

WHERE WILL THE WORLD'S FUTURE MINERAL RESOURCES COME FROM?

Schulz, Klaus J., U.S. Geological Survey, 954 National Center, Reston, VA, USA 22092, kschulz@usgs.gov, and Global Mineral-Resource Assessment Team

Global demand for mineral resources will continue to increase for the foreseeable future because of the continuing increase in global population, and the desire and efforts to improve living standards worldwide. The ability to meet this growing demand for minerals is affected by concerns about possible environmental degradation caused by mineral production and by competing land uses. Informed planning and decisions concerning sustainability and resource development require a long-term perspective and an integrated approach to land-use, resource, and environmental management worldwide. These, in turn, require unbiased information about the global distribution of identified and especially undiscovered mineral resources, the economic factors influencing their development, and the environmental consequences of their exploitation. In response to the growing concern about the sustainability of nonfuel mineral production and environmental quality, the U.S. Geological Survey has initiated a project to evaluate the feasibility of conducting assessments of the world's undiscovered mineral resources. The project is gathering information regarding the current status and availability of global minerals-related information, and the distribution of ecosystems and their response to minerals development. The project also is experimenting with prototype global assessments for selected metallic and non-metallic deposit types to help improve assessment methodology and define protocols needed to conduct global-scale assessments. The project seeks cooperation and collaboration with other organizations and industry involved in international mineral-resource and related environmental issues.