

## Environment and Rural Tourism in Bustamante, Mexico

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**Abstract:** The community is Bustamante, population 3,501, in Nuevo Leon state, Mexico. It is a privileged rural landscape, made fertile in the middle of a semi-desert by springs that flow year-round. And in the vicinity of the oasis lie the internationally known caverns known locally as *Grutas de Palmito*.

The problem are the pressures of recreation on the environment: day excursionists who come in great numbers are causing erosion near the water, both around the springs and along the river that flows from them. The waters that used to be clear are now murky because of the soil deposition. And in the cave, the visitors walk freely in the gallery spaces and trample on the formations. But because the local tourism industry is nature-based, it is imperative to conserve the natural resources that make it possible.

This research considers the potential of what has come to be known as sustainable tourism to promote economic development in Bustamante and possibly in similar communities, not by replacing the agricultural base but by complementing it. Data were obtained from observations, interviews, survey questionnaires, from the Mexican census, from the regional newspaper, and from the literatures on sustainable tourism and history of the region. The study proposes that the natural and cultural resources of Bustamante had been largely conserved until recently, and that the present accelerated degradation of these resources can be reversed through approaches to sustainability that are related to tourism, so that Bustamante's people meet their present needs without compromising the ability of future generations to meet their own needs, measured against the standard of living currently enjoyed.

### INTRODUCTION

"We receive a hundred thousand visitors a year, and we want to receive a million", declared Felipe Hernandez, Jr., owner of what was until recently the only hotel in town, at the public meeting on tourism held at Bustamante's city hall on July 10, 2001. The answer from Jordi Perez, a tourism consultant from Spain, was: "Instead of getting a million visitors, it would be better to get ten times more money out of the hundred thousand who already come". Aside from this controversy, let us start by saying that the number of visitors to Bustamante per year has never been reliably counted, a statement that I made at the meeting after Jordi's remark. Thus the importance of my attending the Conference on Monitoring and Management of Visitor Flows in which this paper is to be presented: the topics that will be explored there are of great value for my learning to research the relationships between landscape and rural tourism, which is the topic of my doctoral dissertation at Texas A&M, a larger work in progress. Because the number of visitors per year is one of the basic elements of research data for this larger project, an approximation was made using the number of tickets sold for entrance to the park that has been developed in the canyon where the spring waters flow, which is where most visitors go. For one of

the two major festivals of the year, this one held in *Semana Santa* or Easter week of 2001, (1) the regional newspaper *la Prensa* published that during the period of the week-long festival, 12,027 tickets for entrance to the park were sold (Tesoreria Municipal de Bustamante, N.L., 2001). Using the same number for the other week-long festival of the year, we come up with 24,054. 20 out of 30 visitors surveyed mentioned the canyon or the springs as the attractions that brought them, and if 24,054 then constitutes 67% of the visitors, we obtain 35,901 for the two weeks out of the year which define peak demand. We have observed that on weekends during the Summer season the park gets almost as heavily used as during *Semana Santa*. If fourteen weekends during school holidays (when visitors increase dramatically) make up 28 days, that equals four weeks of heavy use. Considering the intensity of this use even at one half of that of the use the park gets during festivals, in terms of number of visitors, that equals another 35,901 visitors. Now we have 71,802 and triangulation with Mr. Hernandez's figure starts to seem reasonable.

"It is necessary to ensure that the development of rural tourism is sustainable, including allowing for the participation of all the members in the given community" (Verbole, 2000). "Individuals have no effective voice in any community of more than 5,000-10,000 persons" (Alexander, 1977). At 3,501

(INEGI, 2000), the Bustamante community can have a democracy, and control over the destiny of the privileged landscape that they inherited. As defined by Krippendorf (1982), "soft" tourism stresses local control, along with slow, self-determined development. The paper argues in favor of this tourism model, over large scale, mass-based tourism controlled by large corporations, for the sake of protecting the natural and cultural resources for future generations. The work focuses on the notion of community as a scale of things, and on how the power of community is decisive in environmental outcomes. In researching the relationships between environment and rural tourism, using Bustamante as a case study, we define the local phenomenon of tourism and recreation as nature-based, and understand that even when inserted in an international system of eco-travel, it is the local community who should lead the effort towards its own sustainable development, benefit the most from the economic gains of receiving visitors, and be most directly responsible for the conservation of the natural and cultural resources that are bringing in visitors and revenue, precious resources that have traditionally given them an exceptionally high quality of life. "Sustainable tourism development depends on protecting the environmental resources for tourism" (WTO, 1998). Efforts at state, national and international levels are also necessary for success in this complex environmental arena, but the grassroots and local leadership levels are the most crucial.

I am involved in the community and in contact with the leaders, transitioning as an observer from the non-participant that I was on my first visit in the Summer of 1999, to the role of a participant observer during my field trips which in 2001 became monthly. It is the ultimate goal of my involvement that this present and other work will eventually directly or indirectly become useful towards landscape conservation in Bustamante, a place admired by many.

### **HISTORY AND SOME OTHER BACKGROUND**

On June 8 of 1686, thirty families of Tlaxcalan indians officially applied for land and water rights to settle in what was to become San Miguel de Aguayo, and later Bustamante (2). This northern frontier of the New Spain, now northeast Mexico, was before the conquest inhabited by semi-nomadic tribal peoples who are some of the least-known in the larger region. One group settling at least seasonally in this landscape were the Alazapa (Gomez, 1998), who left us rock art such as paintings and petroglyphs attesting to their magical interpretation of the universe, art which today some people still value as sacred, while unfortunately others value merely as money to be made in the

international stolen art market, as evidenced by the recent thefts of major petroglyphs in nearby Mina.

"This place had a distinct economic boom in the last decade of the Seventeenth Century and the two first decades of the Eighteenth" (Cavazos, 1994). It was during this period that the waters coming from the mythical springs at the west end of the eight-kilometer long canyon, were diverted into three *acequias*, small earthen irrigation ditches that turned the flatlands just to the east of the canyon into a lush oasis of pecan and avocado orchards, as well as other crops which constituted this garden community, one that would feed the mining booms in nearby Villaldama and Lampazos.

The Canyon of Bustamante is most dramatic, with sheer rock faces that tower more than a thousand meters above the valley. Its orientation is a clear east-to-west (See Figure 1), and the sun sets exactly between the canyon walls. This is a highly "imageable" place, easy to read, without a problem to find one's way. And the clarity of the orientation makes it pleasant. "A good environmental image gives its possessor an important sense of emotional security. He can establish a harmonious relationship between himself and the outside world. This is the obverse of the fear that comes with disorientation. Indeed, a distinctive and legible environment not only offers security, but also heightens the potential depth and intensity of human experience" (Lynch, 1960). The town is laid out on the cardinaly-oriented gridiron pattern characteristic of Spanish Colonial America, consisting of one-story houses of small and human scale, with a central plaza and the Catholic church across the street. The town layout orientation reinforces and complements that of the natural features, contributing further to place legibility and pleasant atmosphere. There is a harmony of built and natural environments, and even though the historical core has lost its architectural integrity, there remains a town full of artistically valuable old houses, mostly from between 1850 and 1950, based on the dates inscribed in main entrance doors.

Houses old and new, but all one story, shaded streets and open plazas, and the unpretentious church as a landmark, all assemble to a larger landscape, surrounded by vast fields and dramatic mountains. The view west from the plaza is composed of the church in the foreground, and in the background, the highest mountain in the region, the *Cabeza de Leon* or Lion's Head of characteristic profile. Houses front the streets making a consistent urban composition, and the core of each urban block is not built up, but rather a garden with towering pecan and avocado trees that shade the environment, producing a good microclimate that attracts visitors from around the arid, dry surrounds. The *acequias* run through plots and under streets, surviving today in functioning mode. And even though there has been a high degree of

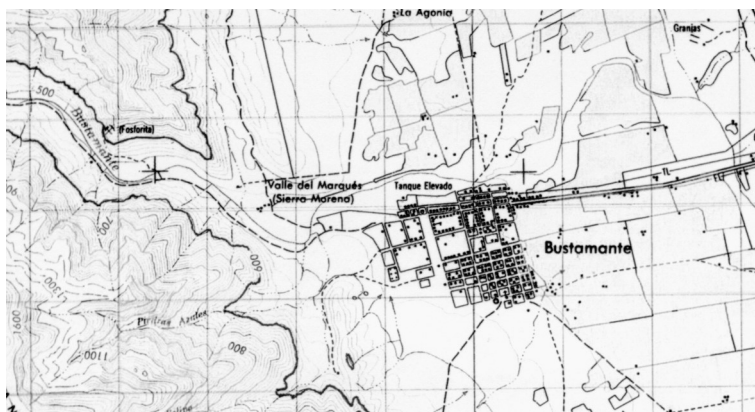


Figure 1: Map of Bustamante with the canyon to the left (spring shown as a dot at west end) Grid in kilometers

abandonment of the traditional agricultural practices (3), this continues to be one of the oldest surviving cultural landscapes of Tlaxcalan origin. Four hundred Tlaxcalan families emigrated from their central Mexican homeland after the conquest, and those who moved north left us a heritage of hydraulic works, also influenced by Spanish technology, that extends well into Texas. In San Antonio the 270-year old *Acequia San Juan* was recently restored, having been dry since 1968 (Koidin, 2001). In that city only two of seven original *acequias* survive, and the fact that in Bustamante all three original *acequias* are still working adds importance to this landscape as a cultural resource that needs to be restored, maintained, and legally protected.

Mexico gained independence from Spain in 1821, and in 1832, the name of the town was changed to Bustamante, after Anastasio Bustamante who was president of the newly established republic. The community continued to be a prosperous one, fortunate to live in a highly fertile agricultural landscape, and maintained its sustainable agricultural traits well into the Twentieth Century. The railroad came in at the end of the Nineteenth, and in 1906 the caverns were discovered. Clean, clear water flowing year round in the middle of a vast semi-desert, a small colonial garden city in the shade of pecan and avocado orchards, and a cave with huge inner space and fantastic formations all turned Bustamante into a community attractive for recreation, drawing visitors in growing numbers from throughout the region, and also increasingly from outside.

From observations of the past two years, it is evident that growing numbers of visitors are resulting in negative impacts on the environment: vegetation around the most fragile of two spring-fed pools has diminished, and grass cover in the valley between town and the springs has also demised due to excessive traffic of motor vehicles approaching the running stream, with resulting soil erosion, deposition, and loss of *acequia* water clarity. Other evident problems resulting from the pressures of growing recreation include littering, crowding with

its loss of experiential quality in going out to the countryside, and unmet needs for human waste disposal with consequent contamination of land and water. And this is not to mention the impact on threatened and endangered species, evidence of which would have to be found from studies other than this, from fields such as biology, botany, or ecology.

#### COMMUNITY AND LANDSCAPE

The scale of *landscape* is used to define the geographical area of study, that is, land size between the larger environment called a *region* and the smaller-than-landscape land area which would be called an *ecosystem*. "A *landscape* (in contrast) is a mosaic where the mix of local ecosystems or land uses is repeated over a kilometers-wide area" (Forman, 1995). The landscape of Bustamante that we study is approximately thirteen kilometers long (See Figure 1). This length is defined by a east-to-west line between the *Ojo de Agua* springs site, at the west end of the canyon, and the connection to Nuevo Leon State Highway 1. A paved road runs the entire length. As one turns onto this paved road to approach Bustamante town from Highway 1, a scenic corridor experience starts. To the sides of the road there are pecan and avocado orchards, and as one is traveling west the background is composed of the Sierras Morena and de Gomas, cut dramatically by the Canyon. After four kilometers one enters the town, and if continuing on this main spine, the town is passed and the entrance to the canyon is reached. The mountains on both sides grow higher and higher, and become sheer rock faces as one reaches the park site that has developed around the springs. The pavement ends, and the Sierras get left behind if the direction of travel keeps west. Here one enters the vast arid plains that conform the drainage basin from which the waters of Bustamante come. Hence this plain is a connected landscape, outside the strict limits of the research study, but one that needs to be managed in synchronicity with the management of the Bustamante landscape as this paper defines it. The

width of the landscape of study varies, bounded to the north and south in the canyon area by both visible rims, and outside the canyon area to the east of town defined by the land area under irrigation. At its maximum near Highway 1, this dimension is about 6 to 7 kilometers stretching north-south. Within the canyon area, "landscape" can be advantageously defined and managed using the concepts of watershed and viewshed.

Community and landscape are overlaid in this study in terms of scale, if we understand "community" as per Alexander, at less than 10,000 inhabitants (4), and "landscape" as per Forman at several kilometers long. In this case, participatory decisionmaking makes it possible to reach autonomy in environmental management. "Few case studies in Latin America have been carried out that have demonstrated meaningful local participation in tourism planning and development" (Mitchell and Eagles, 2001). "The predominant form of tourism found in Mexico today is export-oriented, large-scale, mass-based, and centered around beaches. Evidence shows that this brand of Mexican tourism has been significantly affected by state action" (Clancy, 2001). In the case of Bustamante, the demand for recreation has been met in an unplanned way. Then the numbers of visitors grew to the point where business potential became a driving force for planning, as did the evidence of ecological damage caused by the recreation phenomenon. Since then, several meetings have been held which have included stakeholders involved. One recent such meeting was held on July 10, 2001, and I was in attendance, in the group of technical advisors together with Jordi Perez and Alberto Gayoso from Spain. The meeting included the mayor, the city manager, the local historian, representatives of the State Bureau of Tourism including the director of the Rural Tourism Project, leaders of the local hospitality industry, the presenters of a project to build commercial features in the cave, and the leader of the *ejido* or communal farmers (5). The main purpose of the meeting was for the community to inform the Spanish consultants, hired by the Bureau of Tourism, about what attributes of the place, possibly unknown to planners, need to be planned for and included in a comprehensive rural tourism plan for the state, which defines a sub-region composed of the communities of Bustamante, Villaldama, and Lampazos, which together could integrate a tour larger than what each individual community could offer.

It was evident during the forum, based on ideas expressed by some participants, that the model of large scale, large capital tourism development is popular among some stakeholders. One participant expressed that a golf course would be good; a technical advisor defended that the establishment of a chain hotel could be more sustainable than community control over the lodging business, and found it desirable (an idea expressed more privately

after the forum) to shut out the regional visitors who come to picnic for the day, with their coolers and very little money, by charging high prices to enter the park. Felipe Hernandez Cruz Sr., owner of the Ancira, the only hotel in town until recently, disagrees that the market is large enough to support a multinational chain operation. Observations and surveys on the types and amounts of tourists here support Don Felipe, since most visitors come for a day picnic seasonally and on weekends, with the exceptions of the two week-long festivals that draw large crowds to stay. And it seems philosophically unacceptable to "shut out" the people from the region, who have traditionally enjoyed bathing in these beautiful natural pools. They have the right to access places like this more than anybody else! "A reasonable assumption for a given tourism project is that maximising local participation is a desirable objective" (Mitchell and Eagles, 2001). In Bustamante, Don Felipe and other business and political leaders are ideally positioned to lead a successful effort toward sustainable economic development for the community, with tourism at the core. Other elements of the green/soft/alternative tourism model appropriate for Bustamante include that tourism "is embedded within a diverse local economy, makes use of local products and inputs, employs local people and yields them satisfaction and enhanced self-esteem, does not place unacceptable burdens on the environment, and respects local traditions and ways of life" (Kippendorf, 1987).

My own interactions with some of the players who have in their hands the environmental destiny of Bustamante are not very encouraging. Even though the organization of public meetings to discuss tourism is a good sign, there seems to be a lack of political will, as well as ignorance of landscape planning for recreation. One mayor whose identity I would rather protect, said that "tourism is a business for which you don't have to invest"; La Prensa published in February of 2001 that the equivalent to half a million dollars "at least" would be spent to improve the Canyon (Flores, 2001), but tracing the source of the information through a phone call to the newspaper director revealed fuzzy origins; typical of small towns, there is a jealousy that makes it difficult to access records to do research; my students' designs for landscape conservation, presented to the municipal authorities, have been largely ignored; and the expenses necessary to display the best of these student projects in the public library, suggested at U.S. \$ 500, could not be covered by the municipality because "they would equal the cost of running five ambulance trips" (6).

But there are also encouraging signs: streets look clean and public gardens in the town well kept; municipal worker crews make daily efforts to collect trash from bins in the canyon's recreational facilities; local policemen are well equipped and polite; there does exist some sense that local

government is doing things relatively well. And, to begin with, this is a privileged place, enjoying much better lands, infrastructure, and general quality of life than average in rural Mexico, as well as a scenic landscape which is an asset for tourism to become a source of revenue and make things even better. There is also an explicit level of commitment by the local population to care for their environment: 22 out of 30 locals surveyed responded that they were willing to volunteer cleanup work in the canyon, or to pay to have it done, or both.

There is a dilemma in Bustamante between exploitation of local resources for short term gain (7) with the consequent environmental degradation and loss of tourist attractions, and planning toward landscape conservation through sustainable tourism development. Only the latter is acceptable.

### CONCLUSION

There is a charming sense of "picturesque disrepair" in the town of Bustamante, evidenced by ruinous old houses and overgrown gardens. But this also means lack of economic vitality. Even though population grew in the the 1990s from a slump of 2,976 to an all time high of 3,501 in 2000 (INEGI, 1990, 2000), economic opportunities are scarce. Those people from Bustamante who pursue an education find it difficult not to leave the town behind, and the community relies heavily on money sent to local families by members who are working outside. With the decline in percentage of the labor force employed in agriculture, there has been a diversification of the economy that still needs to develop. Agriculture should not be sacrificed for tourism, as they are complementary rather than exclusive economic activities in rural areas. The insufficiency of the local tax base to deal with needs of infrastructure and planning for tourism could be alleviated through the growth of locally owned, small-scale businesses responding to the current needs of visitors and thus promoting growth and development in the tourism sector. Money is needed for parks to be maintained, *acequias* repaired, and the historic building stock preserved, and while much of it should come from taxes and other public funds, small scale private enterprises in tourism and recreation need to be undertaken, intervening in the environment for profit, but positively, constructively, sustainably. Severe degradation of the environment is resulting with the present form of recreation, while very little money is made by the community since most visitors do not spend the night and come already supplied with food and drink. It is observably in beer sales where the most of the revenue lies. Increases in visitor spending are necessary. These can come from an increase in spending per visitor or from an increase in the number of visitors, but more than likely and perhaps ideally from a combination of both.

Political and economic strategies need to be deployed towards sustainable tourism development

as presented in this paper. Local autonomy and control over the development strategies and their application is highly desirable, as are community-owned, small-scale, moderately commercialized businesses. However, municipalities are limited in terms of what they can do legally and economically in the interdependent society of today, and frameworks and institutions at larger scales should also be integrated to the local development efforts. The currently in-progress Rural Tourism Plan for the State of Nuevo Leon is key, as is the larger National Tourism Plan. Also international agencies can be tapped into for knowledge, legal instrumentation, and funds. In the meantime, urgent landscape planning and conservation efforts need to be made to avoid environmental disasters.

### NOTES

(1) The other festival is held during the first week of August, in honor of *El Señor de Tlaxcala*, an effigy of Christ on the cross that is revered by the community since the early Eighteenth Century. It is housed in the local church all year and taken around the streets of town during the festival.

(2) When Hernan Cortes and his men invaded the Aztecs in Mexico, they were helped by the Tlaxcalan indians, who were at constant war with the Aztecs, always resisting their annexation to the empire and serving as a source for prisoners destined for human sacrifice. When the Spaniards defeated the Aztecs,

they gave the Tlaxcalan people special rights which included land grants in the northern frontier. The data on the application for land and water rights comes from J. Portillo's "El Señor de Tlaxcala..." to be found under next heading, "References".

(3) According to INEGI census data, the proportion of the local labor force working in agriculture dropped from 70% in 1950 to only 17% in 2000, dropping below one half for the first time in 1970.

(4) There is a long tradition of theorizing about the maximum number of people in a community who can have a situation of complete access to the democratic process for all, meaning direct access at anytime to the top of authority, either individually or as a group. The Greek *Agora* is a conceptual origin of the physical space needed to accommodate this maximum number of people. And even today, many townships exist where the entire population gathers in a public space to engage in political dialogue. Of course there is no exact figure, and for instance, whereas Alexander uses ten thousand, Lewis Mumford would say five. At any rate, 3,501 for Bustamante is good.

(5) *Ejidots* date from early colonial times, when they existed as small communal lands outside or near villages where herds could overnight. After the Mexican Revolution of 1910-1917 agrarian reform was accomplished, and a new form of *ejido* created in which land was distributed to peasant

farmers who have full control over the rights to cultivate and inherit their plots, but without the ability to sell them.

(6) This was the response of Valdemar Gomez, city manager, via telephone (the local ambulance is sponsored publicly).

(7) An example is the plan by a landowner from Lampazos to convert the canyon of Piedras Azules, a significant resource for eco-tourism just outside of town, into a source for crushed stone aggregates destined for the construction industry.

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