

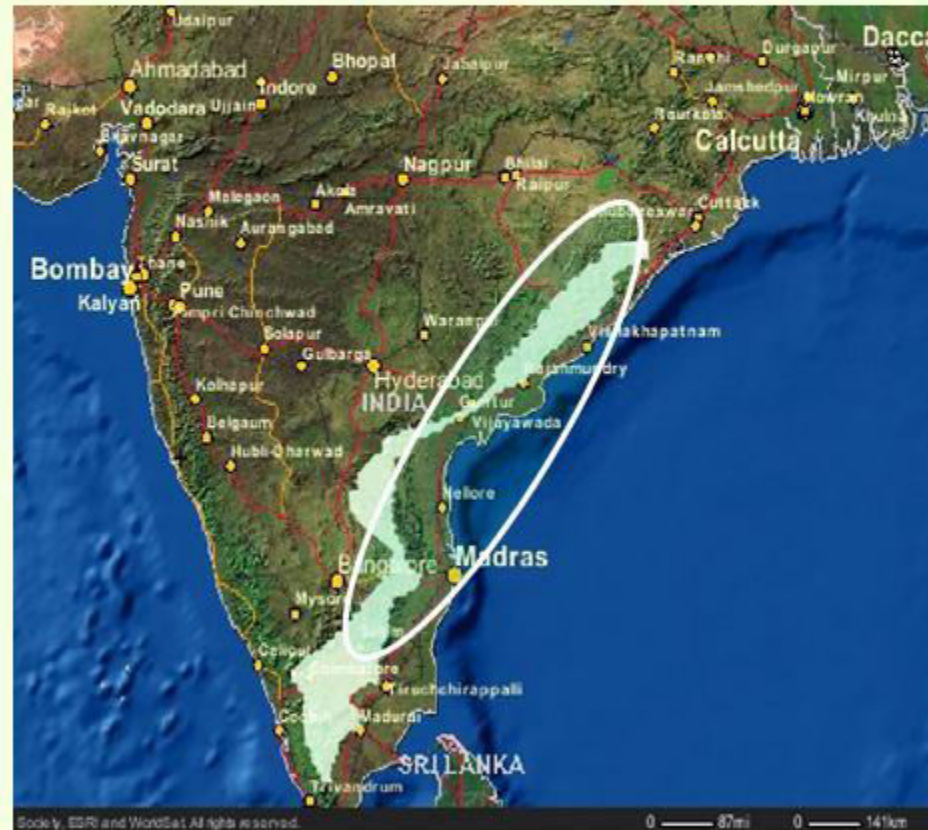
*“Health of the Hills is Wealth of the
Plains”*

The Eastern Ghats
...our lives depend on them

Where are the Eastern Ghats?



All along the East Coast



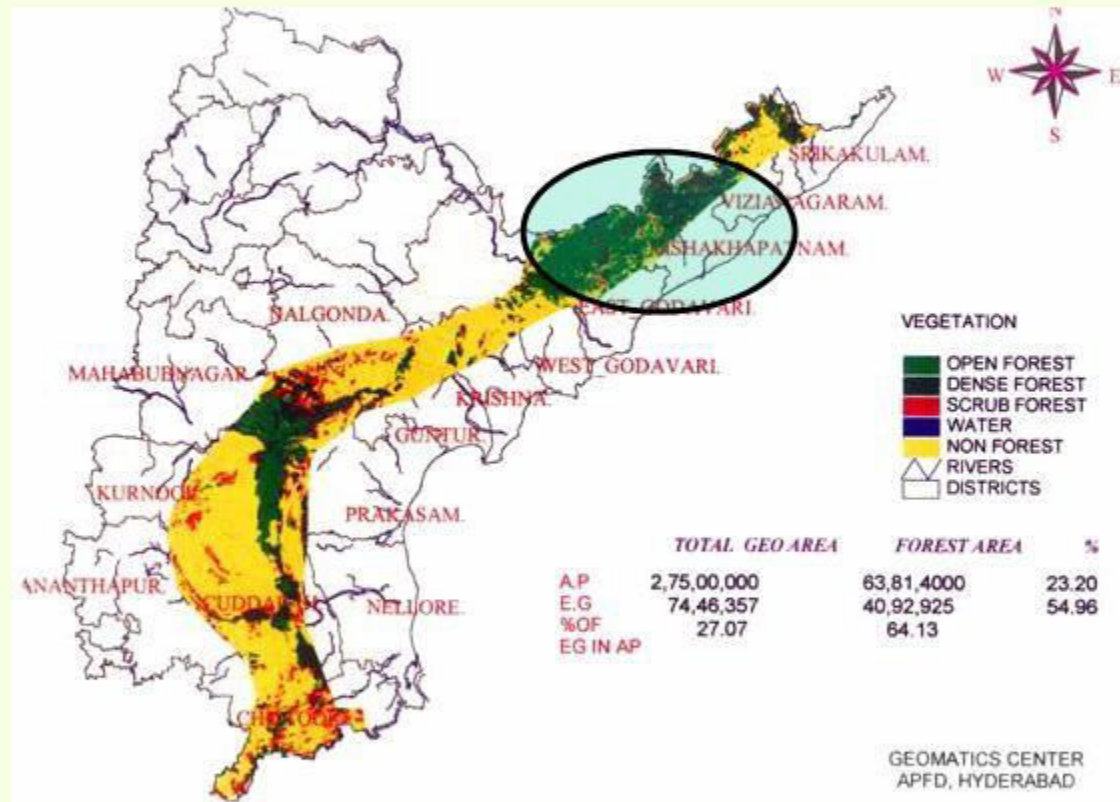
The Eastern Ghats of North Andhra Pradesh



The ghats of Srikakulam, Vizianagaram, Vizag & East Godavari Districts



Vegetation in the Eastern Ghats



Blessed & life giving hills



Source of life giving water



Springs everywhere



Valleys that have nurtured tribes for thousands of years



Hills and valleys ... God's gift to us



More about the ghats

- Orissa, Andhra and Tamil Nadu
- Godavari, Mahanadi, Krishna and Kauveri pass through the ghats
- Long stretch of contiguous forest in East Godavari



Land of tribes

- Ethnic tribes inhabit Orissa, Chattisgarh and Andhra Pradesh

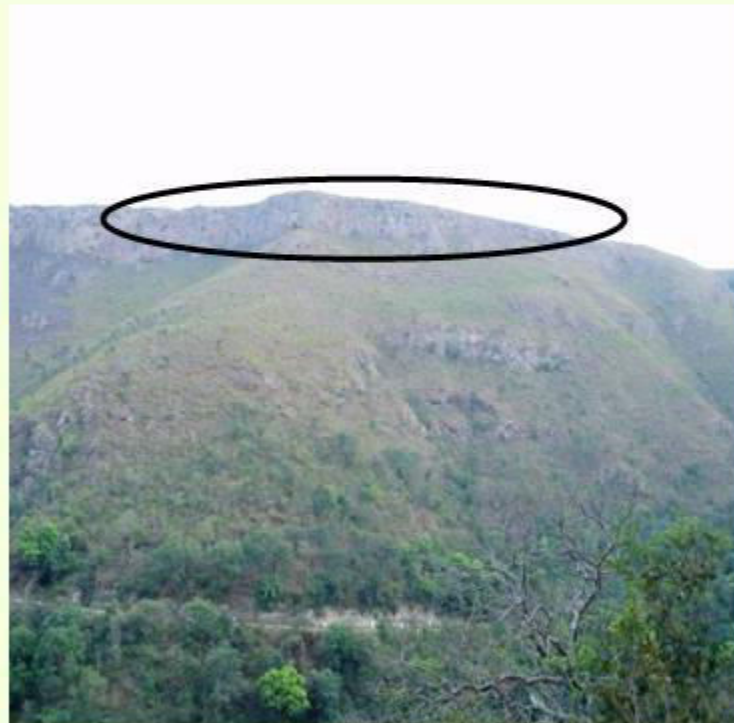


A rich land of biodiversity



- These ghats are a home to several unique flora and fauna.
- A source of biodiversity to be handled with care for future generations

Mineral wealth a boon or bane?

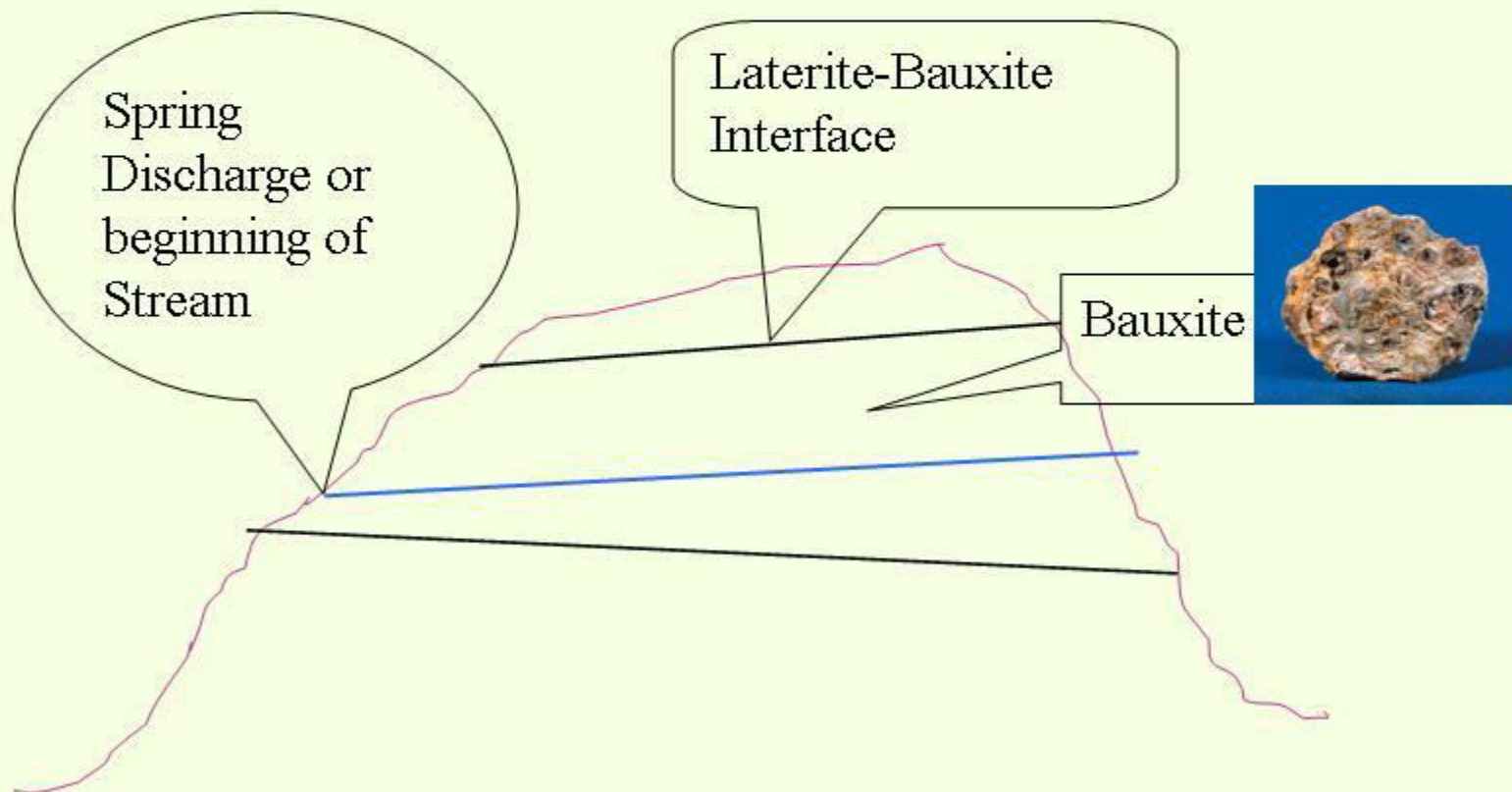


Picture of
Galikonda

Bauxite Deposits

Galikonda	- 14.5 Million tons
Raktakonda	- 8.5 Million tons
Chittamgondi	- 28.0 Million tons
Sapparla	- 186.25 Million tons
Gudem	- 38.41 Million tons
Jerrela	- 246.04 Million tons
Gurtedu	- 42.63 Million tons

Schematic Diagram of Bauxite and Water Resources



Bauxite retains water

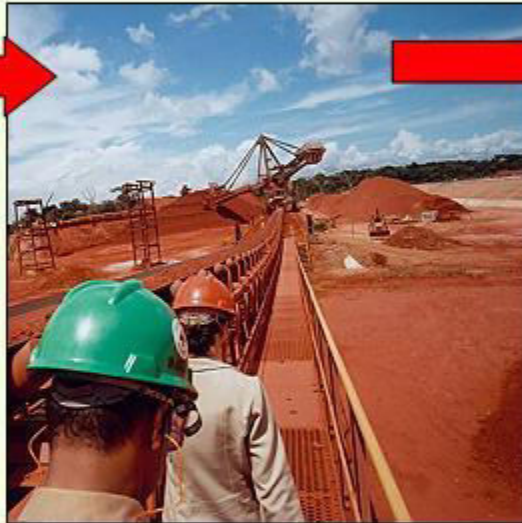


The concretionary nature of bauxite (*pisolitic* and *oolitic*) makes it an excellent rock for retention of water.

Bauxite to Aluminum



MINING



REFINING

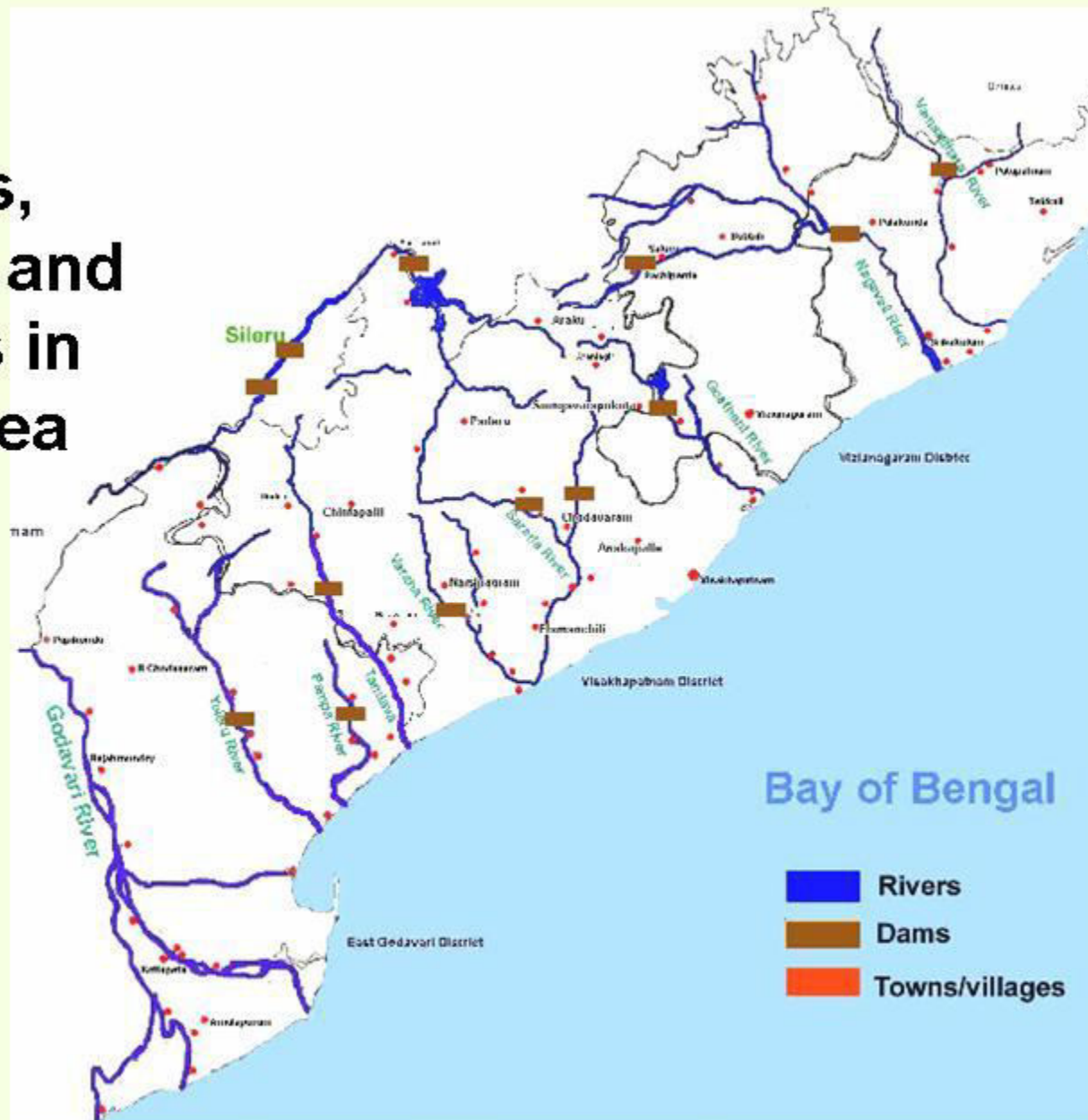


SMELTING

Plans of the Govt

- Bauxite mining
- Alumina refinery
- Aluminum smelter
- Support housing and infrastructure
- **ALL NEED WATER**

Rivers, dams and towns in the area



Reservoirs in Vizag and East Godavari

Vizag

- Ramanapalli
- Thandava
- Raiwada
- Meghadrigedda
- Konam
- Gambhiragedda
- Pedduru
- Kalyanlova

East Godavari

- Maddigadda
- Yeleru
- Surampalem
- Seethapallivagu
- Pampa
- Suddagedda
- Thandava
- Bhoopathipalem

Reservoirs in Vizianagaram & Srikakulam

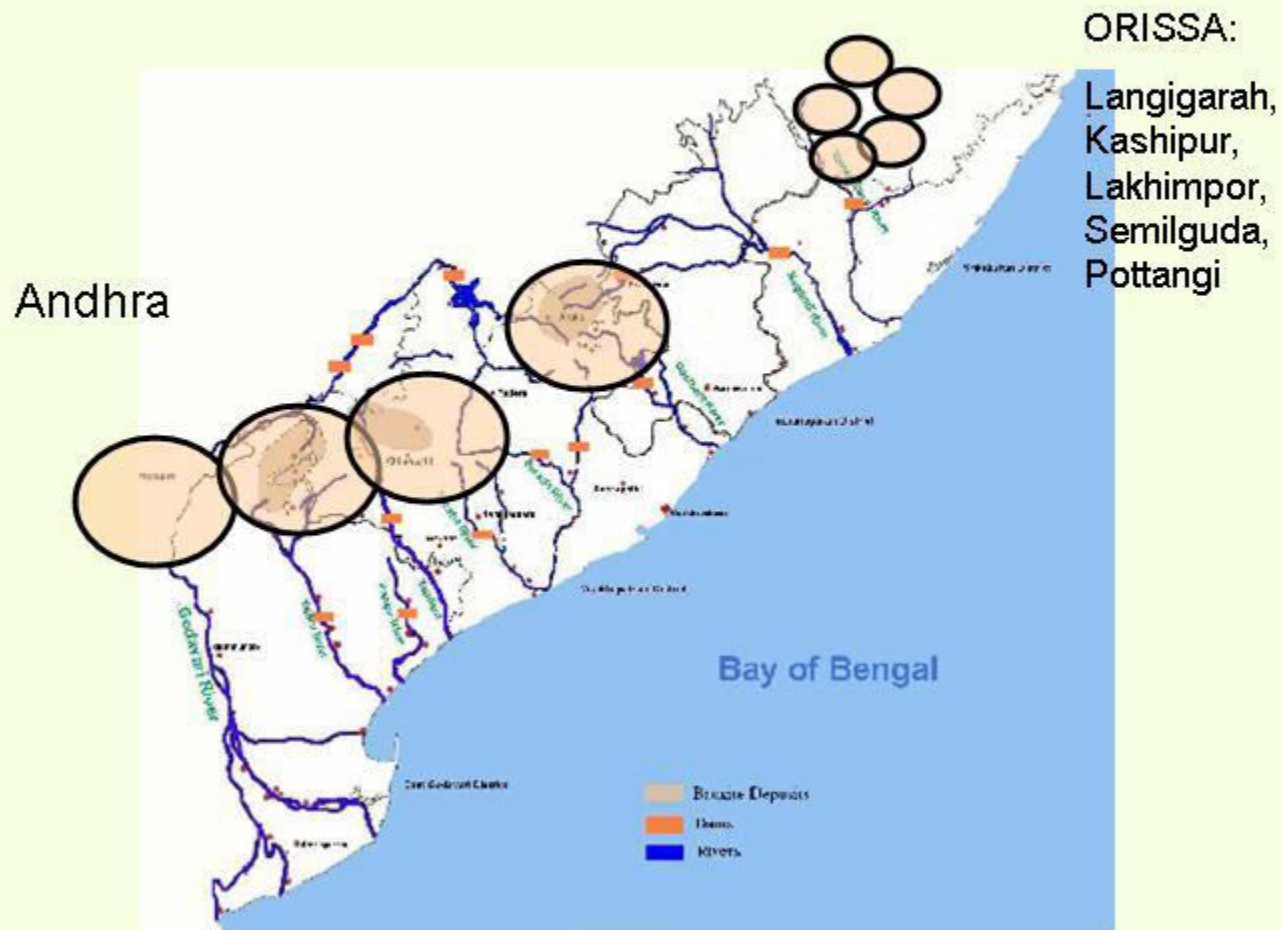
Vizianagaram

- Vegavathi
- Vengala Raya Sagaram
- Vottigedda
- Andra
- Denkada
- Peddagedda
- Seethanagaram
- Tarakarama Thirtha Sagaram
- Thatipudi
- Pedankalam
- Thotapalli
- Janjhavati

Srikakulam

- Vamsadara 1
- Vamsadara 2
- Muddavalsa
- Narainpuram Annicut
- Thotapali Regulator
- Pydigam Project

Bauxite deposits in river catchments



Water needs of proposed Bauxite Mining operations

Location	Operations	Water Consumption Per Day	Reserves	Life of Operation	Water per Year Cu M	Water for life of mine Cu M
Galikonda	Mining	142.00	14.50	10	51,830	5,18,300
Rakthakonda	Mining	106.00	8.50	10	38,690	3,86,900
Chitamgondi	Mining	186.00	28.00	12	67,890	8,14,680
Sapparla	Mining	1,300.00	186.25	25	4,74,500	118,62,500
Gudem	Mining	255.00	38.41	15	93,075	13,96,125
Jerrela	Mining	1,625.00	246.04	40	5,93,125	237,25,000
Gurtedu	Mining	275.00	42.63	15	1,00,375	15,05,625

14,19,485

402,09,130

Water requirements for Bauxite alone per annum

- For seven bauxite mines 14.20 Lakh cu meters!
- For just one Refinery 146 Lakh cu meters!!
- For just one Smelter 32.50 Lakh cu meters!!
- For 7 mines + 1 Refinery + 1 Smelter
- **Total 192.70 Lakh cu meters per year**

How much is that?

- 1 cu meters of water = 1,000 liters
- Water for bauxite industry 192.70 Lakh cu **meters**
- This equals to $192,70,000 \times 1,000 =$
- 192,70,000,000 Liters per year
- Recommended human need 50 Liters per day or **18,250 liters per year**

How much ?

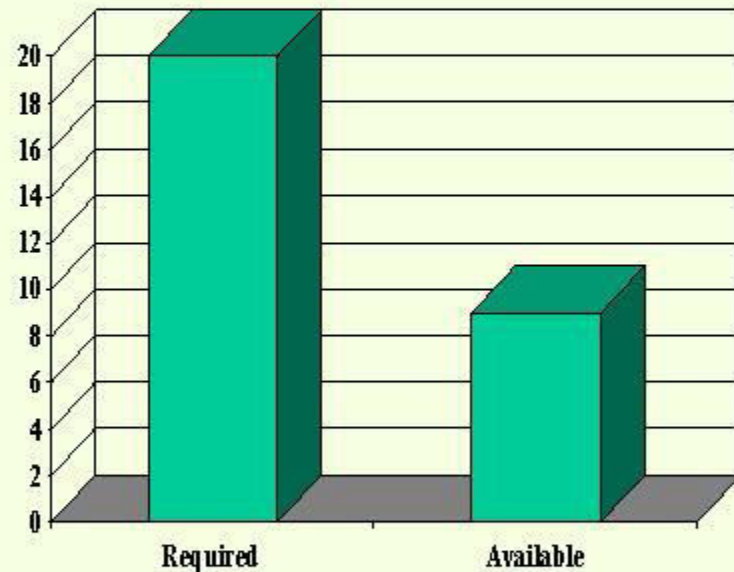
- Therefore mining water is enough for a population of 10,56,000 persons for 1 year



Enough water for a large Indian city

Projected annual water requirements versus availability from existing sources

Required water	Available in reservoirs
20 million cubic meters	9 million cubic meters



This projection is based on five bauxite mining complexes get operational as per APMDC intentions

That's not all!

- Memorandum of Understanding already signed with Jindal & RAK
- Awaiting clearance: NALCO, Essar Gujrat & BHP Billeton
- **How many more do we need to destroy our state?**

Deficit in supply for different horizon years for Vizag

Year	Projected Population in Lakhs	Water Demand in MGD	Present Available in MGD	Deficit in MGD
2006	19.25	87.00	40.00	46.75
2010	22.80	97.70	40.00	57.45
2020	26.70	124.00	40.00	83.75

Imagine what we will be paying for water!



ಮಂಜು ನೀರು ಜಾಲಾ ಖಲಿದಯಪಾಯಿಂಜಿ.

Waste management & pollution

- Waste management –
 - 4/5th of the mined materials will be wasted in the process from bauxite to aluminum
- Water pollution by industry will reduce drinking water availability



Before & After destroying our environment



What is the best choice?

- Mining should be the last resort for the use of land.
- Much greater wealth for human kind above these minerals,
- A single life saving plant is worth much more than all the minerals
- Let Bauxite stay in the hills like a fixed deposit for future
- Wiser generations may know how to mine without depleting our water

We can do without mining

- National policy of what has to be mined and what should not be mined, from the interest of the people rather than the Markets and the Industry .
- Progressive nations should go beyond economics of the market place and understand global stewardship
- Minimizing mining - replace non renewable with renewable

We need two Earths by 2050!



- As we need two earths to satisfy our present consumption pattern by 2050 (Recent report by WWF)

Keep mining out of our life giving hills!



Together we can do it

- **The minerals will be forever - if we do not mine them**
- **The wealth above will never be ours - if we mine them**



Sign the petition so that our voice may be heard



**ಸಂತೆಕಾಲುಚೆಗು ಪ್ರಜಾವಾಣಿನಿ ಪ್ರಭುತ್ವಮುನೆಕು ವನಿಪಿದ್ದಾಂ.
ನೆಡಿಜಲಾಲನು ಪೆಲರೆಕ್ಷಿದ್ದಾಂ. ಮನುಗೆಡುಕಾಸೆಂ ಒದ್ಯೆಮುದ್ದಾಂ !**

Yes, the health of the hills is the
wealth of the plains

