Local Vibrancy in a Globalizing World:
Evidence from Dominica, Eastern Caribbean
by
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Photographs by the authors

The Local within the Global

Globalization is often described as a process that increasingly encompasses world regions, countries, products, services, and people. Blouet (2001 p.7), for example, states that “...globalization removes obstructions to movement and creates conditions in which international trade in goods and services can expand.” This process of increased movement of goods and services has grown steadily, aided by technological advances. While much of the world's economic activities move toward free trade and globalization, at the same time there are local areas that remain to a significant extent autonomous and vibrant. The relationship between the local and the global has received much attention in recent years in social sciences and the humanities (Kearney 1995). Local activities intertwine with the global influences; local and global are not distinct and separately analyzable (Porter 2000).

This essay centers on locally-focused aspects of the economy, culture, and society, and the people behind them, drawing on the case study of the Eastern Caribbean island nation of Dominica. Primary products, and those that are involved in and benefit from their production, weave into the complexity of the globalized world while at the same time continuing to be locally sustainable.

We use marine and forest resources as examples to show how people on this remote Eastern Caribbean island continue to utilize and manage these resources sustainably and how these local producers complement the globalized trade flows and supply chains for these resources. Dominica illustrates how local actors continue to have a sizable role in generating employment and satisfying daily needs, despite the growing outside pressures toward a globalized Western lifestyle. By documenting the continued vibrancy of certain natural resource sectors in an island economy that is otherwise increasingly permeated by imports, this essay furthers our understanding of the status of the local amidst the global.

The Regional and Local Context of Dominica

The Commonwealth of Dominica is an Eastern Caribbean country with a population of about 70,000. The Caribbean Islands, or West Indies, are divided into the Lesser Antilles and the Greater Antilles and cover about 230,000 km² of land area (Figure 1). Of the islands, Cuba, Hispaniola (Dominican Republic and Haiti), Jamaica, and Puerto Rico (comprising the Greater Antilles) make up about 90% of the land area; but smaller islands among the Lesser Antilles such as Dominica have considerable biological endemism (Barker 2004). Taken together, the varied physical conditions, marine environments, and micro-climates of the Greater and Lesser Antilles comprise a hotspot for global biological diversity (Conservation International 2009). Dominica lies near the middle of the Lesser Antilles and is the northernmost of the Windward Islands. Dominica has about 750 km² of land surface and nine active volcanoes, giving it the distinction as the country with the world’s highest volcano density (Lindsay et al. 2004).

Most of the Dominican population lives along narrow coastal plains in villages or in the capital of Roseau. Given the island’s coastal settlement pattern, and its otherwise steep terrain (Figure 2) and heavy rainfall, most of the interior is comprised of remnants of undisturbed primary forests. Throughout history, the island’s residents – first indigenous peoples including the Kalinago (also known as Caribs), subsequently African slaves brought by colonial powers, and now their descendants – have had close ties to the land (Honychurch 1995). This tie to the land continues today through the prevailing livelihoods of subsistence and commercial farming, fishing, and forestry. Dominicans’ tie to the land is captured in the national motto, expressed in French Creole as: “Après Bondie, C'est La Ter” or “After God is the Earth.”

Dominica’s historical tie to the land was rooted in the fact that the island’s occupants over the centuries have needed to develop highly localized means of sustenance and livelihood. This is partly because, until the 1950s, there were no paved roads connecting separate parts of the island. Remote parts remained detached until the late 1990s (Honychurch 2009). The distance “as the crow flies” is often not more than a few kilometers between any two villages; however, given the mountainous terrain and lack of roads, villages in Dominica were historically isolated. For most of the island’s history, the quickest route between any two villages, and between any two parts of the island, was by water.

The mountainous topography, limited infrastructure, and a tumultuous history of colonization have led people to create localized knowledge systems and practices with considerable local self-sufficiency (Honychurch 1995). The local isolation encouraged subsistence lifestyles focused on extracting nearby resources. Traditional knowledge of local trees and other plants and their value as food, medicine, and other functional uses is still widespread. History connects Dominican culture directly to the forests to fill a range of needs, to the land and the soil for crops, and to the sea for fish.

How does Dominica’s local self-sufficiency mesh with our increasingly inter-connected world? We argue in this essay that Dominica sits on the cusp of globalization and balances between being internationally connected and being autonomous. We use two of Dominica’s most important primary product sectors -
timber and fisheries – to illustrate how the country can be both internationally connected yet relatively autonomous and locally vibrant at the same time. These two primary products, from the island’s still ample forests and its vast territorial waters, are quintessentially Dominican (Figure 1).

Marine Resources

Fishing and the harvesting of marine resources have been a crucial part of the Dominican and the wider Caribbean diet and culture for millennia (Watts 1987). While the diet of the Amerindian people in pre-Columbian times relied primarily on farming (cassava, tubers, etc), marine resources were also crucial. For example, the Arawaks, one of the early groups to settle in Dominica are known to have fished in nearby coastal waters where they harvested crabs, lobster, conch, other shellfish and turtles (Honychurch 1995). Arawaks consumed marine products both as sustenance and as a part of folklore culture. This combination is illustrated by “jack soup,” a concoction made to this day with a variety of local herbs and jack fish, a common Caribbean fish that is believed to be an aphrodisiac. Carib Indians, a tribe from South America, followed the Arawaks northward up the island chain. The war-like and more seaworthy Caribs successfully conquered the Arawaks throughout the West Indies. The Caribs innovation of substantial dugout canoes made from local gommier trees allowed them to fish many miles further offshore than the Arawaks for larger catches of grouper, dorado, and barracuda. Fish was the Caribs main staple food in the pre-Columbian era (Parry and Sherlock 1956). Caribs developed and mastered fish preservation. The process included gutting, cleaning, salting, and drying fish in the sun for several days. The result called “salt fish” is still a staple ingredient in many Dominican and wider Caribbean dishes today (Figure 3). For Dominicans, fish protein represents 13% of diet, a far greater share than both the Caribbean and world averages of 7% and 6%, respectively (World Resources Institute 2007).

Most Dominican fishermen have adopted some modern fishing technologies, such as outboard motors, and the occasional use of artificial bait and newly developed lures. However, the typical Dominican still fishes in a small-scale sustainable way, as he has for centuries.

Figure 1: Map of the Caribbean and Dominica highlighting places mentioned in this essay.

Figure 2: The main port and capital city of Roseau is dwarfed behind large off-shore vessels bringing goods to the island. Several typical Dominican open-air fishing boats appear tiny in the foreground. The island’s rugged landscape can be seen in the background.
registered decked fishing vessels which have refrigeration, trawling equipment, or fish processing capabilities on-board. The majority of Dominican fishing is done in small open-air boats (Figure 4). While fishing generally uses little in the way of technological advancements, it remains central to Dominican culture employing thousands of fishermen and supplying successive generations with sustained economic possibilities (World Resources Institute 2007).

A typical day of fishing in Dominica still consists of rising before the sun and navigating to the fishing areas in the stereotypical brightly colored wooden or fiberglass boat by humble outboard motor (Figure 4). These boats are produced in villages around the island, representing a small-scale local economic activity for generations of artisans. The relationship between fishermen and secondary industries such as boat building adds not only to local jobs, but also serves to create feelings of national pride and ownership with respect to local fishing. Here we note Dominica’s consistency with the ideas of E.F. Schumacher, who in his 1973 book, Small is Beautiful: Economics as if People Mattered, argued for an economy based on local labor, community, and ecological values, rather than global imperatives. Today, Schumacher’s ideas are gaining traction in the form of back-to-the-land movements in the Global North (E.F. Schumacher Society 2010), which have similarities to a way of life Dominicans have practiced for centuries.

Small-scale fishing in the Caribbean region is generally pursued under four categories: subsistence – aimed at personal and other local consumption; recreational – generally foreign fishermen for pleasure; commercial – for sale on the open market; and industrial – fishing also for sale on the open market, but with new high-yield technologies (World Resources Institute 2007). Of these four categories, fishing for local consumption (subsistence) and local livelihoods (commercial) are the primary ones pursued in Dominica. There is very little industrial-scale fishing. Dominica exports almost none of its commercial fish or fish products, but increasingly imports foreign-caught fish (Figure 5).

A few of the primary fishing zones have been made into multi-use areas, encompassing the needs of fishermen, and also the needs of tourists, and those concerned with marine conservation. The Soufriere-Scotts Head Marine Reserve (SSMR), in the southwest part of the island (Figure 1) was established in 1998 and is a fine example of how a marine-centered community can balance and manage the demands of local production with fishing zones, global interests with SCUBA and snorkeling zones for tourists, and sustainability with marine nursery zones. Local producers continue to utilize local resources in conjunction with activities related to globalization, including the demands for exotic recreation and international conservation. However, this arrangement is not always harmonious as conflicts sometimes arise (SIDSNET 2009).

Most Dominican fishermen still use traditional methods, such as simple hooks, fresh-caught baitfish, and line, often without reel (Figure 6). They sometimes wear gloves to protect their hands from line burn. The typical fishing boat in Dominica will have two to three individuals, one to drive, and the others to fish and to prepare and gut caught fish. Dominica’s method of fishing is labor-intensive, but is also sustainable both to the environment and to the labor force. This method of fishing allows fish populations to rejuvenate and maintain a healthy level of biodiversity, but results in a more expensive product at the marketplace compared to industrial fishing techniques. As global pressures towards free trade have increased and local people have been attracted to purchase more foreign goods, the importation of fish products has
grown steadily (Figure 7). Dominica’s fish imports rose from hundreds of thousands to around two million U.S. dollars over the period from 1980 to 2000 (Figure 5).

Small-scale Caribbean fishing differs from most of the world’s informal economic activity. Worldwide, somewhere between 60–80% of informal workers are female (Hays-Mitchell 2006: 255). And unlike many other informal economic activities in the Caribbean region, such as food vending, in which women are strongly represented, the Caribbean and Dominican fishing trade employs almost exclusively males (Sookram and Watson 2008). Women often help in the preparations of fish stew, soup etc., and in the salting of fish, but this is done only after the catch is brought in.

The complex hierarchy that governs relationships among fishermen and their fishing areas requires analysis all its own. What is notable here is that fishing areas, and the catches from these areas, are thought of as vital resources and the knowledge of these places and the associated fishing techniques are held closely by elder fishermen. The knowledge base of fishing is passed down to new generations, and there is a sense that respect should be paid to the older generation of fishermen. Dominica’s small scale fishing sector operates and relies heavily on community involvement, with villagers helping to bring in fish, haul boats on shore, and watch over fishing equipment when left unattended (Figure 8). The communal nature of fishing in villages such as Scotts Head has allowed those who were previously unable to purchase fishing equipment on their own to engage in fishing activities. Often several fishermen will fish from the same boat while contributing towards gasoline and supplies (Figure 9).
Fishing officially contributes about 2.5% to Dominica’s GDP, but this undervalues its contribution. About 1,150 metric tons of fish are taken annually from Dominican waters, and the industry provides some 2,000 registered fishermen with incomes. This does not include people who are not registered with their local fisheries office nor the many involved in ancillary activities. The contribution of fishing to GDP also does not include much of the fish that is exchanged in the informal economy. Throughout the Caribbean region, the informal trade that occurs off-the-books is a crucial component of the daily lives of people (FAO 2000). To summarize, statistical tools used by the macroscale policymakers do not incorporate much of Dominica’s micro-scale informal sector, illustrated here by fishing, fishing boats, and off-the-books exchanges. Local fishermen still operate much as they have for generations, making a sustainable living off the resources available around them.

**Forest Resources**

As noted earlier, Conservation International (2009) identifies the Caribbean region as a biodiversity hotspot and an international conservation priority. Its many varied physical and marine environments support high levels of flora and fauna diversity and endemism. The Caribbean has about 13,000 species of plants, as compared to around 14,000 in all of North America. That makes the Caribbean five times more biodiverse as the equivalent area of North America (Barker 2004). Among Caribbean plant species, about 6,550 are single island endemics. Dominica is home to approximately 1,250 species of plants, some of which are Caribbean endemics. There are 11 plants endemic only to Dominica. Currently, about 13% of Caribbean land is protected, but the comparable figure for Dominica is 20%. Over 16,000 hectares (about 40,000 acres) of Dominican land is designated as either national parks or forest reserves (Figure 1; Commonwealth of Dominica 2001). Beyond these public lands are significant tracts of privately owned forested land. Overall, about 51,770 hectares (127,900 acres) or 65% of the Dominican landscape is forested. The forested landscapes make Dominica unique in the Caribbean—it has the most intact forest cover in the region (Commonwealth of Dominica 2001, Conservation International 2009).

Given the large amount of forest in Dominica, a considerable amount of wood harvesting can still take place in the forest reserves and on private land, while the forests in the national parks are left intact. For many years, local people have been harvesting trees sustainably. Before harvesting any tree in the forest reserves, a harvester must obtain a permit and approval from Dominica’s Forestry, Wildlife and Parks Division. The Forestry Division charges a nominal fee for the permit and the tree. The Division today has a broader mandate to ensure sustainable use of the island’s forests compared with its role as a regulatory body when it was created in 1949 (Forestry, Wildlife and Parks Division 2006a). In 2003, the Division issued 28 permits for the removal of forest produce from state lands. That year saw the harvesting and sale of 24 individual trees from public lands (Forestry, Wildlife and Parks Division 2006b). Occasionally there are cases of illegal harvesting of forest products, but this is rare.

Though Forestry Division permits are relatively inexpensive, the process of harvesting the tree presents great challenges to most of the local chainsaw men and harvesters, particularly because of inaccessibility. This makes Dominica different from other Caribbean islands and most tropical islands, where forests have been more severely exploited. The Forestry Division divides the island into four ranges in which Dominicans can select and harvest trees. The difficult terrain is a major reason for inaccessibility, as is the location of areas allowed for harvesting within the four ranges. The locations are often farther away from roads than harvesters would like. Every few years the Forest Division assesses the areas where harvesting is allowed and designates new areas where sustainable harvesting can occur.

In most other parts of the world, wood harvesting generally takes the form of clear cutting or strip cutting, especially when large logging companies are involved. This form of harvesting is known to have detrimental effects on the environment and local biodiversity (Mason and Putz 2001). This type of large-scale forest exploitation has been attempted several times in Dominica’s history, but the rugged topography has always caused it to fail (Honychurch 1995). Today in Dominica, single-tree fell ing is used by harvesters as opposed to the other two larger scale methods. The process involves the selection of one or two trees to be harvested from an area and it causes minimal disturbance in the forest compared to clear cutting or strip cutting (Mason and Putz 2001).

After a person has selected a specific tree to harvest and the tree has been inspected and approved by the Forestry Division, a couple of men (most are hired by the harvester or are neighbors and
friends) go into the forest to cut down the tree. The mountainous terrain makes it difficult to carry out the entire cut tree, so trees are cut into planks where they are felled. The chainsaw men make the straight planks with surprising accuracy using only string and a chainsaw (Figures 10 and 11). The advantages of making the planks in the forest itself are two-fold, one for the harvesters and the other for the ecology. Firstly, the entire tree does not need to be carried out of the forest on the difficult terrain and secondly, it causes the harvesters to leave behind much of the tree in the form of smaller branches bark, leaves, etc. This is environmentally beneficial since it returns nutrients to the forest and contributes to forest regrowth. Tropical forests have most of the nutrients stored in the very top layer of the soil, the detritus, and in the trees themselves. When entire trees are taken out of the forest, so are all of the nutrients.

Many species of local trees have valuable wood. Some of the more well-known and widely used include the gommier (Dacryodes excelsa), balat (Pouteria multiflora), bwa blan (Simarouba amara), bois diable (Licania terratensis), almond (Terminalia cattapa), and apricot (Mammea americana). The gommier continues to be used by the Caribs people and others to make ocean-worthy canoes. Houses in Dominica were for centuries also made out of wood, but in recent decades there has been a shift to mainly concrete houses. While some people still use local wood in construction of houses, most of the local wood harvested today is made into furniture.

While cinder blocks are the preferred housing construction material today, people do continue to use wood for features of and additions to their houses. This wood is cut not only in the Forestry Division’s reserves but more often on privately-owned land. Observations lead us to assert that most of the wooden housing built today is for ecotourism. An example of an ecotourism house is located near the start of Victoria Falls trail in Delices (see Figure 1). People living in and around Delices constructed the house as a place they can rent out to backpackers travelling through the island. Many of the woods used in the construction of this house can be seen in Figure 12.

Local wood is also used to make souvenirs for tourists. These crafts are usually sold near the start of trails or at the Bay Front area in Roseau where stalls and shops are devoted to tourists disembarking from the cruise ship dock. Local logs and wood are also used in creating steps on trails. The trunks of tree ferns are preferred for the steps of the island’s growing number of hiking trails. Tree ferns provide grip and are rot resistant, even under hot and humid conditions (Figure 13). Another on-going use of local wood relates to the fact that Dominicans often have a wood stove outside their home, in addition to the gas stove in the kitchen. The wood used for these stoves are small branches collected from public lands (but not national parks) and private forested areas.
The amount of wood harvested locally is small, especially compared to the number of available permits from the Forestry Division. All of the factors mentioned above have kept the forests in Dominica intact. Most of the locally harvested wood is also used within Dominica rather than exported. There is, however, plenty of imported wood, especially from Guyana and Trinidad. Wood is imported to serve a range of uses including the local furniture industry, housing, and telephone poles (Figure 14).

**Conclusions**

There are some notable connections between this empirical study of Dominica’s fishing and forestry industries and three wider issues: development policy, globalization, and the relationship between the local and the global.

Out of a series of consultations with the World Bank and the International Monetary Fund (IMF), a key development policy document called Medium-term Growth and Social Protection Strategy was created to provide an economic assessment and a set of development priorities for Dominica (Commonwealth of Dominica 2006). The document flatly states that “Dominica is not internationally competitive; and internally there is a lack of dynamism in the economy” (p. 3). The economic activities and social networking described in this essay are largely excluded from this development policy analysis. Domestic fishing and forestry activities function under the radar from the development assessment and recommendations of the World Bank and the IMF. However, these activities, as illustrated in this essay, have deep cultural roots and much artisanal vibrancy, are largely sustainable, and provide substantial employment and consumption value. Analysis of development in the Global South based on global free-trade typically does not fully incorporate these products and services. Without recognizing the level of informal trade between vendors and consumers, GDP statistics fail to capture the true scale of economic activities associated with primary products, and the many people who produce and consume them.

A similar comment can be made with respect to globalization. Though globalization processes now connect much of the world through trade flows and information exchanges, they are not as all-encompassing and homogenizing as they are sometimes portrayed (Friedman 2005; Blouet 2001). Certain activities within our otherwise highly globalized world, especially those in small economically peripheral countries, continue to flourish. Local activities, products and producers often function somewhat autonomously, and while influenced by globalization, they are not reliant upon nor subdued by it.

Further, the expansion of globalization has led to an unsustainable scale of resource exploitation, with the distribution of benefits highly uneven in terms of regions and people. Globalized supply chains and trade are now responsible for a host of everyday products in many parts of the world. From 1970 to 2002, the value of merchandise and services exported worldwide rose from US $316 to US $8025 billion (UNCTAD 2004). Many primary products originate in one country, are processed in another, and are consumed in a third. Driven by efficiency and price, supply chains have begun to expand and integrate even the most remote of places, often bringing its members into new markets with new opportunities. However, this integration is not even and often places dire stress upon ecosystems and small-scale producers. While paying attention to the interconnected nature of primary products, this essay has focused on the people behind two of these primary products, how they are connected, but also how they remain locally vibrant. As Scholte (2000 p.8) puts it, “Although globalization has touched almost every person and locale in today’s world, the trend has spread unevenly, being most concentrated among property and professional classes, in the north, in towns, and among younger generations”.

A vast literature in economic geography examining industries and regions coalesces around the idea of “[t]he continuing significance of ‘the local within the global,’ the notion that the forces of globalization not only do not obliterate local distinctiveness but that, seemingly paradoxically, local qualities become more, not less, significant in a globalizing world economy” (Dicken 2000 p.438). Much related work in political economy continues to draw attention to the significance of the geographical scale of “the national.” That is, there is still considerable economic activity framed by the territoriality and powers associated with the nation state. It is also important to appreciate ways that local activities mesh with the global influences, rather than to think of the local and global as distinct, and separately analyzable (Porter 2000).
These global-local connections and issues of sustainability play out in fascinating ways in Dominica. Many practices in the Global North that would be labeled as examples of sustainability, Dominicans conceptualize in different ways, often driven by pragmatism. In the coastal marine zones, Dominican fishermen understand the essential relationship between harvesting and replenishment. Wary of legal reprisal, Dominican fisherman generally adhere to catch quotas, seasonal fishing regulations, and restrictions on fishing in protected marine nursery zones. More fundamentally, however, fishermen have for long adhered to their own unwritten regulations that limit the take of females and juveniles, and express a no-nonsense attitude that this increases future fishing possibilities.

Similarly, what appears to the outsider as sustainable forestry, for Dominican tree fellers is the age-old practice of balancing the level of tree extraction with the level of seedling replenishment. Further, tree fellers do not leave the leaf and branch litter in the forest to decompose in the pursuit of sustainability. Instead, the practice is driven primarily by convenience. The steep terrain and great distances to motorable roads make it nearly impossible to remove entire trees. Cutting them into boards where the tree is felled, and in the process, leaving behind considerable detritus, is therefore standard practice.

There is deep national pride in the work of Dominicans that supply fish, harvest trees, and craft products out of wood. There is appreciation of local skills, hard work, connections to the land, and the quality of Dominican products. Practitioners of these crafts have pride and appreciation for their workmanship. Fishermen eloquently and passionately describe the marine world and its products, and tree fellers do the same with wood and the resulting crafts. Tree fellers often speak of innate beauty, describing the “built-in designs” in the grain and color of the wood they work with, especially praising wood that does not need an application of colored varnish. Some tree fellers will go even beyond that to state the superior quality of the island’s wood (and its resulting products) compared to imported alternatives. The pride and appreciation carries beyond just the practitioners, as Dominicans that consume the fresh local foods and use the artisanal products from local hardwoods recognize their distinct value.

At the same time, globalization is shifting more and more attention abroad, and this is particularly apparent in the form of a demographic divide, as Scholte (2000) has noted is occurring throughout the world. Most of the young people are less connected to the land and sea than previous generations. Many Dominicans and especially younger ones yearn for greater connections to the globalizing world and are less content practicing traditional lifestyles. They desire more external connections than already present through imported products, satellite TV, and the Dominican Diaspora. We call for future research that looks more directly at relationships between the local and the outside world, as the impacts of globalization continue to grow in relatively remote and locally vibrant places such as Dominica.

This essay has focused on two pre-globalization economic and cultural legacies that have continued to flourish in Dominica. These two legacies are not globally isolated and do interact with the outside world, especially when they deploy certain outside technologies, such as chain saws for forestry, and motors and synthetic nets for fishing. However, they each have their own local logic, distinctive local features, and significant autonomy from globalization processes. Thus they can continue to function separately from the global trade flows, unlike so many other activities in the global economic periphery. Dominica’s fishing and forestry sectors illustrate a local dynamism that can continue to flourish, independent of the many aspects of globalization that increasingly connect distant places and peoples in the world to each other.

References


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