#### **REGIONAL DEVELOPMENT DIALOGUE**



# Vol. 30, No. 2, Autumn 2009

# HUMAN SECURITY, TERRITORIAL SECURITY, AND REGIONAL DEVELOPMENT MANAGEMENT IN LATIN AMERICA

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UNITED NATIONS CENTRE FOR REGIONAL DEVELOPMENT

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# RDD

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# **EDITORIAL INTRODUCTION**

## The Invisible Hand, Territory, and Human Security

## Patrick J. D'Addario

When I was invited by Claudia Hoshino, Coordinator of the United Nations Centre for Regional Development Latin America and the Caribbean Office (UNCRD LAC Office), to serve as guest editor for this issue of *Regional Development Dialogue (RDD)*, I was honoured to be given the opportunity to participate with a group of distinguished thinkers and practitioners in the field in considering what kind of contribution that territory, specifically regional development policy, can make to human security. I recognized that UNCRD's promotion of an integrated and multidimensional approach to security was an important new contribution to development planning. Nevertheless, I was concerned about what my contribution would be to such a consideration.

The concept of human security is not simply a quotidian consideration for us at the Fiorello H. LaGuardia Foundation. Our approach is to utilize market mechanisms to develop and replicate financially, environmentally, and socially sustainable livelihoods for the rural poor. Once I had the opportunity to read the articles, however, I saw that territory and security, even when understood in their most inclusive and dynamic manifestations, have at their very centre, individual projects that affect the day-to-day life of the poor.

Moreover, the real world implications of these articles that may have seemed to many a merely academic exercise, have since been tragically brought home by the recent disasters caused by earthquakes in Haiti and Chile. And although the aftershocks of Chile's earthquake are still being felt as I write these words, the relatively small toll in terms of life and property of the Chilean quake compared to Haiti's illustrates one of the basic lessons that can be drawn from our authors — disaster is the result of a threat for which a community has not prepared. Both threats were foreseen, but Haiti's lack of resilience, a product of its poverty, depredation of natural resources, and long history of dysfunctional government, significantly exacerbated the results of the disaster. Chile, on the other hand, had learned from previous quakes how to build quake-resistant structures and deal with future threats. The government and civil society were prepared to take necessary measures to assist affected communities and relieve the afflicted.

The approach to human security and development suggested by the authors — based on broad-based consultation including all of the affected parties, including the traditionally disenfranchised poor — appears at first to be antithetical to the unfettered competition promoted by advocates of market economics. I would like to suggest, rather, that it is a recognizable variant foreseen in microeconomic theory and, therefore, offers the possibility of harnessing the undeniable power of the market to promote human security. Indeed, this argument is made by Andres Roi Riedel in his forceful defence of the market as the determinative force for urban development. Roi argues that government must accept the fact that its role is not to execute projects, a private sector function, but to recognize the underlying dynamics of urban change, and to participate with the private sector, local initiative, civil society, and the poor to develop agreement-based values and policies to foster positive urban development.

#### **Inclusion for Human Security**

The authors in this volume emphasize inclusiveness at various levels as they deal with territory and security. Gustavo Wilches-Chaux takes the broadest view, placing human security in the context of territorial security, defined as a "…'dual way' concept that seeks that sustainability of human communities advances in an interrelated way…with the sustainability of ecosystems, and vice versa". Wilches-Chaux defines territory as nothing less than the interaction of "culture with nature" — the ecosystems and the communities, and the multiple outcomes of complex interactions between them. Wilches-Chaux's magisterial analysis begins with a history of his thinking about territory and security. In an eerie foreshadowing of the current disaster in Haiti, he recounts how the 1983 earthquake at Popayan in Southwestern Colombia was a disaster because the community had not taken steps to minimize risks of the foreseeable local interaction between nature and culture — seismic activity.

Jaime Valenzuela G. talks about the integration of social, environmental, and economic considerations in regional planning, and the need to cross the lines between disciplines and government agencies to address basic human needs. Ricardo Jordan F. cites the need for joint consideration of mitigation and adaptation in the context of an urban development agenda that crosses institutional and administrative lines for the systematic evaluation of risks, vulnerabilities, and opportunities. Our two Colombian authors give us the opportunity to understand how the issues of territory and security have played out in Colombia. Gustavo Adolfo Carríon Barrero provides the history and a top-down analysis of the struggle between centralism and federalism, while Saúl Pineda Hoyos and Sergio Montero-Muñoz show us efforts to redefine the City of Medellín through a broadly inclusive process which resulted in an exemplary strategy and programme for regional integration that sadly never attained its promise owing to the inability of the government to eliminate competing, armed interests in the territory.

While generational inclusion has received the lion's share of attention in sustainable development, i.e., the Brundtland Commission definition, "Meeting the needs of the present generation without compromising the ability of future generations to meet their needs," it is apparent that both geographical inclusion and social inclusion are important components. We witnessed geographical inclusion take centre stage at the recently concluded 15th Conference of Parties of the United Nations Framework Convention on Climate Change, as many of the developing countries of the South argued that they are entitled to compensation for climate-induced damage, inasmuch as they are minimal contributors to climate change and likely disproportionately to suffer its effects. In part, this disproportion stems from the direct reliance<sup>1</sup> of the poor for their livelihoods on ecosystems threatened by climate change. It thus becomes a question of social inclusion as well.

In regional planning, inclusion is crucial on the macro scale. Carríon argues that security depends on an approach to planning in which cities recognize their dependence on their surrounding rural areas for natural and human resources as well as their dependence on neighbouring cities and rural areas to capture the diversity of capacities and economies of scale needed to compete with other regions on a global stage. He recounts the history of decentralized planning in Colombia to arrive at the conclusion that regional development must today have primacy in national government economic plans.

In short, regional planning internalizes many issues traditionally treated as externalities in urban planning. Moreover, our authors argue, problems with multi-dimensional impacts, affecting numerous resources over broad geographic areas, means that development decisions can no longer be taken in a single dimension. A decision to deforest a mountain top in search of coal to fuel a power plant can affect potable water quality, agricultural productivity, hydropower generation, and the microclimate over an area of thousands of square miles, to say nothing of the global impact resulting from the loss of carbon sinks. It is a multi-jurisdictional (often international) environmental, water, energy, disaster, quality-oflife issue and cannot be adequately dealt with by any single jurisdiction, much less by any single bureaucratic compartment dedicated to energy, water, or agriculture.

#### Renewable Energy in the US — A Personal Perspective

My personal experience has been in planning, developing, and executing sustainable development projects, and particularly in financing them. In my first encounter with renewable energy in the mid-1970s, I organized a multi-state proposal for the Solar Energy Research Institute as an advisor to US Representative Paul Tsongas. Shortly thereafter, I became an advisor to such industry giants as the National Association of Home Builders and the American Institute of Architects on how to integrate renewable energy into their programmes. These experiences convinced me that renewable energy would only become a reality if embodied in commercial products and services, i.e., in a market context. Plumbers would need to sell solar hot water systems that paid for themselves in reduced heating costs (even if ultimately dependent on government subsidies), and architects would need to design houses in which the costs of the passive solar elements could all but "disappear" into longterm mortgage financing. In short, **the numbers needed to work**. These efforts were, of course, part of a national drive to avert a repeat of the energy shortages caused by the Organization of the Petroleum Exporting Countries (OPEC) oil embargo of 1973, when the US was rudely awakened to its dependence on imported oil.

The US drive to achieve energy independence was relatively short-lived, however, as predictions of the imminent exhaustion of petroleum reserves came to be considered alarmist. The second oil shock of 1979 quickly receded into memory as real oil prices fell steadily from 1981-1988, bottoming out at less than one-half of the 1981 price.<sup>2</sup> The Reagan Administration's faith in the **invisible hand** to regulate markets and their deep-seated distrust of government activism led to the termination of federal renewable energy and energy efficiency incentives, and to the dismantling of all US government renewable energy and energy efficiency (RE/EE) programmes not focused on long-term research and development.

#### The Invisible Hand

The invisible hand, the idea that individuals, acting for their own benefit, can produce socially optimal results, was famously promulgated by Adam Smith, in *The Wealth of Nations*.

...every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public

interest, nor knows how much he is promoting it[,]...led by an invisible hand to promote an end which was no part of his intention...By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good.<sup>3</sup>

This assertion of the primacy of economic individualism is the handmaid of the political individualism that still characterizes the United States — "...that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness" – as asserted by the US *Declaration of Independence*, promulgated in 1776, the same year that *The Wealth of Nations* was published. It is worth noting that in the last sentence of the quotation, there is a tinge of skepticism towards economic activity that seeks to promote the public good, which has evolved over the intervening two centuries into an article of conservative faith that the self-regulatory character of the market can only be undermined as a result of government interventions.

In the two centuries between Adam Smith and Ronald Reagan, the invisible hand was rigorously demonstrated by microeconomists in the form the first and second welfare theorems that "...the market allocates commodities efficiently, and any efficient allocation can be derived by a market with suitable ex ante transfers of wealth."<sup>4</sup> In other words, if costs are properly accounted for in the price of goods, individuals (with money to spend, of course) weighing those costs and the benefits derived from the goods, will purchase the efficient amount and drive the price to that of the most efficient producer. Not only has the invisible hand been clothed in academic rigor, but pricing theory has proven to be the most robust branch of economics, at least in terms of its ability to predict human behaviour.

#### **Externalities and Missing Markets**

Only at the end of the 1980s was a new economic rationale for support of renewable energy and energy efficiency forthcoming. Monetization of the environmental costs of burning fossil fuels to human health and welfare, encyclopedically laid out in *Environmental Costs of Electricity*,<sup>5</sup> was offered as a basis to support the entrance of clean energy technologies into the US electric grid.

This rationale hinged, crucially, on the concept of **externality**. An externality is present whenever the well-being of a consumer or the production possibilities of a firm are directly affected by the actions of another agent in the economy (and this interaction is not mediated by the price mechanism).<sup>6</sup> In other words, economic actors bear costs (or reap benefits) not reflected in the price they pay for a commodity, and therefore purchase too much or too little of the goods. In the case of electricity generation, consumers were sustaining costs — to health, in loss of use of natural resources — that were not reflected in the price of the electricity whose production caused the pollution. According to microeconomic theory, the inefficient allocation of resources (too much electricity from dirty sources) resulting from externalities must be rectified by the imposition of taxes or quotas to achieve the socially optimal prices and quantities of electricity.

The *Environmental Costs of Electricity* took a somewhat different approach, promoting the inclusion of pollution externality costs in the various methodologies used by state utility commissions to determine the costs that would be considered in the setting of utility rates to consumers by investor-owned utilities.<sup>7</sup> In the subsequent deregulation and "unbundling"

of the electric and gas utilities — separating generation, transmission, and distribution functions into separate business entities, the government's ability to affect technology choice through an internalized "tax" in the regulatory rate-making was severely constrained. What has largely replaced it has been Renewable Portfolio Standards (RPSs), which are legislatively mandated quotas for the purchase of renewable energy by electricity distribution companies. While less quantitatively rigorous, the RPSs are easier for governments to administer in an unbundled utility landscape.

Another classic solution to the externality problem is the creation of a market for a public good (or bad). In effect, the government creates a property right, for example, by assigning rights to limited amounts of pollution, for example. Those rights can then be traded. The successful cap (limitation) and trade system developed by the US for the control of sulfur and nitrogen oxides ( $SO_x$  and  $NO_x$ ) and the Clean Development Mechanism (CDM) developed under the United Nations Framework Convention on Climate Change (UNFCCC) are examples of this approach.

These approaches to solving the externality problem — taxation, quotas, creation of missing markets — have proven to be effective in some markets and at some times. In the case of the regulation of  $SO_x$  and  $NO_x$ , the efficiency of the solution — the low cost to achieve the desired pollution reductions — surpassed the expectations of virtually all of the participants.

Nonetheless, these solutions may fairly be characterized as "end of the tailpipe". Like the sulfur scrubbers on the smoke stacks of coal-burning power plants and the catalytic converters on gasoline combustion engines, they mitigate negative impacts while ignoring the potential for efficiency gains in the underlying processes that produce those impacts. To the extent that they compensate society for the deleterious effects of pollution, they may actually discourage development of more sustainable energy and transportation alternatives. Perhaps more importantly, they are narrow solutions to very specific problems that have little to teach us as we address ourselves to the broad problem of human security that Wilches-Chaux characterizes as nothing less than the harmonious interaction of "nature and culture". Nothing, by definition, can be external to an all-inclusive system. A throw-away society cannot exist if there is no "away".

Happily, market theory recognizes an alternative solution to the externality problem in which consumers negotiate with the producers of the externality to achieve the socially optimal level of the externality. This solution depends on all parties to the negotiation having property rights in the externality. Moreover, Coase's theorem<sup>8</sup> states that as long as property rights are clearly assigned, the parties will negotiate in such a way that the optimal level of the externality-producing activity is implemented. Interestingly enough, this result is independent of the relative quantity of rights that the participants have, as long as all participants have clearly defined rights. For our authors, it is clear that we all have rights to human security and should participate in the negotiation that determines how resources are allocated to achieve that security.

#### **Dynamic Development**

This is no one-time negotiation, however. Wilches-Chaux and Valenzuela emphasize that complex development processes are characterized by feedback mechanisms that must be respected, if not completely understood, to avoid short-sighted interventions. Carrion and Pineda take us through the painstaking steps involved in the negotiation. Valenzuela quotes

Lewis Thomas that: "When you are confronted by any complex social system, such as an urban center or a hamster, with things about it that you are dissatisfied with and anxious to fix, you cannot just step in and set about fixing with much hope of helping." Provisional solutions should be developed, but with the expectation that they will need to be adjusted, and re-adjusted once their systemic impacts are understood. Roi sees the urban planner awash in oceans of data, trying to anticipate emerging trends to understand how best to harness them to promote the public good.

Moreover, Wilches-Chaux cites Ian Davis in *Shelter after Disaster*,<sup>9</sup> to the effect that "...disaster is the result of the confluence of a threat with a vulnerable situation." Implicit in this understanding is that vulnerabilities can be reduced, but not completely eliminated. While many threats can be prepared for, all threats cannot be anticipated. The quest for human security is a process that more resembles internet security — an unending duel of threat and countermeasure — than a lock on a door, which as we know, often provides only the illusion of security. It is striking to note how similar the language of a globally-focused corporate security expert<sup>10</sup> is to our authors' treatment of the subject, to wit:

Natural and man-made risk is mitigatable if not preventable. It is the humanist approach to influencing up, down and laterally within the organization as well as out and over traditional boundaries. I attempt to remind the reader that resilient communities survive all hazards. Less resilient communities falter.<sup>11</sup>

While the discussion of human security unavoidably tends toward the macro and the abstract, our authors agree that without the active efforts to secure the participation of groups traditionally excluded and disenfranchised because of their poverty or geographic isolation, sustainable development and human security are not possible. Even as Wilches-Chaux presents us what is arguably a glossary of human security and sustainable development, he observes:

...a complex system is highly sensitive to "initial conditions," since it indicates that even small changes in any of the "local" factors or interactions that comprise the system/process, can generate great changes in the "result" of the entire process/ system. This is the basis of confidence that through successful local interventions, we can generate major changes in the entire system/process, in this case, the territory.

Indeed, most of the authors cite the importance of the involvement of the local communities in their examples of successfully planned development efforts that they recount in Curitiba, Brazil, Bío-Bío, Chile, and Cordoba, Argentina (Valenzuela); Bogotá (Montero); Medellín, and Colombia (Pineda). Valenzuela notes that a seriously flawed national housing programme would have been radically different had the real security needs of the poor been better understood, as it might have, had the target population itself been consulted. The programme would have recognized that provision of access to meaningful employment had priority over home ownership, if the choice had to be made.

In his excellent article on the efforts to re-invent Medellín as an integrated regional entity, Saúl Pineda Hoyos sounds a cautionary note that notwithstanding successful efforts at inclusive planning, the existence of "illegal stakeholders" in the territory undermined attempts to execute those plans. Nevertheless, we must bear in mind that human security is achieved person-by-person, family-by-family, and community-by-community. Francis D'Addario, addressing himself to those entrusted with the security of the largest corporations, writes: Our risk mitigation endeavors must begin at home. There is wisdom in the admonition that "the shoemaker's children should not go barefoot." Those of us who wish to inspire greater preparedness for emergencies must first be prepared at home...Global security may be regarded as a compound complex equation that requires many subset solutions. We will consider the hazards that may or may not get our attention. If we aim to be protection professionals out understanding of client requirements to protect self and family will serve our purposes when bridging the needs of the community.<sup>12</sup>

We have now come full circle to the Fiorello H. LaGuardia Foundation's projects. We, at LaGuardia, listen to the community to understand its needs and aspirations, help it to develop options to achieve sustainable livelihoods through inclusion in markets, and provide access to the resources needed to create those livelihoods. Where need be, we create additional links in commercial chains such as AMercsol, the solidarity middleman which allows the nascent microentrepreneurs to achieve economies of scale in purchasing inputs and marketing and selling outputs. As the microentrepreneurs' confidence in their capabilities increase, they enter into more harmonious relationships with their environment. Their success in the present allows them to contemplate the future, as individuals and as communities. They become secure.

#### NOTES

- 1 This is not to say that the economically advantaged will not be affected. Many seaside vacation homes will be lost to rising seas. In the US at least, these are often covered by mandatory, government-subsidized insurance. Moreover, those who can afford valuable ocean-front property in OECD countries often have the single most important prerequisite for adapting to climate change savings. This is not to say that the rich will not suffer financial losses; it is only to point that these losses are less likely to involve total loss of livelihood and assets.
- 2 Compiled by the Earth Policy Institute from the US Department of Energy (DOE), Energy Information Administration (EIA), "Annual Oil Market Chronology" (Available at www.eia.doe.gov/emeu/cabs/ AOMC/Overview.html; accessed July 2007); and DOE, EIA, "Cushing OK WTI Spot Price FOB (Dollars per Barrel" (Available at tonto.eia.doe.gov/dnav/pet/hist/rwtcD.htm; accessed 7 November 200). For consumer price index deflator, see US Department of Labor, Bureau of Labor Statistics, "Consumer Price Index — All Urban Consumers" (Available at www.bls.gov/cpi; accessed 17 October 2007).
- 3 Adam Smith, *The Wealth of Nations*, 5th ed. (London: Methuen & Co., Ltd., 1905), Book IV, chapter 2, par. 9.
- 4 N. Miller, "Notes on Microeconomic Theory," Chapter 8, Externalities and Public Goods (Harvard University, 2005), p. 211 (Available at http://www.hks.harvard.edu/nhm/notes.htm#download; accessed 31 December 2009).
- 5 R. Ottinger, D. Wooley *et al.*, *Environmental Costs of Electricity* (New York: Oceana Publications, 1990).
- 6 Miller, "Notes on Macroeconomic Theory," p. 213.
- 7 Determination of the costs of the production of electricity was crucial to the utility companies under the "reasonable rate of return on investment" criterion commonly used by state utility regulatory commissions to determine allowable utility rates, since all allowable costs generated the stipulated rate of return for the utility.
- 8 Miller, "Notes on Macroeconomic Theory," p. 219.
- 9 Ian Davis, Shelter and Disaster (Oxford: Disaster Management Center, Oxford Polytechnic, 1975).
- 10 Francis D'Addario, former Vice President of Partner and Asset Protection for Starbucks is, incidentally, the guest editor's brother.
- 11 F. D'Addario, "Confronting Global Risk," Security (1 February 2010) (Available at http://www.

securitymagazine.com/Articles/Column/BNP\_GUID\_9-5-2006\_A\_100000000000753521-2010/02/01).
F. D'Addario, *Not a Moment to Lose* (Washington, DC: Security Executive Council, 2010), "Introduction."