February 2022

Digital Earth
AFRICA

2022 Annual Work Plan

About This Plan

This report sets out the strategic level Annual Work Plan for the Digital Earth Africa Establishment Team (the Plan) for the period January 2022 to December 2022. The 2022 Annual Work Plan has been prepared by the DE Africa Establishment Team for the Digital Earth Africa Governing Board, Technical Advisory Committee, funding partners, and other stakeholders. It provides a summary of program outcomes and high level activities for 2022 highlighting strategic context, key challenges and risks, and an activity scheduled overview.

The Plan has been informed and shaped by inputs from the DE Africa Establishment Team, Implementing Partners and Technical Advisory Committee.

Version Date	Feb 2022	Approved by	The Digital Earth Africa Governing Board

[1] Cover image: Bazaruto Archipelago, Mozambique. Contains modified Copernicus Sentinel data 2020, processed by Digital Earth Africa

Foreword

A message from the Digital Earth Africa Establishment Team Managing Director

Over the past year, Digital Earth Africa has grown significantly as an organisation. From making significant strides towards African governance and operations, to building a network of engaged users across the continent, Digital Earth Africa continues to make an impact.

As we look ahead to next year, we will focus even more on embedding operations and leadership in Africa, expanding our impact and ensuring sustainment for the years ahead. We will continue to take a highly collaborative approach, striving to act as a critical enabler, to complement, rather than duplicate, existing efforts across the continent.

2022 is set to be a pivotal year for Digital Earth Africa. I would like to thank our Establishment Team, Implementing Partners and all those who have contributed to this year's successes and hope for another productive year building towards the Digital Earth Africa vision and mission.

Best regards,

Dr Lisa Hall

Managing Director, Digital Earth Africa Establishment Team
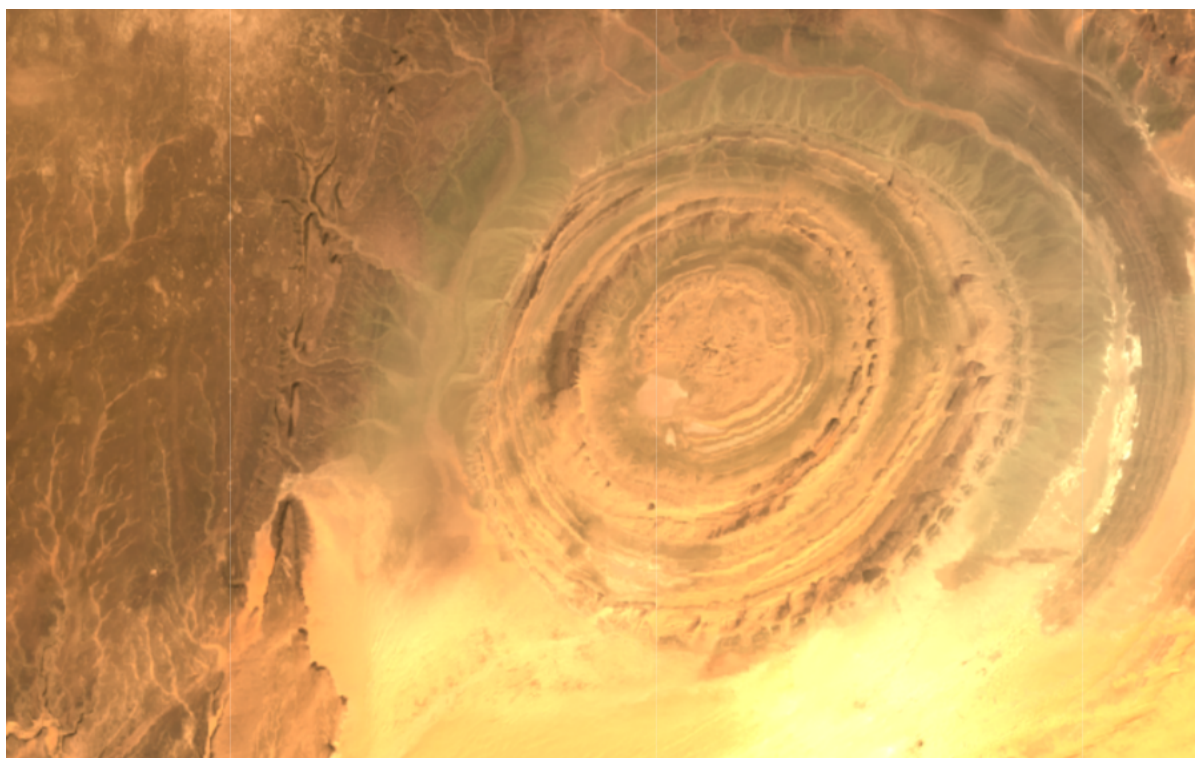
Figure 1 - "Eye of Africa", Mauritania, Landsat 9, scene acquired 6th February 2022

Table of Contents

Executive Summary

Digital Earth Africa (DE Africa) aims to improve the lives of African people by providing planners and policy makers with tailored Earth observation information to support better decision making and enhance sustainable development outcomes.

The 'Establishment Phase', or 'Phase II' of DE Africa is an approximately AUD 23 million program which aims to establish DE Africa as an African-based and managed operational platform. Phase II is funded by The Leona M. and Harry B. Helmsley Charitable Trust (The Helmsley Charitable Trust) and the Australian Government.

2022 will see a strategic emphasis on embedding operations in Africa, expanding our impact and ensuring sustainment in terms of governance, management and resources. To achieve this, DE Africa will continue to deliver Earth observation products that meet development needs and can be applied to real world development challenges. We will continue capacity development to strengthen African institutions to collaborate and work together to better understand, access and use DE Africa.

This 2022 Annual Work Plan is guided by key operational documents, DE Africa's Governing Principles, and long-term program outcomes. Within this overarching program framework, 2022 will see the Establishment Team focus effort and delivery in the following key areas:

- **Strengthening our Governance Framework**. Membership of our Governing Board will continue to grow, providing guidance on long-term strategy, risks, and performance. The Technical Advisory Committee will continue to provide critical advice through the year.

- **Embedding program operations in Africa**. Our new Africa-based Program Management Office will become fully established, and work with our Implementing Partners to support critical engagement, capacity building and uptake with end users across the continent.

- **Driving African-led technical innovation.** Now DE Africa's foundational operational platform and data pipelines are established in AWS Cape Town, technical leadership will transition to Africa, growing significant skills, program knowledge, insights and expertise.

- **Securing additional investment.** Additional funding needs to be secured in a timely manner to ensure ongoing delivery beyond the program's Establishment Phase. The program will pursue a range of strategies, targeting both African and international investors to support this priority.

- **Expanding user capacity across Africa.** Leveraging its multi-lingual training platform, DE Africa will continue to strengthen and empower institutions across the continent to harness the power of EO data and services for better decision making.

- **Delivering and demonstrating impact for Africa.** DE Africa will grow and diversify its range of users to apply DE Africa platform data and products to their needs, and collate evidence of use, impact and benefits.

- **Strengthening partnerships and community.** DE Africa is built on partnerships to create sustained capability development in Africa. We will continue to strengthen existing partnerships and form new relationships where needed to progress our objectives.

- **Expanding awareness.** DE Africa's relevance and importance is becoming increasingly well known. We now need to enhance our brand with a stronger Africa based voice, to ensure we continue building buy-in, engagement and uptake across the continent and the globe.

The Annual Work Plan sets out, in further detail, the key actions and milestones to be progressed by the Establishment Team and new Africa based Program Management Office in 2022. The Governing Board and Technical Advisory Committee will provide ongoing oversight, and quarterly reports will summarise progress.

Program Overview

The Vision and Mission of Digital Earth Africa remain unchanged, as developed and endorsed by the Technical Advisory Committee and its predecessors at the inception of the program in 2019. Digital Earth Africa (DE Africa) aims to improve the lives of Africans by providing planners and policy makers with tailored Earth observation information to support better decision making and enhance sustainable development outcomes.

DE Africa Vision

To provide a routine, reliable and operational service, using Earth observations to deliver decision-ready products enabling policy makers, scientists, the private sector and civil society to address social, environmental and economic changes on the continent and develop an ecosystem for innovation across sectors.

DE Africa Mission

To process openly accessible and freely available data to produce decision-ready products. Working closely with the AfriGEO community, DE Africa will be responsive to the information needs, challenges, and priorities of the African continent. DE Africa will leverage and build on existing capacity to enable the use of Earth observations to address key challenges across the continent.

Governance

The DE Africa Governance Framework sets out terms of reference, roles and responsibilities of DE Africa's governing groups. The Governing Principles of DE Africa are a fundamental part of the governance framework, informing strategy, planning and delivery.

DE Africa Governing Groups

The **Governing Board** will initially comprise 7 members from across 5 African countries, and will provide strategic guidance, oversight and accountability to ensure successful achievement of the mission and vision of DE Africa. This includes policy guidance, alignment and prioritisation, and uptake and use of data products at the national and other levels.

The **Technical Advisory Committee (TAC)** includes 19 Members from across 12 African countries. The TAC provides expert advice and guidance related to: technical and scientific directions; stakeholder engagement at the international, regional, country levels; cross-sectoral engagement; capacity building, and; the latest trends, issues and research relevant to the program.

The **Stakeholder Community Group (SCG)** provides opportunities for engagement with a broader range of stakeholders and perspectives, which is necessary to achieve impact and growth and sustainability.

Program Goals

The long-term DE Africa Goal, or Outcome, is that **DE Africa improves the lives of African people** through access to tailored information for decision making. This encompasses:

- **Livelihood strengthening** – EO data will support more informed decision making at government, sectoral and other levels, contributing to direct and indirect benefits for individuals and communities.

- **Development effectiveness** – DE Africa will support enhanced understanding of development challenges and solutions, and in so doing, strengthen collective impact and ability to assess progress towards national priorities, African Union's Agenda2063 and the UN SDGs.

- **Digital transformation** – through industry uptake and innovations, DE Africa will help to fuel the ongoing evolution of the digital economy in Africa.

- **Economic development and job creation** – through access to data for commercial products and services development, DE Africa will support new business development and employment opportunities.

The investment logic describes how the Program Goal will be achieved by undertaking a range of activities that link together and lead to the high level outcome. This is a key guide for the program, and all 2022 activities are aligned with the DE Africa Phase II Investment Logic. As both long-term program goals and the investment logic encompass the duration of the DE Africa Phase II funding, they will remain unchanged for the 2022 calendar year.
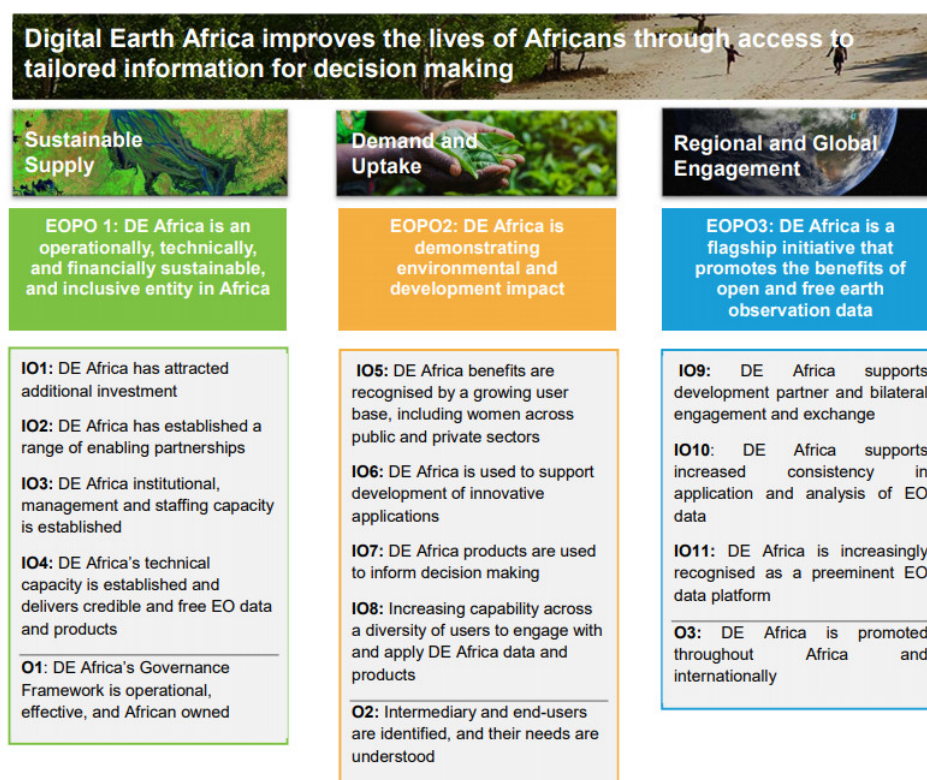
Figure 2 - DE Africa's investment design

Program Delivery Framework

DE Africa has now been established with a distributed operational model as agreed in March 2020, as an outcome of the fourth Technical Advisory Committee meeting (TAC-4) in Pretoria, South Africa. The components of the operational model are laid out below.
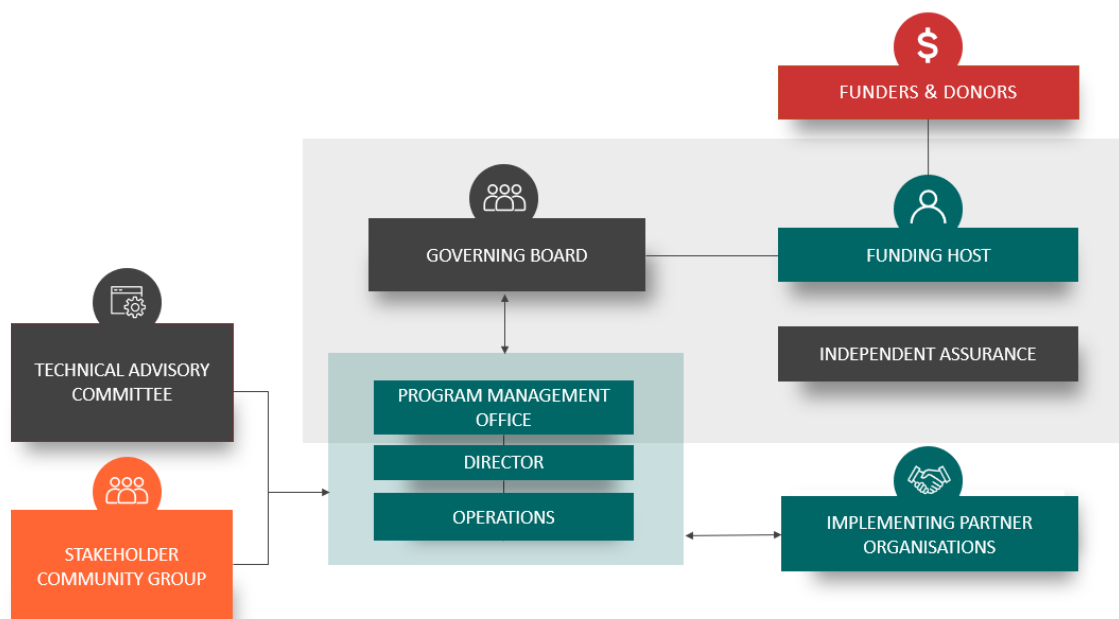
Figure 3 - DE Africa Distributed Operational Model

The distributed operational delivery model places emphasis on working with and through existing organisations and partners with Earth observation capabilities, and facilitating new networks to allow flow of information and end users (e.g. policy and program decision makers) to be connected to the technical platform and the data and decision support tools that it offers. In 2020, key parts of the model were put in place, including the Funding Host (GEO) and agreements with several Implementing Partner Organisations. The elements of the model are described in more detail below, along with the areas of focus for 2022.

Funders

Financial support through our current funding partners, The Helmsley Charitable Trust and the Australian Government, is tied to Phase II of the program. Australian Government agreement to support Phase II continues until June 2023, and a no-cost extension application will be submitted to the Helmsley Charitable Trust to align to the same timeframe.

Additional funding needs to be secured in a timely manner to ensure ongoing delivery through Phase II and beyond. The program will pursue a range of strategies to support this priority, framed by an overarching sustainability roadmap to be delivered in early 2022.

Funding Host

In 2020 a formal agreement was signed with the Group on Earth Observations (GEO), establishing an additional funding host mechanism to support DE Africa's transition process. GEO is hosted within the UN World Meteorological Organisation and provides access to UN systems, including the ability to employ staff in Africa.

Going forward, funding will also be directly managed by the new Program Management Office once it is fully established.

Program Management Office

Implementation of the three-year DE Africa Establishment Phase (DE Africa Phase II) is currently being guided by Geoscience Australia. Following the initial establishment of DE Africa by Geoscience Australia, the South African National Space Agency (SANSA) has been appointed to host the DE Africa Program Management Office (PMO). The appointment marks a significant milestone in establishing an Africa-based infrastructure for Digital Earth Africa.

During the first half of 2022, DE Africa program management and delivery arrangements will be transitioned from Geoscience Australia to the new DE Africa PMO. By mid 2022, the PMO will be fully staffed and operational with an Africa-based Digital Earth Africa team taking on functions and responsibilities from the GA Establishment Team.

Implementing Partners

DE Africa is currently engaging directly with six national and regional 'Implementing Partners' (IPs), who together represent the interests of 43 African countries, including:

- African Regional Institute for Geospatial Information Science and Technology (AFRIGIST, Nigeria),
- AGRHYMET (Niger),
- Centre de Suivi Ecologique (CSE, Sénégal),
- Regional Centre for Mapping of Resources for Development (RCMRD, Kenya),
- Sahara Sahel Observatory (OSS, Tunisia) and;
- South African National Space Agency (SANSA).

Each of the IPs has been selected based on their existing role in supporting the uptake of Earth observation (EO) in decision making and based on their existing strengths in providing technical support to affiliated countries. IPs themselves will be key users of DE Africa. Further Implementing Partners will be added as the program evolves.

Strategic Context for 2022

As we continue delivery, DE Africa maintains a focus on supporting African countries to progress national, regional and international sustainable development agendas, including:

- The **UN Sustainable Development Goals** for which Earth observation can play a significant role in supporting implementation and monitoring.[1]
- **Agenda 2063** 'the Africa We Want', which also recognises Earth Observation as providing a comprehensive basis to support implementation and monitoring of the development strategy.
- DE Africa also offers potential to support initiatives aligned with and reporting against the **Paris Agreement** and **Sendai Framework for Disaster Risk Reduction.**

DE Africa will continue to focus on the priority thematic areas of food and water insecurity, as previously endorsed by the TAC. Both remain serious issues for Africa that have been further amplified by the effect of the COVID-19 pandemic. DE Africa is well placed to expand its impact in addressing these issues and others, including land degradation and building resilient cities and human settlements. However, further efforts are required to understand and address any technical and institutional barriers to uptake of our products and services.

DE Africa must also support climate action. Africa is on the frontline of the climate crisis. With populations across the continent severely affected by drought, flood and rising sea levels, climate adaptation and building greater climate resilience is crucial to Africa's future. According to a recent IPCC Special Report, human activities have caused global warming of approximately 1.0 degree Celsius above the pre-industrial level, and this is likely to reach 1.5 degree Celsius between 2030 and 2050 if it continues to increase at the current rate.

DE Africa has a unique role to play in supporting climate adaptation towards a continent that is more resilient to the climate challenges that lie ahead. The platform is well positioned to support country-led action on climate change mitigation, National Greenhouse Gas (GHG) Inventory Reporting and climate adaptation.

2022 will see a continuation in DE Africa's strategic emphasis on building partnerships and collaborations, to transition capabilities and functions to Africa, amplify the impact of our products and services and ensure the program is sustained beyond the Establishment Phase in terms of governance, management and resources. Through such collaborations, DE Africa is well placed to act as an enabler, to complement, rather than duplicate, existing efforts across the continent. For example, DE Africa has regular contact with groups such as SERVIR, GEOGLAM, GMES, IWMI and FAO, and 2022 should see the development of a range of joint projects and activities of mutual interest. Through our new status as a GEO Initiative, we can further expand collaborative activities with GEO, particularly with respect to the AfriGEO community, other GEO programs and future sustainment activities.

DE Africa will continue to expand its technical offerings to include a wider range of data and services, as guided by the TAC and Product Development Task Team. There will need to be significant effort to focus on supporting our operational services such as WOfS, whilst responding to the need to integrate new data from other domains (e.g. climate data). The existing operational data flows from space agencies will become richer with the anticipated addition of Landsat 9 data from the USGS.

Underpinning the success of the DE Africa program throughout 2022 and beyond will be strong and effective governance from our Governing Board and TAC, to support operational establishment and program delivery. Our governing groups will also be key to helping champion DE Africa to connect products and services with the needs of high level decision makers and to support future funding efforts.

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[1] Group on Earth Observations Supporting Official Statistics in Monitoring and Achieving the 2030 Agenda

Challenges and Risks

DE Africa's most immediate challenge is to ensure that our Project Management Office (PMO) is successfully transitioned from Geoscience Australia to the South African National Space Agency, in a timely, comprehensive, and efficient manner. A dedicated project management team is now in place for the next 6 months to oversee the implementation of all aspects of the transition, from recruitment and resourcing to work planning for 2022 and risk management.

A key challenge for 2022 will be to secure additional funding to ensure the long term sustainability of DE Africa - beyond the Establishment Phase. The focus will be to secure a further 3-5 years of funding to fully realise the program's impact and deeply embed our products and services in the business of governments, the private sector and NGOs. Growing recognition of the value delivered by DE Africa across sectors will ensure countries will be highly supportive of DE Africa and will themselves be investors.

To complement sustainment efforts, DE Africa must continue to build both explicit and implicit in-country support from a diverse range of African organisations and governments, as well as grow the impact of the program. Establishing strong project buy-in and ownership within Africa is critical for the program's long term success. Building a strong and engaged Governing Board who are able to advocate and engage at high-level policy and decision making will be a key focus.

On the international stage, DE Africa will continue to promote the benefits of free and open analysis ready data at international forums (through CEOS, GEO and other groups), to ensure all earth observation data drawn from existing sources remains easily accessible to all.

At the program delivery level ongoing restrictions associated with the pandemic will continue to pose challenges. The ability to travel in 2022 is likely to remain limited and/or uncertain so the DE Africa team will continue to rely on virtual engagement. Consistent, reliable, responsive, and tailored engagement is needed, and will require accelerated deployment of the Africa-based team who bring local knowledge, language and networks.

In Focus: Climate Action for Africa

Africa is on the frontline of the climate crisis. With populations across the continent severely affected by drought, flood and rising sea levels, building greater climate resilience is crucial to Africa's future. Digital Earth Africa is uniquely positioned to empower decision makers across Africa to take climate action.

Climate Change Mitigation

Climate change mitigation depends on more carbon leaving the atmosphere, and less carbon entering it. Much of this plays out in the natural world through the growth and clearing of forests, through fires, and through changes in the use of the land which release or absorb carbon into plant tissues or the soil. Understanding and managing changes in the natural environment and managed lands is essential to calculate carbon emissions and sequestration. The Digital Earth Africa platform hosts the satellite data that are used globally for forest and land-use land-cover change mapping and therefore is well placed to assist countries to design, implement and account for their domestic mitigation measures, including establishing baselines that demonstrate progression.

National Greenhouse Gas (GHG) inventory

Transparent reporting is a key component of impactful climate action, and every country has a responsibility to deliver their reports effectively. As part of the Paris Agreement, an enhanced transparency framework has been adopted, which requires all Parties to report their national greenhouse gas inventory, any progress made in implementing their nationally determined contributions (NDC), and climate change impacts and adaptation measures every two to fours years, as appropriate. Global datasets on forest and land use are becoming more accurate and reliable and can be the starting point for national climate reporting. Digital Earth Africa can connect to these global datasets providing easy access to African countries from a single location without needing to download data, with transparency and control over national and international reporting processes.

Climate Adaptation

Adaptation is a global challenge and is a key component of the long-term global response to climate change to protect people, livelihoods and ecosystems. The impacts of a changing climate will only become greater, and their consequences more urgent. The Digital Earth Africa platform allows access to historic satellite data for the entire continent, providing a consistent record of changes in the landscape over the last three decades. This is an excellent source of data to assess the impact of climate change on coastal systems, infrastructure, water resources, cropping, urbanisation, etc. Further, Digital Earth Africa digitally connects with the global climate datasets which are immensely useful in planning adaptation measures at national and regional level.

2022 Work Plan

DE Africa has three Strategic Priorities for 2022:

- **Embed in Africa:** DE Africa must be fully established and transition to Africa in 2022. Most transition activity needs to be complete by June 2022, after which the new PMO and Implementing Partners will focus on embedding DE Africa products and services into a diverse range of government, industry and NGO activities across Africa.

- **Expand our impact:** With the core infrastructure now fully in place, we need to demonstrate the impact of the services. We need to capture the impacts we are already having and be determined and selective in seeking use cases that connect to actual decision makers, and to target users of our decision ready (DR) services (such as WOfS and the Cropland map).

- **Ensure our sustainability:** We need to actively approach funders, implementing our strategy and planning and leveraging the Governing Board and Technical Advisory Committee. We need to attract additional investment, and secure in-kind contributions through our enabling and implementing partnerships. We must also strengthen and leverage relationships with existing funding partners.

Aligned with long term program outcomes, the DE Africa Establishment Team will include special focus on the following priorities through 2022:

1. Strengthening our governance framework
2. Embedding program operations in Africa
3. Driving African-led technical innovation
4. Securing additional investment to support Phase III delivery
5. Expanding user capacity across Africa
6. Delivering and demonstrating impact
7. Strengthening partnerships and community
8. Expanding awareness

Details of work areas follow, including the connection to the investment logic, key milestones, and indicators.

2022 Framework Updates

All endorsed DE Africa strategies are available on the [DE Africa website here](#), including the **[DE Africa Governance Framework](#)** (current to July 2021).

Key program documents that we expect will need to be created or updated during 2022 include:

- The **[DE Africa Technical Road Map](#)** (current to March 2021) will continue to be updated on an annual basis, as guided by the Technical Advisory Committee.

- **Data and Services Governance documentation** will be developed and include a data hosting policy.

- The **Diversity and Inclusion (GESDI) Implementation Plan** will be updated to ensure alignment with the 2021 update to the [DE Africa Diversity and Inclusion Strategy](#), which now includes a focus on linguistic diversity.

- The [DE Africa Capacity Development Strategy](#) will be reviewed and updated and a 2022 **Capacity Development Implementation Plan** will be co-designed with partners.

- The **Sustainable Funding Implementation Plan**, currently under development to deliver against the **Sustainable Funding Strategy** will be completed early 2022.

- An **Industry Engagement Plan** will be further developed, setting out short, medium and long-term strategies and actions to ensure that DE Africa is used to support industry innovation and third-party applications.

- The **[DE Africa Communications Strategy](#)** (current to Jan 2021) will continue to be updated on an annual basis.

Other key documentation supporting program delivery, maintained or under development by the DE Africa Establishment Team team includes:

- **Risk Management Framework** – the risk management framework will continue to be reviewed and updated as required on a quarterly basis.

- **Monitoring, Evaluation and Learning Framework** – the risk management framework will continue to be updated on an annual basis, or as appropriate.

- **DE Africa Operations Manual** – the Operations Manual serves as an overarching summary of key technical, management, engagement and other policies and processes as will be applicable to DE Africa beyond Phase II. The Manual will be further co-developed early 2022 with the PMO as new staff come on board.

In Focus: Implementing DE Africa's Diversity & Inclusion Strategy

Linguistic Diversity and Inclusion

Diversity and inclusion is a Guiding Principle of DE Africa's Governance Framework. It commits DE Africa to being an exemplar of diversity and inclusiveness and states that the governance framework will be mindful particularly of gender and geographic diversity in its makeup at all levels.

As part of its focus on diversity and inclusion, DE Africa has had a strong practical commitment to ensuring the DE Africa platform and materials are available in relevant languages. This will ensure that everyone from across the continent can access and use the DE Africa platform.

A priority for 2022 is to ensure **materials continue to be available in both English and French, including our training platform, sandbox environment, held desk and other resources.** DE Africa's website already supports a number of relevant languages such Arabic and Swahili, and in the long-term, other components of DE Africa platform will also be made available in these languages.

1. Strengthening our Governance Framework

Phase II Outcome: DE Africa's Governance Framework is operational, effective and African owned.

Full implementation of the Governance Framework underpins the 'African owned and led' objective of the Establishment Phase and will ensure that decision makers and leaders from within the community are guiding and directing DE Africa's future program, and also advocating for its sustainment.

Membership of our Governing Board will continue to grow, providing guidance on long-term strategy, risks, and performance. The Technical Advisory Committee will continue to provide critical advice through the year.

Theme	2022 Activity Area	Milestones/ Indicators 2022
Governance	Strengthen DE Africa's governance framework; including leveraging the Governing Board as a basis to establish high-level buy-in and advocacy for the program, and ensuring continued strong engagement with the TAC.	• TAC – Quarterly meetings • GB – meetings three times a year • PMO – effectively working with GB & TAC • GEO trust fund active and effectively being used for program delivery
Program delivery	Continue to operate under the program planning and reporting cycle, and in the MEL framework; consolidate and document established processes and approaches.	• Delivery of key planning & reporting documents, inc: DE Africa 2021 Annual report, 2022 Annual Work Plan, quarterly reports, financials. • Effective and efficient tracking of program progress against benefits and impacts
Diversity & Inclusion	Deliver against Diversity & Inclusion implementation plan.	• Deliver against the Diversity & Inclusion implementation plan • Strengthen D&I working Group • D&I outreach activities
Data and services governance	Effective use of the technical road map to guide product delivery; Data and product governance processes in place.	• Data and Services Governance documentation is developed • Technical roadmap is updated and used to guide further service development.

Implementation approach under the Distributed Operational Model:

- Continued in-kind support from Partner organisations and others as members of Governing bodies (Board, TAC and subsidiary bodies (e.g. PDTT))
- IPs (PMO) to lead the program delivery processes and MEL framework

2. Embedding Program Operations in Africa

Phase II Outcome: DE Africa institutional, management and staffing capacity is established/ DE Africa has established a range of enabling partnerships.

Our new Africa-based Program Management Office will become fully established and work with our Implementing Partners to support critical engagement, capacity building and uptake with end users across the continent.

Theme	2022 Activity Area	Milestones/ Indicators 2022
PMO	Establish and fully staff the PMO	• PMO institutional hosting arrangements in place, operational and fully staffed • DE Africa Standard Operations Manual is complete and actively used
Platform host	Establish the DE Africa platform hosting	• Platform hosting arrangements in place, operational and fully staffed
Implementing Partners	Strengthen the DE Africa distributed operational model; improve effective policy and processes for distributed operational model	• All Implementing Partners actively leading DE Africa program delivery against agreed 2022 Work Plan outcomes
DE Africa Est Team support	Ensure continued Establishment team support through the transition phase	• DE Africa Est Team provide on-boarding support for new PMO team

Implementation approach under the Distributed Operational Model

- PMO to lead program operation and to oversee platform operation and program delivery by IPs.
- Platform host is responsible for maintaining operation of the platform against a service level agreement with the PMO.
- IPs are responsible for delivering work activities against agreements with the PMO.
- Est Team to provide onboarding and to lead the development of the Standard Operations Manual.

3. Driving African-led Technical Innovation

Phase II Outcome: DE Africa's technical capacity is established and delivers credible and free EO data and products

Now DE Africa's foundational operational platform and data pipelines are established in AWS Cape Town, technical leadership will transition to Africa, growing significant skills, program knowledge, insights and expertise.

Theme	2022 Activity Area	Milestones/ Indicators 2022
Platform	Maintain operational cloud infrastructure & data pipelines	● Operational infrastructure in Cape Town successfully maintained ● Documentation of DE Africa infrastructure complete
User interfaces	Maintain and further develop platform interfaces; monitor user needs for the analysis platform and develop capabilities guided by the TAC	● Maintain Terria Map (English & French) ● Maintain the Sandbox, support its growing usage ● Develop capabilities to support use by EO teams, such as cube-in-a-box ● Grow Esri geoportal ● Maintain/ further develop Explorer ● Continued effective and efficient monitoring of platform usage
Data	Maintain and grow reliable automated and well documented operational input data flows and downstream service production	● Maintain operational Landsat Collection 2, Sentinel-2 and Sentinel-1 pipelines ● Additional dataflows established
Product development & validation	Co-design, validate and deliver planned and new continental products and notebooks, with Africa partners, guided by the Technical Road Map.	● Maintain the following operational services: Sentinel-2 GeoMAD, Landsat GeoMAD, WOfS, Fractional Cover ● Cropland extent service operational ● NDVI anomaly service operational ● Prototype methods established for future continental scale services, such as crop type classification, coastal monitoring and land degradation monitoring ● Additional continental scale products in development, guided by the Technical Roadmap. ● Grow number and diversity of publically available DE Africa notebooks, including interactive tools that require no coding
Program delivery team	Product Development Task Team	● Product Development Task Team meets regularly to support work program delivery

Implementation approach under the Distributed Operational Model

- PMO to oversee operational interfaces, data flows and services and drive development of new platform capabilities and services.
- Platform host to maintain operation of the platform, user interfaces and data workflows, to lead development of new capabilities as requested by the PMO, and to support development of new services.
- IPs to co-lead projects against agreed work plans and to contribute to coordinated efforts through PDTT.

4. Securing Additional Investment to Support Phase III Delivery

Phase II Outcome: DE Africa has attracted additional investment

Additional funding needs to be secured in a timely manner to ensure ongoing delivery beyond the program's Establishment Phase. The program will pursue a range of strategies, targeting both African and international investors, to support this priority. A program of strategic communications and engagement will also be progressed.

Theme	2022 Activity Area	Milestones/ Indicators 2022
Funding strategy	Implement Sustainable Financing Strategy	● Sustainable Financing Strategy complete and implementation underway ● New funders approached
Future funders	Secure additional investment and in-kind support for the Sustainment Phase of DE Africa (i.e. for DE Phase III, Sustainment)	● Co-investment and further in-kind contribution secured from both existing partners and additional philanthropic/ aid agencies
Existing funders	Ensure strong continued support and engagement from our existing funding partners and governing groups	● Quarterly reports to funding partners ● Continued support received from existing funding partners

Implementation approach under the Distributed Operational Model

- PMO to lead development and implementation of the funding strategy.
- IPs to support implementation of the funding strategy through contributing to strategic communications and engagement activities.

5. Expanding User Capacity Across Africa

Phase II Outcome: Intermediary and end-users are identified, and their needs are understood

Phase II Outcome: Increasing capability across a diversity of users to engage with and apply DE Africa data and products

Leveraging DE Africa's multi-lingual training platform, DE Africa will continue to strengthen and empower institutions across the continent to harness the power of EO data and services for better decision making.

Theme	2022 Activity Area	Milestones/ Indicators 2022
User needs	Understand key needs of partners and end users, prioritising high-level Government decision-makers.	• Engage more deeply with in-country institutions to better understand user needs • Support consultations with relevant African agricultural agencies to identify priority information services from the DE Africa platform to support Africa's agricultural sector, and create a strategy to develop and implement these services.
Capacity development	Deliver the Capacity Development Implementation Plan, with our Implementing Partners, providing fit-for-purpose training and support to maximise user ability to use and derive impact from DE Africa products/ services	• Actively maintain the DE Africa training portal (English and French) • New training modules developed and assessed regularly by both the PMO and partners • Training portal used effectively by end users for self-paced training (number and diversity of training graduates; user satisfaction metrics) • Training portal effectively used by Implementing Partners to deliver end user training (Number of training courses given; number and diversity of training graduates; user satisfaction metrics)
User support and engagement	Expand and catalogue the number and diversity of use cases focussing on real decision-makers, including use-cases based on new products (as per the technical roadmap)	• Continue to maintain/ support DE Africa Help Desk, with Implementing Partner support as appropriate (Number of Help Desk requests; average request turnaround time; diversity of users requesting help desk support) • Deliver awareness sessions, through both the PMO and Implementing Partners (e.g. number and diversity of participants) • Evidence of a growing active user community (e.g. number and diversity of live session participants) • Number and diversity of Implementing Partners and end users developing their own use cases

Implementation approach under the Distributed Operational Model

- PMO to lead, oversee and coordinate capacity development and user engagement activities.
- IPs to deliver against agreed work plans, which may include maintenance of the training portal, development of new training modules and delivery of training to relevant stakeholders.

6. Delivering and Demonstrating Impact

Phase II Outcome: DE Africa products are used to inform decision making

Phase II Outcome: DE Africa is used to support development of innovative applications

Phase II Outcome: DE Africa benefits are recognised by a growing user base, including women across public and private sectors

DE Africa will strengthen its focus on supporting the application of DE Africa platform products and data to real-world development challenges. DE Africa will build the evidence base (qualitative and quantitative) demonstrating outcomes and impact for people in Africa. In parallel the program will work with 'champion users' and implementing partners to empower them to advocate for uptake and in turn drive additional application and benefits.

Theme	2022 Activity Area	Milestones/ Indicators 2022
Users	Expand the number of technical and 'downstream' users and beneficiaries, across all sectors including in-country users and with priority on government decision-makers and industry innovators	● Deepen engagement with a diverse range of decision-makers, and demonstration of uptake and benefit from the use of DE Africa services
Industry innovation	Support industry uptake of DE Africa services and the development of innovative applications	● An Industry Engagement Plan will be further developed, setting out short, medium and long-term strategies and actions to ensure that DE Africa is used to support industry innovation and third-party applications ● Support specific industry development initiatives
Benefits realisation	Build robust evidence of impact, complimenting modelling published in 2021. This will include delivery of targeted research, case study development and economic value evaluation	● Undertake, publish and promote Economic Value Studies - in collaboration with key partners including GEO, WEF and others

Implementation approach under the Distributed Operational Model

- IPs support further engagement with a diverse range of decision-makers
- PMO leads industry engagement with support from IPs

7. Strengthening Partnerships and Community

Phase II Outcome: DE Africa is increasingly recognised as a preeminent EO data platform

Phase II Outcome: DE Africa supports increased consistency in application and analysis of EO data

Phase II Outcome: DE Africa supports development partner and bilateral engagement and exchange

Throughout 2022, DE Africa will continue to grow our user community, ensuring our partners and aligned programs can effectively engage with our products and services, and will advocate for the program.

Theme	2022 Activity Area	Milestones/ Indicators 2022
Governance	Mobilise the Stakeholder Community Group (SCG) more effectively.	● Information can be, and is, disseminated to and captured from the SCG
Global technical community	Regularly engage in national, regional and international fora, including continued advocacy for and alignment with international data standards and ongoing active participation in the Open data cube community.	● Active, regular participation in GEO, CEOS, ODC initiatives ● Adoption and promotion of international data standards
Partnerships & alignment	Support inter-regional collaboration, for example across Implementation Partners and aligned programs, as a means to establish self-sufficient and mutually beneficial capacity support, knowledge sharing and information networks.	● Governments and international development programs engaged ● Foster and grow existing and new enabling partnerships - AWS Public Data Program relationship is promoted, supported and sustained ● Private sector engaged - CEO levels; SMEs; innovators / startups
Aligned programs	Work in synergy with other development initiatives and aligned programs, enabling other groups to leverage our products and services.	● Number and diversity of aligned programs leveraging DE Africa products and services

Implementation approach under the Distributed Operational Model

- PMO to manage, maintain and develop partnerships
- IPs to support inter-regional collaboration

8. Expanding Awareness

Phase II Outcome: DE Africa is promoted throughout Africa and internationally

DE Africa's relevance and importance is becoming increasingly well known. We now need to enhance our brand with a stronger Africa based voice, to ensure we continue building buy-in, engagement and uptake across the continent and the globe.

Theme	2022 Activity Area	Milestones/ Indicators 2022
Strategy and brand	Maintain the DE Africa brand and associated messaging; update communication collateral to ensure it is effective in engaging stakeholders and providing them the information they need to champion the program. Implement effective analysis to demonstrate reach and impact.	● Update and continue to deliver the DE Africa Communications Strategy ● Deliver new fit-for-purpose and inclusive DE Africa branded assets (including supporting additional printed assets for Implementing Partners)
Comms channels	Continue to build effective communication channels, processes and networks.	● Grow social media communities ● Continue to develop, adjust and archive content on website ● Continue to seek media opportunities ● Develop regular stakeholder newsletters ● Continue to maintain effective communications monitoring and evaluation systems
Comms network	Maintain distributed communication model, ensuring a shared understanding of the communication approach, brand and narrative among IPs. Support IPs to promote IP-led activities, with communication materials aligned with DE Africa brand and narrative.	● Continue to maintain an active and effective communication working group with Implementing Partners (e.g. monthly meetings held, number & diversity of active participants)
Content	Develop, share and amplify stories (including impact stories) aligned to the communication themes through communication channels and with key stakeholders.	● Number and diversity of stories published, including content provided by Implementing Partners (blogs, social posts) ● Level and diversity of engagement across all channels (as measured by comms metrics)
Events	Ongoing engagement in national, regional and international events.	● Number of events/ joint initiatives supported through sponsorship, participation or general attendance, including representation of DE Africa from Implementing Partners

Implementation approach under the Distributed Operational Model

- PMO to lead the communication network and ensure a consistent DE Africa brand and narrative is used.
- IPs to drive and lead communications related to their relevant Work Plans and to support strategic communications to attract additional investment.

Annexe

Additional information can be found in the following Annexe

1. 2022 Implementing Partner Work Plans ([DE Africa 2022 Annual Plan Annexes 1-3](#))