

NON FERROUS METALS RESOURCES IN INDIA - ACTIONS & STRATEGIES

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by
L Pugazhenthly
Past President, The Indian Institute of Metals &
Executive Director, India Lead Zinc Development Association

NON FERROUS METALS - SOME GLIMPSES

- A family of large no of metals
- Focus on key industrial metals & nuclear materials
- Originally, India import dependent
- 1991, macroeconomic reforms & disinvestments in NF sector
- A sea change in production capacities & rapid expansion of uses

ALUMINIUM

- India, ranks fifth in the world, resource wise
- Huge bauxite reserves, 3037 million T,
25% proven, 20% probable & 55% possible
- 80% metallurgical grade
- East Coast, 90% of country's resources
- India exports substantial quantities
- Gujarat, M.P, Bihar, UP & Kashmir with
chemical & refractory grades

COPPER

- Reserves in India, 10 million T
33% proved, 33% probable & rest possible
- Major deposits (90%) in Rajasthan, Jharkhand and Madhya Pradesh
- Balance in Gujarat, Karnataka, Meghalaya, Maharashtra, Orissa, Sikkim & Uttarakhand
- Only Hindustan Copper has captive mines
- Other players, Sterlite Inds & Birla Copper import & have acquired mines

LEAD & ZINC

- Occur together as resources
- Lead Zinc resources estimated at 572 million T
- 90% located in Rajasthan
- Efforts on by govt & producers to locate newer resources
- Hindustan Zinc Ltd, with captive mines & overseas acquisitions
- Binani Zinc, import dependent, acquired Australian mines

NICKEL

- Total resources, 189 million tonnes, major chunk (42) contains 0.9% Nickel, high Fe content & low magnesia
- Orissa, 92% of total resources
- Sukhindia Valley, the overburden of chromite ore
- Ni in sulphide form in Jharkhand, process being developed for recovery
- India imports 50000T Nickel/year
- Stainless steel sector, uses expanding rapidly

TITANIUM

- India with excellent resources, ilmenite & rutile varieties
- Beach sands of Kerala, Tamil Nadu, A.P. & Orissa
- Estimates, 520m T ilmenite & 29m T rutile variety
- India, well placed globally resource wise
- Ilmenite production capacity, 8-0 lakh tonnes only & very poor exploitation

URANIUM

- Primary resources, limited and poor grade
- Uranium resources, 140m T
- Mostly in Jharkhand, A.P & Meghalaya
- Unable to mine, population resistance
- Nuclear power generation, Uranium resources to be exploited

ACTION & STRATEGIES

- Aluminium
 - bauxite exports to be relooked at
 - to encourage new capacities
- Copper
 - to acquire overseas mines
 - to utilize leaner ores
- Zinc
 - comfortable situation
- Lead
 - more & more recycling
- Nickel
 - new technologies
 - to utilize leaner ones
- Titanium
 - to encourage investments & new capacities
- Uranium
 - To accelerate domestic mining