

Indigenous Peoples, Poverty and Development

Ch. 9 Conclusion: Towards a Better Future for the World's Indigenous

Gillette Hall

Georgetown University

Harry Patrinos

World Bank

This is not a formal publication of the World Bank. It is circulated to encourage thought and discussion. The use and citation of this paper should take this into account. The views expressed are those of the authors and should not be attributed to the World Bank.

Indigenous peoples are widely held to be among the worlds' poorest. Yet there is no global source drawing together the available evidence to assess the degree to which this holds across countries and over time. This book provides a cross-country assessment of poverty and socio-economic indicators for indigenous peoples. It builds on a small but growing body of work that until now has focused on indigenous peoples in rich countries (the United States, Australia and New Zealand) and more recently in Latin America.

The joining together under a common identity as indigenous peoples is a relatively new phenomenon in the world (Chapter 2), and has accompanied a process among some groups of 'reclaiming' identity – as for example among the Manchu in China (Hannum and Yang 2009). It is born of common differences, with tremendous variety in individual and group characteristics. It is best seen a political identity and a social movement. Levi and Maybury-Lewis argue that groups come together under the banner of indigenous peoples in order to demand the “Four R's” of the indigenous movement: demands for representation, recognition, resources and rights.

Being indigenous, or the term “indigenism,” can describe “the international movement that aspires to promote and protect the rights of the world's ‘first peoples’” (Niezen 2003). Increasingly, over the last two decades disenfranchised peoples from around the world are discovering the liberating potential of the term “indigenous” and claiming this identity as a badge of pride wrested from oppressive conditions, thereby allowing actors from diverse local cultures access to a universal category of collective empowerment predicated on primordial attachments. Put simply, these groups are *becoming indigenous*. Comparing indigenous movements in Africa and the Americas, there are increasing numbers of historically marginalized groups becoming indigenous by joining international networks that promote mobilization and demanding recognition of rights (Hodgson 2002). The indigenous movement is a social movement, not a social stasis. It can be described as more of a process than a category. And because issues of indigenous identity also become entwined with demands for political recognition and rights such as those over territory or resources, disagreement over who is and is not indigenous can become heated. This book makes no attempt to resolve these questions, and takes no position on – nor is designed to inform – on-going or future disagreements over identity.

Box 1: The usefulness of the concept of identity (Chapter 2)

“When we are introduced to a man in the village of Mishongnovi on Second Mesa in Arizona, in the southwestern portion of the United States, we are told his name and that he is a member of the Bear Strap Clan. When he goes on business to the nearby town of Window Rock, capital of the Navajo Nation, he specifies that he is a Hopi; at a lecture he delivers in Chicago he claims to be Native American and at the Palais Wilson in Geneva, as he sits between a Dayak woman from Kalimantan, Indonesia and an Ogiek man from Kenya while attending an international human rights conference, he identifies himself, and is identified by others, as indigenous. The same man has claimed four different identities, yet none are inconsistent and all are true.”

This book does not put forth a rule of what does or does not constitute ‘indigenous.’

Such an approach would contribute little and would by definition invite controversy over perceived errors of inclusion or omission. The approach taken is instead a pragmatic one. Part I provides a minimum set of MDG-like indicators for a definition-conditional assessment of indigenous peoples’ development. That is, where data allow, it includes indicators for any people whom any government or recognized organization – including self-identified indigenous organizations such as International Working Group for Indigenous Affairs, Indigenous People of Africa Coordinating Committee, Africa Commission on Human and Peoples’ Rights, Asia Indigenous Peoples Pact – has described as indigenous. Part II country case studies use terminology and population breakdowns typical in that country. Thus, in China, Vietnam, and Laos, the term ‘ethnic minority’ is used and where possible groups are broken down into further sub-categories; in India, the constitutionally recognized term ‘Scheduled Tribes’ category forms the base of our analysis. In Africa, where the data available are far more limited, the case studies focus on the pygmy populations for whom data can be disaggregated from household survey data in three countries: DRC, Gabon and the Republic of Congo.

Chapter 3 presents a set of core socio-economic indicators for indigenous peoples in low and middle income countries. Information is drawn from household surveys and the respondent’s self-reported identity or the respondent’s language, either spoken at home or spoken by the enumerator with the respondent, are used to determine whether one is indigenous. The five indicators selected for this analysis most closely measure progress under the Millennium Development Goals (MDGs) while being computable for as many countries and peoples as possible given data limitations. These indicators include:

- (1) Under-five mortality rate
- (2) Safe water deprivation (proportion of individuals with a water source more than 15 minutes away or with access only to surface water or unimproved springs)
- (3) Nutrition deprivation (proportion of children under 3 years of age whose height-for-age ratio is less than -3 standard deviations for the international reference population)

- (4) Male and female literacy rate
- (5) Male and female country-specific net primary enrolment rate

These results, presented in a series of World Development Report-style tables, are augmented by tables replicating similar data on indigenous peoples residing in high-income countries, drawn from existing research. Results, which will also be portrayed online as an interactive map, can be summarized as follows:

With some exceptions, MDG indicators for indigenous groups across Asia are below (worse than) population averages. Under-five mortality rates are only available for Nepal and India; for the Nepalese Janajati infant mortality rates are distributed around the national level, but as a whole are below (better than) the national level. In India, however, infant mortality among the Scheduled Tribes is uniformly higher (worse) than the national average, while water deprivation rates both exceed and fall short of their national levels. Among the Hill Tribes in Thailand, the Kammu and Leu samples in Laos, and the Hmong, Muong and BaNa peoples in Vietnam, these rates are the worst in the region. Male literacy rates are only available for the Scheduled Tribe sample of India and the Nepalese Janajati sample; the Scheduled Tribe sample exhibits the worst among these, while the Gurung sample from Nepal exhibits the best. The lowest female literacy rates are found among the Hmong samples in both Vietnam and Laos. Across New Zealand and Australia, all indicators are worse for the Maori and Aborigines than national averages.

Indigenous peoples in Latin America have uniformly worse outcomes across all five MDG indicators, though again some differences by group stand out. Under-five mortality levels are mostly higher than the national averages with the worse being speakers of the Mam language in Guatemala and those who identify as Quechua in Bolivia. Water deprivation rates are generally evenly dispersed around the national levels, the worst being sampled speakers of the Q'eqchi, with nearly seven times that of the national level. Child nutrition deprivation rates are generally higher, with Mam speakers from Guatemala and Quechua in Peru having nearly double national rates. The lowest female literacy rates are among the Quechua speaking sample in Peru.

Data coverage is far more limited in Africa, making over-arching conclusions difficult. In Africa, survey coverage is spotty. In many cases, available data do not cover core groups widely considered to be indigenous due to their small size (i.e., the Ogiek in Kenya), while covering groups for which there is less consistent agreement on status as indigenous (i.e., the Maasai in Kenya and the Fulani in West Africa). The data that do exist show under-five mortality rates tend to be highest among West African groups, such as the Fulani and Tuareg, and lowest among the Maasai and Ethiopian group. However, these latter groups also experience the highest rates of water deprivation. Education indicators are uniformly worse; even in countries with higher levels of literacy, such as Namibia, the male literacy rate for San males is less than half that of the national sample and for females less than one-third.

Case Study Results

The detailed country case studies in this book include countries from Africa, South and Southeast Asia: Central African Republic (CAR), China, the Democratic Republic of the Congo (DRC), Gabon, India, Lao People's Democratic Republic (Laos) and Vietnam. The population of interest in each country ranges from very large to very small. Among the largest representations of indigenous/ethnic minorities, two countries make up more than 2/3 of the world's indigenous population: China and India. Overall, the country cases account for 72 percent of the world's indigenous peoples (Table 4). Combined with earlier case studies for five Latin American countries (Hall and Patrinos 2006), the results cover almost 85 percent of the world's indigenous population.

Table 4: Indigenous Population in Our Case Studies

Country	Year	% Indigenous in Country	Indigenous Population	% of world's indigenous
CAR	2003	1.2	46,380	0.02
China	2005	8.0	106,403,568	35.90
DRC	2005	0.2	132,000	0.04
Gabon	2003	0.1	1,455	0.00
India	2005	8.1	92,987,668	31.37
Laos	2002	42.0	2,361,232	0.80
Vietnam	2006	13.4	11,539,619	3.89
Total			213,471,923	72.02

Source: Own calculations

Indigenous Peoples and global poverty

Estimates suggest that indigenous peoples make up about 5 percent of the world's population (Ch. 1). Given the above population numbers, poverty rates in China and India largely determine global poverty estimates for indigenous peoples. Of course, any estimate of the number of poor depends on the poverty line used. Arriving at a global poverty estimate based on our results is tricky given that what this study contributes is national poverty figures (derived from national poverty lines that are designed to most accurately represent the consumption level it actually takes to be poor in a particular country). While conceptually comparable across countries in that what we want to discern is precisely the number of people whose consumption levels are below poverty level – national poverty lines take different dollar values and are thus not strictly comparable across countries. Further, we do not generate poverty estimates beyond our country case studies, leaving out around 20 percent of the global indigenous population.

With the above caveats, a rough estimate of number of indigenous people in poverty can be generated as follows. For all countries covered by case studies (representing about 80 percent of the world's indigenous population) poverty rates are multiplied by indigenous population estimate. Beyond these countries we extrapolate as follows. For South Asia, we apply the poverty rates for India to the whole region. For Southeast Asia we use the poverty rates for Laos and Vietnam. For the Former Soviet Union the only poverty estimate available is a national rate for Russia. For Africa, we use the poverty rates

generated for CAR, DRC and Gabon. For South and Central America and Mexico, we use the poverty rates reported in Hall and Patrinos (2006). For Arabia, we use the only have general poverty rates for two countries: Algeria and Morocco. For Greenland/Scandinavia, Japan and the Pacific Islands we do not have disaggregated poverty figures.

Table 5: Indigenous Poverty as Proportion of Total

Country	Indigenous population (millions)	Indigenous poverty rate	Number of indigenous poor
China	106.4	0.048	5.1
South Asia	94.9	0.438	41.6
Former Soviet Union (Russia)	0.4	0.002	0.0
Southeast Asia	29.8	0.515	15.4
South America	16.0	0.800	8.7
Africa	22.0	0.783	17.2
Central America/Mexico	12.7	0.800	9.4
Arabia	15.4	0.050*	0.8
USA/Canada	5.6	0.270	1.5
Japan/Pacific Islands	0.8	na	0.1
Australia/New Zealand	1.1	0.390	0.4
Greenland/Scandinavia	0.1	na	0.1
Total	299.2	--	100.1

Source: Computed from country studies, using national poverty lines

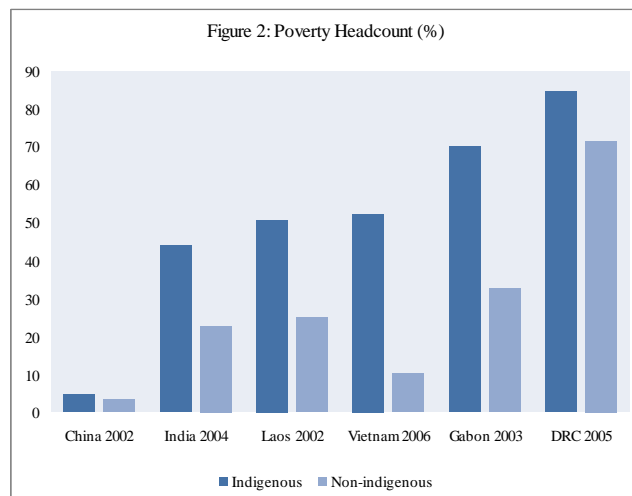
*** Not representative**

Table 5 presents a rough estimation of indigenous poverty rates by region. Using the indigenous poverty rate for the country or region, or a reasonable approximation, we estimated the number of poor according to the country's national poverty numbers. We add up the total numbers, which admittedly are not comparable, to arrive at a rough estimate of the number of poor indigenous worldwide. According to this rough estimate 100 million indigenous peoples worldwide are poor, out of a total indigenous population of almost 300 million. Taking the global number of poor people in the developing world, which is estimated at 1 billion people (but is based on a comparable poverty line that is usually lower than the national poverty lines used below), then one can crudely estimate the share of the world's poor that are indigenous.

Estimates appear to confirm that worldwide, indigenous peoples are over-represented among the poor. According to our estimates, indigenous peoples make up about 5 percent and about 10 percent of the worlds' poor; yet they account for only 4 percent of the world's total population. Thus, indigenous peoples do in fact make up a disproportionate share of the worlds' poor. This confirms a back-of-the-envelope estimate that suggests the same. Given the concentration of indigenous peoples in China and India, and because poverty rates are slightly higher for ethnic minorities in China,

and higher still in India and the rest of the world, the share of indigenous in the world's total poor is higher than their population share.

In China, both the national and indigenous poverty rates are strikingly low. Elsewhere, indigenous poverty rates approach or exceed 50 percent. While the majority of indigenous peoples come from China and India, the proportion of the indigenous poor is more spread out across regions, given lower poverty rates in these two countries, particularly China. In other countries, indigenous peoples have disproportionately high poverty rates – meaning that they deviate from the non-indigenous poverty rate by a great margin. Figure 2 shows the poverty rates for indigenous and non-indigenous from our case studies.

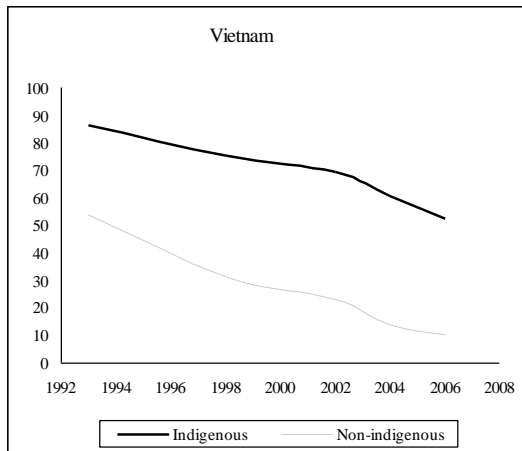
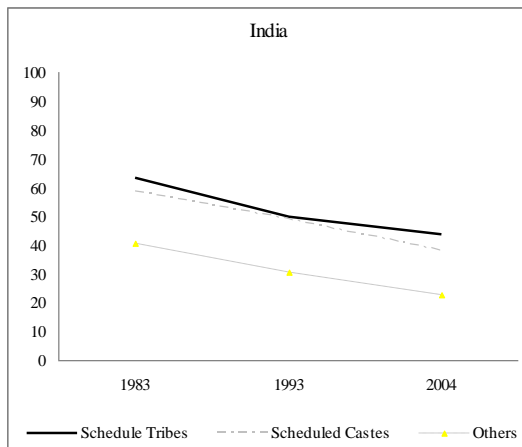
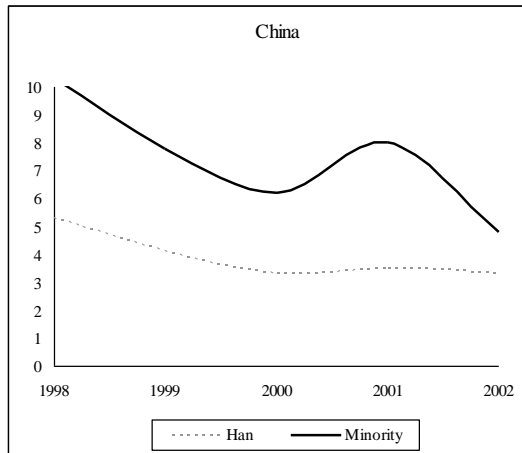


Source: Own calculations

Poverty over time

Evidence of rapidly declining poverty rates – even among indigenous peoples – is emerging Asia. Research from Latin America, and to some degree also in Australia, Canada, New Zealand and the United States, shows a sticky persistence of poverty rates for indigenous peoples over time. Yet for the few countries for which over time data on indigenous poverty exist in other parts of the world (China, India and Vietnam), we see significant declines in both overall and indigenous poverty rates. In Vietnam, almost two-thirds of the population was poor in 1993. By 2006, only 16 percent of the population was classified as poor. However, progress in reducing poverty was unequal; the poverty rate fell by over 80 percent for the non-indigenous, but only by 40 percent for the indigenous. The same pattern appears in India (see Figures 3a, b, c).

Figure 3a, 3b, 3c: Poverty Rates over Time



Source: Own calculations

For the three countries of our study for which we have over time data, we find significant improvements in standards of living over the last decade. China shows exceptional progress. Poverty decreased even over a short period of time, and poverty reduction was more rapid for the indigenous (see Table 6). But poverty rates were very low in China, at only 6 percent in 1998. Yet while indigenous peoples improved considerably, they are still 1.5 times more likely to be poor.

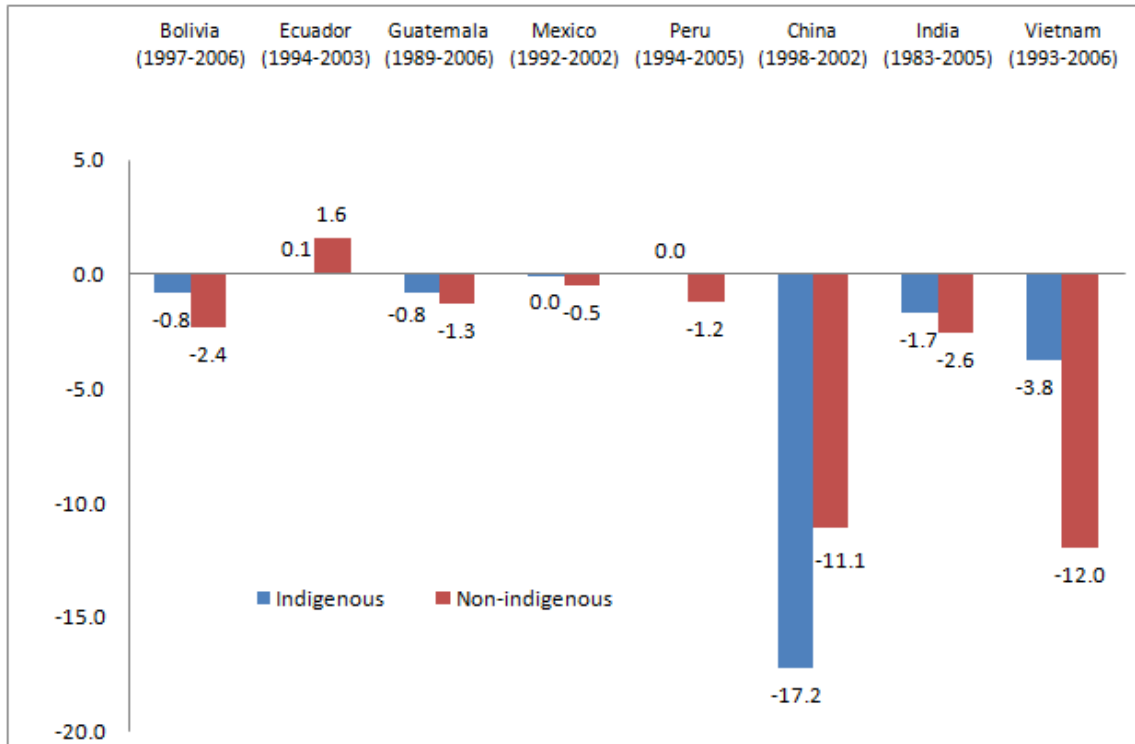
Table 6: Poverty Rates Decreased Significantly in Asia
Less so for Indigenous, except in the case of China

Percent change in headcount poverty rate between early and later survey year		
Country	Non-indigenous	Indigenous
China (1998-2002)	37.7	53.4
India (1983-2005)	44.0	31.0
Vietnam (1993-2006)	80.9	39.5

Source: Own calculations

This is exceptional progress. In the case of Latin America, poverty rates changed at a lower rate, and even when there was poverty reduction, indigenous poverty reduction was always less and in most cases insignificant (see Figure 4). In fact, over the period of mid-1990s to 2004, few gains were made in income poverty reduction among in Latin America, especially among Indigenous Peoples. In cases where gains in poverty reduction are being made, indigenous people are benefiting less, and when indigenous poverty rates fell, they did so at a slower pace than for non-indigenous people. In the case of Latin America, we concluded that the incomes of indigenous people are less affected by macroeconomic trends, whether positive or negative. The situation seems much different in Asia, with overall very large and significant reductions in poverty.

Figure 4: Annual Rate of Change in Poverty Headcount



Source: Own calculations

Poverty gap

A sizeable poverty gap remains. The poverty gap, or shortfall of the poor below the poverty line, provides a measure of the resources required to eliminate poverty. It is expressed as the total amount of money which would be needed to raise the poor from their present incomes to the poverty line, as a proportion of the poverty line, and averaged over the total population. This measures the depth of poverty. In all cases the poverty gap measure is higher for indigenous/minority groups, in some cases substantially higher such as the cases of Vietnam, Laos and Gabon (Table 7). In the case of China, the minority group would require about twice as much money as the majority to escape poverty. A similar story emerges for India's Scheduled Tribes. In Gabon, the indigenous would need three times as much income. In Vietnam, the poverty gap index for the ethnic minorities is more than 7 times greater than for the majority; this implies that it would take 7 times as much income for the minority group to escape poverty.

Table 7: Poverty Gap (FGT1) by Minority/Indigenous Status across Countries

China (rural), 2002	Minority	2.0
	Han	0.9
	All	-
India, 2005	Scheduled Tribes (ST)	10.6
	Scheduled Castes (SC)	7.9
	Non-ST/SC	4.4
	All	5.6
Vietnam, 2006	Ethnic minority	15.4
	Ethnic majority	2.0
	All	3.8
Laos, 2003	Non-Lao Tai	13.2
	Lao Tai	5.4
	Total	8.0
DRC, 2005	Indigenous	39.4
	Non-indigenous	32.4
	All	32.3
Gabon, 2003	Indigenous	30.0
	Non indigenous	10.7
	All	10.7

Source: Own calculations

Further, the indigenous poverty gap in many countries has been widening over time. While data allowing poverty rates to be tracked over time are more limited, where available the results show that the poverty gap index has also declined over time (Table 8). The index has declined for the minority population in each case, but not by as much as the decrease for the majority population. That is, the gap in the Poverty Gap Index has widened over time. This widening ranges from slight in the case of China to significant in the case of Vietnam. In 1998, the poverty gap index for the minority was three times as large as for the majority in Vietnam; in 2006, the gap is sever times. In India, the poverty gap index was the same for Scheduled Tribes and Scheduled Castes in 1994; but in 2005, while the index decline somewhat for the Tribes, it fell more significantly for the Castes, by 35 percent, which is the same decline that the non-Caste, non-Tribe population experienced. Thus the gap declined between Castes and others, but widened between Tribes and others.

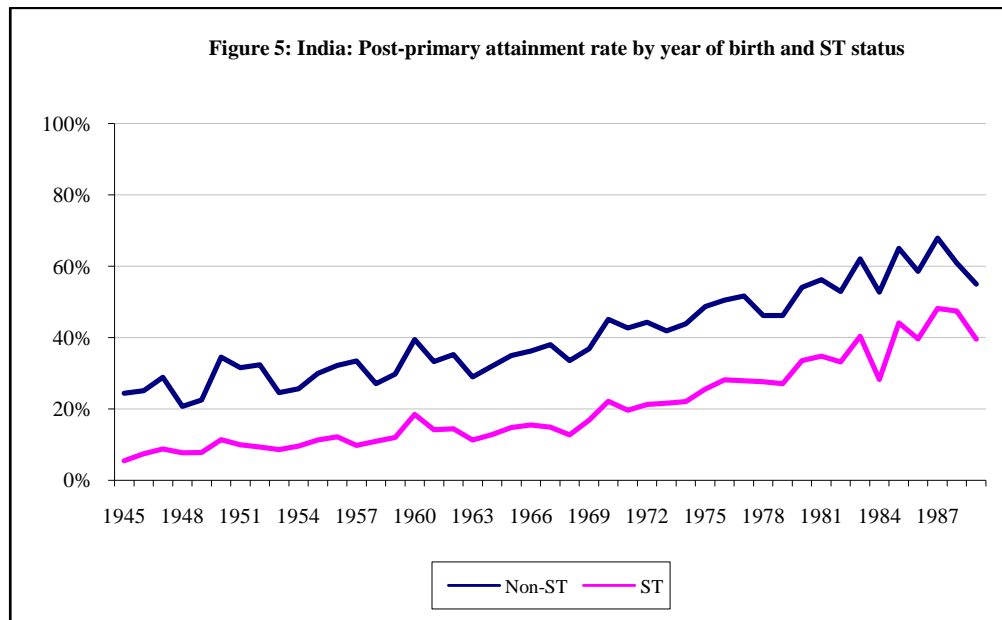
Table 8: Poverty Gap (FGT1) by Minority/Indigenous Status across Countries and Over Time, early to latest estimates

		Early	Latest
China, 1998-2002	Minority	2.8	2.0
	Han	1.5	0.9
	All		
India, 1994-2005	Scheduled Tribes	12.2	10.6
	Scheduled Castes	12.2	7.9
	Others	6.8	4.4
	All	8.4	5.6
Vietnam, 1998-2006	Ethnic minority	24.2	15.4
	Ethnic majority	7.1	2.0
	All	9.5	3.8

Source: Own calculations

Education gap

A persistent gap in schooling attainment remains. Minority groups have increased their overall schooling attainment. But so has the majority population. Therefore, despite significant and schooling progress overall, the gap between groups remains (see Figure 5 for India, scheduled tribe (ST) and non-scheduled-tribe (non-ST) comparison).

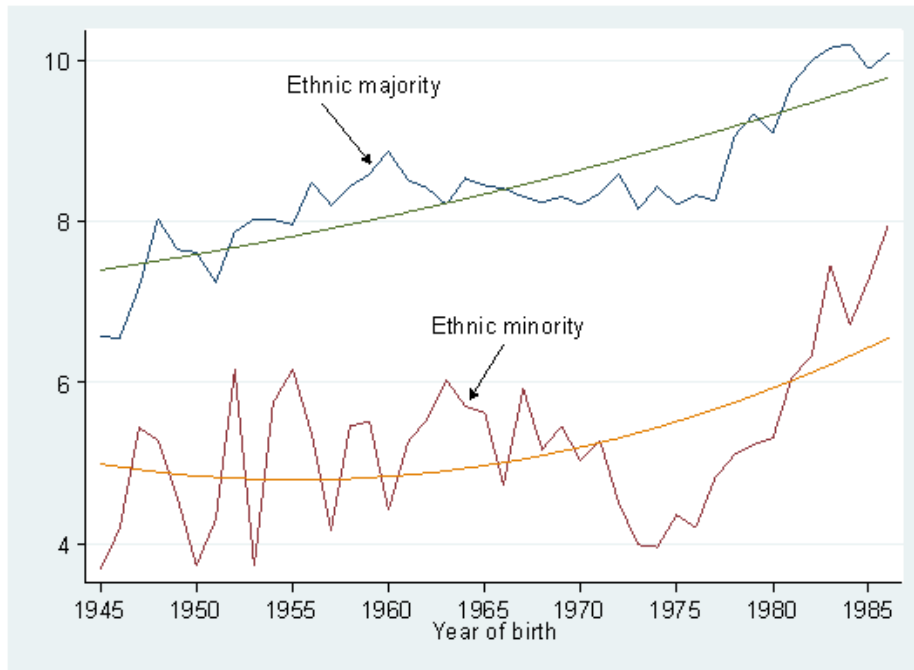


Source: India National Sample Survey, various years.

There is evidence of greater vulnerability to shocks – in this case, in education. In Vietnam there is over time a significant increase in schooling attainment overall. This is evident in Figure 6, and for both majority and minority groups. However, there is a large

break in the trend beginning in the 1970s and coinciding with the Vietnam War. What is interesting about this break is that it affected the ethnic minority groups more than the rest of the population. That is, the gap in schooling widens during the war and is larger after the war. This finding adds further evidence that crises and interruptions affect the indigenous more and/or differently, as was the case after economic crises in Latin America (Hall and Patrinos 2006).

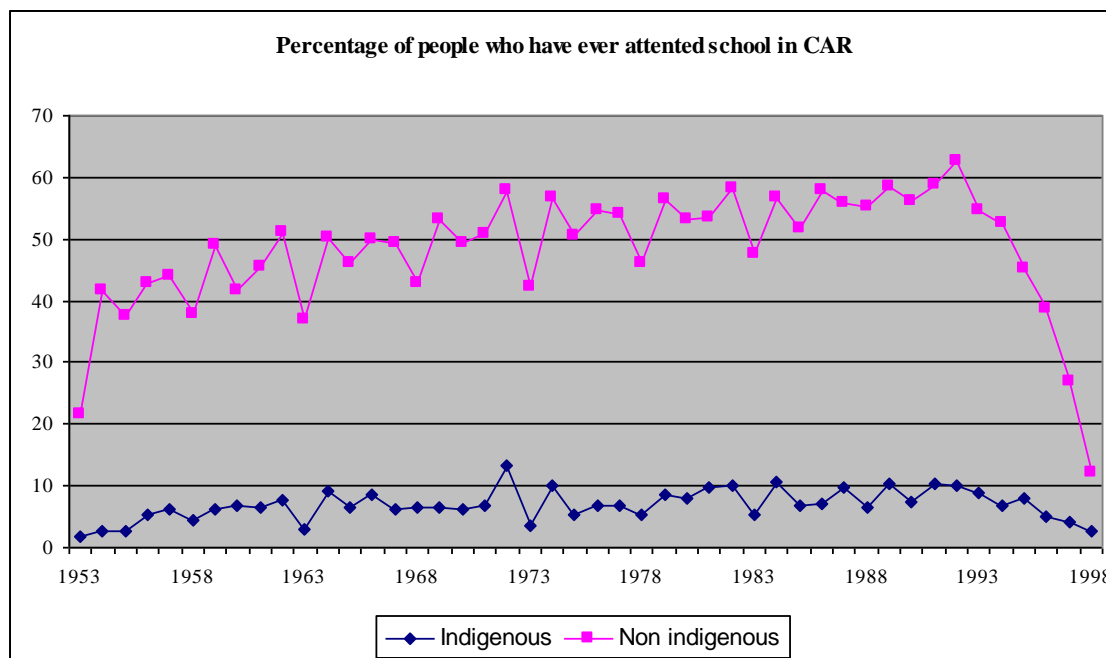
Figure 6: Vietnam: Schooling attainment by year of birth and minority status



Source: Vietnam Living Standards Survey, various years.

In Africa, there is evidence of a widening education gap. In Africa, while there is progress in schooling attainment overall, there is evidence of a widening gap in the share of people who report ever having attended school in the Central African Republic (Figure 7). Indigenous females are particularly disadvantaged, in CAR, as well as in Gabon. Note, however, that from 1993 there is a significant declining and plummeting in the case of indigenous; most likely the cohort is still too ‘young’ to give us good numbers. The double-disadvantage of ethnic/indigenous females has been documented elsewhere as well (see, for example, Psacharopoulos and Patrinos 1994; Hall and Patrinos 2006; Lewis and Lockheed 2006). Even in countries with far higher average schooling rates, such as Laos, we find hidden pockets of low schooling in rural areas, and for girls. In rural Laos, 34 percent of non-Lao-Tai females have never attended any school, while only 17 percent of non-Lao-Tai males never attended and only 6 percent of Lao-Tai females never attended.

Figure 7



Source: own calculations.

Earnings

Much of the earnings disadvantage of minority workers is due to lower levels of human capital endowments. Yet the returns to schooling are not necessarily lower for minority workers. However, given limited sample sizes, the location and type of work concentration of indigenous peoples, it is not always possible to estimate labor supply or earnings functions. In Latin America, there is evidence that indigenous peoples face significant disadvantages in the labor market (Patrinos, Skoufias and Lunde 2007; Hall and Patrinos 2006; Psacharopoulos and Patrinos 1994). The portion of the difference in earnings between indigenous and non-indigenous peoples that is "unexplained"—perhaps due to discrimination or other unidentified factors—represented one-quarter to over one-half of the total differential, with the average at about 42 percent. This means that while about half of the earnings differential can be influenced by improvements in human capital (education, skills, and abilities that an indigenous person brings to the labor market); another half may result from discriminatory labor market practices or other factors over which the indigenous person has little control. In terms of labor market earnings, indigenous peoples experience significantly lower returns to a year of education, averaging 40 percent lower returns.

There is evidence in some countries of strong returns to education among indigenous populations. In Laos, for example, controlling for other characteristics, there are significant and large returns to education, although the pattern of returns differs

across groups. In urban areas, returns to lower levels of education are not significantly different from the returns to no or some primary schooling for the indigenous, while the non-indigenous get significant returns from the completion of lower and upper secondary schooling. The picture is quite different in rural Laos where there are pronounced and significant returns to schooling at all levels although the completion of a schooling level tends to do more for consumption than having only completed part of the level. Still, the returns tend to be larger and more consistently statistically significant for the non-indigenous. For example, the impact on per capita consumption of the most educated household member having completed primary school is 10 percent of original consumption for the indigenous versus 17 percent for the non-indigenous. Completion of lower secondary school results in a per capita expenditures increase of 15 percent for the rural indigenous and of 26 percent for the rural non-indigenous. The returns to vocational education are strongest for the urban indigenous and those to university are strongest for the rural non-indigenous. In Vietnam, the rate of returns to education for ethnic majority workers is around 2 percent higher than for ethnic minority workers. Earnings functions show significantly lower labor earnings for indigenous peoples. There is also evidence consistent with labor market discrimination. In Vietnam, unexplained differences in wage structure account for 26% to 34% of the wage differential in 2006 (Table 9).

Table 9: Earnings Differentials, Vietnam, 1998-2006 (age 15 and over)

	Percentage of earnings differential due to differences in			
	Endowments		Wage structure	
	1998	2006	1998	2006
At ethnic minority mean	35.6	66.3	64.4	33.7
At ethnic majority mean	94.6	69.9	5.4	30.1
Cotton	86.2	69.4	13.8	30.6
Oaxaca-Ransom	90.9	73.6	9.1	26.4

Source: Vietnam Living Standards Survey 1998 & 2006.

Unlike the situation for indigenous workers in Latin America, where in almost all cases indigenous peoples receive lower rates of return to a year of schooling (Hall and Patrinos 2006), as well as in Australia—where the private rates of return for indigenous Australians were estimated to be lower for post-compulsory schooling and higher for post-secondary qualifications (Daley and Lui 1995), Canada (Patrinos and Sakellariou 1992), New Zealand (Brosnan 1984; Brosnan and Hill 1984), United States, in China the minority groups have higher returns to schooling. Overall, the returns are 8.1 percent, and 6.9 and 9.1 percent for men and women. For minority men they are 9.1 and only 6.6 for majority men; they are 10.7 for minority women compared to 9.1 for majority women.

Health

Despite generally improving conditions in many countries, health deficits among indigenous populations are severe. Indigenous groups are more likely to suffer from health issues and they are less likely to seek or receive medical attention, even the most basic preventive care. For example, in both India and Vietnam, where poverty reduction achievements have been sizeable, indigenous peoples (known as Scheduled Tribes and ethnic minorities respectively) are less likely to be covered by health programs nor receive vital vaccinations (Table 10). While there is good coverage against tuberculosis (BCG vaccine), ethnic/tribal groups in Vietnam and India are less likely to be vaccinated against DPT, polio and measles. There is a large ethnic gap in vaccination against DPT in Vietnam. Only about one-third of ethnic/tribals are vaccinated against all diseases listed in Table 10. This is as true in Vietnam, where overall vaccination rates are high, and in India, where overall vaccinations are relatively low.

Table 10: Vaccination rates for India and Vietnam, latest year
(percent of children 12-23 months)

	BCG	DPT	Polio	Measles	All
Vietnam (2002)					
Ethnic minority	82	48	58	68	38
Ethnic majority	96	78	80	87	73
All	93	72	76	83	67
India (2005-2006)					
Scheduled Tribes (ST)	72	42	65	47	32
Non-ST	79	57	80	60	45
All	78	55	79	59	44

Sources: Vietnam Demographic and Health Survey 2002; National Family Health Survey 2005-2006

Notes: BCG=bacille Calmette-Guérin, a vaccine for tuberculosis; DPT= Diphtheria Tetanus whole cell Pertussis vaccine

Social programs

There are significant discrepancies in access to basic infrastructure and services. For example, in the case of Vietnam, only 5 percent of minorities have access to safe drinking water, compared to 25 percent of the ethnic majority population. While electricity and interestingly enough Internet connections are fairly evenly available to both groups, ethnic minorities are less likely to have garbage collection services and more likely to live in temporary housing.

However, there is also evidence of higher incidence rates among ethnic minorities as beneficiaries of major social programs in Vietnam (Table 11). In India, the Scheduled Tribes are more likely, especially the poorest 20 percent, to be beneficiaries of the Integrated Child Development Services program, and appear well represented as beneficiaries of the National Rural Employment Guarantee scheme. In China, the Han are well represented as beneficiaries of social insurance programs such as unemployment insurance, pensions and basic medical insurance; yet, not all minority groups are under-represented, with the Manchu just as likely to be covered by unemployment insurance and the Hui more likely; the same goes for pensions; and in the case of medical insurance, the Hui are just as covered as the majority Han, but 50 percent of the rural Uyghur have medical coverage. In Laos, there is a very low incidence of access to pension and life insurance – less than 1 percent – and majority and minority populations are about as equally likely to be covered.

Table 11: Social Program Coverage by Expenditure Quintile, Vietnam, 2006 (%)

	Expenditure Quintile				
	1	2	3	4	5
Preferential credit for poor people					
All	36.3	39.9	31.6	36.5	36.0
Ethnic minority	40.4	45.1	45.2	38.7*	100.0*
Ethnic majority	33.0	38.7	30.8	36.5	34.5
Free health care					
All	77.5	70.2	62.2	63.8	74.6
Ethnic minority	83.1	78.9	89.3	71.9*	100.0*
Ethnic majority	73.0	68.2	60.5	63.4	74.0
Tuition exemption and reduction					
All	59.6	46.9	44.3	22.0	11.2
Ethnic minority	73.0	56.9	67.2	54.0*	0.0*
Ethnic majority	49.1	44.7	42.9	20.8	11.5
Agriculture, Forestry & Aquaculture promotion					
All	27.6	15.1	9.5	4.7	2.5
Ethnic minority	41.1	25.8	27.4	54.0*	0.0*
Ethnic majority	16.9	12.7	8.4	2.7	2.5
Number of households	4,247	1,420	582	361	68

Sources: Vietnam Living Standards Survey 2006

Note: * fewer than 20 observations

Understanding Indigenous Peoples' poverty

The above findings, while documenting falling poverty rates in some regions, also reveal a persistent gap in basic indicators of wellbeing (poverty, health and education outcomes) for indigenous peoples worldwide. This result prompts the question of causality: what causes indigenous peoples on average to be significantly poorer than the rest of the population? Building from Lunde (2008), a review of the literature yields six principal (and inter-related) strands of thinking on the causes of extreme poverty and disadvantage:

- (i) Spatial Disadvantage: *geographic characteristics such as climate, vegetation, access to basic infrastructure, and 'remoteness' explain poverty differentials*
- (ii) Human Capital Theory: *focuses on the lack of education and poor health, and consequent limited productivity in the labor market as the major determinants of low income and poverty*
- (iii) Asset-based Explanations and Poverty Traps: *beyond human capital assets, it is the lack of a minimum asset threshold or combination of assets, and the inability to cope with shocks ('vulnerability'), that constrain movements out of poverty*
- (iv) Social Exclusion and Discrimination: *even with a sufficient asset base, the chronically poor lack social capital and access to key 'networks'; discrimination further causes market segmentation - low returns on assets and/or limited access to services and credit*
- (v) Cultural and Behavioral Characteristics: *the poor are further constrained by (mal) adaptive own behaviors such as a 'culture of poverty'; stigma and self-reinforcing stereo-type threat; group-level influences and peer effects*
- (vi) Institutional Path Dependence: *beyond characteristics and behaviors of the poor themselves, inequality is structurally reproduced via historically determined social and political relationships, exploitation and 'opportunity hoarding' among elites*

The chapters in this book provide empirical evidence that can be discussed in light of the above theories, particularly the first two (spatial disadvantage and human capital theory). To round out these results, it augments the evidence with findings from related micro-studies to provide a summary picture of what is known – and not known – about the causes of indigenous disadvantage.

Spatial disadvantage

Despite some urbanization, indigenous peoples worldwide continue to live predominantly in rural areas. For various historical and cultural reasons, they also inhabit remote locations to a far greater degree than the rest of the population. A growing literature suggests a strong role for geography in poverty outcomes, driven both by externalities such as climate and topography as well as limited access to infrastructure and services. Spatial inequality (variations in wellbeing between regions) is well documented. Cross-country studies find that differences between regions account for up to a third of inequality in a given country (Kanbur and Venables 2005; Shorrocks and Wan 2005).

What explains these regional differences? In China, there is some evidence that geographical characteristics trump household characteristics in accounting for poverty reduction and growth in income or consumption (Jalan and Ravallion 1997, 2002, 2004). Borooah et al. (2006) also find that rural inequality in China is driven to a large extent by location, while in India inequality between rural areas is driven to a greater degree by education levels. In Mexico, Esquivel (2000) finds that two-thirds of differences in state income are driven by natural characteristics (climate, vegetation). Others, however, show that once differences in households' access to private and public (infrastructure and basic services) assets are accounted for, pure geography (altitude, temperature) does not affect household wellbeing (Escobal and Torero 2005).

In China and Laos in particular, we find results that are consistent with the notion that poverty among minority groups is driven to a significant degree by geographic location. In China, more urbanized groups, and groups not concentrated in poor regions, have much reduced disparities with the Han population. But China also shows, like India, that some minority groups have lower urbanization rates, and thus live in a 'disadvantaged context' in terms of access to infrastructure and opportunity (Hannum and Meiyan 2009). Overall, minorities in China are twice as likely to live in isolated, remote villages with difficult topography and poor infrastructure. Further, the disparity between Han and ethnic minority groups diminishes when household and individual characteristics are taken into account, but also very strikingly when geographic differences are taken into account – again suggesting that much of what appears as cross-ethnic differences has to do with regional development. Similarly, in Laos, the sizeable discrepancy in returns to education declines significantly once controls for village fixed effects are included.

Evidence drawn from related micro-studies yields mixed results. For instance, Van de Walle and Gunewardena (2001) finds that in Vietnam, location in disadvantaged areas reduces returns to productive characteristics of households (such as education and household structure) for all groups, but the effect was significantly stronger for ethnic minorities. Similarly, in Mexico Borja-Vega et al. (2006) find that while indigenous peoples concentrate in poorer, more marginalized locations, poverty and human development outcomes are still worse for indigenous families when compared to non-indigenous families in equally marginalized locations. It seems that while geography may be a powerful explanatory variable, it alone does not explain high and persistent poverty rates among indigenous peoples.

Human capital

Human capital is often used to explain poverty and its persistence over time. Fewer years of schooling and lower academic achievement (test scores) are strong correlates of poverty across rich and poor countries alike (Glewwe 2002). An extensive literature also explores the role of human capital in explaining racial differences in income, particularly in the US (Browne and Askew 2005, Mintz and Krymkowski 2008). In the development literature, education is also considered one of the main vehicles through which poverty is transmitted across generations (Birdsall and Székely 1999; Perry et al. 2006).

There is a small but growing body of work exploring the relationship between human capital and poverty outcomes among indigenous groups. Recent evidence finds continued disadvantage among indigenous groups in terms of schooling and health outcomes in Latin America (Hall and Patrinos 2006), Africa (Ohenjo et al. 2006), Asia (Hannum 2002; Kabeer 2006), as well as in developed countries (Cooke et al. 2007). Several studies from Latin America also find lower income mobility among excluded groups such as indigenous and Afro-descendants (Ferreira and Veloso 2004; IADB 2007).

Our results document significant progress over time with regard to education and health status, with indigenous peoples gaining as part of national upward trends. But in all cases a gap persists between indigenous peoples' outcomes and national averages, and in Africa, there is some evidence that the gap is widening (Wodon 2009). In countries where one is able to further disaggregate by group, differences do come to light. Despite massive educational achievements in China, national averages hide major pockets of low education among sub-groups such as the Miao, a quarter of whom remained illiterate in 2005 (Hannum and Yang 2009). In Laos, the Chine-Tibet population fares significantly worse and is the reason behind the low non-Lao Tai averages (King and van de Walle, 2009). Yet across several dimensions of the MDGs including female literacy and infant mortality, the Aymara in both Peru and Bolivia do significantly better than the Quechua, and are converging with national averages (MacDonald, 2009). In China, a further degree of nuance emerges, and there appears to be some 'bi-furcation' of human capital status across urban and rural regions, even among members of the same group: the Hui in urban areas are highly educated, but significantly disadvantaged in terms of education outcomes in rural areas (Hannum and Yang 2009).

But what does education produce for indigenous peoples in terms of incomes gains, and how important is it as a determinant of poverty? Here the story appears to be more nuanced than it first appeared when based solely on results for Latin America. Much of the earnings gap of minority workers is due to lower levels of schooling, and yet the returns to schooling are not necessarily lower for all minority workers. In Laos, there are significant and large returns to education, but the pattern of returns differs across groups. In Vietnam, the rate of returns to education for ethnic majority workers is 2 percentage points higher than for ethnic minority workers.

Other Explanations

Much of the evidence presented here supports the spatial disadvantage and human capital story. Yet, other theories have not been specifically tested. For instance, the poverty trap (Dasgupta and Ray 1986; Van de Walle 2003).

Overall, little work exists testing asset-based theories to explore the determinants of indigenous poverty. Given the results now emerging at a global scale, this is likely to be a promising area for further research. Also, there is some evidence that outright discrimination may also explain a portion of the observed differential in poverty outcomes among minority groups (Becker 1971). There is evidence consistent with labor market discrimination for indigenous peoples in Latin America, Australia, Canada, New Zealand, and the United States (Daley and Lui 1995; Patrinos and Sakellariou 1992; Brosnan 1984; Kimmel 1997; Hall and Patrinos 2006), where indigenous peoples receive lower rates of return to a year of schooling. But more recent work in the United States finds that 90 percent of the Native American wage differential can be explained by characteristics rather than wage structure. Our findings on labor market returns are consistent with discrimination in some countries (Latin America, as well as Laos and Vietnam) but less so in others. In China, minority groups overall have higher returns to schooling (27 percent higher for males and 15 percent for females). Qualitative research points to discrimination restricting access to social services in Africa (Ohenjo et al. 2006) and that exclusion from social networks inhibits access to services and credit in India (Parker and Kozel 2007). But overt tests for discrimination of indigenous peoples, such as those in the United States comparing call-back rates for blacks and whites with otherwise similar profiles (Bertrand and Mullainathan 2003), are distinctly lacking.

Conclusions

This study brings together information about indigenous/ethnic/minority groups for a number of counties that have not been studied systematically in a comprehensive manner. The study systematically assesses the socioeconomic situation of groups in Asia and Africa, and adds value by interpreting the empirical results in a manner consistent with previous research in other regions, thus giving, perhaps for the first time, a more global understanding of indigenous peoples' socioeconomic development. Prior to this study, detailed work providing comparative national estimates of poverty and other living standards indicators on indigenous peoples has focused on Latin America, Australia, Canada, New Zealand and the United States. While the populations in these countries represent a minority of the world's indigenous peoples, results have been taken to suggest that indigenous peoples tend to be among the poorest of the poor, with little progress in poverty reduction and a persistent gap with the non-indigenous population.

Poverty rates have declined substantially among indigenous peoples in Asia. Our analysis adds data for only seven additional countries, yet which by population represent about 72 percent of the world's indigenous population worldwide, of who two-thirds reside in Asia. The results presented here, especially for Asia, present an important

nuance to the general finding. While indigenous peoples have a higher poverty rate in all countries studied, the general pattern of failure to progress or catch up does not hold in all countries. In fact, widespread and sustained growth and poverty reduction appears to have brought large numbers of indigenous out of poverty in Asia. This puts previous multi country evidence in a new light, in particular suggesting that the Asian success at achieving sustained growth and poverty reduction has positively impacted major segments of the indigenous population in those countries in terms of poverty, health and education outcomes.

Despite this progress, a poverty gap persists between indigenous and non-indigenous populations. This result holds across all countries without exception, but the size of the gap, as well as whether it is growing or shrinking, does vary across cases. While the gap is narrowing in China, it is stable or widening in most other countries. Further, within countries, some specific sub-groups among the indigenous population appear to be particularly disadvantaged. Here there appears to be multiple sources of disadvantage at play. Ethnic disadvantage among these groups is driven in part by topography and other characteristics of land inhabited, compounded by limited access to infrastructure and services leading to, among other things, low levels of endowments, but also low combined endowments of several assets at once (low human capital, poor land, poor access to credit). Ethnic and gender disadvantage also compound, and there is evidence consistent with discrimination in labor markets, though little overt evidence to prove or disprove the extent of it.

In some countries, spatial or geographic factors may be the predominant cause of indigenous disadvantage (China, Laos, and to some extent India). Most ethnic minorities in China and Scheduled Tribes in India reside in rural areas, and face the economic challenges of isolated rural communities – highly overrepresented in relatively poorly paid agricultural occupations. Access to basic infrastructure and services is an apparent driver of indigenous poverty in these cases. Yet, it is not obvious how to address these constraints most effectively. Delivering basic infrastructure to small, dispersed populations in remote areas is not cost-effective, and resettlement strategies, where they have been attempted, are not only contentious but have largely failed (Laos).

In Latin America, indigenous disadvantage appears to be more complex, driven not only by geography low returns on human capital and other assets, leading to significant differences in earnings and, therefore, poverty status. That these differences have endured despite several decades of progress in reducing human capital gaps may be indicative of the lack of complementary investments and less than optimal national growth and poverty reduction strategies. That is, if at the national level one is willing to accept slow growth and inequality, then not much can be expected for indigenous peoples.

There is no overwhelming evidence that programs targeted specifically the indigenous population will substantially erase the gap between groups, especially in the absence of broad-based growth and poverty reduction. In Latin America we only found evidence of poorly performing targeted programs and even in cases where programs could help – such as bilingual education – they were poorly implemented. On

the contrary, the one program that as of 2006 had reached indigenous groups successfully and on a large scale – *Oportunidades* in Mexico – did so as a poverty-targeted as opposed to indigenous-targeted program. Due to its success this program is now being replicated across the region and it will be important to monitor results for indigenous peoples across the region. In Asia, ethnicity-targeted programs such as the resettlement strategies in Laos are generally appraised as failures. China, like India, has implemented some pro-indigenous policies, in this case easing access to political office, looser fertility restrictions, and affirmative action policies for matriculations into colleges and universities along with subsidies, the appraisal of which is mixed. In sum, the evidence that can be pieced together so far suggests that general economic improvement (as in China and somewhat India and Vietnam) or generally poverty-targeted programs such as Mexico’s *Oportunidades* have had a greater impact on indigenous poverty.

Well-designed targeted programs are also likely to be important, but their success is probably contingent on country-wide growth and poverty reduction. Widespread growth and poverty reduction may be the necessary but insufficient condition in eliminating the indigenous poverty gap. That is, the first step in improving indigenous peoples outcomes is likely to be to identify and address the binding national country constraints to poverty reduction. Evidence suggests that within this context vast segments of the indigenous population will benefit. Yet the indigenous movement is made up of varied groups of people, some of whom will be likely to benefit substantially from widespread growth and poverty reduction strategies, and others which will require focused strategies to address multiple sources of disadvantage. Country and group-specific solutions, however, are likely to be complex; as David Maybury-Lewis noted the question is not if we are going to have development in the indigenous world, but how (Levi and Maybury-Lewis 2009). However, it will be very difficult for efforts designed to tackle group-specific disadvantage will succeed unless implemented against a backdrop of successful widespread poverty reduction strategies.

Areas for further research

Causes of indigenous poverty. While we are able to show the concentration of poverty, it is nevertheless difficult to ascertain why indigenous are poor, except in very general terms. Given the nature of unobservables, one will never clearly be able to claim causality. Thus, a first priority is to rigorously assess what works and what doesn’t in improving indigenous peoples’ outcomes, and to get more precise estimates of indicators and the differences in those indicators between groups. Such work is feasible, even with survey data. In the case of Vietnam, using repeat cross-section household surveys and the Vietnam War as an instrument for schooling, the determinants of earnings were calculated (Dang and Patrinos 2008). Results show that the gap increased as a result of the war, and while there has been progress in regaining schooling years lost since the war, it has been substantially slower for ethnic minorities.

Determinants of success among outlier groups. A second and related research priority is to gain a better understanding of what has determined the success of some “outlier” or successful groups. Our results underscore the fact that there are particular groups, or sub-

groups in some countries that are doing very well (for example, the Aymara in Peru, particular ethnic groups in China, such as the Hui and Manchu). Untangling the factors behind these success stories is a priority for future research significant recovery over time, the minority has fallen further behind.

Education. Third, given overwhelming evidence on the role of human capital, research specifically focused on improving education outcomes among indigenous peoples is also critical. In particular, a promising area for research concerns the question of language of instruction. This may be relevant not only for improving access but also for making education more relevant – to the indigenous communities themselves and for improving the quality of that education as measured by standardized test scores. Therefore, evaluating bilingual programs could be a promising area of future research (Patrinos and Velez 2009). Also, among the multiple sources of inequality identified in this study is the precarious position of rural minority girls and women. Besides relevance of schooling, other improvements must be made to ensure that minority girls participate in schooling. Scholarship programs such as Mexico’s *Oportunidades* (conditional cash transfers) have proven very successful in getting poor children into school and was even more successful in reducing the indigenous/non-indigenous gap in schooling (Lopez-Calva and Patrinos 2008); it is now being tried in other countries, but should be in cooperation with indigenous communities and have a quality or supply-side corresponding element.

Country coverage and data collection. Although we cover most of the indigenous population of the world since we include both China and India, there are nevertheless many countries where this type of work is not yet done, and should be. This study demonstrates that it is possible to come up with indicators for indigenous populations in a large number of countries using existing survey instruments. Therefore, the call to disaggregate data used for official international programming (MDGs) and country specific programming is possible and should be done.

In cases where data is lacking, a concerted effort then is needed to introduce items in standard data-gathering instruments to identify different population groups. In surveys, questions on identity can focus on self-identification, language and geography. The need to develop a list of standardized questions for surveys in different years and countries is apparent. That list could include self-identification, language (mother tongue, commonly used language, language used at home, secondary language), and parents’ mother tongues. Ideally, each question would allow respondents to identify a specific group. Statisticians must also recognize that indigenous areas are often under-surveyed due to civil conflict and geographic isolation, thus there may be a need to impute the under-representation of groups, particularly if changes in the size of the indigenous population would affect policy.

However, besides the usual self-identification questions a special survey module for Indigenous Peoples could be very useful. Statistics agencies could include a special survey module for Indigenous Peoples. That module could study traditional medicine practice, religious/community activities, land ownership, bilingual schooling, inter-

marriage and others. Some countries have used separate surveys for Indigenous Peoples. It is unclear whether such separate surveys are more useful for researchers than are national surveys including both Indigenous and non-Indigenous Peoples. More useful, from a research and policy perspective, are supplements to national censuses (such as Canada's Aboriginal Peoples Survey, designed and implemented in partnership with national Aboriginal organizations). It goes without saying that as indigenous peoples themselves have been requesting, this effort can only be done successfully to the extent that they play a role in the conceptualization and implementation of the data gathering, as well as policy formulation.

References

- Altamirano, T., J. Copestake, A. Figueroa and K. Wright. 2003. "Poverty Studies in Peru: Towards a More Inclusive Study of Exclusion". Economic and Social Research Council Working Paper No. 5. University of Bath.
- Bertrand, M. and S. Mullainathan. 2003. "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination." NBER Working Paper No. 9873.
- Borooah, V.K. 2005. "Caste, Inequality, and Poverty in India." *Review of Development Economics* 9(3): 399-414.
- Borooah, V., B. Gustafsson and L. Shi. 2006. "China and India: Income Inequality North and South of the Himalayas". *Journal of Asian Economics* 17: 797-817
- Borland, J. and B.H. Hunter. 2000. "Does crime affect employment status? The case of indigenous Australians." *Economica* 67(265):123-144
- Bradley, S., M. Draca, C. Green and G. Leeves. 2007. "The magnitude of educational disadvantage of indigenous minority groups in Australia." *Journal of Population Economics* 20(3): 547-569.
- Brosnan, P. 1984. "Age, education and Maori-Pakeha income differences." *New Zealand Economic Papers* 18: 49-61.
- Brosnan, P. and C. Hill. 1984. "New Zealand Maori/non-Maori labour force income differentials." *Journal of Industrial Relations* 25: 327-338.
- Daley, A.E. and J. Lui. 1995. "Estimating the private rate of return to education for indigenous Australians." Centre for Aboriginal Economic Policy Research Discussion paper no.97.
- Dang, H.A and H.A. Patrinos. 2008. "The Long-Run Educational and Labor Market Costs of the Vietnam War: Gender and Ethnic Minority Impacts."
- De Meer, K., et al. 2005. "Differences in Physical Growth of Aymara and Quechua Children." *American Journal of Physical Anthropology* 90(1): 59-75.
- de Silva, A. 1999. "Wage Discrimination Against Natives." *Canadian Public Policy* 25(1): 65-85.
- Drost, H., B.L. Crowley and R. Schwindt. 1995. *Market Solutions for Native Poverty: Social Policy for the Third Solitude*. Toronto: C.D. Howe Institute.

- Eversole, R., J.-A. McNeish and A.D. Cimadamore, eds. 2005. *Indigenous Peoples and Poverty: An International Perspective*. London: Zed Books.
- Gang, I.N., K. Sen and M.-S. Yun. 2008. "Poverty in Rural India: Caste and Tribe." *Review of Income and Wealth* 54(1): 50-70.
- George, P. and P. Kuhn. 1994. "The size and structure of Native-White wage differentials in Canada." *Canadian Journal of Economics* 27(1): 20-42.
- Gregory, R.G., A.C. Abello and J. Johnson. 1997. "The individual economic well-being of Native American men and women during the 1980s: A decade of moving backwards," *Population Research and Policy Review* 16(1-2): 115-45.
- Gregory, R.G. and A.E. Daly. 1997. "Welfare and Economic Progress of Indigenous Men of Australia and the US 1980-1990." *The Economic Record* 73(221): 101-119.
- Gundersen, C. 2008. "Measuring the extent, depth, and severity of food insecurity: an application to American Indians in the USA." *Journal of Population Economics* 21(1): 191-215.
- Gustafsson, B. and L. Shi. 2003. "The Ethnic Minority- Majority Income Gap in Rural China during Transition." *Economic Development and Cultural Change* 51:805-822.
- Gwartney, J.D. and J.E. Long. 1978. "The relative earnings of Blacks and other minorities." *Industrial and Labor Relations Review* 31(1): 336-346.
- Hall, G. and H.A. Patrinos. 2006. *Indigenous Peoples, Poverty and Human Development in Latin America*. London: Palgrave.
- Hannum, E. 2002. "Educational Stratification by Ethnicity in China: Enrollment and Attainment in the Early Reform Years." *Demography* 39(1): 95-117.
- Hitchcock, Robert and Diana Vinding, eds. 2004. *Indigenous People's Rights in Southern Africa*. International Work Group for Indigenous Affairs. Copenhagen.
- Hodgson, D.L. 2002. "Introduction: Comparative Perspectives on the Indigenous Rights Movement in Africa and the Americas." *American Anthropologist* 104(4): 1037-1049.
- Hurst, Michael. 1997. "The Determinants of Earnings Differentials for Indigenous Americans: Human Capital, Location or Discrimination?" *Quarterly Review of Economics and Finance* 37(4): 787-807.
- International Work Group for Indigenous Affairs. 2008. *The Indigenous World 2008*. Edison, NJ: Transaction Publishers.

- Jalan, J., Ravallion, M., 1997. "Spatial Poverty Traps?" Policy Research Working Paper Series 1862, Washington DC: World Bank
- Jalan, J., Ravallion, M., 2002. "Geographic poverty traps? A micro model of consumption growth in rural China," *Journal of Applied Econometrics*, 17
- Jalan, J. and M. Ravallion. 2004. "Household income dynamics in rural China," in S. Dercon, ed., *Insurance against Poverty*. Oxford: Oxford University Press.
- Kalt, J.P. 2007. *The State of the Native Nations: Conditions Under U.S. Policies of Self-Determination*. Oxford: Oxford University Press.
- Kimmel, J. 1997. "Rural wages and returns to education: Differences between whites, blacks, and American Indians." *Economics of Education Review* 16(1): 81-96.
- Kuhn, P. and A. Sweetman. 2002. "Aboriginals as unwilling immigrants: contact, assimilation and labour market outcomes." *Journal of Population Economics* 15(2):331-355.
- Kymlicka, W. 1996. *Multicultural Citizenship*. Oxford University Press.
- Levi, J. and B. Maybury-Lewis. 2009. "Becoming Indigenous: Identity Strategies and Global Activism for the 21st Century." Draft.
- Lewis, M. and M. Lockheed. 2006. *Inexcusable Absence: Why 60 Million Girls Still Aren't In School and What to do About It*. Washington, DC: Center for Global Development.
- Lucas, K. 2006. "Ecuador: Eruption Exposes Indigenous Poverty". August 22. Inter Press Service News Agency. (online edition).
- Lumsden, 2008. "Making Indigenous Poverty History". *Journey*, September 30. Queensland Uniting Church (online edition).
- Maani, S.A. 2004. "Why have Maori relative income levels deteriorated over time?" *Economic Record* 80(248):101-124.
- Maybury-Lewis D. 2002. *Indigenous peoples, ethnic groups and the state*. Needham, Massachusetts: Allyn & Baker.
- Meerman, J. 2005. "Oppressed People: Economic Mobility of the Socially Excluded." *Journal of Socio-Economics* 34: 542-567.
- Neckerman, K. 2007. *Schools Betrayed: Roots of Failure in Inner City Education*. University of Chicago Press.

- Niezen, R. 2003. *The Origins of Indigenism: Human Rights and the Politics of Identity*. Berkeley: University of California Press.
- Ohenjo, Nyang'ori, et al. 2006. "Health of Indigenous People in Africa." *The Lancet* 367: 1937-1946.
- Parker, B. and V. Kozel. 2007. "Understanding Poverty and Vulnerability in India's Uttar Pradesh and Bihar: A Q-squared Approach." *World Development* 35(2): 296-311.
- Patrinos, H.A. and C.N. Sakellariou. 1992. "North American Indians in the Canadian labour market: A decomposition of wage differentials." *Economics of Education Review* 2(3): 257-266.
- Patrinos, H.A., E. Skoufias and T. Lunde. 2007. "Indigenous Peoples in Latin America: Economic Opportunities and Social Networks." World Bank Policy Research Working Paper No. 4227.
- Patrinos, H.A. and E. Velez. 2009. "Costs and Benefits of Bilingual Education in Guatemala: A Partial Analysis." *International Journal of Educational Development* forthcoming.
- Psacharopoulos, G. and H.A. Patrinos. 1994. *Indigenous People and Poverty in Latin America: An Empirical Analysis*. Washington DC: World Bank.
- Royal Commission on Aboriginal Peoples. 1993. *Sharing the Harvest: The Road to Self-Reliance*. Report of the National Round Table on Aboriginal Economic Development and Resources. Ottawa: Minister of Supply and Services Canada.
- Sandefur, G.D. and W.J. Scott. 1983. "Minority group status and the wages of Indian and Black males." *Social Science Research* 12(1): 44-68.
- Snipp, C.M. and G.D. Sandefur. 1988 "Earnings of American Indians and Alaskan natives: The effects of residence and migration." *Social Forces* 66(4):
- Sorkin, A.L. 1969. "American Indians industrialize to combat poverty." *Monthly Labor Review* 92(3): 19-25.
- Sorkin, A.L. 1970. "Poverty and dropouts: The case of the American Indian." *Growth and Change* 1(3): 14-18.
- Sorkin, A.L. 1974. "The economic and social status of the American Indian, 1940-1970." *Nebr. J. Econ. Bus.* 13(2): 33-50.

- Stephens, C., C. Nettleton, J. Porter, R. Willis and S. Clark. 2005. "Indigenous peoples' health—why are they behind everyone, everywhere?" *The Lancet* 366(9479): 10-13.
- Stephens, C., J. Porter, C. Nettleton and R. Willis. 2006. "Disappearing, Displaced, and Undervalued: A Call to Action for Indigenous Health Worldwide." *The Lancet* 367: 2019-2028.
- UNPFII. 2006. UN Economic and Social Council, Permanent Forum on Indigenous Issues, Fifth Session. "Action Programme for Second Indigenous Decade Launched." 15 May 2006.
- UNPFII. Who Are Indigenous Peoples? Factsheet 1. http://www.un.org/esa/socdev/unpfii/documents/5session_factsheet1.pdf
- Van de Walle, D. and D. Gunewardena. 2001. "Sources of Ethnic Inequality in Vietnam." *Journal of Development Economics* 65: (177–207).
- Van den Berghe, P. 1974. *Class and ethnicity in Perú*. Brill Archive.
- Velasquez Castellanos, I. 2007. "Extreme Poverty: Vulnerability and Coping Strategies among Indigenous People in Rural Areas of Bolivia." *Ecology and Development Series* No. 51. ZEF, University of Bonn.
- World Bank. Poverty and Growth Blog. http://pgpblog.worldbank.org/indigenous_and_tribal_people_and_prsps (accessed 4/26/09)