Combating Climate Change through Strategic Destination Planning: A Quadruple-bottom-line Approach

By James MacGregor, President, ecoplan:net sarl, Morocco

Notes

This article is based on the strategic sustainable tourism development plan for the Tata Destination Region in the Western Sahara prepared by Ecoplan:net sarl for the UNDP and the Program for the Oasis of the South and the Agency for the Social and Economic Development of the Provinces in the south of the Kingdom of Morocco. Project management was by Abdullah Hachimi. James MacGregor was the team leader with associate Hassan Aboutayeb, owner, Atlas Kasbah Eco-lodge (sustainable tourism consultant).

Abstract

The Tata Destination Region is one of the hottest regions of Morocco. Summer

temperatures frequently exceed 50°C and temperatures seem to be rising over the past two decades, in part because of the influence of climate change. Furthermore, the regions major resource, the oasis, has been rapidly degrading because of climate change, reduced available water and consequently decreased management. The reduced viability of the agricultural production also has a significant impact on lifestyle. It is increasing the cost of urbanization, leaving the communities with fewer young people.



Hiking the hills of Tata.

The region has not traditionally been a tourism destination but has been a

significant pass-through territory for package tours and individual 4 x 4's traveling between Ouarzazate and the Atlantic coast of southern Morocco. While many tourists stop in the region, their length of stay is typically very short and there is little economic contribution from tourism

The decision was made to establish the region as a destination that holds these pass-through travelers and attracts destination-bound tourists. Because of the interest in climate change from the major source markets to the region, including France, Germany, Spain and England, it was decided to highlight climate change as a theme that suggested tourist development of committees.

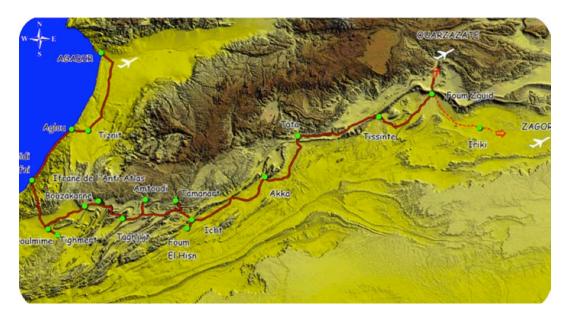
Two sub-themes were also developed:

- a) Living with a hotter climate: the people of the region are familiar with adapting to and coping with 50°C plus temperatures. Their architecture, lifestyle and customs reflect these conditions and provide important lessons for their western European market.
- b) Visiting a low-carbon destination: This implies converting the region from one of relatively high-carbon consumption, from both the residents and tourists, to one that conscientiously seeks to reduce carbon emissions.

The tourism development criteria and project proposals were based on these two themes. In practical terms, all current and planned tourism facilities and services will adopt climate-friendly infrastructure, equipment and practices. As well, tourism activities will focus on those that are particularly low or neutral with respect to carbon emissions. Tourists will be encouraged to park their 4 x 4 vehicles and take any number of hiking, cycling, photography, etc. tours.

The supply chain itself has slowly adopted a number of technologies and practices that are meant to reduce the level of greenhouse gases.

The region has been keen to adopt this new quadruple-bottom-line approach based on social, economic, environmental and climate considerations. First of all, the president of the region, M. Mehdi Elhabibi, who has been elected to the position consistently for the past 36 years, possibly the longest political career in Africa, is known as one of Morocco's strongest environmentalists. His support for the proposed environmentally responsible and carbon-reduction initiative has been instrumental in promoting the concept of a carbon-neutral development plan.



1. Overview of the Tata and Western Sahara Region

The Tata Tourism Destination Region is located approximately 200 kilometers south of the popular Moroccan beach destination of Agadir on the Northern limit of the Western Sahara. The area is also strategically positioned between the interior Moroccan city of Ouarzazate and the Atlantic Coast. The region has traditionally relied upon oasis agricultural production, including dates and other cash crops as well as growing food for local consumption. The oases themselves have been an excellent source of natural



The largest oasis in Morocco.

resources used in the production of a variety of products that have sustained the "oasisian" lifestyle and economy for generations.

Water is truly the source of life in this region. It is channeled from the higher altitudes through a complex series of canals that bring water to the individual plots of land in the oasis of those families living adjacent to the oasis. This system of irrigation has been effective for centuries in part because it assures equal distribution of the precious water resources to each family. This in itself provides a powerful message to the modern traveler as well as future generations who must ensure that future water resources must be shared to ensure survival.

Global warming, including desertification are influencing the health of the oasis. Increased temperatures and reduced water supply have begun to discourage the continuation of management practices that have maintained the oasis for generations. Decreased economic opportunity combined with changing interests of the younger generations has already caused the first wave of exodus from the region to major cities such as Casablanca and Marrakesh or to Europe.

2. Response to Changing Economic and Social Conditions

The president, of the region, Mr. Mehdi Elhabibi, recognized the need for introducing and integrating new economies into the communities if they were to survive as a viable region within Morocco and Western Sahara. Tourism was identified as the leading economic opportunity despite relatively little



Measuring water level in the basin for equal distribution.

infrastructure and the complete lack of recognition in the domestic and international tourism marketplace. Nevertheless, there were about 40,000 tourists coming to the

region, particularly from December to April, and they seemed to enjoy their contact, albeit limited, with the people and the various natural and cultural resources. But for the most part they were passing through and rarely spent one night in the region.

The challenge then was to increase the length of stay as well as reinforce the recognition of the region as an appealing Moroccan tourism destination.

The decision was made by the president and counsel to aggressively pursue the tourism market. UNDP and the regional economic development agency were approached to contribute partnership funding and expertise.

A proposal call was issued and the Moroccan sustainable-tourism consulting firm, ecoplan:net sarl was hired to prepare a long-term tourism development strategy.

3. A Classic Tourism Strategic Planning Process ... Well Not Exactly!

Despite the wealth of natural and heritage resources throughout the region, the consultants immediately recognized the need to go beyond the traditional strategic-tourism-planning process if the region was to achieve its development goals. However, this did not preclude undertaking certain typical exercises that are associated with standard sustainable-tourism planning.

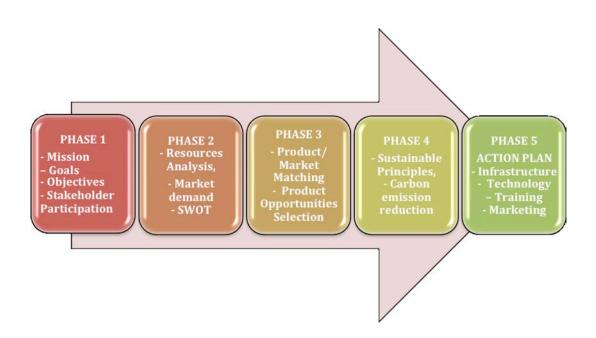


Diagram 1: The sustainable tourism planning process.

Diagram 1, demonstrates it was necessary to establish a clear mission and set of goals and objectives (phase 1). This was achieved by engaging a variety of stakeholders from the communities. Their demands were rather conventional and included increasing tourism

volumes, increasing the length of stay and encouraging higher expenditures. Furthermore, there was an understanding that the impressive mix of cultural, heritage and natural resources were sufficiently attractive to support a viable tourism sector.

However, it was the stakeholders' strong sense of protecting their resources that most impressed consultants. Perhaps it was because these people live in such a harsh environment that the combination of sharing, intelligent use and conservation of the limited resources are an integral part of their vocabulary and behavior. The physical size limitations of the oasis suggests that every square meter must be protected and managed with great care because beyond the edge of the oasis, there is only desert which, of course, is limited in agricultural production and even sheep grazing. In other words, the oasis is the lifeline to the survival, shelter and culture of the people.

Despite this encouraging respect for their local resources, the challenge of positioning the region as a significant destination still remained. Essentially, it was necessary to develop a strategy that could attract substantially more tourism to a relatively unknown region of north Africa and Morocco.

4. Resources and Market Analysis (Phase 2)

The resource analysis identified the typical physical attractions that one would expect to find in a desert environment and its communities, including:

- A vibrant, nomadic culture throughout the region with their traditional herding and gathering activities;
- Traditional villages and Kasbahs, still fully occupied and supporting cultural and lifestyle activities dating back many generations;
- Dramatic desert and mountainous landscapes and an abundance of petroglyphs;
- Lush oasis with a still abundant date production as well as other agricultural (and fully organic) products;
- Unique structural features, including the irrigation system that brought water from higher elevations and distributed it to the villages and agricultural areas in the oasis;
- Some of the world's oldest archeological sites.

The tourism market profile was equally impressive. They were almost exclusively western European, well educated, well traveled, sophisticated travelers with a sense of adventure, curiosity and interest in Moroccan culture and lifestyle and, given the opportunity, demonstrated a strong preference toward environmental responsibility.



The stunning environment beyond the oasis.

5. Product/Market Matching Process

The product/market matching process was prepared in collaboration with local stakeholders and matched the identified long-haul travel consumer interests with the available resources of the region. It was this dynamic process that identified the concept of introducing the educated and environmentally aware market to the local practices associated with living in this hot environment. There was a strong message that connected the local populations' ability to survive and flourish in these extremely hot conditions with the travel markets concern about global warming.

What was initially considered a "negative" – the increased regional temperatures due to climate change – became a "positive" feature. It was possible to exhibit to tourists:

- a) The impact of carbon emissions and subsequent global warming on the destination (and in particular, a desert environment);
- b) Local, traditional knowledge practices that can demonstrate how to effectively live in a hot environment (i.e. with a warming planet).

These two messages are very compelling and, when tested, proved to appeal to the current (and presumably future) visitor market.

6. Product Development Opportunities

The results of this product/marketing process and the identification of potential visitor activities resulted in the selection of numerous product opportunities associated with the global warming theme. They were grouped under two sub-themes:

Sub-theme 1: Living with Climate Change and Increased Temperatures

- 1) Climate change interpretation visitor center
- 2) Interpretation and demonstration projects including
 - a. Traditional architectural building techniques
 - b. Irrigation and water conservation and sharing methods
 - c. Local food production and preparing traditional meals
- 3) Traditional transportation methods

Sub-theme 2: Establishing a Carbon-Responsible Destination

- 1) Minimizing fuel-based transportation and excursions for both visitors and residents; providing options for the visitor to move within the destination by hiking, cycling and on horseback or camel.
- 2) Reducing energy consumption for visitor accommodation, food services and tour operations.
- 3) Increased local food production and decreased imports.
- 4) Environmental education and improved visitor awareness with a specific emphasis on carbon-reduction activities.
- 5) Restoration of traditional irrigation techniques and revitalization of the oasis food production.

7. An Environmentally Responsible Tourism Destination Brand

The combination of responding to the above sub-themes, as well as the government support and political will from the local authorities, and the expressed interests of the current market, suggested branding the destination as "carbon responsible" with a conscientious focus on reducing carbon emissions.

The concerted efforts were targeted at four levels, including:

- 1) Visitors
- 2) Residents
- 3) Tourism supply chains, particularly accommodation, food services and receptive tour operations
- 4) Local business not necessarily associated with tourism

The strategy outlined how each of these components can work collectively to ensure that greenhouse gases (GHG) are kept to an absolute minimum, thus projecting a strong environmentally responsible image to the national and international marketplace.

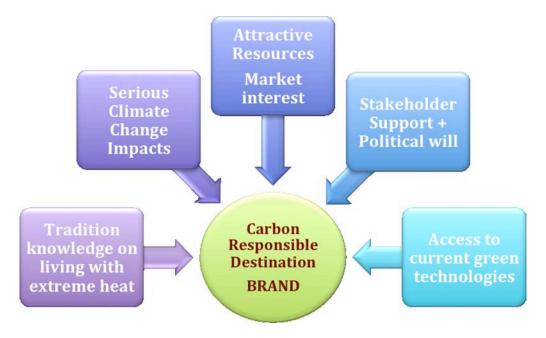


Diagram 2. The brand: a carbon-responsible destination.

8. Establishing Carbon-Reduction Criteria and Practices (Phase 4)

In phase 4, the strategic tourism destination planning process deviates from the standard approach. In order to ensure that there is a conscientious and proficient implementation of the quadruple-bottom-line approach, and in particular carbon-reduction initiatives, it is necessary to provide government, residents and the industry with a comprehensive set of criteria that guarantees the proper planning and development of the various tourism recommendations.

Four categories of implementation criteria were established including:

- 1) Tourism facilities and infrastructure: accommodation, food services, attractions, visitor centers, interpretation kiosks, etc.
- 2) Tours and tour packages: hiking trips, cycling, horseback, etc.
- 3) Purchasing procedures: local purchasing, bulk buying.
- 4) Training programs and educational materials: accommodation suppliers, tour operators and government authorities.

For each of these categories, general standards where provided that would enable any stakeholder within the tourism supply chain to immediately adopt carbon-friendly initiatives. Of course the use of these standards did not preclude other areas of environmental, social and economic responsibility.

9. Tourism Facilities and Services Grading Program

The application of carbon-friendly practices will be reinforced by the launch of an international level-grading scheme. This would initially be developed for the accommodation sector, and then followed by restaurants, attractions and tour operations. It would be a comprehensive grading program including quality assurance, responsible tourism and universal accessibility. The responsible tourism standards in particular would ensure that all available carbon-reduction standards are integrated into the overall tourism operations.

10. Training Programs, Educational Materials and Awareness Campaigns

The offering of sustainable tourism training programs, with a specific emphasis on carbon-reduction practices was an important component to advancing the destination towards "low-carbon emission status."

Carbon emission reduction training includes introducing concepts of:

- Transportation efficiencies and reduced-travel planning
- Energy saving technologies
- Integrating local purchasing practices and related operations
- Sourcing and purchasing energy-efficient equipment

Furthermore, well-designed manuals support all training programs, and technical documents that when circulated throughout the destination make a significant contribution to understanding social and environmental responsibility and identifying carbon-reduction practices.

These training efforts are further enhanced by a destination-level environmental awareness campaign.

The following diagram demonstrates the scope of the training materials.



Diagram 3. Developing carbon-reduction criteria.

11. Preparing an Aggressive Action Plan and Attaining Carbon-neutral Status (Phase 5)

Moving the Tata Destination from a conventional southern Morocco region to one that could eventually attain carbon-neutral status requires a comprehensive and integrated action plan. Furthermore, the various stakeholders had to be committed to the overall plan as well as their individual responsibilities and within the prescribed time frame. The various partners were also committed to the costs of implementation.

Parallel priority streams characterized the first five years including;

Stream 1: Establishing the tourism products that identified the region as a carbon-reduction-responsible destination, including:

- a) Creating a variety of hiking trails within the oasis with visits to women's cooperatives, interpretation exhibits and enjoying local cuisine.
- b) Inaugurating multiple-day hiking and cycling trips throughout the destination with particular emphasis on identifying select responsible communities as staging areas.
- c) Promoting interpretive tours of heritage Kasbahs to demonstrate how architectural materials and layout provided an ambient environment in a hot climate.

Stream 2: Integrating energy conservation technologies and building practices throughout the tourism supply chain; a few examples include:

- a) Retrofitting hotels and guesthouses, including the introduction of natural ventilation techniques, improved insulation, etc.
- b) Promotion and distribution of solar panels for water heating.

- c) Establishing individual, local purchasing policies and contracts for accommodation and food-service suppliers.
- d) Respecting traditional architecture that combines both aesthetics and functionality in terms of ventilation.

12. A Phased Planning Process

The local stakeholders validated the following three-phase implementation process and action plan.

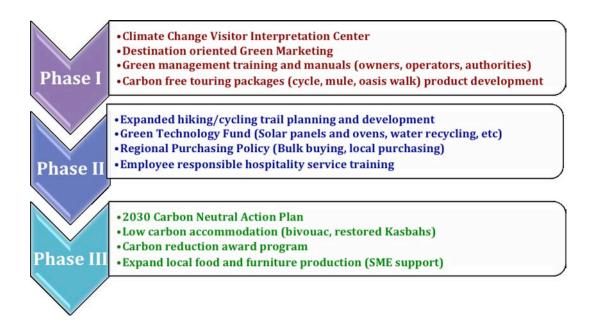


Diagram 4: Tata destination carbon-reduction action plan.

13. Conclusion

The Tata Destination Region and the Western Sahara are positioned to become one of the first carbon-responsible and possibly carbon-neutral tourism destinations in North Africa and even all of Africa. The combination of strong political will, an active social and economic development agency and a clear mandate by the regional stakeholders suggest that the region could be carbon neutral by say 2020. This date corresponds with the Vision 2020 plan of the Morocco Tourism Ministry that envisions sustainable development at the core of its tourism strategy.

Positioning the destination as "carbon responsible" is proactive on carbon-emission reduction and also enables the crafting of a unique identity and brand that will generate the necessary level of interest that can attract visitors to a relatively remote and unknown area of Morocco. By identifying climate change as a development theme, the destination will continue to build new environmentally responsible products for a wider audience that will expand as concerns for global warming and the reduction of greenhouse gases increases.

This then becomes a win-win situation. The destination benefits from increased exposure and consequently more tourists, Morocco benefits by supporting the sustainable tourism initiatives in the destination, the travelers are educated on how to live in a warming world and the planet benefits from a decrease in carbon emissions.

14. News for Other Tourism Destinations

Other destinations can also benefit as well from introducing similar carbon-responsible initiatives. The concepts and techniques identified in this Western Sahara sustainable-tourism plan can be voluntarily applied elsewhere. For the most part, they are relatively inexpensive, are readily adopted by most stakeholders across the tourism supply chain, use technologies that are currently available, and, for the most part, are cost saving.

In fact, much of the effort in the first two years of a carbon-reduction plan can focus on changing local attitudes and behaviors. Green management workshops (particularly for the accommodation sector) and training seminars for the travel trade in general as well as environmental awareness campaigns for residents and business can contribute to significant and immediate reductions in carbon emissions. Even these modest changes send a positive message to the travel consumer about how your destination acts in a responsible and professional manner.

It is hoped, by this author, that eventually there can be a network of tourism destinations whose members are designated because of their special emphasis on implementing initiatives to reduce greenhouse gases. Collectively, they can send a message to the marketplace that the tourism industry is aware of its contribution to global warming and yet there are select destinations that are committed to reducing the impact.