

# Africa

## CSA Global African Expertise



Resource  
Industry  
Consultants

Since 1986, CSA Global's consultants have worked on a diverse range of projects in the African region, across all mineral commodities and covering all stages of the exploration and mining cycle. We have on-ground experience in most African nations and can provide local knowledge to complement our global expertise.

We draw on our collective experience to customise exploration and mining solutions to each client's requirements. Our advice and services are tailored to respond to the individual advantages and constraints of each geographical region. This approach helps us to provide a holistic approach to operating within the African region.

We have worked with all sizes of companies from small businesses to international majors, as well as with governments and NGO's. We make it our business to get to know and understand the region's cultural diversity, political background, sovereign risk, workforce and technical capability. We identify with each region's approach to sustainability and its level of support for our industry.

Our offices in Australia and UK are ideal regional hubs which provide around the clock support to our consultants who have been servicing the African region for more than two decades.

### Exploration & Evaluation

- Research & targeting studies
- Exploration planning & supervision
- Field investigations (*mapping, geochemistry, drilling, etc.*)
- Project reviews & evaluation
- Technical & expert reporting

### Data Management & Mapping

- Data capture & validation
- Database design & management
- GIS & mapping services
- Database hosting, security & audits
- Intranet design & setup

### Resources & Mine Geology

- Data collection & QA/QC audits
- Geological modelling & Mineral Resource estimation (*JORC, NI.43-101, PERC, China, Russia, etc*)
- Resource assessment & expert reporting
- Mine geology reviews & contract services
- Grade control & dilution management

### Mining & Projects

- Ore reserve reporting & classification
- Mine & operations design & strategy
- Engineering studies (*concept & PFS to BFS*)
- Due diligence & operational audits
- Strategic planning & productivity improvement

### Community Development & Sustainability

- Impact assessment & sustainability programs
- Stakeholder liaison & community engagement
- Landscape interpretation & geotourism
- Educational workshops & training courses
- Sustainability benchmarking & certification



## Recent African Projects

NATION	PROJECT	COMMODITY	WORK COMPLETED	
	Botswana	Karoo	Uranium	Regional geological study
	Burkina Faso	Inata mine	Gold	Competent person report, operations review, geological modelling, Mineral Resource estimation, site support
	Congo (D.R.)	Kipoi	Copper	Geological review, Mineral Resource estimation, reporting
		Kisanfu	Copper	Geological review, exploration planning, Mineral Resource estimation, JORC reporting, site support, database management
		Kisenge	Gold	Geological review
		Mpokoto	Gold	Resource review, mining study
	Congo (Rep)	Sintoukola	Potash	Geological review, exploration planning, data management, Mineral Resource estimation
	Cote d'Ivoire	Bonikro	Gold	Mine geology, grade control, exploration planning
	Ghana	Wa-Lawra	Gold	Management & technical support, field programme evaluation, structural mapping and targeting, provision of GIS & drill hole database management services, Mineral Resource estimation
	Guinea	Kalia	Iron Ore	Mineral Resource estimation and NI.43-101 reporting, independent geological report for AIM listing, site support
	Kenya	Migori	Gold, Copper	Geological and evaluation review, Mineral Resource estimation, drill planning, site support
	Madagascar	Ambatovy	Nickel	Geological assessment, evaluation study
	Malawi	Livingstonia	Uranium	Data review and Mineral Resource estimation
		Kayelekera mine	Uranium	Structural geological study and training
	Mauritania	Reguibat	Uranium	Exploration management and contract services
	Mozambique	Tete	Iron	Desk top review
	Namibia	Marenica	Uranium	Independent geological review, ongoing technical advice, pit optimisation, grade tonnage models & drill spacing proposal
	Niger	Tim Mersoï	Uranium	Exploration management
	Nigeria	Kaffo Valley	Uranium, Nb-Ta	Project review & assessment
	South Africa	Bushveld	Nickel	Desk top review
		Traansval	Zinc - Lead	Geological review
		West Rand	Gold, Uranium	Review of mineral resource model & parameters applied, 3D modelling of underground voids
	Sudan	Kamoeb, Hassai	Gold, Copper	Mine planning, scoping study
	Swaziland	Havelock	Nickel	Desk top review
	Tanzania	Golden Pride mine	Gold	Mine site operator training, ore loss & dilution workshops, mine geology audit
		Mkuju River	Uranium	Contract services, site support, Mineral Resource estimation and reporting for scoping study, PFS and DFS, Sharepoint site implementation & management, Independent Expert report in accordance with VALMIN code
		North Mara	Gold	Mine geology
	Tunisia	Fernana-Hefza and Haffouz	Zinc - Lead Copper - Gold	Exploration management, technical geological and data management services
	Zambia	Munali	Nickel	Mine geology
		Golden Eagle	Copper	Mineral Resource estimation
		Motanga	Uranium	Resource evaluation up to DFS study, drill planning, site support
	Zimbabwe	Filabusi/Moshabe	Nickel	Desk top review
		Dalney mine	Gold	Review of potential, evaluation planning

## About CSA Global

We are a leading geological, mining and management consulting company with 25 years experience in the international mining industry.

We cover all stages of the exploration and mining cycle:

### Exploration & Evaluation

### Data Management & Mapping

### Resources & Mine Geology

### Mining & Projects

### Community Development & Sustainability

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