

자원개발 진출 가이드

파키스탄

kotra

Korea Trade-Investment
Promotion Agency

머리말

우리공사는 지난 8월 호주, 뉴질랜드, 인도네시아 등 아시아대양주 지역에 대한 자원개발 현지진출 방법과 절차를 소개하는 '아시아·대양주 자원개발진출가이드 I'을 1차로 발간한 바 있습니다.

그동안 동지역은 풍부한 자원부존에도 불구하고 호주, 인도네시아 등 몇몇 나라를 제외하고는 대다수의 국가가 열악한 인프라 및 투자환경으로 인해 우리기업의 진출이 활발하지 못하였습니다. 그러나 향후 정치안정과 투자여건이 우호적으로 조성될 경우 미얀마의 원유, 파키스탄의 천연가스와 같이 아시아·대양주 지역의 자원개발 사업기회와 유망성은 다른 어느 지역보다 높다고 할 수 있겠습니다.

이번에 발간하는 '아시아·대양주 자원개발진출가이드 II'에서는 진출 유망 대상국에 필리핀, 베트남, 미얀마, 태국, 스리랑카, 말레이시아, 파키스탄 7개국을 추가하여 각국의 부존자원 및 자원개발 현황, 자원개발 제도 및 절차, 우리기업의 유망 진출분야 및 시사점 등을 수록하였습니다. 아울러 현지 자원개발 관련 법령 및 각종 행정서식 등 실무적인 자료 등을 부록으로 첨부하여 현지진출시 실질적인 참고자료로 활용될 수 있도록 하였습니다.

아무췌록 금번자료가 우리기업이 아시아대양주지역으로 자원개발 사업 진출시 유용한 길잡이가 됨으로써 해외자원확보라는 소기의 성과를 달성하는데 큰 도움이 되었으면 하는 바램입니다.

끝으로 이번 책자가 발간될 수 있도록 현지에서 자료수집 및 보고서 작성에 힘써주신 아시아대양주 한국비즈니스센터와 자원건설플랜트팀 여러분들의 노고에 진심으로 감사를 드립니다.

2008년 12월

해외사업본부장 박기식

목 차

I. 자원개발 진출환경 / 5

II. 부존자원 현황 / 11

III. 자원개발 현황 / 27

- 27 1. 탐사/생산/개발 동향
- 29 2. 외국인 자원개발 투자현황
- 30 3. 우리나라 참여현황 및 전망

IV. 자원개발 제도 및 절차 / 33

- 33 1. 자원개발 법령 및 제도
- 38 2. 자원개발 관련 규제 및 인센티브
- 41 3. 자원개발 관련 인프라 현황
- 48 4. 자원개발 유관기관/기업/네트워크

V. 우리기업의 자원개발 유망 진출분야 및 시사점 / 55

- 55 1. 전략개발 분야 및 우리기업의 참여방안
- 56 2. 진출 시 유의점 및 참고사항

VI. 부록 / 61

- 61 1. 광업법
- 82 2. 서식 견본



자원개발 진출환경

I. 자원개발 진출환경

■ 세계 자원보유 및 생산 면에서 주재국의 위상

- 파키스탄은 광물자원 부존 가능성이 매우 큰 것으로 알려져 있으며 지질학적으로 노두(露頭) 지대(석탄, 광물 등의 지표면 노출 지대)가 전 국토면적의 75%인 60만km²에 이르는 것으로 추정
- 석탄, 석회암, 암염과 같은 비금속광물의 매장량이 풍부하고 최근 정부당국과 외국기업의 탐사를 통해 상당지역에서 구리, 금(백금), 은, 크롬철석, 철광석, 납, 아연 등 금속광물 매장 확인
- 특히 최근 신드주 Thar 사막 지역에서 1,750억 톤 규모의 석탄광산이 발견되면서 파키스탄은 세계 7위인 1,850억 톤의 석탄 매장량을 보유한 것으로 추정되며 석탄의 전체 전력 공급원에서의 비중은 7.6%(2005년도 기준) 정도에 이름.
- 현재까지의 탐사결과 총 52종의 광물자원 매장이 확인되었으며 석유 및 천연가스의 생산도 부분적으로 이루어짐.
- 파키스탄 정부 당국(Energy Information Administration)에 따르면 지난 2006년 석유제품 수출은 세계 54위를 기록하였으며 천연가스의 수출 역시 30위권(2005년)을 유지하고 있음.
- 그러나 열악한 인프라와 기술부족, 행정시스템 미비 등의 요인으로 지하자원에 대한 탐사 및 개발은 아직까지 초보적인 단계를 벗어나지 못하고 있어 광업 분야가 전체 GDP에서 차지하는 비중은 0.5% 수준에 불과

■ 자원개발 정부정책 방향

- 파키스탄은 최근 3년간 연평균 7.5% 이상의 경제성장세를 보이며 산업생산이 증가에 따른 전력수요가 지속 확대되고 있으나 노후화된 송전 인프라에 의한 전력 누수, 만연한 도전 등으로 전력난은 갈수록 심화되는 양상을 보이고 있음.
- 세계은행(WB) 등 주요 국제 경제기구들은 지체되고 있는 관련 설비 투자로 인한 전력난 악화에 큰 우려를 나타내며 파키스탄 정부가 발전설비는 물론 송전 시스템에 대한 예산 투입 및 도전 방지를 통한 전력손실 최소화를 정책 최우선 과제로 삼을 것을 권고하는 한편, 전력 사정이 개선되지 않을 경우 파키스탄 경제 성장의 최대 걸림돌로 작용 및 사회 불안의 중요 요소로 작용할 수 있음을 경고

〈파키스탄 전력 수급 추이〉

(단위 : MW)

연도	공 급				수요	비 고
	현 발전시설	건설계획	소계	실 공급능력		
2008	15,903	615	16,518	13,214	16,484	-3,270
2009	15,903	3,381	19,284	15,427	17,868	-2,441
2010	15,903	5,965	21,868	17,494	19,352	-1,858
2011	15,903	9,950	25,853	20,682	20,874	-192

자료원 : Hydrocarbon Development Institute of Pakistan

- 이에 파키스탄 정부는 비교적 매장량이 풍부한 천연가스와 석탄을 활용한 발전량 확충에 정책의 초점을 맞추고 있으며 자본 및 기술부족으로 인해 동 분야에 대한 외국기업의 투자진출 유치에 집중하여 다수의 자원개발 및 발전소 건설 프로젝트를 공급자 금융방식(BOO,

BOT)으로 추진중

- 또한 최근의 고유가 추세에 따른 에너지 수입부담 증가로 석유자원에 대한 탐사 및 생산에도 노력

■ 민간 및 외국인 투자 동향

- 파키스탄 자원개발에 대한 외국인 투자는 열악한 인프라와 정정불안에 따른 높은 국가위험도 등의 요인으로 미미한 수준에 머물러 있음. 특히 철, 동, 아연 등의 매장지역이 발로치스탄(Balochistan), 북서변경주(North-West Frontier Province, NWFP) 등 치안이 극도로 불안한 지역에 집중되어 있어 내, 외국기업의 개발 프로젝트 참여가 상당부분 지연되고 있는 실정임.
- 그러나 아라비안해(Arabian Sea) 유전, 가스전 개발, 신드주 Thar 지역 석탄 개발은 상대적으로 수익성이 높은 것으로 평가되어 외국기업의 관심이 높은 상태이며 특히 석유, 가스 탐사 분야에 대한 투자는 지난 2년간 크게 증가하였음.

〈파키스탄 자원분야에 대한 내, 외국기업 투자 동향〉

(단위 : US\$ 백만, %)

구분	2004/2005		2005/2006		2006/07	
	금액	증가율	금액	증가율	금액	증가율
Mining & Quarrying	0.49	-55.05	7.15	1,359.18	23.70	231.47
Oil & Gas Explorations	193.81	-4.24	312.69	61.34	545.11	74.33

자료원 : State Bank of Pakistan

■ 인근국과의 관계

- 파키스탄은 자원 탐사 및 개발이 아직까지 초기단계에 머물러 있어 천연자원과 관련해서 주목할 만한 마찰관계는 없는 상태
- 이란의 Asalouyeh 지역 South Pars 가스전으로부터 파키스탄을 경유하여 인도로 연결하는 가스 공급 라인 건설 프로젝트(IPI 프로젝트)가 가격산정방식, 파키스탄의 정세불안에 따른 인도의 연기요청 등으로 답보상태에 머물러 있음.



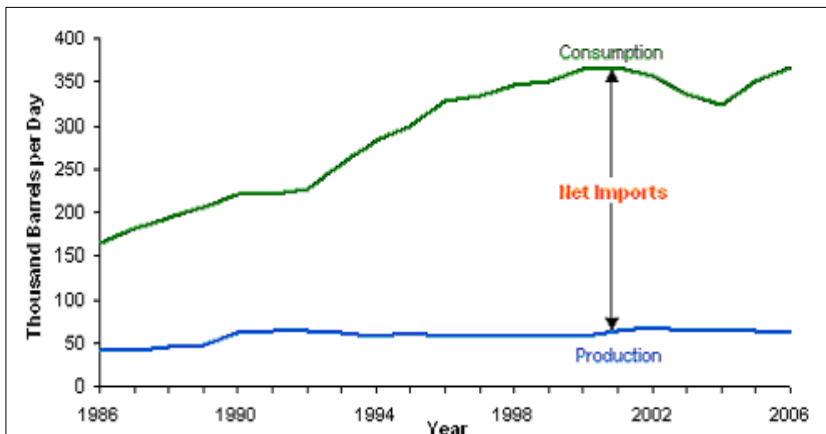
부존자원 현황

II. 부존자원 현황

■ 석유·가스 및 전략광종

- 파키스탄의 원유 매장량은 약 8억 배럴 수준으로 추정되며 원유시추를 포함한 석유제품의 연간 총생산량은 2천만 배럴로 국내 수요량의 19%에 그쳐 대부분을 수입에 의존하고 있음.
- 파키스탄에는 5개의 정유회사가 있으며 일일 생산능력은 27만 배럴 수준이나 실제 생산은 이에 미치지 못하고 있음. 정유기술의 미비로 인해 주로 나프타 등의 중간재를 생산, 수출

〈파키스탄의 일일 석유제품 수요 소비 추이(1986~2006)〉

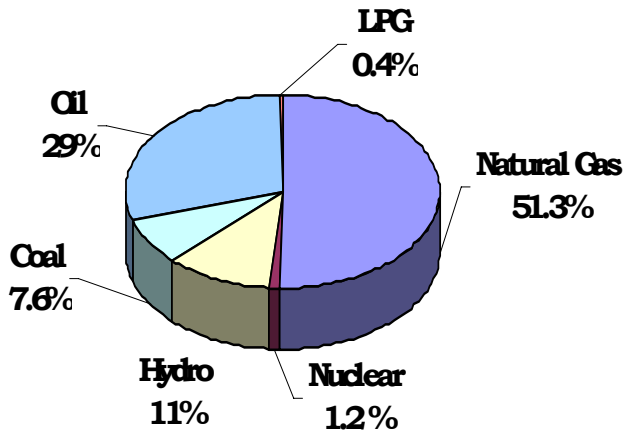


자료원 : EIA International Energy Annual 2006

- 천연가스는 비교적 풍부한 편으로 추정 매장량은 28.51TCF (Trillion Cubic Feet)에 이르며 이는 현재 연간 생산량을 기준으로 약 35년치에 해당되는 양. 그러나 생산설비 및 기술미비로 연간 4만 톤 정도

의 LPG를 수입하고 있으며 천연가스가 파키스탄 전체 에너지 공급원에서 차지하는 비중은 50% 정도임.

〈파키스탄의 에너지 공급원 비중〉



자료원 : Pakistan Energy Yearbook 2005

- 석탄의 경우 신드주 Thar 사막지역에 1,750억 톤 이상의 매장량이 확인되면서 수입 연료의 대안으로 주목받고 있음.
- 철광석의 매장량은 약 9억 톤 정도이며 품질은 중, 하등급인 것으로 평가됨. 발로치스탄 주 Dilband 지역에 철 성분 30~45%의 철광석이 2억 톤 이상 매장되어 있는 것으로 확인. 이밖에 Chilgazhi 지역에 철 33%, 동 0.4%를 함유한 철광석 2,300만 톤이 매장되어 있으며 Pachinkoh, Chingandek 지역에 3,000만 톤과 4,000만 톤이 각각 매장
- 동 역시 발로치스탄 주를 중심으로 약 18억 톤 정도가 매장되어 있는 것으로 추정됨. 이중 Distt Chaghi 지역에 위치한 'Reko Diq

Copper - Gold Deposits'에 5,000만 톤의 동지대(동 성분 0.64%)가 분포해 있으며 금 역시 9백만 온스가 매장되어 있는 것으로 조사됨.

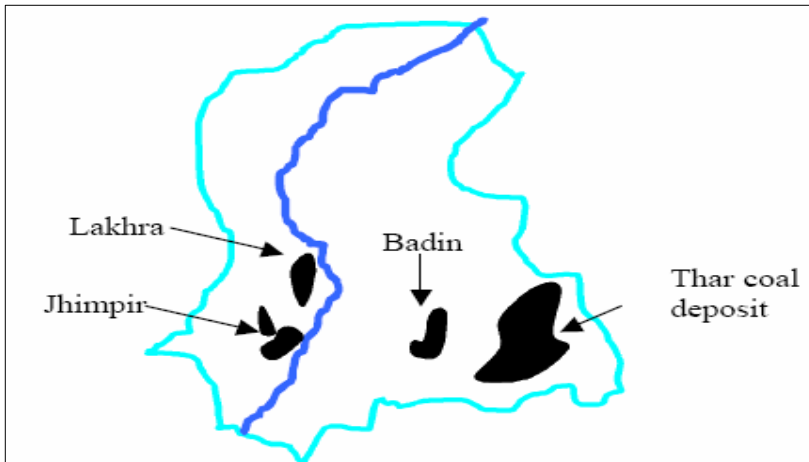
- 우라늄, 아연, 니켈의 매장량은 그리 많지 않은 편으로 아연의 매장량은 23백만 톤이며 니켈과 우라늄의 매장량에 대한 자료는 없는 상태임.

■ 주재국 대표적 부존자원 현황

가. 석탄

- 파키스탄에서 가장 풍부한 매장량이 확인된 광종은 석탄으로 신드주 Thar Coal Field, Sonda-Thatta, Lakhra 등에 총 1,851억 톤이 매장되어 있으나 대부분 역청이 함유된 갈탄이며 평균 열량 6,000BTU/1b의 저급품으로 공장연료, 발전용 등에 사용가능

〈파키스탄 신드주 주요 석탄 매장지역〉



자료원 : 신드주 정부

〈파키스탄의 지역별 석탄 매장량 현황〉

주	지역명	추정 매장량(백만 톤)
Baluchistan	Hamai	76
	Sor Range Degari	50
	Duki	50
	Mach Abegum	23
	Pir Ismail Ziarat	12
	Bar khan - Chamalang	6
Punjab	Salt Range	213
	Markawal	22
Sindh	Thar Coal	175,506
	Sonda-Thatta	3,700
	Indus East	1,777
	Jherruck	1,823
	Lakhra	1,328
	Ongar	312
	Meting - Jhimpir	161
	Badin	16
NWFP	Hangu / Orakzai	82
	Cherat / Gulla Khel	9
Azad Kashmir	Kotli	9
합계		185,175

자료원 : Energy Year Book(2003/2004 회계연도)

나. 석고(Gypsum/Anhydrite)

- 편잡 주의 Salt Range, 북서변경주의 Koha Banu 지역 등에 총 60억 톤 가량이 매장되어 있음.

〈파키스탄의 지역별 석고 매장량 현황〉

주	지역명	추정 매장량(백만 톤)
Punjab	Rakhi Munh	27
	Safed Koh Rodo area	15
	Dadukhel - Mianwali area	53
	Khewra	25
NWFP	Dera Ismail khan	20
	Saiduwali	70
	Near Drazinda and Mughalkot	4,442
	Kohat	472
Balochistan	Near Spintangi	5
	Mawand - Khattan	20
	Barkhan - Chamalang	7

자료원 : Investment Oriented study on Minerals and Minerals

다. 보석류

- 파키스탄은 보석류의 매장량이 풍부한 편으로 에메랄드, 루비, 핑크 토파즈(Pink Topaz) 등은 국제적으로도 품질을 인정받고 있음.
- 북서변경주 SWAT 지역에 7천만 캐럿의 에메랄드가 매장되어 있으며 핑크 토파즈 역시 9백만 톤 매장

〈파키스탄의 주요 보석 매장지〉

보석류	주요 매장지역
Emerald	Swat, Gilgit, Muhmand & Bajour Agency
Ruby	Hunza, Neelum Valley (Azad Kashmir) and Upper Hunza
Pink Topaz	Mardan
Light Pink Topaz	Mardan
Peridot	Kohistan
Spinel	Hunza Vally
Aquamarine	Eastern Part of Gilgit, Chitral
Tourmaline areas	Neelum valley Azad Kashmir, Chitral, Bulechi Northern Tribal
Feldspar	Skardu, Gilgit, Chitral
Quartz	Skardu, Lasbela, Nagarparkar, Azad Kshmir, Gilgit, Chitral
Topaz	Shingus and Bulechi in Gilgit District, Dusso in Skardu District
Zircon	Chilas, Gilgit
Agate	Nagarparkar Sind, Dir Kohistan
Garnet	Swat, Malakand Agency, Targhao Bajaur Agency, Skardu
Turquoise	Chagi Hills Balochistan

자료원 : Investment Guide 2004, Expert Advisory Cell

라. 건축자재용 암석류

- 화강암(Granite)과 대리석(Marble), 오닉스(Onyx) 등의 매장이 풍부하며 색상 종류가 다양하고 품질도 우수함.

〈파키스탄 건축자재용 암석류 매장현황〉

(단위 : 백만 톤)

종류	색상종류	매장량	매장지역
화강암	Black, Pink, Grey, Green, Gold, Yellow, White, Red	4,140	북서변경주
대리석/오닉스	Black, Pink, Grey, Green	2.2 157.9	발로치스탄 북서변경주

자료원 : All Pakistan Marble Industry Association

마. 기타

- 형석(Fluorite) : 발로치스탄 주 Qalat 지구 내 Maran, Pad Maran 지역에 10만 톤 부존
- 마그네사이트 : 북서변경주 Khmhar 지역에 11백만 톤 부존
- 알루미늄 : 카슈미르 Muzaffarabad, 발로치스탄 주 Ziarat 등지에서 산출되고 있으며 총 매장량은 74백만 톤으로 추정
- 이밖에 암염(6억 톤), 고령토(34백만 톤), 동석(60만 톤), 백금, 텅스텐, 망간, 크롬 등이 부존해 있음.

〈파키스탄 주요 자원 매장 및 생산 현황〉

자원명	주요 분포지역	추정 매장량 (백만 톤)	연간 생산규모(톤)	품질
Antimony	- Karangali Hill Salt Range - Zaimukht Hill - Kurram Valley - Shekran, Khuzdar - Krinj Partson, Chitral - Qila Abdullah	0.090	35	중하 등급

자원명	주요 분포지역	추정 매장량 (백만 톤)	연간 생산규모(톤)	품질
Chromite	<ul style="list-style-type: none"> - Harichand, Dargai - Boya, N.Waziristan - Naweoba, Zhob 	2,527	27,458	중하 등급
Copper	<ul style="list-style-type: none"> - Shinkai, Boya, Waziristan - Bulashgah, Gilgit - Saindak, Chagai - Sasht-e-Kain, Chagai - Ziarat Pir Sultan, Chagai - Kabul Koh, Chagai - Missi, Chagai - Bandegan, Chagai - Reko Diq, Chagai 	1,882.5	N/A	중하 등급
Gold	<ul style="list-style-type: none"> - Saindak - Reko Diq 	11.24 (백만 온스)	N/A	하 등급
Iron ore	<ul style="list-style-type: none"> - Besham - Abbottabad - Goldanian - Langrial - Mazar Tang, Kohat - Kalabagh - Pezu - Nizampur - Dilband, Kalat - Shekran, Khuzdar - Dammer Nisor - Mashkichah - Durban Chah - Amir Chah - Chilghazi - Chapar - Kundi Baluchap - Pachin Koh - Bandagan 	903.4	24,322	중 등급

자원명	주요 분포지역	추정 매장량 (백만 톤)	연간 생산규모(톤)	품질
Lead Zinc	- Besham - Gunga, Khuzdar - Surmai, Khuzdar - Duddar	23.72	N/A	중하 등급
Manganese	- Chur Cali, Abbottabad - Lasbela - Khuzdar	0.600	655	중하 등급
Aluminum (Laterite/ Bauxite)	- Muzaffarabad, AJK - Kalat, Balochistan - Khushab, Punjab	74.0	N/A	중하 등급
Agglomerate	파키스탄 전역	N/A (매장량 풍부)	366	상 등급
Aragonite/ marble	파키스탄 전역	N/A (매장량 풍부)	497,317	상 등급
Basalt	파키스탄 전역	N/A (매장량 풍부)	217	상 등급
Building stone	파키스탄 전역	N/A (매장량 풍부)	16,011	중상 등급
Conglomerate	파키스탄 전역	N/A (매장량 풍부)	276	중상 등급
Ebry stone	파키스탄 전역	N/A	209	중상 등급
Granite	파키스탄 전역	N/A (매장량 풍부)	5,676	중상 등급
Gravel	파키스탄 전역	N/A (매장량 풍부)	19,684	중상 등급
Millstone	파키스탄 전역	N/A (매장량 소량)	1,257	상 등급
Onyx marble	파키스탄 전역	N/A (매장량 소량)	28,780	중상 등급

자원명	주요 분포지역	추정 매장량 (백만 톤)	연간 생산규모(톤)	품질
Ordinary stone	파키스탄 전역	N/A (매장량 소량)	1,887	중 등급
Sand / Bajri	파키스탄 전역	N/A (매장량 소량)	92,670	상 등급
Sand stone	파키스탄 전역	N/A (매장량 소량)	2,255	상 등급
Serpentine	파키스탄 전역	N/A (매장량 소량)	4,204	중 등급
Slate stone	파키스탄 전역	N/A (매장량 소량)	108,182	상 등급
Ball clay	파키스탄 전역	N/A (매장량 소량)	1,371	중상 등급
Bentonite	파키스탄 전역	N/A (매장량 소량)	19,983	중상 등급
China clay	파키스탄 전역	N/A (매장량 소량)	61,403	중상 등급
Clays	파키스탄 전역	N/A (매장량 풍부)	2,934,218	중상 등급
Fire clay	파키스탄 전역	N/A (매장량 풍부)	124,003	중상 등급
Fuller's earth	파키스탄 전역	N/A (매장량 풍부)	18,446	중상 등급
Asbestos	파키스탄 전역	N/A (매장량 소량)	60	중상 등급
Barite	- Naka Pabni - Bakhari - Kundi - Gunga - Moner Talar	13.71	26,002	중상 등급

자원명	주요 분포지역	추정 매장량 (백만 톤)	연간 생산규모(톤)	품질
Brine	파키스탄 전역	N/A (매장량 소량)	55,903	상 등급
Calcite	파키스탄 전역	N/A (매장량 소량)	15	상 등급
Celestite	파키스탄 전역	N/A (매장량 소량)	838	상 등급
Chalk	파키스탄 전역	N/A (매장량 소량)	7,945	상 등급
Dolomite	파키스탄 전역	N/A (매장량 풍부)	276,668	상 등급
Feldspar	파키스탄 전역	N/A (매장량 소량)	32,012	상 등급
Flint stone	파키스탄 전역	N/A (매장량 소량)	73	상 등급
Fluorite	파키스탄 전역	0.1	579	중 등급
Gypsum	파키스탄 전역	4,850	384,513	중상 등급
Lake salt	파키스탄 전역	N/A (매장량 소량)	16,035	상 등급
Limestone	파키스탄 전역	N/A (매장량 풍부)	8,697,573	상 등급
Magnesite	파키스탄 전역	12	4,535	중상 등급
Nephline Synite	파키스탄 전역	12	70	중 등급
Ochres Red oxides	파키스탄 전역	100	12,780	중하 등급
Orpiment	파키스탄 전역	N/A (매장량 소량)	29	중하 등급
Phosphate	파키스탄 전역	N/A (매장량 풍부)	1,074	중하 등급

자원명	주요 분포지역	추정 매장량 (백만 톤)	연간 생산규모(톤)	품질
Pumice	파키스탄 전역	N/A (매장량 풍부)	1,577	중 등급
Quartz	파키스탄 전역	N/A (매장량 풍부)	485	상 등급
Quartzite	파키스탄 전역	N/A (매장량 소량)	1,457	중상 등급
Rock salt	파키스탄 전역	N/A (매장량 풍부)	1,212,366	상 등급
Silica sand	파키스탄 전역	N/A (매장량 풍부)	157,300	중상 등급
Soap stone	파키스탄 전역	N/A (매장량 소량)	46,486	중상 등급
Sulphur	파키스탄 전역	0.8	527	중하 등급
Talc stone	파키스탄 전역	0.8	260	중상 등급
Trona	파키스탄 전역	0.8	3,446	중하 등급
Coal	파키스탄 전역	145,175	3,037,080	중하 등급
Crude Oil (Million Barrels)	파키스탄 전역	765.237 (300.203)	23.195048	중상 등급
Natural Gas (Trillion CFT)	파키스탄 전역	41.97889 (26.98237)	0.923758 (Million CFT)	중상 등급

자료원 : Geological Survey of Pakistan

〈파키스탄 자원매장 분포도〉



자료원 : Geological Survey of Pakistan



자원개발 현황

III. 자원개발 현황

1. 탐사/생산/개발 동향

■ 진행 중인 자원탐사/개발/생산 사업

가. Thar 석탄 광산개발 및 600MW급 화력발전소 건설 프로젝트

- ‘Thar’ 지역은 카라치에서 북동쪽으로 380km 떨어진 신드주 내륙에 위치하고 있으며 석탄매장량은 1,750억 톤으로 추정
- 파키스탄과 중국 정부는 동 지역에 대한 공동 석탄 광구개발 및 생산된 석탄을 이용한 화력발전소 건설에 합의하였고 지난 2002년 4월에 Riaz Hussain Khokhar 당시 주 중국 파키스탄 대사와 Ye Qing Shenhua Group' 회장 간에 양해각서를 체결
- 이후 심층 타당성 조사 등을 거쳐 2005년 1월에 본격적인 개발이 시작되었으며 사업이 중단된 2007년 1월까지 동 중국기업은 약 2천5백만 불을 투자
- 그러나 양측은 발전소에 대한 용수공급 책임소재 문제로 한 차례 갈등을 겪은 데 이어 파키스탄 측이 동 발전소로부터 구입할 전기 요금 문제가 심화되며 사업이 전면 중단된 상태
- 파키스탄의 최대전력 회사인 WAPDA는 kw당 5.7센트의 구매요율을 제시한 반면 중국기업 측은 13센트 수준을 요구하고 있음.

나. 기타 파키스탄 정부추진 주요 프로젝트

(단위 : US\$, 백만)

프로젝트명	총예산	전년도까지의 투입예산	'07/'08 회계연도 배정예산
Chichali 철광석 지대에 대한 경제성 조사	2.10	0.25	0.88
Thar 석탄의 복합화력발전 타당성 조사	2.11	0.10	1.00
Thar Coal Mining Company 설립	4.03	2.50	1.17
Balochistan주 원유, 가스 탐사	7.50	2.67	5.22
Balochistan주 Chamalang-Bala Dhaka, Bahlol 석탄지대 탐사, 경제성 조사	0.50	-	0.19
AJK Kotli 지역 석탄지대 탐사	0.30	0.19	0.08
Chichali 지역 철광석 개발 및 제철소 설립 경제성 조사	2.10	0.25	0.88

자료원 : Ministry of Petroleum and Natural Resources

■ 현지 주요 메이저 기업의 해외자원개발 전략 최근 추이

- 파키스탄은 자본과 기술의 부족으로 해외자원개발보다는 외국기업과의 합작투자 또는 기술협력 등을 통해 자국 내 자원탐사 및 개발에 역량을 집중하고 있음.

〈파키스탄의 자원관련 메이저 기업〉

부문	회사명	개요
석유	Pakistan State Oil(PSO)	석유산업 관련 최대공기업 원유생산, 수입, 비축 등을 총괄
	Attock Petroleum Limited	석유 및 가스의 탐사, 생산
가스	Sui Northern Gas Pipelines	파키스탄 북부지역에 대한 가스 공급
	Sui Southern Gas Pipelines	파키스탄 남부지역에 대한 가스 공급
석탄	Al-Razzaq Group	파키스탄 최대 석탄 공급업체

자료원 : 무역관 자체조사

2. 외국인 자원개발 투자현황

■ 국별/광종별/단계별 외국인 자원개발 투자현황

- 파키스탄의 자원개발에 가장 많이 진출해 있는 국가는 중국으로 MCC Resources Development는 총 1억불을 투자, 발로치스탄 주 Saindak 지역의 금/동 광산개발, Duddar 지역의 아연/납 광산개발 프로젝트를 추진 중임.
- 또한 상기된 바와 같이 Shenhwa Group이 Thar 사막 석탄 광산 및 발전소 건설 프로젝트를 추진, 타당성 조사를 완료하였으나 전기 요율 문제로 중단된 상태임.
- 호주기업인 Tethyan Copper Company는 발로치스탄 주 Reko Dik 지역의 금/동 광산개발에 대한 타당성 조사를 진행 중으로 투자 예정 규모는 1억3천만 불임.

〈파키스탄 진출 자원개발 외국기업 현황〉

(단위 : US\$, 백만)

국가	기업명	지역	광종	진행단계	투자규모
중국	MCC Resources Development	Saindak	동/금	생산	30
		Duddar	납/아연	생산	72
	Shenhua Group	Thar	석탄	타당성 검토 후 중단	400
호주	Tethyan Copper Company	Reko Dik	동/금	생산	300
	Lake Resources	Chagai	-	3개의 탐사권 확보	180

국가	기업명	지역	광종	진행단계	투자규모
영국	Paige Limited	Chagai	-	계획	120
	Nativus Resource Limited	hagai Lasbella	-	계획	150
미국	Benway Corp:	Chagai	-	계획	100
UAE	Gulf Mineral Limited	Chagai	-	계획	100

자료원 : Ministry of Petroleum and Natural Resources, Balochistan Government

3. 우리나라 참여현황 및 전망

- 우리나라 기업의 대 파키스탄 자원개발 분야에 대한 진출은 파키스탄 시장에 대한 인지도 부족 및 열악한 인프라, 불안정한 정치 환경 등의 요인으로 현재까지 전무한 상태임.
- 파키스탄은 한반도의 3.6배 규모의 영토에 천연가스, 석탄, 철, 동, 아연, 보석류 등 다양한 광물을 보유하고 있고 특히 아라비안 해 유전, 가스전과 신드주 Thar 지역 석탄개발은 매장량이 풍부해 경제성이 있는 것으로 평가되어 우리기업의 관심 확대 필요



자원개발 제도 및 절차

IV. 자원개발 제도 및 절차

1. 자원개발 법령 및 제도

■ 현지 정부의 자원개발 정책 기조

- 파키스탄 정부는 고용확대, 기술이전 등을 통한 기술수준 고양, 주요 광물 매장지에 대한 개발 확대, 자국 기업의 사업기회 확대, 연방 및 지방 정부의 세수 확대, 사회 간접시설 확충에 광업 분야에 대한 정책목표를 두고 있음.
- 파키스탄 헌법에 의해 석유, 가스, 원자력과 특별지역(북부지역 및 부족지역)에 대한 관할권을 제외한 나머지 분야는 각 지방정부에서 관할권을 행사
- 자국의 광업기업 기반을 확충하기 위해 소규모의 광산개발은 내국인에게만 허용하고 유망기업에게 정책자금을 지원하고 있으며 최근에는 기업 간 인수합병, 외국기업과의 합작을 통해 자원개발 프로젝트의 대형화를 유도

■ 자원개발 관련 법령

- 파키스탄 자원개발 관련법규 및 주요내용은 다음과 같음.

관련법규	제공처	주요 내용
National Mineral Policy	파키스탄 정부 홈페이지 (www.pakistan.gov.pk)	· 광업분야 투자 관련 제규정 · 채굴권 등 각종 인허가 규정
LPG Policy	파키스탄 정부 홈페이지 (www.pakistan.gov.pk)	· LPG 생산, 면허, 안전규정 · LPG 수입, 유통 관련 규정
Natural Gas Allocation Policy	파키스탄 투자청 홈페이지 (www.pakboi.gov.pk)	· 천연가스 관련 제규정
BOI Ordinance	파키스탄 투자청 홈페이지 (www.pakboi.gov.pk)	· 법인설립, 지사설립 관련 내용 · 각종 인센티브, 외국인 투자보호
Labor Policy	파키스탄 투자청 홈페이지 (www.pakboi.gov.pk)	· 근로자 고용, 복리후생, 급여 등 · 사회보장 및 노동쟁의 관련 규정
The Company Ordinance	파키스탄 SECP 홈페이지 (www.secp.gov.pk)	· 기업등록 및 상장 · 회사유형에 관한 규정
The Foreign Exchange Controls	파키스탄 중앙은행 홈페이지 (www.sbp.gov.pk)	· 외환관리규정 제반

■ 자원개발 관련 각종 인허가 절차 및 허가 기간

- 파키스탄의 자원개발 관련 인허가는 크게 예비조사 허가(Reconnaissance Licence, RL), 탐사허가(Exploration Licence, EL), 보유허가(Mineral Deposit Retention Licence, MDRL), 채굴허가(Mining Lease, ML) 등 4가지로 구분할 수 있음.

가. 예비조사 허가(Reconnaissance Licence, RL)

- 예비조사 허가는 광산회사가 위성사진, 항공사진, 지질조사 등의 첨단 기술을 동원하여 단기간에 대규모 지역을 조사할 경우 부여되며 조사 가능면적은 최소 100km², 최대 10,000km²임.
- 별도 명기가 없는 경우 예비조사 기간은 최대 12개월이며 연장 불가
- 예비조사권 신청에 대한 심사기간은 최대 120일을 초과할 수 없으며 신청 수수료는 Rs.15,000(US\$230)임.

나. 탐사허가(Exploration Licence, EL)

- 탐사 허가의 최대 면적은 1,000km²이며 기간은 3년을 초과할 수 없음.
- 타당성 추가검토와 개발허가 신청을 위해 필요 시 기존의 탐사 설정 지역의 50%에 해당되는 권역을 3년에 한하여 연장 가능
- 탐사권 신청 및 연장신청에 대한 심사기간은 최대 120일이며 수수료는 최초 신청 시 Rs.25,000(US\$400), 연장 신청 시 Rs.50,000(US\$800)임.
- 탐사권은 최초 2년간은 제3자에게 분할, 양도할 수 없으며 2년 이후 관계당국의 사전 허가를 받으면 가능

다. 보유허가(Mineral Deposit Retention Licence, MDRL)

- 탐사 및 타당성 조사를 완료한 상태에서 국제 자원가격의 급락 등 시장여건의 악화로 인해 상업적 개발이 불가능할 경우, 탐사권 소유

기업은 동 탐사권의 종료기한 180일 이내에 보유허가권을 신청할 수 있음.

- 보유권 신청 및 연장신청에 대한 심사기간은 최대 180일이며 수수료는 최초, 연장 신청 모두 Rs.100,000(US\$1,600)임.
- 보유권의 인정기간은 2년이며 1년에 한해 연장이 가능함.
- 보유 허가권역에 대해 제 3자가 채굴허가를 신청할 경우, 보유허가권 소유기업은 채굴권으로의 전환에 대한 우선권을 부여받을 수 있으나 이를 거부하거나 채굴권 신청에 대한 조건제시가 제 3자의 조건보다 열등할 경우 보유허가는 자동 취소됨.

라. 채굴허가(Mining Lease, ML)

- 채굴허가는 탐사권 및 보유권 소유자의 신청에 의해 이루어지며 최대 채굴 가능면적은 기 탐사(보유) 지역 내 250km²임.
- 해당 기업은 자금조달, 환경보호계획, 물자(파키스탄 물자) 조달계획, 파키스탄인들에 대한 기술교육 계획 등을 제출해야하며 수수료는 최초신청, 연장 신청 모두 Rs.100,000(US\$1,600)이며 1년에 km²당 Rs.3,000(US\$50)의 토지 사용료를 별도 납부요
- 채굴 허가기간은 광산의 수명을 전제로 최대 30년이며 10년에 한해 연장이 가능함.
- 채굴권 신청 및 연장신청에 대한 심사기간은 180일이며 정부의 정책적 판단이 필요할 경우 180일이 연장될 수 있음.

- 채굴권 보유기업은 정부의 승인을 얻어 채굴작업을 하도급할 수 있고 채굴된 자원의 판매, 수출에 대한 독점적 권리를 가짐.

〈파키스탄 광업권의 종류〉

구분	허가면적	심사기간	권리기간	수수료(Rs)
예비조사권	· 최소 100km ² · 최대 10,000km ²	120일	· 최대 12개월 · 연장불가	· Rs.15,000
탐사권	· 최대 1,000km ²	120일	· 3년 · 3년 연장가	· 최초 신청 시 - Rs.25,000 · 연장 신청 시 - Rs.50,000
보유권	· 탐사권 면적	180일	· 2년 · 1년 연장가	· 최초, 연장 - Rs.100,000
채굴권	· 250km ²	180일	· 최대 30년 · 10년 연장가	· 최초, 연장 - Rs.100,000 · 토지사용료 - 연 Rs.3,000/km ²

자료원 : Ministry of Petroleum and Natural Resources, Balochistan Government

■ 개발계약의 형태 및 절차

- 주 정부와 개발기업간의 계약 형태는 프로젝트의 성격 및 내용에 따라 상이하나 주로 해당기업과 주 정부(또는 자국기업)의 합작투자 형태가 많으며 개발업체가 해당 광산을 소유(법률적으로는 장기 리스 형태), 운영하고 채굴된 자원을 정부가 사전 협의된 요율에 따라 구매하는 형태를 보임.
- 주요 합의대상 사항들은 사업내용 및 계획, 부지공급관련 사항, 자원 공급방안, 용수관련 사항, 환경규제 관련사항, 인센티브 관련사항, 인프라건설계획 등이며 외국기업의 경우 위에서 언급한 바와 같

이 파키스탄 물자에 대한 조달계획과 파키스탄 기술 인력에 대한 교육, 기술이전 계획 등을 제출해야 함.

2. 자원개발 관련 규제 및 인센티브

■ 자원개발 기업 의무, 탐사·개발 규제사항 등 법상 규제

- 파키스탄의 자원 개발관련 관할권은 광종, 지역에 따라 연방정부와 각 지방정부로 나뉘어 있음.
- 중앙정부는 석유, 가스, 원자력 물질에 대한 개발 권한과 카슈미르 지역과 별도로 지정된 특별구역에 대한 권한을 보유하고 있으며 지방정부는 Mineral Investment Facilitation Authority(MIFA), Mines & Mineral Development Department 등의 독립적인 광물자원 개발 담당부서를 두고 중앙정부 권한 이외의 모든 자원에 대한 권한을 소유
- 자본금 Rs.300백만(U\$5백만) 이하의 소규모 광산개발에 대한 권리는 자국민에게만 부여, 외국인의 참가가 불가능함.
- 한편, 법률적으로 외국기업의 단독투자가 금지되어 있는 것은 아니나 관련 법률인 "National Mineral Policy"에 "외국기업과 자국기업의 합작투자를 유도한다"라고 명기되어 있으며 외국기업의 최소 지분율은 발로치스탄 주 15%, 편잡 및 북서변경주 20% 등 지역별로 상이함.
- 역사 유적지, 국립(주립) 공원지역, 묘지, 군사지역 등에 대한 자원탐사 및 개발은 원칙적으로 금지되어 있음.

■ 수출·판매 부과금, 로열티 등 세제상 규제

- 법인세의 경우 상장기업(Public Company)의 경우 35%, 비상장 기업(Private Company)의 경우 43%이며 최소세율은 0.5%임.
- 자원개발에 소요된 비용에 대한 공제율은 최대 25%임.
- 판매세(Sales Tax)의 경우 수출은 비과세, 내수판매 15%
- 외국기업이 투자한 대형 광산의 경우 투자자금 대비 이윤의 규모에 따라 별도의 세금(Additional Profits Tax)을 부과하며 세율은 협의에 따라 조정됨.
- 이슬람국가에서 부과되는 자선용 세금인 Zakat의 경우 외국기업은 면제됨.
- 파키스탄 최대 광물인 석탄에 대한 로열티는 톤당 발로치스탄 주 Rs.60, 펀잡주 Rs.35, 신드주 Rs.60, 북서변경주 Rs.25로 지역별로 차이가 있음.
- 보석류(Precious Stones)에 대한 로열티는 10%이며 금, 은 등의 고가 금속류(Precious Metal)과 준 보석류(Semi-Precious Stones)에는 3%, 기타 금속류는 2%, 기타 1%의 로열티가 각각 부과됨.
- 이외는 별도로 주정부는 매년 개발 허가면허 당 U\$5,000의 현지인 교육기금의 출연을 개별 자원개발기업에 요청할 수 있으며 생산개시 이후에는 금액이 두 배인 U\$10,000로 증가함.
- 또한 매년 U\$10,000을 학교, 상수도시설, 도로 등 사회 인프라 건설에 지원해야 함.

■ 환경관련 규제

- 자원개발기업은 모든 프로젝트에 대해 환경영향평가(Environmental Impact Assessment) 보고서와 개발 단계별 환경보호 계획을 제출해야 하며 국내법과 국제관습에 따라 개발지역의 복구 등을 시행해야 함.
- 파키스탄 역시 매연, 오폐수의 배출에 대한 기준(NEQS; National Environmental Quality Standard)을 제정, 시행하고 있음.

〈파키스탄 오염물질 배출기준〉

오염물질	발생요인	제한기준
Smoke	Not to exceed	40%
Particulate matter (Based on 10 micron size)	Boilers & Furnaces: (i) Using Oil (ii) Using Coal (iii) Cement Kilns (iv) Blast Furnaces	300mg/Nm ³ 500mg/Nm ³ 200mg/Nm ³ 500mg/Nm ³
Hydrogen Chloride	Any	400mg/Nm ³
Chlorine	Any	150mg/Nm ³
Hydrogen Fluoride	Any	150mg/Nm ³
Hydrogen Sulfide	Any	10mg/Nm ³
Sulfur Oxides	Sulfuric Acid Plants	400mg/Nm ³
Carbon Monoxide	Any	500mg/Nm ³
Lead	Any	50mg/Nm ³
Mercury	Any	10mg/Nm ³
Cadmium	Any	20mg/Nm ³
Arsenic	Any	20mg/Nm ³
Copper	Any	50mg/Nm ³
Antimony	Any	20mg/Nm ³
Zinc	Any	200mg/Nm ³
Oxides of Nitrogen (NOx)	Any source	400mg/Nm ³

■ 외국인 투자자의 인센티브, 감면 또는 특혜

- 파키스탄 정부는 광물자원 개발 분야에 대한 외국기업의 투자 확대를 유도하기 위해 관련 제도 개선, 타당성 조사 지원, 자료 제공, 세금 감면 등 다양한 지원을 제공하고 있음.
- 탐사단계에서는 자국에서 생산되지 않는 관련 장비의 수입에 대해 영세율의 관세가 적용되며 판매세(Sales Tax) 등 부가세 역시 감면
- 건설단계에서는 관련 장비의 수입에 대해 5%의 관세율이 적용되며 수출 자원에 대한 판매세가 면제되는 한편, 과실송금의 제한이 철폐됨.

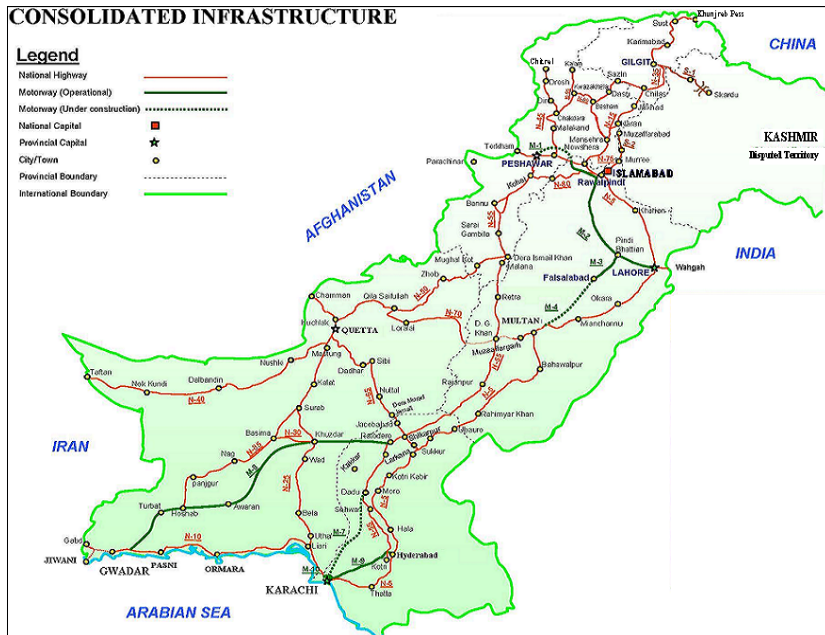
3. 자원개발 관련 인프라 현황

■ 운송 인프라

가. 도로

- 파키스탄은 총 연장 258,340km의 도로망을 확보하고 있으며 이 중 9,555km의 국가도로(National Highway)망이 전체 상업운송의 약 75%를 담당하고 있음. 그러나 도로의 상태가 매우 열악하고 연방정부와 지방정부 또한 지방정부간 관리체계가 미흡해 도로의 기능이 현저히 떨어진 상태임.

〈파키스탄의 도로망 현황〉

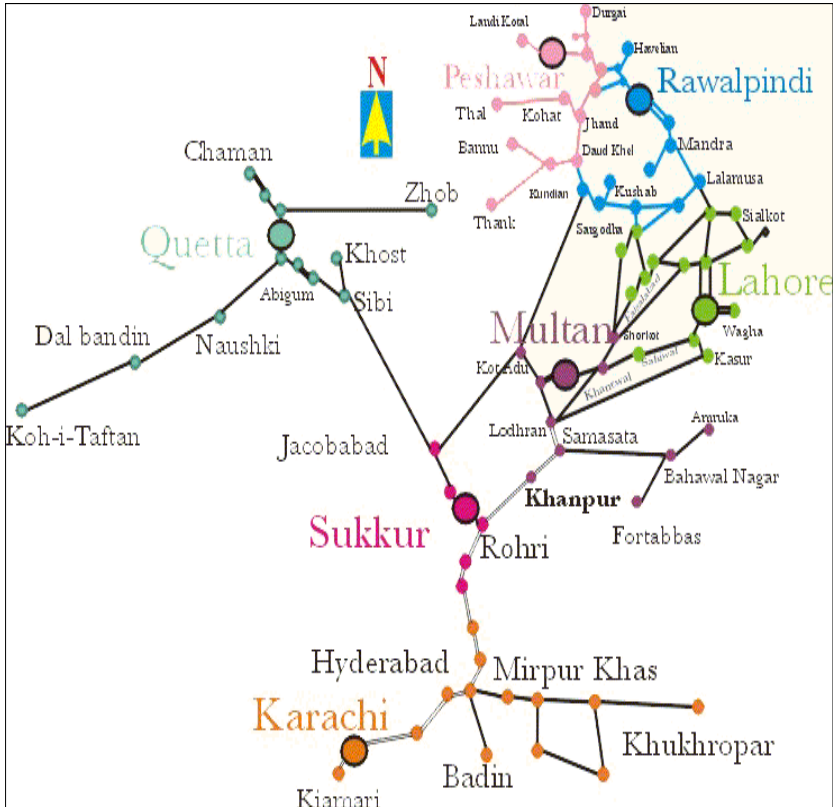


자료원 : National Highway Authority of Pakistan

나. 철도

- 파키스탄의 철도길이는 총 11,515km이며 2004/2005 회계연도(2004. 7 - 2005. 6)기준 총 기관차량 수는 557량이며 화물운송 객치는 총 21,556량임. 전반적인 철도 인프라가 매우 열악하여 철도의 상업운송 분담율은 매우 미미한 수준에 머물러 있음.

〈파키스탄의 철도망 현황〉



자료원 : Pakistan Railways

다. 항만

- 파키스탄의 최대항구는 카라치 항으로서 파키스탄 전체 물량의 약 60% 정도인 연 25백만 톤의 수출입 물동량 처리하고 있음.
- 카라치 항의 기능을 보완하기 위해 카라치 시내에서 동쪽으로 약 35km 떨어진 곳에 조성된 카심항(Port Bin Qasim) 역시 연간 17백

만 톤의 화물을 처리, 동 2개의 항구에서 파키스탄 전체 무역화물의 95%가 처리되고 있음.

- 특히 카심함은 파키스탄 최대 철강업체인 Pakistan Steel Mill 인근에 위치하고 279m 길이의 철광석 전용 선석을 갖추고 있음.
- 또한 최대 석탄 매장지인 Thar 지역에 가장 근접해 있어 동 지역의 개발에 따라 석탄화물의 처리가 집중될 것으로 예상
- 이와는 별도로 파키스탄 정부는 동서로는 서남아시아와 중동, 남북으로는 아라비아 해와 내륙국가인 아프가니스탄 및 타지키스탄 등의 중앙아시아 지역을 연결하는 지정학적 위치와 상대적으로 낙후된 서부지역 개발을 감안, 지난 1993년도부터 Gwadar 항구의 개발을 추진하고 있음.
- 현재 1단계 공사가 완료된 현재, 3개의 다목적 선석(총 길이 602m)과 100m 길이의 서비스 선석 1개를 갖추고 있으며 2만5천톤(DWT)급 컨테이너선 또는 3만톤 급의 벌크선 처리 가능
- 파키스탄 정부는 8억4천만 달러가 소요되는 2단계 개발 사업을 통해 2010년까지 총 9개의 선석을 추가 건설할 예정임.
- Gwadar는 파키스탄에서 자원을 가장 많이 보유한 발로치스탄 주에 위치하고 있어 향후 자원개발이 본격화될 경우, 자원의 수출입은 동 항구를 통해 이루어질 가능성이 큼.

〈파키스탄 Gwadar항 위치도〉



■ 노동력 조달

- 파키스탄은 저임금의 단순 노동 인력이 비교적 풍부한 편이며 영어 사용 가능 인력의 확보 역시 용이한 편임.
- 그러나 훈련된 기능인력이 매우 부족하고 직업에 대한 충성도 도 부족한 편임.

- 파키스탄 경제가 지난 3년간 연평균 7.5% 이상의 고성장세를 보임에 따라 인건비 역시 연 두자릿수 이상의 상승률을 나타내고 있음.
- 최근 파키스탄 정부는 법정 월 최저임금을 현행 Rs.2,500에서 Rs.6,000으로 대폭 인상하는 방안을 추진 중이며 실제 임금은 미숙련공의 경우 200불, 숙련공의 경우 250불 정도임.
- 평일 초과 근무 시는 통상 임금의 1.5배, 주말 근무 시는 2배를 지급하며 사무직인 경우 통상적으로 초과근무를 인정하지 않음.

〈파키스탄 노동자 급여수준〉

구분		월 급여수준(US\$)	
		중소기업	대기업
관리자	CEO 급	2,500	6,700
	Country Manager	1,700	5,000
	부장급	1,700	3,400
	차장급	1,400	2,500
	Regional Manger	1,250	1,700
중간관리자	Senior Manager	1,250	1,420
	과장급	1,000	1,250
	Deputy Manager	840	1,160
	대리급	670	1,000
	Trainee Managers	420	580
	일반사원	250	300
하급관리자	숙련 직원	200	350
	미숙련 직원	300	350

구분		월 급여수준(US\$)	
		중소기업	대기업
엔지니어 / 기술자	숙련 엔지니어(10년 이상)	1,200	2,800
	일반 엔지니어(5년 이상)	840	2,000
	미숙련 엔지니어	500	900
	Trainee	250	410
일반 노동자	숙련 노동 관리인	250	420
	비숙련 노동 관리인	170	300
	숙련 노동자	140	250
	비숙련 노동자	120	200

자료원 : 무역관 자체조사('07년 12월)

■ 기술력 수준

- 파키스탄은 자원 지역에 대한 조사, 탐사, 시추 등 모든 분야에서 기술력이 확보되지 못한 상태로 광업정책의 초점 역시 기술이전과 고용창출에 맞추어져 있음.
- 따라서 우리나라와 기술적으로 보완되는 부분은 없는 것으로 판단되며 외국기업의 투자유치에 적극적인 모습을 보이는 바 현지 투자 진출을 통한 자원생산을 검토해 볼 수 있으며 이밖에 기술협력, 관련 장비 수출 등이 유망함.

4. 자원개발 유관기관/기업/네트워크

■ 정부 및 지방 주무부처

기관/기업명	담당자	성격	홈페이지	전화번호	이메일
Ministry of Petroleum & Natural Resources	Mr. Manzoor Ahmed Rana (Section Officer Minerals)	연방 정부	www.mpnr.gov.pk	92-51) 921-0220, 920-6416	minister@mpnr.gov. pk stateminister@mpnr. gov.pk info@mpnr.gov.pk
Provincial Govt. of Punjab	Mr. Maqbool Ahmad Khan (Secretary Mines & Mineral)	주정부	www.punjab.gov.pk	92-42) 921-2916, 921-0616	mines.min@punjab. gov.pk
Provincial Govt. of Balochistan	Mr. Abdul Manan Kakar(Secretary Mines & Mineral)	주정부	www.balochistan.gov.pk	92-81) 920-1062	N/A

■ 연구소 및 기술평가기관

기관/기업명	담당자	성격	홈페이지	전화번호	이메일
Pakistan Mineral Development Corporation (PMDC)	Mr. Muzafar Hussain (GM Geology)	공기업	www.pmdc.gov.pk	92-51) 925-8713	pmdc@isb.com sats.net.pk
Geological Survey of Pakistan(GSP)	-	정부 기관	www.gsp.gov.pk	92-81) 921-1032	qta@gsp.gov.pk

■ 유력 입찰·개발 관련 현지에이전트

기관/기업명	담당자	성격	홈페이지	전화번호	이메일
Sai Company (Pvt.) Ltd.	Mr. Ather Iqbal	Services and Materials to Oil & Gas	www.sai.com.pk	92-21) 584-6655, 584-7755	info@sai.com.pk, sai5@cyber.net.pk
Petroleum Supply Company	Mr. M. A. Rasool	Services & Equipments to Oil & Gas	N/A	92-21) 583-5508 / 5836405	petchem1@cyber.net.pk

■ 법률 및 조세 자문기관

기관/기업명	담당자	성격	홈페이지	전화번호	이메일
Saiduddin & Co	Mr. Anwer Kashif	Law Firm	N/A	92-21) 452-2456 452-9768 453-9502	saidudin@super.net.pk

■ 금융기관

기관/기업명	담당자	성격	홈페이지	전화번호	이메일
State Bank of Pakistan	Mr. Wedan Bat Khan	중앙은행	www.sbp.org.pk	92-21) 245-3979 245-3949	wedan.bat@sbp.org.pk
NIB Bank Ltd.	-	-	www.nibpk.com	92-21) 111-333-111	head.office@nibpk.com

■ 주요 활동기업

기관/기업명	담당자	성격	홈페이지	전화번호	이메일
Petroleum Exploration (Pvt.) Ltd.	Mr. M. Akhtar Mr. Syed Shahid Raza	Oil & Gas Exploration	www.shahzadintl.com.pk	92-21) 585-9618 92-51) 221-0602, 210-3247	shahzadintl1@cyber.net.pk, shahzadintl@cyber.net.pk
Saif Group	Mr. Osman Saifullah Khan Mr. Usman G Khattak	Oil & Gas Exploration	www.saifgroup.com	92-51) 287-4670, 287-3595, 282-9415	info@saifgroup.com
Shell Gas LPG(Pakistan) Limited	Mr. Mohib H. Khan	LPG Gas Marketing	www.shell.com	92-21) 530-1270, 92-21) 530-1264	mohib.khan@shell.com
Caltex Oil (Pakistan) Ltd	-	Refined petroleum products	www.caltex.com/pk	92-21) 568-1371	-
Pakistan State Oil(PSO)	Mr. Mohammad Abdul Aleem	Oil marketing company	www.psopk.com	92-21) 920-3866~85	-
Oil & Gas Development Co.(OGDCL)	Mr. Alman Aslam(Director) Mr. Azam Faruque (Director)	Oil & Gas Exploration	www.ogdcl.com	92-51) 920-9811~18	info@ogdcl.com
Pakistan Oilfields Limited	Mr. Sajid Nawaz(Chief Executive)	Oil Exploration	www.pakoil.com.pk	92-51) 548-7589~97	cs@pakoil.com.pk

기관/기업명	담당자	성격	홈페이지	전화번호	이메일
Pakistan Petroleum Limited	Mr. S. Munsif Raza(Chairman)	Oil & Gas Exploration	www.ppl.com.pk	92-21) 111-568-568	info@ppl.com.pk
Oil & Gas Regulatory Authority (OGRA)	Mr. Munir Ahmad Jawaid Inam	Oil & Gas Regulatory Authority	www.ogra.org.pk	92-51) 922-1705, 922-1701	chairman@ogra.org.pk chairmanogra@yahoo.com
Mari Gas Company Ltd	Mr. Lt Gen Mushtaq Hussain(MD), Mr. Qaiser Javed(Director)	Oil & Gas Exploration	www.marigas.com.pk	92-51) 229-7686, 229-7683 92-21) 583-0830, 583-0827	info@marigas.com.pk
Saif Group	Mr. Osman Saifullah Khan Mr. Usman G Khattak	Oil & Gas Exploration	www.saifgroup.com	92-51) 287-4670, 287-3595, 282-9415	info@saifgroup.com



우리기업의 자원개발 유망 진출분야 및 시사점

V. 우리기업의 자원개발 유망 진출분야 및 시사점

1. 전략개발 분야 및 우리기업의 참여방안

- 파키스탄은 천연가스, 석탄의 매장량이 풍부하고 원유의 생산도 제한적으로 이루어지고 있으며 기타 금속, 비금속 광물의 매장량이 풍부한 것으로 알려짐.
- 그러나 대부분의 자원매장지가 발로치스탄, 북서변경주 등 치안이 극도로 불안한 곳에 위치하고 있으며 매장 자원의 경제성 역시 확인되지 않은 부분이 많아 단기간의 투자진출 보다는 장기적 관점에서의 접근이 요구됨.
- 최근 파키스탄은 극심한 전력난을 겪고 있으며 정부당국은 재정문제로 인해 대부분의 발전소를 독립발전사업자(IPP) 방식으로 건설할 계획임.
- 따라서 막대한 매장량이 확인된 Thar 지역의 석탄자원과 천연가스 등의 개발을 발전소 건설 프로젝트와 연계하여 추진할 경우 동 분야에서 우수한 기술을 확보하고 있는 우리기업의 진출가능성이 클 것으로 기대됨.

2. 진출 시 유의점 및 참고사항

가. 합작투자 및 BOO/BOT 방식에 대한 신중한 접근 필요

- 파키스탄 비즈니스맨들은 자신의 능력을 약간 과장되게 말하는 경향이 많고 전문분야가 아님에도 불구하고 많은 관심이 있다고 얘기하므로 실제로 합작투자 능력이 있는가를 세심하게 확인할 필요가 있음.
- 합작투자 시 파키스탄측이 투자하는 부분은 대개 토지, 건물 등 고정자산이며 외국인은 나머지 설비와 자금 등을 투자하는 조건이 되기 때문에 분쟁 발생 시 외국 투자자의 피해로 이어질 가능성이 있으며 후진적 법률 시스템으로 소송을 통한 해결 역시 여의치 않은 실정임.
- 또한 파키스탄은 재정부족으로 대부분의 개발 프로젝트를 공급자 금융방식(BOO/BOT)에 의존, 세제혜택 등 다양한 인센티브를 제공하고 있으나 행정 서비스 마인드의 부재, 부정부패 등으로 분쟁발생의 위험이 상존
- 따라서, 합작투자 및 BOO 방식의 사업추진 시 사업타당성에 대한 면밀한 검토와 더불어 아주 세밀한 부분까지 합의된 내용을 문서화하여 분쟁의 소지를 최소화하는 노력이 필요

나. 현지 치안확보에 만전

- 치안문제는 파키스탄에서 외국인들에게 가장 두려운 문제로 총기가 만연되어 있기 때문에 강도나 차량절도 등이 수시로 발생하고 있으며 정치 및 종교 갈등에 따른 유력인사 암살, 폭탄테러 역시 자주 발생

- 또한 대부분의 광물자원 매장지역이 벨로치스탄, NWFP 등 치안이 매우 열악한 지역에 위치한 바, 현지 관련 프로젝트 진출 시 현지 공관 및 무역관에 현지 파견인원 현황을 반드시 등록하도록 하고 거주 선정에 주의하여야 하며 야간에는 가급적 외출을 삼가함으로써 위협에 노출되지 않도록 유의해야 함.



부 록

VI. 부 록

1. 광업법

NATIONAL MINERAL POLICY (NMP) 1995

The Government of Pakistan is cognizant of the role of mineral industry in the overall economic and social development of the country and its importance in industrial and export promotion. It is also conscious of the unique characteristics of the mining industry like highly risk prone, capital intensive and subject to global competition with high volatility of prices. To harness the fairly adequate mineral potential with national and international investment, the Government of Pakistan has formulated National Mineral Policy offering appropriate institutional arrangements at federal and provincial levels; time bound investment friendly regulatory regime and internationally competitive fiscal incentives.

In seeking foreign and local private risk capital investment in mineral sector, the Government of Pakistan wishes to satisfy several important objectives. The most significant benefits to be derived from an expansion of mineral sector activities are:

Expansion of employment opportunities; enhancement of skills; sustained development of mineral bearing area; expanded business opportunities for local industries; increased revenue flow to the Provincial and Federal Governments; technology transfer; regional infrastructure development and an improved data base of Pakistan's mineral resources.

4.2 Constitutional Position on Minerals

4.2.1 Minerals are a provincial subject under the Constitution, except oil, gas and nuclear minerals and those occurring in special areas (FATA and NA). Provincial Governments are responsible for development and exploitation of minerals, which fall in their domain. In line with this Constitutional framework, the Federal and Provincial Governments have jointly formulated National Mineral Policy, which provides for appropriate institutional arrangements, a modern regulatory framework, an equitable and internationally competitive fiscal regime and a programme to expand Pakistan's geological database.

4.2.2 The provisions of Minerals Policy distinctly convey the message that focus of all

activities and decision-making is at the Provision level while the Federation would provide requisite support and advice to the Provinces to take up the challenge of achieving sustainable benefit from the development of non-renewable mineral resources.

4.3. Consultative and Regulatory Framework

4.3.1 Mining has many peculiarities of its own including quite a wide span of effects over other sectors requiring established consultative mechanisms for achieving optimal benefits of mineral resources. Long gestation period of over a decade, which is generally spent in exploration of a mineral deposit and still longer period for its exploitation, require a fairly stable and equitable regulatory regime. With these characteristics in view, the Federal and Provincial Governments have agreed to put in place the requisite framework.

4.3.2 Mineral Investment Facilitation Authority (MIFA)

4.3.2.1 A Mineral Investment Facilitation Authority (MIFA) will be set up in each Province (including AJK, and Special Areas i.e. FATA & NA). The membership of MIFA will be as follows:

Chief Minister of the Province (Prime Minister AJK in case of AJK, Chairperson Federal Minister Incharge in case of NA and Governor NWFP in case of FATA)

Minister for Mineral Development Vice-Chairperson

Chief Secretary / Additional Chief Secretary (Dev) Member

Secretary Mineral Development Department Member

Secretary Finance Department Member

Secretary Works Department Member

Secretary Forest Department Member

Chairperson of the Provincial Mineral Member

Development Corporation

Representative of Environment Protection Agency Member

Two representative of Business Community Member

nominated by the Chairperson

4.3.2.2-The Department of Mineral Development will serve as the Secretary of MIFA. Provincial Government may change the composition or the functions of MIFA to the extent considered necessary by it. MIFA may coopt or request presence of a representative of any government department for a particular meeting.

4.3.2.3- Each MIFA will execute the following functions:

- (i) Regular monitoring and direction of mineral related activities and mineral programmes of the Government and public sector in the Province.
- (ii) Periodic review of implementation of the new regulatory regime and functioning of the administrative set-up in the Province.
- (iii) Review progress of approvals from the relevant agencies on grant and working of concessions and other related development issues and direct for any specific support to the investors required for mineral exploration and development (such as access to land, private or public and communications).
- (iv) Introduce measures to promote use of local goods and services, create opportunities for appropriate education and training of nationals in modern mining skills.
- (v) Perform as appellate forum for resolution of disputes of specified nature between Licensing Authority and the investors of specified projects or categories.
- (vi) Promote establishment of secondary and tertiary processing facilities within Pakistan.
- (vii) Arrange and approve mineral portfolios for attracting private investment.
- (viii) Ensure adequate protection of the environment.
- (ix) Any other function assigned by the Chairperson.

4.3.2.4- MIFA may also request, if considered necessary, for the participation or assistance of the Federal Government in negotiation of mineral agreements by the Provincial Government with foreign investors.

4.3.3 Provincial Department of Mineral Development

4.3.3.1- Given the increasing importance being placed on mineral activities, and in order to adequately respond to the administrative demands of the sector, each mineral rich province will establish a separate Department of Mineral Development under a separate Secretary with the following functions: -

- (i) Development of Mineral Resources.
- (ii) Consideration of applications and grant of licences and leases.

- (iii) Regulating and monitoring mining operations and activities in the mineral, sector, including collection of royalties.
- (iv) Negotiating mineral agreements and consulting the Federal Government when considered necessary by MIFA.
- (v) Facilitating access to private or public lands and reserve forest areas for the purpose of mineral exploration or development of minerals resources.
- (vi) Maintenance of up-to-date master plans showing positions of all exploration licenses and leases granted, renewals, assignments and surrenders of mineral titles, relinquishment of acreage etc. and make this information public through regular publication of complete details in the official gazette.

4.3.3.2-Each Department of Mineral Development will consist of a Licensing Division and Exploration Promotion Division. The Directorate of Mineral Development, existing in a Province may serve as a nucleus for the establishing of Licensing Division.

4.3.3.3- Adequate funding will be allocated by the Provincial Governments to equip and staff their Departments of Mineral Development.

4.3.3.4- Licensing Division

4.3.3.4.1-Licensing Division will be properly equipped with modern surveying instruments, a technical library with up-to-date reports, sets of topographical, geological maps, aerial photographs and satellite imageries of the Province and adequate transport to enable it properly discharge its supervisory responsibilities.

4.3.3.4.2-The deficiencies in the existing staff of the Directorate of Mineral Development will be made up by:

- a) recruitment of highly qualified and experienced staff in various disciplines of mineral exploration, development, environmental protection, mineral economics and law; b) imparting practical on-the-job training in large mines/mineral processing plants; c) sending staff abroad for short duration courses in mineral development, management of regulatory regime, mineral economics, including minerals sales contracts, protection of environment and socio-economic development of mining areas and regulation of mineral agreements; and d) prescribing training provision in the mineral agreement entered with foreign investors.

4.3.3.5- Exploration Promotion Division

4.3.3.5.1- Exploration Promotion Division will be staffed and equipped to carry out regional investigations and exploration, necessary for promotion of mineral prospects and for preparation of project portfolios. This Division may initially draw man-power and facilities from public sector agencies, which would onward play only promotional role. Exploration Promotion Division will:

- (i) Provide competent interface with teams of international investors.
- (ii) Generate its own geodata, and carry out geological mapping of priority areas, identify mineral prospects with or without assistance from Geological Survey of Pakistan (GSP) and donor agencies for exploration promotion.
- (iii) Compile, evaluate and disseminate geodata and make available geological and geographical maps and serve as sales point for GSP publications, maps and reports.
- (iv) Provide advisory services to industry.
- (v) Feed and receive all critical geodata to or from Geodata Centre of Pakistan.
- (vi) Perform any other function assigned by the Chief Minister.
- (vii) Not be involved in mining activity.

4.4 Mineral Investment Facilitation Board (MIFB)

4.4.1 The Federal Government can play an important role in the development of mineral resources, not only in the context of fiscal policies but also in international contacts with donor agencies and negotiation of mineral agreements. A political consultative forum, by the name of Mineral Investment Facilitation Board will therefore be established under the chairpersonship of the Prime Minister. The membership of MIFB will be as follows: -
 Prime Minister Chairperson Federal Minister for Petroleum & Natural Resources Governor NWFP Chief Minister, Punjab Chief Minister, Sindh Chief Minister, NWFP Chief Minister, Balochistan Federal Minister for Finance Prime Minister of AJK Chairman Board of Investment Deputy Chairman Planning Commission Member

4.4.2 The Ministry of Petroleum & Natural Resources will serve as the Secretariat of MIFB. In case the Prime Minister is unable to chair the meeting of the Board, the meeting will be chaired by the Vice-Chairperson. However, the Prime Minister may be requested to chair at least one meeting in a year. In case a Chief Minister cannot

attend any meeting, he may nominate the Minister for Mineral Development to attend the same. Where an agenda item concerns a Federal or Provincial agency, the head of that agency would be invited to the concerned meeting.

4.4.3 MIFB will advise authorities concerned on appropriate actions to: -

- (i) Encourage flow of investments in mineral sector, review proposals for its enhancement and make recommendations to the concerned agencies.
- (ii) Assist the Provincial Governments in selection/preparation of suitable mineral sector portfolios for introduction by the provinces to donor agencies and investors.
- (iii) Advise on fiscal and taxation policies and federal tariff for mineral sector for its international competitiveness.
- (iv) Establish annual priority of geo-science mapping and surveys bases on requirements of industry and priorities advised by the MIFAs.
- (v) Assist the provinces in development of skilled manpower and infrastructure as per their priorities by arranging financial assistance including foreign/donors assistance.

4.4.4 The MIFB scope can be amended/expanded as and when considered necessary and agreed to by this inter-provincial consultative forum.

4.5 Public Sector Mineral Corporations

4.5.1 There are a number of mineral sector corporations at the federal and provincial levels with a pool of technical skills and equipment. It has been decided to privatize the government corporations, but so long as they are in existence, the skilled manpower and equipment available in the public sector corporations shall be utilized for promotional activity on promising areas with the express purpose of attracting private investment in the detailed mineral exploration and development. This pool of expertise in the public sector may also be made a part of provincial Departments of Mineral Development. No new mineral corporations would, however, be set up in the mineral sector.

4.5.2 The Federal and Provincial Governments will provide grants to the respective corporations for the promotional tasks on priority minerals or priority areas, as are assigned to them. These corporations may retain a minority share in joint venture mineral projects to be managed by the private sector; local or foreign.

4.6 Geological Survey of Pakistan (GSP)

4.6.1 Availability of geological, geophysical and geochemical maps and reliable geodata are a prerequisite to large-scale mineral exploration. Geological Survey of Pakistan (GSP) is charged with this responsibility and has also competent manpower available to undertake the same. GSP will be strengthened as the central organization for geological, geophysical and geochemical mapping, geodata generation and research.

4.6.2 GSP will concentrate on the following functions: -

- (i) Expedite publication of geological, geophysical and geochemical data and maps already available. GSP will not be required to obtain clearances from other agencies like Survey of Pakistan or the Printing Corporation of Pakistan (PCP).
- (ii) Produce 1:250,000 geological maps of the whole country and 1:50,000 maps, supported by reports, for the whole country commencing with priority areas as identified by the provinces.
- (iii) Operate an open-file system so that unpublished raw data is also made available to the investors on charge basis.
- (iv) Undertake fast track integrated geological, geophysical, geochemical, and tectonic surveys, generate and disseminate basic data on potentially prospective areas as per priorities determined by MIFAs. Mineral exploration would be a minimal activity of GSP and only to support its regional surveys.
- (v) Execute mutually agreed collaborative projects with private sector and Provincial Governments if approved by MIFA, on cost reimbursable or sharing basis.
- (vi) Help the provinces in generation of geological data.

4.7 Geo-Data Centre of Pakistan (GDCP)

4.7.1 A Geodata Centre of Pakistan (GDCP) will be established as an autonomous body of the Ministry of the Petroleum and Natural Resources with the active support of donors and of the Governments, which shall be governed by a broad based council, headed by Director General, Geological Survey of Pakistan.

4.7.2 GDCP will perform the following functions:-

- (i) Collect, store, update and manage geodata of the whole country in a standardized system and its unrestricted dissemination to provinces and the industry.

- (ii) Create a centralized digital map production and distribution facility.
- (iii) Arrange on-the-job training of its own staff in geodata management/data automation and dissemination.
- (iv) Obtain non-confidential mineral concession, exploration and production data from the provinces for incorporation in the data pool.

4.8 New Regulatory Regime

4.8.1 The existing regulatory regime is being revised and updated to change some features which have been considered unattractive to investors and to put in place a set of rules, which are internationally competitive. The new rules would meet the concerns of the investors on such matters as transparency, criteria for dealing with applications and the grant of licences and lease, expeditious decision making process, security of tenure, provision of adequate information on mineral titles, independent dispute resolution mechanism etc., and to equitably meet the objectives of the investors as well as aspirations of the Governments. The guidelines agreed to by the Federal and Provincial Governments for drafting of new rules or amendment to existing rules are as follows:

4.8.2 The Mining Concession Rules will provide for four types of mineral titles, namely; Reconnaissance License, Exploration License, Mineral Deposit Retention License and Mining Lease.

4.8.3 Reconnaissance Licence (RL)

To enable the mining companies to reconnoitre large areas in a short span of time using modern techniques of satellite imagery, aerial photographs, aeromagnetic and regional geochemical survey, an RL will be granted over an area of 100 to 10,000 sq.km. in respect of a mineral or a group of minerals. Unless stipulated otherwise, the licence will be non-exclusive for a period of 12 months and will not be renewable. However, the licensee will have the right to an exploration licence over 10% of the area held under an RL provided that the criteria for the grant of such a licence and other requirements of the law are met. The Licencing Authority will take a decision on the application for an RL within 120 days from the date of filing of complete application. The application fee for an RL will be Rs. 15,000. The licensee will be obligated to carry out an approved work programme and comply with other conditions of the RL.

4.8.4 Exploration Licence (EL)

4.8.4.1 An exploration licence will be granted over an area not exceeding 1,000 sq.km. for a period not exceeding three years where the applicant meets the specified criteria. The application must provide adequate information about the applicant, description and a sketch map of the area, work programme and expenditure to be undertaken and technical and financial resources available to the applicant.

4.8.4.2 Subject to satisfactory completion of work programme and compliance with other conditions of the EL, it will be renewed for a period not exceeding three years over 50% of the area of the original EL. Where it can be demonstrated that a further extension is necessary for the completion of full feasibility study prior to applying for a mining lease, the EL will be renewed over 50% of the area held for a period not exceeding 3 years. The applicant will be obligated to submit, with the application, a work programme and give valid reasons for such a renewal. The application for an EL or its renewal shall be granted/refused within 120 days from the date of filing of complete application.

4.8.4.3 Application fees for EL will be Rs. 25,000 and fee for each renewal will be Rs.50,000. In addition, rent of the land over which the licence is granted will have to be paid. The rent will increase progressively each year.

4.8.4.4 Where more than one application are made in respect of the same area, the Licensing Authority shall make a decision on the grant of an EL to one of the applicants on the basis of the best minimum work programme submitted and other financial terms offered and demonstrable technical and financial competence to execute the work programme and meet the other obligations of the EL, regardless of the order in which the applications were received.

4.8.4.5 The EL shall not, during the first two years of its term, be assigned or transferred by the Licensee to any party, other than to an affiliate. Assignments to an affiliate will be subject to the prior approval of the Licensing Authority.

4.8.4.6 The Licensee shall have the right, after a period of two years, to assign or transfer all or part of its interest in the EL to any third party subject to the prior written

consent of the Licensing Authority. Such consent shall not be withheld except for good reasons, for example, where the Licensing Authority is reasonably satisfied that the proposed assignee does not meet the criteria for the grant of an EL; the proposed assignee is unwilling to provide an unconditional undertaking to assume all the obligations of the assignor, or to comply with any reasonable condition of the assignment; or the assignment or transfer is reasonably considered by the Licensing Authority to be against the national interest.

4.8.5 Mineral Deposit Retention Licence (MDRL)

4.8.5.1 On completion of a full feasibility study, if the holder of an EL can demonstrate that the deposit, though potentially viable, cannot be commercially developed, due to depressed metal/mineral prices utilizing proven technology or with financing on commercial terms which are reflective of current market conditions for other mining projects he may, within 180 days before the expiry of the EL, apply for a Mineral Deposit Retention Licence (MDRL). The application must be accompanied with full justification and data and the prescribed fee. The applicant for an MDRL will have to demonstrate that the exploration operation had progressed as far as progressed as far as practicable and that the applicant is able and willing to comply with the conditions of the MDRL and has complied with the terms and conditions of the EL.

4.8.5.1 The application fee for an MDRL or its renewal will be Rs.100,000 each and the licensee shall in respect of the MDRL Area, pay in advance, for each year, he rent applicable for the corresponding period of the EL.

4.8.5.3 The application for an MDRL will be considered within 180 days and may be granted for a period not exceeding two years subject to specified conditions. It may be renewed for a period not exceeding one year subject to payment of a renewal fee and land rent. However, the licensee must justify annually to the Licensing Authority the basis for continuation of renewal of the MDRL. The date generated by the licensee will be placed on an open file and the feasibility study will be placed on a confidential file at the office of the relevant Licensing Authority and will be open to bona-fide interested third parties for inspection.

4.8.5.4 In the event of another company applying for a mining lease over a deposit

covered by MDRL, the licensee will have the right of first refusal to obtain a mining lease. If the licensee is unable to match the terms offered by the third party, the MDRL shall stand terminated.

4.8.6 Mining Lease (ML)

4.8.6.1 The holder of an EL or an MDRL may apply for a mining lease over an area subject to a maximum of 250 sq. km. within his EL or MDRL in respect of the mineral/minerals discovered. The application shall be accompanied by detailed information including technical and financial resources available for development of the mine, work programme for development and operation of the mine, production schedule, financing plan, environmental protection plans, protection plans, proposals for procurement and use of local goods and services training of nationals and the prescribed application fee. The application will be considered, in accordance with specified criteria, within 120 days after receipt of the application or receipt of any additional information requested. The licence will remain valid while the application is under consideration.

4.8.6.2 The Licensing Authority shall not unreasonably refuse an application for the grant of an ML. Where the Licensing Authority considers that the applicant has satisfied the specified criteria for assessment and grant of an ML, the ML will be granted. The Licensing Authority will not refuse an application by a licensee for an ML unless the Authority has notified the applicant of the proposal to refuse the ML and has given the applicant a reasonable opportunity to modify the proposals or mining plans or make representation or otherwise remove the grounds for refusal.

4.8.6.3 The application fee for an ML or its renewal will be Rs. 100,000 each and the land rent will be Rs. 3,000 per sq.km/ year to be paid in advance each year.

4.8.6.4 The ML will be granted for the lesser of a period of 30 years or the estimated life of the mine. An ML may be renewed for a period not exceeding 10 years or the life of the mine whichever is lesser in the light of the circumstances prevailing at that time.

4.8.6.5 Where an application for a mining lease is made by an applicant not holding an EL or MDRL, the decision will be made within 180 days, unless extended further up to 180 days by the Government. The lessee will be obligated to carry out mining

operations in accordance with good international mining industry practice, provide acceptable working conditions and take measure to protect health, safety and welfare of employees and the environment. The lessee will be required to commence mining operations within six months of the grant in accordance with the approved mine development plan.

4.8.6.6. A lessee shall have the right to assign an ML with prior consent of the Licensing Authority. Such consent will not be unreasonably withheld or delayed, if the proposed assignee meets certain specified criteria and conditions similar to those applicable for assignments of ELs.

4.8.6.7 A lessee shall have the right to market and export minerals or mineral products subject to satisfaction of the internal requirements of Pakistan. The price to be paid for any minerals or mineral products purchased by the Government shall be the fair market price. The fair market price shall be determined by agreement on the basis of specified criteria and, failing agreement, by reference to a mutually acceptable expert or to arbitrators.

4.8.6.8 Details of various categories of mineral titles, their duration, application and renewal fees and rentals and time within which decisions will be taken are tabulated in the annexed Tables I & II.

4.8.7 Environment

4.8.7.1 With the increasing focus on the environment and international obligations, Pakistan, in common with other countries, wished to pursue an approach of sustainable development consistent with environmental priorities. Companies will be expected to ensure that their mining operations are carried out in a environmentally acceptable and safe manner and that such operations are properly monitored.

4.8.7.2 Accordingly, mining companies will be obligated to take adequate steps to prevent and minimize environmental damage and to make good any damage caused, during and on completion of mining operations; submit to the Government an environmental impact assessment (EIA) and environmental management plans for each

stage of their operations; carry out site rehabilitation as necessary; comply with applicable laws and international acceptable environmental standards; and ensure adequate compensation for injury to persons or damage to property caused by the effects of mining operations.

4.8.7.3 Mining companies will also be required to submit to the Licensing Authority periodic environmental reports detailing the measures taken by them for compliance with environmental requirements.

4.8.8 Performance Guarantee

An applicant for grant or renewal of EL, MDRL or ML will be required to provide, at the time of the grant or renewal a guarantee, in a form satisfactory to the Licensing Authority, to ensure performance of the licensee's or lessee's obligations.

4.8.9 Rights Conferred

The holder of an EL, MDRL or ML, subject to payment of dues and compliance with obligations, shall have certain exclusive rights under the title including, for example, the right to enter upon the licensed/leased area (subject to the rights of surface owners) and to carry out exploration/mining operations in accordance with the terms of the licence/lease and applicable laws and to remove the ore/concentrate from the leased area. Detailed rights and obligations of licensee/lessee will be spelled out in the law governing the grant of mining titles.

4.8.10 Termination

A licence or lease will only be terminated on the occurrence of certain specified events, for example, breach or non-performance of the terms, bankruptcy of the licensee or lessee, misrepresentation etc. The events will be specified in the relevant Rules.

4.8.11 Grant of Mineral Titles to Foreign Nationals

Foreign companies will be free to apply for and be granted licences without the need to incorporate locally. However, no mining lease will be given until the foreign company is incorporated locally.

4.8.12 Mineral Agreement

4.8.12.1 The Provincial Governments may enter into an agreement with an investor, within the framework of the law, to stabilize the terms or to predetermine procedures with respect to certain matters relating to the carrying out of operations under licence/lease, if government is satisfied that substantial foreign investment in exploration and mining operations is likely to be made and it is desirable in the interest of the development of mineral resources, to do so. The Federal Government may also become signatory to such an agreement, if so requested by a Provincial Government, after independently examining viability of the project and credit worthiness of the party.

4.8.12.2 The agreement may cover, for example the right of the licensee to obtain a mining lease, assignment rights, the circumstances in which a licence or lease may be terminated or cancelled, the valuation of minerals on an arms-length basis, the levying of additional profit tax and additional royalty, in case agreed and its terms, the circumstances and conditions on which rights of pre-emption to minerals may be exercised by the government, the settlement of disputes through a mutually agreeable sole expert or through international arbitration etc.

4.8.13 Arbitration

Any question or dispute between a foreign investor and the government arising out or in connection with the terms of an agreement or of a granted mineral tile shall be settled amicably. Failing an amicable settlement within a reasonable period, such dispute shall be submitted to the International Centre for Settlement of Investment Disputes (ICSID) for arbitration. Dispute solely involving Pakistani parties will be settled by arbitration in Pakistan and under the provisions of the Pakistan arbitration laws.

4.8.14 Joint Application

A licence/lease may be granted jointly to two or more persons with respect to an area where such an application is made jointly and the liability of the applicants under the licence/lease in such a case will be joint and several.

4.8.15 Areas not Available for Grant of Mineral Rights

Mineral rights over areas of historical interest, national or public parks and gardens, cemeteries, defence sensitive/strategic sites etc. or such other areas as may be specified will not be available. The Provincial Governments will identify all such areas so that

prospective investors are aware at the time of filing their applications whether the area applied for is available for licensing.

4.8.16 Competitive Bids

The Licensing Authority may award EIs and MLs over free acreage through a process of competitive public bids or selected tenders.

4.8.17 Public Notice of Grant of Licences etc.

Notice of all grants, renewals, assignments, surrender and revocation of mineral titles and relinquishment of acreage will be published promptly in the Official Gazette, with details of the area and of the companies to whom the licence/lease/assignment etc. is granted.

4.8.18 Proprietary Rights over Data

All geodata obtained by a licensee/lessee shall be a property of the Licensing Authority and shall be deposited at such offices and at such intervals as are specified in the Rules.

4.9 Fiscal Regime

4.9.1 The Overall Fiscal package

4.9.1.1 The Federal and Provincial Governments have agreed to adopt and maintain a joint approach towards the fiscal terms which are applied to mining operations so as to ensure that on overall basis it yields a level of return to the investor which is commensurate with the risk and internationally competitive, and as well provides equitable "take" for the Provincial and Federal Governments through royalties on minerals and federal income from mining ventures.

4.9.1.2 The fiscal regime, including royalty, would be structured to have a progressive character to allow exploration of less profitable mineral deposits.

4.9.2 Income Tax

4.9.2.1 Rate of Corporate Tax

The Government has embarked upon a progressive reduction in the effective rate of corporate tax. In fiscal year 2002-2003 the applicable rate of tax will be 35% for public companies other than banking companies and 43% for private companies.

4.9.2.2 Minimum Corporate Tax

A minimum amount of corporate tax is payable annually at the rate of 0.5 % of the declared annual turnover. However, in any year when the corporate tax payable exceeds this amount, the minimum tax will not be charged.

4.9.2.3 Development Expenditure Deduction and Loss Carry Forward

Expenditure incurred on exploration operations qualifies for immediate deduction in the determination of taxable income. Expenditure incurred for project development operations will be allowed deduction at a rate of 25% p.a., in line with international practice; the depletion allowance will no longer apply.

4.9.2.4 Ring-Fencing

A mining company will be assessed for income tax on the entirety of its mining operations in Pakistan.

4.9.3 Withholding Taxes

4.9.3.1 Dividends

Except where lower rates are specified in Pakistan's double taxation treaties, the withholding tax levied on dividends paid from mining profits to non-resident corporate shareholders will be set at 7.5% but adjustable against final tax liability.

4.9.3.2 Non-Resident Contractors

The rate of withholding tax on non-resident contractors engaged in mining operations will be 15% of the gross amount for technical services. This will represent their full and final tax liability.

4.9.3.3 Interest

Interest paid to non-residents in respect of availed approved loans is exempt from withholding tax.

4.9.4 Other Taxes

4.9.4.1 Sales Tax

No sales tax will levy on minerals, which are exported.

4.9.4.2 Additional Profits Tax

For certain large-scale mining operations undertaken by foreign investors, where the anticipated size and nature of the mining operations are such as to involve a large investment and portend considerable economic and social benefits over a long period of time, the Government may require the investors to negotiate and enter into a mining agreement containing a provision for the levying of an additional profits tax (APT). The APT on an agreed rate would be payable only when the project achieves the agreed threshold level of profitability.

4.9.4.3 Zakat

Non-Muslims and non-resident shareholders of a company are exempt from the requirement to pay Zakat on dividends.

4.9.5 Concessions on Imports

4.9.5.1 For Mining Companies and Mineral Based Industry

The Investment Policy announced in November 2001 places Mining and Value Added Mineral Processing in Category A industries. The allows 10% rated tariff on import of plant, machinery and equipment (which is not manufactured locally) while the import of raw materials, sub-components and components etc. will be subjected to cascaded tariff regime. For new investments, Category A industries are also allowed First Year Allowance equal to 90% of cost of plant, machinery and equipment, for being set-off against income and this allowance can be carried forward till fully adjusted.

4.9.5.2 For Local Manufactures of Mining Machinery

In order to encourage local manufacture of machinery and equipment needed by the mining industry, raw material will be subjected to customs duty at the rate of 10% with 15% sales tax but on components and machinery customs duty at the rate of 10% with no sales tax, will be levied if imported by local manufacturers for mining machinery and equipment for mining operations only.

4.10. Royalty

4.10.1 Coal, Construction and Industrial Minerals

The current rates of royalties in the Provinces for coal, construction and industrial minerals are being retained as such since these minerals are primarily of interest to local mining companies, for sale in the domestic market.

4.10.2 Other Minerals

For all other minerals, a simplified and uniform royalty system is being introduced in all the Provinces. Royalty will be charged ad valorem on the gross sales value determined on a third party (arms-length) basis. The rates of royalties are:

- (i) Precious Stones 10%
- (ii) Precious Metals & Semi-Precious Stones 3%
- (iii) Base Metals 2%
- (iv) Others (other than i, ii, iii above) 1%

4.10.3 Royalty Determination and Payment

4.10.3.1 Royalty will be calculated at the first point where the mineral is sold or otherwise disposed of, without any deductions from gross value.

4.10.3.3 In order to encourage investment in marginal or low grade mineral deposits, as well as the maintenance of mineral production in years of difficult cash flow, the Provincial Governments may adopt special royalty provisions which would allow them to reduce, defer or waive royalty payments on certain projects or minerals on certain terms and conditions in specified circumstances.

4.10.3.4 Enhanced Royalty rates may be negotiated under an agreement with the investor of a mining project, which would apply only when the project achieves the agreed threshold level of profitability.

4.10.3.5 Stocked minerals and by-products will not be subjected to royalty payment until sold.

4.10.4 Royalty in Lieu of Local Levies etc.

Except for royalty, there will be no other Provincial or local levies or taxes imposed on minerals or mining operations. The claims of local bodies for any levy on minerals will be satisfied by the Provincial Governments from royalty collections.

4.11. Joint Ventures with Local Enterprises

There will be no mandatory State participation. However, the Governments will encourage joint ventures between foreign and local private investors. Such joint ventures could also be entered into with agencies of the Federal and Provincial Governments.

4.12 Development of Infrastructure

Mechanisms will be developed to provide infrastructure support in special circumstances and under certain terms and conditions; for example, for the development of a large marginal grade mineral deposit which is capable of being economically developed only with such support.

4.13.1 Investment in small-scale mining (capital employed less than Rs. 300 million) will be confined to Pakistani nationals.

4.13.1 To improve the working of small-scale mining:-

- (i) The Provincial Inspectorates of Mines will provide basic personal safety equipment to small-scale mine operators on a no-profit-no-loss basis. Failure by the mine operators to acquire the prescribed safety equipment may result in closure of their operations.
- (ii) Corporate merger of small-scale mine operators will be encouraged.
- (iii) Provincial Inspectorates of Mines will monitor the working of small-scale mines and ensure compliance with the provisions of the Mines Act and of environmental protection laws. Penalties will be imposed for violation of these provisions.
- (iv) Small-scale mines will be required to carry out or participate in collective environmental rehabilitation programmes introduced by regulatory agency.

13.2 Small-scale mining operators will be expected to make appropriate contributions towards upgrading the social infrastructure of the area where they are operating.

4.14 Social Development Contributions

4.14.1 Mining companies would contribute to the social uplift of local population by contributing annually Rupee equivalent of US \$ 5,000/licence/lease and after the commencement of commercial production double that amount for on the job vocational training of local population in training institutes.

4.14.2 In order to give lasting benefits to the local population of the area, mining companies would pledge annually Rupee equivalent of US \$ 10,000 for construction and self sustained maintenance of welfare projects like school, dispensaries, drinking water supply, roads etc.

4.14.3 Mining companies would participate in the Government efforts to sustain the development level of mineral bearing areas, on depletion of mineral resource.

4.14.4 The licensing authority may enforce that small scale mine operators will also make a contribution in the uplift of the social infrastructure of the area where they operate.

4.15 Linkages with other Sectors

4.15.1 In order to develop skills in the various disciplines required in the mining sector, companies involved in medium and large-scale mining operations will be required to provide to specified number of facilities as agreed to with the Provincial Government for technical education and on the job training, either in Pakistan or abroad

4.15.2 Similarly, in order to develop meaningful backward and forward linkages with other sectors of the economy, mining companies will be required to utilize in their operations Pakistani goods and services, to the extent available on competitive basis with international supplies. Secondary and tertiary processing of the ores within Pakistan will be encouraged to the extent practicable.

4.16 Miscellaneous Matters

4.16.1 Protection from Expropriation

The Protection of Economic Reforms Act 1992, provides that no foreign industrial or

commercial enterprise established or owned in any form by a foreign or Pakistani investor shall be compulsorily acquired or taken over by the Government. The mining sector will equally have this protection.

4.16.2 Repatriation of Capital and Profits

The Foreign Private Investment (Promotion and Protection) Act, 1976, guarantees that a foreign investor in an industrial undertaking may at any time repatriate capital and profits. This includes mining ventures.

4.16.3 Insurance

Mining operators will be allowed to insure their assets and risks with international insurance companies.

4.16.4 Formalization of Mineral Policy

The respective Federal and Provincial Ministries/Departments will undertake necessary administrative measures and amendments to relevant mining and fiscal laws to give full effect to the provisions of this Policy.

2. 서식 견본

■ 보유허가권 신청서

FORM E

DRAFT

SINDH- PAKISTAN

APPLICATION FORM FOR MINERAL DEPOSIT RETENTION LICENCE BY A COMPANY

NB. The content of this Form will need to be revised and amended in the context of the finalized Rules of Sindh.

TO (The Licensing Authority)

Information to be supplied by applicant. Where information can not be fitted on form to be included as attachment.

Particulars of the Company:_____

(a) Name of the Company_____

(b) Principal Place of business_____

(c) If principal place of business is outside Pakistan, name and address of office and representative/ agent in Pakistan.

(d) Nature of Business

(e) Authorized, subscribed and paid up capital

(f) If the company has a share capital, state the full names, addresses and nationalities of any person who is beneficial owner of more

than five percent of the issued share capital.

(g) Name of Principal shareholder Nationality, Amount of shareholding

1. _____
2. _____
3. _____
4. _____

(h) Past experience of the company

(i) Director(s) _____

- | Full Name (s) | Address (s) | Nationality |
|---------------|-------------|-------------|
| 1. _____ | _____ | _____ |
| 2. _____ | _____ | _____ |
| 3. _____ | _____ | _____ |
| 4. _____ | _____ | _____ |

(j) Officer (s) _____

- | Full Name (s) | Address (s) | Nationality |
|---------------|-------------|-------------|
| 1. _____ | _____ | _____ |
| 2. _____ | _____ | _____ |
| 3. _____ | _____ | _____ |
| 4. _____ | _____ | _____ |

2. State approximate size of the area for which application is made. (Note size of area shall not be greater than the exploration area concerned).

3. State location and description of the area in terms required under Enclosure (i)

4. State the mineral or group of minerals to which the application relates.

5. Include particulars of all other mineral titles held or mines operated in Pakistan by the applicant. (or any affiliate or subsidiary of the applicant) whether alone or jointly. Currently or during the ten years immediately preceding the date of application or where no such titles or mines are or were held or operated particulars of any current or previous involvement by the applicant or any affiliate or subsidiary of the applicant in reconnaissance, exploration or mining operations outside Pakistan.

6. State period, not exceeding two years, for which the licence is sought.

7. Give reasons in support of the claim that the mineral deposit discovered in the area of land to which the application relates could not then be mined on a profitable basis.

8. State other relevant information or any special remarks.

Enclosures to be attached with Application:

(i) A detailed topographical and geographical description of the boundaries of the areas of land to which the application relates, and a plan drawn to an appropriate scale of the area of land which the application relates, showing : (a) its location with reference to magisterial districts, and (b) the extent of area and the boundaries by reference to identifiable physical features and co-ordinate reference points. (Refer Draft Rules 18(d)).

(ii) Details of the proven, estimated or inferred mineral reserves contained therein and of the mining conditions pertaining thereto : (Refer Draft Rule 37 (d)).

(iii) The proposals for the carrying out of work in the exploration area

and expenditures during the period of the retention licence in respect of which application is made and if no further work in our in relation to the exploration area could be usefully carried out the reasons thereof: (Refer Draft Rule 37 (e) (i)).

(iv) The state of the environment in the area to which the application relates, the likely adverse impact which operations to be carried on may have on the environment and the measures to be taken to prevent or migrate such impact (Refer Draft Rule 37 (e) (ii)).

(v) Particulars of the applicant's technical and financial resources and those of any person to be engage to provide such resources, together with supporting documentary evidence and copies of relevant contractual agreements: (Refer Draft Rules 18 (F)).

(vi) Particulars of the exploration licence held by the applicant: (Refer Draft Rule 37 (f) (ii)).

(vii) Annual report of the company for the last three (3) years.
Application Fee: Application fee as specified in the Rules to be submitted with application (Refer Draft Rule 10 (c)).

I/We solemnly and sincerely declare that all the foregoing particulars are correct and that no Government dues are outstanding against me/us in respect of any concession (s) held by me/us or by any firm of which I/we have been partner (s).

Singed on behalf of _____ (Co) by its duly authorized representative.

Name _____

Designation _____

Dated _____

채굴권 신청서

FORM F

DRAFT

SINDH- PAKISTAN APPLICATION FORM FOR MINING LEASE

NB. The content of this Form will need to be revised and amended in the context of the finalized Rules of Sindh.

TO (The Licensing Authority)

Information to be supplied by applicant. Where information can not be fitted on form to be included as attachment.

Particulars of the Company:_____

(a) Name of the Company_____

(b) Principal Place of business_____

(c) If principal place of business is outside Pakistan, name and address of office and representative/ agent in Pakistan.

(d) Nature of Business

(e) Authorized, subscribed and paid up capital

(f) If the company has a share capital, state the full names, addresses and nationalities of any person who is beneficial owner of more than five percent of the issued share capital.

(g) Name of Principal shareholder Nationality, Amount of shareholding_____

1. _____

2. _____

3. _____

4. _____

(h) Past experience of the company

(i) Director(s)

Full Name (s)

Address (s)

Nationality

1. _____

2. _____

3. _____

4. _____

■ 예비조사 신청서

FORM A

DRAFT

SINDH- PAKISTAN APPLICATION FORM FOR A RECONNAISSANCE LICENCE BY A COMPANY

NB. The content of this Form will need to be revised and amended in the context of the finalized Rules of Sindh.

TO (The Licensing Authority)

Information to be supplied by applicant. Where information can not be fitted on form to be included as attachment.

Particulars of the Company:_____

(a) Name of the Company_____

(b) Principal Place of business_____

(c) If principal place of business is outside Pakistan, name and address of office and representative/ agent in Pakistan.

(d) Nature of Business

(e) Authorized, subscribed and paid up capital

(f) If the company has a share capital, state the full names, addresses and nationalities of any person who is beneficial owner of more than five percent of the issued share capital.

(g) Name of Principal shareholder Nationality, Amount of shareholding_____

1._____

2._____

3. _____

4. _____

(h) Past experience of the company

Director (s)	Full Name (s)	Address (s)	Nationality
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

1. _____

2. _____

3. _____

4. _____

(i) (j) Officer (s)

Full Name (s)	Address (s)	Nationality
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____

1. _____

2. _____

3. _____

4. _____

3. State location and description of the area in terms required under Enclosure (i)

4. State the mineral or group of minerals to which the licence is sought.

5. Include particulars of all other mineral titles held or mines operated in Pakistan by the applicant. (or any affiliate or subsidiary of the applicant) whether alone or jointly. Currently or during the ten years immediately preceding the date of application or where no such titles or mines are or were held or operated particulars of any current or previous involvement by the applicant or any affiliate or subsidiary of the applicant in reconnaissance, exploration or mining operations outside Pakistan.

6. State period, not exceeding twelve months, for which the licence is sought.

7. Other relevant information or any special remarks.

Enclosures to be attached with Application:

(i) A detailed topographical and geographical description of the boundaries of the areas of land to which the application related, and a plan drawn to a scale of [1:50,000:or nearest scale available] showing: (a) its location with reference to magisterial districts and (b) the extent of area and the boundaries by reference to identifiable physical features and co-ordinate reference points. (Refer Draft Rules 18(d)).

(ii) The programmed of reconnaissance operations proposed to be carried on the estimated expenditure in respect thereof and the period within which the operations will be carried on, and in case of and application for an exclusive right referred to an (Rule 18), the reason for the application : (Refer Draft Rule 18 © (i) and (ii)).

(iii) Particulars of the applicant's technical and financial resources and those of any person to be engage to provide such resources, together with supporting documentary evidence and copies of relevant contractual agreements: (Refer Draft Rules 18 (i) and 19 (c) (ii)).

(iv) Copy of articles of association along with an attested copy of the certificate of incorporation / registration of the company in Pakistan.

(v) Annual report of the company for the last three (3) years.

Application Fee: Application fee as specified in the Rules to be submitted with application (Refer Draft Rule 10 (c)).

Singed on behalf of _____ (Co) by its duly authorized representative.

Name _____

Designation _____

Dated _____

■ 탐사권 신청서

FORM C

DRAFT

SINDH- PAKISTAN APPLICATION FORM FOR AN EXPLORATION LICENCE BY A COMPANY

NB. The content of this Form will need to be revised and amended in the context of the finalized Rules of Sindh.

TO (The Licensing Authority)

Information to be supplied by applicant. Where information can not be fitted on form to be included as attachment.

Particulars of the Company:_____

(a) Name of the Company_____

(b) Principal Place of business_____

(c) If principal place of business is outside Pakistan, name and address of office and representative/ agent in Pakistan.

(d) Nature of Business

(e) Authorized, subscribed and paid up capital

(f) If the company has a share capital, state the full names, addresses and nationalities of any person who is beneficial owner of more than five percent of the issued share capital.

(g) Name of Principal shareholder Nationality, Amount of shareholding_____

1. _____

2. _____

3. _____

4. _____

(h) Past experience of the company

Director (s)	Full Name (s)	Address (s)	Nationality
1.			
2.			
3.			
4.			

(i) (j) Officer (s)

Full Name (s)	Address (s)	Nationality
1.		
2.		
3.		
4.		

2. State approximate size of the area for which application is made. (Note size of area shall not exceed 1,000 square kilometers).

3. State location and description of the area in terms required under Enclosure (i)

4. State the mineral or group of minerals to which the licence is sought.

5. Include particulars of all other mineral titles held or mines operated in Pakistan by the applicant. (or any affiliate or subsidiary of the applicant) whether alone or jointly. Currently or during the ten years immediately preceding the date of application or where no such titles or mines are or were held or operated particulars of any current or previous involvement by the applicant or any affiliate or subsidiary of the applicant in reconnaissance, exploration or mining operations outside Pakistan.

6. State period, not exceeding twelve months, for which the licence is sought.

7. Other relevant information or any special remarks.

Enclosures to be attached with Application:

(i) A detailed topographical and geographical description of the boundaries of the areas of land to which the application related, and a plan drawn to a scale of [1:50,000:or nearest scale available] showing: (a) its location with reference to magisterial districts and (b) the extent of area and the boundaries by reference to identifiable physical features and co-ordinate reference points. (Refer Draft Rules 18(d)) and 25 (d))..

(ii) The programme of exploration operations proposed to be carried on, the estimated expenditure in respect thereof and the period within which the operation will be carried on: (Refer Draft Rule 26 (e) (i)).

(iii) The anticipated effect which the proposed exploration operations may leave on the environment and measures to be taken to prevent or minimize any effect thereon:(Refer Draft Rules 26 (e) (ii)).

(iv) Particulars of the applicant's technical and financial resources to carry out the exploration operations and those of any person to be engage to provide such resources, together with supporting documentary evidence and copies of relevant contractual agreements: (Refer Draft Rules 18 (f) and 19 (c) (ii)).

(v) Copy of articles of association along with an attested copy of the certificate of incorporation / registration of the company in Pakistan.

(vi) Annual report of the company for the last three (3) years.

Application Fee: Application fee as specified in the Rules to be submitted with application (Refer Draft Rule 10 (c)).

Singed on behalf of _____ (Co) by its duly authorized representative.

Name _____

Designation _____

Dated _____

파키스탄 자원개발진출가이드

발행인 | 조 환 익

편집인 | 박 기 식

발행처 | KOTRA

발행일 | 2008년 12월

주 소 | 서울시 서초구 염곡동 300-9

서초우체국 사서함 101호

전 화 | 3460-7114(대표)

홈페이지 | www.kotra.or.kr

* 낙장, 파본은 교환해 드립니다.