

Natural Resource Management and Subnational Governments

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PRINCIPLES OF FISCAL FEDERALISM



National public goods vs Local public goods

Competition between communities (Tiebout Hypothesis)

Adaptation to preference and shared responsibilities

Market Failures

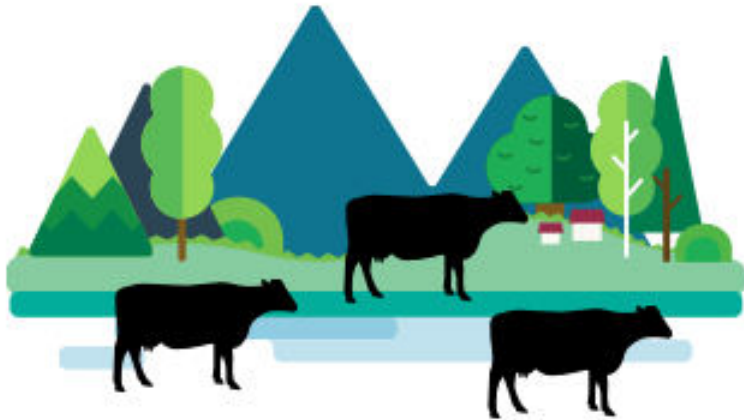
- Externalities
- (Tax) Competition and profit maximization vs. economic gardening

Redistribution

Inequality (Individuals and Communities)

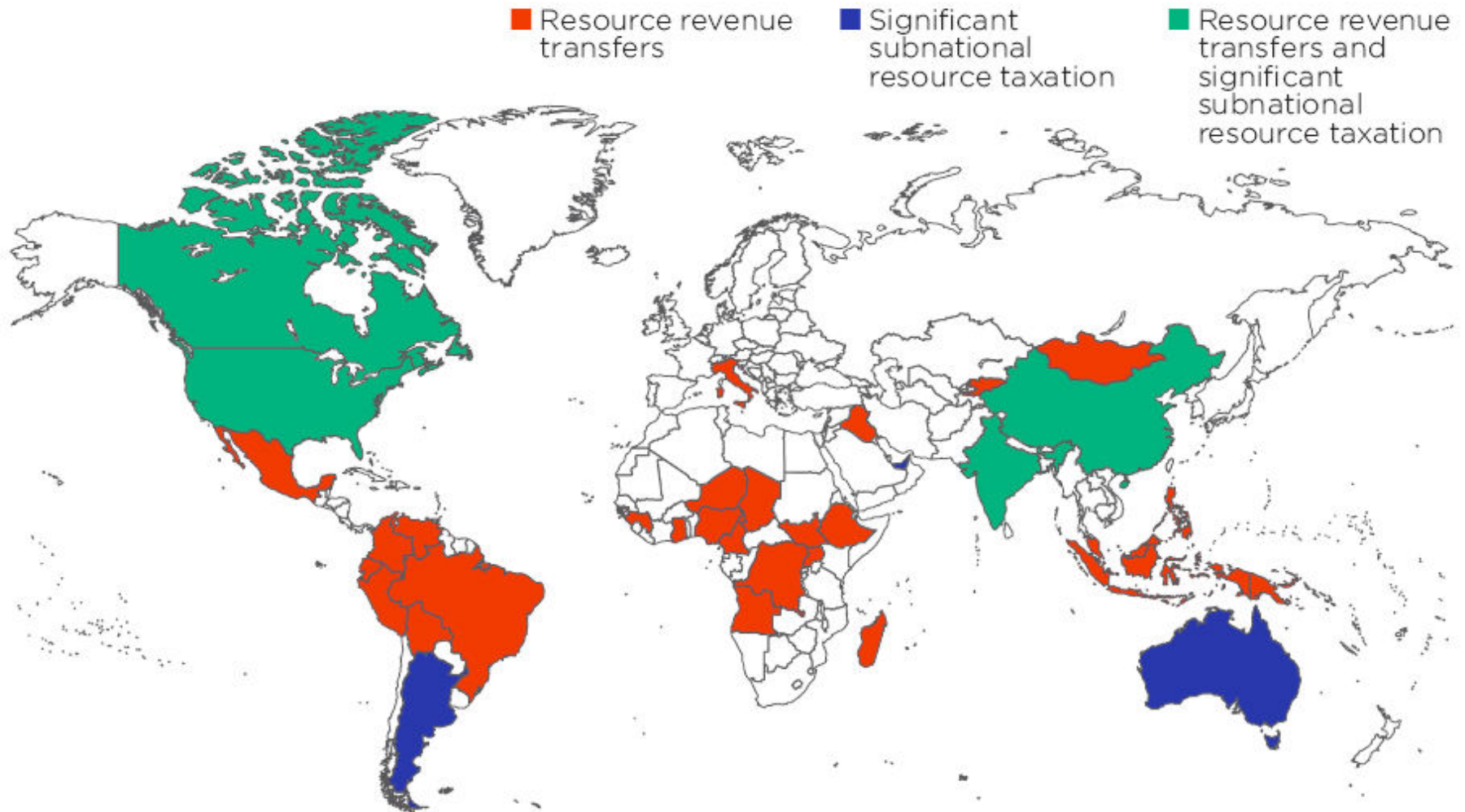


DIVISION OF RESPONSIBILITIES



- Economies of scale
- Capacity
- Available resources
 - Size of funding
 - Fiscal transfer
 - Devolved fiscal power
- Decision making process

RESOURCE REVENUE SHARING AROUND THE WORLD



Source: Bauer et al. 2016, Natural Resource Revenue Sharing, NRGI and UNDP.

SUBNATIONAL TAX COLLECTION - MINING

COUNTRY	GOVERNMENT STRUCTURE	CORPORATE INCOME TAX		ROYALTIES		PROPERTY/ LAND TAXES	
		N	S	N	S	N	S
Argentina	Federal	X			X		X
Australia	Federal	X		X ^a	X	X ^a	X
Brazil	Federal	X		X		X	
Canada	Federal	X	X	X ^a	X	X ^a	X
Chile	Unitary	X				X	
China	Unitary	X			X		X
Democratic Republic of the Congo (DRC)	Unitary	X		X			X
Ghana	Unitary	X		X			X
India	Federal	X			X		X
Indonesia	Regionalized unitary	X		X		X	X
Kazakhstan	Unitary	X		X			X
Kyrgyzstan	Unitary	X		X	X ^b		X
Malaysia	Federal	X	X		X		X
Mexico	Federal	X		X		X	
Mongolia	Unitary	X		X			X
Myanmar	Unitary	X		X		X	X
Peru	Unitary	X		X			X
Philippines	Regionalized unitary	X	X	X	X ^c		X

Source: Bauer et al. 2016, Natural Resource Revenue Sharing, NRGI and UNDP.

DERIVATION-BASED INTERGOVERNMENTAL TRANSFERS

COUNTRY	RESOURCE	REVENUE STREAM	CENTRAL GOVERNMENT	PRODUCING REGIONAL/ PROVINCIAL/ STATE GOVERNMENTS		MUNICIPAL/ DISTRICT GOVERNMENTS		PRIVATE (E.G. LAND-OWNERS; TRADITIONAL INSTITUTIONS)
				PRODUCING	NON-PRODUCING	PRODUCING	NON-PRODUCING	
Brazil	On-shore oil	Royalties	15%	20%	25%	10%	30%*	
	On and off-shore oil	Special participation (some fields)	42%	34%	9.5%	5%	9.5%	
Democratic Republic of the Congo (DRC)	Minerals	Royalties	60%	25%		15%		
Ghana	Minerals	Royalties	91%			4.95%		4.05%
Indonesia	Oil	All	84.5%	3.1%		6.2%	6.2%	
	Gas	All	69.5%	6.1%		12.2%	12.2%	
	Minerals	Royalties	20%	16%		32%	32%	
Philippines	Minerals	All	60%	8%		18% municipality; 14% barangay		
Uganda	Petroleum	Royalties	93%			6%		1%

Source: Bauer et al. 2016, Natural Resource Revenue Sharing, NRGI and UNDP.

FISCAL POWER



MOBILIZATION OF RESOURCES

Principles of Taxation (Stiglitz, 2000)

1. Efficiency – the tax system should not be distortionary; it should be used to enhance economic efficiency
2. Administrative simplicity – tax system should have low costs of administration and compliance
3. Flexibility – the tax system should allow easy adaptation changing circumstances
4. Political responsibility – the tax system should be transparent
5. Fairness – the tax system should be, should be seen to be, fair, treating those in similar circumstances similarly, and imposing higher taxes on those who can better bear the burden of taxation.

TAXATION PRINCIPLES FOR THE EXTRACTIVE SECTOR

1. Certainty, fiscal stability, and administrative convenience apart from neutrality (Sarma & Naresh, 2001).
2. The government has to secure an **appropriate share in the mineral rent as owner of minerals**. If valuable minerals are extracted, the government should receive separate payment over and above the regular tax (Sarma & Naresh, 2001).
3. Taxation as a tool to manage the quick exploitation of mineral resources producing cheap products that are consumed wastefully.
4. Accounts for negative externality.

SAMPLE TAXES AND FISCAL INCENTIVES/LIMITATIONS

Taxes and Incentives		Philippines	Papua New Guinea	Indonesia	Vietnam
Corporate Income Tax		30%	37% ^d 40% ^e 2% ^f	25%	32-50% ⁿ
Mineral Taxes	Gold	2% ^a	2% ^a	3.75% ^h	15% ^o
	Nickel			4-5% ⁱ	10%
	Copper			4% ^j	10%
	Additional tax in mineral reservation areas	5% ^b		10% ^k	
	Tax to indigenous communities	1% ^c			
Export tax		-		20%	10%
Withholding tax on dividends		15%	15%	20%	-
Withholding tax on royalties		30%	10-15% ^g	20%	-
Withholding tax on interests		20%	10-15% ^g	20%	-
Fiscal Incentives/ Limitations					
Ring fencing		No	Yes	No	No
Income tax holiday		Yes ^l	Yes	Yes	Yes
Accelerated depreciation		Yes	Yes	Yes	Yes
Deduction of exploration expense		Yes	Yes	Yes	Yes
Carried forward tax losses		Yes	Yes	Yes	Yes
Thin capitalization limit ^m		No	No	No	No

SAMPLES OF TAXES IMPOSED ON MINING COMPANIES (PHILIPPINES)

BIR	Corporate Income Tax
	Excise Tax
	Withholding tax - Foreign shareholder dividends
	Withholding tax - Royalties to claim owners and IPs
BOC	Customs duties
	VAT on imported materials and equipment
	Excise tax on imported goods
MGB	Royalty in mineral reservation
PPA	Fees on ports

LGUs	Community tax
	Environmental fees
	Extraction fees
	Local business tax
	Local wharfage fees
	Mayor's permit
	Mine wastes & tailing fees
	Occupation fees
	Real property tax - Basic
	Real property tax - SEF
	Registration fee
	Regulatory/Administrative fees
	Rental fees on mineral lands
	Other LGU payments

DECISION MAKING PROCESS





1 NATURAL RESOURCE MANAGEMENT

- Fundamental to economic activities
- Who controls and manages?
- Efficiency OR equity?
- Property Rights

2 "NATURE" OF NATURAL RESOURCES

- Who has jurisdiction over the resources?
- How can “non-owners” be prevented from using the resource?
- Avoiding Tragedy of Commons



3

PHILIPPINE REPORT CARD



**58% of
groundwater is
contaminated
(ADB)**



**Only 30% of the
country's river
systems is suitable
for water supply
(ADB)**



**Forest cover has
dropped from 70% to
20%. Only 3.2% of the
total rainforest has
been left as of the
late 1990s.**



The country has been losing valuable ecosystem services due to the growing demand on the environment and natural resources, and poor management.

4

PUBLIC POLICY to MANAGE NATURAL RESOURCES



"One-size-fits-all" Policy



Renewable vs. Non-renewable resources

Point source vs. Non-point source pollution

Endangered vs. non-endangered

Presence (or non-presence) of indigenous people

Fragility of natural resource

Locational context and issues

Stakeholders

Multiple Jurisdictions

5

KEY ISSUES



WHO DECIDES?



**WHO WILL BEAR
THE COST?**



**WHO SHOULD
ENJOY THE
BENEFITS?**



**HOW WILL
ECONOMIC BENEFITS
BE DISTRIBUTED?**



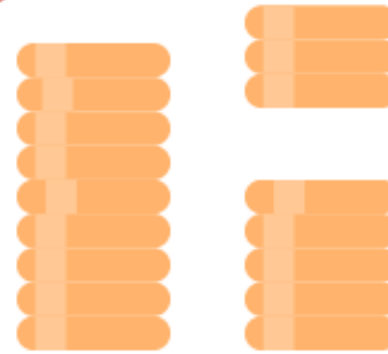
COMMON POLICY CONFLICTS TO NATURAL RESOURCE PROBLEMS

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KEY ISSUES: OWNERSHIP and PROPERTY RIGHTS



FISCAL AUTONOMY



SHARING



**FUND
MANAGEMENT**



**ENVI COST
AND BENEFIT**



**EQUITY and
REDISTRIBUTION**

5

KEY ISSUES: CONTROL



Regulation
(Decentralization vs.
Cooperative Federalism vs.
Federal Control
Capacity)



Capacity

SEVERE CHALLENGES ON NATURAL RESOURCE TRANSFERS

1. Finance not following function (mismatch between revenue and expenditure assignments) → boom-bust cycles and wasteful spending
2. Lack of legal clarity, transparency and oversight → non-payment to subnational authorities
3. Lack of consensus building → no peace

Source: Bauer et al. 2016, Natural Resource Revenue Sharing, NRGI and UNDP.

10 recommendations



Source: Bauer et al. 2016, Natural Resource Revenue Sharing, NRGI and UNDP.

References:

- Stiglitz, J & Rosengard, J. (2015). Economics of the Public Sector.
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