

## THE POLITICAL BURDEN OF SPARSELAND DEVELOPMENT: SOME INTERNATIONAL CONSISTENCIES

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*Nations with extensive areas of lightly populated territory or "sparselands" often devote substantial attention and capital to their fuller development and support. An examination of the record in several European-explored and settled sparselands suggests that such regions tend to become seen as financial and therefore political burdens for nations possessing them, despite the resources extracted from them. An explanation is seen in the historic pattern of resource exploitation and attendant settlement instability, ill-conceived strategies for promoting new and more permanent settlement, and growing demands within sparselands for improved public services, a matter requiring government action and subsidization.*

### BACKGROUND AND THESIS

A glance at a world map of population density reveals the presence of large expanses of very lightly populated territory (e.g., where densities are commonly below one person per square kilometer). Such areas are here referred to as "sparselands," peripheral regions of substantial expanse characterized by (1) restrictive physical environments, (2) an emphasis on primary economic activities, (3) small populations and discontinuous settlement patterns, (4) remoteness, (5) the presence of indigenous peoples as an important element in the local population, and (6) a frequent dependence on government to subsidize many essential public services. Nations with large tracts of sparseland territory include the Soviet Union, Mongolia, China, several Arab states, Australia, the United States, Canada, Brazil, and others.

Sparselands are often the object of much attention and very much a part of the national development philosophy of the country concerned. Attention has been motivated by (1) the presence of mineral, forest, wildlife, and other natural resources of sufficient value and quantity to justify the high cost of exploitation, (2) land hunger/population pressure within the larger society and a perceived need to open new lands to family-farm colonists, (3) a sense of manifest destiny or obligation to develop all areas of the nation and bring modernization and opportunities to all the citizens, (4) geopolitical and military considerations, such as expanding the national wealth and power, consolidating claims to peripheral and sometimes contested areas, and firming control of regions militarily strategic or useful for weapons testing or deployment, and (5) tourism and recreational opportunities where sparselands are reasonably accessible and hold scenic attractions. The possession of space,

however forbidding the physical environment, has important psychological advantages and increases the statistical probabilities of having natural (especially mineral) resources.

Many governments have been active in promoting sparseland development through a variety of programs encouraging private investment and/or channeling substantial public funds into these areas. Development may be initiated with much optimism, spurred by land grants and/or subsidies, hopes for quick riches, and a sense of adventure. But all too often settlement is ephemeral and expectations unfulfilled, and governments experiment with expensive new programs. Persons residing in sparselands come to expect essential public services, usually requiring government subsidization. In time, governments and/or citizens of more populated areas increasingly question the cost of sparseland development, and the whole matter becomes something of a political burden for government officials and persons seeking political office.

The main thesis of this paper is that sparselands tend to become "wards of the state," i.e. financially dependent on the central government, because of three circumstances which have dominated sparseland development to date: (1) a pattern of resource exploitation and settlement instability, (2) often misguided government efforts to promote more permanent settlement, and (3) growing demands by sparseland citizens for essential public services. There is much irony in their financial dependence, because sparselands have and many still do make contribution to the national wealth out of proportion to their small populations (e.g., in the case of major mining operations). But wealth generated tends to flow out of sparselands immediately, to be invested elsewhere so other regions can enjoy the multiplier effects. Thus, sparseland can generate wealth and still need financial aid. These observations are quite consistent with the core-periphery model of regional development as presented by Friedmann (1972).

The three circumstances here postulated as contributing to the dilemma are elaborated on below, drawing examples from Australian, U.S., Brazilian, and Russian/Soviet experiences. Since the sparselands of these nations were all subject to European exploration and settlement, there is a clear European bias in my comments. Nonetheless, the observations made here would seem to have some applicability throughout the world's sparselands.

## RESOURCE EXPLOITATION AND SETTLEMENT INSTABILITY

Mineral and forest resources have been relatively more important in sparselands, given the scarcity of good agricultural lands. By their very nature, sparselands were explored comparatively late, but the Europeans in time made their way into most of them, seeking glory, souls to save, and above all riches in the form of precious metals, furs, and other easily removable goods. From the beginning, sparselands were places of extraction and not places of major permanent colonization (a "hit and run" economy).

When a resource was found, sufficiently rich to overcome the high costs of production and transportation in a remote setting, it was vigorously exploited with little or no concern with long-term resource management, the workers, the community, or the area. Examples are many, including the Amazon basin's "rubber

boom" (roughly 1870-1912) wherein the industrialized nations sought the natural rubber available only in this region. Several hundred thousand Brazilians migrated to become latex collectors (Castro Soares, 1956), and prices climbed through 1911. But the boom ended precipitously, and jobless rubber gatherers were left to outmigrate or regress to a primitive subsistence agriculture. Fur trading experiences in Siberia, Alaska, and the western U.S. provide another case. As Siberian trappers, seeking the sable in particular, overhunted and depleted the stock of animals, they simply moved on, eventually combing all of Siberia to the Pacific (Gibson, 1969). In Alaska, Russian fur traders seeking the sea otter enslaved the Aleut peoples to do the hunting, and lost interest in Alaska when animal numbers declined. In the western U.S., traders brought the bison and beaver to near extinction by 1840 (Wishart, 1979). In all these extractive activities European settlement was often transitory, though leaving behind some small villages and a few larger regional centers.

Mining provides the most consistent and widespread example of the intense exploitation of a single resource and subsequent settlement instability. As deposits play out or world market prices drop, operators and most miners simply move on, forsaking towns whose economic base is retarded or eliminated either temporarily or permanently. The Australian countryside, for example, is dotted with hundreds of once-bustling mining towns containing a fraction of their former population. Some of these places were supported by gold mining which employed 75,000 miners in 1900 but only 6,000 by 1929 (Blainly, 1969). In Siberia silver and lead mining brought over 350,000 workers to the Altay district by 1861, but employment dwindled to 4,500 by 1899 (Lonsdale, 1963). Similar stories can be related for most sparselands, and the pattern is not purely historical, as witness the oil shale boom towns of Colorado and Wyoming, suddenly in eclipse in 1982. Not all workers leave immediately, as some wait around, hope, and look to the government. Some of the indigenous peoples, meanwhile, have become dependent on mining and related construction activities, and for them there is usually a "special" government responsibility. Thus the whole pattern of resource exploitation and job and settlement instability almost inevitably has become an issue with which political leaders have to contend, past and present.

## ILL-CONCEIVED STRATEGIES FOR NEW AND MORE PERMANENT SETTLEMENT

Given the fact that nations have tended to view their sparselands as underdeveloped frontier regions awaiting further attention, it is not surprising that governments have pondered many strategies to promote their broader and more diversified development and provide the basis for new and more permanent settlement. Large amounts of capital have been invested and seemingly innumerable programs put into operation, but overall the results have been very disappointing. With the benefit of hindsight, we can say that most strategies have been ill-conceived. Governments seem not to possess the power or the wisdom to establish the sparseland settlement presence that many feel the nation somehow ought to have.

In Australia, early efforts focussed on "closer settlement" on semi-arid lands, reducing the size of larger grazing properties and enabling settlement by crop farmers and a class of "small sheep farmers." But drought, rabbits, and overstocking brought hardship and ruin for many (Roberts, 1968). After 1945 a number of dam

and water diversion projects helped promote settlement based on irrigation agriculture, but cost-benefit ratios are hotly debated, and the recent Ord River scheme has been a political embarrassment. Australia has gone to great lengths to encourage industrial and population decentralization away from coastal areas, and in the early 1970's inland "growth centers" were vigorously promoted, but all of this accomplished little, squandered much capital, and helped to bring down the Whitlam government in 1975 (Lonsdale, 1980).

In the U.S., lightly populated regions have responded more positively to various federal programs, not because of greater government wisdom, but because of the luck of geography. Except in Alaska, U.S. sparselands are spatially intermittent, broken by pockets of well-watered lands supporting larger urban centers. Transport routes across sparselands lead to somewhere, and residents do not experience the same sense of isolation. The depression and drought years of the 1930's did see much abandonment of marginal land, but also major federal expenditures on hydroelectric and irrigation projects. Of special note was a politically motivated and widely publicized 1935 effort resettling 903 colonists in Alaska's Matanuska Valley, but a decade later only a third remained (Fernstrom, 1981).

In Siberia, the tsars expanded settlement through involuntary transfer, not only of undesirables, but of hundreds of thousands of state serfs to work the mines. After the late 1880's, millions of peasants voluntarily entered Siberia seeking free land in an agricultural migration paralleling that of the American West (Treadgold, 1957). Under Soviet rule, a combination of economic pragmatism, socialist principles, and Stalinist tyranny guided settlement strategies. The utilization of Siberia's mineral wealth was essential to support industrial expansion and a measure of self-sufficiency. Socialist ideology called for a more even distribution of productive forces across the nation and a raising of economic and cultural levels in less-developed regions. New mining and manufacturing centers emerged, augmented by relocated plants during W.W.II. Stalin established a network of forced labor camps (Solzhenitsyn's "Gulag Archipelago") and transferred en masse nationalities accused of collaborating with the Nazis. The Virgin and Idle Lands wheat program, begun in 1954, required the movement of a half-million persons eastward. More recently, major oil and gas developments in the Ob' basin and the construction of a second railroad across eastern Siberia have promoted new settlement. But despite all efforts, past and present, many workers remain only a short time, and serious labor shortages plague the Siberian economy and perplex Soviet planners and political leaders.

Brazilian efforts to promote a more permanent settlement base in the Amazon basin and other interior areas provide another example of unfulfilled expectation. The 1946 Constitution provided that three per cent of federal tax revenues be invested in the Amazon basin, and a special organization was created to carry out this mandate. The idea of building a new capital city in the interior to encourage growth away from the coast was an old one, but President Kubitschek made Brasilia a reality by 1960 (Rodrigues, 1967). In 1966 the military government created a new regional development agency with extensive tax incentives to encourage investment. A network of unpaved highways was cut through the landscape, and farm colonization projects involving up to 100,000 families were envisaged. But after four years of effort, the government reversed itself in 1974, preferring to transfer land to large-scale corporate developers for extensive cattle grazing (Moran,

1981). Brazil seems no exception to the rule that large-scale population dispersal efforts can be a burden on the national treasury, bring little in the way of results, and help to bring on fiscal crises the kinds of which Brazil began to face in 1982-83.

## GROWING DEMANDS FOR ESSENTIAL PUBLIC SERVICES

As nations become more advanced economically, there emerges a heightened degree of public concern with quality-of-life issues, most specifically the provision of essential public services. This concern, like that for regional equity, has been a fairly recent thing on the world scene (largely post-1945, and particularly since 1960). Sparselands are not necessarily areas with per-capita incomes below national averages, though some are, but they do stand out as regions with a limited availability of many services increasingly seen as essential to provide a reasonable quality-of-life for residents. The presence of disadvantaged indigenous peoples has provided an additional reason for public interest.

The most consistent concerns of sparseland residents are with the availability of health care, education, and utilities, followed by access to retail and service facilities, transportation, and communications. Such public services, even where offered in the private sector, almost always involve government, because assurance of their provision is seen as a government responsibility.

Doing without some or most of these services may have been acceptable in the past, but today's rising consumer expectations are politically difficult to deny, as the communications revolution has made residents of even remote areas aware of the services they lack (Hewes, 1974).

The per capita cost of providing modern public services to a remote and dispersed population is generally higher than elsewhere, and their provision requires some form of subsidization. Governments (and sometimes groups in the private sector) support sparseland facilities out of revenues obtained from more densely populated areas. In the private sector, government regulation may require utilities, airlines, etc. to service sparselands as a condition for a firm's charter, usually aided by subsidies, even where unprofitable. Not surprisingly, the private sector exerts great pressure on politicians to minimize such regulation.

Most more-advanced nations have been fit to subsidize service provision in their sparselands, particularly in the last few decades. The Soviet Union has been something of a pioneer in this regard since the 1920's, bringing education and health care to all of Siberia, yet investment in housing, retail, and social facilities has lagged (Khodzhayev, 1976). In the U.S. and Australia, a broad variety of assistance programs has done much to minimize the margin of sparseland service disadvantage. Brazil has yet to give much priority to such programs (Hewlett, 1980).

Whether subsidies to "problem" regions can be defended as economically rational or a proper expenditure of public funds is often questioned. Political leaders may incur the wrath of more densely populated areas who see themselves as having to support excessive government expenditures. This kind of political backlash has been much in evidence in Australia and the U.S. since about 1975, and the future of subsidy programs is in doubt.

## CONCLUDING THOUGHTS

This paper has attempted to demonstrate how sparselands tend to become heavily dependent on government programs and subsidies. It is a recurrent pattern and thus

probably the general case. Maybe it is inevitable, given core-periphery relationships and the realities of politics. I don't know that this financial dependence is a bad state of affairs, and it may represent a triumph of regional justice. True, these lands may require federal aid, especially as regards service provision, but even more costly for the government have been their ill-advised settlement schemes. Also, the extraction of sparseland resources has been and in many cases still is an important contributor to the national prosperity and power. But when the mines close, the nation may go on prospering, but the sparselands do not, and thus they need assistance.

What is needed is (1) a better appreciation of the distinctive character and limitations of sparseland environments, and (2) an ability to take a long-term view of their place in the total national development. But political leaders of all stripes prefer short-term perspectives and short-term results, so it is likely that sparseland development will continue to follow a less-than-satisfactory course.

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