

**G7 CONNEX Initiative International Conference
on Capacity Building and Transparency**

Session 5: 11:00-13:00, Friday 16th September, 2016

**Panel Discussions: The future direction of capacity building
and the CONNEX Initiative**

International Conference Hall, JICA Ichigaya, Tokyo, JAPAN

**The Necessary Training for the
Resource Management and Contract**

Yoshitaka HOSOI, Ph.D.

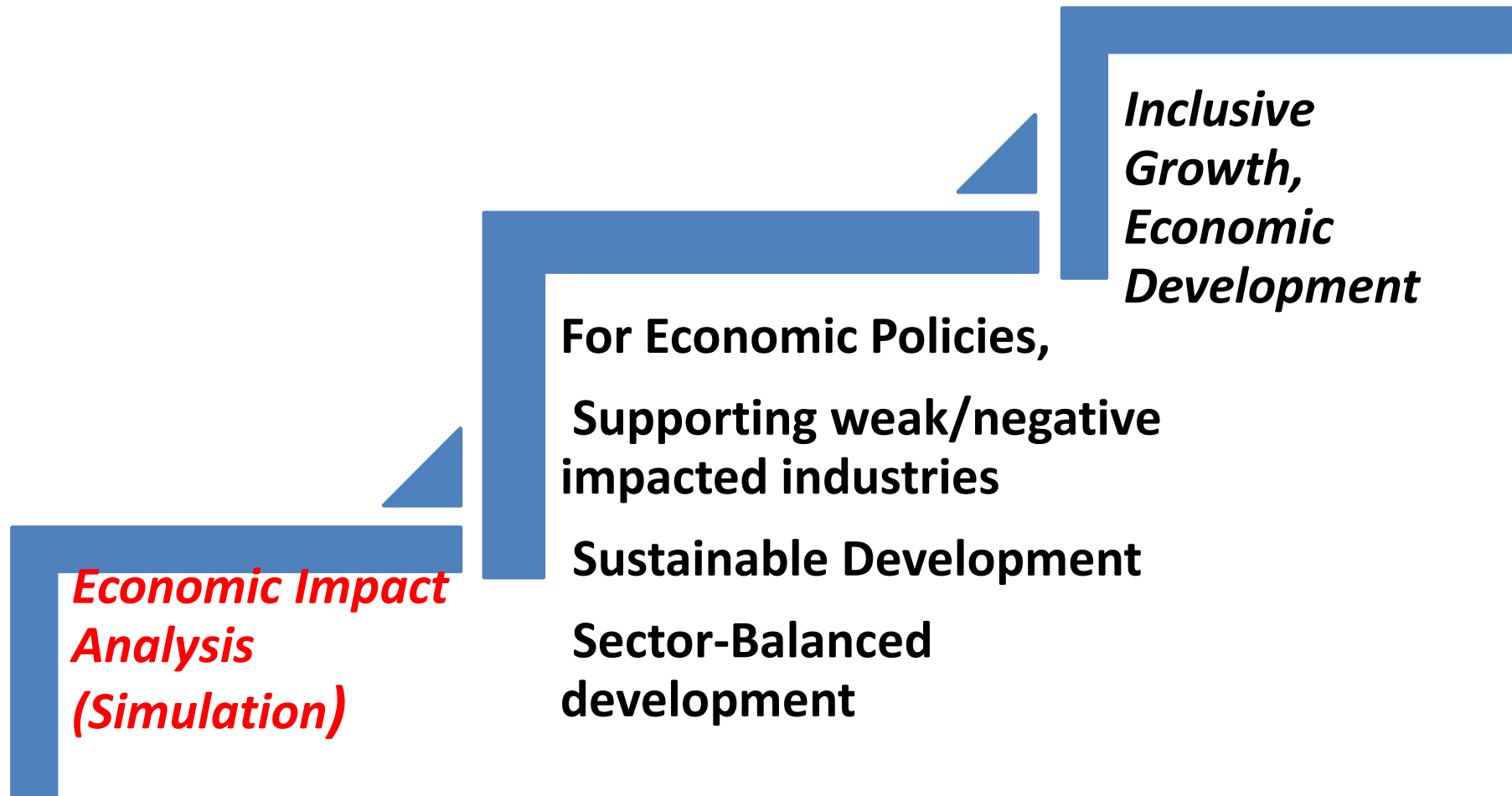
Hosoi.Yoshitaka@jica.go.jp

**Senior Advisor for Natural Resources, JICA
*Economist and Exploration/Mining Engineer***

Visiting Professor, Akita University

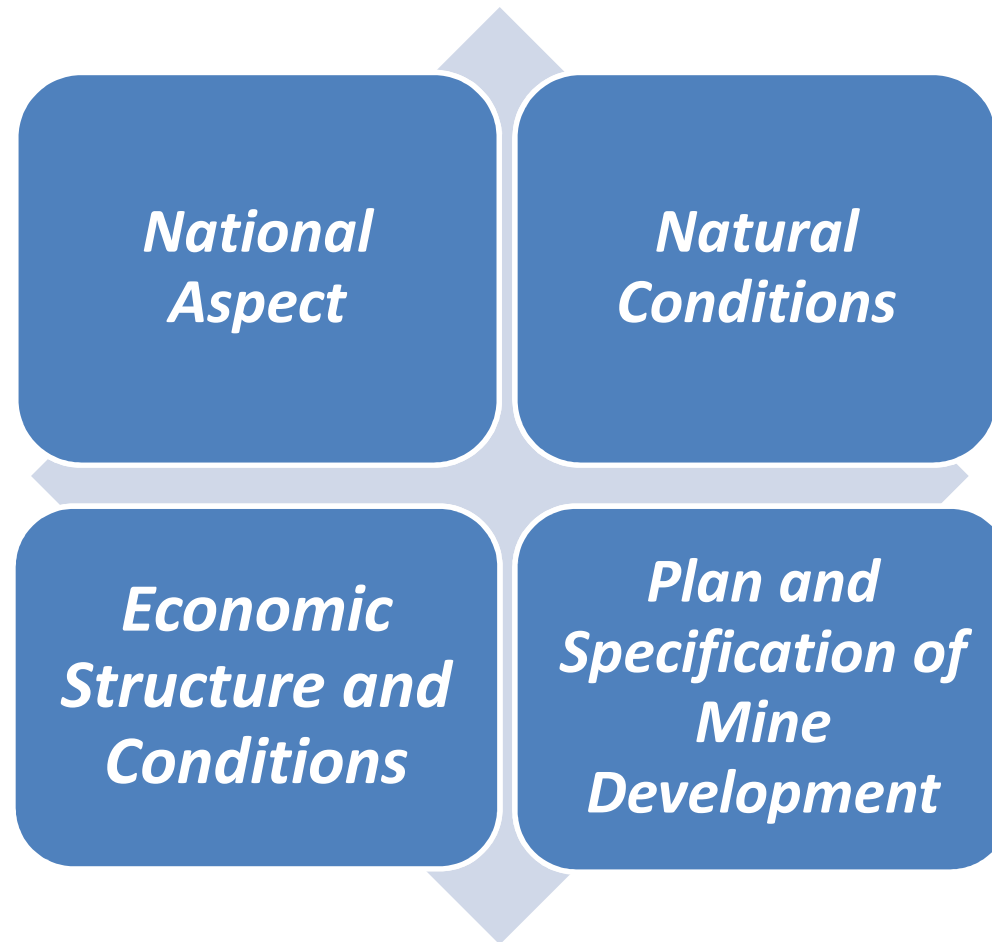
**Member of the Association of Mining Analysis, UK
(Former: Japan Oil, Gas and Metals National Corporation)**

Stage 1. Before Mine Development



Four Major Conditions

***Impacts from Mine Development
are not uniform.***



Standpoint of Developing Countries

*Whether mining resources should
be developed as a mean to add
to prosperity and economic
growth*

*or alternatively conserved from
the standpoint of the
environment and stability.*

se days, it is unusual for academic analysts to recommend investment in mining as a desirable means for economic development. The economics of mining point to its possible negative social, economic and environmental impacts in developing countries. It is possible for negative impacts to occur but its environmental costs are often outweighed by economic gains. These issues are discussed in this book by focusing on the proposed development of the Namosi mine in Fiji. The development of the Namosi mine could make a significant contribution to Fiji's economic growth. The extent and nature of the contribution is assessed. The environmental costs of the project are estimated and compared with economic gains. It is argued that the economic gain is likely to outweigh the environmental cost associated with the mining project. A variety of techniques are used to conduct the assessment. These include cost-benefit analysis, I-O analysis and CGE modeling. This in-depth contribution will be valuable reading for development economists, resource and environmental economist, government policy-makers as well as those interested in mining development generally.



Yoshitaka Hosoi

Yoshitaka Hosoi has qualifications both in mining and in economics. He has a Bachelor of Mining from Akita Univ., a Postgraduate study in Mining at the Univ. of Tokyo, a Master in Economics from Santo Tomas Univ. and a PhD in Economics from the Univ. of Queensland. He has practical experiences in Africa, Asia, Oceania and South America.



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Yoshitaka Hosoi

Mining and Development



Yoshitaka Hosoi

Mining and Development

A Case Study Assessing National Economic and Environmental Issues



After decision of mine development



To decide condition of development



Contract negotiation



Make efforts to develop mine



Monitoring EITI

Mineral Resource Management (MRM) by Government

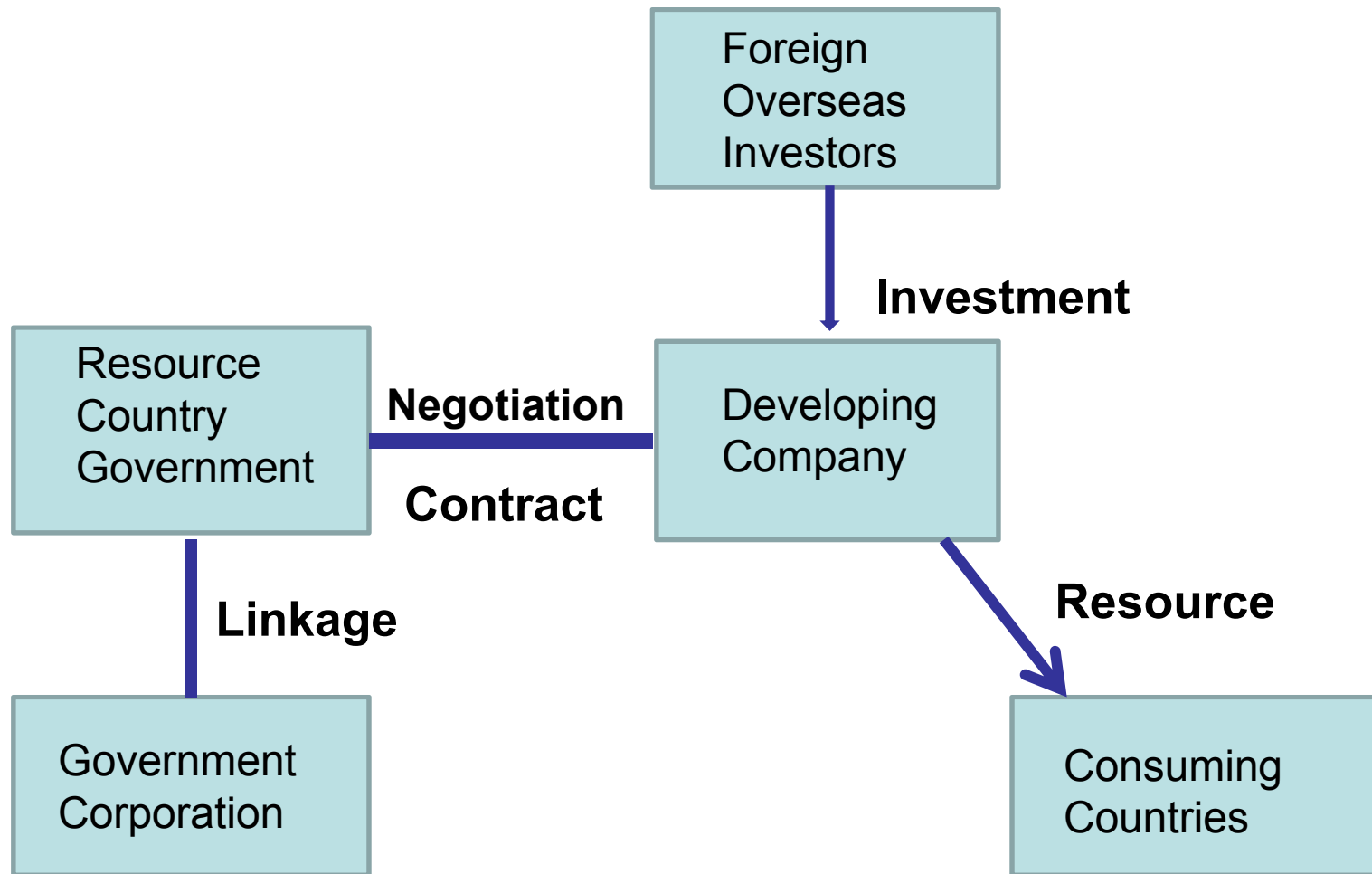
Definition:

The Management for National Prosperity and Economic Growth by Mineral Resource (national treasure) Development with Long term Operation and without Environmental Load.

Categories needed for MRM

1. Development of Strategy, Law and Administrative Organ
2. Discover and Administration of Mineral Resources
3. Environment Management
4. Development Management
5. Correspondence for Community and Resident
6. Proper management of Resource Revenue
7. Prediction of Economic and Environmental Impact and its Dealing Ways

Relationship



Road Map of Contract (from Columbia Center on Sustainable Investment)

1. Setting the Legal & Policy Framework
2. Pre-Negotiation Stage
3. Contract Negotiation Stage
4. Implementation & Monitoring Stage

Necessary Knowledge for Stage 1

Various Data of Mining Sector in the World and Domestic, Supply and Demand of Commodities, Tendency of Prices of Commodities, National Resources Inventory, Mining Law, FDI Law, Master Plan of Resource Development, Focusing Mining Sector, Impact Analysis

Necessary Knowledge for Stage 2

Geology, Exploration, Ore Volume Estimation, Mine Development Construction, Mining Method, Concentrating Method, Finance, FDI, Feasibility Study of Mine Development and Operation, Environmental Impact Analysis, Economic Impact Analysis, Resource Economics (Macro and Micro), Tender System, Commodity Price and Its Tendency

Necessary Knowledge for Stage 3

Profit Sharing, Framework of Contract, Law
farms and Lawyers(Negotiation Team),

Necessary Knowledge for Stage 4

Study from EITI (Extractive Industries Transparency Initiative), Monitoring Standard, Environmental Monitoring, Mine Closure and Reactivate Mine town

JICA's Role and Human Resource Development in Mining Sector

JICA's Four Pillars for Mining Sector Development

16

Strategic Target:

- (1) Investment Climate and Infrastructure Development
- (2) Human Resource Development



➤ Infrastructure and Regional Development

- Developing infrastructure; electricity, water and transportation
- Developing communities around mines
- Regional promotion, and measures for closing/ed mines, etc.

➤ Policy Support and Legal System Development

- Formulating mining sector master plan
- Organizing the laws and regulations related to mining exploration development, etc.
- Human resource development

➤ Mineral Resource Management

- Better estimation by advanced technology
- Establishing appropriate management systems, etc.
- Human resource development

➤ Mine Safety and Environmental Measures for Mines

- Improving technology for mine pollution prevention and environmental restoration
- Organizing the law related to mine safety
- Human resource development

16

Technical Cooperation Scheme

- Target:
Governmental/Public Organizations
- Concept:
Enhancing problem-solving capacities of the partner countries
- Input from Japanese Side:
 - **Training Program in Japan**
 - Short-Term Training (1-3 months)
 - Long-Term Training (2-5 years) at graduate school in Japan
 - **Dispatch of Japanese experts** to support and advise (OJT);
 - to strengthen the Capacity
 - to strengthen the Governmental / Institutional system
 - **Provision of Equipment**
 - to improve facilities for capacity development

Kinds of Training Course & Program in Mining Sector

- On the Job Training within implementing Technical Cooperation Program
- Short/Long term training in Japan within implementing Technical Cooperation Program
- Theme Focused group training course in Japan
- Country Focused group training course in Japan
- Region Focused group training course in Japan
- **Long term training in Japan (Human Resources Development)**

“Shigen no Kizuna”(in Japanese)=“Bond in Mineral Resource Filed” (in English)



The Kizuna Program: Outline

1. Objective

- ① Human Resource Development in Mining Sector
- ② Network building among Developing countries and Japan

2. Contents

- ① Obtain the Master/Doctor Degree
 - Research Students Program (6 month)
 - Graduate Course Program (2-3 years)
- ② Internship Program
- ③ Practical Training Course (short term program)
 - Mining Policy and management Course (in summer)
 - Mining value chain in Japan (in spring)
- ④ Overseas Field Research Program



Overseas Field Research (Image)

3. Target Number of Trainee

- 22 trainees , including 13 trainees from Africa countries, are under the Program as of May 2015
- 20-30 trainees will join the program every year
- Target number of trainee is over 200 for coming 10 years

Introduction on JICA short-term Program in Summer 2016

Title	Resource policy and management Course
Theme	Practical Mining Industry Management in International Trend
Schedule	Mid-end of August (2 weeks)
Contents	<ul style="list-style-type: none"> ✓ Mining Law ✓ Resource Investment / Finance ✓ Resource Economics ✓ Analysis for Impact by Mine Development ✓ Evaluation of Mine Development Project ✓ Oil price and Economy ✓ Resource Contract ✓ Mine Closure and Pollution Control ✓ Mine Closure and Activation of Mine Town, etc.

Africa Business Education Initiative for the Youth (ABE Initiative) Master's Degree and Internship Program

➤ **Schedule:**

Nov. 2013～Oct. 2021 (Arrival: September 2014-2017)
(1st Batch: Sep. 2014, 2nd: 2015, 3rd: 2016, 4th (final): 2017)

➤ **Target Number of Participants:**

1st Batch 156 (actual), 2nd Batch 317(actual),
3rd Batch 300(plan), 4th Batch 100(plan)

➤ **Target Countries:**

All African Countries (54 countries)

➤ **Target Participants:**

Young personnel from private, public, and education sector

➤ **Accepted Field:**

All academic field.

(when the research theme matches the concept of ABE initiative)

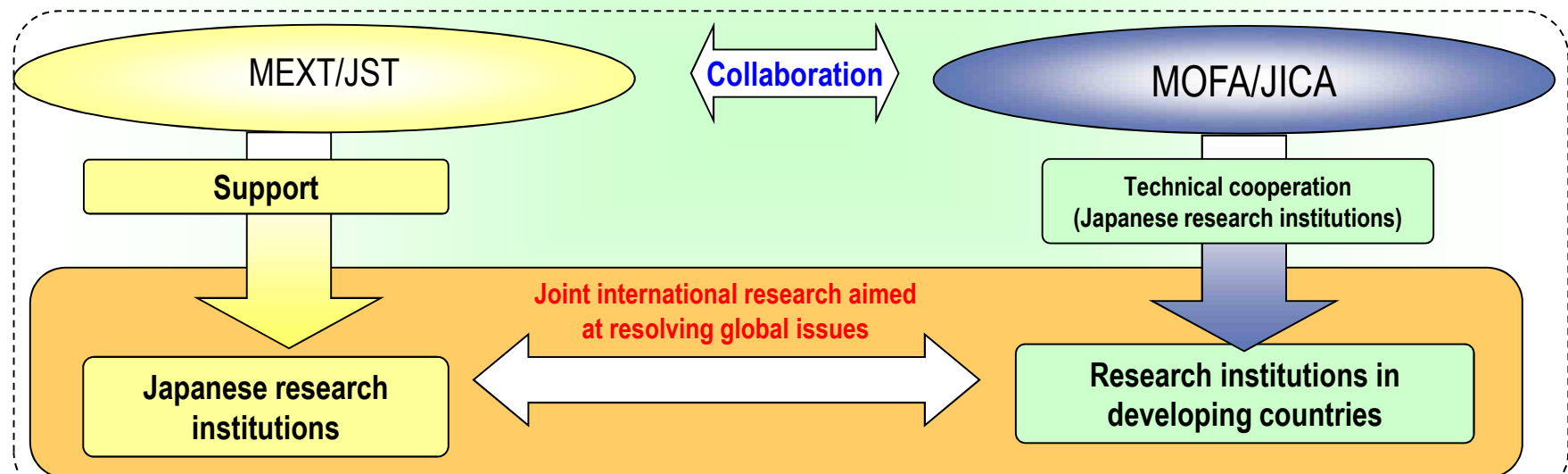
➤ **Cooperating University in Japan**

70 Universities, 148 graduate courses

Example of JICA-university collaboration: Science and technology partnerships to resolve global issues

Science and Technology Research Partnership for Sustainable Development (SATREPS)

- The SATREPS program carries out international joint research involving research institutions in Japan and developing countries working in partnership with MOFA, JICA, MEXT, and JST to resolve **global issues** in the areas of environment and energy, disaster management, and infectious disease.
- The joint research is designed not only to generate problem-solving outcomes, but also to strengthen the capacity of research institutions in developing countries.



MEXT: Japan Ministry of Education, Culture, Sports, Science and Technology
JST: Japan Science and Technology Agency
MOFA: Japan Ministry of Foreign Affairs

**Strengthen the ability of developing nations
to resolve issues on their own**

Thank you for your kind attention.

JICA's Support
for HRD in Mining Sector

Hosoi.Yoshitaka@jica.go.jp
JICA