PROGRESS IN THE IMPLEMENTATION OF THE OPERATION PHAKISA PROGRAMME

Portfolio Committee on Forestry, Fisheries and the Environment

25 February 2022

FOLLOW UP ON OPERATION PHAKISA CHEMICALS AND WASTE ECONOMY

25 February 2022

Contents

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The Chemicals and Waste Economy Phakisa aims to reduce negative impact on the environment, while growing the GDP contribution and creating jobs

Phakisa Aspiration

Reduce the **negative environmental and health impact** of waste and risks posed by chemicals

Increase commercialisation of the circular economy and create value from resources currently discarded as waste

Foster inclusive growth through positioning of South Africa as a globally competitive producer of sustainable products

Key objectives

- Grow the secondary resources economy by **increasing local utilization and beneficiation of waste resources by 50%-75%** through creation of an enabling regulatory environment
- Generation of **opportunities from chemical and waste resources** for the creation of jobs/ opportunities in new / existing markets specifically **through enabling SMMEs**
- Invest in R&D innovation (including IP) and infrastructure to **enhance the utilization of local waste** resources for new products, substances and services that will create jobs, and enhance the production of environmentally friendly chemicals
- **Reduce waste to landfill** by 75% of industrial waste and 50% of municipal waste through education and awareness, compliant society, application of cleaner production

Four workstreams were defined across the Chemicals and Waste economy

1 Bulk industrial waste

Maximise the **utilisation and beneficiation of bulk industrial waste**, including:

- Ash, Slag and Gypsum
- Organic waste (sewage sludge and meat production waste)

2 Municipal

Maximise **diversion of waste from landfill sites** through reuse, recycling and recovery, covering:

- Organic waste
- Construction and demolition (C&D)
- E-waste
- Packaging waste (paper, plastic and glass)

3 Product design & waste minimisation

Reduce volume of packaging and food waste ending up in landfill sites, by:

- Improving product design
- Increasing quality in production practices
- Promoting waste prevention

4 Chemicals

Reduce negative health, safety & environmental effects of harmful imported chemical products, focused on:

- Reclamation and recycling of refrigerant gas
- Lead-free paint

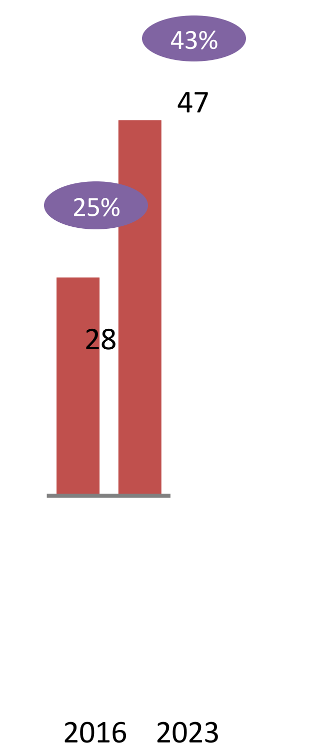
… and will divert 19.74 m tonnes from landfill of which 13.55 m tonnes will be recycled

% Percentage of total waste generated

Waste stream	Total annual waste production (M tonnes)	Total additional waste to be diverted annually (M tonnes)	Total additional waste to be recycled/reused annually (M tonnes)
Organic waste[2]	40.40	2.34	0.27
Ash	36.00	14.76	10.76
Non-recyclable waste[1]	8.85	0.12	0
C&D	5.20	1.45	1.45
Packaging/ plastic waste	1.49	1.00	1.00
E-waste	0.36	0.08	0.08
Total addressed	92.30	19.74	13.55
Waste not addressed[3]	22.40		
TOTAL WASTE	111.00		

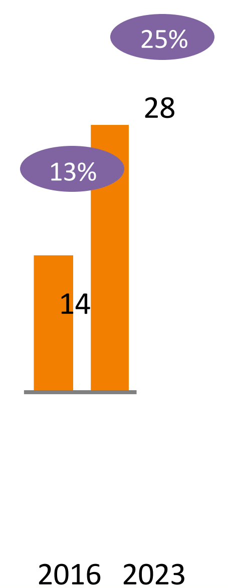
Waste diversion potential

M tonnes



Recycling/reuse potential

M tonnes



1 Includes AHP (absorbent hygiene products) and waste that would be recyclable but was contaminated due to mixing, composite materials, etc.
2 Includes organic waste from large industrial sources, municipal waste and sewage sludge
3 Waste not addressed includes all other waste generated in South Africa that is not being addressed by the Phakisa

SOURCE: 2012 National Waste Baseline

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2030 NDP

Participants identified 20 initiatives across 4 workstreams, including 2 cross-cutting initiatives

Bulk industrial waste

1. **Increase ash uptake for alternate building materials[1]**
2. Accelerate innovation and commercialize existing R&D[1]
   - Use ash as soil ameliorant
   - Use ash to treat acid mine drainage and backfill mines
3. Export ash and ash products[1]
4. Zero sewage sludge to land(fill)
   - Anaerobic Diegstor Biogas to Energy
   - FBR Thermal Treatment
5. Towards Zero meat production waste to land(fill) by 2023

Municipal

6. **Introduction of an E-waste levy to increase collection rate**
7. **Unlocking government ICT legacy volumes**
8. **Achieving a minimum of 50% of households separating at source by 2023**
9. Introduction of materials recovery facilities and pelletization plants to increase plastic recycling rates
10. Produce building aggregates and construction inputs from rubble and glass

Product design and waste minimisation

11. Developing capacity through a specialised programme which upskills agri-stakeholders to minimize food loss
12. Consumer awareness campaign to use and consume ugly food[2]
13. **Compilation/update of packaging design guidelines**
14. **Formalising the packaging industry producer responsibility plans**
15. **Establish an refuse-derived fuel plants across South Africa**

Chemicals

16. Establish a refrigerant reclamation and reusable cylinder industry
17. Ban import of harmful chemicals (e.g. leaded paint/paint pigments)
18. Collect and dispose stockpiles of harmful substances (asbestos, mercury)

Cross-cutting initiatives

19. Coordinate SMME development opportunities across initiatives
20. Roll out national awareness campaigns

1 The large volumes of ash produced enables both beneficiation and export
2 Fruit with high calorific value, but that are physically imperfect

Bulk industrial waste

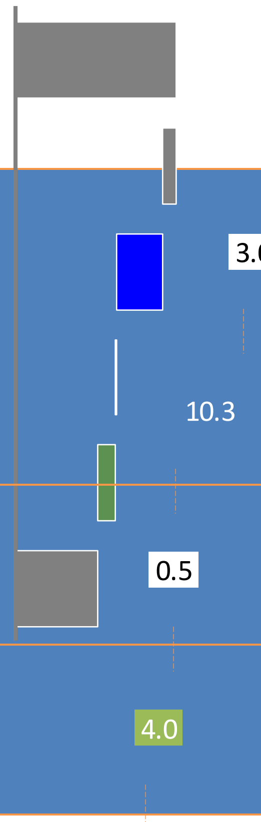
Bulk industrial waste

High impact initiatives for ash, gypsum, slag and biomass will divert 15.5Mt of waste from landfills and create ~28k direct jobs

		Impact: Economic Direct jobs created	Impact: Environmental Waste Diverted (Mt)
Ash, Slag & Gypsum Initiatives	**1a** Increase uptake for brickmaking, roads and building markets (key enabler is creating an **Industry forum to promote Alternative Building Material**)	24,500	10.3
	1b Accelerate innovation and commercialise existing R&D **i** Use ash as **soil** ameliorant	1,000	0.5
	ii Use ash to treat **Acid Mine Drainage (AMD)** and **backfill mines**	~1,000	4.0
	1c **Export** ash and ash products		
Biomass Waste Initiatives	**2** Towards zero **sewage sludge** to land(fill) sites by 2023	29	0.1
	3 Zero **meat production waste** to land(fill) sites by 2023	890	0.8
	Total	**28,220**	**15.5**

From Eskom alone there is more than enough ash to supply all local beneficiation options and export

New uptake through Phakisa initiatives



Prioritisation by type of impact		Target use of available ash, Mt per annum	Description of use
	Total ash produced by Eskom in 2023[1]	36.0	▪ Existing use in cement industry (market saturated) ▪ Some use for brick-making
1a Highest contribution to jobs	Existing use	3.0	▪ SMMEs will be set up to make **bricks/pavers and alternate building materials** from ash, gypsum and slag – Preliminary target of 30% for women and 70% for youth ▪ Impact will be maximized through demand creation for bricks to respond to housing crisis, create buildings and pave streets
	Brickmaking/pavers	10.3	
1b Solves critical environmental problem	AMD, back-filling and soil amelioration	0.5	▪ Ash will be used to **backfill** mostly **derelict and ownerless mines** – starting with 3 demonstration sites ▪ Once technology is fully established larger volumes could be used, possibly including ash from selected dump sites[2]
1c GDP contribution and trade balance	Export	4.0	▪ Fresh, dry fly ash is valued as admixture to cement and can be exported for 35-55 USD per tonne ▪ Due to the volumes of ash generated every year, there will still be **sufficient ash left over for exporting**
	Remaining ash	18.2	▪ Currently Eskom ash is largely used as effluent sink for power plants – if this practice is restricted by upcoming regulation more ash would be available

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1 Including ash from Medupi and Kusile
2 Quality of ash differs by dump site, in particular if it was used as effluent sink

2030 NDP

Bulk Industrial Waste Work Stream

1. Ash for bricks, 2. Soil Amelioration & Acid Mine Drainage and mine backfilling , 3. Ash Export, 4. Sewage sludge and 5. Meat waste

Planned activities

- South African Coal Ash Association (SACAA) to lead Ash Working Group to coordinate various ash initiatives
- Create enabling legislative environment
- Conduct further research and development for beneficiation of Ash for soil ameliorants- Initiative 2a
- Conduct feasibility and risk assessments for ash export (i.e., feasibility on mode of transporting ash)- Ash Export
- Gather information on existing abattoir and feedlot on initiative 5 (meat waste)
- Norms and standards for composting

Achieved activities

- SACAA taking lead as industry experts
- 48 sites excluded through Sec 74, and **94** SMMEs were supported (Eskom= 18 off takers; Sasol= 64 off takers; Sappi = 12 off takers)
- University of Pretoria together with AgriMinTech conducted research in Emalahleni for the Pilot project
- Feasibility study on viability by Transnet in progress- Ash Export
- Database developed for feedstock across the country- meat waste
- Norms and standards for composting approved and in implementation

Challenges

- CWE Phakisa was launched two (2) years after the Lab
- Delays in the processing of waste exclusion applications

Corrective actions

Review of the timelines to 2024/25, and targets (i.e. jobs, GDP, Diversion)

- Review and consequent amendment of the Waste Exclusions Regulations prioritised for 2022/23
- Improved coordination, SACCA to continue leading together with DFFE and the identified organised informal coordination structures.

Stakeholders for Ash Initiatives

	Description	Members
South Africa Coal Ash Association (SACAA)	SACAA's role is an umbrella association for the "ASH" Producers, Marketers, Users, Universities, Research Organisations and individuals playing an active role in the promotion of responsible ash utilisation. SACAA's role is aligned with increasing waste beneficiation for growth and business development for the benefit of the South African economy in compliance with the environmental legislation. The association is an enabler, since it plays a support role to the industry (i.e. producers and beneficiates). The work of the association is voluntary, which sometimes limits participation and involvement in solving the challenges of the sector.	▪ Power generators, cement producers, resin producers, science council, etc.
Aggregate and Sand Producers Association of South and Ash Users Forum	Surface mining voice on local, regional and national level	▪ Brick makers

It is acknowledged that there is room for improvement on engaging the informal sector in the brick-making sub-sector. Organised industry assists with coordination of the implementation of the initiatives. The DTIC and DSBD have been engaged to provide support as the equivalent of "SAWPA" from the packaging sector have not been identified. The close collaboration with DSBD on this initiative would also capacitate the SMMEs to respond effectively to the offtake tenders issued by ash generators.

Details of the Ash Off-takers

	Company Name	Director/s	email address
1	Afrimat	Bruno Penzhorn	Bruno.Penzhorn@Afrimat.Co.Za
2	Andani Ash Supplies	Collin Ramukhubathi	Collin2806@Outlook.Com
3	Ash Resources	Gordon Makgato	Gordon.Makgato@Lafargeholcim.Com
4	Ashcor	Andre Wilson	Andre@Bordercarriers.Co.Za
5	Cenospheres Sa	Delase Nyamazana	Delase@Dekhabu.Co.Za
6	Dangote Cement Sephaku	Heinrich De Beer	Hdebeer@Sepcem.Co.Za
7	Dvine Brothers	Thulane Kota	Dvinebrothers001@Gmail.Com
8	Empuma And Bailey	Russel Bailey	Billy.Maduna@Gmail.com
9	Igagu Enterprises	Peter Masango Bruno Shilaloke	Wozungithathe@Gmail.Com
10	Insika Yethu	Shaun Brentjies	Shaun.Brentjies@Insikayethu.Co.Za
11	Isivuvu	Nhlanhla Maphalala	Nhlanhla@Isivuvu.Co.Za
12	Izibusisozethu	Sibusiso Masango	Jomosbu@Gmail.Com
13	Led-Mos	Ledile Makgoba	Marmakgoba@Gmail.Com
14	Moribi Engineering	Robert Madubanya	Robert@Morobi.Co.Za
15	Pedayahu	Blanche Mogorosi	Blanche.Soldaat@Pedayahu.Co.Za
16	Shankwazi Trading	Themba Nyembezi	Themba@Shankwazi.Co.Za
17	Sonke Resources And Energy	Glen Mavuso	Gmavuso@Sonke-Rande.Co.Za
18	Tsabakwena Investments	Mathema Makola	Chaisha@Webmail.Co.Za
19	Tshenolo Waste	Matshela Mphahlele	Mmphahlele@Tshenolowaste.Co.Za
20	Ulula Ash	Dave Miles Mluleki Dlodlo	Dave.Miles@Ppc.Co.Za Mluleki.Dlodlo@Ppc.Co.Za
21	Vukani Mazangwa	Mpume Sampo	Mpumesampo@Gmail.Com
22	Wozungithathe	Peter Masango	Wozungithathe@Gmail.Com

Details of beneficiaries of Recycling Enterprise Support Programme

NO	BENEFICIARY NAME	PROVINCE
1	New Earth (Pty) Ltd	Western Cape
2	E-compliance (Pty) Ltd	Western Cape
3	W37 Group (Pty) Ltd	Northern Cape
4	Landfill Consult (Pty) Ltd	North-West
5	Rethaka Trading (Pty) Ltd	North-West
6	Climasol Waste and Environmental Cooperative (Pty) Ltd	Mpumalanga
7	Bagodumo Trading Enterprise CC	Limpopo
8	Waste Aside CC	Limpopo
9	Zaba Waste Solutions (Pty) Ltd	Limpopo
10	Deltrobase (Pty) Ltd	KwaZulu-Natal
11	Baclan Energy t/a E-waste Africa	KwaZulu-Natal
12	Okuhle Waste Management (Pty) Ltd	Gauteng
13	Ore2value (Pty) Ltd	Gauteng
14	K1 Recycling CC	Gauteng
15	Eco Care Holdings (Pty) Ltd	Gauteng
16	Mandini Green (Pty) Ltd	Gauteng
17	Nobomate (Pty) Ltd t/a New GX Enviro	Gauteng
18	Gugulami Glass Recycling (Pty) Ltd	Gauteng
19	Phambili Services (Pty) Ltd	Gauteng
20	Recycle Yourself (Pty) Ltd	Gauteng
21	Waste Response CC	Gauteng
22	PPNG Trading (Pty) ltd	Eastern Cape
23	Tulsaspark (Pty) Ltd	Eastern Cape
24	Dymacap (Pty) Ltd	Eastern Cape

Municipal waste

Municipal waste

Initiative 1a and 1b: Introduction of an E-waste levy to increase collection rate and unlocking government ICT legacy volumes

Supply generation through **increased collection**

Facilitate transformation and growth of the sector in existing recycling architecture (Tier 1 – Tier 4)

1a Collection incentive

- The value of components in E-waste can be positive or negative, resulting in **illegal dumping of majority of negative or low value components**
- Introducing a **'handling fee'** per kg will incentivize collectors, and can be financed through an EPR levy[1]

1b Unlock government volumes

- Adopting a government and SoE wide **E-waste asset management system** could **unlock legacy volumes** to the private sector through a process of **de-listing, data wiping and certification**
- Future stocks could be managed through a **refurbishment and re-deployment** policy

Transformation target: 80%

	Current companies	Additional companies	Highlights
T1 Cradle-to-cradle recyclers	7	15	- Fast track technology uptake to enable local beneficiation of precious metals - Incubation of new black industrialists
Tier 2: First-line recyclers	25	50	- Incubation of new black industrialists - Enterprise support and development
Tier 3: Entry-level dismantlers	600	2200	- Transport infrastructure subsidy to be introduced
Tier 4: Informal waste collectors and entrepreneurs	~1000	2000	- Provision of tricycles with bins

1 Extended producer responsibility requiring original equipment manufacturers to pay a fixed amount per KG upon placing product onto market

Initiative 2 and 3: Separation at source and increased plastic recycling

Out of work stream scope

Separation | **Collection** | **Sorting & recovery** | **Re-use/ recycling/ disposal**

Households waste

South African provinces	% Recycling of waste	% S@S
Western Cape	11,3	3,4
Eastern Cape	9,9	0,5
Northern Cape	2	0,2
Free State	5,4	0,4
KwaZulu-Natal	17,4	0,5
North West	7,3	0,5
Gauteng	29,6	5,7
Mpumalanga	7,8	0,4
Limpopo	9,4	0,1
Total	**100**	**11,7**

a **Clear bag**
- Dry recyclables (250,000 T)

b **Green bag**
- Wet organics (800,000 T)

c **General waste bin**
- Non-recyclables

127 SMMEs[2]

Collection by 3 tonne truck

- 9 **transfer stations** per metro
- 17 new **MRFs[1]** proposed (140,000 T) run by 17 SMMEs[2]

Recycling facilities
- **6 plastic plants** run by SMMEs[2] (7,200 T)

Direct retail (re-use), waste to energy etc.

Composting & Anaerobic digesters (local level)

Municipalities

Collection by municipal garbage truck

Landfill

Enablers: Education & awareness campaigns

Incentives: Tariff re-structuring- reduced tariffs if households comply with separation system

1 Material recovery facilities
2 SMME development has a preliminary target of 30% women and 70% youth

Municipal Waste Work Stream

6. E-waste levy, 7. Government e-waste stockpiles , 8. Separation at source

Planned activities

- DFFE to issue Section 28 Notice
- Registration by Original Equipment Manufacturers (OEMs) & producers of "EEE“
- Development and approvals of IWMPs
- 50% of HHs in Metros implementing separation of waste at source

Achieved activities

- Section 28 Notice was replaced with Sec 18, and published EPR Regulations and three Section 18 Notices
- Original Equipment Manufacturers & producers of "EEE” have registered with DFFE (**123 producers and 5 PROs) and (46 producers and 3 PROs for lighting**)
- 2 black Industrialists supported through Samsung/ the DTIC/ DFFE etc., for the collection and dismantling of e-waste. **Matangoni Group** in Gauteng – black male owned) and south (**Ilanga** e-waste in KZN – black woman owned
- Development and approvals of IWMPs- In progress.
- 11% of HHs already separating waste at source

Challenges

- CWE Phakisa was launched two (2) years after the Lab
- By-laws that are not mandating separation at source

Corrective actions

- Review of the timelines to 2024/25, and targets (i.e. jobs, GDP, Diversion)
- Implementation of the Section 18 EPR, and secure funding through EPR fees
- Implementation of By-laws to enforce IWMP

Municipal Waste Work Stream

9. Material Recovery Facilities and Plastic pelletisation and 10. Construction and Demolition Waste recycling

Planned activities

- A standardised design for the 17 MRFs and 6 Recycling Plants developed by 2018. Construction of 5 Big and 12 Small Dry MRFs by 2023 in identified municipalities. Construction of 6 Plastic Recycling Plants by 2023
- Amendment of green procurement policies and government tender specifications to require 30% recycled construction materials and clarification regarding standards

Achieved activities

- 23 MRFs have been supported through the RESP programme.
- Green public procurement strategy on C&D is in progress
- Ongoing programme in support of Buyback Centres and Transfer stations across the country (i.e. including revitalisation of non-operational buyback centres)

Challenges

- Review of MRFs specifications, increasing transfer stations for MRFs to run successfully,,
- Public tender specifications that do not promote secondary materials

Corrective actions

- Identification of funding model and operational capabilities of MRFs and transfer stations
- Implementation of the Section 18 EPR, and secure funding

Roles of Product Responsibility Organisations (Associations)

- The producer responsibility organisation must-
- (a) develop and maintain a system to collect the extended producer responsibility fees;
- (b) conduct internal biannual financial audits and make these audit reports available to the department upon request;
- (c) make the internal biannual audit reports available to the external auditor;
- (d) appoint an independent financial auditor to annually -
- (h) conduct an external audit of the financial records; and include the internal biannual audit findings in the annual audit report;
- (e) submit this annual audit report to the Department within 60 days after finalisation of the audit, which annual audit report will be uploaded onto SAWIS for public access
- (f) develop and maintain a register of its members, in the event that the scheme has two or more members;
- (g) collect, record, manage and submit data to the SAWIS;

Roles of Product Responsibility Organisations (Associations)

- The producer responsibility organisation must-
- (h) by agreement with the board of directors, contract with the existing downstream value chain before outsourcing;
- (i) contract for the collection, recycling and recovery of the identified products, if outsourced, through a fair and transparent process;
- (j) keep records of the quantity of identified products placed on the market by members of the producer responsibility organisation; collected; sorted; recycled; and recovered;
- (k) manage services that have been awarded to service providers in particular, these services include the fulfilment of collection and recycling by waste management companies;
- (l) co- operate with all municipalities (where applicable), within 3 years of implementation of their extended producer responsibility scheme, to increase the recovery of identified products from municipal waste;
- (m) integrate informal waste collectors, reclaimers and pickers into the post consumer collection value chain;
- (n) develop and establish secondary markets for recycled content;

Roles of Product Responsibility Organisations (Associations)

- The producer responsibility organisation must-
- (o) utilise new and existing infrastructure across extended producer responsibility schemes in a collaborative manner where feasible, or establish and operate new infrastructure within 3 years after completion of feasibility studies, where the initial feasibility study must be undertaken within 2 years of implementation of the extended producer responsibility scheme, that identifies the need for additional infrastructure;
- (p) compensate waste collectors, reclaimers or pickers, who register with the National Registration Database, for collection services and environmental benefits, through the collection service fee by November 2022. The collection service fee and the National Registration Database shall be reviewed annually by DFFE;
- (q) implement transformation within those entities with whom they contract, with a special focus on women, youth and persons living with disabilities; and
- (r) prioritise the promotion of small businesses and entrepreneurs with a special focus on women, youth and persons living with disabilities."

Government stockpile on EEE waste

- **On-going WEEE pilot project at DFFE**
  - 176 kg collected (Sept 2019 – November 2021) and awareness raising is ongoing
- **Other Departments**
- Initiated DG submission to pilot WEEE project in various government departments - Finalised.
  - Letters of collaboration issued to Departments. Initiation started with Gauteng (EGOV) Other Departments will follow from April 2022.
  - Developed WEEE Government Stockpiles Framework and Step to step guideline for various government departments.(December 2021)
- SANDF engagement and data gathering in WC / Limpopo at 2 sites completed / NC to follow

Product design and waste

Product design and waste minimisation

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Recycling of packaging will be increased by rethinking design and formalising the Extended Producer Responsibility (EPR) mechanisms

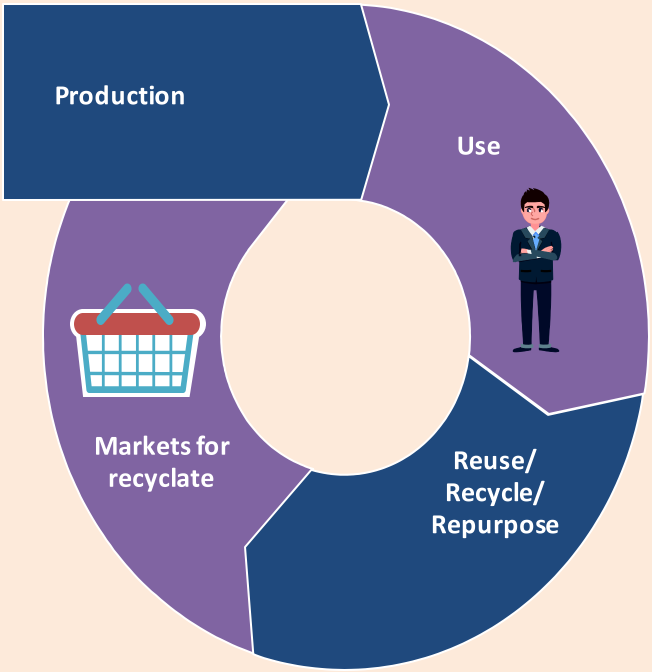
Initiative

Impact from packaging waste initiatives

Objectives

1. **Increase the recyclability of packaging**
2. **Increase the use of packaging recyclate**

Rethinking Packaging Design



3

Develop national packaging design guidelines and green grading/certification scheme

Green grading/ Certification Scheme

- Level A
- Level B
- Level C

- Develop **packaging guidelines** with the intention of evolving these into **Norms and Standards** by 2022
- To accelerate adoption of guidelines and increase collaboration between recyclers, designers and brand-owners, a **packaging certification scheme** will be launched

4

Implementing a successful packaging industry EPR mechanism

Publishing a section 18 or 28 notice that will

- Identify the **products** to which the EPR applies
- Specify the **EPR measures** required for each product
- Identify the **category of persons** who must implement the EPR
- Include a **regulatory tool/ mechanism** to deal with "free riders".

Jobs Created

Direct jobs	616
Indirect jobs	1,848

Environmental & Economic

Volume of packaging waste diverted from landfill (000's Tonnes)	146
Contribution to GDP (ZAR millions)	36

Establishing a Refuse Derived Fuel (RDF) plant with the intention of building four more by 2023

Context: the problem

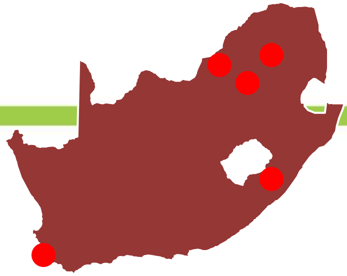
- South Africa's landfills are rapidly running out of space with **98m tonnes of waste being deposited every year**

- **1.4bn diapers** are sold per year resulting in approx. 280 000 tonnes of Absorbent Hygiene Product (AHP) waste arising nationally
- It takes **200 – 500 years** for a diaper to decompose[1]

Proposal

Transportation → Refuse derived fuel Plant → Fuel Stock → Cement Kilns & Industry Use

- **RDF plants** will process high Calorific Value Municipal Solid Waste (MSW), including Absorbent Hygiene Products (AHP).
- Additional **revenues generated from gate fees** from brand owner contracts for excess preconsumer AHP waste and RDF sales to industry e.g. Cement Kilns
- Plants will be located based on **analysis of waste streams** in different Material Recovery Facilities (MRFs) and landfill sites



Impact: Jobs

- Direct jobs — 105
- Indirect jobs — 200

Environmental and Economic

- Waste diverted (000 Tonnes) — 120
- GDP value (ZAR million) — 80

Funding requirement (ZAR Million)

Total investment — 260

Private Funding — 81% — 210

Public Seed Funding (Waste Bureau) — 19% — 50

1 BBC (2015)

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Waste Minimisation Work Stream

11. Agri platform, 12. Ugly fruit Awareness, 13. Packaging guidelines, 14. Packaging EPR, 15. Refuse-Derived Fuel (RDF)

Planned activities

- Develop Packaging Guidelines
- Identifying opportunities & solutions to minimising food loss and waste
- Preparation and Publication of EPR Notice
- Submission of EPR Schemes (with possibility of consolidation into a single plan)
- Implementation and Monitoring of EPR schemes
- Conduct Feasibility Study and develop RDF business case

Achieved activities

- Packaging Guideline developed
- Food Waste Guideline developed and launched targeted interventions to minimise food loss – in partnership with CGSA and other industry players (retail and brand owners)
- EPR regulations in place and EPR for packaging under implementation
- Feasibility study completed & develop business case for establishment of 5 RDF Plants to address Adsorbent Hygiene Products and other residual waste streams

Challenges

- CWE Phakisa was launched two (2) years after the Lab
- Funding

Corrective actions

- Review of the timelines to 2024/25, and targets (i.e. jobs, GDP, Diversion)
- Working group was established to develop a plan to secure funding for food waste
- Implementation of the Section 18 EPR, and secure funding

3. Formalising the Extended Producer Responsibility (EPR) mechanisms

Implementing a successful **packaging industry EPR mechanism**

14

EPR Scheme Formalisation (Packaging)

- ✓ The **EPR scheme & Regulations** for Paper and Packaging products - Published for implementation
  - ✓ *ensure the effective and efficient management of the identified end-of-life products incl*
    - ✓ *The following plastic products* (Plastic packaging (both printed and unprinted):

(i) Type 2,4,5 Polyolefin - rigid;
(ii) Type 2,4,5 Polyolefin - flexible;
(iii) PolyEthylene Terephthalate (PET) - rigid
(iv) PolyEthylene Terephthalate (PET) - flexible /strapping;
(v) Polystyrene (including expanded polystyrene protective packaging and high
impact polystyrene packaging);
(vi) Poly Vinyl Chloride (PVC) (Resin Code 3)
(vii) Vinyls (rigid and flexible); and
(viii) Other (multilayer plastic packaging including those with resin code 7)
And Films/Flexibles: agricultural mulch films, garbage bags, pallet wrap;
(ii) Injection moulded products: cups, tubs, cutlery (knives, forks, and spoons),
stirrers;
(iii) Blow moulded products: bottles, containers, jars;
(iv) Extruded products: straws, sheets; and
(v) Thermoformed products: trays, punnets, cups, various packaging.

4. Establishing a Refuse Derived Fuel (RDF) pilot plant with the intention of building four more by 2023

- South Africa's landfills are rapidly running out of space with **98m tonnes of waste being deposited every year**

- **1.4bn diapers** are sold per year resulting in approx. 280 000 tonnes of Absorbent Hygiene Product (AHP) waste arising nationally
- It takes **200 – 500 years** for a diaper to decompose[1]

Transportation › Refuse derived fuel Plant › Fuel Stock › Cement Kilns & Industry Use

15 Establish Refuse-Derived Fuel (RDF) Plants

✓ **Feasibility Study and Business Case/s** for the establishment of the 5 RDF plants - *will process high Calorific Value Absorbent Hygiene Products (AHP) and other residual waste.*

- ✓ Feasibility study developed with recommendations
- ✓ Business case/s developed
- ✓ Exploration of Funding/investment for establishing pilot RDF

Operation Phakisa Chemicals and Waste Economy Roadmap and Implementation Timeline

Operation Phakisa Programme Idea initiated to roll out and fast track NDP 2030

Operation Phakisa Chemicals and Waste Economy initiated - partnership between DPME & DFFE

2017

Lab Process with all stakeholders in the sector

August 2017

3 Feet Plan Development finalised

Nov 2017

Implementation through Partners and DFFE – Chemicals and Waste Branch

2018- to date

Pledges and Partnership

signing and endorsements

2018-2019

Establishment of a Delivery Unit

Jan-Aug 2019

Operation Phakisa CWE Launch in

March 2019

Realignment Workshop July 2019

Mid-Term Review

(May – October 2021)

Waste Economy Master Plan- in progress 2022

RECOMMENDATION(S)

- To note the development of the Waste Economy Master Plan that is underway, and renew buy-in and commitment from stakeholders on waste-related delivery on GDP contribution, jobs and waste diversion
- To support the collective approach to minimising the negative environmental impacts associated with waste generation by avoiding (product re-design), reusing and recycling and Promotion of Green industries for uptake of recyclate.
- To note the innovation potential and improving socio-economic conditions while contributing to sustainable development and the Capital raising for the initiatives (SIDS partnership)

Follow- Up on Oceans Economy Phakisa

Growing the Oceans Economy

- South Africa has a long coastline of 3900 km (mainland SA and sub-Antarctic Islands) and an Exclusive Economic Zone of 1.5 million square kilometres.

- Economic analysis in Nine (9) sub-sectors: Estimated that the oceans could potentially contribute between R129 - R177 billion to GDP by 2033 (compare R54 billion (2010)) and create between 800 000 to 1 million jobs (compare 316 000 (2010)).

	GDP, R bn			Jobs, 000	
	2010	2033	CAGR, %	2010	2033
Marine transport and manufacturing	16	42-61	6%	15	40-56
Tourism	15	25-35	4%	90	150-225
Offshore oil and gas	4	11-17	9%	0.4	0.8-1.2
Construction	8	20-21	4%	162	390-407
Renewable energy	0	14-17	25%	0	0.9-1.1
Fisheries and aquaculture	7	10-16	4%	30	170-250
Communication	4	7-10	4%	19	35-52
Desalination	0	0.1-0.1	1%	0	1.6-1.6
Marine protection services	0	TBD	-	0	TBD
Total	**54**	**129-177**		**316**	**788-1 004**

Sub-sectors interrogated during Operation Phakisa (2014)

- Marine Transport and Manufacturing
- Offshore Oil and Gas
- Aquaculture
- Marine Protection Services and Ocean Governance
- Small Harbours and Coastline Development
- Coastal and Marine Tourism
- Skills Development and Capacity Building
- Research, Technology and Innovation

Growing the Oceans Economy

Economic Impact:
(6 Ocean Sub-Sectors)
GDP: R153 billion (R41 billion investments).
Jobs: 26 764 jobs

Investments mainly in infrastructure development (in ports), marine manufacturing (boatbuilding), aquaculture and scientific and seismic surveys; coastal and marine tourism, small harbours and marine protection services and ocean governance

JOBS PER SUB-SECTOR

OCEANS SUB-SECTOR	NO. OF JOBS
Marine Transport & Manufacturing	4589
Offshore Oil and Gas	234
Aquaculture	2367
Marine Protection & Ocean Governance	41
Small Harbours Development	719
Coastal and Marine Tourism	433
TOTAL	8383

Critical considerations:

- **SMME development; Inclusion of women, youth and people with disabilities**
- **Transformation**

Role of Science and Innovation

- Leading cross-cutting work on Research, Technology and Innovation.
- Fund research through the National Research Foundation (NRF).
- Provide innovative solutions through the Council for Scientific and Industrial Research (CSIR).
- Partner through the NRF on the Research Chairs, Communities of Practice and Centres of Excellence.

TVET Colleges and Partnerships

- SAIMI (South African International Maritime Institute (SAIMI) was established through Department of Higher Education and Training (DHET) and is responsible for the skills initiatives within the Oceans Economy.
- SAIMI is working with all TVET colleges that offer maritime training.

Partnerships

- 26 TVETs (out of the 50) have been made Centres of Specialisation (CoS) for various trades by DHET.
- The CoS programme is a three way partnership between TVETs (for theoretical and workshop training), SETAs (Sector Education and Training Authorities) (for funding) and industry (for work placement).

TVET Colleges and Partnerships………continued

- The programme is implemented in different phases with an intake of 30 learners at a time.
- Companies (partners) for work placements include maritime companies such as Damen Shipyards, Nautic Africa, Sea Harvest, Oceana, etc.
- Government forms part of the partnerships i.e. SA Navy and Saldanha Bay IDZ (Industrial Development Zone) for work placement.
- TVETs also formed partnerships for other programmes (Yacht and Boatbuilding training) at False Bay College for a 3-year programme with SAIMI funded by the NSF (National Skills Fund) for 30 learners with four maritime companies forming part of the partnership for placement of these learners during this period.
- TVET partnerships also formed with industry, provincial governments and SETAs for other training programmes that TVETs drive.
- In terms of entrepreneurship, some TVETs have applied for funding for business incubation programmes for some of the students that they train to encourage entrepreneurship.

TVET Colleges and Partnerships………continued

- The five-year target commenced after the conclusion of the detailed Operation Phakisa sessions in 2014.

- Marine Transport and Manufacturing Sub-sector:
  - 1 338 apprenticeships were recorded against the target of 2 550 (with available data).
  - Total of 4 598 people were trained in different skills programmes including the 620 artisans against the target of 18 172 (with available data).
  - Target of 720 officers and 1200 ratings have not been met due the lack of training berths on vessels.
  - Cape Peninsula University of Technology (CPUT) and Durban University of Technology (DUT) that offer seafarer training indicated that they could only produce about 100 seafarers each per year.
  - In light of the challenges facing the sub-sector as well as the economic climate, a proposed change management process commenced to revise the targets.

OCIMS (Oceans and Coastal Information System)

- The Oceans and Coastal Information System (OCIMS) is developed by the Council for Scientific and Industrial Research (CSIR), an entity of the Department of Science and Innovation (DSI).
- It is a very robust tool which supports various departments and stakeholders in respect of information.
- OCIMS provides a number of Decision Support Tools, two of which were highlighted:
  1) Vessel Tracking System for intelligence gathering in respect of vessel movements within the RSA EEZ and its immediate surroundings waters; and
  2) The ability to provide early warning information regarding the Harmful Algal Blooms, blooms which are extremely critical for fisheries and aquaculture as well as to the general public as they may be toxic to sea life and humans.

- The system has demonstrated functionality for the aquaculture industry and the Defence cluster has used it in planning their operations.

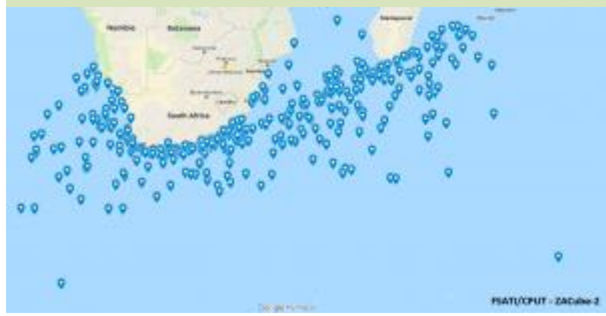
OCIMS (Oceans and Coastal Information System)……….continued

- The DSI in collaboration with the Cape Peninsula University of Technology (CPUT) developed and launched the ZA-Tube 2 nanosatellite onboard a Russian rocket in December 2018.
- Researchers from the University of Stellenbosch created the satellite's control system to help the satellite orient itself in space.
- The mission of the ZA-Cube 2 include vessel tracking module and wild fire detection capabilities.
- The satellites were re-launched in early 2022.

science & technology
Department: Science and Technology
REPUBLIC OF SOUTH AFRICA

Cape Peninsula University of Technology

Test data from the ZA-cube2 –Vessel locations 1 January 2019



ZA-cube2

Funding of satellites

- In respect of funding for nanosatellites, the DSI as a partner with the DFFE on Oceans Economy initiatives is the lead department and is funding the constellation of South African owned satellites through the South African National Space Agency.

PROGRESS IN THE IMPLEMENTATION OF THE BIODIVERSITY ECONOMY OPERATION PHAKISA

25 FEBRUARY 2022

PURPOSE

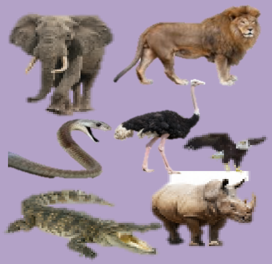
For the Portfolio Committee :

- To note the supplementary notes to the verbal responses given at the Portfolio Committee meeting of the 7th of December 2021.

SOUTH AFRICA OCCUPIES 2% OF THE GLOBAL LAND SURFACE

Indigenous Knowledge linked with the use of indigenous biological and/or genetic resources

7% of the world's reptiles, birds and mammals

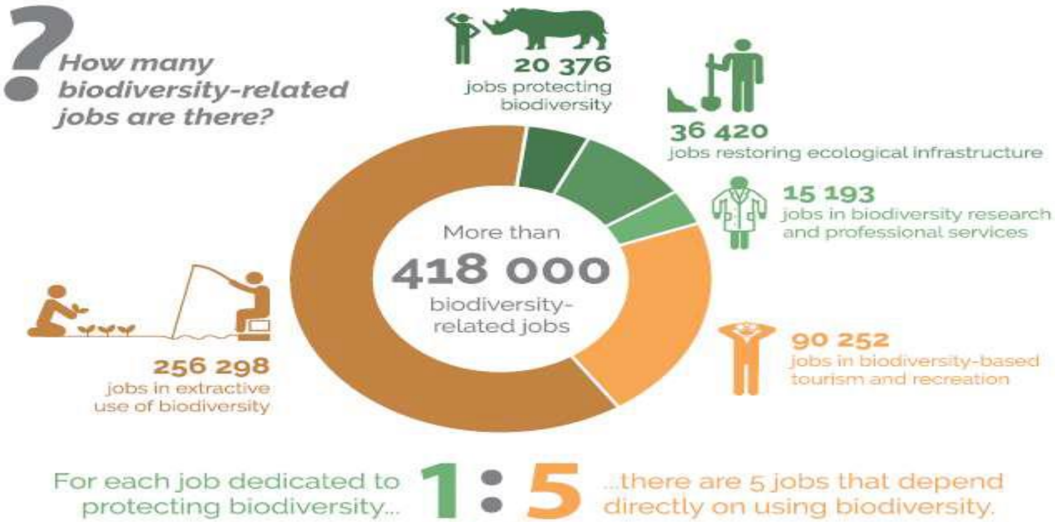


10% of the world's plants

15% of the world's coastal marine species

BIODIVERSITY ECONOMY'S CONTRIBUTON TO SOUTH AFRICA'S ECONOMY

- In 2018, the hunting industry contributed R13,6 billion to the GDP, at an average of R250 000 per foreign hunter and R58 000 per domestic hunter during the hunting season (Univ. of North West, 2017)
- Excluding water, ecosystems contribute some R47 billion annually in terms of provisioning services that support the livelihoods of South Africa's rural inhabitants (Turpie et al, 2017)
- Biodiversity economy currently contributes at least 4% to the country s GDP



SANBI et al 2018

SANBI et al 2018

<u>QUESTION NO. 1:</u> HOW MUCH OF THE HUNTNG REVENUES FILTERS TO LOCAL COMMUNITIES AND ALSO TO THE COLLECTIVE RICH?

- The total value that communities accrue from hunting cannot be determined due to lack of research within the sector. Meanwhile, the Department is prioritising transformation to increase meaningful participation by previously disadvantaged communities and individuals. For example:
  - The Department developed the National Framework on game donation/custodianship which act as a national guideline for management authorities to review their respective policies in line with their respective legislative mandates to ensure transformation
  - The donation undertaken by SANParks that took place during the commemoration of International Day for Biological Diversity which was presided by the Minister of Forestry, Fisheries and the Environment held on the 22 May 2021 at Aphamo Boerdery in the Groot Marico district of North West was a demonstration of government's commitment to developing the wildlife economy as part of the transformative obligations within the sector.
  - Communities such as the Tshivhula Community Property Association (CPA) own three hunting farms in Limpopo Province, demonstrating that private, government and communities partnership on hunting can contribute to sustainable communities. Tshivhula CPA in partnership with Ndou Safaris' main revenue comes from trophy hunting. About 90% of the hunters visiting the Ndou Safaris are international tourists from Europe, America and Asia. Ndou Safaris has 40 permanent employees and 110 Temporary workers and generate a turnover of approximately R12 million per annum.
  - In 2018, the hunting industry contributed R13,6 billion to the GDP, at an average of R250 000 per foreign hunter and R58 000 per domestic hunter during the hunting season (Univ. of North West, 2017)

<u>QUESTION NO. 1:</u> HOW MUCH OF THE HUNTING REVENUES FILTERS TO LOCAL COMMUNITIES AND ALSO TO THE COLLECTIVE RICH?

- Access to land, game animals and infrastructural development are the main challenges which continue to hamper PDIs and communities from participating meaningfully in the wildlife sector.

- The game donation programme was developed to address the challenge of access to game. Through this programme, Management Authorities and SANParks donates/loan excess/surplus game to qualifying PDIs and communities. For example:
  - The Departmental EPIP programme provide infrastructure to new entrants.
  - The Department offers accredited and non-accredited trainings to new entrants.

QUESTION NO. 2: GAME DONATIONS/LOAN PROGRAMME TO APHAMO BOERDERY IN NORTH-WEST PROVINCE

- Aphamo Boerdery's successful nomination for game donation was based on the policies and qualifying criteria developed by SANPARKS to support emerging game farmers as part of the transformation agenda. Mr Molebatsi Andrew Aphane was approved to receive 14 Zebra, 12 Red Hartebeest, 10 Gemsbok, 5 Eland and 4 Giraffe .

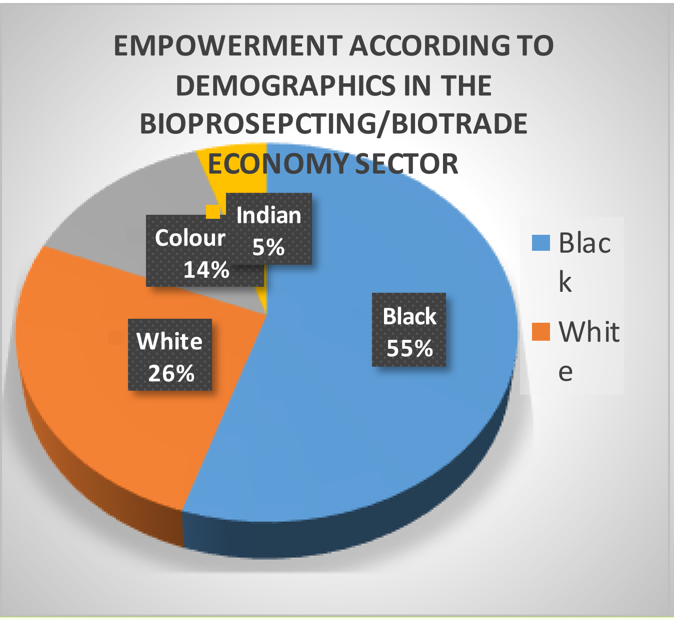
- The game farm that Mr Aphane is occupying is government land received through the land reform process implemented by the Department of Agriculture, Rural Developed and Land Reform.

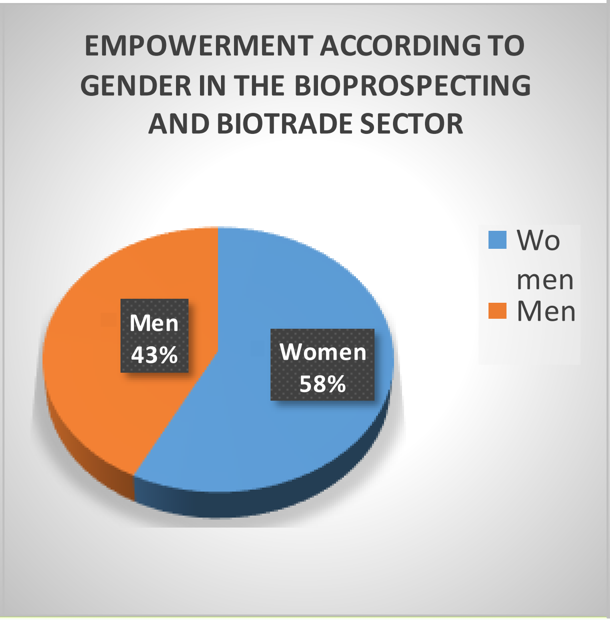
- Mr Aphane had previously reported to the Department that he has four (4) employees from local communities.

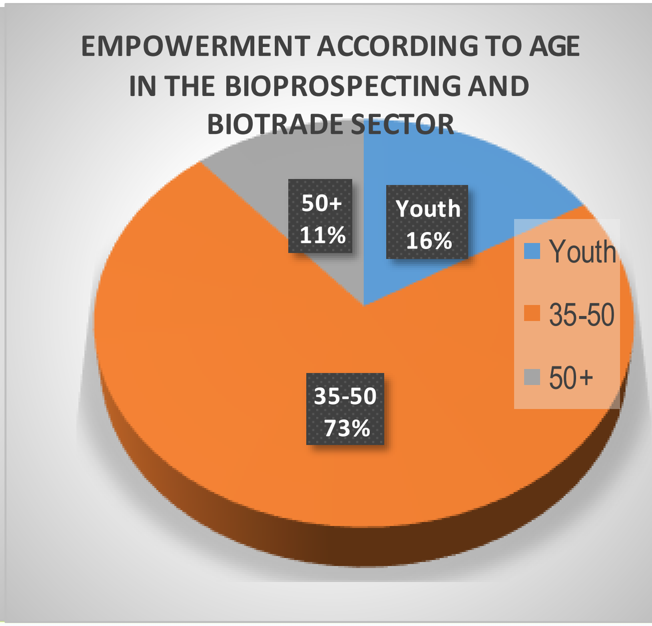
QUESTION NO. 3: EMPOWERMENT ASPECT OF THE BIODVERSITY ECONOMY PROGRAMME IN TERMS OF FEMALE/YOUTH/VETERANS ETC.

- Most of the government interventions, within the biodiversity economy sector are made to support the PDIs and communities in the form of grant funding for infrastructure projects as well as capacity development and training to beneficiaries on various requisite skills

- The Pie charts below indicate the participation of targeted individuals in capacity development programmes which responds to empowerment aspects of the BE programme toward an inclusive, transformed BE Sector. The focus on women and youth groups to achieve growth and inclusivity within the BE Sector.







QUESTION NO. 4: ARE WILD ANIMALS SLAUGHTERED IN APPROVED ABBATOR FACILITIES?

- Wild animals/Game are slaughtered in approved abattoirs in terms of Meat Safety Act, 2000 (Act No. 40 of 2000) (“the Act”).

- The Act provides regulation of slaughter of all animals for human and animal consumption. It prohibits the selling of meat that has not been inspected, approved & slaughtered in an approved facility such as an abattoir. By implication, game meat available in the local market (both raw and processed) that has not been inspected, approved and slaughtered in a registered abattoir is deemed illegal. Such meat poses a risk to human health.

- Section 11(3)(e) of the Act, states that game animals will be exempted from portion of the provisions of section 11(1)(i) of the Act once the regulations are promulgated. Section 11(1)(i), states that no dead animal or animal suffering from a condition that may render the meat unsafe for human and animal consumption may be presented at an abattoir for slaughter.

- Given the difficulties involved in slaughtering game in an abattoir and also operations involving the hunting, the DALRRD who are the custodians of the Meat Safety Act have developed the draft Game Meat Regulations which are yet to be promulgated.

- The draft Regulations give direction in terms of the processes to be followed from the field operations (shooting), slaughter depot (bleeding and evisceration) and abattoir operations (freezing, meat inspection and dressing) for game meat which will be consumed by human beings. It is anticipated that once promulgated, the regulation will increase compliance and meat safety to ensure the integrity of game meat available in the market.

QUESTION NO. 5: IS THE GAME MEAT INSPECTED BY APPROVED INSPECTOR?

- The current game meat processes and sale activities must comply with the provisions of the Meat Safety Act, 2000 (Act No. 40 of 2000).

- The draft game meat regulation requirements for ante-mortem and harvesting inspection are that, a trained person or registered inspector must be present at harvesting to perform a visual appraisal of the live game animal at time of harvesting to ensure that no animal showing signs of injury or diseases is harvested for human consumption and they should also verify proper shooting, bleeding times, hygienic harvesting and transport procedures and identifying abnormal conditions in the live animal and alert the inspector at the depot or abattoir.

- The DFFE in partnership with the industry has developed the National Game Meat Strategy, which is being considered by the Intergovernmental structures.

<u>QUESTION NO. 6:</u> THE WASTE AFTER SLAUGHTERING/WHERE DOES IT GO?

The waste arising as the result of shooting/slaughtering of game animals is handled in accordance with the prescribed environmental, health and safety and meat safety protocols and legislations in line with the Meat Safety Act, 2000 (Act No. 40 of 2000)

<u>QUESTION NO. 7:</u> THE ISSUE OF TRADITIONAL AUTHORITIES BEING USED, ARE THE END-USERS REALLY BENEFITING.

- The Department provides transactional advisory services to ensure that communities and traditional leaders negotiate and enter into contracts that will see fair and equitable benefit-sharing accruing from the Biodiversity-based business enterprises.

<u>QUESTION NO. 8 :</u> WHERE/HOW DO TRADITIONAL HEALTH PRACTITIONERS GET INVOLVED WITH REGARD TO TRADITIONAL PLANTS.

- Traditional Health Practitioners are involved in cultivation, harvesting and use of traditional plants as key users of traditional indigenous plants. Their wealth of knowledge is invaluable to the country to further research on claims and ultimately produce or manufacture natural ingredient products.
- DFFE is concluding a memorandum of understanding with Traditional Health Practitioners.
- Traditional Health Practitioners are also part of the National Bioprospecting Forum, which is a Forum formally established by the Department comprising industry, communities, relevant government Departments, public entities, and research institutions.

<u>QUESTION NO. 9 :</u> PROTECTION OF THE TRADITIONAL HEALTH PRACTITIONERS KNOWLEDGE, HOW IS THIS PROTECTION GIVEN TO THEM

- Traditional knowledge is regulated in terms of the legislative provision as provided in terms of the National Environmental Management Biodiversity Act, 2004 (NEMBA) (Act No.10 of 2004)
- NEMBA does not favour any specific grouping when it relates to communities that hold traditional knowledge associated with the use of specific indigenous biological resources (i.e. plants/animals/microorganisms).

QUESTION NO. 9 : PROTECTION OF THE TRADITIONAL HEALTH PRACTITIONERS' KNOWLEDGE, HOW IS THIS PROTECTION GIVEN TO THEM

- Section 82 of NEMBA protect interests of certain stakeholders before the permit is issued. These stakeholders include:
  - ✓ a person, including any organ of state or community, providing or giving access to the indigenous biological resources to which the application relates; and
  - ✓ an indigenous community—(i) whose traditional uses of the indigenous biological resources to which the application relates have initiated or will contribute to or form part of the proposed bioprospecting; or (ii) whose knowledge of or discoveries about the indigenous biological resources to which the application relates are to be used for the proposed bioprospecting.

- Traditional Health Practitioners are covered under indigenous communities in terms of NEMBA. Therefore, their rights are protected through the conclusion of the benefit sharing agreement which will then be approved by the Minister, only if they hold traditional knowledge associated with specific indigenous biological resources which is going to be used for bioprospecting or biotrade purposes.

<u>QUESTION NO. 10 :</u> WORKING WITH THE DEPARTMENT OF HEALTH

- The Department of Health interacts with Traditional Health Practioners at various levels with DFFE. They are a member of the Bioprospecting Advisory Committee and has also been included in the various Clusters of the coordinating network known as BioPANZA (BioProducts Advancement Network of South Africa.)

- BioPANZA coordinates partnerships to enhance development and socio-economic growth in the biotrade and bioprospecting sector. Furthermore, the Department of Health is part of the stakeholders and will be involved in the Wildlife Sector as well through the Game Meat Strategy initiative already underway.

<u>QUESTION NO. 11 :</u> FOOD INSPECTION THE DEPARTMENT OF HEALTH MUST BE INVOLVED IN GAME MEAT PROCESSING

- As a product that will be consumed by human beings , game meat production and sale must comply with all national and provincial legislation governing Food Safety Control in South Africa, which are the competency of the Department of Agriculture, Rural Development and Land Reform, The Department of Trade, Industry and Competition and the Department of Health, including Consumer Protection Act, 2008 which seek to monitor the consumer market, investigate alleged prohibited conduct and offences and enforce compliance notices.

QUESTION NO. 12 : LOCATIONS OF PROJECTS PRESENTED

- The Biodiversity Economy EPIP funded Projects (wildlife, bioprospecting and People & Parks/ecotourism) shared with the Portfolio Committee are in the various phases of planning.

- Beneficiaries of such projects received approval letters for their Projects in 2019 and professional engineers to design specifications for contractors have been appointed for at least 40 projects.

- ThE projects highlighted in the presentation provided at the previous meeting are in the design phase. Projects in stage four of the planning will have contractors appointed in 2022/2023 financial year.

- During the 2014/2015-2016/2017 funding cycle, the Department implemented a few pilot projects, namely: Mayibuye Game Reserve fencing project in KZN, Sepelong Game Farm project in Free State, Double Drift Nature Reserve in Eastern Cape, Leshiba Game Reserve in Limpopo, and Balepye Game Reserve in Limpopo, amongst others.

QUESTION NO. 13 : DFFE CONTRIBUTIONS TO BIOPANZA PLATFORM

- A contribution into the Natural Ingredient Product Programme (NIPP) Fund of the BioPANZA is due and the DFFE is already undertaking all the necessary steps toward fulfilling its commitment contribution toward this initiative to ensure continued growth of the Bioprospecting and Biotrade Economy Sector of South Africa.

- The DFFE has mobilized donor funds toward the Sector through the Global Environment Fund (GEF) (6.2 mil USD) and the Swiss Secretariat for Economic Affairs (SECO) (R6, 670 000 – specifically to support SMMEs.

- The DTIC has committed a financial contribution of R50 million to the NIPP through the Industrial Development Corporation (IDC). Additionally, the DTIC has committed to contribute a further R50 million over a period of 3 years. The transfer of funds is in progress.

<u>QUESTION NO. 14 :</u> WHAT IMPACTS HAS BIODIVERSITY ECONOMY OPERATION PHAKISA HAD ON WILDLIFE CRIMES/NUMBER OF BUSINESS AROUND BIODIVERSITY ECONOMY AND WHERE ARE THESE BUSINESSES? … HAVE WE NOT BEEN ALREADY DOING BIODIVERSITY SO HOW CAN WE NOTE THE IMPACT OF BIODIVERSITY OPERATIONS FROM WHAT WE WERE ALREADY DOING?

- The Biodiversity Economy Phakisa is designed to address three key fundamental imperatives:
  - ✓ contribution to economic development,
  - ✓ transformation and
  - ✓ conservation & sustainability.
- It is envisaged that through the implementation of the biodiversity programme, we will create meaningful opportunities for participants.

<u>QUESTION NO. 15 :</u> MONITORING POWERS AND AUTONOMY OF THE GAME DONATED

- The environmental sector is a concurrent function between the National and Provincial governments.

- Provincial Departments have Ordinances that have empowering provisions to MECs in line with the Constitution and similarly, the National Legislation has empowering provisions to the Minister on issues pertaining to her mandates.

- Game donation therefore follows the mandates of the respective Management Authorities, including accountability and monitoring thereof.

QUESTION NO. 16 : INDUSTRIES REPRESENTED IN THE WILDLIFE FORUM

- The Wildlife Forum is comprised of broad sector players within the wildlife industry including:
  - ✓ National departments/organs of state responsible for biodiversity matters on national and provincial level respectively;
  - ✓ National associations/organisation/entities within the wildlife industry including: wildlife ranching, Hunting associations, Falconry, Associations of zoos, Game breeders associations, welfare organisations amongst others as per the list below:
    - ➢ South African Bow Hunting Association (SABA); Endangered Wildlife Trust (EWT); South African Crocodile Industry Association (SACIA); South African Veterinary Association (SAVA); Professional Hunter's Association of South Africa (PHASA); South African Wing shooters Association (SAWA) ; South African Sport Anglers and Casting Confederation (SASACC); South African Predator Association (SAPA); South African Taxidermy and Tannery Association (SATTA); Wildlife Ranching South Africa (WRSA); Pan-African Association of Zoos and Aquaria (PAAZA); National Shooting Association (NSA); Wildlife Translocation Association (WTA); Confederation of Hunters Associations of South Africa (CHASA); South African Hunters and Game Conservation Association (SAHGCA); Association of Directors of Professional Hunting Schools; African Bow-Hunting Organization; South African Nursery Association (SANA); South African Falconry Association (SAFA); Custodians; Parrots Association (PVSA); African Game Ranchers Association (AGRA); Black Business Council (BBC); Private Rhino Owners Association (PROA); African Community Conservationists (ACC); Cheetah Society ; Predation Management South Africa (PMSA).

<u>QUESTION NO. 17 :</u> HOW MANY JOBS ARE EPWP AND SUSTAINABLE JOBS FROM THE PRESIDENTIAL ECONOMIC STIMULUS PROGRAMME?

- The Presidential Economic Stimulus (PES) projects provide mainly temporary work opportunities to support livelihoods of distressed beneficiaries due to the Covid-19 Pandemic and economic distress.

- Over 1500 youth were been appointed through the PES, in the October 2021 to January 2022. This was a temporary relief programme for the youth.

<u>QUESTION NO. 18 :</u> IN REGARDS TO HUNTING, WHERE ARE ALL THE ANIMALS COMING FROM? ARE WE TALKING ABOUT CAPTIVE BRED ANIMALS AS PARKS RIGHT NOW ARE STRUGGLING?

- Hunting occurs in private land, community-owned land in some provincial nature reserves. It is governed by national and provincial legislation with the associated norms and standards. These animals are not coming from captive bred facilities.

<u>QUESTION NO. 19 :</u> WHAT ARE THE NORMS AND STANDARDS IN TERMS OF ETHICAL HUNTING - WHO MONITORS THAT?

- As environmental legislation is a concurrent function between the National and Provincial governments, Norms and Standards are developed, promulgated and monitored by the respective Management Authorities in accordance with the respective ordinances and legislations. The wildlife industry also enforce rules to their members to comply with legislative provisions as well.

<u>QUESTION NO. 20 :</u> HLP REPORT IN REGARDS TO HUNTING OF LEOPARDS, WHAT IS THE PROCESS IN REGARDS TO HUNTING LEOPARDS?

- Hunting of leopards follows very strict regulatory regime processes. The Scientific Authority recommends hunting quotas per annum following a thorough scientific assessment which includes information submitted by the provincial authorities and monitoring date of leopard population. CITES also plays an important global role in allocating hunting quotas based on scientific evidence from member states.

<u>QUESTION NO. 21 :</u> THE ONGOING POACHING OF INDIGENOUS PLANTS (IN PARTICULAR SUCCULENTS SENT TO THE FAR EAST - IS THERE PLAN TO CURB THIS?)

- There a plan to deal with the challenge which including working with Law Enforcement Agencies to manage ports of entry and exit. Similarly, Provincial Management Authorities are charged with the responsibilities of managing species occurring in their areas of jurisdictions.

<u>QUESTION NO. 22 :</u> WHAT ARE THE NORMS AND STANDARDS IN TERMS OF ETHICAL HUNTING - WHO MONITORS THAT?

- As environmental legislation is a concurrent function between the National and Provincial governments, Norms and Standards are developed, promulgated and monitored by the respective Management Authorities in accordance with the respective ordinances and legislations. The wildlife industry also enforce rules to their members to comply with legislative provisions as well.

<u>QUESTION NO. 23 :</u> SMME'S AND JOBS/DEMOGRAPHICS ON SMMES (INDIANS/WHITES/BLACKS) ACROSS ALL THE BUSINESSES.

- The Department has not conducted any research to determine the demographics within the wildlife sector. There is still a long way to go ascertaining demographics in projects, but the initial work done within the bioprospecting /biotrade sector as captured in the previous slides No.8 is beginning to address this issue.

RECOMMENDATIONS

It is recommended that the Portfolio Committee :

- **Take note of the supplementary notes to the verbal responses given at the Portfolio Committee meeting of the 7th of December 2021.**

THANK YOU!

Ms Flora Mohlohloa

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