and point to the fact that Lester Thurow, just-retired Dean of MIT's Sloan School of Business, has also talked of de-linking in the last year or two.

I sympathize therefore, with those who would minimize, rather than those who would maximize, economic entanglement between nations. Ideas, knowledge, art, hospitality, travel – these are the things which should of their nature be international. But let goods be homespun whenever it is reasonably and conveniently possible; and, above all, let finance be primarily national.

-The Collected Writings of John Maynard Keynes, 1993, vol. 21, edited by Donald.

Shades of Gandhiji.

#### Efficiency and enoughness

I believe it is essential now to start a major educational effort to introduce the concept of a society's values as key actors in national policies. We all, for example, agree that energy efficiency has proved its worth as a technological principle pulling on science. US utilities literally give away the new expensive fluorescent bulbs to city dwellers, so that they will not have to build new plants. But this cannot be a substitute for national policy. Of course in an era of dwindling access to non-renewable resources, every possible energy savings must be encouraged by technological innovation. But if social pressures continue to push for growth for thoughtless increase in use of energy, they can wipe out all the gains from increased efficiency. The larger policy issue is how much 'consumption' is possible and how much is enough. My paraphrase of what Gandhiji said is 'Earth has enough for everyone's needs but not for a large number's greed.' How much is 'enough', is a key national, religious and ethical value which must be the overriding principle guiding all technological and science policies. A technology policy maker's oath, analogous to the Hippocratic oath, should be, 'First, fulfill everyone's basic needs...'

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# The new mineral policy

#### B. P. Radhakrishna and L. C. Curtis

There is much talk about the liberalization policy leading to vast developments in the mineral industry. The futility of monopolistic control over mineral assets seems to have been realized belatedly and the exploitation of minerals and metals has now been thrown open to private investment. We propose examining some of the issues involved. In our opinion the policy, to become really effective requires action on several other related fronts.

The main thrust appears to be to provide incentives to foreign investment in the mining industry in India. Encouraging local enterprise appears to be only incidental. Mineral development and agriculture, offer the greatest potential for creating additional wealth and employment. More urgent than attracting foreign money are measures and action to develop our land and water resources, and creation of a self-reliant and self-sustaining economy with a strong industrial and agricultural base. The former requires a well-developed and vibrant mineral industry.

The main benefit anticipated is the

induction of capital for investment in prospecting, development and exploitation of minerals through private sector companies. Participation by foreign companies is expected to provide access to up-to-date mining methods and metal recovery processes and a significant increase in production.

## Essential further steps required

Initial response to the new policy is one of very considerable interest by international mining enterprises having extensive world-wide operations. To sustain this interest and yield results further steps have to be taken. These are:

- 1. Geological and mineralogical information to become freely available.
- 2. Tax incentives to be provided to attract capital.
- 3. Mineral concession rules to be further amended, present ineffective procedures to be replaced to speed up grant of concessions.
- 4. Labour productivity to improve through inculcation of work ethic with effective incentives to higher production.

- 5. Availability of reliable electric power at reasonable rates to be ensured.
- 6. Unnecessarily restrictive mining regulations to be amended.

# Non-availability of basic geological data

The Geological Survey of India and the Indian Bureau of Mines, instead of providing information necessary for exploration, are catering only to the requirement of Government. The needs of the industry are ignored, through reluctance in parting with geological maps. The policy of labelling quite a few of even the limited number of published maps as 'restricted' and denying them to the interested public is one cause of under-development of the mineral industry. A reorientation of outlook is essential as no progress will be possible without easy dissemination of basic geological data. We have repeatedly stressed this point but thus far to no effect.

### Paucity of production data

Information on mineral statistics is largely historic, data being several months old.

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The latest Mineral Year Book published by the Indian Bureau of Mines is for 1992 and the information is three to four years old. National interest and economic urgency appear to be frustrated by departmental lethargy. Technical reports are either not available or/are classified 'for official use only' and easy public access denied. Mineral information service is inadequate, detailed maps of mineralized belts and mineral resources not being available. There is great scope for improvement in this service.

Mineral information should be collected and made available through a network at very short notice.

## Tax incentives

Present tax burden on the industry is heavy preventing formation of capital for the exploration and development of new prospects. For example, the Hutti Gold Mines Co. Ltd., had to pay during the last twenty years, income tax of over Rs. 41 crores. In addition, it had to pay sales tax on gold sales and royalty to government. These heavy charges had the effect of making the Company mine higher grades of ore, in contravention of the official policy of conservation and maximum utilization of mineral resources. The siphoning off of the greater portion of surplus funds has made it impossible for the industry to undertake exploration or expansion of mining activities.

For the mining industry to thrive and provide maximum national benefits direct taxation has to be reduced and replaced by incentives for ploughing back surplus funds into exploration and development of new properties.

## Simplification of rules

Rules for granting mineral concession have to be liberalized as the present process extends over several years! A simple and more effective procedure has to be evolved taking note of the position and practices in the advanced nations of the world. Unless procedures are simplified and accelerated, private sector is not likely to show positive interest in mineral development.

#### Incentive to higher production

In earlier years labour wages were low,

working conditions hard and standard of living poor. These conditions have now greatly improved but productivity has not shown a corresponding improvement. Protective legislation has prevented the development of a work ethic on the part of labour. Threatening to go on strike for trivial issues is not a healthy sign for the growth of an efficient labour force. Legal provisions have tended to create a multitude of category of workers based on specific and completely separate occupations. This has resulted in overmanning and a tendency by workers to avoid work outside their particular occupation. Absenteeism, and the numerous declared holidays have also played havoc with productivity.

#### Uninterrupted power availability

No perceptible increase in mineral development is possible unless steps are taken immediately to set up time-bound programmes for production of additional power. This is of great urgency and no time should be lost in implementing power projects. Uninterrupted power supply has to be assured.

Employment generation potential is the highest in the fields of agriculture and mineral development. These sectors should, therefore, receive priority consideration in the supply of adequate power at minimal, or if necessary, concessional rates.

# Progressive mining legislation

Safety and working conditions of workers are paramount considerations and legislation to promote safety is necessary. But some mining regulations are unnecessarily restrictive and act as a break on production. The industry should be consulted and regulations amended where necessary.

Existing laws make it impossible except after inordinate delays to close down operations when a deposit is exhausted. Such legislation results in perpetuating sick units at very heavy cost. No private enterprise would be willing to face such a prospect. There is urgent need for an effective 'exit policy'. Government should seriously give thought to the removal of this provision which forces a mine to continue working even when it is proved that it is no longer economical.

# Need to build national character and self-reliance

The liberalization policy gives the impression that it is intended more to attract foreign capital rather than to encourage local capital and talent. Private sector in India is handicapped with many local restrictions and lack of funds at reasonable rates of interest. Foreign companies have none of these disadvantages and it will be difficult for the Indian companies to compete on equal terms. Every effort should be made to see that no unfair advantage is granted to the foreign investors. More important than attracting outside capital is the building of national self-reliance in meeting challenges. Without this attribute any amount of money that may flow in will effect little lasting good. What is needed today is not so much foreign investors, but a good healthy climate for indigenous investments.

#### Undesirable effects

Foreign companies are likely to offer relatively high salaries to attract efficient hands from government and industry. In the foreseable future, many will seek such positions. In a country where a good percentage live below the poverty line, this will cause great dissatisfaction and unrest. Clamour for more and more emoluments will increase which, when granted, will add to inflation. The benefits of development so far have been appropriated by the upper levels of society and little has trickled down to improve the condition of the poor. Salaries now drawn by the top executives in industry are staggering compared to the standards of twenty years ago. Already every essential commodity has become costly and non-essential luxury goods are available everywhere luring an average worker into squandering his hard earned money. Economic prosperity has yet to permeate to the lower levels of society. Unbridled governmental expenditure and wastage has continuously fueled inflation, making life miserable for a very large proportion of the population.

The facades of prosperity in urban agglomerations represent borrowed money and not indigenous effort or intrinsic worth. Green farmland, made greener through hard work, careful animal husbandry and wise utilization of water resources are

signs of our well-being and not the multistoried monstrous structures disfiguring our cities, adding to our problems and appropriating large sums of money that could be better utilized in rural areas.

We are not against liberalization as such. In fact this is one of the most welcome, although belated decisions of Government, provided it works in the national interest. For this to happen other steps and corrective measures as indicated are necessary to make the gesture meaningful and effective.

#### Reality of situation in the country

Plans for mineral development require the reality of the situation to be considered. India is a densely populated country and mineral wealth is not concentrated, but lies scattered throughout in the form of medium to small size deposits. The most desirable pattern of development would be the opening up of as many as possible environment-friendly small to medium size mines with high employment potential. The aim should be not to disturb and displace the rural poor, but to provide local gainful employment. Foreign companies are unlikely to show much interest in such ventures. Local talent and entrepreneurship should be encouraged. The phenomenal development of the granite industry, gem and jewellery industry, purely by private effort with no government assistance, are examples of what can be achieved. Computer software industry is

another, which has achieved spectacular growth through private initiative and enterprise. Given freedom and suitable investment climate, and a will to succeed, Indian industries can be expected to reach great heights.

Israel has attained world leadership in agro-technology and arid zone farming, making agriculture a most exciting art. India should forge strong ties with Israel to help develop agriculture side by side with mineral development.

# Encourage young men to visit foreign lands

Our bright young men should be provided with opportunities to visit the world's leading centres to get knowledge of important mineral fields and methods of exploration. The best geologist is one who has seen most rocks at an early stage of his career and knowledge on exploration can be gained only through personal acquaintance with mineral occurrences in their varied settings. Young impressionable geologists and mining engineers with rich field experience should be encouraged to visit mineral fields of the world.

#### An autonomous commission

These and several other aspects of mineral policy require early attention of Government. A breath of fresh air has to blow to revive the stagnant mineral industry.

To this end we do trust that the reforms now initiated will gain in tempo and usher in a new era of progressive and pragmatic support for the industry.

Finance Minister, Dr Manmohan Singh in his budget speech said, 'I have a vision of our industrial firms acquiring a global reach, and their names becoming household words in distant lands'. This will indeed be possible if government removes all restrictions and controls and gives a free hand to the flowering of Indian talent.

The problem of revitalizing the mineral industry with its rich unexplored potential cannot be solved through minor tinkering by a few government officials at the top. To quote the eminent jurist, Nani Palkhiwala: 'We keep on tackling fifty year problems, staffed by two year officials, working with one year appropriations, fondly hoping that somehow the law of economics will be suspended because we are Indians.'

The full effect of the great leap forward which government has now taken, will be realized only when effective follow-up action is taken. This can be best achieved by forming an autonomous commission fully empowered to take appropriate decisions and draw up a programme—both short and long term, for developing mineral industries in the country.

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