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Integration Initiative in the Context of the Humane
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Regional Infrastructure Planning in Chile



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Editorial Introduction

Integrated Regional Development Planning for Sustainable Development

Belinda Yuen

This issue of *Regional Development Dialogue (RDD)* on integrated regional development planning (IRDP) is devoted to two critically important areas in support of this task: recognizing the key concepts in IRDP and identifying recent practices and policies critical to its implementation. It presents six papers reviewing situations in developing Asia, Africa, and Latin America, associated commentaries as well as a keynote contribution from John Friedmann, urban theorist pioneer who developed the core-periphery four-stage model of regional development planning, uncovering the evolution of IRDP over time. The aim of this Introduction is to situate IRDP in the wider context of sustainable urban development and to outline briefly the content of the articles which follow.

IRDP is not new. But, with rapid urbanization and peri-urbanization in many developing countries, it has become one of the most challenging development issues requiring rigorous data and serious policymaking. IRDP has been the topic of numerous workshops and conferences in recent years. At Rio+20, the importance of integrated planning was emphasized across all institutional levels (para 101). UNCRD has included IRDP in its current work programme to promote sustainable development. It has convened a number of meetings including an Expert Group Meeting (EGM) on IRDP in Nagoya, Japan, 28-30 May 2013 and the UNCRD-UN-HABITAT Forum for Mayors and Senior Urban Officials on Sustainable Urban Development and Management in Africa, 27-29 November 2013, in Nairobi, Kenya. The purpose is to revisit the concept of integrated regional planning and management and raise international understanding and capacity-development around the tools IRDP can provide to help developing countries address sustainable development issues.

While the EGM addressed capacity-building strategies and how IRDP could effectively contribute to UNCRD work areas, the Forum for Mayors discussed the drivers, causes, and impacts of urban problems in Africa and the urgent need to enhance the capacities of African mayors and senior city officials in planning and implementing an integrated set of policies and measures to promote sustainable urban development and poverty reduction within the context of the outcomes of Rio+20. A crucial conduit is knowledge exchange, exposing and sensitizing policymakers and senior officials

to policy options, practices, and approaches towards achieving sustainable urban development. A selection of presentations from those two meetings have been rewritten and included in this *RDD* issue.

What is IRDP?

There are many different definitions; its constituent terms: “integrated”, “region”, “development” and “planning” are variously defined. For instance, the term “region” is often defined as any subnational territory delineated for purposes of planning or development.¹ A region, however, may comprise parts of more than one country. A region may be a geographic unit such as a strategic ecosystem, a river basin or a watershed cutting across several countries. At the same time, a region could refer to a political/administrative subdivision within a country, e.g., one or a group of municipalities, a province or a group of provinces. It can also comprise a core city and its hinterland (urban and rural), a metropolitan area, a city-region or a network of cities.

Often, instead of geographical location or statutory boundary, a region in IRDP is defined according to the issues being addressed. It may be the place of a specific problem or conflict, or a spatial planning unit defined by an alliance among interested regional stakeholders to address common issues, enhance efficiency in the use of resources, and/or take advantage of opportunities under a cooperative approach. A key principle is to have the “problem” define the region and its scope (such as described in the case of Bogotá by Carolina Chica Builes *et al* in this *RDD*). Another example is environmental problems. Take haze. Haze is not just a domestic issue. Haze can migrate to adjacent countries and pollute other countries as well. In this regard, the Association of South-east Asian Nations (ASEAN) member states signed the ASEAN Agreement on Transboundary Haze Pollution in 2002 to reduce haze pollution in South-east Asia.

The term “development” is equally broad. It can encompass urban development, regional development, and local development. Even though the issues inherent in each of these developments differ, many of them concern multi-faceted and integrated issues and increasingly carry with them the concept of sustainability. Development, according to this conception, implies change with growth and equity. Most authors in this volume consider this broader interpretation of development. As several of the authors have written, the notion of “planning” (of cities) suggests a technical activity – the process of making or carrying out plans required to achieve a desired goal.²

Planning encompasses social, economic, and environmental policy; development and environment can no longer be approached separately.³ Its practice includes the establishment of goals, policies, and procedures for economic, environmental, and social well-being and is generally conducted by governments. Its process is inherently interdisciplinary and holistic. Building on this recognition, an integrated approach to development planning has long been recognized as one of the better methods to deal with environmental issues.⁴ It is widely hypothesized that if environmental concerns could be systematically integrated into development planning from the outset, many of the so-called negative environmental impacts of development projects could be avoided.

IRDP seeks to contribute to harmonizing and integrating plans and policies at different government levels and between different administrative sectors. UNCRD has described IRDP as a process of planning that is holistic and integrated (can transcend sectors as well as administrative boundaries) for advancing sustainable development.⁵ Sustainable development under the Rio principles calls for integration, inter-generational

equity, intra-generational equity, reduction and elimination of unsustainable patterns of production and consumption, participation in decision-making, access to information and access to judicial and administrative proceedings.⁶ At the heart of IRDP is the emphasis on multisectoral planning. The multisectoral approach to development planning affords a useful framework for dealing with the many existing and potential resource-use conflicts that arise during planning and implementation.

IRDP identifies and analyses the inter-relations and linkages between fundamental dimensions of development, the need for multi-scalar territorial planning and horizontal and vertical cooperation of state and non-state actors. It thus goes beyond the traditional land-use plan by bringing together and integrating approaches and policies within management areas, across city functions, administrative boundaries, and across sectors (transport, housing, social services, and utilities, etc.). For effective IRDP, the involved territorial system, however, should be clearly demarcated – as large or as small as necessary – to properly address its social, economic, and environmental issues.

IRDP methodologies are by and large multidisciplinary in character. They attempt to integrate the three pillars of sustainable development – economic growth, social development, and environmental protection – and promote dialogue among administrations to articulate coherent solutions as well as address community empowerment and capacity development by employing participatory planning. IRDP formulation and implementation is a cyclical and interactive process of planning, participation, and action. The three essential elements of IRDP are diagnosis, strategy, and project development:

- (1) **Diagnosis** – The first stage is the study of both internal and external factors that influence regional development. It is an analysis to determine the principal problems, potentials, and constraints of a region. The diagnosis includes evaluation of natural resources and socioeconomic conditions, delineation and analysis of subregions, identification of critical institutions, sectors, and geographic areas, generation of new information, and ideas for potential investment projects.
- (2) **Strategy** – The second stage is the development of a long-term development concept and the choice of a general development scenario. Often presented in the format of a development plan (see the articles by Adjei-Fosu Kwaku, Carolina Chica Builes *et al.*, and Vivien Villagran Acuña *et al.*, in this *RDD* volume), it sets out a general vision of development in the region (scale, rate, and direction of development), determines subsequent targets as well as elaborates a development strategy. Critical issues and opportunities (actions) to address them are selected based on resource and time availability. Generally, the actions are politically feasible within a time frame short enough to maintain momentum. Less critical issues can be left for future revision. Alternative strategies are presented as choices for the government and stakeholders.
- (3) **Project Development** – The third stage is the development of certain target projects within the framework of a general strategic plan. The projects, developed usually through pre-feasibility, provide a balance among infrastructure, production activities and services. Collectively, their cost-benefit ratio must be acceptable to governments and funding agencies.⁷

In its participatory and multi-sectoral approach, IRDP offers useful tools for those undergoing devolution of decision-making power and fiscal capacity to local government. But even a technically- and economically-sound development proposal will not automatically be converted into action. The greatest development challenge is its

political economy – getting plans implemented under prevailing financial and institutional conditions. Perhaps this explains why some integrated regional development plans fail to materialize or their outcomes fail to meet the expectations set at the planning stage.

That is, the practice of IRDP is not without challenges as illustrated by several of the articles in this *RDD*. These could include issues such as how could IRDP create innovative methodologies and approaches to deal with new emerging issues such as new information technologies, rapid urbanization, effects of climate change or how should IRDP address the lack of human and institutional capacity that affects its implementation, etc. A review of prevailing IRDP implementation (failed and successful) suggests some pertinent considerations including, among others,⁸

- All relevant stakeholders, especially the poor and marginalized segments of the population must be included in the planning process;
- The planning process must address the issues of concern of local people and communities;
- The planning process must identify priorities of issues to be addressed and issues must be addressed in an integrated manner;
- The planning process must include disaster governance and management since many areas of developing countries are affected by threats of climate change, other extreme weather events and environmental degradation;
- The approach of the planning process must be multidisciplinary in order to achieve more balanced regional development and the physical organization of space;
- There must be increased concerted decision-making by multiple actors in social, economic, political, and technical domains;
- There must be a technical administrative process to improve regulation and promotion of the location and development of human settlements and protection of ecosystems;
- The resultant plan must have endogenous vision and regional identities;
- The planning process must consider the dynamics of interactions in the context of environment for development, e.g., land degradation/desertification which can compound the issues of agricultural production and food security, and in turn affect the livelihood security of rural farming communities;
- The planning process must be linked to environmental services, natural capital, and ecosystem values in an environmentally-sustainable way;
- Potential conflicts associated with development activities for each ecosystem of the region must be identified and resolved before a strategy is presented.

Although there is a substantial literature on theories of integrated regional development planning, fewer practitioners have documented the process of preparing and implementing regional development plans to improve planning methodologies. The articles presented in this *RDD*, many written by practitioners, are especially timely, particularly for readers interested in recent practices of IRDP in developing countries.

About the Articles

The volume begins with John Friedmann's article followed by regional perspectives from Asia, Africa, and Latin America. A common theme is around the question of what it means to adopt an integrated regional approach to planning and development. While contexts may differ, a common pattern in most articles is a synoptic analysis of past and present regional experiences, usually through case studies, to assess and ascertain the

outcomes of integrated regional development on national and local sustainable development.

Given that many of these articles have their origins in conference presentations, the analytical depth and rigour understandably varies considerably as the motivation is to share practices and experiences (promote tacit knowledge sharing) rather than present theoretical expositions. Notwithstanding, the diverse cases and approaches presented give a glimpse of the complex, often intricate, territorial practices that are happening in different time periods and different geographies. They clearly remind us of historical path-dependencies as well as present development dynamics and future aspirations.

The first article following this Guest Editorial Introduction comprises John Friedmann's practical experience and research of four decades on regional development planning and the lessons they present for UNCRD in its mission of integrated regional development to achieve sustainable development. The comprehensive resource-based development of the Tennessee Valley Authority, the planning and implementation of a new urban-industrial "growth pole" in eastern Venezuela, Ciudad Guayana, and advising the Government of Chile on regional planning have certainly provided Friedmann the opportunity to be one of the pioneers in IRDP, engendering the identification of the importance and role of interconnected city regions, core regions, "agropolitan" development, and world city in urban development. It is interesting to note that his world city hypothesis, intended as a theoretical model for research, has inspired a race among cities, especially Asian cities, to become "world-class" in the image of Tokyo or London and to become a platform for global headquarters.

Against the multiple processes of globalization, accelerated urbanization, peri-urban colonization, and the changing Asian urban landscape, Friedmann raises a critical question for the planning and development community: How can planners intervene, if at all, and do so with consideration for:

the rootedness of urban life in the natural world that perforce sets limits to perennial greed for more material possessions, while acknowledging the rightful claims of those who live in the city of shadows for a measure of the happiness that is their due?

Friedmann outlines three strategies response to this key question:

- (1) Integration of periurban areas with the central city to look for a resource-conserving urbanism that minimizes pollution, offers new economic opportunities, and preserves agricultural work and open space;
- (2) Coordinated development of multi-centered urban regions by more collaborative development among competing cities, particularly with regard to sustainability issues;
- (3) Focus on smaller, often obscure and relatively neglected cities throughout Asia and in other parts of the world.

Mike Douglass, in the second article, appraises the decades-old idea of IRDP. He focuses on three case studies in innovative governance of three types of regional settings in Asia – extended metropolitan region (Jakarta-Jabodetabek), rural-urban region (Rural-Urban Partnership Programme in Nepal) and transborder riparian region (Transborder Riparian Regions of the Mekong River Basin) – to address how regional development contributes to sustainable development in Asia. IRDP for sustainable development calls for processes of governance that are capable of adjusting to the complex interplay of social, environmental, and economic dynamics. Governance is defined here as decision-

making and action in the public domain.

Democracy and good governance are essential for sustainable development.⁹ Governance is about more than building institutions; it is about being people-centered, empowering people to engage with decision-makers and institutions.¹⁰ Douglass reminds us that IRDP is multifaceted in its requirements. Among the most important of these requirements is decentralized governance and participatory planning. He offers five general observations about IRDP practices in Asian regional settings to illuminate the drivers of the challenges and contributions of an IRDP approach:

- (1) It is pursued more as an experiment or special case rather than as an institutionalized practice of government;
- (2) Implicit spatial policies of sectoral programmes and private sector investments are more powerful than explicit spatial or regional planning programmes;
- (3) It tended to mostly rely on international agencies for funding;
- (4) It is receiving renewed interest and proposals for its adoption to pursue sustainable development goals;
- (5) It is taking on a new purpose of engaging governments across national borders to find mutually beneficial ways to pursue sustainable development.

The fundamental challenge is how to transform IRDP from a platform for expert management and technological solutions to one embedded in processes of participatory governance. The full potential for an IRDP approach can only be realized by embedding it in specific social, political, economic, and environmental contexts.

Belinda Yuen, in the third article scans the key challenges and opportunities in providing efficient urban services, using intervention in transportation infrastructure in Asian cities as an example of the transformative urban development possibilities. It is the only article in this issue of *RDD* which is not directly concerned with IRDP. Instead, it explores the role of infrastructure in sustainable development. How we respond to infrastructure needs today (what, where, and how we build infrastructure) can have impact on sustainable development because of economic and technological irreversibility. A great deal of infrastructure (e.g., energy and transport systems) is long-lived and will affect housing, location, and transport choices that people make well into the future.

Urban mobility is one of the toughest challenges facing cities, both in terms of travel demand-supply management and greenhouse gas (GHG) emissions. In the context of IRDP, improving urban mobility, especially inter-city connectivity and rural-urban connectivity, is a key building block for sustainable development. The implication is that if we get infrastructure investment right, it has the potential to accelerate growth economically, socially, and environmentally and break the carbon lock-in effects of large-scale infrastructure (such as road transportation infrastructure projects). A crucial early strategy is to deliberately create, designate, and preserve green infrastructure at both large and small scales to reduce energy and resource consumption and support ecosystem services of the city over the short- and long-terms. Such consideration is particularly acute in developing Asia as several Asian countries are facing environmental crisis as a result of rapid urbanization and damage to the ecosystems.

From Asia, the lens is rotated to Africa with Teshome Negussie Bediye, in the fourth article, reviewing the past and present development of IRDP in Ethiopia using the case of Oromia. Since 1992, the Government of Ethiopia has embarked on decentralization and the implementation of economic policies and development programmes is shifting

from previously centralized systems to the regions. Through medium-term development plans, which are consistent with the Millennium Development Goals (MDGs), IRDP is being implemented in the regions and regional governments such as Oromia have institutionalized the planning system at each level of administration. Planning is participatory and the role of local communities in regional development planning is increased. While showcasing how regional planning has helped Ethiopia to become one of the fastest-growing economies in the world, the Oromia case highlights several needs and challenges in regional planning including the problems of shortage of skilled manpower in IRDP, shortage of budget and quality of data and information for planning and budgeting.

Adjei-Fosu Kwaku, in the fifth article explains Ghana's decentralized national development planning system, in particular, the success of integrated regional planning through the application of strategic environmental assessment to illustrate how sustainable regional development may help economic growth and poverty reduction. Ghana has established a process for mainstreaming environmental principles in subsequent cycles of plans, policies, and programmes for sustainable and integrated development as well as developed methods (e.g., matrices and checklists) for assessing those plans, policies, and programmes. Even though there is growing realization that poverty reduction and environmental considerations are integral components of sustainable growth and there is enhanced awareness and capacity-building among stakeholders, challenges remain. These include the need for deepened knowledge and skills in IRDP, the need for enhanced skills in engaging the community in the participatory process at all levels and the need to develop capacity and skills of planning officers, especially among the lower-level professionals in monitoring and evaluation of development projects and activities.

The sixth article is from Carolina Chica Builes *et al* and discusses an example of IRDP at the subnational/territorial level using the regional integration experience of Bogotá within the context of its land development plans. The regional integration strategy provided a framework for analysis and action on IRDP, illustrating the characteristics, challenges, and possible solutions for the Bogotá region. Bogotá is the capital city of Colombia and one of the biggest cities in Latin America. Yet, Bogotá is mostly rural as well with socio-spatial segregation at the regional scale. Even though standards of living are improved in its urban areas, its rural areas continue to experience high poverty.

A central tenet is that IRDP is a process, involving context-specific planning, multi-territorial/multi-scalar/inter-governmental, multi-dimensional/multi-sectoral issues inherent in urban expansion, requiring multi-stakeholder participation and is prospective. A fundamental element of successful regional development is the 3Cs – capacity, coordination, and cooperation to develop a clear agenda of strategic actions and projects that address critical threats and barriers to achieve sustainable development.

Vivien Villagran Acuña *et al* discuss the policy and practice of IRDP, in the seventh article, from the perspective of regional infrastructure planning in Chile and Argentina. Several major challenges (e.g., international integration, demographic changes, technological changes, climate change) and opportunities (e.g., the ongoing decentralization process, increased citizen empowerment, option to achieve connectivity across the country) were highlighted. The integration of remote regions and isolated areas is a vital issue not just for local communities and territorial development but also from the per-

spective of how those territories integrate with neighbouring countries to bring about maximum social, economic, and environmental impacts while simultaneously exercising sovereignty and integration. Recent estimates suggest that the world is fast shrinking with modern technologies and connectivity to an extent unimaginable in the past. Remote areas presently cover about 10 per cent of the world's land area with "remote" being defined as locations that are more than 48 hours travel from a large city.¹¹

Taken together, these articles illustrate the positive outcomes of integrated planning, the different strategies, actors and institutions of IRDP as well as its challenges and contributions. Even though largely focused on developing country experiences in Africa, Asia, and Latin America, it is to be hoped that the articles in this *RDD* issue will stimulate further productive policy discourse and research to support the realization of urban sustainability. Against the deep and extensive changes in macroeconomic and socio-spatial conditions of urban development (experienced at varying scales), we can no longer ignore the value of knowledge exchange and the need to cross over traditional disciplinary and expertise boundaries. As demonstrated in this *RDD* issue, such an integrated approach would generate changes in local (regional and national) governance, planning, and implementation processes. Above all else, it requires a clear shift towards an integrated view of urban development manifested in terms of setting up a common vision while at the same time considering economic, social, and environmental issues as equally important.

NOTES

- ¹ United Nations Centre for Regional Development (UNCRD), "The Expert Group Meeting (EGM) on Integrated Regional Development Planning, 28-30 May 2013, Nagoya," Concept Note (Available at <http://www.uncrd.or.jp/content/documents/993IRDP%20EGM%202013%20-%20Concept%20Note.pdf>; retrieved on 10 November 2014).
- ² UN-HABITAT, *Planning Sustainable Cities* (London: Earthscan, 2009).
- ³ T. Fitzpatrick, ed., *Understanding the Environment and Social Policy* (Bristol: Policy Press, 2011).
- ⁴ See, for example, Dennis A. Rondinelli and H. Evans, "Integrated Regional Development Planning: Linking Urban Centres and Rural Areas in Bolivia," *World Development* 11(1:1983):31-53; H. Briassoulis, "Theoretical Orientations in Environmental Planning: An Inquiry into Alternative Approaches," *Environmental Management* 13(4:1989):381-92; and D. S. Slocombe, "Environmental Planning, Ecosystem Science and Ecosystem Approaches for Integrating Environment and Development," *Environmental Management* 17(3:1993):289-303.
- ⁵ C. Takase, "Capacity-Building for Public Official on Integrated Regional Development Planning: Experience of UNCRD" (Paper presented at the UNCRD Expert Group Meeting on Integrated Regional Development Planning, 28-30 May 2013, Nagoya).
- ⁶ B. B. Alvarez-Rivero, "Experience with National Sustainable Development Strategies" (Paper presented at the UNCRD Expert Group Meeting on Integrated Regional Development Planning, 28-30 May 2013, Nagoya).
- ⁷ Department of Regional Development Secretariat for Economic and Social Affairs Organization of American States (1984) *Integrated Regional Development Planning: Guidelines and Case Studies from OAS Experience*, Washington, DC (Available at <https://www.oas.org/dsd/publications/Unit/oea03e/ch04.htm>; retrieved on 8 September 2014).
- ⁸ R. Saunier, "Integrated Regional Development Planning, Santiago and Mira River Basins, Ecuador" in C. Conroy and M. Litvinoff, ed., *The Greening of Aid: Sustainable Livelihoods in Practice* (London: Earthscan, 1988), pp. 162-7; C. J. Barrow, "River Basin Development Planning and Management: A Critical Review," *World Development* 26 (1:1998):171-86; P. Allmendinger, "Re-scaling, Integration and Competition: Future Challenges for Development Planning," *International Planning Studies* 8 (4:2003):323-8; and R. S. De Groot, R. Alkemade *et al.*, "Challenges in Integrating the

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Concept of Ecosystem Services and Values in Landscape Planning, Management and Decision Making,” *Ecological Complexity* 7 (3:2010):260-72.

⁹ G. Welch and Z. Nur, *Governance for the Future: Democracy and Development in the Least Developed Countries* (New York: UN-OHRLLS and UNDP, 2006).

¹⁰ “Governance will be an important driver of progress across all dimensions of the next global development agenda,” Deputy Secretary-General says at side event, UN Press Release DSG/SM/798, dated 22 September 2014.

¹¹ A. Nelson, “Travel Time to Major Cities: A Global Map of Accessibility” (Ispra, Italy: Global Environment Monitoring Unit, Joint Research Center of the European Commission, 2008), retrieved on 30 October 2014.