

## 8. SUMMARY AND CONCLUSION

Prior to 1985, mine closure can be said to have been of a low priority for most of countries. With the paradigm shift in human development the objectives of mine closure have been expanded to include ensurance of environmental sustainability as the most important one. The author expects that mine closure will play a more active role and would gradually become a part and parcel of the project planning exercises.

Closure planning has in recent years become a legal necessity, an environmental responsibility and a sound business approach. It is high time a serious attempt is made to ensure that mine closure plays its envisaged role in environmental management. In the mining sector of India a special effort is required in this regard. The approach taken by the mineral industry towards environmental issues has mostly remained reactive in nature. By merely attempting to comply with the legislative requirements, mine closure for mining projects actually ignore the strategic perspective. Once this aspect is understood. The industry leaders would themselves like to take lead in ensuring environmentally sustainable mine closure.

A process of sweeping economic reforms is underway in India. It is desirable that the environmental management in India would be comparable in effectiveness to the system-utilized world over. Last decade has witnessed phenomenal development in the principles and methods of mine closure planning. During the last fifteen years a huge literature has appeared on mine closure planning. In the current days of rising environmental concern a proactive approach to mine closure is no longer a luxury but an absolute necessity. It is important that a synthesis be carried out. The following key constraints remain to be removed:

- § A general lack of accountability by decision makers;
- § An effective mine closure planning policy due to the lack of the political will and internal pressure;
- § Inefficient incentive mechanism;
- § Inability to take a holistic long-term view of the problem;
- § An over-abundance of mediocrity among the think tank;
- § A lack of environmental expertise; and
- § An acute shortage of financial resources.

There has, of late, been significant improvement in the understanding of the relationship between environment and development. This understanding calls for a

suitable change in the framework of project planning so that objectives of maintaining long-term environmental source and sink functions are included in the planning process itself. The mine closure in future will have to adjust to this new framework of project planning. The author urges upon the future researchers to carry forward the outcome of the present study on mine closure in that direction. The author puts down his pen with the sincere belief and hope that through concerted efforts of academic, research, industrial and government organizations the mine closure in India will become an important part for integrating environmental, social and economic issues into the project planning process.