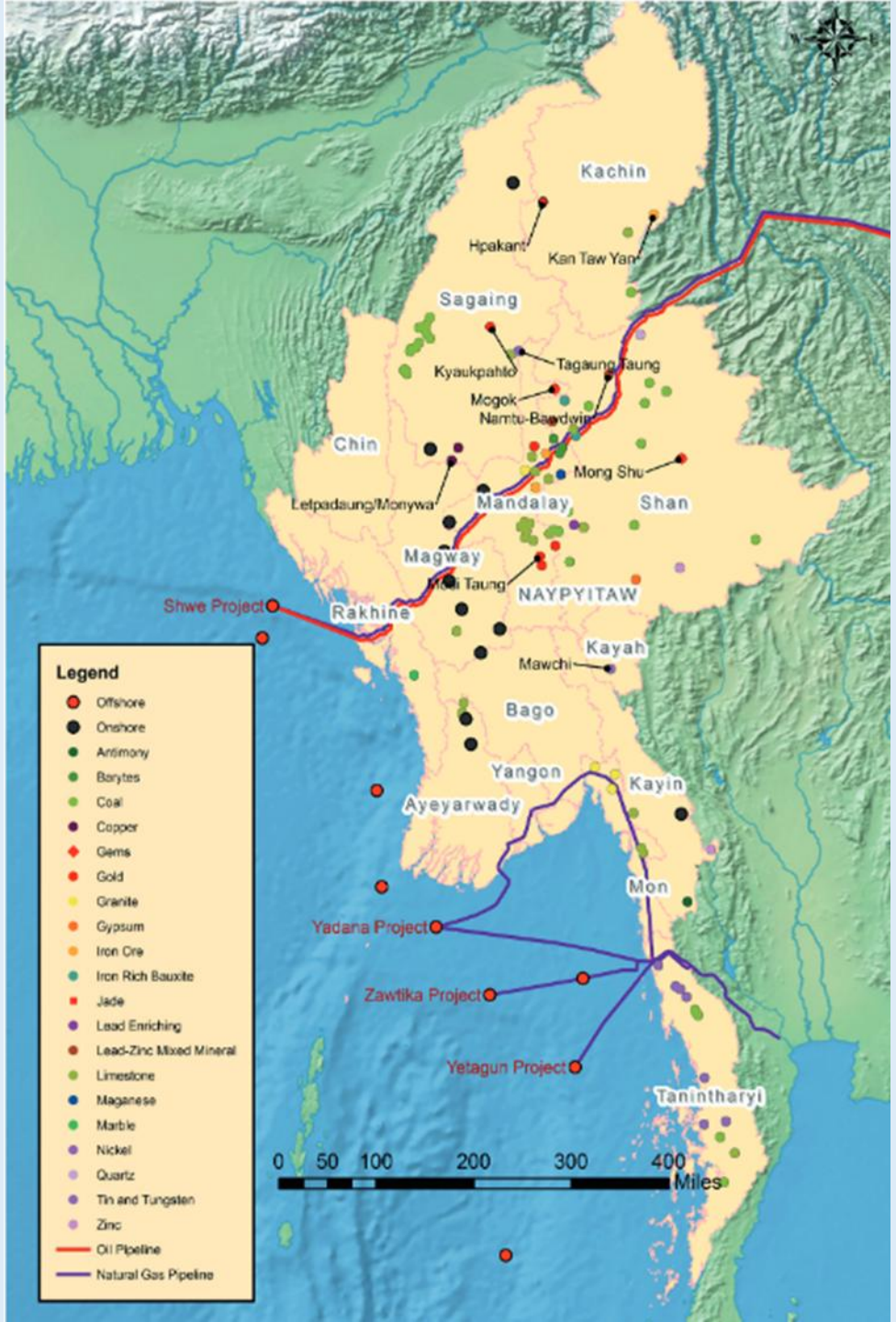
Resource Revenue Sharing

Maps of extractive activities in Myanmar



LOCATION OF NON-RENEWABLE NATURAL RESOURCES AND SCALE OF RESOURCE REVENUE

Map Maker- Thet Naing Oo

Minerals

- Active legal mines in all states and regions except Chin State
- Major Production: Rare Earth, Jade, Rubies, gold, nickel, copper and limestone

Heavy Rare Earth Elements (HREE)

Location – *Chipwi, Panwa, Tsawlaw*

Myanmar is responsible for 57% of global dysprosium and terbium mine supply in 2023, which is worth $ 1.4 Billion. It is exported through China which withholds 90% monopoly on the production and processing of HREE.

Well-known mines are:

❖ Jade Mines	Hpakant	Kachin State
❖ Copper Mines	Letpadaung	Sagaing Region
❖ Nickel Mines	Tagaung	Sagaing Region
❖ Gold Mines	Modi-Momi	Sagaing Region
❖ Gold Mines	Kyaukpahto	Mandalay Region
❖ Rubies, Sapphires	Mogok	Mandalay Region
❖ Iron Ore		Kachin, Bago and Shan
❖ Lead and Zinc		Shan, Taninthari

REVENUE

- UN Trade Data - $ 12.3 Billion in precious stones were exported to China in 2014.
- Global Witness – Gross Jade Production in 2014 was roughly $31 Billion.

Noted that actual mineral exports were more than 10 times more valuable than what was reported by the government.

Oil and Gas

- It is estimated that Myanmar has 10 trillion cubic feet of proven natural gas.
- Yadana and Yetagun Offshore Gas Field and pipeline runs through Yangon, Bago, Mon and Tanintharyi.
- Shwe oil and gas pipeline passes through Rakhine, Magway, Mandalay and Shan.
- There are at least 49 onshore blocks in different phases of auction, exploration and production, mostly in Magwae and Bago regions.
- The sale value of oil and gas in 2012-2013 was estimated around $ 5 Billion, with gas export alone accounting for nearly $3.7 Billion.

Eight Principles for Resource Revenue Transfer

Principle 1: Clarify Objectives

- ❖ Compensate local communities for the negative impacts of extraction
- ❖ Mitigate or prevent violent conflict
- ❖ Respond to local claims for benefit, based on the ideas of local ownership
- ❖ Promote Regional income equality between resource and non-resource-rich regions.

Revenue-sharing options linked to objectives

Objective	Share options	Indicator options
Benefit equalization/ decentralized accountability/ build local capacity	• Equal share to all regions • __% to each citizen	• Population index • Poverty index • Education index • Health index • Wage index • Transportation index
Reduce regional income inequalities	• Equal share to all regions	• Inverse revenue generation capacity index (e.g., local GDP share of national GDP) • Poverty index
Compensation to producing regions	• __% to directly affected regions • __% to indirectly affected regions • __% to affected communities / citizens / landowners	• Environmental damage index • Job loss index
Conflict prevention	• __% to producing regions • __% to non-producing regions • __% to special interest groups	• "Fair" formula with broad-based and public consultation

Principle 2: Balance Revenue and Expenditure Assignment

Transfer of resource revenue should be linked to Expenditure Responsibilities or costs of public service deliveries such as education, health, public safety, social protection and transportation. Again, Expenditure responsibilities should be linked to local administrative capacity building.

Expenditure responsibilities by level of government

National	Capital city and aimag	Soum
• Education services • Health services • Defense • Pensions • Foreign affairs • Mining • Energy • Industrial policy • National transport infrastructure (e.g., roads, railways)	• Urban planning and establishing new infrastructure • Social care, welfare services and poverty alleviation • Development of small and medium-sized enterprises • Water supply, sewerage and drainage systems • Housing • Public transport • Environmental protection and rehabilitation • Large scale roads and bridges • Utilities for public areas, landscaping, public hygiene, street lighting, cleaning, and waste removal • Maintaining electrical infrastructure	• Utilities for public areas, public hygiene, street lighting, cleaning and waste removal • Protection of nature and the environment • Public lighting • Maintenance of sidewalks, recreational areas and children's playgrounds

Revenues by level of government

National	Capital city and aimag
• Corporate income tax • Value added tax • Excise tax • Customs duties • Fuel and diesel tax • Mineral royalties • Mining license fees • Air pollution fees • Water pollution fees • SOE dividends	• Personal income tax • Land use fees • Immovable property tax • Vehicle tax • Water use fee • Common minerals royalty • Income on local property

Principle 3: Promote Fiscal Responsibility and Stabilizing Resource Revenue Transfer

Dutch Disease: The Cycle of Boom and Burst in a Resource Revenue-Dependent Economy.

Dutch Disease

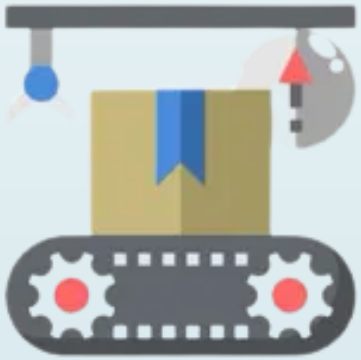
- Economic problems that occur when a sudden increase in natural resources leads to a fall in other sectors of an economy.

(This economic disease is mainly associated with the sudden discovery of natural resources in a country, followed by the negative economic consequences. The resource-rich countries may experience economic decline or an imbalance due to the ill treatment of these natural resources.)

DUTCH DISEASE

Economic problems

associated with



a sudden increase in the natural resources

leading to

a decline in other sectors of economy

www.economicsonline.co.uk

Historical Background

- The Economist magazine (1977)

Referring to the bad experience in the Netherlands when natural gas was discovered there in 1959

- Result, other sectors of industry (manufacturing sectors) remained underdeveloped, leading to their decline
- Netherlands faced negative economic consequences in the form of currency appreciation, less competitive manufactured products, high unemployment, and a decline in other sectors of industry due to the Dutch disease.

Causes of the Dutch Disease

- Discovery of Natural Resources

sudden discovery or an increase in the extraction of natural resources

- Other Causes

the sharp increase in the prices of natural resources in the world market, financial aid or assistance from other countries, and an increase in foreign direct investment (FDI)

Effects of the Dutch Disease

- Economic Imbalance
- Currency Appreciation
- Decline in Non-Resource Industries
- Vulnerability to Price Volatility
- Lack of Diversification
- Higher Imports
- Income Inequality

Effects of Dutch Disease	Brief Description
Economic Imbalance	Over-reliance on a specific resource sector hampers the growth of other sectors like agriculture and manufacturing, leading to economic imbalance.
Currency Appreciation	Surges in revenue from resource exports cause currency appreciation, making non-resource sectors less competitive internationally.
Decline in Non-Resource Industries	Dominance of the resource sector results in a decline in job opportunities, investment, and innovation in non-resource industries.
Vulnerability to Price Volatility	Heavy dependence on resource exports exposes countries to price fluctuations, impacting revenue and overall economic stability.
Lack of Diversification	Dutch disease impedes economic diversification, making it difficult for a country to bear economic shocks from changing global market conditions.

Precautions for Dutch Disease

- Promote Economic Diversification
- Develop Human Capital
- Implement Effective Resource Management
- Foster Innovation and Technology
- Strengthen Infrastructure
- Encourage Export Diversification
- Foster Small and Medium Enterprises (SMEs)
- Enhance Trade Policies
- Implement Countercyclical Fiscal Policies
- Strengthen Institutions and Governance

Doctor’s Orders to Address Dutch Disease

- Economic Diversification Prescription
- Currency Management Treatment
- Resource Revenue Stabilization Therapy
- Infrastructure Enhancement Prescription
- Policy Coordination Medication

Development Implications of Dutch Disease

- Economic Dependence
- Limited Diversification
- Job Market Challenges
- Inequality and Poverty
- Volatile Economic Growth

Government Policies to Overcome Dutch Disease

- Diversification Efforts
- Resource Revenue Management
- Exchange Rate Policies
- Skill Development and Education
- Institutional Reforms

Four Possible Ways to address this challenge:

(1) SNG can be allowed to save resource revenue windfalls for when revenue decline unexpectedly, e.g a natural resource fund

Sovereign Wealth Funds SWF

SWFs are state-owned funds that invest, usually at longer term, fiscal resources to finance future expenditures, be it for economic stabilization, saving for future generations, or supporting a country's economic transformation.

Norway’s sovereign wealth fund

- The largest of its kind in the world was set up in the 1990s to invest excess revenues from Norway’s oil and gas industry;
- Norges Bank Investment Management (NBIM) manages the fund on behalf of the Norwegian population.
- The fund is currently an investor in more than 8,000 companies across 63 countries. The fund is a shareholder in global companies including tech giants Apple, Microsoft, Nvidia and Amazon, with 70% of its benchmark index comprised of equities.
- The sovereign wealth fund also invests in fixed income, including government and corporate bonds, as well as in real estate and renewable energy infrastructure.
- The fund’s 2024 profit surpassed the record set a year earlier when it achieved a full-year profit of 2.22 trillion kroner ($222.4 billion) .

Principle 4: Smooth fiscal expenditure and make spending predictable

While National Govt. ensure smooth fiscal transfer to subnational government (SNG), SNG has to improve its ability to have a balanced budget and to handle fiscal instability due to resource volatility, making preparation including saving in a sovereign wealth fund.

Principle 5: Simplicity and enforceability of Resource Revenue Sharing Formula

Resource Sharing formula should be simple enough for SNG and CSOs so that transfers can be easily verified, spending can be monitored and thus help prevent corruption.

VERTICAL ALLOCATION

Vertical distribution ought to be a function of the relative cost of adequate service provision over national and subnational expenditure responsibilities, respectively. It should also be a function of the revenue-generating capacity at each level of government. The first step in deciding the vertical distribution is to estimate the cost of each expenditure item under each government jurisdiction as well as revenue generating capacity for each level.

HORIZONTAL ALLOCATION

Distribution of resource revenue among subnational jurisdictions at the same level of authority. There are 2 types of channels.

1. Derivation-based transfer
2. Indicator-based transfer

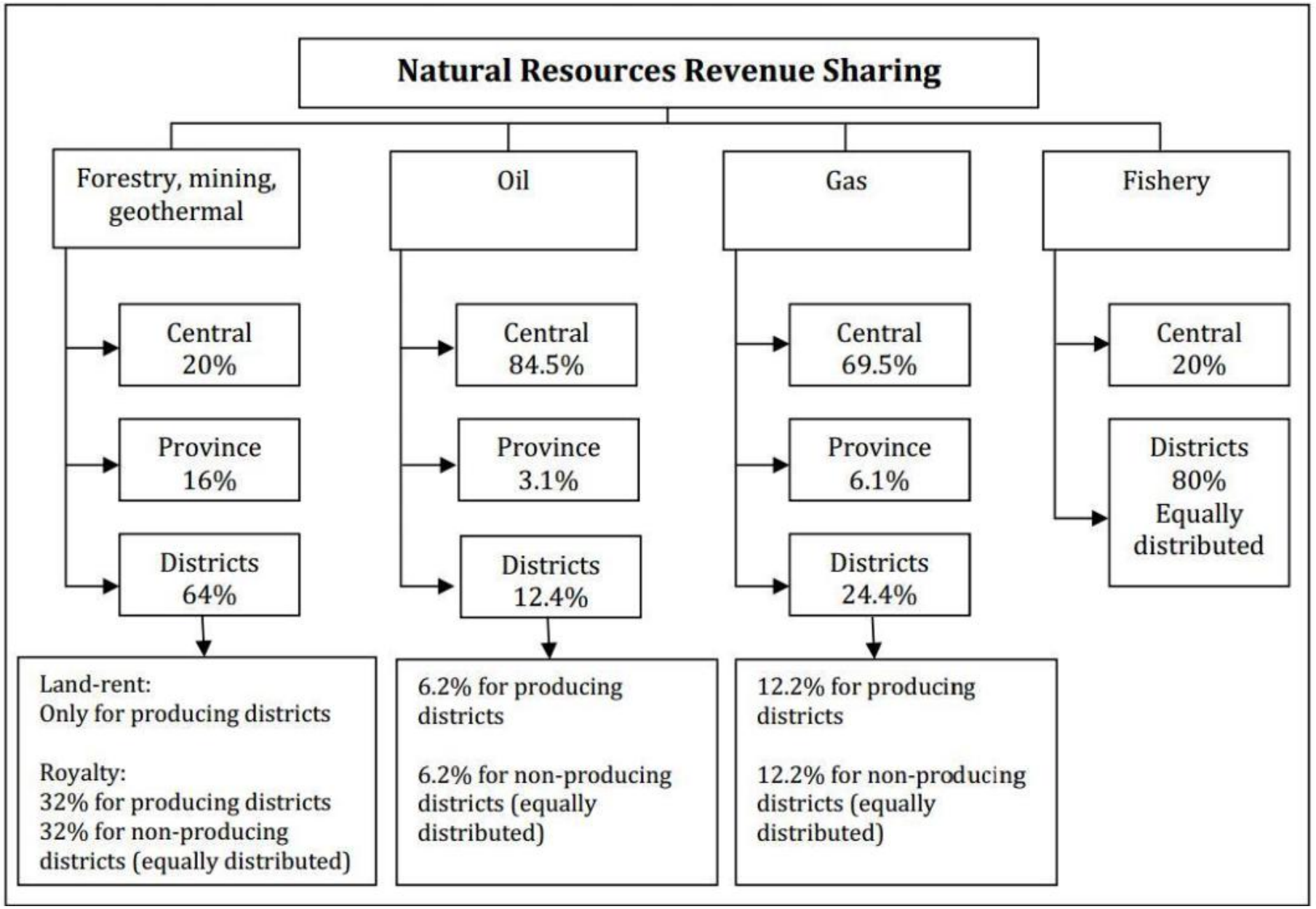
Derivation-based transfer

A defined share of resource revenue generated in that region, is usually measured by production value.

De jure derivation-based intergovernmental transfer formulas in selected countries

Country	Resource	Revenue stream	Central government	Producing regional/provincial/state governments	Municipal/district governments		Private (e.g., landowner, traditional institutions)
					Producing	Non-producing	
Brazil	On-shore oil	Royalties	12.6%	52.5%	26.2%	8.7%	0.5-1.0%
	On-shore oil	Special participation (some fields)	50%	40%	10%	0%	0.5-1.0%
Ghana	Minerals	Royalties	91%	-	4.95%	0%	4.05%
Indonesia	Oil	All	84.5%	3.1%	6.2%	6.2%	0%
	Gas	All	69.5%	6.1%	12.2%	12.2%	0%
	Minerals	Royalties	20%	16%	32%	32%	0%
Philippines	Minerals	All	60%	8%	18% municipality; 14% barangay	0%	0%
Uganda	Petroleum	Royalties	93%	-	6%	0%	1%

Indonesia's revenue sharing arrangement; Natural Resources Sharing arrangement



Source;
http://www.gsdrc.org/

Indicator-based transfer

The amount transfer is calculated using a formula consisting of objective and measurable indicators such as population, poverty rates, or regional GDP. Within an Indicator-based transfer system, all revenue can be pooled and redistributed, or natural resources revenue can be separated from other types of revenue.

Decide to share ALL REVENU STREAMS or transfer some.

Common Revenue Streams are –

- ❑ Royalties
- ❑ Signature bonuses
- ❑ Profit taxes
- ❑ Property taxes
- ❑ Goods and Services Taxes
- ❑ License Fees
- ❑ Fines and Penalties

TYPES OF NATURAL RESOURCES REVENUE SHARING

Group 1- All resource revenues are pooled centrally with revenues from other sources and form part of regular transfer to SNGs that do not treat resources revenue differently from non-resource revenue.

It is called vertical distribution system which refers to the split in revenue share between the National and Subnational Governments. [Chart: Indonesia ‘s Revenue Sharing Arrangement.]

e.g. Algeria, Chile, Norway, Vietnam

Group 2- A unique intergovernmental transfer system for natural resources revenue without allocating larger portion to natural resources producing regions.

e.g. Mexico

Group 3- Separate out natural resources revenue and make allocation from this pool to producing regions or communities using legislated derivation-based formula (Table 2- page 34)

e.g. Brazil, Columbia, DRC, Ecuador, Ghana, Indonesia, [See Table] Iraq, Mongolia, Nigeria, Papua New Guinea, Philippines, Southern Sudan, Uganda, Venezuela.

Special Transfer System of Natural Resources Revenue:

- Indonesia – Asymmetrical Revenue Sharing Model : Aceh will receive 70% of oil and gas revenue for 9 years, Papua and West Papua will each receive 70% of oil and gas revenue for 25 years. After these years, they will receive 50%. (2005 MOU which ended Ache conflict)
- Sudan – Agreement on Wealth Sharing (AWS) stipulated that net oil revenues should be split equally between Govt, of Sudan and Govt. of Southern Sudan.
- Malaysia – A fixed 5% royalties is given to oil producing States.

Derivative-based system + Indicators- based mixed system:

- **Nigeria – The** Constitution stipulates that population, equality of States, internal revenue generation, and land mass (area) must all be taken into account when deciding on the formula for oil revenue sharing. A minimum of 13% of oil revenue must be reserved for oil-producing States according to each state's level of production. The remaining 87% is then pooled with revenues from other sources. Of this new pool, 47% is allocated to states and municipalities according to a formula that includes population, social development and internal revenue generation efforts indicators. [Parliament decides on the formula sharing oil revenues for every 5 years.] [Special Transfer System mixed with the derivation-based system.
- **Mongolia** – 30% of mining royalties go directly to the mining provinces as well as 50% of license fees will go to the Local Development Fund of mining provinces.

  5% of mining royalties and 30% of petroleum royalties are pooled and then distributed to the provinces and the capital city according to the derivative-based formula. [See Table]

Principle 6: Achieve national consensus on the formula

- Enhance the ability of all levels of government and relevant stakeholders to reach a consensus on a formula that can survive political transitions.
- Making industry and Financial experts available during the early stages of a negotiation process can be very beneficial. It enables a move away from the politics of resource governance towards technical aspects of resource governance. Experts can provide stakeholders with realistic assessment of the issues involved and can deal with unrealistic expectations, especially regarding money.

Principle 7: Codify the formula in law

Authorization of Resource Governance Bodies and Institutions at different level of Government, Revenue sharing formula, monitoring and evaluation mechanism and Oversight mechanism should be codified in legislation or regulation.

Principle 8: Make revenue sharing transparent and verify amounts

TRANSPARENCY AND OVERSIGHT

- Data and Information related to resource extractions, collection of revenues, revenue streams assigned to collect at different levels of government, and intergovernmental financial transfer for each Extractive Industry Project should be compiled by relevant Ministries and made publicly available.
- Project-by-project payment information and payments by companies must be broken down in detail.
- Institutional quality is key for the successful management of resource revenues. In particular, technical capacity in public institutions responsible for managing resource revenue is vital for successful SNG of natural resources revenues. Institutional reform focusing on these institutions should be the strategic priority for a democratic transition.
- The Annual Auditor General's Report to Pyidaungsu Hluttaw should include all this information.
- Myanmar Extractive Industry Transparency International (M-EITI) should be strengthened.

Models of Oversight Mechanism

India: Every five years, the Finance Commissions are constituted to make recommendations to the President on subnational transfer and how to improve revenue generations at local level. Under the Indian Constitution, the report must be presented to both houses of parliament and the government must respond to each recommendation.

Nigeria: The Revenue Mobilization, Allocation and Fiscal Commission – Chaired by Minister of Finance and that includes finance commissioners from each state – monitor disbursements to the states and reviews the subnational allocation formula.

Good Governance in Resource Management refers to the principles, systems, and practices that ensure natural resources—such as minerals, forests, water, and land—are managed in a fair, transparent, inclusive, and sustainable way for the benefit of all stakeholders, especially the public.

🔑 Key Principles of Good Governance in Resource Management

1. **Transparency**
   - Open access to information on resource contracts, revenues, environmental impacts, and government decisions.
   - Use of tools like the **Extractive Industries Transparency Initiative (EITI)** to publish data on resource revenues.
2. **Accountability**
   - Decision-makers are held responsible by laws, institutions, and public oversight.
   - Clear roles and responsibilities for governments, companies, and communities.
3. **Participation**
   - Inclusion of local communities, civil society, and indigenous groups in decision-making.
   - Respect for Free, Prior, and Informed Consent (FPIC)..

4.Rule of Law

- Legal frameworks that protect rights, enforce contracts, and prevent corruption.
- Independent judiciary and regulatory bodies.

5.Equity

- Fair distribution of resource benefits across society.
- Avoidance of elite capture and marginalization of vulnerable groups.

6.Sustainability

- Resource extraction does not harm the environment or future generations.
- Revenue management supports long-term development (e.g., sovereign wealth funds).

Why It Matters

- Prevents **conflict** over resources.
- Enhances **economic growth** and **poverty reduction**.
- Reduces **corruption** and **mismanagement**.
- Builds **trust** between citizens, companies, and governments.
- Promotes **environmental protection** and **climate resilience**.

Tools and Mechanisms

- **EITI Standard** – ensures disclosure of resource revenues.
- **Natural Resource Charters** – provide governance frameworks.
- **Environmental Impact Assessments (EIAs)**
- **Open Contracting** and **Beneficial Ownership Registers**

Example: EITI in Practice

Countries implementing EITI must:

. Publish data on resource revenues, taxes, and royalties.
. Involve civil society in oversight.
. Provide open and accessible information to the public.

GUIDING PRINCIPLES OF RESOURCE MANAGEMENT AND ENVIRONMENTAL POLICY

Common Property Rights:

- **Most natural resources are common property resources.**
- **Common Property Rights must be subject to government regulation in the interest of society as a whole.**
- **If the country is to pursue its future development relying heavily on a free market economy, whatever property rights are granted to individual owners must be defined strictly, and in particular must be protected from capricious interference from the state authorities just by citing the social interest.**
- **The management of natural resources and environment is a matter of great importance for social welfare. But this does not mean that the exploitation of these resources has to be carried out only by the government. On the other hand, neither does it mean that the management of these resources can be left entirely to the domestic or the foreign private sector. The correct policy is that while the management of these resources may be left to the private sector, it should be subject to regulation in the social interest. A better procedure is to influence the private sector management of these resources through the price system, such as taxes, subsidies and penalties (Polluter Pay the Price-PPP System). This type of regulation will be more in accord with the sort of free market economy.**

Benefit for the Future Generation:

The most important factor that will determine the use of these resources should be how and to what extent we could convert the large part of earnings from the sales of these resources into productive assets or investments in the country so that the ultimate fruits of these efforts could be enjoyed by future generations as well.

Maximum Sustainable Yield:

The ultimate limit of how much we could exploit our renewable resources will be the maximum sustainable yield (MSY), set with the objective that the existing ecosystem, including rivers, watershed areas, and forest areas will be maintained.

Not the Resource Dependence Development Policy:

Our long-term economic growth path must be laid on the basis of industrialization and technical development rather than complete dependence on resource-based development.

Thank You

(2) The SNG government can borrow when revenue declines and pay down the debt when there is a large resource revenue windfall.

(3) The Union government could smooth transfers on behalf of SNGs. For example, the UG could establish a **“Subnational Transfer Fund”** and make allocations not on an annual basis but based on a seven-to eleven-year moving average of resource revenues.

(4) Rather than a derivation-based formula, indicator-based formula could be used. For example, resource revenues can be distributed based on fiscal gaps or unemployment indicators.