

The Roseau Botanical Gardens and Peripheral Link Project

Introduction

In 1997, the Dominica Conservation Association was granted \$50,000 from GEF Small Grants Program to initiate community participation in the planning and implementation of activities related to the upgrading of the Roseau Botanical Gardens and the development of a link way between the gardens and the city of Roseau. The Dominica Conservation Association proposed that the initial funds would help to:

- Develop and utilize tools and methods effective in creating ecological/environmental awareness
- Use the information gained during this period to influence the decision-making process with regard to upgrading of the gardens and other future development projects
- Form a committee comprising non-governmental organizations, government, and private sector members to oversee project activities.

The primary goal of this case study is to analyze the relative success and constraints to the design, planning and initial implementation stages of the Roseau Botanical Gardens Link project. In the fall of 2002, the government of Dominica will receive approximately one million Euro from the European Union to further the design and implementation of the Roseau Botanical Gardens Link project. Therefore, it is important to reflect on efforts made during phase one of the project and how these efforts might affect the future success of this conservation and development initiative in the second phase. More specifically, this case study also attempts to examine how the relative inclusion of various stakeholders to date may help to determine where future efforts and funding might be most appropriate. It is my sole intention that this case study provides constructive feedback to the project designers, implementers and funders of this project.

Methodology

The information contained within this paper is primarily derived from research conducted from June through August 2001 on-site in Dominica by the author. The methodological approaches employed include in-depth interviews with key informants within the Dominican government, with tourism operators, with non-governmental organizations, and with community members; participant observation in government meetings, public forums, and workshops and at tourism sites; and structured socioeconomic surveys of tourists.

The City of Roseau

The capital city of Roseau encompasses close to 600 meters of the island and houses over sixteen thousand inhabitants or 23% of Dominica's total population. Although, the size of the capital city population would be considered a small town in the United States, this city serves as the main center of commerce and activity for the entire island. In fact, an additional 30% of the population works within the city limits and an even greater number come to market every week to acquire essential goods and services.

In many ways, Roseau can be considered an island within an island. Built on the site of an ancient Kalinago Indian village of Sairi, it is the oldest and most important urban settlement in Dominica (Honychurch 1995). It is also one of the few relatively flat areas in Dominica, a stark contrast from the lush and mountainous tropical forest that assumes the rest of the island. Because of its rugged terrain, urban growth in the Roseau area has concentrated on a certain nucleus instead of continuous sprawl. The central district of Roseau is tightly packed with small houses, and only a few green or open spaces can be found within the city's bounds. However, the district is surrounded by natural elements including the Caribbean Sea, Roseau River and Morne Bruce. First established by the French, in the 18th century, central Roseau was first organized in the shape of a star, which allowed for the most efficient transportation network while still leaving open space between the built areas. This area is recognized today as the French quarter and can easily be identified by the crooked and irregular streets close to the Bay front. However,

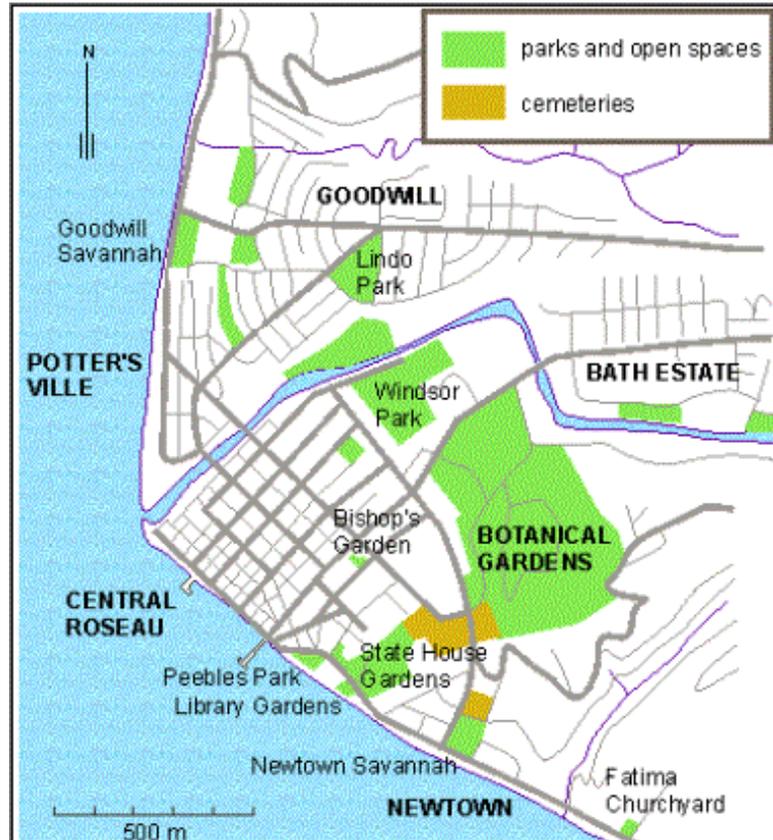
after British occupation, the rest of the city was soon transformed into a uniform and rectangular grid.

Currently, only 2,300 of the 16,000 residents live in central Roseau (Population Census Data 1999). Rather, Roseau residents occupy one of the many neighborhoods that act as the city's bedroom communities on the outskirts or neighboring hillsides. Newtown and Potter's Ville, the oldest suburbs, were already formed in the late 18th and early 19th centuries and are only a couple minute walking from the city center. In the 1950's, Goodwill was established as a result of the rising middle classes demand for larger housing. In the early 1980's, the Bath Estate was established on flat and former agricultural lands, just to the east of the city center. Since this time several new semi-urban settlements, such as Stock Farm, Castle Comfort and Wall House have been constructed around the existing ones. These settlements house many of the well-established families and expatriates. Other older settlements like Fond Cole and Canefield, which now belong to the semi-urban area that lie around Roseau, house older communities. These 'suburban' communities exhibit a growth among the urban population and an increasing demand for work within the city center. So, although the island is covered in tropical forest, a growing majority of the population has little regular access with or contact to the natural environment on a daily basis.

Historically, the streets of Roseau, and especially those of the central district, have not only been considered a way to move from place to place but rather as a place in itself. Sidewalks were used as converted gardens and streets, as well as converted playing fields and social meeting places. However, as greater numbers commute to Central Roseau to conduct their daily business the concept of mixed space has become increasingly stressed. Motorized vehicles pour into the central district thus introducing a mode of point-to-point interaction in an environment that was created for multiple uses. Today one of the few spaces that remain in Roseau for such mixed-use social activities is the Botanical Garden, which lies on the eastern fringe of the central district (see figure below).

The Botanical Gardens

In 1889, the government acquired the land for the Botanical Gardens from the owners of Bath Estate. The first curator was Charles Murray of the Edinburgh Botanical Gardens and soon after, Henry Green from England, who began planning and laying out the grounds. The Botanical Garden primarily served as an experimental station, where plants from all



over the world were grown to provide farmers with seeds for planting, experimentation, and production. However, ornamental plants were also grown on the grounds for purely aesthetic appeal. This continued for the better part of seventy-five years. Additionally, in 1896, a portion of the property was also given to the Catholic Church to develop the island's first secondary school (Honychurch 1995).

The late 1970's and early 1980's were difficult years for Dominica, with its transition to independence in 1978 and hurricane David in August of 1979. Both these occurrences have had a huge impact on the Botanical Gardens. David was probably the most intense hurricane in the Caribbean during the 20th century and caused extensive destruction to the southern parts of the island, including Roseau. After passing over the most densely inhabited portion of the island, the hurricane left 75% of the population homeless (Ward 1980: 375, Honychurch 270). Hurricane David also decimated the botanical gardens destroying 50% of the collection, including most of the palms, which composed the main

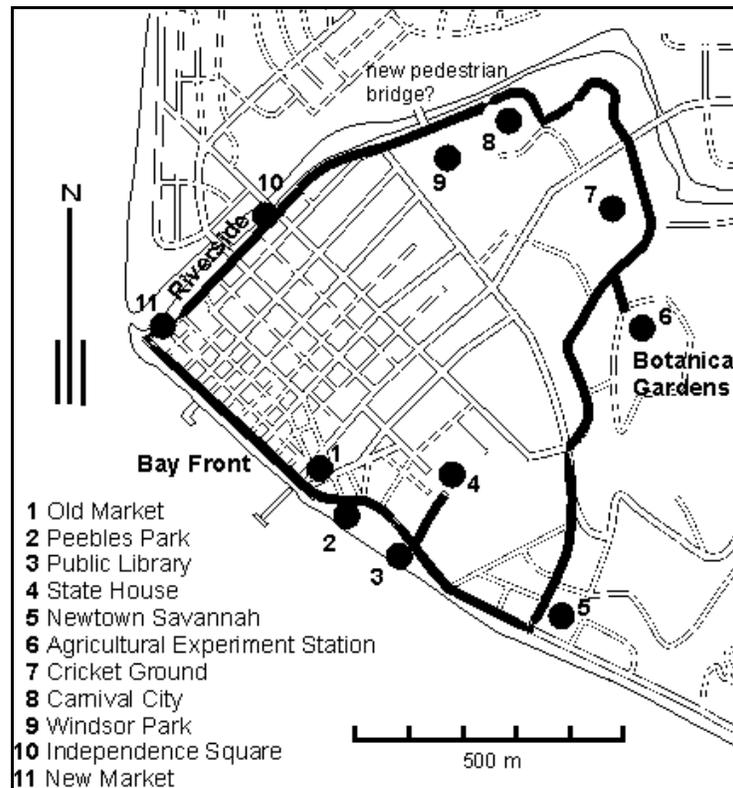
collection. Recovery efforts left the government in debt and heavily dependent on international development assistance. Funding for activities such as the redevelopment of the gardens became extremely low priorities.

To this day, the gardens continue to receive little attention other than continual maintenance efforts controlled by the Forestry Department. Efforts to expand the collection of trees or redevelop the gardens have been discussed, but little action has been taken due to political will and financial constraints. Nevertheless, the use of the grounds remains high. The Botanical gardens are used on a daily basis by school children as their playground, sports enthusiasts playing a cricket match, tour guides as the entry point for their island tour, residents as a thoroughfare, and the departments of Forestry and Agriculture who are currently housed on the grounds.

The Botanical Gardens-Roseau Link Project

The idea of *Botanical Gardens—Roseau Link* was first developed in 1993, when the present government proposed to develop the most northern section of the Botanical Gardens into a full sized cricket stadium. Expanding the cricket pitch would have required leveling the irregular slope as well as acquiring more of the grounds for the cricket pitch and stands. The implications of this development, including the increase in congestion and traffic within Central Roseau and the Botanical Gardens, distressed local residents and special interest groups. In response, an integrated group consisting of local residents and community-based organizations, including SPAT (Small Project Assistance Teams) Save the Children, National Council of Women, then Elderly Association, and the Dominican Conservation Association rallied in protest. This public dispute eventually led to the mandate of one of the first Environmental Impact Assessments (EIA) in Dominica. The EIA attempted to analyze the potential impact to both the grounds and its surrounding neighborhood. First, the environmental assessment noted that there was not sufficient room to build a parking lot and that the traffic congestion around the park would be too difficult to manage. Second, the report stated that the physical damage from either retractable or permanent stands on the grounds would be too great and costly. In conclusion, the EIA resulted in the recommendation not to extend a major portion of the

Botanical Gardens into a cricket stadium and that finding an alternative location would be a more appropriate action (Shillingford, *Pers. Com.*).



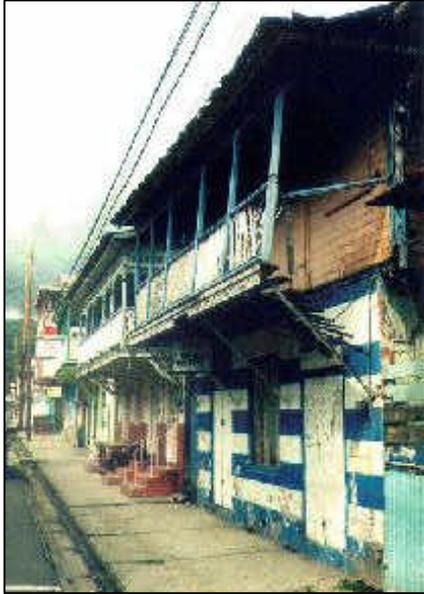
In response to its loss, the government suggested that those who opposed the cricket stadium development suggest another project for the Botanical Gardens. The Dominica Conservation Association (DCA) was especially interested in preventing further encroachments onto the Botanical Gardens. With the support of the Society of Architects, the DCA decided that to develop another solution, which later became known as the Botanical Gardens Roseau Link project. Seeing as the Botanical Gardens cover close to one third of the Central district, it was deemed impossible to develop the Botanical Gardens without taking the whole city into consideration. The architects of this plan began to build a connection between the cities natural elements and the French Quarter.

The overall goals of the Botanical Gardens- Roseau Link project became the following:

- To develop a historical district and educate local residents about historical architecture;
- To restore the riverbank;

- To restore the Botanical Gardens and develop exhibits and educational opportunities for tourists, local residents, and school children.

Historic District Revitalization



Dominica's historic district, otherwise referred to as the Old French Quarter, has been described as the best living body of Caribbean Vernacular Architecture. The French Quarter is the oldest part of the city and can be found at the southern end of the Bay Front the streets, where the streets are most irregular and crooked. This area dates back to the early 18th century when the French first settled in Roseau. When the British captured Dominica in 1761, however, they performed a survey for an orderly grid system and changed the city's character forever. The French Quarter still continues to embody

the character of Dominican people. Most of the buildings from this period had a 'hurricane roof' that lets both the heavy winds of the hurricanes and more gentle breezes of the trade winds to traverse the house. Traditional buildings, even the shanty houses of Pound and Potter's Ville have showed greater resistance to the winds than today's most modern buildings (Lipsanen 2001: 9.1). The decorative side of the Dominican architecture can be found in the verandahs and balconies.

In the mid-nineties, a small group of business owners created SHAPE, a community based organization, which has been working to preserve the aesthetic beauty of Roseau's historic architecture. Many owners of historic buildings have been profiting by selling their land to developers, who demolish the property and often replace it a concrete structure, which developers find cheaper than restoring old buildings. SHAPE is also attempting to develop a National Trust for architectural restoration and cultural education. They hope that through their restoration efforts and incentives that in the future they could be awarded an UNESCO World Heritage Designation for cultural

preservation of their historic district. With this designation, Dominica would be the only Caribbean Island to possess a Cultural and Natural World Heritage Site.

In addition to the preservation of historic architecture for aesthetic value, local proponents are also seeking to promote the economic development of local tourism activities within the capital of Roseau. SHAPE is making the argument that restoration of a historic district and the development of tourism-based enterprises will help to increase the economic revenue in the capital city. Currently, most cruise ship passengers' dock in Roseau, but quickly leave the city for other parts of the island, which are known for its natural beauty. However, on average 40% of cruise ship passengers do not opt for tours and either decide to stay on the cruise ship or walk around town. However, there is usually little for people to do or see in Roseau. Restoring the historic district could encourage economic development in central Roseau if stores were established to sell quality handicrafts, local art, and souvenirs (Armour, *C. Pers Com*).

Riverbank Restoration

The Roseau River is the only river running through a Caribbean capital city. However, the health of this river is currently under great threat from development and the combined impacts of nutrient loading and soil erosion. The Potters Ville Neighborhood primarily occupies the riverfront in Roseau and is one of the more economically depressed neighborhoods in Roseau. Only a small percentage of Potters Ville is currently connected to the existing sewage treatment system and few houses have regular access to running water. Therefore, Potters Ville primarily relies on the river as a place for dumping raw sewage, washing clothes and occasional bathing. Presently, this area is under construction with the laying of pipes for a new sewage treatment system in the city, which is attempting to connect the majority of homes within the city.

In addition to this sewage project, the government has proposed the construction of new offices and a large parking structure, which would span the mouth of the Roseau River. This development is seen as a mixed blessing as people are hopeful of the additional revenue and work opportunities, but concerned about the impacts of development and the

increased congestion. The government's response to this concern was the expansion of available parking spaces. In doing so, however, this project would cut off some local access to the river.



The conservationists have proposed an alternative, which includes the redevelopment of a central pick-up/drop off location for public buses (as indicated by the blue square in the map above). By developing a centralized location for public transportation, the conservationists hope to ease the congestion created by buses stopping in the middle of the streets all over town (Shillingford, *Pers. Com*). Others interviewed believe that money would be better spent on expanding the forested buffer zone along the river and developing a public walkway and green way along the river. This would provide an access point into Roseau from the Potters Ville and Goodwill Neighborhoods. It would

also help to develop the Botanical Gardens Roseau Link, with a green way that leads to the Botanical Gardens. The Botanical Gardens-Roseau Link, if approved by the city, would encircle central Roseau with a development zone. Proponents argue that this green way would provide a way to connect currently underdeveloped districts such as Riverside and Newtown to each other and to initiate a more integrated development plan with the Bay Front. This link would also help to expand the opportunities available to tourists when visiting the island.

The Restoration of the Botanical Gardens

The Botanical Gardens restoration plan has four main features and is the most developed aspect of the Roseau Link project.

Restore Biodiversity: The project plans to restore the diversity that existed within the gardens before Hurricane David. Currently the Botanical Gardens appear more like an arboretum than a real Botanical Garden. The Dominica Conservation Association has consulted with the Florida Botanical Gardens to enlist their help in the new design of its collection. Under this plan the grounds of the Agricultural Experimental Station would be developed into a display garden and an ornamental section would be constructed as well.

Improve Local Access to Environmental Education: The project also proposes to develop an eco-tourism center. In order to do so, the Department of Forestry and Agriculture's offices would need to be demolished and those departments relocated. In their place, four separate buildings would be constructed around a courtyard to house a science and botany laboratory/ museum, a restaurant, administrative offices, and an audiovisual center for films and slide shows. This center would receive entrance fees for the museum and for guided tours around the garden. Fees earned from this center would go back to operating costs and sponsorship of educational programs for the community.

Develop a Native Showcase: The project proposes to turn the existing agricultural plots into collections, which show a variety of local vegetation including medical plants, perennials and annuals. A walking tour through these plots would give an introduction to Dominica's natural diversity.

Renewable Energy Demonstration: The project proposes to expose local residents to the opportunities provided by photo voltaic cells and renewable energy. One government official even called for adding a water element and proposed an artificial waterfall and/or fountain. She explained that it would be nice to provide the waterfall down to the Gardens for people to experience, since they may not be able to hike to the real ones.

Develop a Parking Lot: In order to relieve traffic congestion outside the Botanical Gardens gates, the development of a small parking lot has been proposed for local buses and taxis. Speed bumps will also be put in place to slow down or dissuade through traffic.

Users of the Botanical Gardens:

When the Dominican Conservation Association began publicizing the Roseau-Link project in 1998, they identified the following stakeholders. This section attempts to explore the perceptions and personal interests of these stakeholders with regard to Botanical Gardens Roseau Link project.

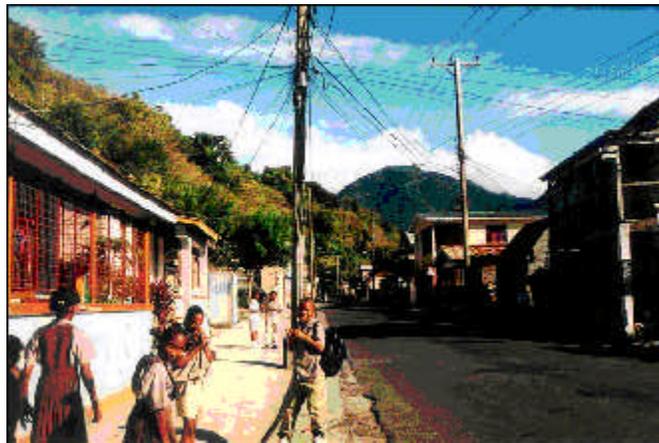
Sports Enthusiasts: The most northern section of the gardens has traditionally been used as a cricket field. It was once regarded as the most beautiful place to play cricket in the West Indies before hurricane David. However, the field is not large enough to meet international



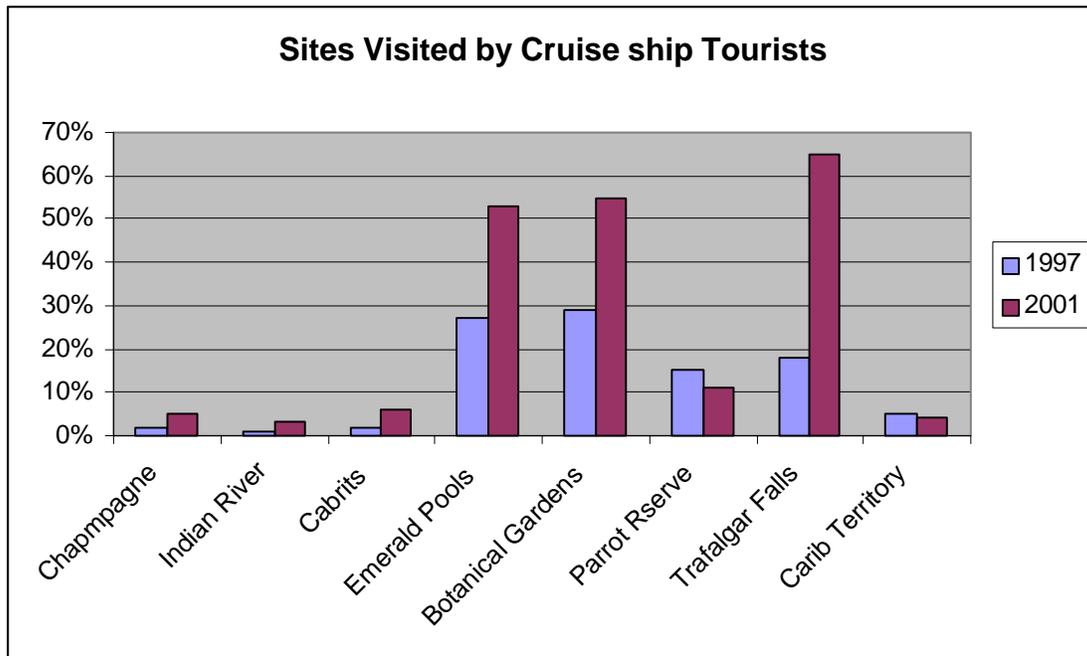
standards and is therefore not used for international matches (Shillingford, *Pers Com*). Rather community teams within close proximity (1/2 hour) of Roseau most often use the field, which enter into local and year-round leagues. School children from the four schools, which surround the Botanical Gardens, also use the field during recess for playing sports. Most recently, the northern edge of the field, which is lined by an eight-foot stonewall, has become an alternative footpath since the expansion of the road on the

outer edge of the garden. Residents of Bath Estate, or more distant communities such as Trafalgar and Laudat use this route into town in order to avoid street traffic since there is no longer a sidewalk. The sports enthusiasts want continued use of the cricket pitch and believe that restoration efforts should also include retractable stands and public restrooms (Personal Interviews).

School Children: Groups of school children in their blue or brown uniforms populate the gardens throughout the day. The Botanical Gardens serve as a meeting point for parents and their children that attend one of the four schools, which abut the garden, including a public high school, a private Catholic school, a Montessori school, and an elementary school. Local residents and bus drivers note the traffic congestion that results from dropping off students in the morning and picking up students at lunchtime as a major problem in central Roseau. The restoration of the garden and the addition of an environmental education center benefits teachers and students. Teachers, however, were not able to suggest another alternative site for picking up and dropping off school children, since the streets are already so congested.



Tour Guides and Tourists: Local tour guides in the past five years have increasingly used the Botanical Gardens as a stop on their tour to or from other destinations, including Trafalgar Falls and Emerald Pool. Although the stops only last for a short duration, it serves as a venue to provide some brief facts about Dominican history in relation to the natural landscape. Tour guides will quickly point out the parrot aviary, the cricket grounds, and the Boabab tree that crushed a school bus during the hurricane. Cruise ship passengers, which make up the largest majority of tourist traffic in Dominica have increased from approximately 9, 000 to 240,000 in a period of four years (Patullo 1996).



The Botanical Gardens receive approximately 132,000 visitors a year (Central Statistics Office). This summer, after conducting a cruise ship survey, I estimated that 55% of all tours visit the Botanical Gardens. Even though it is one of the most visited sites in Dominica, there is currently no entry fee for the Botanical Gardens. Tour guides take advantage of the gardens 'no cost', as it allows them to provide visitors with a second or bonus stop on their tour. Imposing an entry fee to the gardens would necessitate either an increased cost in the overall tour price or the guides would have to receive a reduction in profits. Tour prices are so competitive, due to a poor economy. Therefore, increasing the price of a tour appears unlikely. Tour guides are not supportive of any measures for improvement of the gardens if it results in a fee (Personal Interviews). In addition, the gardens also serve as a short cut for cars attempting to drive through the city to the north and south of the island. Restricting access to the gardens would cause a headache for taxi drivers and individual drivers alike.

Government Offices: The Botanical Gardens is currently home to the Departments of Agriculture and Forestry. These departments still maintain experimental agricultural and silvicultural plots in the western portion of the gardens. The grounds also serve as an

operating base for daily activities and training sessions for new personnel and interested farmers. A library is available to staff and all those interested in pest management, forest management, and historical records and maps. Even though the botanical gardens are under the authority of the forestry department, the site has failed to be included in any of the management plans from the last decade. Specifically, restoration of the botanical gardens is absent from the Nature Sites Report (1997), the Dominica National Parks Service Management Handbook (1995), and the Dominica Eco-tourism Strategy (1997).

The plan to redevelop the gardens, as proposed by the DCA, has generated an intergovernmental and inter-sector struggle over authority. Currently, the Forestry department is responsible for the maintenance and development of the gardens. A number of officials perceive this redevelopment as an imposition by conservation interests to take over their responsibilities. Since the forestry offices are currently located within the garden's bounds, part of the proposed redevelopment would require the forestry department to be relocated. The Dominica Conservation Association has argued that it would be more appropriate for the forestry and agricultural departments to be located in the middle of the island, to provide easier access to the countries farming areas and national parks. However, what they have failed to account for is the problems that would ensue from this transition. Historically, other government officials view the forestry department as the least important department. One department member notes that it was not until this year that he had ever been invited to a high-level government event. Another forestry department official notes that the forestry department is always the first one to receive a reduction in annual funding or staff. Many staff members expressed that if they were stationed outside of the capital they would be forgotten and perhaps even loose respect.

Roseau Residents: Most Roseau residents used to manage three types of green spaces. They would keep potted plants and ferns on the sidewalk in front of their homes, tend small 'kitchen' gardens for basic foodstuffs in the backyard, and maintain family land in the 'country' on the weekends for more staple crops like yam and dasheen. However, due to the increased congestion in the city center residents, over the past ten years residents



have moved to the outer districts of the city. In doing so, the backyard gardens have now become commercial buildings and in concentrated areas low income neighborhoods. Up until recently, there was little need for the Botanical Garden as a social gathering or green space. However, now that it is the only large tract of greenery in the city, residents will occasionally spend time in the garden. This is especially true if they have younger children who are interested in sports. The Botanical Gardens also unconsciously serves as the cities green lung, to counteract the immediate effects of pollution, dust and stifling heat. Some residents, however, are turned off by the leaders of the Roseau Botanical Gardens Link project and suggest that development of the area would help to expand job opportunities within the city.

Project Analysis

Perceptions of Development: The goals of the Roseau Botanical Gardens Link project do not appear to correspond with local perceptions of development. The results from my interviews suggest that Roseau is currently struggling with two main problems, encouraging development while managing its impacts. The breakdown occurs in the initial stage of defining the kind of ‘development’ that people want and need. Development implies a transformation from an initial conception into a more perfect form or as a process of directed change. Once there is a developed, it naturally implies that there is an “underdeveloped” (Esteva 1992:7). Since the shift from colonialism, the presence of international agencies and development organizations in Dominica has been profound. The initial mission of these development agencies was essentially to relieve poverty by creating a definable path of economic growth. This has primarily involved an attempt to increase the GDP or per capita production and consumption of material goods. This is illustrated by a period of large infrastructure development projects such as roads, dams, and buildings. Since this period, development agencies have moved on to the transfer of technical knowledge and expertise, which lies primarily in the Western

Countries. (Agrawal 1997:468) When asking local Dominican's what development they wished to see, answers most often included a financial complex, a factory, a new road system or even a new cricket stadium. The notion of development is rarely envisioned as additional educational opportunities, better health services, or a cleaner environment rather, they include tangible and mostly visual objects. This is not to say that these more intangible aspects are not desired but they are simply not perceived by most as development.

Conservationists are attempting to disrupt the logic behind 'modern' development by suggesting a radical re-definition of development into 'sustainable development'. This includes the preservation of Dominica's natural spaces and historic places. This project represents an initial step in this direction, by placing an increased emphasis on holism and local control of natural resources. What project initiators have failed to do, however, is translate the project into a language that the local person can comprehend, identify with and benefit from. To date, many Dominicans associate environmental protection with Morne Trois Pitons National Park or some of the other tourism destinations and not necessarily the city. In addition, the majority of local people have failed to find any personal benefit within the conservationist vision of Nature Island development. They do not see the connection between the conservation of natural resources and wildlife and the generation of financial capital and economic growth. 'Eco-tourism' or 'nature tourism' serves as the primary tool used by conservationists to convert environmental interests into development interests.

Staff and Resources: The DCA project administrators are currently overburdened with other environmental efforts and commitments and do not possess the time, resources or energy to commit to this project. In order to keep the DCA functioning, they are responsible for fundraising and are often required to take on additional consultancies when money is in short supply. A large portion of capital is still generated by international development agencies in the form of loans, projects and grants. Small grants can be useful to small scale NGO's, but rarely ever cover operating costs. This has created a cycle of dependence and short-term thinking in Dominica. As soon as one

project is almost complete, both government and non-governmental organizations return their focus to acquiring the next pot of money. Follow up, maintenance or evaluation of projects is rare, evidence of which can be seen all over the island, in the form of abandoned buildings, half finished projects and roads and gardens in disrepair. In this case, the DCA used their funding from the GEF Small Grants program to pay basic office operating costs. Therefore, they ran out of money and time to complete their stakeholder analysis. When funding projects, grantors should be more aware of the financial and staffing constraints. Donor agencies could help to provide not only access to additional funding or technical expertise, but also help strapped non-governmental organizations and government entities locate additional funds.

Expanding the List of Stakeholders: A major problem with this project is that from the beginning it was quite an inclusive process. The Dominica Conservation Association failed to consult with all stakeholders that would be impacted by or needed to be involved in the design and implementation of this project. The players that were initially included were those that were already supporters of the DCA. This suggests that the DCA is currently reaching too limited of an audience. A more neutral facilitator for the stakeholder analysis might be necessary. The DCA's resources could be best used in other places. The players that were not included in the visioning process were those in favor of a more infrastructure development vision. In large part, the success of this project will depend upon the stakeholders that have to date been excluded from the process. Actively working to combine the interests of business owners, planners, local residents and government officials is tremendously important. These players possess the necessary financial, technical, and legal resources to turn this project into a success or a failure. The important question is how to turn ensure that environmental preservation enhances opportunities for economic growth. How will this project generate revenue and fuel development, while on the other hand equip the city so that it can bear the effects of it? City residents and officials appear to address one or the other, but have a hard time developing a plan, which addresses them simultaneously.

Recommendations

My recommendations stem from my analysis and include the following.

1. *It is important to reflect on who is or is not involved in the design, planning and implementation of the project and why.* It will be important in this next stage to encourage involvement from the public and private sector from the re-design stage of the project. Hosting a series of public forums or public debates, as well as individual community meetings can help to open dialogue and increase communication. It will be important to begin by asking stakeholders what they envision for Roseau in the next twenty to thirty years and to compare individual visions with this project. This process will also require a neutral facilitator to mediate the public involvement and comment process. The Dominican Conservation Association is too politically charged of an organization to stay neutral and act as an effective facilitator.

2. *Project advisors will also need to carefully examine what resources are needed to foster this process and what the most effective and efficient mechanisms are for obtaining these resources.* The project needs to be broken into manageable components. Hiring additional staff members to move along the implementation process in a timely manner will be very important. The project implementers should also ensure that the project continues to be an integrated process established on a grounding of common objectives. In addition to additional staff, it will be important to utilize local and regional resources and expertise. Taking the time to explore lessons learned from other countries green space initiatives, partner with other botanical gardens and societies, and host other technical experts and university research teams can prove valuable and should take place during the initial project development stages. Identifying private investors and donors, whether it is for donations of solar panels, educational resources, etc is also valuable.

3. *Project Advisors will also need to develop a system to determine how stakeholders will know when they have achieved their goals.* Developing accountability by introducing a monitoring and evaluation program will be crucial during all phases of the project. Continual monitoring and evaluation with the help of local stakeholders can help project implementers to analyze the successes and failures during the course of the project. This can allow one to readjust more easily, then upon discovery at the end of the

project. Establishing realistic targets, timetables and priorities areas for the next funding cycle will also help people clarify their goals and stay on track.

4. Change the perception of the Botanical Gardens as a burden to a contributor.

Lastly, changing the perception of conservation initiatives as a project of the rich to contributors to the national economy is key. Generating revenue from conservation activities is possible. First, government departments and NGO's could help to sponsor graduate or university research in areas lacking local expertise. A fee could also be charged for the use of government facilities or labs in the new educational center. The Botanical Gardens could also sponsor volunteers to serve as environmental educators and trainers. For more direct revenue, the Botanical Gardens could set up a museum, gift shop, and walking tours of the grounds for cruise ship and stay-over tourists, all of which would charge a fee. Generating revenue can help to maintain the facility and support the staff. Any additional revenue could be funneled directly into conservation education in the local schools. It will be important to ensure that money does not return to the general government coffer, because people will not attribute general government revenue with conservation activities.

Conclusion

Dominica has a tremendous opportunity, upon receipt of the grant from the European Union, to expand economic development while ensuring the preservation of green space and cultural heritage in Roseau. What will be most important, however, is changing the perception of restoration and conservation as prohibitory to economic development. In order to do so, project advisors will need to carefully examine what resources are needed to foster this process and what the most effective and efficient mechanisms are for obtaining these resources. In addition, developing a system for monitoring and evaluation the outcomes of the project can help stakeholders identify when they have achieved their goals.

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