Fiji Modules 2008

Format for Module Responses

Our programs use field modules as an instructional approach to introducing topics of study. The module approach relies heavily on short essay answers to complex ecological, environmental and social issues related to sustainability. This is a writing-intensive approach to study that requires the student to have (1) a clear understanding of the question and responses and (2) the ability to formulate those responses in a concise and non-redundant manner. We believe that reading, writing and communication skills are critically important to gaining the most from higher education and for being successful in the workplace. Those who speak and write well are at a clear advantage when competing for jobs and promotions.

Each module relates to a specific theme and/or geographical location and consists of (a) a background/introductory narrative, (b) related readings and other associated material, and (c) approximately 2-4 questions. The following guidelines are applied to grading and assessing your work:

1. Each question (comprised of all parts) should be answered using a limit of 250 words written clearly, succinctly, and legibly. Your response will be graded on appropriate content, grammar, and presentation. Do not repeat the question as part of your answer.
2. Any references other than from the readings listed with the module (a) are encouraged (to be included as citations in the body of the essay) and (b) must be included in a references section (not included in the 250 word limit). Such references include all forms of personal communication (from lecturers, faculty members, field guides, etc), information available during field trips (for example, visitor centers), and/or incidental/additional material collected during the program (from libraries, tourist shops, etc).
3. There is an automatic 10% penalty for exceeding the word limit and only the first 250 words will be graded.
4. If there are multiple parts to each question (e.g., 1a, 1b, 1c, etc), give equal weight to each part.
5. Unless specified otherwise, all module questions receive equal weight in the final assessment.
6. Answer each question on one side of a single sheet of paper and include the references on the reverse side. You should not include references for readings that are already included as part of the module question (though you can/should cite the author(s) of these readings within the body of the essay) – use the reference section only for additional sources not included as part of the module question. Write your name and question # at the top of each sheet of paper.

The Module Approach

The module approach is probably unlike most other approaches to teaching and learning that you have experienced on campus. In most campus classes, you are taught and you learn through lectures in a somewhat linear fashion with one class building upon another. The module approach is more like doing a mosaic in which the complete picture only gradually comes into focus as more and more pieces of the mosaic are put into place. When the last piece of the mosaic is in place, the picture is complete, and you can see the complex and multifaceted nature of what you have created. To push this analogy a little further, the pieces of the mosaic are like pieces of information, and the complete mosaic is the knowledge that you have gained of the subject.

You will likely find this approach confusing and even frustrating early on. Where do I find the pieces of information? Where does this piece fit? *Does* this piece fit? How does this piece relate to the overall topic? These are all legitimate questions, and questions that you will have to keep asking yourself and discussing among classmates. Despite some initial confusion (perhaps like the confusion when confronted with a jumble of mosaic pieces), we believe that the module approach has numerous advantages, especially for teaching and learning within the context of a field-oriented study abroad program. Perhaps the single greatest advantage of this approach is that it is an active approach. You are actively engaged in finding the pieces of information from multiple sources. True, one of these sources is the traditional classroom lecture, but there are also mini field-lectures, class discussions on the road, informal conversations with field faculty, meetings with specialists and professionals, and direct experience and observation, as well as the related readings. The module approach obliges you to be an active learner, an active participant in the learning process. In practice, this means listening and looking, taking good notes, asking good questions, and generally taking advantage of all of the resources and opportunities you encounter. It is a

way of learning that is far removed from the taking and regurgitating of lecture notes. The module approach will be novel and challenging for most students. However, if you embrace it, you will also find it a highly satisfying way of learning. Indeed, you may even find that it influences the way in which you look at the world around you and learn beyond this particular study abroad experience.

Tips for writing essays of 250 words

1. It is arguably more difficult to write essays of 250 words than 1000 words. As a result, write short, concise sentences and avoid quotations. Develop a skeletal outline of your essay, write your answer out, and then rewrite to get within the 250 words limit.
2. Ensure that your sentences flow – don't abruptly change topics. Do not simply provide a chain of undeveloped (or unsupported) facts that are simply reiterations of lectures and/or readings. You can use facts/data but they must be substantiated and fit within the context of the story you are writing.
3. Make a statement, support that statement, and provide the "so what". This shows that you can conceptualize and see "the big picture."
4. Avoid writing about things, and using technical terms about which, you don't understand. Your lack of understanding will come through and affect your grade. If you are confused or don't understand something, ask.
5. Most importantly, answer the question.

A Sample Module Question and Answer

In the space below, we have provided a set of answer examples to a sample question much like that posed in the field modules. The context for the sample module question is Australia, but the example applies as equally to all our other field destinations.

Sample Question

The British claimed Australia to be "Terra Nullius", in part because there was no evidence Aboriginal peoples managed their land. In fact, native peoples practiced extensive management over nearly the entire continent using fire-stick farming. The land viewed by the First Fleet was not "untouched" but rather, highly manipulated and evolved through periodic burning. (a) Describe at least three applications of fire in Aboriginal culture and how these applications influenced the environment. (b) Describe at least three applications of fire by European settlers in Queensland. (c) Compare the Aboriginal and European use of fire and subsequent landuse within the context of environmental sustainability.

Poor Response

The British said that no one claimed the land because they didn't see any houses and people had no gardens or anything that looked like home (in Europe) and they called that Terra Nullius. They claimed the land for the British Empire even though people lived there already. The first white people to look at eastern Australia thought it looked like a park and it was untouched by humans. They have continued polices for years that said natives were not even humans but they didn't understand anything about their culture and ways of life. Aboriginals used fire a lot for many reasens and it did so for a long time. The way Aboriginals used fire is good for the environment and helps keep it strong and sustaining. They needed fire to live the way they did, and this were called fire-stick farming but it was not farming like Europeans were used to and so they ignored it or did not even recognize it. It helped them catch food and kept them warm at night and they did it for thousands of years. Europeans used fire to destroy the forests and killed off all the animals used by natives. This was very bad for the ecology and rivers are messed up and diversity destroyed. Everything white people have done has been destrictive, except farms are getting better about sustainability. As it turns out, Europeans could learn a lot about ecology from the natives. They also used fire to heat their houses.

Critique: (Based on a score of 1-10 points)

The answer is incomplete, does not address the question well, has examples of incorrect English and misspellings, and generally does not show much of a comprehension of what sustainability means. There is no clear separation of the three parts of the question and no use of references. It begins by repeating the question or opening statement.

That is an unnecessary waste of words (you only have 250). Some of the comments were unrelated to the question (natives are not humans).
Scoring:
a) A total of 3 points could be earned for each of 3 applications of fire in Aboriginal culture with related note on environmental effects of that fire use. Noting the application alone, without reference to environmental effects would be downgraded. *For this answer, 1.5 points would be awarded for reference to catching food and staying warm.*
b) A total of 3 points could be earned for identifying at least 3 applications by Europeans. *For this answer, 1.5 points would be awarded for reference to land clearing (though it was called forest killing) and heating of houses.*
c) A total of 3 points could be earned for contrasting these applications and their sustainability in the environment. In this answer, there are but a few general references to longevity or effect of treatment on the environment. *For this answer, 1 point would be given.*
Finally, up to 1 point could be earned for general writing skills, proper English and spelling, staying within 250 word limit, etc. This paper had too many errors to qualify since there were no references used, misspellings, and poor grammar.
Total Score: 4/10. F grade.

Good Answer

a) At first the British didn't recognize that the Aboriginals used fire a lot to shape their environment. In fact they had been using "fire-stick farming", a term coined by a European in the 1800's, for thousands of years. For instance, they used fire to clear the land and make it easier to move around on their walkabouts (Flannery, 1994). The fires often killed snakes, spiders, and other animals which were undesirable and drove game animals out where they could be caught for food. Natives also used fire to cook and for protection at night. Finally, they used fire regularly to prevent big uncontrolled fires from occurring more infrequently. The effect of this fire use was to change the environment, sometimes dramatically, by changing species mixes and vegetation patterns.
b) Europeans used fire differently (Hughes, 1987). In Queensland they used fire to clear the native rain forest for agriculture. Once they started growing sugar cane, they used fire a lot to burn the cane annually before harvest to protect harvesters and to control disease. Of course, they burned lots of wood for powering sugar mills and heating houses.
c) Aboriginals have used fires for thousands of years and they have sustained their culture and way of life very well during that time. Fire has certainly resulted in altered landscapes and species mixes or diversity, but these seem to be alright. In a land where soils are generally very poor, fire seems to provide a natural recycling of nutrients which is good. European use of fire along with intensive land clearing efforts and agriculture result in land use practices that are only sustainable with a lot of extra input in fertilizers and pest control.
Critique:
This answer shows a greater understanding of the issues, addresses all parts of the question, and does so with a reasonably clear albeit not very concise text (283 words). It still starts off with redundant materials or discourse, rather than getting right to the answer.
a) Author provides 4-5 uses of fire, although not always presented so that you know for sure if they understood the actual application. The last sentence discussed environmental effects of all applications, although it was brief. *2.5 points awarded.*
b) First sentence is unnecessary. Author did capture applications pretty succinctly, though point 2 could have been more complete. *2.75 points awarded.*
c) Final paragraph takes a good stab at discussing "sustainability" concepts but lacks depth and understanding. Not a bad effort though. *2.75 points awarded.*
Finally, .75 points awarded for use of the English language, some references, and proper spelling, formatting; however, 1 point deducted for exceeding the word limit by more than 10%.
Overall: 7.75/10

Excellent Answer

a) Aboriginal populations have intentionally used fire for most of their long tenure in Australia (40 – 60K years), with significant impact on the species mixes and biodiversity of the native flora and fauna (Tarrant, personal communication). Specific applications include burning landscapes to reduce undesirable brush and poisonous animals while simultaneously improving habitat for desirable game like kangaroo, driving game for easy collection,

defending against warring clans, and cooking and warmth. Frequent, low intensity fires associated with Aboriginal cultures probably reduced the likelihood of catastrophic fires, stabilized species diversity, and created a flora and fauna that could more easily sustain these small, nomadic, hunter/gatherer groups (Roberts, personal communication).
b) European settlers in Queensland used fire extensively to clear land for agriculture or development of cities, transportation corridors, and industry (Hughes, 1987). Fire was used extensively for energy to run mills and heat homes. In cane fields, fire was essential to make harvest easier, reduce disease on plants, and to kill potentially dangerous pests (snakes and spiders) and rats.
c) Europeans did not use fire to modify the plant and animal communities in Queensland but to replace them with non-native crops under intensive cultivation (Craig-Smith, lecture; Flannery, 1994). By nature, agricultural crops are not typically sustainable. They require high inputs of energy in the form of fertilizers, farm equipment, pest controls, etc. Aboriginal fire use, though landscape altering, appears to have resulted in sustainable plant and animal communities that could support the modest population sizes that existed. However, even this non-intensive use of fire may have contributed to the pre-historic loss of many larger mammals on the Australia continent (Department of Conservation, 2006).
Critique:
This answer is relatively complete, addresses all parts of the question, uses proper English and spelling, is even-handed, and does it all ~250 words. Furthermore, it references the module readings, additional publications/references, and lecturers. It is clear the author thought through the question carefully, had a clear concept of what was to be said before writing started, and made some very relevant points in addition to giving basic answers. For instance, fire-stick farming probably worked very well for sustaining "relatively small" populations, but would be insufficient to support larger populations. In fact, population was intentionally controlled by natives so that resources were not in short supply. Also, even Aboriginal populations probably drove some species to extinction, along with unfavorable climatic conditions.
Scoring: This answer is awarded a 10/10. It is not the only answer that could get a perfect score.

Field Research Projects

Occasionally the modules will include field exercises and reports. These are typically group activities that require (1) knowledge and application of the scientific method, (2) field work to collect data or information, and (3) documentation of the study and results. These exercises are intended to provide exposure to natural world phenomena while allowing group members to use logic and rigor in describing what they saw. All members of the group are responsible for the final product comprised of the following sections:

Title
The title is not a section as such, but it is necessary and important. The title should be short, unambiguous and reflect the purpose of the study (see below). A general rule-of-thumb is that the title should contain the key words describing the work presented.

Purpose of Study and Introduction
The Introduction should (a) clearly describe the purpose of the study and (b) explain why this is an interesting or important issue to address (i.e. how will this study advance our knowledge). This is a critically important step that will often dictate success or failure of an investigation. Identifying the purpose of a study can actually be very difficult – it is the story of what you are doing - and requires that you have a good understanding of the reason for doing the study in the first place and the likely value (or contributions) of the study. It is highly recommended that you spend the first 20 minutes with your group brainstorming what you believe to be the purpose of the study (or story) before doing any experimentation or writing. A purpose statement is sometimes written as a research question (though there is a subtle difference between the two). Two examples of research questions are illustrated here: (a) By all accounts, native populations of cassowaries appear to be declining in the Daintree Rain Forest. Why are populations declining? (b) Vegetation around me changes as I walk through the forest between the beach and the road. What biotic and abiotic changes are responsible for these changes?

Hypotheses
A purpose statement or research question is much too broad to be examined by using the scientific approach; therefore, a series of hypotheses are developed to examine the issue at hand. Hypotheses are testable and are stated as predictions pertaining to a relationship between two or more variables. The most fruitful approach to the testing

of statistical hypotheses has been that in which the possible outcomes of an experiment are expressed as a *null hypothesis*. The null hypothesis is a statement to the effect that there is no difference between specified population parameters – like being innocent until proved guilty. It is simpler to say there is no difference between two variables than to state a difference. Of course, this is not usually the expected outcome; the experiment is usually carried out because the independent variable is predicted to influence the dependant variable in some way. In other words, a *rejection* of the null hypothesis is interpreted as a significant finding. Using the two examples from above: (a) Null hypothesis #1: Cassowary populations are not affected by loss of habitat and food supplies in the Daintree Rainforest. Null hypothesis #2: The shells of Cassowary eggs are unaffected by pesticide applications in the Daintree Rainforest. (b) Null hypothesis #1: Tree and shrub species do not change with proximity to the ocean. Null hypothesis #2: Soil moisture does not influence species composition.

Methods

The methods section describes what was actually done. It should include a description of the techniques used in sufficient detail that someone else could replicate your study (at a later time and/or location). The following sub-sections should be included in your methods: (a) subjects used (plant, human or animal), (b) study site (physical and biological features, topography, cover, precise location), (c) study design (how the experiment was structured, e.g. treatments, variables measured, number of samples collected, etc), (d) protocol for collecting data (how the procedures were carried out), and (e) data analysis (how was the data summarized and analyzed – what statistical methods did you use to test each of your hypotheses). For the purposes of your reports here, the methods section will likely be very short (unless specified otherwise) because all groups of students will be using the same methods (prescribed by the field guide) and so there is very little new material being presented. You should however, note methodological issues unique to your study such as slope, aspect, cover, evidence of wildlife, etc of your field site. Continuing the examples from above: (a) Hypothesis #1: Establish sample plots throughout the natural range of the cassowary, including areas where populations are thriving and where they are not. Record habitat disturbance and frequency of known food sources Compare. Hypothesis #2: Conduct controlled experiments with caged animals in which diets are modified with pesticide levels. Measure egg shell thickness. (b) Hypothesis #1: Make a transit across the area between road and beach. Stop every 100 yards and describe species present, their density, size etc. Hypothesis #2: Make a transit across the area and measure soil moisture and soil properties.

Results

The function of the results section is to objectively present your key results, *without* interpretation, in an orderly and logical sequence. This is where data gets summarized in tables, figures, and statistical tests that are used to support or reject hypotheses based on "statistical" confirmation, or tests of significance. For descriptive studies (including ours) we rely more on basic statistics such as frequency observations, tallies and summations, averages (mean, mode, and median) and standard deviations to reject or accept our null hypotheses. Illustrative material (tables and figures) should be used to highlight your key findings and be in a format that is easily evaluated by the reader. A good rule of thumb is that it should be possible to understand the information in a table or figure without referring to the text. Tables and figures should typically summarize results (not present large amounts of raw data), be sequentially numbered, and have a descriptive title.

Discussion and Conclusions

This section is not a restatement of the results. The discussion summarizes the most important findings (as they relate to the hypotheses). The conclusion interprets the meaning of the results as they relate to the purpose of the study. In this section you might also describe the limitations of the study and future steps and recommendations. For the purpose of the modules, this is typically the most important section of your report.

Some Additional Suggestions

Include a Literature Cited section (a record of all the references you used in your study). Use standard abbreviations (hr, min, sec, etc) instead of writing complete words. Define all other abbreviations the first time they are used then subsequently use the abbreviation. Results described in your paper should be described in past tense (you've done these experiments, but your results are not yet accepted "facts"). Only experiments that you plan to do in the future should be described in the future tense. It is acceptable to use the first person in scientific writing, but it should be used sparingly – reserve the use of first person for things that you want to emphasize that "you" uniquely did (i.e. not things that many others have done as well). Most text should be written in the third person to avoid sounding like an autobiographical account.

Module I: Natural Resources Conservation and the Fijian Way of Life

Natural Resources Conservation

The conservation of Fiji's natural resources cannot be described without understanding the history of at least two distinct cultures that have co-existed since the mid-late 19th century and today each comprise slightly less than half of the population of Fiji: Indigenous Fijians (mostly from Melanesia, perhaps as long as 3,000 years ago) and Indo-Fijians mostly (indentured labourers brought to Fiji from India by the British from 1870 to 1919, but including a second wave of business migrants in the mid-20th century). In the past 100+ years, laws have been passed creating a system whereby only ~16% of the land is freehold and the vast majority (~84%) is under native ownership (native title, leasehold, or state). Native ownership means that the land is owned by the village and preserved in perpetuity, prohibiting anyone (including Fijians from other areas/villages) from buying it. While this system does result in limited freehold land opportunities for Indians (and Fijians alike – and has arguably marginalized Indo-Fijians as tenants of the land), anyone can negotiate a lease (usually on a 99-year term) with the village for leasehold land. (Indeed, most of the large resorts that you will see in Fiji are on leasehold land negotiated between the Fijians and Westerners.) Recently, leases have begun to mature on sugarcane plantations resulting in growing conflict between the tenants (mostly Indo-Fijians) and the land owners (Fijian villages). On the other hand, Indo-Fijians have prospered as industrious business people in agriculture (sugarcane, cotton, tobacco, and rice farms), service industries (telecommunications, hospitality and clothing), and the public sector. Today, the two cultures remain inextricably dependent on one another, yet co-exist in a political climate that has resulted in four coups in the past two decades.

The history of political and cultural struggle in Fiji over the past 100+ years has arguably diverted attention away from some of the more serious natural resource issues facing the country. As with many places in the South Pacific, Fiji's coasts, reefs and fisheries, in particular, have suffered severe degradation in recent decades from the combined effects of development (industrial agriculture, urbanization, resort development), overfishing (including offshore trawling), and tourism (diving, fishing, surfing). One of the primary approaches to addressing such degradation has been the Locally-Managed Marine Area (LMMA) network, a system which has replace conventional top-down resource management schemes (that tend to be coercive and exclusionary) with conservation efforts that are community-based and garner local support. Since its inception in 1999, the Fiji network of LMMAs has grown to include communities in six districts and covers 10% of the inshore marine area of Fiji. The approach taken is to actively promote and support community-based coastal and reef conservation initiatives managed according to traditional resource management institutions, and it has been touted globally as an exemplar of effective community-based conservation. Some of the key features of the LMMA approach include: (a) a reliance on traditional resource management institutions and techniques; (b) integration of indigenous and scientific knowledge to guide resource management decisions; (c) local monitoring of resources; and (d) promotion of direct benefits of conservation to communities through ecotourism. The results of LMMA efforts in local communities have been considerable and include (a) increases in the number and size of clams, crabs, and other species harvested adjacent to taboo areas, (b) increases in household incomes (up to 35% in some), and (c) increased catch per unit effort (up to three times as much in some communities). The success of the initiative is attributed to its participatory and collaborative focus, which has ensured that local people are at the center of the network's operations.

Fijian Way of Life: The Village Homestay

During the program you will have a homestay in a typical Fijian village. As part of the experience you (and your fellow student in the homestay, as part of a 2-person team) will conduct an ethnographic study of (a) your homestay hosts and (b) one other individual in the village. The purpose of the assignment is to nurture your understanding of the Fijian way of life but also (as part of the experience itself) to create opportunities for the village to better understand your/American culture. Ethnographic studies involve the systematic collection of data derived from direct observation of the everyday life of a particular society, group or subculture in order to understand the behavior, values and meanings of any given individual (or group). Your study must take into account the wider cultural context while balancing this with the minute everyday detail of individual lives. According to Massey (*The way we do things around here: the culture of ethnography*, 1998),

> "The ethnographer tries to make sense of what people are doing by asking 'What's going on here? How does this work? How do people do this?' and hopes to be told by those people about 'the way we do things around here'. Answering those questions requires an openness to learn from those who inhabit that culture,

> and a willingness to see everything and suspend premature judgment on what should be selected as data. The usefulness of the information may not be immediately apparent, but is often collected and stored anyway. This quality of openness lies at the heart of ethnography, in its processes, purposes and ethics."

For part (a) consider asking the following questions (add your own if you like): How long have you lived in this village? Who lives in your household? How does each of the members of your household spend their time each day? What are the key ways your household produces its food and cash income? What are the major constraints to these activities? What changes have you seen in and near your village with regard to use of land, water, trees, other vegetation, coastal resources, and wildlife? If creating problems, what ways have you and or others in your village tried to respond to these changes or concerns? For part (b) conduct an oral history with someone else in the village (not your hosts) asking more or less similar questions as above, but focusing more on their particular occupation. Parts (a) and (b) should take about 2-3 hours and can be conducted any time during your homestay.

Readings

Aalbersberg, W., A. Tawake & T. Parras. 2005. "Village by village: Recovering Fiji's coastal fisheries." *World Resources 2005. The Wealth of the Poor: Managing Ecosystems to Fight Poverty*. Pp. 144-151. UNDP, UNEP, World Bank, WRI.

Lal, B. 2005. "Girmit, history, memory." In *Bittersweet: An Indo-Fijian Experience*, B. Lal (ed). Canberra: Pandanus Books.

Ravuvu, A. 2005. *Vaka I Taukei: The Fijian Way of Life*. Pp. 1-24, 70-84, and 112-123. Suva, Fiji: Institute of Pacific Studies at the University of the South Pacific.

Module Questions

1. (a) How are divisions between Indigenous Fijians and Indo-Fijians perpetuated and maintained in contemporary Fijian society? (b) What are the prospects for the future with respect to the potential for cooperation between Indigenous Fijians and Indo-Fijians?
2. How do LMMAs benefit the Fijian way of life? Your answer should include <u>specific</u> examples of tangible benefits that would accrue to a Fijian village community and its people.
3. How authentic do you think your village experience was as a representation of the "Fijian way of life?" As part of your 2-person team, submit a 500-word report which answers the question using <u>specific</u> findings from your ethnographic study. Attach your (legible) findings from the ethnographic study as an Appendix to the report (the Appendix is not considered part of the 500-word limit). (Worth two questions.)

Module II: Tourism and Ecotourism in Fiji

Tourism is the world's fastest growing industry, in some cases generating ~10% of a nation's gross national product (total market value of the final goods and services produced in the economy) and ~7% of global export receipts (foreign income earned). In Fiji, tourism is the nation's leading economic activity with over one-half million international visitors a year. Although four coups since the 1980s, the Asian financial crisis in 1997/98, and the devaluation of the currency in 1999 have produced peaks and troughs in the market, tourism remains the primary (and fairly robust) source of foreign income (exceeding the revenue from its other two largest goods exports – sugar and garments) and a major industry for employment (although 67% of the Fijian labor force are classified as subsistence farmers). Today, Fiji's tourist accommodations range from village homestays, to backpacker camps with dormitory accommodation, to exclusive $2500+-a-day resorts. The ability to sustain the growth of the tourism industry in Fiji depends on careful cultivation of certain kinds of images of "nature" and "natives." Images of pristine beaches and reefs, tropical lagoons, and swaying palms abound. Portrayals of Fijian culture are dominated by images of chiefs offering hospitality to visitors through the kava ceremony, fire-walking, and idyllic beach-side villages. In the process Fijian culture is arguably turned into a commodity, a series of performances provided for the benefit of visitors. Tourism as an industry is not without effects on local environments and local communities. Resorts may use excessive amounts of water to satisfy tourist demands for swimming pools, hot showers and green golf courses. They may pollute groundwater, increase nutrient loads on local reefs, and create substantial streams of solid waste. In short, resort development brings with it a large "ecological footprint." Likewise, resorts may also have substantial effects on local communities. While various kinds of tourism may or may not provide direct, monetary benefits to local communities, they inevitably have effects of one kind or another. Some of these may be beneficial, but some may not be. As such, Fiji faces several problems associated with tourism activity, notably conflict among local peoples and organizations stemming from economic development (especially the outflow of capital to large multi-national corporations), cultural changes stemming from the influx of visitors from predominantly western societies, and environmental impacts associated with everything from increasing demands on infrastructure (e.g., waste and water) to vandalism and traffic and noise pollution.

A key development in the tourism field in the last two decades has been the growth of ecotourism, which is presented as a less intrusive, more beneficial and sustainable form of tourism, striving to maintain the smallest possible ecological footprint, simultaneously supporting both conservation goals and local livelihoods. Ceballos-Lascurain (1996) defines ecotourism as "environmentally responsible travel and visitation to relatively undisturbed natural areas in order to enjoy and appreciate nature, that promotes conservation, has low visitor impact, and provides for beneficially active socio-economic involvement of local populations" (in *IUCN-World Conservation Union*). Ecotourism therefore has several key components including: (1) an emphasis on promoting an appreciation of nature and/or culture through education and interpretation, (2) promoting small, locally owned tour operator businesses providing services for small groups of visitors, (3) minimizing negative impacts of visitor travel on the natural and social-cultural environment, and (4) generating economic benefits associated with the conservation of nature by generating employment opportunities and foreign income for local communities as well as organizations and authorities managing the natural areas (World Travel Organization, 2002 *Concept Paper*). Clearly, while ecotourism has the *potential* to make a positive contribution to socio-economic development and environmental protection, uncontrolled and unmanaged ecotourism can also destruct fragile ecosystems and contribute to social and cultural conflict. Many people have argued for the need to focus on the *sustainable development* of ecotourism, meaning that the principles of sustainability should be applied to the manner in which ecotourism operates and is governed. The most widely cited definition of sustainable development is by the World Commission on Environment and Development (which is also attributed with bringing the term into being): "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (*Brundtland Commission*, 1987). This definition recognizes two key aspects of development: (1) ensuring access to wealth generating resources, where the costs and benefits associated with such access are distributed equitably and (2) that there is a limit to nature's ability to meet present and future needs for renewable resources (e.g., plant and animal species), nonrenewable resources (e.g., fossil fuels and minerals), and life-support resources (i.e., "free" resources such as air and water). The sustainable development of ecotourism in Fiji must give credence to these key aspects such that the exploitation of any resources, the direction of investments, and political, social, and cultural change associated with tourism use and development must enhance both current and future potential to meet human needs.

Critics charge that the goals of ecotourism are illusory; it is merely the thin end of the wedge in a long-term process

of commodifying places: once ecotourism is established, conventional resorts soon follow. Further, just as images of nature and natives are produced for tourists, so too does ecotourism produce for tourists a benign image of themselves as appreciators of unspoiled nature. Whatever the merits of these critiques, the fact remains that the distinction between tourism and ecotourism is not necessarily as clear as we may think. While it may alert us to several important differences between these two forms of tourism, it is also possible that this distinction may obscure key similarities.

This set of exercises takes as its focus the distinction between conventional tourism and ecotourism. On your travels along the Coral Coast of Viti Levu and throughout the off-shore islands you will see a number of very different kinds of resorts, ranging from exclusive (with every amenity imaginable), to small backpacker resorts (with very few amenities). Some are adjacent to local communities, others are not. All provide compensation to Fijian communities which own the land they occupy. The resort island that we will visit forms part of a chain of two island groups known as the Mamanucas and Yasawas. From the main point of departure at Denarau, this chain of islands extends over 150km in a north-west, north, and then north-east arc from the town of Nadi on Viti Levua. Reportedly, there is a prehistory sequence for the Mamanuca and Yasawa island groups that dates back nearly 3000 years. The islands are predominantly volcanic and dramatic in appearance, with many steep slopes and peaks, white sand beaches, diverse corals, and numerous traditional Fijian villages. The landscape is a tribute to human burning and swidden cultivation, resulting in a patchwork of anthropogenic grassland (talasiga) and some forested areas on the higher ridges. The relatively dry leeward climate (~50 inches of annual precipitation) has limited agricultural potential for the islands although, in contrast, the marine diversity of the region has provided a rich and reliable source of seafood. Most striking however is the evidence of the recent (and growing) effects of tourism in the region: resort development litters the island landscape and the increasing number of boats are evidence of the tourism demand.

Readings

Belsky, J.M. 1999. Misrepresenting communities: The politics of community-based rural ecotourism in Gales Point Manatee, Belize. *Rural Sociology* 64(4): 641-666.

Carrier, J. & D. Macleod. 2005. “Bursting the bubble: The socio-cultural context of ecotourism.” *Journal of the Royal Anthropological Institute* 11:315-334.

Dawson, C.P. 2001. Ecotourism and nature-based tourism: One end of the Tourism Opportunity Spectrum. In S.F. McCool and R.N. Moisey *Tourism, Recreation, and Sustainability*. New York: CABI Publishing.

WTO (2001). *Sustainable Development of Tourism*. New York: UNESC

Module Questions

1. (a) Provide some specific examples of how tourism has changed the natural landscape and culture of Fiji. (b) What kinds of contacts are there between visitors to Fiji and the local people, and how do these contacts affect the local community?
2. Using substantiated evidence from lectures, readings, and your personal experiences, identify specific ways in which your island resort could become an exemplar sustainable ecotourism destination.
3. Demonstrate how planning tools, such as the Tourism Opportunity Spectrum (TOS) and local participation approaches, can be applied in order to ensure sustainable ecotourism development in Fiji?
4. Develop a 500-word group field research project assessing the impact of tourism on the island. The report should contain (a) one research question, (b) three (null) hypotheses, (c) field methods, (d) results (and appendix of figure or table), and (e) conclusions and implications. Additional information will be provided at the lecture on the Island. (Worth two questions.)