

GOLD CASTLE COMPANY LIMITED

FULL FEASIBILITY REPORT – GOLD PROCESSING PROJECT (MPANDA, KATAVI, TANZANIA)

1. Executive Summary

The project involves development of a gold processing operation under PML01944KTV in Mtisi, Mpanda. Production starts at 12 kg/year scaling to 25 kg/year. Strong financial viability with IRR ~40% and payback 2–3 years.

2. Project Location & Licence

Located in Mtisi, Mpanda District, Katavi Region. Licence area approx. 7.02 Ha. Accessible via road with proximity to regional infrastructure.

3. Geology & Mineralization

The project lies within a greenstone belt. Gold mineralization occurs in quartz veins and shear zones, with sulphide association. Potential for both primary and alluvial deposits. Recommended drilling and trenching to upgrade resource confidence.

4. Mining Plan

Initial open-pit mining with shallow depth. Use of excavators and manual sorting. Expansion to mechanized mining in later phases.

5. Processing Plant

Gravity concentration circuit including jaw crusher, ball mill, sluice boxes, and centrifugal concentrator. Future upgrade to CIL or Merrill-Crowe for higher recovery.

6. Production Schedule

Year 1: 12 kg

Year 2: 15 kg

Year 3: 18 kg

Year 4: 22 kg

Year 5: 25 kg

7. Financial Analysis

Gold price: USD 125,000/kg

Revenue Year 5: USD 3.1M

Operating cost: ~55%

EBITDA margin: ~45%

8. CAPEX Breakdown

Plant & Machinery: USD 700,000

Civil & Infrastructure: USD 250,000

Working Capital: USD 250,000

Total CAPEX: USD 1.2M

9. Investment Returns

IRR: ~40%

Payback: 2-3 years

Strong cashflow generation

10. Environmental & Compliance

Compliance with Tanzanian Mining Act, Environmental Management Act, and TIC requirements. EIA to be conducted.

11. Risk Assessment

Geological uncertainty, gold price volatility, operational risks, regulatory compliance.

12. Conclusion

The project is financially viable and suitable for TIC incentives, financing, and expansion.