

Jobs and the Value Chain

ASM Reducing Poverty and
Generating Distributed Growth
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Starting Point=Negatives

- Smuggling
- Children in difficult circumstances
- Inefficiency of ASM vs multinationals



Big vs. small

- Economic analysis →
- Bring very different benefits and costs
 - Capital intensive vs. labor intensive
- Political factors
 - Government revenues and official benefits vs.
 - Voters wanting a piece of the action



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The competition



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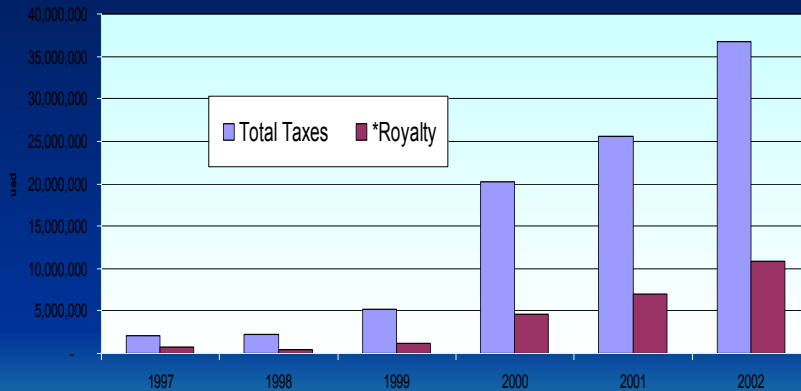
Benefits of large mines

- Government revenues
- Employment opportunities
- Improvement of human capital
- Increased foreign exchange
- Improvement of infrastructure
- Multiplier effects on other economic activities



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Tz Government Revenues



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Costs of mining delayed

- Environmental **plans** fairly sound
- But after mine closure, costs often exceed total benefits
- Future generations suffer the toxic effects or pay for clean-up
- Mine companies gone by then



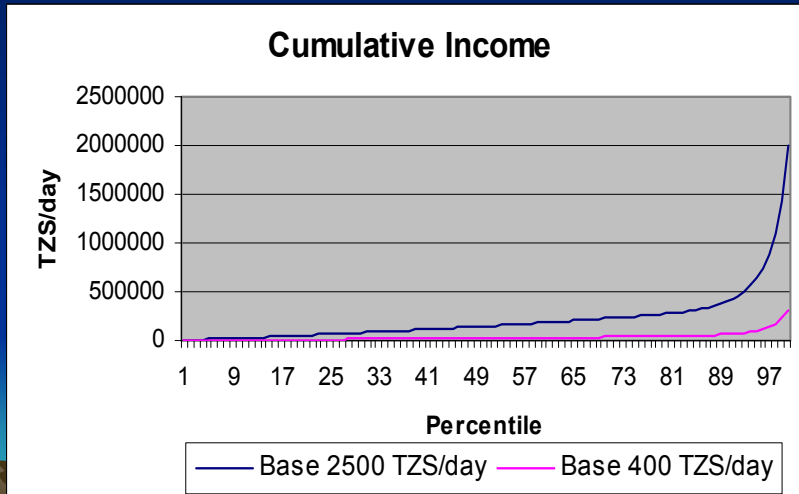
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Environmental Good Intentions



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ASM → 550,000 middle-income jobs



Communities saw advantages

- There had been problems with disease, drinking, prostitution
- Asked about them, people said, “Yes, but...”
 - The road is open, so we can also sell cashews
 - Buyers got capital to buy cashews
 - People built new houses and businesses
 - Put on new roofs
 - New/improved schools
 - Clinic and private pharmacy
 - Social life more interesting



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Conclusion

- ASM should stay, develop
- TZ Government decided not to let big mining totally squeeze out small
- Question is still debated in Madagascar



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That answers why ASM endures, next question how?

Accentuate the positives

Policy focus on

- Jobs (livelihoods)
- Building the value chain

Mitigate the negatives

- Smuggling
- Environmental impacts
- Shifting rushes
- Health, safety and family integrity



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Smuggling

- Driven by convenience more than price
- Multiple taxes and currency controls drove business thru neighboring Kenya
- Model dealer business plans Nairobi & Arusha
 - Same working capital, same initial purchases & same prices, paying all legal taxes
 - In 3 years the Nairobi dealer had 1.7 times the capital of the Tanzanian and paid 63% more taxes
 - Key was higher volume of business, working capital



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Anti-smuggling Strategy

- Consolidate taxes, reduce transaction taxes in favor of royalties + corporate tax
- Adopt incentive approach
- Make licensing easy and transparent
- Stop hassling legal dealers
- Do suppress illegal activities
- Eliminate currency controls (had added 5-14% cost)



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How to build the value chain?

- Obligatory lapidary for foreign buyers?
 - Lapidaries were all losing money
 - Not enough stones to keep a cutter busy
 - Limited market, modest quality
 - Some foreign buyers left or stayed away
- Foreign buyers' capital was essential
 - To fund mining, as well as marketing
 - Jobs dried up wherever they left



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IBI proposed alternatives

- Lapidaries focus on the top of the value chain—gemstone quality stones
- We focus on the waste material lying around
- Build skills in cutting, polishing, jewelry design
- Establish linkages with tourist market
- Foster service businesses for big and small mining



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Cabochons & Hand-made Jewelry

- Training in cabochon-making using cloudy, included or opaque material
- Also using jasper, quartz, beryls, agate...
- Vast volume of low-cost material available
- Initial capital costs \$100-200
- Business skills training followed technical
- Tuition payment enhanced motivation



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Hand-made Jewelry

- Where there is no electricity
- Capital cost <\$100
- Compare >\$5000 to assemble classic jewelry
- Techniques learned in 2 weeks
- Build design skills



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Business plan viable

- Brass and aluminum wire creations sell on local market
- Silver and gold-filled sell to tourists
- For export, gold-filled and silver retail at \$25-\$100
- Classic jewelry at Wal-Mart now same price range



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Build synergies with tourism

- Conveniently co-located in Tanzania
- Somewhat so in Madagascar
- Contacted tourist shops to carry wire-wrap jewelry—sells well
- Potential synergy: tour operators organize visits to mines



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Within six months

- Results of gemcraft & entrepreneurship trainings
 - 2 wire-wrap, 1 cabochon, 1 master cutters
- 12 new jewelry businesses with 35-40 full-time employees (1st training only)
 - Avg wage for jewelry making jobs = \$2-\$6/d
 - Est. \$40,000/year income from 1st training
 - Est. \$500,000/year from 4 trainings + entrepreneurial skills



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Mining Extension Program

- Partners Tan Discovery implemented
- Objectives
 - Improve techniques, reduce environmental impacts
 - Transition from artisanal to small-scale
 - Build value-added in services
 - Create dialogue & cooperation with big mines



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Results of mining extension, 1.5 years, \$400,000

- Rapid response teams for mine rushes
- 206 new SMEs created in small scale mining industry (holding legal primary mining licenses)
- 10,000-18,000 direct small scale mining jobs
 - support services 40-50,000
- 14 new businesses, with about 50 new jobs, provide goods and services to formal mines
- 621 small scale miners trained in environmentally friendly practices and safer mining techniques



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Awareness

- With Tanzania Chamber of Mines, Ministry of Energy and Minerals and local authorities
- Held workshops
 - Local authorities
 - Stakeholders
 - Journalists
 - Policy-makers on revenue segregation
 - Parliament on benefits of ASM and big mining



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Growth with Poverty Reduction

- Large and small-scale coexist uneasily
- Each sees the other as an invader
- Major deposits go to big mines
- Many smaller ones are uneconomic for them—still good for ASM
- Colored gemstones rarely capital intensive
- Legal environment provides for both



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Segregated revenues needed

- Because benefits come first
- And costs much later
- Spending income → inflation, when ore exhausted, downturn
- Significant portion should be invested
- World Bank assists oil countries to segregate income
- Similar approach for mining?



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Mining is like the goose that lays the golden egg

- Some countries eat the eggs
- Other countries eat the goose for dinner
- Others fight over her, tear off her wings, legs, head; then fight one another for the scraps

- Do better with geese and many goslings
- And can build for the future by converting resource capital into human capital



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Thank you. Obrigada.

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