

WATER AND LAND IN LATIN AMERICA – GLOBAL STRATEGIES AND POLICIES

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EXECUTIVE SUMMARY

This article analyses within a global context the impacts of the transformation of water and land into strategic scarce resources in the case of Latin America. Behind water and land are concerns for food, fuel, energy and minerals provoked by the rapid, sustained growth of an increasing number of countries in the developing world. The pursuit of these resources involves strategies which call in question some of the key tendencies associated with globalization. The strategies currently being put in place to access these resources begins to displace the centrality of free trade in favor of bi-lateral or regional agreements, when not reverting to colonial models of yesteryear. States with highly concentrated power are a defining feature of these emerging countries. Within this broader framework we will first discuss the emergence and significance of water and land as strategic scarce resources before focusing on their importance in Latin America and the associated foreign investment trends and related policy initiatives which they are provoking.

It is appropriate to analyze water and land jointly for the simple reason that some 70% of fresh water use is dedicated to agricultural irrigation. The intimate connection between land, water, and food, feed and fuel commodities is captured in the notion of "virtual water", a term increasingly used in agricultural trade to gauge the amount of water required to produce a specific crop. At the same time, each has specificities which require separate consideration. In the case of water, other central uses include human consumption, industry, the production of energy, and water as a strategic transport system, a source of food, and also of leisure. Three sources of water are relevant for this paper – surface water in the form of rivers, precipitation or rainfall, and underground water sources or aquifers Each form of use has its own range of externalities and as scarcity increases so also does the potential for conflict over different claims to use. Land use is similarly the object of multiple and conflicting claims and collective identities have been predominantly defined in terms of claims to territories. Native reserves, parks, agrarian reform, zoning of production are all responses to conflicting claims on land, involving traditional communities, biodiversity, peasant and small-scale farming and modern agriculture. Urbanization and its accompanying transport systems threaten each of the previous conflicting claims

accelerating the withdrawal of rural lands just at a time when increasing demands are being placed on agriculture as a consequence of the transition to an animal protein diet in developing countries. Important tracts of land have also to give way to water as dams are built in response to the increasing water consumption needs of city life.

The supply of water for final consumption including drinking water and sanitation has become an increasingly central issue in developing countries given the explosion of urbanization. This service has been traditionally identified with the public sector, in line with the conception of access to water as a basic right and therefore a public good. In the wake of the debt crises and restructuring in developing countries, multilateral organizations (World Bank, IDB) presented the privatization of these services as the solution to water services access, which was often imposed in the framework of debt renegotiation. In developing countries, the inefficiency of water supply services opened the way for the emergence of a market for bottled water. Initially, this was largely directed to poor urban consumers without direct access to public supplies and sold in large containers. Declining confidence in the quality of tap drinking water and varied strategies internal to the soft drink markets (segmentation, healthier alternatives to sugar-based soft drinks) have seen an explosion in both mineral (directly from the source) and mineralized (recycled) water. Initially dominated by local firms, this market has been taken over and developed globally by leading players in food and soft drinks sectors - Nestlé, Danone, Coca and Pepsi Cola.

When compared with Africa and Asia, Latin America has become a privileged focus of trade and investment in each of the three water segments indicated above. As we will see, in the case of both land and water on aggregate Latin America finds itself in a very favorable position. With only 8% of the world's population Latin American has 31% of total freshwater resources, Brazil alone having more than 20%. This has given the region a series of competitive advantages. Water provides 68% of the region's electricity as compared with a global average of 16% and to date only 30% of its potential has been exploited. Latin America is able to take advantage of global demand for its mineral resources because it is able to draw on the huge reserves of water which mining requires. Water availability also explains Latin America's leading position in food exports which have doubled over the last decade, overwhelmingly on the basis of rain-fed agriculture.

This availability of water, however, is very much a phenomenon of South America. Mexico has ten times less fresh water per capita than the regional average and the Caribbean islands are deficient in rivers. According to Barlow and Clarke (2004) Mexico city now depends on aquifers for 70% of its water supply which are being mined much faster than they are being replenished. Desertification is advancing in South American also and the above authors calculate that 25% of Latin America is characterized as arid or semi-arid. Rapid and now very high levels of urbanization/metropolitanization are also threatening access to water supplies.

In the light of the debates on the compatibility of biofuels and food security, the Latin American Office of the FAO and CEPAL produced a report on the availability of land in Latin America (FAO/CEPAL, 2007). This report highlights that the region has a higher than average increase in food production and a higher than average proportion of

food exports when compared with other regions. The supply of food energy per capita is positive for almost all countries. Central American countries, dependent on maize, are seen to be most at risk. Brazil, Bolivia, Argentina, Colombia and Uruguay are identified as the countries with the greatest potential for expanding the agricultural frontier.

Water emerged on the international agenda at the Mar del Plata UN Conference on Water in 1977 where this resource was defined as a common good. By 1992, however, at the Dublin, International Conference on Water and the Environment, preparatory to the Rio, Earth Summit, the fourth of its Guiding Principles emphasized that "water has an economic value in all its competing uses and should be recognized as an economic good" (Dublin Statement, 1992). It is this vision which informed the World Bank's and the BID's promotion of the privatization of water services in Latin America in the '90s, often in the context of debt renegotiations, and in close articulation with the leading transnationals in water services. The level of opposition to privatization in the mid '90s, however, led to the collapse of many initiatives and the withdrawal of leading firms from a whole number of Latin American countries.

The bottled water market, as mentioned above, has been a focus of more attention in Europe and the U.S. from the point of view of conflicts and social movements reflecting the greater presence there of the politicized consumer. In Latin America, however, it has also become a target of opposition since the importance of the mineral water segment means that the global players, Nestlé, Cocoa Cola and Pepsico, are buying up and, it is argued, drying up key mineral springs which in addition to supplying local communities are often also the basis of the leisure spa industry.

The bulk water is becoming the object of trade via the construction of aqueducts, pipelines, tankers or huge sealed bags, the biggest of which can hold two million liters, towed across the oceans or along waterways. This trade has not yet received similar attention in South America. Nevertheless, a water Export law has already been passed in Bolivia to provide water from the Potosi to Chilean mining companies. Over the longer term, however, attention will be increasingly turned to the Guarani aquifer, the world's largest reservoir of trans-border underground freshwater, shared between Brazil, Argentina, Paraguay and Uruguay.

The bulk of recent investments in land in Latin America has been explicitly productive and aimed at the fuel, food, feed and forestry sectors. This move represents a shift from the traditional strategies of agribusiness which have been to concentrate their investments up and down stream of agriculture, thereby controlling farming activities from a distance. A second difference, is that such investments are no longer limited to traditional agribusiness interests but include, global corporations from a wide range of other sectors – petroleum, autos, construction. Perhaps the most novel features of these investments, however, have been the presence of global investment funds, on the one hand, and investments by capital-rich, resource-poor States, either directly or through their leading firms.

In its projections for the development of global agricultural commodities markets through to 2016, USDA (2007) highlights the persistent relative decline of the US and the shift of the global agricultural commodities frontier to the Southern Cone driven fundamentally by demand from the emerging economies, led by China. While the novel

features of the global land grab phenomenon have been identified as the result of a concern for securing food staples by import dependent countries less confident in the functioning of global markets after the food prices hikes of 2007-8, investments in Latin America, and in particularly South America, are predominantly motivated by the attraction of this region's increasing role in global agricultural, fish products and forestry commodity markets, to which should be added also the emerging carbon credits market.

Land and water are increasingly intertwined as scarce strategic resources. The design of policies, therefore, should reflect this convergence. Latin America is favorably placed with regard to both land and water although these are unevenly distributed throughout the region, particularly the latter which is concentrated in the South. At the same time, it is perhaps the continent which is most vulnerable to negative tendencies affecting these resources since all aspects of its economy are organized in terms of the comparative advantage which these resources offer in energy, agriculture, forestry and mining.