# Spatial integration and human transformations in the Greater Mekong subregion

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chapter

At the core of the World Development Report 2009 (WDR 2009) is the contention that, while the concentration of economic activity is positive because it both stimulates further economic growth and is an inevitable outcome of such activity and growth, it also tends to lead to great(er) spatial inequalities, which are undesirable. The report proposes that the solution to this development conundrum is the better integration of markets. Such integration will enhance economic concentration (a "good" thing), while tempering the tendency to deepen spatial inequalities (a "bad" thing).

Drawing on the experience of the countries of the Greater Mekong subregion (the GMS), which are undergoing just such a spatial transformation in one of the world's most economically dynamic regions, this chapter highlights the practical difficulties and policy challenges of achieving such a win-win outcome. We do this, first by focusing on spatial integration as a necessarily unsettling and destabilizing process; second, by emphasizing the societal and environmental outcomes and side effects of the concentration of economic activities and the integration of markets; and third, by viewing geographic space not as the mere stage on which certain activities occur, but as socially produced and politically charged. Regarding the last point, we wish to avoid, for example, simply assuming that remoteness is a problem, that policies and programs to stimulate spatial integration are necessarily beneficial, and that people are affected by and respond to the challenges of marginality and integration in similar ways. We start from the premise, therefore, that the devil really is in the details. Like Ravallion, we are interested in exploring the "churning that is found under the surface of the aggregate outcomes" (Ravallion 2001: 1812).

We do not seek to challenge the core assumption of the WDR 2009 that regional spatial integration and concentration tend to increase aggregate output; the evidence, both national and international, from the countries of the GMS suggests—strongly otherwise. Rather, we are intent on highlighting the inequalities, inconsistencies, and incongruities that accompany this process. In particular, we seek to show not only that economic concentration does lead to deeper spatial inequalities but also that spatial integration—the "solution" to such a tendency—is accompanied by its own negative and undesirable side effects. We end the chapter by reflecting on the policy implications of these processes.

## The GMS: an idea becomes a subregion

The GMS encompasses six countries centered on mainland Southeast Asia: Cambodia, China (originally Yunnan province only, but since 2005 also including Guangxi Zhuang Autonomous Region), Lao People's Democratic Republic, Myanmar, Thailand, and Vietnam (see figure 6.1). The GMS program was launched in 1992 and given further impetus in November 2001 when



Figure 6.1 The Greater Mekong subregion

 ${\it Source:} http://www.adb.org/GMS/img/gmsmap.gif.$ 

the Strategic Framework for the GMS was adopted at the Association of South East Asian Nations (ASEAN) ministerial conference. At the first GMS summit held in Phnom Penh at the end of November 2002, the leaders of the subregion endorsed a 10-year strategic framework with five strategic thrusts: 2

• Strengthen infrastructure linkages through a multisectoral approach;

- Facilitate cross-border trade and investment;
- Enhance private sector participation in development and improve its competitiveness;
- Develop human resources and skill competencies; and
- Protect the environment and promote sustainable use of the subregion's shared natural resources.

In a document with the title *Linking Nations*, *Connecting People*, the rationale for the GMS program is summarized in the following terms (ADB 2005a: 7):

[To promote] closer economic ties and cooperation among the six countries. Its vision is to create a more integrated, prosperous, and equitable Mekong subregion, complementing national efforts to promote economic growth and reduce poverty and augmenting domestic development opportunities to create subregional opportunities. It seeks to encourage trade and investment among GMS countries, ease the cross-border movement of people and goods, and meet common resource and policy needs.

Underpinning the GMS are different "logics." The economic logic of the GMS lies in the productivity returns that can be garnered from the spatial integration of countries with complementary economies. Complementarity, here, is rooted in difference; it is because the GMS countries and their economies are different—in wealth as much as in composition—that economic cooperation is worthwhile (see table 6.1). The geographic logic is founded on the Mekong, the hydrological thread that links the countries of the GMS. And the political logic arises from the era of peace and rapprochement that saw the six countries of the GMS make the transition from Cold War foes to post-Cold War friends from the early 1990s, reflected in their membership (with the exception of China) in ASEAN.

Of the five strategic thrusts noted above, the first two relate explicitly to regional spatial integration in physical terms, the third and fourth relate to private and public sector regional cooperation, and the last relates to regional resource cooperation and management. The 11 "flagship" programs that will deliver this strategic framework are all oriented toward integration of the subregion, with a particular focus on three economic corridors (ADB 2005c):<sup>3</sup>

- North-south economic corridor;
- East-west economic corridor;
- Southern economic corridor;
- Telecommunications backbone and information and communications technology;

- Subregional power interconnection and trading arrangements;
- Cross-border trade and investment;
- Private sector participation and competitiveness:
- Human resources and skills competencies;
- Strategic environmental framework;
- Flood control and water resource management; and
- Tourism development.

From the start, therefore, the GMS had a strong infrastructural justification underpinned by a set of assumptions that resonate with the WDR 2009. Political rapprochement and an easing of security tensions in the subregion provided the opportunity for cooperation, but the "program's first priority was ... to create the vital links within and between countries and promote the development of the subregion's resource base" (ADB 2005a: 9). These linkages connect the rural poor to urban-centered services, jobs, and amenities; connect remote regions to the national (and wider) economy; and connect backward rural economies with the modernizing urban core. There is no doubt that the GMS program is ambitious. By mid-2006, 26 GMS projects were being funded to the tune of US\$6.5 billion. In the Kunming Declaration of July 2005, the GMS countries reaffirmed the commitments they had made at the first GMS summit held in Phnom Penh in November 2002 (ADB 2005b: 17):

Cross-border infrastructure is key to economic development and prosperity in the region. A well-built, seamless, multimodal infrastructure is essential to the facilitation of trade, movement of people, and the provision of basic services throughout the whole region. We therefore commit ourselves to fully "connecting the GMS." To that end, we commit to sustained and greater inputs to strengthen the subregional infrastructure linkages through a multisector and holistic approach.

### Openness, progress, and inequality in the GMS

Before we consider in more detail why and how spatial integration leads to an unsettling of categories and scales and the

Table 6.1 Openness, progress, and inequality in the GMS, 1990–2006

Indicator and year	Cambodia	China	Lao PDR	Myanmar	Thailand	Vietnam
Population (million)				-		
1990	8.6	1,143	4.1	40.8	55.8	66.0
2006	14.2	1,315	5.7	56.5	65.2	84.2
Economic progress		1,515				
Average annual growth in per capita GDP, 1990–2005 (percent)	_	9.11	3.75	_	3.52	5.93
Per capita income (current US\$)						
1992	220	415 (293)	271		1,945	144
2006	510	1,999 (842) <sup>f</sup>	601	176 <sup>d</sup>	3,133	724
Percent of GDP (2006)						
Agriculture	30.1	11.8	44.8	48.4	10.7	20.4
Industry	26.2	48.7	29.5	16.2	44.6	41.6
Services	38.6	39.5	25.7	35.4	44.7	38.1
Development, well-being, and inequality						
Poverty (percent of population living on less than PPP US\$1 a day)						
1990	46	32.5	52.7	_	10.2	50.7
2005	12.7	7.1	21.3	_	0.0	6.5
Poverty (percent of population living on less than PPP US\$2 a day)						
1990	76.3	71.5	89.6	_	43.1	87.0
2005	54.5	29.4	67.7	_	16.2	39.7
Percent of population living in poverty (percent of national poverty line)	34.7 <sup>f</sup>	_	32.7 <sup>e</sup>	26.6°	9.8 <sup>d</sup>	19.5 <sup>f</sup>
Number of US\$1-a-day poor (million)						
1990	4.0	377	2.2	_	5.7	33.4
2003	4.5	173	1.6		0.4	7.9
Human development index						
1990	0.512	0.627	0.449	_	0.707	0.610
2004	0.583	0.768	0.553	0.581	0.784	0.709
Gini coefficient						
1993	31.80	40.70	30.40 <sup>a</sup>	_	46.22a	34.91
2004	38.05	45.50	34.68 <sup>d</sup>	_	41.96 <sup>d</sup>	37.08 <sup>f</sup>
Openness and integration						
Openness ratio (ratio of total trade to GDP at current market prices)						
1992	35.8	27.7	33.8	2.8	64.9	50.8
2006	117.2	65.7	56.7	_	123.3	136.4
Foreign direct investment (US\$ million)		00.7	00.7		. 20.0	
1992	33	11,008	280 <sup>b</sup>	149	2,151	474
2006	318 <sup>9</sup>	64,468	650	128 <sup>e</sup>	8,837	4,100
Investment rate (ratio of gross domestic investment to GDP)	0.0	01,100	000	120	0,007	1,100
1992	11.3	36.2	_	1.3	40.0	29.6 <sup>b</sup>
2006	20.8	44.9	_	11.0 <sup>e</sup>	27.9	35.4 <sup>g</sup>
Tourist arrivals (million)						
1995	0.22	1.02	0.35	0.12	6.95	1.35
2006	1.70	3.38	1.26	0.21	13.82	3.58
Registered migrants in Thailand		2.00	20	V.E.I	. 5.02	3.00
1998	9,492	_	1,164	89,318	n.a.	_
2004	104,789	_	99,352	610,106	n.a.	_
2007	107,700	_	33,332	010,100	11.a.	_

Sources: ADB (2007a, 2007b); Ali and Zhuang (2007); Caouette and others (2007).

Note: The per capita GDP figures in parentheses for China are for Yunnan province and Guangxi Zhuang Autonomous Region; the data on registered migrants in Thailand should be treated with caution because of the large number of unrecorded migrants.

a. 1992. b. 2000. c. 2001. d. 2002. e. 2003. f. 2004. g. 2005.

n.a. Not applicable.

— Not available.

destabilization of lives and livelihoods, we wish to set out the positive effects that have flowed, directly and indirectly, from GMS integration.

A mid-term review of the GMS program, published in June 2007, observes that the "GMS economies have grown at one of the fastest rates in the world since the early 1990s, as many of them started the transition from central planning to market-based systems and began opening up and integrating their economies with the other countries in the subregion, the rest of Asia, and the world" (ADB 2007b: 4). Table 6.1 presents the empirical indicators of economic and social development among the countries of the GMS since the grouping was formally established in 1992. There are a number of points to note: first, the clear progress that has been achieved by the countries of the GMS over the period since 1992, particularly in terms of poverty reduction and per capita GDP (all the more remarkable bearing in mind the Asian economic crisis of 1997–99);<sup>5</sup> second, the degree to which the region has become more open, whether measured in terms of the openness ratio, foreign direct investment (FDI), tourist arrivals, migration streams, or investment rate; third, the manner in which economic progress and greater openness have been accompanied, particularly in the reform economies, by widening inequalities (and also see table 6.4); and finally, the large number of people who are living close to poverty, reflected in the differential between the incidence of US\$1-a-day and US\$2-a-day poverty.

Of course, in considering historical causality we must be wary of post hoc rationalization—the logical fallacy of assuming that, because one thing follows another, they must be causally linked. With this in mind, the following questions are relevant: Has greater openness driven the economic gains of the last 10–15 years? Have deepening inequalities been an outcome of market reforms? And what is the relationship among economic reform in general, the GMS initiative in particular, and economic progress, on the one hand, and inequality, on the other?

The GMS mid-term review notes that openness and integration per se are not sufficient, in themselves, to deliver broad-based

and inclusive development (ADB 2007b: 12-13). Three issues stand out. First, there is the question of the quality of integration. Regional road arteries such as the GMS economic corridors need to be accompanied by rural feeder roads and improvements in domestic infrastructure if they are to deliver benefits that are broad based in both their social and spatial impacts. In an econometric analysis of the impacts of cross-border road infrastructure on trade and foreign direct investment in the GMS, Edmonds and Fujimura (2006) conclude that improvements in road infrastructure boost trade, particularly when domestic road infrastructure is good.6 In other words, the focus on transnational (cross-border) links must be accompanied by payment of an equal level of attention to the national infrastructural dimension. A related point is evident in Warr and Menon's (2006) general equilibrium model of road improvement and poverty reduction in Lao PDR, in which they note that the pro-poor impacts are significantly greater when households without road access are provided with dry-season access than when dry-season roads are upgraded to all-weather status. Second, it cannot be assumed that the poor and the vulnerable the destitute, the elderly, ethnic minorities, women-will find equal and equivalent benefits from regional and national integration. Indeed, they may counterintuitively be "crowded out" by the process of integration (ADB 2007b: 12). And third, regional integration can be accompanied by certain adverse effects, most obviously in the realm of environmental degradation. We explore the last two issues in more detail below.

# Scales and sites: the empirics of spatial transformations in the GMS

The core of this chapter focuses on the *effects* of spatial transformations on people and places. But to get to that point, it is valuable to set out the spatial, policy, and historical contexts within which, and on which, those effects are set. In doing this, it will become clear why the GMS offers such a rich ground for reflecting on the issues debated in the WDR 2009.

### Lagging countries, lagging regions, lagging people

The GMS region shows marked inequalities in income and poverty at the international and interregional levels. More than half of the population of Lao PDR and Cambodia live below the PPP (purchasing power parity) US\$2-a-day poverty line, compared with less than one-fifth of the population in Thailand (table 6.1). More significantly, in Thailand, more than half of the country's total poor population of a little over 7 million are concentrated in the northeast region; in Lao PDR and Vietnam, the poor are disproportionately concentrated in upland areas and among ethnic minorities (see table 6.2), while in all the countries of the GMS, poverty is to a large extent a rural phenomenon (see table 6.3). The GMS project is directed, in no small way, at addressing these spatial manifestations of poverty, whether they reflect inequalities among countries, among regions, or between rural and urban areas. There is good evidence that income-expenditure inequalities have widened significantly in the transition economies of the GMS over the course of the last 10-15 years (see table 6.4). Only in Thailand

Table 6.2 Incidence of poverty in Lao PDR, by ethnolinguistic family, 2001

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Family	Percent of poor in sample sites	Percent of total population
Mon-Khmer	56	23.5
Hmong-Mien	15	7.5
Tibeto-Burman	9	2.5
Tai-Kadai		
Thai-Thay	13	36.5
Lao	7	30.0
Total	100	100.0

Source: ADB (2001: 25).

Note: Column 1 shows the percentage of poor by ethnic group in the sampled poor sites; column 2 shows the estimated representation of each ethnic group in the total population. So, while ethnic Lao comprise 30 percent of the population of the Lao PDR, they make up only 7 percent of the population of poor sites in this survey.

Table 6.3 Rural and urban distribution of poverty based on national poverty lines, various years

Country and year	Total	Urban	Rural
China (1998)	4.6	2.0	4.6
Cambodia (1999)	35.9	18.2	40.1
Lao PDR (1997)	38.6	26.9	41.0
Myanmar (1997)	22.9	23.9	22.4
Thailand (2002)	9.8	4.0	12.6
Vietnam (2002)	28.9	6.6	35.6

Source: http://www.adb.org/documents/books/key\_indicators/2005/xls/rt01.xls.

have incomes grown faster for the poor(er) than for the rich(er).

In drawing (relatively) unconnected regions and areas into the mainstream, GMS policies are likely to be narrowing inequalities at some scales, while widening inequalities at others. More precisely, interregional inequalities are likely to narrow, while intraregional inequalities will widen. This is because of the way in which better access bestows differential benefits on social classes and population groups. Generally, men are in a better position to benefit than women, young(er) than old(er), rich than poor, majority populations than minority groups, and the educated than the less well educated. This is not a reason to curtail further integration, but it does highlight the existence of a variegated landscape of opportunity that represents both a development challenge and a political dilemma.

# Border sites and cross-border interactions: economic and environmental

Research undertaken in borderland areas of the GMS notes the increase in economic activity made possible by improving transport links, receding political and bureaucratic barriers to exchange, and a shared economic vision. The deepening of transboundary economic relations is seen by governments, businesspeople, and multilateral agencies as providing considerable scope for local development. These borderland sites, therefore, take on particular qualities that are, in part, a product of their geographic location. They may develop in such a way that they become "enclave" zones relative to other areas, sites of particular economic dynamism and, also, social tensions. For Swe and Chambers, "Frontier towns represent a nexus where opportunities for profit ... abound" and which are "increasingly serving as strategic nodes for commerce and growth in a singular segment of a multisegmented region state [that is, the GMS]" (Swe and Chambers 2008: 2). Moreover, while obstacles to trade persist, from transit taxes (including bribes) to stifling bureaucratic inefficiencies, the growth of commerce is seen as a "positive-sum game for all countries in terms of profits gained" (Swe and Chambers 2008: 3).

Table 6.4 Annualized growth rates of per capita expenditure and income, by country and quintile

Country	Q1 (poorest 20 percent)	02	<b>Q</b> 3	<b>Q</b> 4	Q5 (richest 20 percent)
Cambodia (1993–2004)	0.69	1.27	1.84	2.39	3.38
China (1993-2004)	3.40	4.46	5.42	6.19	7.10
Laos (1992-2002)	1.47	2.22	2.85	3.40	3.82
Myanmar	_		_	_	_
Thailand (1992–2002)	2.35	2.27	1.96	1.51	0.38
Vietnam (1993–2004)	3.37	3.92	4.29	4.61	4.69

Source: Extracted from ADB (2007a: 35).

Gainsborough (2007) undertook research in two Vietnamese borderland sites, in Lao Cai in the north, on the Vietnam-China border, and in Tay Ninh in the south, on the Vietnam-Cambodia border. His interest lay in unpicking the relative roles of the state, private enterprise, and multilateral institutions in orchestrating trade flows across these frontiers. In the context of this chapter, Gainsborough wonders whether the policies and programs of the GMS have had any effect on cross-border flows or whether this is just wishful thinking. He concludes, "In relation to the GMS it is hard to argue against the view that there has been a significant increase in the intensity of cross-border flows of goods, people, money, and information since the early 1990s" (Gainsborough 2007: 8; see also table 6.5). He also suggests that Asian Development Bank (ADB) investments linked to the GMS program have played a defining role in delivering improved infrastructure and raising prosperity that, in turn, lie behind the increased trade flows.

A concern in Gainsborough's study is to ascertain who the "actors" are in cross-border trade and what their relationships are with the state. For him, there is a tendency among scholars and officials to assume that private enterprises are taking the place of

Table 6.5 Expanded trade flows in the Greater Mekong subregion two-way trade (US\$ million)

Time period	Vietnam and Cambodia	Vietnam and China
Early 1990s	30-40	300 <sup>a</sup>
1995	118.1	691.6
2000	178.9	2,937.5
2003	300	4,800
Annual increase, 1995–2003 (percent)	19.3	73.0

Source: Gainsborough (2007: 8)

a. 1991

the state. However, while there has been an increase in the number of private actors in his two border case studies, their success is contingent on their close links with the state and state enterprises and agencies. He says, "I have ... argued in this article that there are important ways in which the growth of private and transnational actors may be associated with a strengthening—not a decline—of state power in some areas" (Gainsborough 2007: 15).

Border zones are, self-evidently, political and politicized spaces: the frontier makes them so. As Sturgeon writes in her book on border landscapes in China and Thailand, "Borders are processes replete with politics, both as margins of the nation state (border-as-margin) and as cross-border social relations (border-as-line)" (Sturgeon 2005: 201). What is less often investigated is the way in which the politics of access fall unequally on groups living in and outside the border zone. The GMS may be trying to go "beyond borders" (ADB 2005b), but this must be seen—for the time being—as just an articulated desire. Borders matter, with the result that there is a quite distinctive border or frontier geography.

The increase in economic activity in borderlands arises partly because integration permits the exploitation of space and the more efficient and intensive use and extraction of natural resources. Crossborder market forces are shaping the transformation of the agricultural sector in the Mekong corridor as production is oriented toward the demand profiles of China, Vietnam, and Thailand (Lao PDR 1999: 35). Sometimes acute environmental pressures have arisen from such spatial integration. Improvements to the east-west economic

Not available.

corridor, for example, led to the "massive illegal movement of live animals [from Lao PDR] into neighboring countries [Thailand and Vietnam]" (UNEP 2001: 55). Consumer demand in China has fueled an unsustainable harvesting of nontimber forest products in provinces like Luang Prabang and Luang Namtha and their funneling, along the valley of the Nam Ou and the Nam Tha, to markets and consumers in China (ADB 2000: 8; see also Lao PDR 2000b: 44; Hoang 2007). In northern Lao, the rapid expansion since 2000 of Chinese rubber concessions has threatened the sustainability of ethnic minority-operated ecotourism activities (Schipani 2007).

Our view of the livelihood and environmental effects of spatial transformations such as those linked to (but not limited to) the GMS project entertains the possibility, indeed the likelihood, that they will be mixed in general and will vary across population groups. This latter issue is explored in greater depth below. It is also the case that, while environmental tensions may be particularly noticeable across borders, they are not limited to border zones, and the market effects that more open borders engender may have considerable spatial "reach."

# Agents, agency, and impacts of spatial transformation in the GMS

Of all the investments in physical infrastructure, none, arguably, has done more to transform regional economic landscapes, spatialities of production and consumption, household livelihoods, and individual mind-sets than has investment in roads. This section, therefore, deals specifically with the impact of roads and the movement of people.

#### Roads

For many analysts, the benefits of spatial integration—and the costs of isolation—are self-evident: "Investment in physical infrastructure will significantly contribute to the pursuit of socially inclusive development.... Roads appear to have strong indirect and direct effects on poverty reduction" (Ali and Pernia 2003: 2, 10). The road-building imperative that informs the GMS initiative

is based on the premise that the most effective means with which to narrow spatial economic inequalities is by drawing people and places into the market mainstream. Poverty has a strong spatial component, and the poor are concentrated in those areas where the market has a weak presence. Roads can bring both the market to the people and the people to the market, thus becoming arteries through and along which spatial inequalities in development and service provision can be bridged. That roads are developmental is taken, often, as both obvious and unproblematic: "Remoteness is an important cause of rural poverty" (World Bank 1999: 7), and a "well-managed road network is one of the essential prerequisites for economic growth, and, given the growing focus on developing rural areas, it is a sine qua non for balanced and equitable growth for all sectors of the community" (Lao PDR 2000a: 64; see also UNDP 1996: 3; Lao PDR 2000c: 9).

There is also strong evidence that road improvements help in delivering social development and reducing poverty. Using the 1997-98 and 2002-03 Lao Expenditure and Consumption Surveys, Menon has studied the impact of road improvements on household well-being. He concludes, "Road improvement in rural areas can contribute to lowering poverty incidence, improving educational participation of primary schoolage children, and reducing the rate of illness" and calculates that around one-quarter of the reduction in poverty over the period between the two surveys could be attributed to the conversion of dry-season access roads into all-weather roads (cited in ADB 2007b: 10). Road improvements increase access to opportunities beyond the local area, boost the potential for in situ local economic development by reducing transaction costs, and bring services such as schools and health centers within easier reach of people, particularly in rural areas. This is also confirmed in a second study of Lao PDR, which concludes that "reducing transport costs through rural road improvement generates significant reductions in poverty incidence" (Warr and Menon 2006: 16).

That roads change things in profound and significant ways is without question. But two additional questions have to be asked: How? and For whom? As Leinbach says, "We still know all too little about the ways in which rural transport should be improved and how to deliver benefits to more needy populations" (Leinbach 2000: 2). This extends from their effects on individual mobility to their distributional implications and their direct and indirect effects on agricultural and nonagricultural productivity. For Johnston (2007: 171-72; see also van de Walle 2002), the three main fallacies that have dogged work on transportation and development are (a) the presumed direct causal link between transport improvements and economic growth, (b) the belief that improved transport will inevitably lead to higher agricultural output and better service provision and use, and (c) the fact that the benefits of such improvements will hold attractions for all and be distributed equally through a population.

Roads and spaces of inequality. There is little doubt that building or upgrading roads—in general—increases aggregate output and has a positive effect on poverty. It is also true that people in areas without easy road access often seem to crave better transport. It is one of the interventions that local people mention most often and prioritize most highly. So roads are not interventions "imposed" on local people from above; they are usually enthusiastically welcomed from below as well.

The first general point to make is that market integration tends to accentuate social differentiation by giving certain groups the ability to accumulate wealth. Where community regulation is weak or where power imbalances are great, natural resources may be appropriated whether by the state, by outsiders, or by wealthy and influential local people. Lowlanders entering upland areas, using roads as access conduits, often have advantages over local people in terms of language, financial resources, contacts, and business acumen. Rather more contentiously, some analysts believe that, although road-led market integration benefits some, it may harm others. Furthermore, one does not have to look at the more radical literature to unearth concerns about the marginalizing effects of road construction and spatial

integration in the GMS. An ADB report, for example, claims in the context of Lao PDR that the "penetration of the market may be aggravating ... social differentiation with the emergence of an entrepreneurial (capitalist) group of farm households, on the one hand, and a dispossessed labor-selling group of households, on the other" (ADB 1999: 6).

In 1999 scholars at the National University of Laos studied the impacts of the upgrading of Route 7 on 227 households in six villages in the provinces of Houa Phanh and Xieng Khouang (NUOL 1999). The study lists a large number of positive impacts of road upgrading but also notes that, in all the study villages, poor households had a markedly lower level of engagement with the sorts of new market-based activities that road upgrading encourages: "The lack of capital available to the poorest group, and their related lower participation in current economic activities, suggests that these households will be at a disadvantage in relation to the economic opportunities afforded by road improvement ... Potential benefits from increased market access will be relatively lower ... In this way, road development may indirectly lead to increased differences between wealth groups" (NUOL 1999: 55-56).

The big winners from road construction are, almost inevitably, the wealthy and middle-income households who have the resources to exploit a latent resource (ILO 1997: 6). Poorer households often find themselves unable to exploit and therefore benefit from the economic potential of roads. At the same time, because roads can disturb established patterns of activity—by, for example, increasing logging or accelerating the exploitation of natural resources more generally—they can harm those groups (tribal), households (poor), and individuals (women) who depend on the natural environment for their livelihood and well-being.

The spatial poverty traps facing women are different from those facing men. This is a product not only of poverty per se (or *only* of poverty) but also of cultural norms, economic circumstances, and productive and reproductive demands and needs. "To most women it does not really matter that much if

they are able to make the once-a-month trip to Vientiane [Lao's capital] in one and a half hours instead of three or four compared to the time-consuming daily necessities of carrying water and fuel for household needs" (Trankell 1993: 84). For some women, the key spatial development needs are not, therefore, off-farm and extra-village, but on-farm and intra-village. It is improved transport of water and firewood from the river and forest to home that would do most to revolutionize women's lives, not the ability to access a local urban center more easily (see table 6.6).

Transport issues related to gender are underpinned and overlain by class- or wealth-based inequalities. Poor families do not have the means or the time to travel. This applies to women and men. Moreover, we know from the experience of Thailand that cultural and social change can very quickly undermine our assumptions about the gendered nature of mobility. In the 1970s women in Thailand were relatively immobile compared with men; cultural norms about seemly behavior militated against female mobility, and there were, in any case, few offfarm employment opportunities available for women. By the early 1990s, the moral envelope of accepted practice had been torn open, and modern factories selectively employing young women had blossomed so that women became, often, more mobile than men. Beyond class and gender, ethnicity and generation can also have a determining effect on patterns and impacts of spatial integration. The minority inhabitants of Lao's Nakai plateau, for instance, are among

Table 6.6 Effects of improved roads and transport

Category	Effects of improved roads or transport
Women	Women are less likely to be able to take advantage of improving transport facilities, even when cost is not an issue, because they face social barriers to mobility such as the stigma of riding a bicycle or traveling alone outside their community.
Women and men	Women and men have different transport needs. Women's needs tend to be for frequent, local journeys; men's tend to be for less frequent, longer trips. Women's trips are directed at meeting household consumption requirements; men's trips are for income generation and production.
Rich and poor	Richer families have the time to travel, the products to sell, and the money to purchase goods. The poor are short of time and money, and better roads often do not increase incomes because they have nothing to sell.
Very poor	The very poor usually walk and "inhabit a localized walking world" (Hettige 2006: 18); roads deliver little for this marginal and marginalized group.

Source: Information extracted from Hettige (2006)

the poorest people in a very poor country, and the construction of roads into the area has played a central role in driving environmental deterioration and livelihood collapse. The sequence of changes is outlined in a study of three villages on the Nakai plateau undertaken in November 2000 (Culas 2001). In 1995 a laterite logging road was cut to the villages of Ban Makfeuang, Ban Navang, and Ban Theung. This was used as such for only two or three years, until 1997-98. The road did not become an axis of development for villagers because no one owned a truck or even a motorbike. Instead, the road became the means by which outsiders could penetrate the area. Lowland Lao and Vietnamese traders created higher demand for rare woods, endangered species, and nontimber forest products more generally (Culas 2001: 29). Some of this wealth did trickle down to the largely Brou and Sek inhabitants of the three villages, but only to some households and usually in small quantities. The great benefits accrued to outsiders, leaving the villages with a degraded resource and villagers, particularly poor villagers, with a yet more tenuous existence.

It is from grounded, local-level, and often qualitative studies such as these that it is possible to build an understanding of the pattern of data revealed in table 6.4. We can surmise that, without the reforms and the market and spatial integration of the last 10–15 years, the countries and the people of the GMS, in general, would almost certainly be poorer, but they would also be more equal.

Roads: creating new spaces of isolation. One of the less understood aspects of spatial integration is the manner in which improving access can actually, and counterintuitively, increase isolation. At the regional level, fears have been expressed that, in connecting centers of economic activity in the GMS, those outside the corridors of connection and nodes of activity may actually find themselves more isolated: "With current focus only on transborder economic flows, it [the GMS program] is at risk of doing little beyond fostering an entrepôt region, defined by increasingly complex corridors linking poles of activity,

but with very little else within or between" (Oehlers 2006: 467). Local-level studies demonstrate most convincingly how and why increased isolation may result from programs of infrastructural development and market integration.

It seems that two processes are under way. On the one hand, when roads are upgraded, this can accentuate "tarmac bias," making off-road communities more cut off and isolated rather than less so, as market activities are concentrated along the roadside and traders restrict their activities to near-road locations. At the same time, roads operate as axes of attraction for people living off-road, encouraging spontaneous migration to the roadside. There is little work from Southeast Asia on the spatially marginalizing effects of road improvements—anecdotal evidence aside—but Porter's research on the Jos plateau in Nigeria is instructive (Porter 1995: 10-12; see also Porter 2002). Bush village populations declined as individuals, households, and sometimes entire villages relocated to the roadside. Loss of population led to a loss of local markets in off-road areas. and this, in turn, led to a loss of market connection. Dirt roads fell into disrepair, and bush transport services dwindled. The effects were felt particularly keenly by women and the poor, whose livelihood interests tended to be local rather than extra-local and who could not afford, either financially or in terms of time, to travel to the roadside. Cultural and reproductive impediments to travel also constrained women's mobility. Porter concludes that many bush markets on the Jos plateau were "in a stage of terminal decline, kept going only by local women who patronize the market both as traders and purchasers" (Porter 1995: 11).

Roads, spatial integration, and the environment. As indicated in the discussion of the Nakai plateau, it is often the deleterious environmental effects of spatial integration that do most to undermine the livelihoods of some of the poor. An ADB report on environmental management in the remote GMS watersheds of Cambodia, China, Lao PDR, and Vietnam explores poverty-environment linkages and states, "The conventional wisdom is that poor people in remote areas

have few livelihood alternatives and may over-extract resources in an attempt to survive" (ADB 2000: 18). But this, the report argues, only occurs when land and resources become scarce, and resources become scarce largely because of pressures that are nonlocal in origin, including in-migration, establishment of new protected areas or hydropower developments, and unsustainable commercial logging. Furthermore, a "power imbalance leads to a fundamental inequity in the flow of ecological goods and services between the uplands and lowlands" (ADB 2000: 5).

These pressures are brought to bear through processes of spatial integration. In Saravan, Lao PDR, the increasing presence of Vietnamese traders is raising fears that traditional livelihood systems will collapse (Denes 1998: 11). In the Sii Phan Done area of Champassak province close to the border between Lao PDR and Cambodia, Bush (2004) suggests that the general decline in fish stocks is caused by market integration, driven by political rapprochement and infrastructural improvements, which are tying the area into wider regional trading networks. In the 10 years between 1989 and 1999, the availability of fish and rattan for the residents of Ban Nong Hin in Champassak declined precipitously (UNDP 2002; see also table 6.7).

There is little doubt that, in the end, spatial integration delivers greater economic returns; but, and here we depart from the WDR 2009, we question whether market integration will moderate the inequality-widening effects of the concentration of economic activity, at least initially. Instead, we propose a temporal sequence to the triangular relationship among infrastructure-integration, environment-livelihoods, and inequality. To being with, better access

Table 6.7 Decline in the availability of nontimber forest products in Ban Nong Hin, Champassak province, Lao PDR, 1989–99

Product	1989	1999
Wildlife	An abundance of animals are available in "your own backyard."	Many species have disappeared, and a two-day trek may yield nothing.
Fish	One hour's fishing yields 4–5 kilograms of fish.	One hour's fishing yields 0.5 kilogram of fish.
Rattan	One day's collecting yields 300 stems.	One day's collecting yields 20–30 stems.

Source: Adapted from UNDP (2002: 82).

leads to accelerated exploitation of natural resources and environmental decline. In extreme instances, this may take the form of a boom-and-bust cycle. Returns to this boom are unequally allocated, both socially (richer and better connected groups and individuals) and spatially (nonlocal groups and individuals). In time, the local economy is reoriented and restructured as connections permit new activities to colonize local spaces and local people to access nonlocal opportunities. This end point, however, can be seen as arising from the environmentally destructive and selectively immiserizing earlier stage in the process of spatial integration. The best example from the GMS of how spatial integration can create poverty and erode livelihoods is reflected in the debate over the focal site strategy of the Lao government (see box 6.1).

#### People, migration, and mobility

The discussion thus far has tended to present "ordinary" people in the GMS as being squeezed, molded, and incentivized by

spatial integration effects that are beyond their control. This, though, overlooks the agency of individuals and the surprising and unexpected ways in which they take advantage of opportunities afforded by spatial integration policies. Nowhere is this more dramatic, at least for the GMS, than in the revolution that has occurred in people's mobility. The discussion here serves to temper the tone of the last section, while also injecting a destabilizing human component into what we regard as the rather too neat-and-tidy depiction of the economics of spatial integration depicted in the WDR 2009.

Since the mid-1970s in Thailand, from the mid-1980s in China, Lao PDR, and Vietnam, and from the early 1990s in Cambodia and Myanmar, the GMS has become a region, increasingly, "on the move" (see figure 6.2). This includes patterns of daily mobility and longer-term and longer-distance migration, both national and international. The work on migration in the GMS is quite extensive, although there is variation in knowledge among countries. For Thailand, we know a

### BOX 6.1 Development through concentration? The Lao PDR government's focal site strategy

The Lao government's rural development policy concentrates resources and services in particular areas, bringing people to these development centers, rather than vice versa. The focal site strategy in its current form was formally endorsed in February 1998 and has become a central plank in the government's Rural Development Program. Focal sites are "integrated rural development clusters par excellence, located in the most deprived areas where presently there are no or only minimum development activities taking place" (Lao PDR 1998:5) with the intention of creating "development centers" or "growth poles" for rural areas "that will thwart or at least slow down the present trend toward widening gaps between rural and urban areas, but also within the rural areas themselves" (Lao PDR 1998: 6 [emphasis in original]). (Closely allied to the focal site strategy are two other initiatives: the Land-Forest Allocation Program and Village Consolidation.) Under the program, upland (minority) villagers practicing shifting cultivation are resettled in focal sites where government services—schools, health centers (souk sala), and so on—are provided as well as market access through better roads.

The focal site strategy has become highly contentious because there "is a compelling and

growing volume of evidence demonstrating that internal resettlement in Laos is having a major and mainly negative impact on the social systems, livelihoods, and cultures of many indigenous ethnic communities and people" (Baird and Shoemaker 2007: 868; see, for example, ADB 2001; Baird and Shoemaker 2005; Ducourtieux, Laffort, and Sacklokham 2005; Evrard and Goudineau 2004; Rigg 2005; Thapa 1998; UNDP 1997; Vandergeest 2003). Some of these problems are connected with the way in which resettlement has been carried out, but others relate to assumptions about the positive effects of integration and concentration. Besides the implications of these policies for human well-being, area-based development has had a profound effect on economic geographies in the uplands by concentrating populations in particular sites (close to roads), barring access to traditional shifting-cultivation fields, encouraging permanent-field agriculture and, in particular, wet rice cultivation, and capturing the forested spaces and their value for the state and its associates. The focal site strategy illustrates what can happen when the rationale of development collides with the messy reality of local cultural and economic geographies.



Figure 6.2 International migrant flows in the GMS

Source: Rigg (2005).

reasonable amount (although the data are poor for international migrants); for Myanmar and Lao PDR, we know rather less.<sup>8</sup>

In terms of international flows among the GMS countries, Thailand acts as the fulcrum in an emerging regional labor market. While many moves are undocumented, it is thought that there are between 1.5 million and 2.0 million GMS migrants in Thailand and probably between 2.0 million and 2.5 million across the subregion as a whole. The main GMS migrant flows are as follows:

 Unskilled migrants from Myanmar, Cambodia, and Lao PDR to Thailand, of which the Myanmar migrant stream is easily the most substantial, followed by Lao PDR and Cambodia;

- Unskilled migrants from Myanmar to China;
- Skilled migrants from Vietnam to Lao PDR and Cambodia; and
- Skilled migrants from China to Myanmar and Lao PDR.

Studies show that the majority of international migrants in Thailand are employed in manual, unskilled activities, usually in those 3-D jobs that Thais resolutely avoid (those that are dirty, dangerous, and difficult). These include agricultural work, fishing and fish processing, construction, domestic work, and the commercial sex industry. Despite the ease of transport in Thailand, the location of these international labor migrants reflects their geographies of origin. Thus Lao migrants are disproportionately employed in the border provinces of the northeast; those from Cambodia are employed in the eastern provinces close to Cambodia; and migrants from Myanmar are employed in provinces in the north and south of the country, usually abutting the border with Myanmar (World Bank 2006: 37).

The creation of an increasingly vital space of human activity across the countries of the GMS has forged the context within which a whole series of development processes have been initiated, molded, augmented, or accelerated, including the delocalization of work, de-agrarianization, livelihood diversification, household reconfiguration, and cultural re-identification. Notwithstanding the evident importance of migration and mobility, it is striking how far rural development studies, particularly by development economists, have tended to skirt the issue. Dercon states, rhetorically: "Surely, studying these [population] movements must be at the core of understanding rural poverty and policies to reduce it" (Dercon 2006: 8). Given that such movements are so much a part of the processes that arise from spatial integration, this must be counted a significant omission.

We hypothesize that when levels of spatial integration are low, migration will be restricted to a small number of the non-poor in rural areas, mainly young(er) men, who move primarily for economic reasons. The costs and risks of migration will limit

migration in general. As spatial integration proceeds, the incidence of migration increases and spreads to other classes (that is, the poor as well as the nonpoor) and to women, although it will remain a young(er) person's prerogative. With high levels of spatial integration, the opportunity will arise for a partial re-localization of life (rather than livelihoods), as daily mobility replaces longer-term migration. This phase may also see the permanent dislocation of some people from their natal villages, as they make the decision to pursue their lives elsewhere.

### Policies and politics of spatial transformation

The GMS program has made an imagined region, increasingly real (Kaosa-ard and Dore 2003), and it is seen by many as a role model of successful cross-border, regional cooperation.<sup>10</sup> One attempt to tease out the "success factors" distinguishes between those characteristics that are inherent to the region and therefore exceptional (geography) and those that focus on the manner in which the GMS regional cooperation objectives have been structured (institutions) and achieved (strategies, sponsorship) and which are therefore repeatable (see table 6.8). There is little doubt that, in headline terms, the GMS has been a success. However, in this chapter we have been intent on excavating between the lines of the "text" of GMS cooperation and, in particular, its impacts on people (well-being, equity) and places (environment). A recent mid-term review of the GMS strategic framework (ADB 2007b) accepts that an important distinction can be drawn between the impressive progress that has been made in terms of the "hardware" aspects of cooperation, as opposed to the "software" components, where progress has been more problematic. This relates to a number of the issues highlighted in this chapter.<sup>11</sup>

Those critics of the GMS outside the ADB, not surprisingly, have been more strident in their views, seeing many of the individual projects as typically "poorly conceived," "disastrously implemented," and ultimately designed to serve the sectional interests of an elite few: "Perhaps more

Table 6.8 Distilling the GMS "success factors"

Factor	Perceived benefit
Geography	A reasonably compact land mass, where every member shares land borders with at least three other members
	A location within an economically dynamic region where markets are growing and where the development of subregional trading links is seen as beneficial by all
	No great differences in size, population, or power (note that it is not China but regions of China that belong to the GMS)
Strategy	Broad long-term vision
	Focus, particularly initially, on small concrete, confidence-building measures Realistic number of well-defined, sometimes modest, targets
Institutional structure	A framework to build a shared identity and purpose but one which is not overly rigid and institutionalized (for example, the GMS opt-in, opt-out approach for infrastructure initiatives)
	An incremental approach that does not require unanimity
	(But) a well-defined program that enjoys the support of all members
Sponsorship	External support through an "honest broker," to facilitate cooperation and provide assistance (in this case, the ADB, with its own substantial budget)
Timing	Patience with mid- to long-term planning horizons

Source: Extracted and adapted from DAC (2005: 10).

importantly, however, the ADB has been at the center of driving a broader process of economic change that is rapidly unraveling the social fabric of Mekong communities and disconnecting human economies from their relationship to the environment" (Cornford and Simon 2001:7).

# Policy implications: humanizing the spaces of development in the GMS

This chapter has sought to question the assumption that spatial integration is unalloyed in terms of its effects. We have unpicked the view that investing in infrastructure, improving access, and drawing people and places more fully into the mainstream of national, regional, and international life will deliver developmental benefits in an unproblematic manner. In making this case, however, we do not wish to suggest that such processes are anti-developmental. The aggregate outcomes are invariably positive, at least in terms of economic development and with attendant positive effects on the depth and incidence of poverty. But it is important not to be completely seduced by the big picture. Up close, it is clear that this large-scale image consists of a mosaic of sometimes contradictory processes and effects that are best illuminated through grounded, micro studies. The grand, strategic market-integrating aims of the GMS, for example, resonate little with poor femaleheaded households struggling to find a way to get water back to their homes or with tribal groups who depend for their subsistence and meager incomes on their surrounding natural environment.

In writing this, however, we do not subscribe to the view that these individuals are living in a state of subsistence affluence and should be insulated from change. Rather, we highlight their multiple vulnerabilities and different capacities and the need to be cognizant of and sensitive to these vulnerabilities and capacities. A focus on the human context clearly shows that people are not, for example, equally mobile or equally able to take advantage of market integration (an obvious point perhaps, but often lost in the big picture). There is a rider to this that is all too easy to ignore when studies are snapshots in time: things change. There is a mobility transition, for example, where "immobile" groups can become mobile in a surprisingly short space of time. As recently as the end of the 1990s, more than twothirds (69 percent) of registered migrants to Thailand from Cambodia, Lao PDR, and Myanmar were male. By 2005, however, the figure had dropped to barely half (53 percent). There are few rules about patterns of human behavior that hold fast in the vortex of social and economic change in the GMS.

While the debate over "openness," "reform," and "transition" in the former socialist countries of the GMS tends to take

place and be orchestrated at the national and macroeconomic levels and can be traced through statistics such as those in table 6.1, the effects of these policies are played out at the local, household, and individual levels. This is reflected in how the "livelihood footprints" (Rigg 2005; Bouahom, Douangsavanh, and Rigg 2004) of households are being respatialized as integration delivers new possibilities for making a living and new ways of escaping from poverty.

Consider the story of Mrs. Chandaeng, who lives close to the Mekong River around 60 kilometers west of Vientiane, the capital of Lao PDR. She was born and raised in the war-shattered province of Xieng Khouang, several hundred kilometers to the east. The death of her husband while she was a young mother and a family dispute forced her to leave her home in Xieng Khouang. She eventually settled in a village on the banks of the Mekong in 1991. At that time her prospects were not good. She had six young children to raise and support, no land beyond her house plot, no education, few skills, and no husband. A decade later, in 2001, she was building a new house and was comfortably off in village terms. Her ability to survive and, indeed, finally to prosper—as a landless, widowed mother of six was linked, ultimately, to the fact that four of her children managed to secure work in neighboring Thailand, remitting home around US\$25-US\$50 a month. Her son was working as a laborer on a shrimp farm in southern Thailand, while her three daughters, Wan (19 years old), Lot (17), and Daeng (15), were employed as housekeepers in Bangkok. She may have explained her children's sojourns in Thailand in terms of "when you are poor, you have to go," but the outcome was a degree of economic prosperity and security. There is a direct link between the ability of Mrs. Chandaeng to break out of her structurally ordained status as a poor, vulnerable woman and the spatial integration policies of the GMS and the Lao government.

A strong temporal dimension shapes the transformations brought about by (and through) spatial changes; there is also a "geography" to space. By this we mean that the dehumanized "spaces" of integration need to seen as humanized "places" of engagement, where inherited structures, prevailing power hierarchies, cultures of engagement, and so forth, give those "spaces" particular and unique qualities that have a bearing on how spatial interactions and dynamics operate and evolve. There is evidence from Xishuangbanna in China's Yunnan province, for instance, that minority groups have been surprisingly astute and effective in taking advantage of the new opportunities that have arisen from market and cross-border integration. Janet Sturgeon speaks of them as willing and successful "neo-liberal subjects" who have taken a lead in outsourcing rubber from Xishuangbanna to Lao's Sing district in Luang Namtha province. While in Lao, some of the minority groups may be vulnerable and marginalized, the story from this part of China is of minority farmers taking advantage of cross-border possibilities, permitting them to transcend their backward status and peripheral location (Janet Sturgeon and Nick Menzies, personal communication, 2008).

Solutions to the "problem" of remoteness and isolation invariably have social and political consequences. As recent papers (for example, Ali and Zhuang 2007; ADB 2007a) have (re)emphasized, the benefits of Asia's growth are not being distributed equally, whether over space, across population groups, between the genders and generations, or according to ethnic group. Access to economic opportunities is linked to social structures. Market access has, simultaneously, positive and negative effects, which are unequally distributed. Income inequality does not map neatly onto other inequalities. A focus on the modern (urban) sector—and the opportunities that are seen to reside there—is as likely to deliver new and sometimes deeper inequalities as to deliver growth. Too often the "take-away" point is reduced to the assertion that spatial integration delivers economic benefits; this, however, should not be separated from the riders "not everywhere," "not equally," and "rarely in similar ways."

The broader policy implications that flow from this discussion can be distilled down to three. First, the hardware-driven logic of the GMS needs to be allied to and integrated with the rather softer pro-poor policies and imperatives being pursued and encouraged by the ADB and other agencies and institutions. Even if we assume that income and expenditure are adequate and appropriate indicators of well-being, "The behavior of average incomes may tell us little about the economic well-being of different subgroups of the population" (ADB 2007a: 8). To put it another way, we need to be concerned about what happens at the margins—social and spatial—when subregional integration is pursued. 12 Second, it is clear that the benefits of subregional integration are tied to the nature of national integration. Thailand's excellent physical infrastructure creates the national context through which additional regional benefits can be leveraged; the same does not apply to Lao PDR or Myanmar. In addition, the national policy environments create the context in which regional initiatives bite. It is not, therefore, only the regional dimension that counts, but the national one too. The third policy implication is that, while the balance of effects arising from the GMS project may be positive, the negative side effects are far from negligible. The "do nothing" status quo is not tenable in two respects: integration is happening, will happen, and should be encouraged; at the same time, this integration will inevitably lead to negative side effects, and these need to be identified, managed, and ameliorated.

In an important recent book on development and governmentality in Indonesia, Tania Li (2007) seeks to challenge those analysts who "separate the study of government rationalities from the study of situated practices." For her, like us in this chapter, "engaging with the 'messy actualities' of rule in practice is not merely an adjunct to the study of government—it is intrinsic to it" (Li 2007: 283). To ignore the inequalities, inconsistencies, and incongruities that are part and parcel of strategies of integration and concentration is a notable oversight, not a trifling thing.

#### **Notes**

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- 1. See http://www.adb.org/GMS/Program/default.asp.
- 2. See http://www.adb.org/GMS/devt-matrix. asp#background.
- 3. "The basic idea of economic corridors is that, by focusing on the same geographic space, investments in priority infrastructure sectors, such as transport, energy, telecommunications, and tourism, will maximize development impact while minimizing development costs. The objective of the transport corridors is to develop a highly efficient system—allowing for easy circulation of goods and people around the Mekong subregion. At the same time, they are expected to form the basis of corridors of economic growth and social development in the subregion, attracting investment and skills" (ADB 2005b: 17).
- 4. See http://www.adb.org/GMS/Program/default.asp.
- 5. Although note the general lack of data on social and economic conditions in Myanmar.
- 6. "From this analysis, we conclude that the development of cross-border road infrastructure in the GMS has had a positive effect on the regional trade. The result that cross-border roads have distinct effects from domestic road infrastructure suggests promotion of regional trade may require deliberate policy shifts toward investments in roads in border areas" (Edmonds and Fujimura 2006: 14).
- 7. Sarah Turner (2007) has also conducted research in Lao Cai, but in her case focusing on ethnic minorities, the trade in textiles, and cross-border relations. The politics of access bestows advantages on those living at the border, because only border residents can cross at the minor "open entrance crossings" with a permit (that is, without a passport) and without any taxes being levied. Others are required to use the formal national-level border crossing points. Thus

Hmong traders (mostly women) living close to the border are at an advantage over other Hmong traders. Ethnic Han Chinese and Vietnamese (Kinh) traders are able to use the national-level crossing points, and their extra-local networks facilitated this process. Turner shows how state policies have created a variegated landscape of access, which influences the livelihood options open to different groups.

- 8. For two recent summary reports, see World Bank (2006); Caouette and others (2007). For data, see http://siteresources.worldbank.org/INTTHAILAND/Resources/333200-1089943634036/475256-1151398858396/LM\_in\_GMSs\_Nov06.pdf; Huguet and Punpuing (2005: 79).
- 9. Caouette and others (2007: 19) provide a higher range of 1.8 million to 4 million intraregional, cross-border migrants in the GMS. For more detailed maps of migrant flows between the countries of the GMS, see http://www.rockmekong.org/pubs/Year2005/Migration\_Mekong/map.pdf.
- 10. "The Greater Mekong subregion provides perhaps the benchmark for successful subregional and cross-border cooperation in Southeast Asia. Over the 12-year course of its existence, it has steadily evolved from a disparate collection of wary neighbors into a highly effective collaboration that can now point to numerous infrastructure investments directly attributable to the GMS initiative" (DAC 2005: 40).
- 11. The mid-term review concludes, "Placing more emphasis on the 'soft' aspects of subregional cooperation will be critical to achieving the goals and objectives of the GMS. ... Complementary measures are needed to translate advances in physical connectivity into accelerated improvements in livelihoods and poverty reduction. ... [In addition] improved physical connectivity and mobility of people and goods can have undesirable consequences, such as the transmission of communicable diseases, illegal migration of workers, and environmental degradation, which need to be contained and mitigated. This proposed shift in emphasis does not mean less concern for developing subregional infrastructure, as unmet needs for infrastructure investments in the GMS are huge. What it calls for is a more balanced approach which ensures that benefits from subregional economic cooperation and integration are maximized and far outweigh the costs involved" (ADB 2007b: 34).
- 12. There is good reason to think that economic reforms and trade openness lead to greater inequality. The available evidence "suggests a contemporaneous increase in globalization and

inequality in most developing countries. Despite the ambiguities involved in identifying the relationship between openness and distributional changes, it seems fair to say that the evidence has provided little support for the conventional wisdom that trade openness in developing countries would favor the least fortunate (at least in relative terms)" (Goldberg and Pavcnik 2007: 76–77). The paper notes that the relationship between openness and inequality is country, time, and case specific and needs to be analyzed in the context of prevailing policies.

#### References

- ADB (Asian Development Bank). 1999. Evaluation Studies in the Bank's Developing Member Countries: Lao Poverty Reduction Evaluation.

  Manila: ADB, August. (ADB Library ref: 16A/POV 0040.)
- . 2000. "Poverty Reduction and Environmental Management in Remote Greater Mekong Subregion Watersheds, Phase II: Draft Final Report." Vol. 1. ADB, Manila, December.
- ———. 2001. Participatory Poverty Assessment: Lao People's Democratic Republic. Manila: ADB.
- ———. 2005a. Connecting Nations, Linking People. Manila: ADB.
- Beyond Borders; Regional Cooperation Strategy and Program Update, 2006–2008. Manila: ADB. (http://209.225.62.100/Documents/Reports/Beyond-Borders/.)
- ——. 2005c. Regional Study on Rural, Urban, and Sub-Regional Linkages in the Greater Mekong Sub-Region (Viet Nam, Lao PDR, Cambodia): A Holistic Approach to Development and Poverty Reduction. RETA 6121, final report. Manila: ADB, December.
- 2007a. *Key Indicators 2007*. Vol. 38, with a special section on inequality in Asia. Manila: ADB. (http://www.adb.org/documents/books/key\_indicators/2007/default.asp.)
- ——. 2007b. *Mid-term Review of the Greater Mekong Subregion Strategic Framework 2002–2012*. Manila: ADB. (http://www.adb.org/documents/reports/mid-term-review-gms/mid-term-review-gms.pdf.)
- Ali, Ifzal, and Ernesto M. Pernia. 2003. "Infrastructure and Poverty Reduction: What Is the Connection?" Economics and Research Department Policy Brief 13, ADB, Manila, January.

- Ali, Ifzal, and Juzhong Zhuang. 2007. "Inclusive Growth toward a Prosperous Asia: Policy Implications." Economics and Research Department Working Paper 97, ADB, Manila.
- Baird, Ian, and Bruce Shoemaker. 2005. Aiding or Abetting? Internal Resettlement and International Aid Agencies in the Lao PDR. Ontario: Probe International.
- Resettlement and International Aid Agencies in Laos." *Development and Change* 38 (5): 865–88.
- Bouahom, Bounthong, Linkham Douangsavanh, and Jonathan Rigg. 2004. "Building Sustainable Livelihoods in the Lao PDR: Untangling Farm and Non-farm." *Geoforum* 35 (5): 607–19.
- Bush, Simon R. 2004. "Scales and Sales: Changing Social and Spatial Fish Trading Networks in the Siiphandone Fishery, Lao PDR." *Singapore Journal of Tropical Geography* 25 (1): 32–50.
- Caouette, Therese, Rosalina Sciortino, Philip Guest, and Alan Feinstein. 2007. *Labor Migration in the Greater Mekong Sub-Region*. Report submitted to the Rockefeller Foundation. (http://apmrn.anu.edu.au/regional\_members/ LaborMigration%20in%20GMS.pdf.)
- Cornford, Jonathan, and Michael Simon. 2001. Breaking the Banks: The Impacts of the Asian Development Bank and Australia's Role in the Mekong Region. Victoria, Australia: Oxfam.
- Culas, Christian. 2001. "Anthropologist Report." District Upland Development and Conservation Project, Khammouane, Lao PDR, February.
- DAC (Development Assistance Committee).

  2005. "Regional and Cross-Border Infrastructure and Its Role in Trade, Pro-Poor Economic Growth, and Poverty Reduction: Background Paper." DAC Poverty Reduction Network (povnet), "Third Workshop on Developing the DAC Guiding Principles," Organisation for Economic Co-operation and Development, Tokyo. (http://www.oecd.org/dataoecd/34/22/36568157.pdf.)
- Denes, Alexandra. 1998. "Exploring the Links between Foraging and Household Food Security: A Gender-Based Study of Foraging Activities in Salavan Province." Australian Embassy, Vientiane, April.
- Dercon, Stefan. 2006. "Rural Poverty: Old Challenges in New Contexts." GPRG-WPS-072, Global Poverty Research Group, University of Oxford. (www.gprg.org.)

- Ducourtieux, Olivier, Jean-Richard Laffort, and Silinthone Sacklokham. 2005. "Land Policy and Farming Practices in Laos." *Development and Change* 36 (3): 499–526.
- Edmonds, Christopher, and Manabu Fujimura. 2006. *Impact of Cross-Border Road Infrastructure on Trade and Investment in the Greater Mekong Subregion*. Discussion Paper 48. Manila: ADB Institute, October. (http://www.iadb.org/intal/aplicaciones/uploads/ponencias/i\_Foro\_LAEBA\_2006\_11\_1\_EdmondsFujimura.pdf.)
- Evrard, Olivier, and Yves Goudineau. 2004. "Planned Resettlement, Unexpected Migrations, and Cultural Trauma in Laos." *Development and Change* 35 (5): 937–62.
- Gainsborough, Martin. 2007. "Globalisation and the State Revisited: A View from Provincial Vietnam." *Journal of Contemporary Asia* 37 (1): 1–18.
- Goldberg, Pinelope, and Nina Pavcnik. 2007. "Distributional Effects of Globalization in Developing Countries." *Journal of Economic Literature* 45 (1): 39–82.
- Hettige, Hemamala. 2006. "When Do Rural Roads Benefit the Poor and How? An In-Depth Analysis Based on Case Studies." ADB, Operations Evaluation Department, Manila. (http://www.adb.org/Documents/Books/ruralroad\_benefits/rural-roads.pdf.)
- Hoang, Cam. 2007. "On Being 'Forest Thieves': State Resource Policies, Market Forces, and Struggles over Livelihood and Meaning of Nature in a Northwestern Valley of Vietnam." Working Paper Series 6, Chiang Mai University, Regional Center for Social Science and Sustainable Development, Chiang Mai.
- Huguet, Jerrold W., and Sureeporn Punpuing. 2005. *International Migration in Thailand*. Bangkok: International Organization for Migration. (http://www.iom-seasia.org/resource/pdf/SituationReport.PDF.)
- ILO (International Labour Organisation). 1997. "Socio-Economic Survey on Short-Term Impact of Rural Roads Construction." (Consultant: Ulf Johanson, A.G.) Employment-Intensive Rural Roads Construction and Maintenance Project, Vientiane, April–June.
- Johnston, Doug. 2007. "These Roads Were Made for Walking? The Nature and Use of Rural Public Transport Services in Garut Regency, West Java, Indonesia." *Singapore Journal of Tropical Geography* 28 (2): 171–87.
- Kaosa-ard, Mingsarn, and John Dore. 2003. *Social Challenges for the Mekong Region.*

- Chiang Mai: Chiang Mai University, Social Research Institute.
- Lao PDR. 1998. "The Rural Development Programme 1998–2002: The 'Focal Site' Strategy." Report prepared for the "Sixth Roundtable Follow-up Meeting," Vientiane, May 13.
- —. 1999. "The Government's Strategic Vision for the Agricultural Sector." Ministry of Agriculture and Forestry, Vientiane, December.
- ——. 2000a. "Fighting Poverty through Human Resource Development, Rural Development, and People's Participation." Unpublished mss. Government report to the "Seventh Roundtable Meeting," Vientiane, November 21–23.
- —. 2000b. "Oudomxay Province: Environmental Inventory." Report prepared by the Ministry of Communication, Post, and Construction and the International Union for Conservation of Nature with assistance from the Swedish International Development Cooperation Agency, March.
- —. 2000c. Road Infrastructure for Rural Development, Final Report. Vientiane: Ministry of Communication, Transport, Post, and Construction, April.
- Leinbach, T. R. 2000. "Mobility in Development Context: Changing Perspectives, New Interpretations, and the Real Issues." *Journal of Transport Geography* 8 (1): 1–9.
- Li, Tania. 2007. *The Will to Improve: Governmentality, Development, and the Practice of Politics*. Durham: Duke University Press.
- NUOL (National University of Laos). 1999.
  "Assessment of Road Development Impacts
  on Land Use in the Nam Mat Watershed, Lao
  PDR." Final report, National University of
  Laos, Vientiane.
- Oehlers, Alfred. 2006. "A Critique of ADB Policies toward the Greater Mekong Sub-Region." *Journal of Contemporary Asia* 36 (4): 464–78.
- Porter, Gina. 1995. "The Impact of Road Construction on Women's Trade in Rural Nigeria." *Journal of Transport Geography* 3 (1): 3–14.
- ———. 2002. "Living in a Walking World: Rural Mobility and Social Equity Issues in Sub-Saharan Africa." *World Development* 30 (2): 285–300.
- Ravallion, Martin. 2001. "Growth, Inequality, and Poverty: Looking beyond Averages." World Development 29 (11): 1803–15.

- Rigg, Jonathan. 2005. Living with Transition in Laos: Market Integration in Southeast Asia. London: Routledge.
- Schipani, Steven. 2007. "Ecotourism as an Alternative to Upland Rubber Cultivation in the Nam Ha National Protected Area, Luang Namtha." *Jut Pakai* 8 (April): 5–17.
- Sturgeon, Janet C. 2005. Border Landscapes: The Politics of Akha Land Use in China and Thailand. Chiang Mai: Silkworm Books.
- Swe, Thein, and Paul Chambers. 2008. "Political Economy on the Perimeter: State Policy and Trade on Thailand's Border with Myanmar and Lao PDR." Paper presented at the "Tenth International Thai Studies Conference," Thammasat University, Bangkok, January 9–11.
- Thapa, Gopal B. 1998. "Issues in the Conservation and Management of Forests in Laos: The Case of Sangthong District." *Singapore Journal of Tropical Geography* 19 (1): 71–91.
- Trankell, Ing-Britt. 1993. *On the Road in Laos: An Anthropological Study of Road Construction and Rural Communities.* Uppsala Research Reports in Cultural Anthropology 12. Uppsala: Uppsala University.
- Turner, Sarah. 2007. "Trading Old Textiles: The Selective Diversification of Highland Livelihoods in Northern Vietnam." *Human Organization* 66 (4): 389–404.
- UNDP (United Nations Development Programme). 1996. "Accessibility, Rural Roads, and Sustainable Rural Development." Background paper for the "Road Sector Donor Coordination Meeting," Vientiane, February 6–7.

- UNEP (United Nations Environment Programme). 2001. *State of the Environment: Lao PDR 2001*. Bangkok: UNEP with the Norwegian Agency for Development Cooperation.
- van de Walle, Dominique. 2002. "Choosing Rural Road Investments to Help Reduce Poverty." World Development 30 (4): 575–89.
- Vandergeest, Peter. 2003. "Land to Some Tillers: Development-Induced Displacement in Laos." *International Social Science Journal* 175 (March): 47–56.

Warr, Peter, and Jayant Menon. 2006. "Does Road Improvement Reduce Poverty? A General Equilibrium Analysis for Lao PDR." ADB Institute and Australian National University, October. (http://www.iadb.org/intal/aplicaciones/uploads/ponencias/i\_Foro\_LAEBA\_2006\_11\_1\_MenonWarr.pdf.)

World Bank. 1999. "Lao People's Democratic Republic: Proposed Agricultural Development Project." Aide-mémoire, World Bank identification mission, September–October.

—. 2006. "Labor Migration in the Greater Mekong Sub-Region, Synthesis Report: Phase I." World Bank, Washington, DC, November. (http://siteresources.worldbank.org/INTTHAILAND/Resources/333200-1089943634036/475256-1151398858396/LM\_in\_GMSs\_Nov06.pdf.)