

2009/SOM2/MTF/CON/007 Section: II (8)

Sustainable Mine Development

Submitted by: Korea Mine Reclamation Corporation (MIRECO)



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Sustainable mine development



Korea Mine Reclamation Corporation **MIRECO**



What is the mine hazards?

Mining hazards occurred in the course of mine development can cause physical and chemical damages that are harmful to the environment and human beings



<Case 1> Waste rocks and tailings



<Case 3> Acid mine drainage



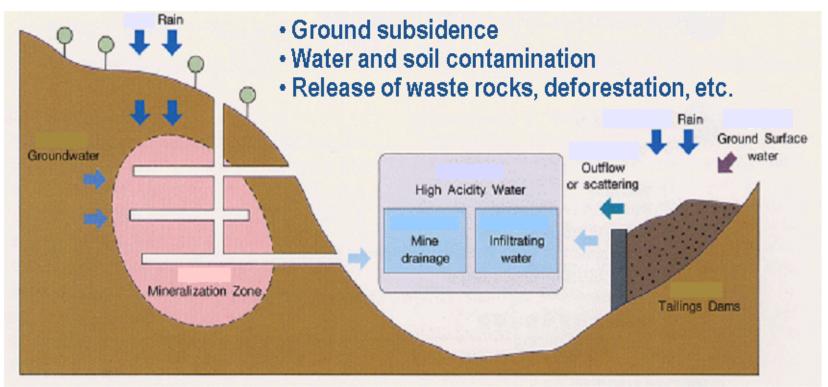
<Case 2> Ground Subsidence



<Case 4> Deforestation



Mechanism of mine hazards occurrence



- Even after mine closure, mine hazards occur widely and continuously causes for large casualties, resulting in social problems
- thus, the initial plan of mine reclamation in the initial step of mine development is very important to have a sustainable mine development

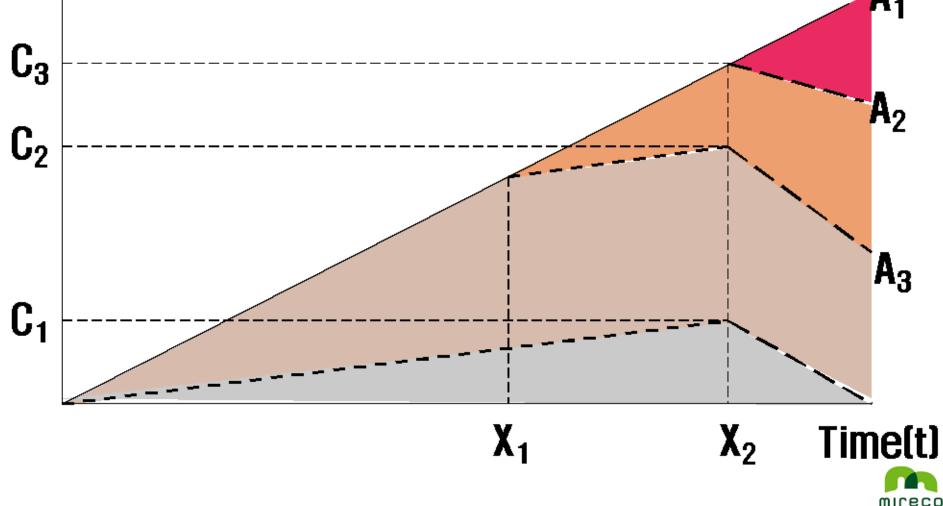
Cases of mine hazards





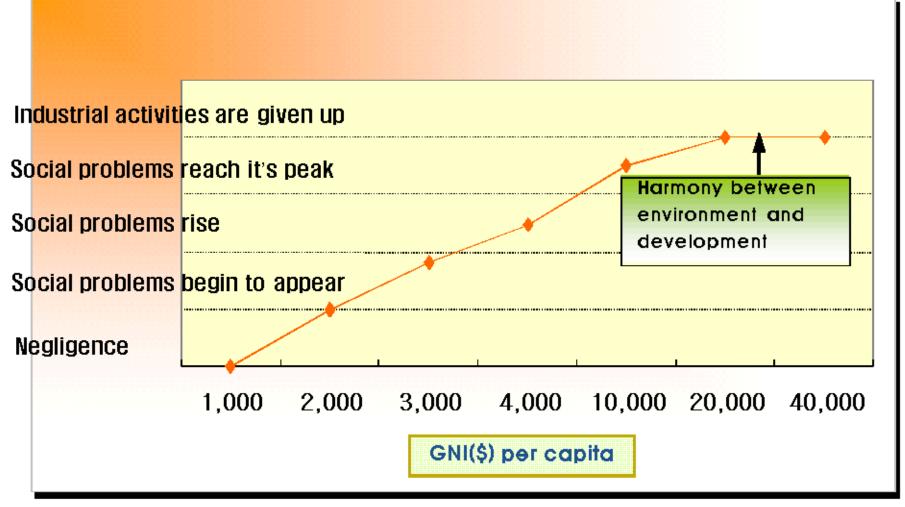
Change of cost for environmental pollution with the conductance of mine reclamation

Cost for environmental pollution occurred by mine development





Change in governmental policies for mine hazards according to the change of GNI per capita





Acts of government for mine hazards

- Nation has a responsibility to improve the environment in order to keep the people on living in safe and clean environments
- Nation has a responsibility to improve the product activity of company and individual in order to keep the people on living in a good quality
- Therefore, while making the mine development in a free way, we should make and operate a system to prevent mine hazards and quickly treat the occurred

- <upbringing system for mine industry> : the mining act, coal industry act
- <system of mine reclamation> : the mining safety act, Act on the prevention and restoration of mining damages



Mine reclamation business of MIRECO

(Unit : ea)

Class.	Coal mine	General mines			
		Metallic mine	Non-metallic mine	Sub-total	Total
Sub-total	349	988	669	1,657	2,006
Ongoing mines	9	52	669	721	730
Abandoned mines	340	936	0	936	1,276

MIRECO accomplishes mine reclamation businesses in an appropriate and systematic way



Cases of Mine Reclamation Business

Water treatment





Soil remediation





Cases of Mine Reclamation Business

Reforestation

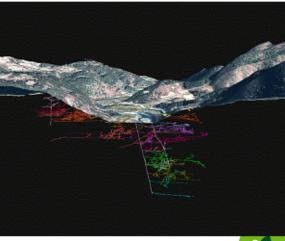




Prevention of ground subsidence

GIS

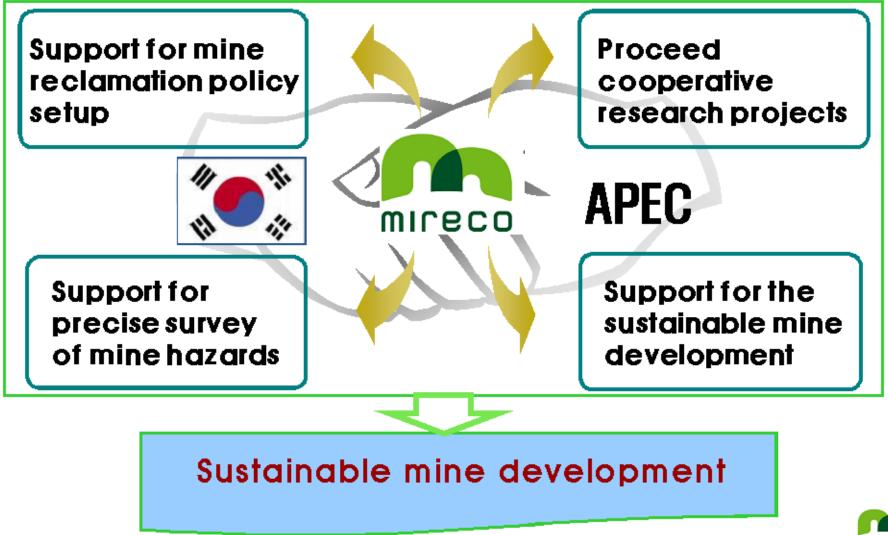








APEC-Korea Cooperation I





Contents of APEC-Korea Cooperation I

Survey of mine hazards



Survey, assessment, GIS



Pilot-scale tests



Slope stabilization



Reforestation







Soil remediation

Water treatment





APEC-Korea Cooperation II

 enhancement of mine reclamation technology through training, education and symposium











Thank you!!

감사합니다

