR RASPBERRIES AND CUCUMBERS

Life Cycle Analysis (LCA) is a globally benchmarked method for revealing and quantifying environmental impacts and resource use along the complete supply chain. A life cycle-based approach makes it possible to understand environmental hotspots and take decisions in a larger system and strategy, while avoiding decisions that fix one environmental problem while causing another.

The willingness with which Woolworths supported WWF's raspberry and cucumber LCA work is evidence of its commitment to look beyond "good housekeeping" and extend its strategy to relieve environmental pressure throughout the supply chain.

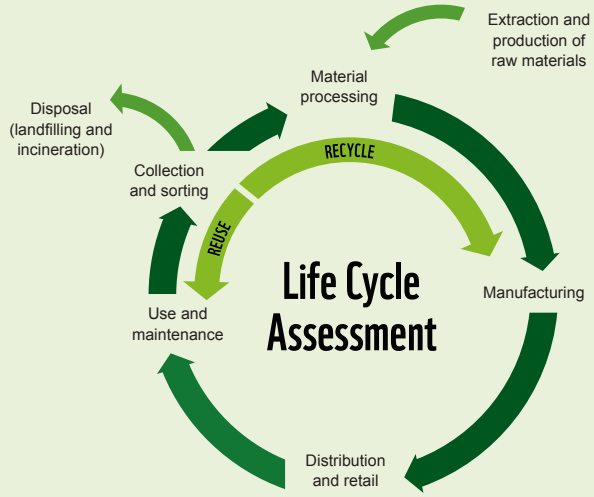
LCA results for raspberries

- A comparison was made between raspberries grown in plastic tunnels and raspberries grown under shade netting. Despite requiring more plastic, the carbon and water-scarcity footprints of tunnel-grown raspberries were less than half of raspberries grown under shade netting, and their potential impact on ecosystem health was lower by nearly 80%. This means tunnel-grown raspberries need less water, pesticides, fertilisers and electricity. Thus, although high, plastic use at the farm stage translates to clear environmental benefits.
- The benefits of the PET punnets are less clear, with relatively high product loss indicated by the consumer survey and relatively high energy-related impacts at retail.

LCA results for cucumbers

- For English cucumbers, the packaging adds extremely little to the plastic footprint (as well as to the other environmental metrics considered in the study).
- Greater reductions in the overall environmental footprint can be achieved by focusing on "hotspots" rather than on the packaging.
- Shelf-life trials conducted as part of the study showed that wrapped cucumbers kept at 22 °C lasted well over the time frame within which most consumers consume a cucumber after purchase.
- Avoiding refrigeration at retail has the potential of decreasing the carbon footprint of a cucumber by at least 25% (while the wrapping adds less than 0,5% to the carbon footprint).
- Keeping cucumbers at too cold a temperature can cause cold damage and increase food loss.
- The high embedded plastic consumption across the cucumber value chain, specifically at the farm stage, means the impacts of producing and disposing of the plastic wrapping (packaging) is insignificant compared to preventing just 2,5% of the cucumber from being wasted.

WHY A LIFE CYCLE ASSESSMENT OF FRESH PRODUCE?



LIFE CYCLE ASSESSMENT OF RASPBERRIES AND CUCUMBERS

KEY INSIGHTS FROM THE 2020 RASPBERRY AND CUCUMBER LCA COMPARING THE CARBON AND PLASTIC FOOTPRINT

- High use of plastic in their value chains
- Significant products for Woolworths
- Good supplier relationships
- From farm to consumer: 1 000 kg at point-of-sale

160 g standard raspberry pack

350 g bulk raspberry pack

English cucumber

Mediterranean cucumber

Mediterranean cucumber 3-pack

Cucumber snacking cups

WHY A LIFE CYCLE ASSESSMENT?

Understand the environmental impacts across the full value chain, from farm to consumer

WHY FRESH PRODUCE?

Explore the duality arising from plastic use in growing and distributing fresh produce

HOW DO RASPBERRIES AND CUCUMBERS COMPARE?

A handful of berries (50 g) is equivalent to boiling 34 cups of water or flushing 20 litres of water or using 26 plastic straws

5 slices of cucumber (50 g) is equivalent to boiling 8 cups of water or flushing 4 litres or using 9 plastic straws

50 g of steak (about a third of a small steak) is equivalent to boiling 40 cups of water or driving 6,6 km

One small apple is equivalent to boiling less than one cup of water or driving 120 m

SUPPLY CHAIN GOOD PRACTICE

Deforestation for palm oil and soy sourcing

Deforestation and forest degradation have led to the destruction of habitat for over half of the world's terrestrial plant and animal species, and contribute to an estimated 15% of global GHG emissions. The destruction of these valuable habitats threatens the livelihoods of over 1,6 billion people who depend on forests for fuel, materials, nutrition and income generation.

While in South Africa there is no direct on-site deforestation, many products and commodities stocked by retailers, including Woolworths, contain ingredients from areas where forests have been cleared, such as palm oil and soy.

COMMITMENT

Woolworths committed to:

- Selling products that cause minimum harm to the natural environment
- Helping to maintain biodiversity
- Helping to improve the lives of workers in the supply chain
- Working with suppliers and partners such as WWF to ensure that products are responsibly sourced.

IMPACTS FOR THE REPORTING PERIOD

- WWF assisted Woolworths in developing its deforestation commitment. The next partnership phase (Phase 3) will promote this policy into the Woolworths supply chain to ensure supplier understanding and implementation.
- WWF and Woolworths developed an in-depth and comprehensive policy for palm oil and soy sourcing.
- Woolworths also played a key role at the Roundtable on Sustainable Palm Oil (RSPO). This global organisation was established in 2004 to promote the production and use of sustainable palm oil. The RSPO brings together stakeholders from various sectors, including palm oil producers, processors, traders, consumer goods manufacturers, and environmental and social NGOs.
- As a result, Woolworths has a firm commitment to sourcing responsibly produced palm oil and will ensure wider industry uptake in Phase 3.
- Woolworths also participated in the Global Palm Oil scorecard and achieved a good score relative to other South African retailers, brand owners and manufacturers.

LOW-CARBON PATHWAYS IN THE SUPPLY CHAIN

EXPLORING LOW-CARBON PATHWAYS THROUGHOUT THE SUPPLY CHAIN

The production of plastic involves the extraction and refining of fossil fuels, primarily petroleum and natural gas. These processes release carbon dioxide and other greenhouse gases into the atmosphere.

Plastic waste that is improperly managed and ends up in landfills or the environment can emit methane, a potent GHG. Plastic reduction can be considered a low-carbon pathway because plastic production and disposal contribute to GHG emissions and climate change. Reducing plastic consumption and implementing more sustainable alternatives can reduce the carbon emissions associated with the plastic life cycle.

THE SOUTH AFRICAN PLASTICS PACT AND ON-PACK RECYCLING LABELS

Plastic, a versatile material used in various industries, presents significant challenges because it persists in the environment and has detrimental effects on human health and ecosystems. The true costs of plastic, including its negative externalities, have become increasingly apparent. Addressing plastic pollution requires a comprehensive approach that considers the entire life cycle of plastic, as failures at each stage contribute to the problem.

In collaboration with the South African Plastics Recycling Organisation (SAPRO), the UK's Waste and Resources Action Programme (WRAP), and with valuable input from Woolworths, WWF developed the South African Plastics Pact. Launched in January 2020, this initiative is managed and implemented by GreenCape.

The founding members of the South African Plastics Pact have committed to ambitious targets for 2025, aiming to prevent plastics from becoming waste or pollution. While tailored to the South African context, the Pact draws upon the experiences of other Plastics Pact networks worldwide, particularly the UK Plastics Pact led by WRAP.

COMMITMENT

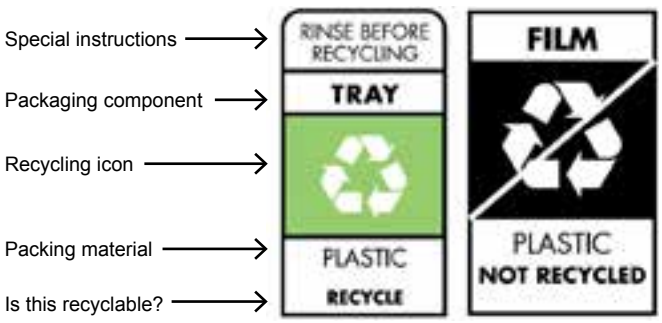
By signing up to the South African Plastics Pact, Woolworths has committed to:

- Taking action on problematic or unnecessary plastic packaging through redesign, innovation or alternative (reuse) delivery models
- 100% of plastic packaging to be reusable, recyclable or compostable
- 70% of plastic packaging effectively recycled
- 30% average recycled content across all plastic packaging.

IMPACTS FOR THE REPORTING PERIOD

- The South African Plastics Pact Memorandum of Understanding (MoU) was revised by WWF's legal department and signed by Woolworths (the founding member).
- Woolworths was one of the main drivers for a South African Plastics Pact and one of the first signatories.
- Woolworths served on the South African Plastics Pact Steering Committee and played an integral role in developing and implementing the on-pack recycling label (OPRL) system.
- OPRLs are needed to assist consumers in separating materials at source for recycling. The use of various symbols on plastic packaging creates a great deal of confusion for consumers, who need to manage their plastic recycling more effectively.
- Woolworths has pioneered the use of OPRLs and is already using this standard on its products.

EXAMPLE OF THE NEW STANDARDISED BINARY ON-PACK RECYCLING LABEL



LOOKING AHEAD

For the past 15 years, WWF and Woolworths have fostered a successful and significant partnership. What initially began as a collaboration solely focused on seafood in 2008 has evolved into a transformational partnership.

This transformative approach goes beyond Woolworths' operations and supply chains, aiming to create systemic changes both within Woolworths and across the sectors in which it operates.

Woolworths, with its substantial influence over suppliers and producers, has the power to drive sustainability and bring about sector-wide shifts. However, these endeavours require extensive support in technical expertise, building public trust and ensuring independent integrity. WWF has provided and will continue to provide this support as the partnership enters Phase 3.

The mission of Phase 3 is bold and game changing. Recognising that nature loss poses business risks, Woolworths and WWF aim to redefine how societies and economies are fed, fuelled and financed. Through this well-established, broad-based and multi-year partnership, we seek to reduce environmental impact, enhance sustainability, and build resilience within Woolworths' business operations and value chains.

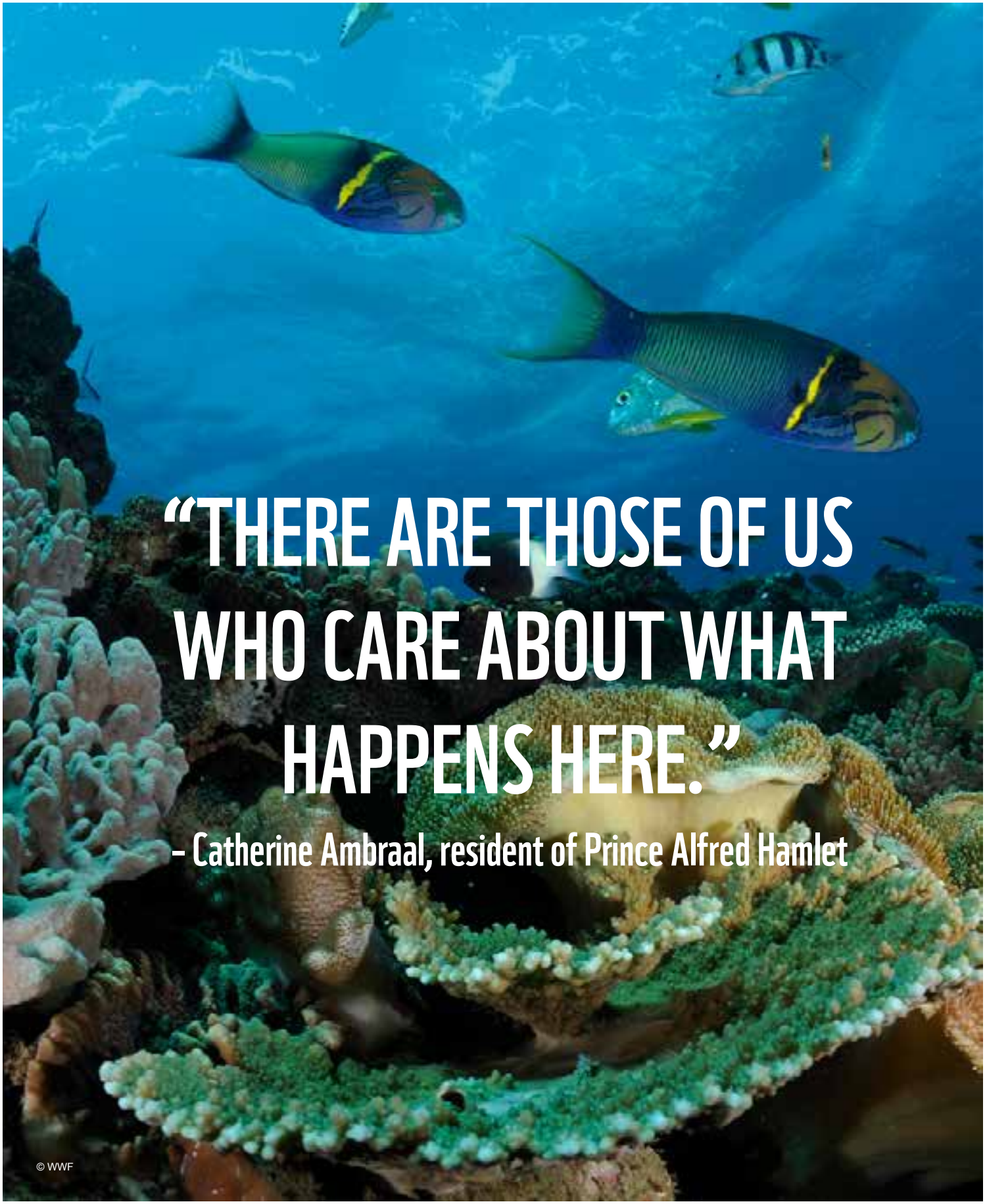
The long-term goals of this collaboration include reducing the production and consumption impacts on water, carbon, biodiversity and natural resources, including marine resources. It also aims to reduce environmental impact in the agricultural supply chain, improve water stewardship and community benefits, decrease food loss/waste, explore nature-based solutions and circularity in supply chains, and inspire behaviour shifts among Woolworths employees and customers.

To align with the revised Good Business Journey strategy and WWF's strategic outcomes, the partnership will from now on be segmented into seven themes: responsible sourcing, circularity, marine, climate change, water, biodiversity, and behaviour change and communications. The guiding principle of Phase 3 is to embrace and operate within a landscape and/or seascape approach.

The value proposition of Phase 3 is framed around three key aspects: looking inwards, looking outwards, and looking forwards. Looking inwards involves focusing on Woolworths' operations and supply chains to drive innovation, reduce costs, minimise environmental impacts and enhance environmental performance (Being the Difference). Looking outwards entails engaging with stakeholders beyond supply chains and collaborating with resource users to support stewardship of the wider landscape (Making the Difference). Looking forwards encompasses using innovation to evolve products and services, and promoting sustainable consumption through consumer engagement, behaviour change, advocacy and good governance (Exploring the Difference).

The WWF-Woolworths Partnership's Phase 3 aims to enable Woolworths to achieve its environmental targets while simultaneously catalysing transformative change within the sectors in which it operates.

Pavitray (Pavs) Pillay
Environmental Behaviour Change and WWF-SASSI Manager, Woolworths Relationship Manager



WWF

Lasting positive outcomes for people and nature in the places where we work and from priority environmental challenges we focus on.

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1st Floor, Bridge House, Boundary Terraces, Mariendahl Lane, Newlands, Cape Town.
PO Box 23273, Claremont 7735 T: +27 21 657 6600 E: info@wwf.org.za W: wwf.org.za