ECO SENSITIVE
SUSTAINABLE
MINING
IN
GOA?

by
MR. RAMESH S. GAUNS
Mining Leases running for 75 kms out of total 105 kms North to South dividing Goa into East and West
Goa and Bellari Mines
Goa’s Facts

- 102 mines in 1 km distance of 12 water bodies with 536 sq km of forest in Sanguem in S. Goa.
- 80 mines in 1 km distance of 22 water bodies including Life line of N. Goa, Mandovi in N.Goa
- 105 MINES OPERATING HAVE 104 PITS FULL OF GROUND WATER.
- Goa is a tiny coastal state with hardly 50km width between Western Ghats and Arabian Sea.
- Saline water intrusion due to tidal influence, is felt up to 40km post monsoon. Exploration of ore, in Ghats and Plateau Region, with already 60% of the mines operating below GWL as per Regional office MoEF Bengaluru. (Bangalore).
NATURALWATERBODY VANISHED -
The economic loss ?
BREECH OF LAW LEADS TO BREECH OF MINING!
SUSTAINABLE ECONOMIC ACTIVITY RUINED- CAN MINING SUBSTITUTE IT?
PADDYFIELD-LOST FOR MINING!
Trees cry for water, thanks to mining
PADDY FIELD AT SHIRGAO – STORY IS REPEATED
River Kale Upstream Opa Khandepar river.
Peninsular Mine!
River Mandovi - the worst affected river...!
River Zuari and ore stacking
Wither Water sources

Traditional water sources destroyed for foreign exchange and private gains.
Under Mining sustainability of water bodies.
Total Siltation of Mulgao Lakes
MOCKERY OF EC & THE MONITORING OF EC CONDITIONS
Ugem abandoned mining pit

- No worries if Selaulim reservoir dries…!
Pit and Ground Water
TRAGIC CONDITIONS OF THE VILLAGE WELLS!
Mining pit with water and dry wells-Pissurlem..sorrows not reflected in EIA’s!
Drinking …
RIVERS

MERCYLESS DESTRUCTION
“Teerth” on the eve of *Gokulashtami* in front of Sapta Koteshwar temple, Khandepar - 21 mines in 1 km distance!
Opa Project - 30% of population drink this water- 21 ML in 1km.
Downstream impact on the drinking water because of mines
KUDNE RIVER
4 mines in 1km distance.
Kushavati in S.Goa - 37 mines in 1km distance!
RED MANDOVI RIVER

- No. of loading points – 37.
- No. of mines in the catchment area – 27.
- All mines generate 101250 T/Day. (Rich land poor people)
- Drains 43500 ha. of forest land.
- 70,000 cu,tones iron particulates get deposited every year.- DR. SEN GUPTA N I O (1973)
- EIAs have no space to mention this!
Harvalem Water Fall - Collapse of E-laws!
The Selaulim dam reservoir—55% of population depends.
GOOGLE IMAGE - PITS & DAM
WESTERN GHAT TALUKAS

• TOTAL AREA COVERED – 1687.12 sq.km
• TOTAL FOREST AREA – 1130.47 sq.km = 83.11% (GOA’S TOTAL FOREST OUT OF 1360.24 sq.km)
• TOTAL MINING LEASES – 379(old documents).
• TOTAL AREA UNDER WATER BODIES – 55.90 sq.km
• TOTAL AREA UNDER ORCHARED – 271.49 sq.km.
• 45% of total Geographical area , population 12%
GOA AT A GLANCE

- TOTAL GEOGRAPHICAL AREA – 3702 Sq.km.
- No. OF MINING LEASES – 864 (as per old documents)
- IRON ORE PRODUCTION PER YEAR CONTRIBUTED TO INDIA’S IRON ORE PRODUCTION – 50%
- GOA IS 1:888 (0.11%) TIMES SMALLER THAN THE REST OF THE COUNTRY.
- GOA PRODUCES ORE to the tune of 465 TIMES MORE THAN ITS GEOGRAPHICAL POTENTIAL.
- AT WHAT COST?
- The Total catchment area of all the rivers of Goa is 3532.4 = 95.41%
- RIVERS MANDOVI & ZUARI HAS CATCHMENT AREA 68%, OF GOA’S TOTAL GEOGRAPHICAL AREA HAVING MORE THAN 40 MINING LEASES UNDER OPERATIONS. OUT OF 11 TALUKAS 5 TALUKAS HAVE MINES UNDER OPERATION!
- MIDLAND TALUKA AREA 22.95% , POPULATION 21%
- COASTAL TALUKA AREA 23.76% , POPULATION 59%
- GHAT TALUKAS AREA 45% , POPULATION 12%
MINING & ECONOMY

- In the last decade average export = 31mt/y.
- Total transaction = Rs171120 crores.
- Net profit app. = Rs 110227 crores for Co.
- Govt’s annual budget = Rs 6000 croes.
- OB generated 930 mt. in the last decade.
- Exported ore in 2011 = 54mt.
- Around 10,000ha of agricultural land lost as of today. (App as no data with agri. dpt.)
MINING AND WATER

• OPA SUPPLIES WATER TO 30.94% OF THE TOTAL POPULATION OF GOA. 4 LEASES IN THE CATHMENT AREA.
• SELAULIM SUPPLIES WATER TO 55% OF THE TOTAL POPULATION OF GOA. 16 LEASES IN THE CATHCHMENT AREA.
• TOURISM DEPT. (ECONOMIC SURVEY 2006 – 07)
  • “…..the Govt. pipelines are either dry or do not have capacity to cater to the need of the tourism industry.”
  • Suggestion “….. Commissioning of the Tillari project at the earliest.”
  • (No. of tourist 2006 – 23,41,649)

- “Combat diseases and malnutrition… through, inter alia, … the provision of nutritious food and clean drinking water”
- Interpreted, Art,8 of the Declaration on the Right to Development adopted by the UN General Assembly in 1986, “Denied access to such essential as food, water, clothing, housing and medicine in adequate measure” representing a clear and flagrant “mass violation of human rights”
CAN SUSTAINABLE MINING BE A REALITY OR AN EYEWASH?

WE NEED TO ANSWER OUR FUTURE GENERATIONS FOR SUSTAINABLE ECONOMIC DEVELOPMENT!
THANK YOU.