

Poverty, Inequity, and the Distribution of Natural Resource Revenues in Africa

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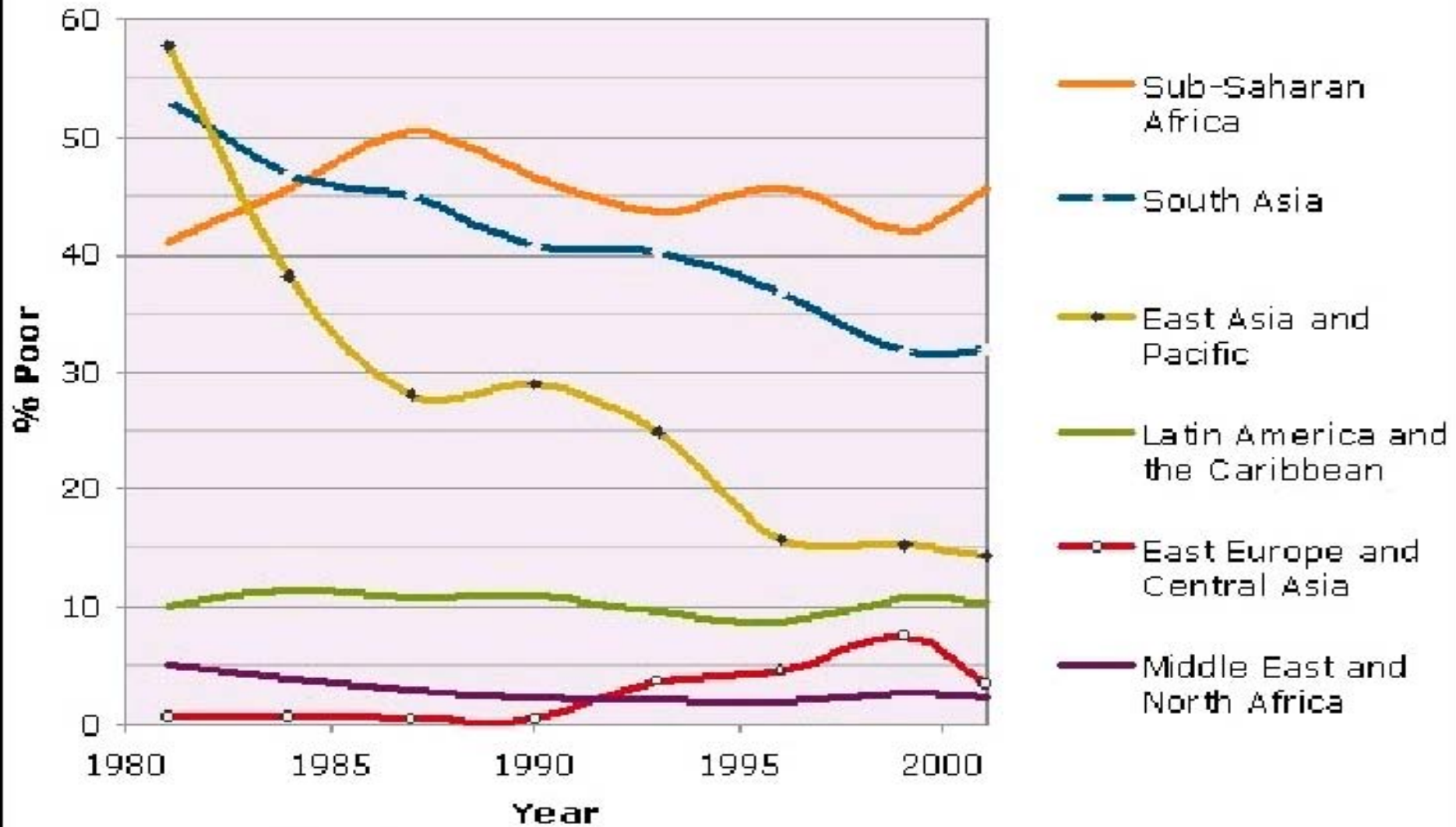
Institutions and Governance Program

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Percent of Population by Region Living on less than \$1.08/day, 1981-2001



Source: World Bank, 2004.



Why Worry About Inequity?

- Inequity retards econ growth and can cause poverty and underdevelopment; equity promotes faster econ growth
- Constitutions guarantee basic right to life and broad-based national development
- Inequity (probably more than poverty) breeds resentment and can lead to violence and ultimately separatist movements



Civil Wars Linked to Resource Wealth: Africa, 1990-2002

<u>STATE</u>	<u>YEAR</u>	<u>NATURAL RESOURCE</u>
Angola	1975-2002	Oil, diamonds
<i>Angola (Cabinda)</i>	1975	Oil
Congo, Rep. of	1997	Oil
Congo, Dem. Rep. of	1996-	Copper, gold, cobalt, diamonds, coltan
Liberia	1989-96	Timber, iron, rubber, gold, diamonds, rubber
<i>Morocco</i>	1975-	Oil, phosphates
Sierra Leone	1991-2000	Diamonds
<i>Sudan</i>	1983-2005?	Oil



Inequity by Region

Gini Index Range **Number of Countries**

60-100				6				
50-59.9				7		5	5	1
40-49.9	8	1	2	9	1	5	6	
30-39.9	14	19	7	7	1	1		2
0-29.9	3	15		1				
	Asia	Europe	Mid East/N Africa	Sub-Saharan Africa	North America	CA & Caribbean	South America	Oceania

Region of the World

Source: 2004 Human Development Report, UNDP



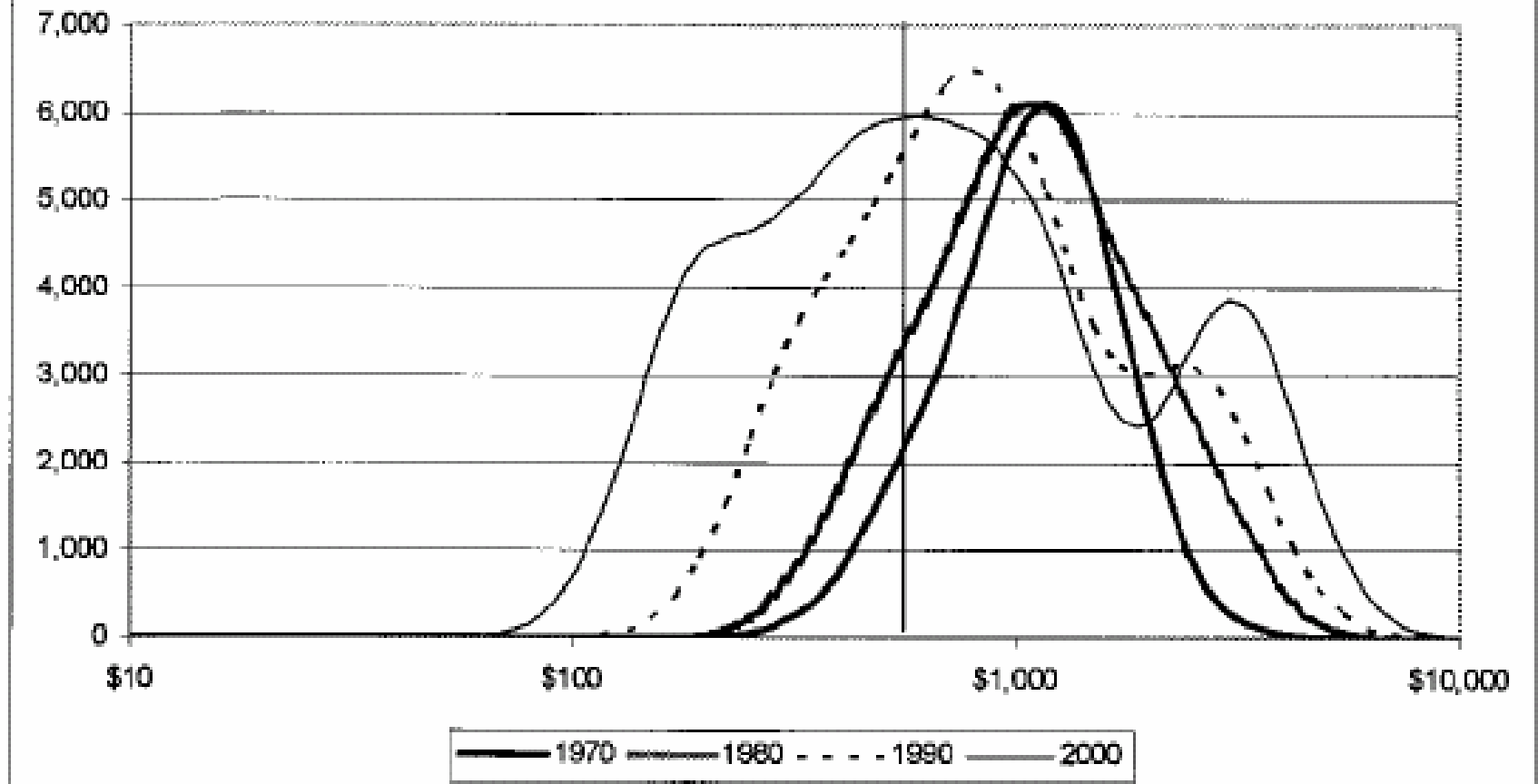
Inequity by Population Group

Gini Coefficient, South Africa

Ethnic Group	1991	1996	2001
African	62	66	72
White	46	50	60
Coloured	52	56	64
Asian	49	52	60
Total	68	69	77



Figure 2: Income Distribution, 1970-2000



Source: Authors' calculations based on Sala-i-Martin (2003)



Addressing Poverty with High Inequity: The Case for Distribution

- Econ policy reforms are conducive to reductions in poverty, econ growth is a necessary, but insufficient condition
- Location (infrastructure, education) and access (finances, land) matter. In their absence, the poor cannot benefit from new economic opportunities, increasing inequity
- Distribution, especially of assets, to the poor, coupled with intensified growth in the sectors in which they engage can speed up their participation in the growth process



Addressing Poverty with High Inequity cont'd

- Distribution is more effective than econ growth in reducing poverty in high inequality countries and in the least developed countries. Small changes in distribution can have a large effect on poverty reduction.
- Multiple targeting methods for poverty reduction. Using more methods produces provides better targeting; implementation matters to outcomes.



Goal and Objectives

Goal. Increase efficiency of econ growth and maximize the reduction in poverty by use of distribution strategy of natural resource assets, especially in countries with high inequity.

Objectives

- Increase the assets of the poor and their opportunities for high returns to these assets so that they can participate in the econ opportunities
- Poverty is a primary criteria in establishing distributions; poor people are targeted in the distribution of public resources
- In resource-dependent economies, poor people capture a disproportionately large share of natural resource revenues



Why Focus on Natural Resource Assets?

- Large, underutilized environmental endowments
- National and household economies driven by natural resources; rural poor most dependent on nature
- Natural resources not evenly distributed in space and not equally accessible to all
- Easier to distribute natural resource assets than other forms of capital
- If not managed well, can lead to poverty, inequity, environmental degradation, unsustainable development



Resource Dependency, 1995

Mineral Dependency

Oil Dependency

Rank	State	% GDP	Rank	State	% GDP
1.	Botswana	35.1	1.	<i>Angola</i>	68.5
2.	<i>Sierra Leone</i>	28.9	6.	<i>Congo, Rep. of</i>	40.9
3.	Zambia	26.1	7.	Nigeria	39.9
5.	Mauritania	18.4	9.	Gabon	36.1
8.	<i>Liberia</i>	12.5	12.	<i>Algeria</i>	23.5
9.	Niger	12.2	14.	Libya	19.8
11.	Guinea	11.8			
12.	<i>Congo, Dem. Rep. of</i>	7.0		Chad, Equatorial Guinea,	
15.	Togo	5.1		Congo Dem Rep of,	
16.	Central African Rep.	4.8		Uganda, Tanzania?	
18.	Ghana	4.6			
20.	<i>Angola</i>	3.6			



Households' Total Income Shares by Quintile and by Major Income Source

Rural Households and their dependence on Environmental Resources (A Case Study of Zimbabwe)

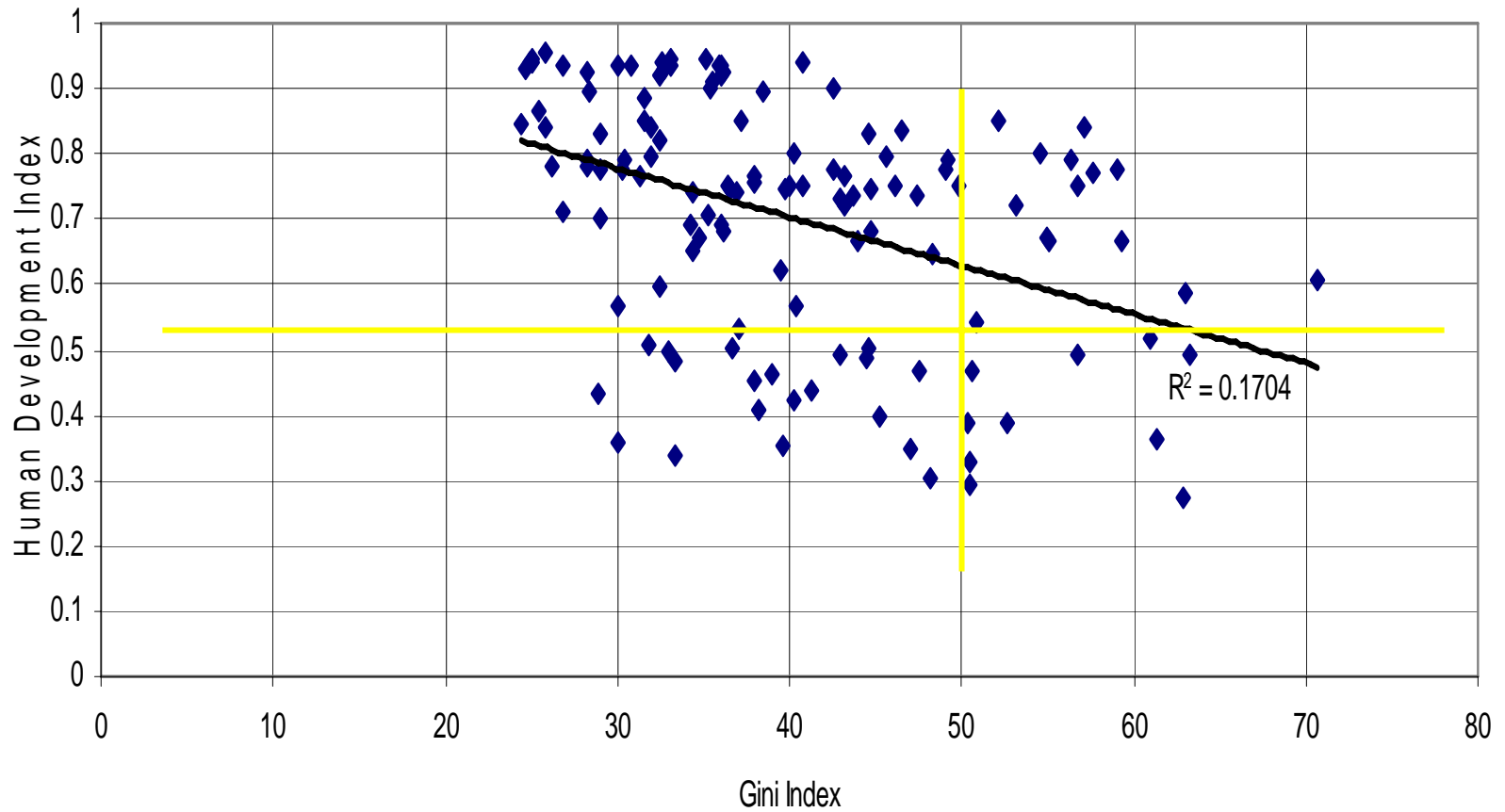
1996/97 Data	96/97 Panel Household Quintile					All Panel Households
	Lowest 20%	20% to 40%	40% to 60%	60% to 80%	Top 20%	
Total Cash Income (Excl. Env. Cash Income)	23.59	27.86	35.28	37.36	47.37	34.27
- Crop Income	2.73	2.88	4.57	4.84	6.71	4.34
- Livestock Income	5.33	4.90	3.49	5.50	7.70	5.38
- Unskilled Labour Income	3.48	1.74	1.68	1.16	0.28	1.67
- Skilled Labour Income (Teaching)	0.00	0.00	0.00	0.00	3.95	0.78
- Crafts and Small-Scale Enterprises	2.60	3.09	4.70	5.42	1.86	3.54
- Remittances	9.46	15.24	20.83	20.44	26.87	18.56
Total Net Gifts/Transfers	4.04	2.00	3.59	5.32	1.92	3.38
Total Own Produced Goods	28.53	28.18	25.55	24.38	20.72	25.48
- Consumption of Own Produced Goods	24.60	23.24	21.55	20.61	17.45	21.50
- Input Use of Own Produced Goods	3.94	4.94	4.00	3.77	3.27	3.99
Total Environmental Income	43.83	41.96	35.59	32.93	29.99	36.87
- Gold Panning	3.88	5.89	2.58	1.88	1.74	3.20
- Natural Habitat Utilization Cash Income	8.85	8.13	3.72	4.78	1.60	5.43
- Consumption of Own Collected Wild Foods	6.83	5.48	4.01	3.44	2.66	4.48
- Consumption of Own Collected Firewood	12.00	9.27	8.37	6.58	4.66	8.17
- Consumption of Own Collected Wild Goods	1.49	0.87	0.66	0.48	0.57	0.81
- Use of Environmental Goods for Housing	4.06	3.11	3.10	1.53	1.13	2.59
- Use of Environmental Goods for Fertilizer	0.64	1.01	0.26	0.28	0.39	0.52
- Livestock Browse/Graze of Environmental Resources	6.09	8.18	12.88	13.96	17.24	11.66
Total Income	100.00	100.00	100.00	100.00	100.00	100.00

- Environmental Income makes a substantial contribution to total incomes, comprising 36.87 percent
- The share of aggregate environmental income decreases as income rises, therefore, the poor are more resource-dependent than the rich

Source: Cavendish 1999



Human Development and the Gini Index



Source: 2004 Human Development Report, UNDP



Two Components of Distributional Equity

Vertical Distribution. The distribution of revenue among institutions along the market chain from the source to the market

Problem: Policies and practices ensure that benefits are concentrated and captured by the elite

Goal: Raise the return of the poor's natural resource assets and enable them to capture a larger share of profits as direct income

Horizontal Distribution. The distribution of public revenues, including public goods/services, across regions and peoples

Problem: Poverty not a main distribution criterion

Goal: Target poor people and regions; rural poor receive a larger share of public assets



Vertical Dist - Charcoal Profits, Senegal

	1994	2002/3
Urban population		
Retailers	12%	?
Urban wholesalers	22%	?
Transporters	-	-
Coxeur de Brousse	-	-
Co-operatives		
Merchants/ Patrons	53%	+
Migrant Wood-cutters	10%	=
Forest Villages	3%	?



Mechanisms of Benefit Concentration

- **VILLAGERS**

- Forest access control

- Threats of violence
 - Village access (wells & housing)

-

- **MERCHANTS**

- Control of labor opportunities

- Permits
 - Credit
 - Control of market access

- - Control of access to markets

- Quotas, licenses
 - Cooperative membership
 - Social ties with government

- - Leverage over prices

- Collusive price fixing
 - Inter-locking credit-labor arrangements
 - Misinformation

- **WOODCUTTERS**

- Access to merchants

- Social ties → Social identity
 - Technical skills

- **WHOLESALEERS**

- Control of distribution

- Credit Arrangements/Capital
 - Knowledge of demand
 - Social ties with vendors & merchants

- **RETAILERS**

- Maintenance of access to wholesalers

- Manipulation of Weight
 - Management plans
 - RC right to say no
 - RC labor allocation
 - Access to RC



Horizontal Distribution

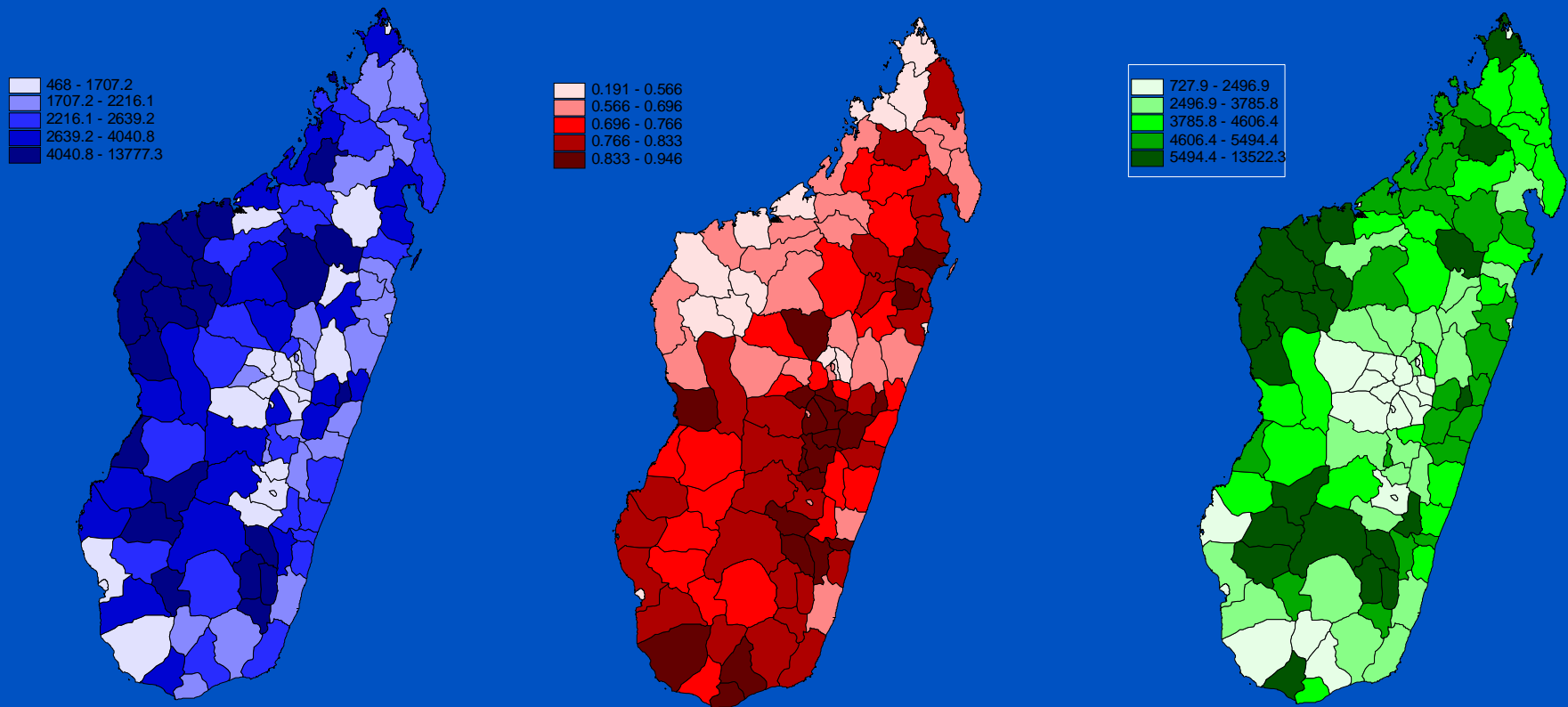
Inter-Jurisdictional Equity. Distributional equity across districts and other sub-divisions within a nation

- A central government responsibility and a function of the willingness of the state to engage in distributive justice among regions
- 3 common disbursement mechanisms
 - Central government public/social services
 - Central government transfers to local levels
 - Central government direct disbursements to citizens



Central Government Public Services and the Poor: Madagascar

District Poverty Incidence



p.c. health to districts

p.c. edu to districts

Central Gov't Transfers to Local Level: Kenya

171 Local Authorities (County Councils)

- Local Authority Transfer Fund. 0.5-5M Ksh; development needs
- LA Service Delivery Action Plan. 0.5-5M Ksh; recurring costs

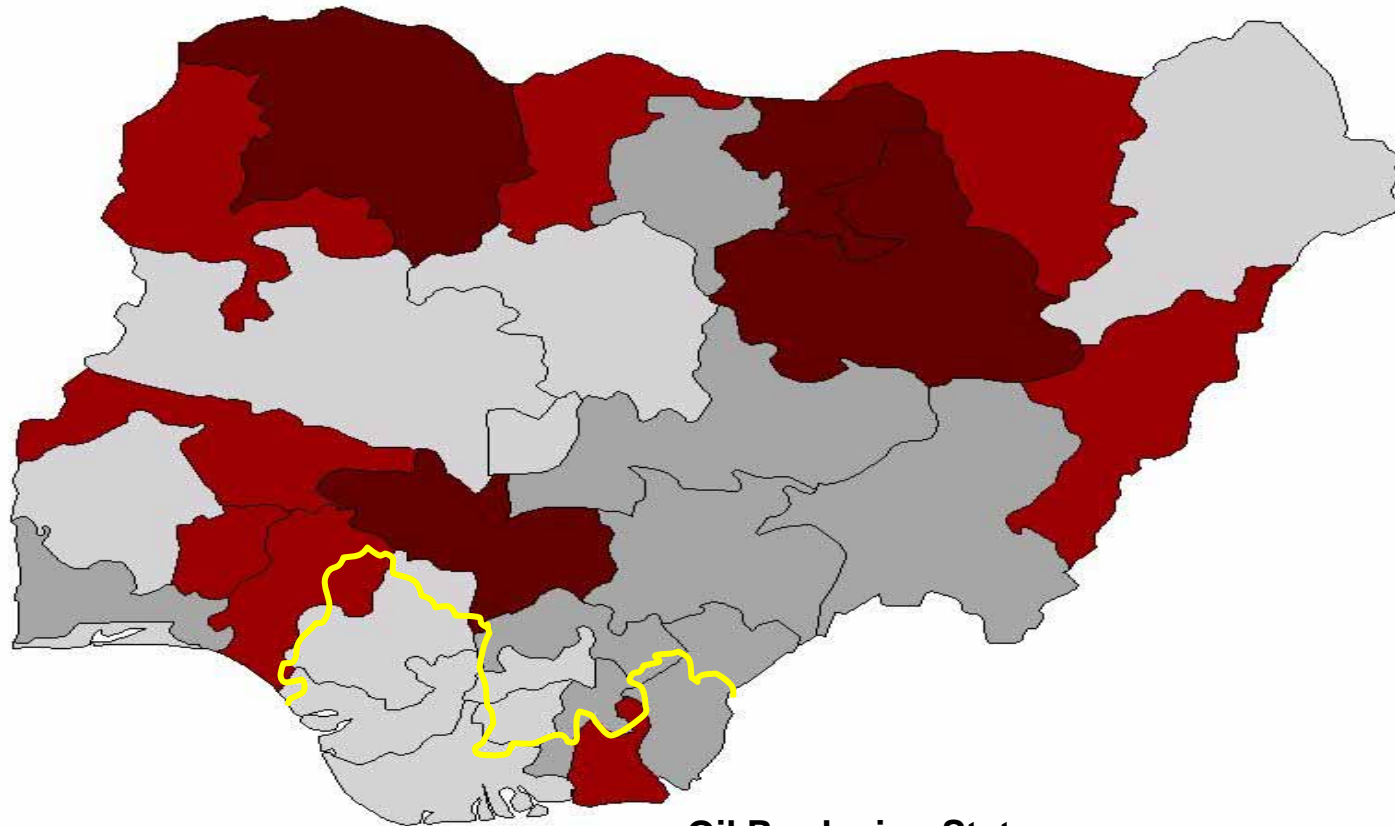
210 Constituencies

- Constituency Development Fund. 0.5% of national budget. 20M Ksh to each constituency (85% of fund); remaining 15% by poverty
- Constituency Bursary Fund. Small amounts, disbursement now based on student enrollment and level of poverty
- Constituency HIV/AIDS Fund. Small amounts, competitive



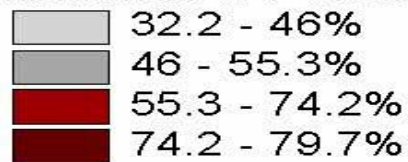
Nigeria

Incidence of Poverty - 1996



Oil Producing States

Incidence of Poverty



Data from "Poverty Report for Nigeria 1985-1996"
Federal Office of Statistics, Nigeria - 1998



Oil Export Revenue, Returned Revenue, Poverty Rates: by Percent, 1958-2004

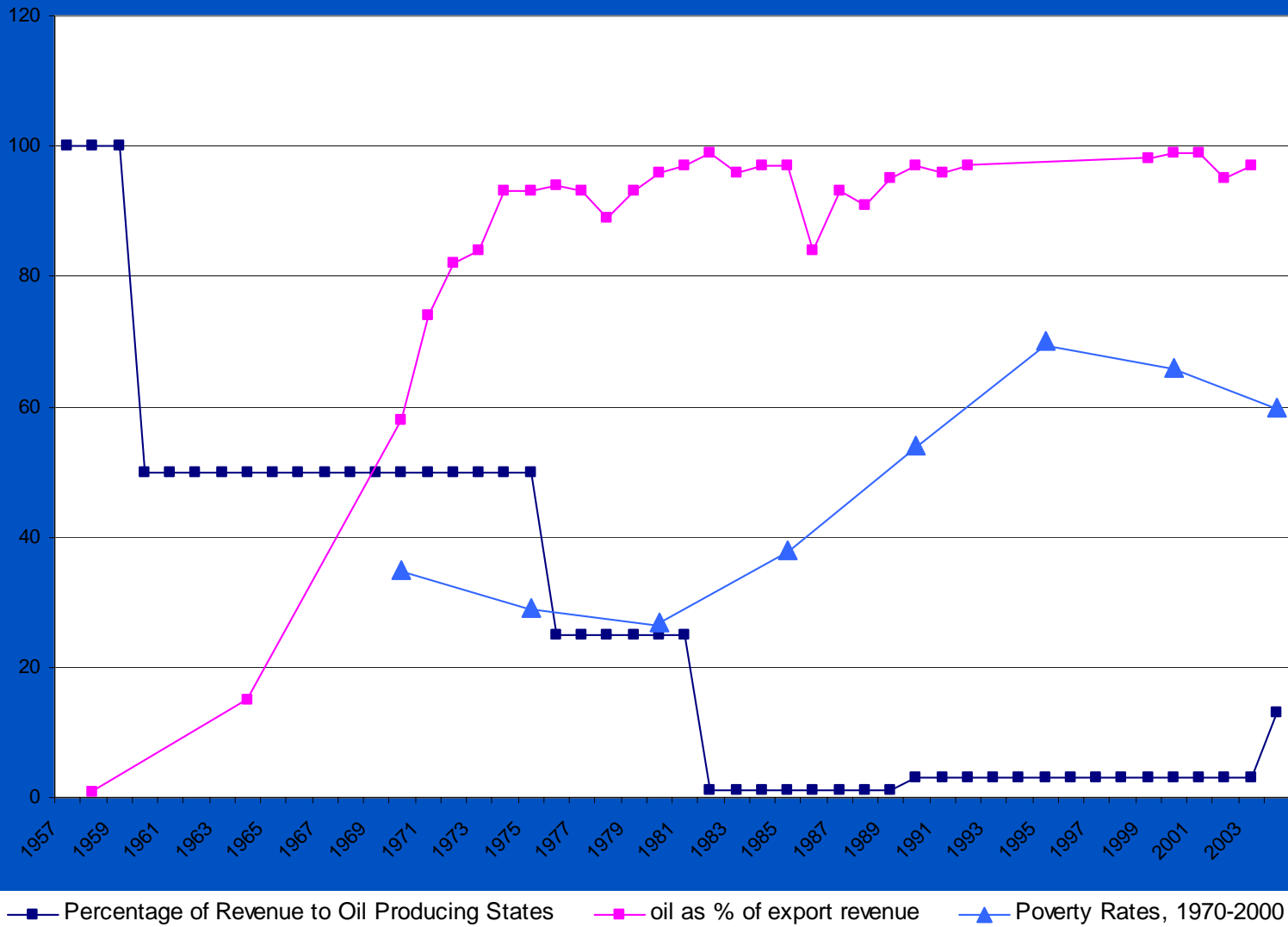
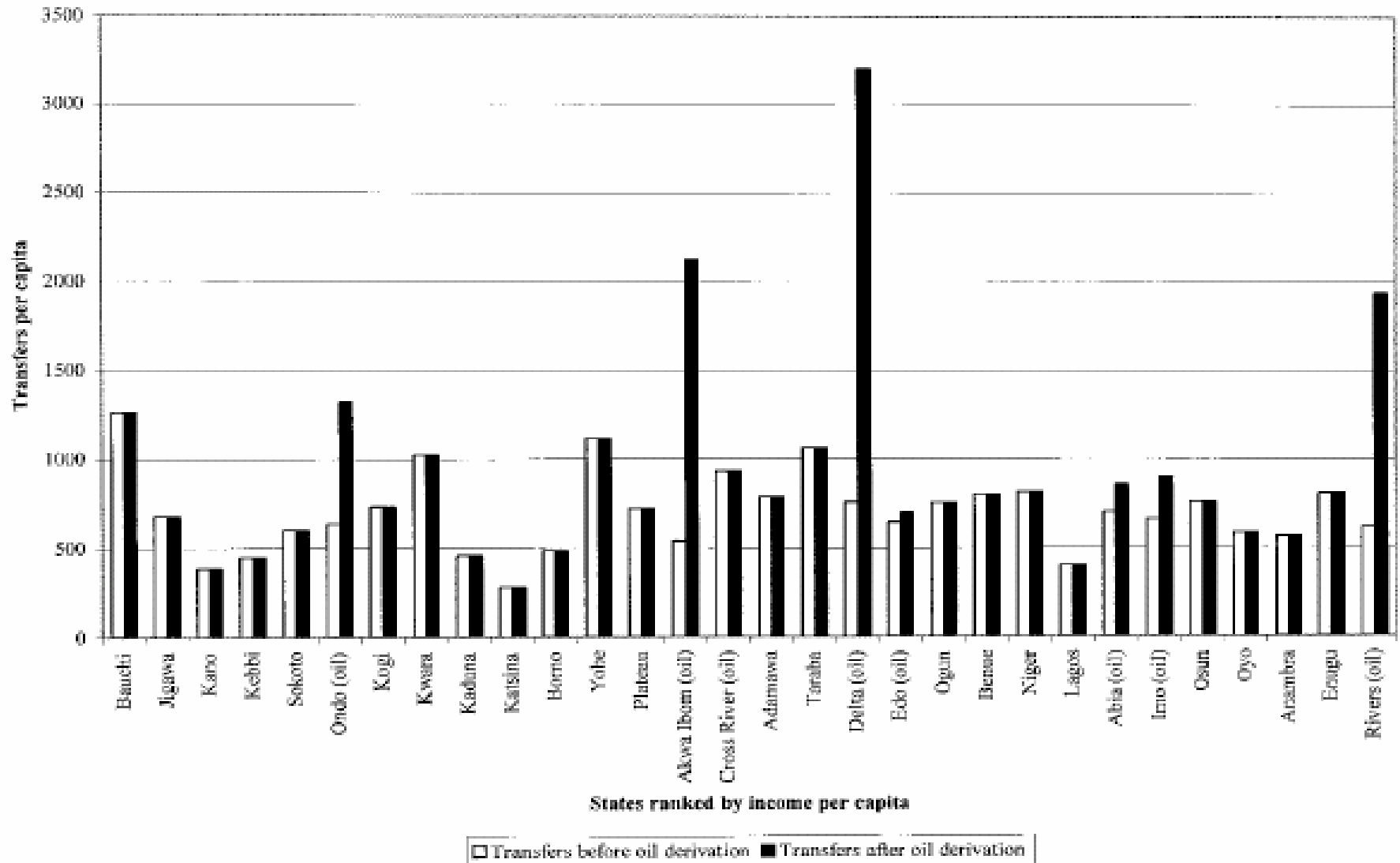


Figure 6. Nigeria: Federation Transfers and Oil Derivation
(Per capita, in naira)

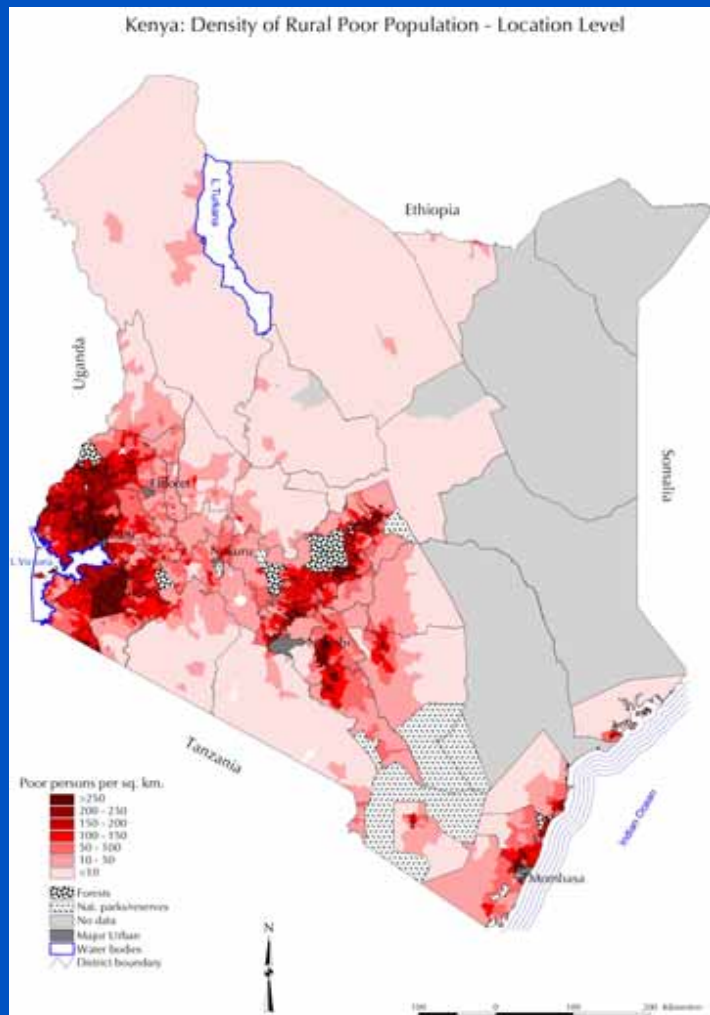


Sources: Own estimates based on Central Bank of Nigeria, Ogwumike and Aromolaran (2000).

Note: The sample includes only 30 states, as income per capita income could not be estimated for 6 of them.



Poverty and Protected Areas, Kenya



Density of Rural Poor Populations



Location of Protected Areas

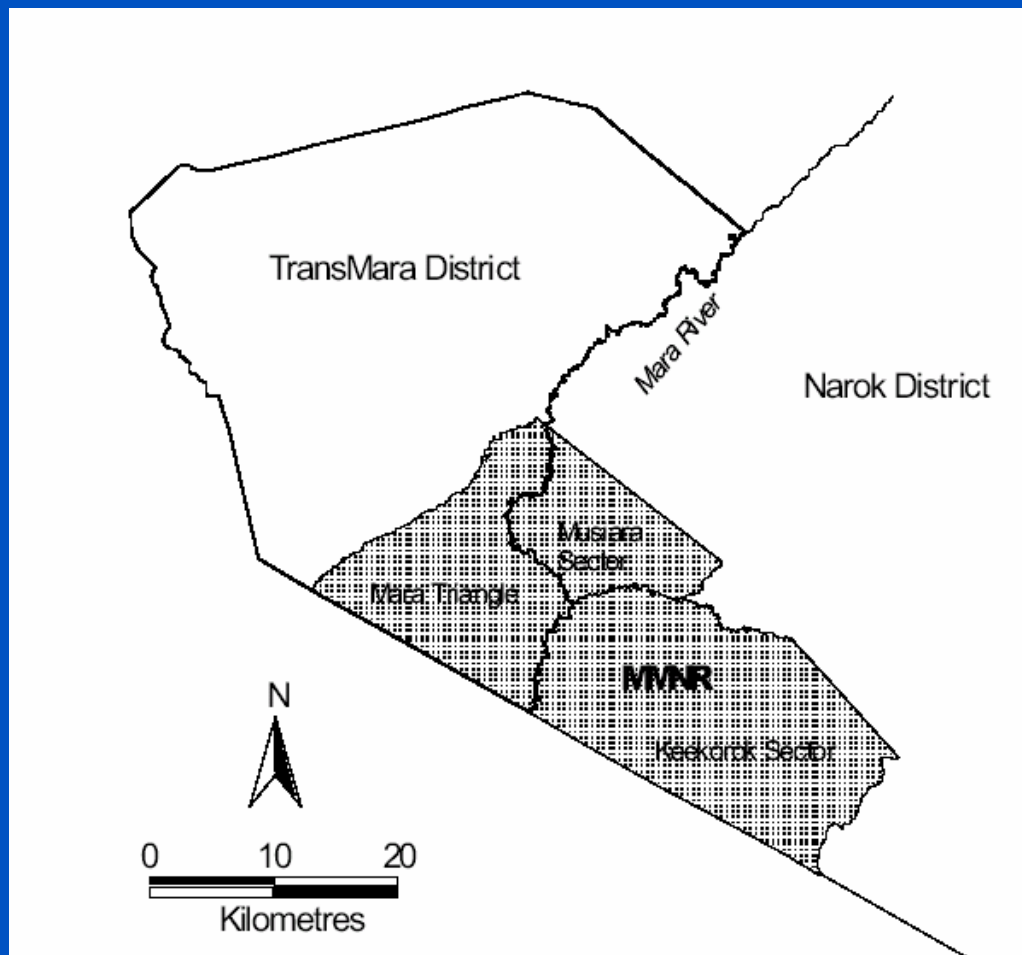
Horizontal Distribution

Intra-Jurisdictional Equity. Distributional equity across peoples and communities within levels of public administration below central government

- Assumed to be function of decentralization – local authorities are thought to be more effective at identifying and reaching the poor than the central state
- Evidence that responsiveness to the poor is a rare outcome of decentralization; pro-poor practices at the local level are mainly associated with strong central govt commitments



Intra-Jurisdictional Equity: Maasai Mara Game Reserve, Kenya



Key Issues

- Different distribution criteria (derivation, poverty, population, recurring costs) generate unique incentives with specific outcomes (environmental mgmnt, poverty reduction). Mix of criteria to meet multiple objectives (principles of fairness)?
- Which distribution mechanisms (CG public services, CG transfer, disbursements to citizens) is most effective in poverty reduction and sound environmental management?
- Measures for promoting distribution equity in undemocratic countries (FPIC, Publish What You Pay)
- Transboundary distributional equity. Are there principles of fairness across nations? Should they be driven by poverty levels?



In this new century, millions of people in the world's poorest countries remain imprisoned, enslaved and in chains. They are trapped in the prison of poverty. It is time to set them free.

-Nelson Mandela, 3 February 2005, preceding G7 finance ministers meeting



Thank you!

