

thereby ensuring a second life for these resources. Such prudent use of the earth's resources is a central theme of sustainable development.

8. What are the basic components of sustainable development?

The basic components of sustainable development (not in order of importance) are: social well-being, environmental health, and economic prosperity. Essentially, sustainable development requires that social, environmental, and economic issues be integrated in decisionmaking. In all decisions, the long-term effects on resources and capital and the capacity for future creation of benefits should be considered. Decisionmaking by natural resource managers should be broad, participatory, and also interdisciplinary.

9. How do each of the three components of sustainable development apply to minerals and mining operations?

Concern for economic and technological efficiency, for local environmental quality including planning for cleanup and reclamation at the closure of a mine, and concern for the social well-being of the local mine community and nearby population have long been mineral industry issues. Sustainable development provides a context within which to integrate these concerns. As a matter of interest, more than 30 of the largest mining companies in the world are sponsoring a project called Mining, Minerals, and Sustainable Development to assess how mining and minerals can contribute to sustainable development.

Employees with the United States Departments of Interior and Agriculture have been working with their stakeholders to show how the social, environmental, and economic components of sustainable development could apply to mining operations. Following are examples of each.

Social: This component relates to community responsibilities. It is aimed at alerting companies, governments, and others to the need for enhancing the health of people and their communities, while maintaining profitable companies. Further, it raises the need for communities to understand and agree upon the distribution of cost, benefits, and risks of any proposed project or activity. It includes concepts such as:

- Respecting the cultures, customs, and values of individuals and groups whose livelihoods may be affected by exploration, mining, and processing
- Respecting the authority of national, regional, and tribal governments; taking into account their development objectives; contributing information related to mining and metal processing activities; and supporting the sharing of economic benefits generated by operations
- Recognizing local communities and other affected organizations and engaging with them in an open, honest, and effective process of consultation and communication from

exploration through production to mine closure

- Assessing the social and cultural impacts of proposed activities
- Reducing to acceptable levels, as recommended by all stakeholders, the adverse social impacts on communities of activities related to exploration, extraction, and closure of mining and processing facilities
- Promoting health and safety both on and off the project site
- Developing one-on-one programs to support the well-being of employees' families in mining communities, such as activities and educational opportunities for spouses and children of mine employees

Environmental: This component relates to environmental stewardship. It is aimed at alerting companies, governments, and others to the need for enhancing environmental conditions over the long term. It includes concepts such as:

- Making environmental management a high priority
- Planning for mine closure beginning with exploration and mine approval
- Establishing environmental accountability in industry and government at the highest management and policymaking levels