SECTION 2

Symposium's Keynote Presentations

and Working Group Discussions

D r. Theodore Panayotou, Program Director of the International Environment Program at Harvard Institute for International Development, and Dr. Hana Ayala, originator of the TCR concept, chaired the symposium on "The Challenge of Experience-Management: Linking Quality with Sustainability". The symposium opened up with plenary presentations from each sector of the TCR alliance (PART A) and a scientific panel that presented lessons learned from a previous global experience with sustainable tourism as well as the economic dimensions of the TCR alliance (PART B). The three dynamic workshops that then followed represented the most important part of the symposium (PART C), since, for the first time, prominent representatives of the science and conservation communities gathered with leaders of the international tourism and hotel industry. A series of thematic and general questions guided the discussions of each working group. These questions were designed with the purpose of obtaining valuable input that would influence the planning and implementation of the TCR alliance, particularly by identifying how tourism revenue supporting scientific research and conservation could be spent most effectively and how research results and economic benefits could be efficiently transferred among TCR sectors and other parts of Panama's economy. Working group discussions were also expected to make recommendations that could be developed into short-term and long-term policy guidelines to maximize the sustainable use of natural and cultural resources for social and economic purposes through sustainable heritage tourism.

PART A

KEYNOTE PRESENTATIONS
BY REPRESENTATIVES
OF THE TCR SECTORS

TOURISM SECTOR

Roberto Eisenmann
President, Coronado Hotel & Resort

Estamos aquí para crear algo nuevo y distinto, por sugerencia de una doctora checa-norteamericana, quien luego de viajar el mundo incontables veces, vio en nuestra pequeña nación, grandes posibilidades, que nosotros los panameños no veíamos por tenerlas tan cerca. Me refiero por supuesto, a la Dra. Hana Ayala, quien vino por primera vez a Panamá acompañando a su esposo, el Dr. Francisco Ayala, científico español-norteamericano de categoría mundial.

La propuesta es que nuestra Nación, hasta hoy al final de la cola del tren económico de mayor crecimiento y de mayor impacto social llamado turismo, reconozca una tendencia mundial que pocos han visto, para dar un gran salto de garrocha y convertirse en la locomotora de un tren turístico que cambia de rieles y toma una ruta distinta, mucho más amplia, de beneficios universales y con un objetivo superior que va mucho más allá del metálico o del simple verde. Estamos hablando no del turismo de sol y playa, abundante y en decrecimiento, tampoco del turismo simplemente ecológico, limitado y ya en vías de desgaste. Estamos hablando de algo mucho más profundo y extenso.

Para liderar mundialmente este nuevo enfoque, resulta que nuestro país tiene dos ventajas únicas. No hay otro país en el mundo que hace 3 millones de años unió dos continentes, para convertirse en el puente de biodiversidad entre norte y sur y por lo tanto cuenta con la mayor riqueza de biodiversidad y variedad de habitat del planeta. En especies de plantas de flor, Panamá se compara con toda Europa. En especies de aves, Panamá tiene más que toda Norteamérica junta. Panamá se convierte en la barrera entre Pacífico y Atlántico e hizo que las especies fueran genéticamente diferentes.

Este hecho único, hace que Panamá sea puente del mundo y maravilloso substrato biológico y geológico que cuenta con largas costas en dos océanos diferentes, distantes a tan sólo una hora la una de la otra. La confirmación de este hecho único en el mundo, está avalada por la presencia aquí, desde hace 35 años, del mundialmente reconocido Smithsonian Tropical Research Institute. Esta institución científica, tiene un cuerpo permanente de más de 30 científicos del mundo entero, con residencia en Panamá. El Smithsonian no está en Costa Rica, ni en Colombia, ni en Brasil, está en Panamá, porque en el campo de la biodiversidad Panamá no tiene igual.

La otra gran ventaja de Panamá es que también es original puente cultural del mundo. Su pequeño tamaño y el hecho de que no tenemos una gran infraestructura instalada para el turismo, permite iniciarlo correctamente para el turismo patrimonial propuesto, sin las enormes inversiones

de reconversión que tendrían que asumir otros países que hoy son destinos turísticos reconocidos, pero de sol y playa.

El original plan propone y logra que exista una alianza económica y de intereses entre la comunidad científica universal y la comunidad turística panameña, de tal forma que la industria turística financie a las ciencias y éstas a su vez produzcan conocimientos nuevos que constituirán componentes de ventas para el turismo patrimonial. Se produciría un gran círculo virtuoso de beneficios que con cada vuelta crecería geométricamente para beneficio cada día mayor de todas las partes.

Será este programa la mayor de las posibilidades de crear empleo en la población más marginada, a la vez que incorpora al círculo del patrimonio nacional biológico, arqueológico, histórico, étnico y cultural en forma sostenible.

Adicionemos entonces la novedosa Ciudad del Saber, que nos explicaron aquí ayer y que es un desarrollo complementario ideal para este concepto. Es tomar el Fuerte Clayton, una base militar, y cambiar las armas por el conocimiento. Qué es la Ciudad del Saber? Imaginen una ciudad jardín con 100 Institutos Smithsonian para distintas ramas del conocimiento, con una especie de plaza socrática o forum internacional y con un parque de ciencia y tecnología para investigaciones. Es un sueño, sí, pero en la Junta de Síndicos de la fundación privada que la promueve, estamos todos soñando. Científicos como Ira Rubinoff del Smithsonian, Ceferino Sánchez de SENACYT, empresarios, educadores, incluidos los Rectores de ambas universidades, profesionales, ministros de estados y ciudadanos simples como este servidor, quien nunca ha logrado éxitos en una empresa que no se inicie como un sueño. Seguido lógicamente por diez años de arduo trabajo apasionado. La Ciudad del Saber con sólo su anuncio, ya ha logrado el interés de más de 50 instituciones internacionales de prestigio, interesadas en situarse ahí.

En mi última visita a la Universidad de Harvard hace unos días, la sola descripción de la idea de la Ciudad del Saber, produjo comentarios de que era la idea más fascinante e interesante producida en América Latina en los últimos 25 años. La Ciudad del Saber podría ser piedra angular del concepto del turismo del patrimonio o del conocimiento. Los panameños de la industria hotelera, del sector científico, del gobierno, de la sociedad civil, somos hoy, como escribió alguna vez Ortega, y cito, "un inmenso coro donde cada uno de nosotros está encargado de una nota, formamos una gran sinfonía, donde todas las cosas se ordenan y adquieren ritmo y valor" y cierro así. Estamos inventando un nuevo círculo virtuoso para el turismo del siglo XXI.

ENVIRONMENT SECTOR

Mirei Endara
General Administrator
National Environmental Authority (ANAM)

Mi presentación en la mañana de hoy realmente es darles un pequeño antecedente de los recursos naturales que tenemos en Panamá y cómo esto puede integrarse a la estrategia que estamos proponiendo hacer: la alianza entre el turismo, la conservación y la investigación.

Panamá, gracias a su posición geográfica, uniendo el Norte y el Sur de América, así como su proximidad y contigüedad a dos grandes masas océanicas, aunado a los distintos pisos altitudinales, hacen del país uno de los de mayor y extraordinaria diversidad biológica en el mundo, misma que se encuentra mejor representada en sus áreas protegidas.

Nuestro país está ubicado en la posición 19, entre 25 países con mayor riqueza de especies de plantas con flores en el mundo y en la posición No. 4 para América del Norte y América Central. Aquí se han reportado 929 especies de aves entre las que se destacan el Quetzal, los Tucanes, tres especies de Guacamayas, el inigualable Águila Arpía, como también muchas otras especies de interés para los observadores de aves.

Los demás grupos como los mamíferos, reptiles y anfibios presentan un alto grado de endemismo, donde se destacan especies como la rana dorada. Dentro de este marco, Panamá cuenta con un potencial enorme de atractivos naturales entre los que se encuentran los bosques tropicales, islas, playas y una riqueza cultural por la variedad de grupos autóctonos y la presencia de otras culturas que se evidencian en las mezclas de razas que existen en nuestro territorio.

Haciendo un poco de historia, podemos contar que los primeros esfuerzos reales sobre la conservación de los recursos naturales en Panamá se inician en 1972, cuando se presenta una propuesta para el establecimiento de un sistema de parques nacionales y reservas equivalentes, donde se identificaron seis áreas prioritarias. Posteriormente se crean cinco áreas protegidas entre los años de 1976 y 1988. Estas cinco áreas protegidas son: el Parque Nacional de Altos de Campana, el Parque Nacional del Volcán Barú, Alto Darién, Parque Nacional Portobelo y el Parque Nacional Marino Isla de Bastimentos.

Desde entonces, se ha procurado un manejo holístico del tema, elaborando en 1987 un plan estratégico para el sistema de parques nacionales y reservas equivalentes y en 1992 y 1994 se crea, efectivamente, el Sistema Nacional de Áreas Protegidas. Y las categorías de manejo, mediante Resoluciones de Junta Directiva de lo que era el INRENARE, No. 022 y No. 09 de 1994. Con el objetivo fundamental de preservar material genético, conservar ecosistemas singulares, proteger y

manejar fuentes de agua, promover investigaciones científicas, conservar y proteger aspectos históricos, culturales y arqueológicos, y proveer oportunidades para el desarrollo de actividades de recreación, educación ambiental y ecoturismo en las áreas protegidas. En otras palabras, desde los esfuerzos iniciales de manejo de las áreas protegidas, siempre se ha procurado incorporar la conservación, la investigación y el ecoturismo.

En la actualidad, el patrimonio natural de Panamá, mejor representado en el Sistema Nacional de Áreas Protegidas, está conformado por 43 áreas de diversas categorías como lo son los parques nacionales, los refugios de vidas silvestres, reservas forestales, áreas recreativas y humedales de importancia internacional, que cubren una extensión de alrededor de 1 millón 900 mil hectáreas que representan el 25% del territorio nacional.

Dado el limitado recurso humano y financiero del Estado para proteger adecuadamente este valioso patrimonio natural, nos hemos concentrado en establecer y desarrollar acciones encaminadas al fortalecimiento de este Sistema Nacional de Áreas Protegidas, a través de proyectos de cooperación internacional y la firma de convenios internacionales y regionales como lo son la Convención Ramsar, la Convención de Naciones Unidas sobre Diversidad Biológica, la Convención Internacional de Tráfico de Especies Amenazadas (CITES) y el Acuerdo Centroamericano para la Biodiversidad, entre otros.

Entre las iniciativas recientes para la cooperación internacional, podemos mencionar el reciente lanzamiento del Corredor Biológico del Atlántico Panameño. Es un proyecto a seis años que busca plasmar la filosofía de un Corredor Biológico Meso-Americano que cubre desde México hasta Colombia, en el que el valor de los recursos naturales del área se incorporan en la planificación del desarrollo proyectado, ofreciendo oportunidades a las comunidades, en buscar alternativas viables para mejorar su calidad de vida, e incentiva al sector privado a aprovechar con este ordenamiento territorial, las potencialidades ecológicas del sector Atlántico de Panamá. Este proyecto de carácter regional, representa para Panamá una donación significativa del Fondo Global del Medio Ambiente (GEF) y un financiamiento del Banco Mundial por un monto total de 12.8 millones de dólares.

Otra iniciativa que encontramos muy valiosa y que se encuentra en ejecución, es la elaboración de la Estrategia Nacional de Biodiversidad. Su plan de acción y el primer informe de diversidad con el apoyo del Programa de las Naciones Unidas para el Medio Ambiente, que proporcionará información valiosa sobre el estado de los recursos biológicos y las recomendaciones para su uso sostenible.

Ambas iniciativas descritas, responden a la nueva visión de la gestión ambiental que se oficializa con la aprobación, por la Asamblea Legislativa, de la Ley 41 del 1º de julio de 1998, Ley General del Ambiente que crea la Autoridad Nacional del Ambiente. Con esta ley se abre la posibilidad de participación del sector privado y la sociedad civil, en el manejo de las áreas protegidas y en las prestaciones de servicios ambientales, siguiendo lineamientos y regulaciones estipuladas por la ANAM que es la Autoridad del Ambiente.

Creemos que el manejo y protección de estos maravillosos recursos naturales en el siglo XXI, sólo tendrán éxitos en la medida en que los humanos aprendamos a valorarlos, respetarlos y ser responsables por los mismos.

Una manera de cómo lograr hacer un manejo efectivo, es mediante la creación de alianzas entre diferentes partes interesadas, manteniendo en cuenta en todo momento la prioridad que es la de proteger nuestra base natural que provee estos beneficios.

En este sentido, la ANAM adelanta estudios técnicos y talleres de consultorías para la reglamentación e implementación de las normas para las concesiones administrativas y el manejo participativo para las concesiones de servicios públicos en las áreas protegidas.

Como pueden evidenciar, desde un inicio ha sido el interés del Estado conservar áreas protegidas estratégicas, para garantizar una serie de bienes y servicios a la sociedad panameña; y por esta vía, en alguna medida se ha iniciado un proceso de ordenamiento territorial que ha permitido contener, a su vez, el proceso de deterioro del ambiente y el uso irracional de los recursos naturales, así como mantener en buen estado las cuencas hidrográficas, el desarrollo de actividades de educación ambiental e investigación, que aportan a salvaguardar la pérdida de biodiversidad.

La importancia de la conservación de las áreas protegidas radica en que las mismas contienen ambientes ecológicamente sanos y por el valor potencial de sus recursos naturales como fuentes de alimentos, materia prima, como reserva de recursos genéticos y como sitios ideales para el desarrollo de actividades de ecoturismo.

Las áreas protegidas proporcionan espacios y oportunidades para la investigación y el ecoturismo, siempre y cuando tengan un impacto no significativo en el recurso natural, proporcionando una economía sustentable, activa y la participación de las comunidades locales para mantener los valores que son objetos de interés de los visitantes.

Entonces, para lograr lo anterior, hay que esperar que el ecoturismo se convierta en un componente lógico del desarrollo sostenible, donde se requiere un enfoque multidisciplinario, un cuidadoso planeamiento físico y sobre todo normas y regulaciones claras y eficientes que garanticen una operación equilibrada en lo económico, lo social y en lo ambiental.

De esta manera solamente, mediante un compromiso real intersectorial, que involucre al Gobierno, a las organizaciones no gubernamentales, a las comunidades locales y a la empresa privada, como lo es el espíritu del TCI, donde todos tenemos un papel que cumplir, el ecoturismo podrá desarrollarse eficazmente.

SCIENTIFIC RESEARCH SECTOR

Julio Escobar
Deputy National Secretary
National Secretariat for Science, Technology,
and Innovation (SENACYT)

Hana Ayala me solicitó que explorara la pregunta de cuáles son las aspiraciones del sector de investigación en la alianza Turismo-Conservación-Investigación.

La pregunta es por qué estoy aquí y por qué son los científicos parte de esta alianza. Es una pregunta difícil. Hablar o representar al sector de investigación es un honor inmerecido. La realidad es que el sector de conservación y el sector de investigación ya tienen una larga relación, una relación creciente no sólo en Panamá, sino en el mundo entero, en parte porque en conservación es evidente el valor de la investigación.

La realidad es que en conservación, desde el punto de vista conceptual, el valor de la investigación no se cuestiona y muchos conservacionistas son investigadores ellos mismos.

A través de la conservación, el sector de investigación va a tener una relación con el sector turístico, pero esa no es una innovación que propone per se, la alianza Turismo-Conservación-Investigación.

Desde el punto de vista de la investigación, la innovación que propone es que exista una relación directa entre el sector turístico y el sector de investigación y esa es la relación que yo quisiera explorar aquí, sin menoscabo de nuestra relación con el sector de conservación.

Existe un tipo de documentos que se conocen con el nombre de Palimpsesto. Son manuscritos típicamente de la antigüedad, donde se recogen varios textos en un solo documento; texto sobre texto, pero a primera vista sólo se nota el último texto escrito. Los textos anteriores han sido borrados por encima para poder reciclar ese material documental; típicamente monjes en la antiguedad, en la Edad Media, lo utilizaban de esa forma. Y para recobrar los textos anteriores, se utilizan mecanismos como luz ultravioleta y pronto se nota la presencia de otros textos en el mismo documento.

En turismo patrimonial, los sitios turísticos son Palimpsesto. Un sitio turístico se puede ver de mil maneras. Qué es, por ejemplo, el Fuerte San Lorenzo como sitio turístico. Es un patrimonio histórico que representa la colonia temprana del imperio español en América, o es un patrimonio geográfico que representa la desembocadura del Chagres. O es un patrimonio geológico que representa el encuentro de un acantilado con el mar, o es un patrimonio ecológico, remanso de bosques tropicales con muchas historias que contar, una realmente por cada especie representada en ese bosque.

La investigación es la luz ultravioleta que permite ver el mismo sitio turístico desde varios ángulos. Para la industria turística esto es como tomar el mismo producto y venderlo varias veces. Venderlo desde varios puntos de vista y además, por añadidura, la investigación garantiza que en cada uno de esos puntos de vista, año tras año la historia cambia, es decir, no sólo es un Palimpsesto en el número de puntos de vista, sino es un Palimpsesto desde el punto de vista de la progresión temporal.

La competencia en el sector turístico requiere una diferenciación del producto turístico nacional del resto del mundo y ya han oído muchas de las razones por las que el turismo en Panamá muestra características únicas. Pero teniendo esas características únicas, el conocimiento nos va a permitir comunicárselo al turista que viene a Panamá. Imagínense, por ejemplo, lo que sucede cuando empecemos a descubrir vestigios del ataque del inglés Henry Morgan al Fuerte de San Lorenzo. Inmediatamente empiezan a hacerse conexiones no sólo con la historia del país, sino con el contexto caribeño, con el Estado de Jamaica, con el Imperio Británico de entonces y con la cultura europea. O cuando se analice la evolución geológica de la cuenca del Chagres, cuyo caudal permite el funcionamiento del Canal de Panamá.

La competencia turística me recuerda la obra "Las Mil y Una Noches". El rey Shahryar desarrolla una gran adversión por las mujeres de ese reino y decide que cada día se va a casar con una mujer nueva en el reino y al día siguiente la va a ejecutar. Y así empieza, y día por día va desapareciendo una mujer de ese reino. Hasta que la hija de Su Bizir desarrolla un nuevo método para salvar al reino y solicita casarse con ese rey. Entonces la primer noche empieza a contarle una historia, una historia larga y no la termina esa noche, así que al día siguiente el rey, antes de matarla, le solicita que termine la historia que efectivamente ella termina, pero luego empieza otra historia. Y así viene Alibabá y los 40 Ladrones, Symbad el Marino, Aladino y la Lámpara Maravillosa y se pasan las mil y una noches, hasta que el regente se olvida o desiste de matar a las mujeres del reino.

Bueno, la competencia turística es como este rey, se nos viene encima en forma inexorable. A lo mejor soy un poco cruel con la alegoría, pero la investigación es como la hija de Su Bizir, generando interpretación tras interpretación para lograr que el turista regrese al país, prolongue su estadía en el país y saque el máximo de esa experiencia que recibe. Esto no es más que apostar al valor de la educación y el conocimiento. La educación siempre paga, aunque sean cinco minutos o una vida entera de aprendizaje. Pero para que esto resulte, es necesario que en la alianza Turismo-Conservación-Investigación se desarrolle un lenguaje común, se entiendan las inquietudes y los retos de cada sector, asi como la escala temporal a la que funciona la investigación. Esto es un reto formidable, porque en la mayoría de los países del Tercer Mundo y Panamá no es una excepción, existe poco vínculo entre la investigación y el sector privado.

La inversión en Panamá del sector privado en investigación es ciertamente baja y mientras esa postura no cambie, el valor de ese conocimiento que genera la investigación no será parte del valor agregado de la industria turística o de cualquier otra industria del sector privado. Y a pesar de que ese reto es formidable, a ustedes les consta a través de estos días, que las personas que están convergiendo en esta alianza son personas formidables. El ser humano es la mejor garantía de éxito frente a un gran reto.

Esta colaboración tiene que ser una colaboración basada en el beneficio mutuo, no hay que ir

muy lejos. Aquí en la región centroamericana, en Belice por ejemplo, la finca Ix Chel contiene rutas de medicina forestal tropical, que recibe visitas al ritmo de aproximadamente 5000 personas por año, cuyos ingresos han permitido a los administradores financiar varias hectáreas de terreno dedicadas a la investigación de plantas medicinales. Esa actividad genera interés por esos turistas de visitar la granja, regresar y aportar su grano de arena al desarrollo de esta finca. Es decir, se beneficia el sector turístico, se beneficia el sector de investigación, se beneficia el sector de conservación. Entonces lo que se puede hacer es amplio y recorre varios niveles. Un nivel mínimo es el de divulgación, ya que existe gran cantidad de información, los periódicos locales rutinariamente divulgan información científica, histórica, antropológica y geográfica del país. Simplemente existe la necesidad de recogerla y presentarls en la forma adecuada y de allí se puede pasar a la interpretación, donde la forma de ver esa información es específica y aumenta el valor agregado de la información que se entrega. Y pasamos por la investigación vocalizada, por ejemplo en las rutas temáticas que pretendemos desarrollar, para lograr explicar la experiencia que está teniendo el turista y finalmente, por supuesto, investigación aplicada y básica que va generando una serie de conocimientos cuyo impacto es impredescible pero siempre, siempre beneficioso.

Entonces Hana, intentando contestar la pregunta, cuáles son las aspiraciones del sector de investigación en esta alianza, yo creo que la aspiración es muy básica y muy simple. Nuestra aspiración es que desarrollemos en conjunto una cultura turística en Panamá que valore el conocimiento. Todo lo demás, la legitimidad social que adquiera la labor científica, el patrocinio de la investigación, va a fluir paulatinamente del éxito que tenga una cultura turística que valore el conocimiento y ese postulado yo creo que es completamente realizable en un país con la energía que está demostrando Panamá y con las grandes ventajas desde el punto de vista de factores únicos de turismo que ustedes han estado escuchando.

A PERSPECTIVE FROM A REPRESENTATIVE
OF AN INDIGENOUS COMMUNITY

Sr. Gilberto Alemancia

Panama Tourism Bureau (IPAT),

TCR Unit, Naturalist Guide and Ecologist specialized in Indigenous Issues

The Role of Indigenous Cultures and Academic Institutions
in Tourism Development Programs

Gilberto Alemancia, Carol J. Hodgson and James R. Hodgson

Indigenous Perspective

Indigenous people have long held that the land is sacred along with everything in it. They have a spiritual relationship with the land. Nature, as well as the earth, is perceived as a woman. The earth is the body of the Great Mother, caring and generous. Her union with the Great Father gave birth to all plants (her garments), animals and humans. Even today, this environmental interpretation is used to teach the young the need to preserve and conserve natural resources because they are the gifts from the mother to her children.

The biodiversity of a region and the subsequent ways in which this diversity is utilized is of primary importance to indigenous communities who depend almost exclusively on their natural environment. Since they consider themselves as a part of the natural world and not separate or above it, indigenous cultures have learned to live as one of many species within a harmonious ecosystem. The entire planet and all its creatures are members of a community of need. This traditional interpretation of humans and nature as a whole entity is the ethic that sustains these communities.

To create an equitable and sustainable future for all humankind in harmony with nature, there must be a balance between scientific knowledge and the traditional knowledge and values underlying indigenous cosmovision. A practical and profitable means of communicating this holistic interpretation of the world could be through cultural heritage tourism programs. Such programs, devel-

oped through visits to indigenous communities, could serve as demonstration models of the benefits of a new respect for the earth and the need for humankind to care for the natural wealth that has been placed on the earth for its benefit. Moreover, knowledge about indigenous culture and traditions could be exchanged utilizing traditional methods such as stories, narratives, dances, ceremonies and rituals, thereby helping to preserve from extinction the cultures themselves.

The Republic of Panama is a country of vast biodiversity with potential for scientific discovery. Panama is also home to seven varied and diverse indigenous communities represented by the Kuna, Embera, Wounaan, Guaymi, Bugle, Nasos (Teribe), and the Bribri Indians, each with their own traditions and customs. These traditions, customs, and myths incorporate the belief of the Indians' oneness with nature and have contributed to their ability to sustainably manage the communities where they live for hundreds of years.

Panama, as the "Crossroads of the World," has a long history of hospitality toward visitors from faraway lands. The first guide who helped Balboa discover the Pacific Ocean was an Indian.

However, past experiences of Panama as a crossroads have not been without cost. The Spaniards sought to conquer this New World and suppress the native populations. Indigenous peoples have fought fiercely for control of their Panamanian mainland since the early 1500's, with the Kuna going to war most recently in 1925 over tribal rights to ancestral land.

As the millennium approaches, many Panamanian indigenous groups are preparing to again welcome foreign visitors. This time Panama hopes to open its doors to those who can appreciate its intrinsic spirit of biophilia and its accumulated knowledge and experience of managing it's natural resources. Indigenous communities can be a place where tourists and scientists alike observe and investigate the natural world. However, any cultural heritage tourism program dictates the consultation with and the involvement of the communities themselves. The truly successful and sustainable program will be one that includes the indigenous people as active players in the decision making process and returns a share of the revenue to the community. Creating an environment where indigenous people are proud of their customs and traditions, their native music, art and crafts and are willing to share these with visitors is imperative to creating a sustainable future and preserving the community culture for the next millennium.

Because of the enormous potential for destruction of the tropical ecosystem and the loss of sustainability of indigenous cultures through the influences of modern society, it is imperative that scientific and tourism activities be well planned. Many cultures can be greatly affected by irresponsible visitors and enterprises. The traditions and attitudes of a community along with pertinent indigenous knowledge can be lost or changed overnight because of irregular and unsustainable but highly profitable activities in their communities.

The extent of the cultural and environmental impact of tourism has generally not been assessed by the host communities or the tourism industry before embarking on an ecotour program. For this reason careful research by all parties is essential. Indigenous groups must be respected and their community not simply viewed as a "cultural zoo." Additionally, there must be a balance between the ecological carrying capacity of the local environment, the well-being of the communities, and the interests of visitors, investors, and tourism agents. Indigenous cultures must play an integral role in the planning, administration and evaluation of the tourism activity developed on their land if any tourism program is to be truly successful.

Academic Perspective

Universities and colleges have a major role to play in the research, education, policy formations, and information exchange to address fundamental problems and reverse unsustainable trends (Association of ULSF 1990). Moreover, according to The Belgrade Charter (UNESCO-UNEP 1976), written by 20 world experts, it is the goal of education to "develop a citizenry that is aware of, and concerned about, the total environment and its associated problems..." Additionally, academia seeks to guide students to understand, appreciate and sustain environmental systems in their totality, a totality that includes indigenous cultures.

Indigenous knowledge holds valuable information for creating and maintaining ecologically sustainable systems. It is also as equally important, as reported by Gadgil et al. (1993), to conserve the diversity of local cultures and the indigenous knowledge they hold as it is to conserve biodiversity for sustainability. To that end, indigenous tourism based on the community or group's unique cultural and land identity and managed within the group (Swain 1989), when joined with ecological tourism that emphasizes the natural environment, can serve as an integrating educational concept.

One of the first indigenous model programs used for nature conservation and tourism in Panama was the creation by the PEMASKY group in 1983 of Nusagandi (Udirbi), a 60,000 hectare primary forest reserve owned and operated by the Kuna Indians of Panama. Objectives of the program include advancing scientific investigation of the ecosystem, inventorying flora and fauna, and developing ecological tourism. The reserve is intended to be a model of effective indigenous political action and conservation, lending hope to the preservation of renewable natural resources in the neotropics (Swain 1989). Infrastructures created within Nusagandi include a dormitory for 40 people, separate kitchen, cold-water showers, and five interpretive paths for birders, nature lovers and scientists and students that come to study tropical biology. The primary forest of the reserve offers both scientists and interested laypersons (eco-tourists) access to an ecologically unique and virtually unstudied area. Nusagandi represents a great potential for developing educational and research tourism programs, especially when combined with indigenous tourism to nearby communities. As a land use model for ecological tourism, Nusagandi has played an integral role in a course/program offered in the United States.

Since 1993, the Natural History Field Study Course: Panama, taught at St. Norbert College (SNC) in De Pere, Wisconsin, U.S.A., has incorporated ecological/indigenous tourism to create a model with which the students as human beings can develop an appreciation, awareness and ultimately a sense of responsibility for their impact on earth's environmental systems. Because environmental study is not a particular subject area, but rather a process that can be applied to all subjects, this natural history course is open to all majors, although the majority of students applying for seats in the course are Biology or Environmental Science majors. While the standard classroom experience simply delivers information, the field trip as a living laboratory moves the students through a series of experiences which guide them to understand the complex nature of the natural and human-made environments, and to appreciate and sustain environmental systems in their totality.

The 16-day in-country experience is the field trip portion of the course lead by two North American biologists (James and Carol Hodgson), with the help of indigenous guide and

Panamanian tour director (Gilberto Alemancia). The trip exposes 14 college students to the natural wonders of lowland tropical forest (Darien), premontane forest (Nusagandi), and coral reef ecosystems (San Blas). Culturally, students have the opportunity to interact with and learn about two indigenous groups, the Embera and the Kuna Indians, and to experience city life in the developing world.

Panama's tremendous biodiversity, it's indigenous Indian cultures, along with the accessibility of its tropical forests and coral reefs, make it one of the leading destinations for serious students interested in nature and ecological studies.

The region of vast tropical rainforest, the Darien, serves the class as a major area of contact with the Embera Indians. In La Marea, a village rarely visited by North Americans, the students observe firsthand how the Indians live. They sleep at in the native tambos of host families. In addition to experiencing traditional dances, native foods and body tattooing with the sacred jagua (a black vegetable dye), the group studies the diverse flora and fauna found in the forests and waterways.

The SNC group experiences a total rainforest immersion during the days spent at Nusagandi located at 500 m on the Continental Divide. This stay affords students the opportunity to study, both day and night, the ecological systems and zones in this premontane area, which is spiritually vital to the Kuna shamans. Night hikes through the rainforest, when the forest comes alive, become a significant life experience in natural surroundings for the majority of the college students. The major portion of the student science research projects is conducted here.

The field trip concludes on the islands of the San Blas Archipelago in the Caribbean, home to the Kuna people. The students stay at night in thatched cabanas and by day snorkel the coral reef studying reef ecology and the marine landscape. They also learn about and interact with the Kunas. Some cultural as well as biological/ecological research projects have been conducted by the students on both Red Snapper and Carti Islands.

Meeting one day a week during the fall semester, the students study tropical nature and design the research projects they will conduct while on the field trip. Extensive lectures and handouts prepare all students for travel in the developing world. Additionally, students are briefed about the cultural histories, customs, manners, and daily activities of the indigenous communities they will visit in order to prepare them for these cultural exchanges.

During the second semester, the group continues lecture material on tropical biology. Additionally, the students work up the data collected and submit their project reports or manuscripts for review and for possible presentation at various professional conferences. A listing of published abstracts of student presentations can be viewed on the web at: www.snc.edu./~hodgjr/!panama.htm

Recommendations

▌ The development of any indigenous/ecological tourism program that involves or affects indigenous lands must consider the people's right to self-determination and include their participation from the beginning (Houseal et al. 1985). It follows that the success of any program depends on building a local constituency that has a vested economic interest in protecting their

culture and natural resources and imparts a sense of ownership and autonomy to the community. Planning must begin with up-front discussions with these groups, integrating the conservation of their ecosystems. Additionally, each program must be distinguished by the unique character of the community's natural attractions and the cultural heritage of that specific indigenous group (Hillel 1997).

▌ Strategies must be formulated that consider both cultural and habit degradation. Indigenous/ecological tourism can contribute to the conservation and economic well-being of indigenous communities, but it also has the potential to destroy the very resources it seeks to protect. Continuing attention must be directed to measuring and monitoring ecological and cultural carrying capacities with assurances that these capacities will not be exceeded.

▌ Tourism management plans must attempt to hire and train local people as guards, guides, craftsmen, reserve administrators, and to manage visitors. The successful tourism program will be determined by the success of incorporating the indigenous communities into the management process and by how well local problems and needs are addressed (Houseal et al. 1985).

▌ Recognizing the beneficial interplay of cultural and biological diversity is crucial for protecting ecosystems and sustaining national development. Because indigenous people create a strong link between cultural traditions and the survival of earth's biological diversity, it is imperative to promote activities such as indigenous tourism that reinforce the connections indigenous communities maintain with the land, finding ways to unite cultural and biological diversity for the benefit of both. Thus, to work with indigenous peoples who have more that an economic attachment to the ecosystems where they live is to work for the conservation of biological diversity (Nations 1997).

▌ Raising the environmental awareness of tour operators and participating academic institutions is as important as indigenous community participation in making tourism an effective sustainability tool (Hillel 1997). Efforts must be directed on helping operators create partnerships with indigenous communities, scientists and interested laypersons, and academic institutions.

▌ Extended emergence experiences in tropical rainforests and coral reefs are and must be developed for students. Such opportunities are necessary to encourage basic research and monitoring that serves to provide data on particular ecosystems and the relationship between indigenous groups and those ecosystems (Houseal et al. 1985). To this end universities and colleges should work collaboratively with first nations and organizations such as IPAT in the development and operation of field stations strategically located within unique ecosystems such as lowland rain forests, montane cloud forests and coral reefs. The Kuna-run lodge at Nusagandi and the St. Norbert College natural history field course program could serve as a model. It is further recommended that researchers encourage and strengthen the participation of the indigenous inhabitants in the implementation of the investigations. Training indigenous assistants, explaining research objectives, and including them in project execution serves to establish long-term relationships between indigenous peoples and students and scientists. This in turn encourages further exchanges of assistance and information (Houseal et al. 1985).

▌ It is lastly recommended that student groups planning to spend time in indigenous villages or unperturbed ecosystems be given sufficient natural history instruction and environmental and cultural-sensitivity training.

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Part B

SCIENTIFIC PANEL

First Presentation:

"DELIVERING STRATEGIC KNOWLEDGE TO A DYNAMIC INTERNATIONALLY COMPETITIVE AND SUSTAINABLE TOURISM INDUSTRY"

Presented by: Terry De Lacy,

CRC for Sustainable Tourism, Griffith University, Australia, www.crctourism.com.au.

It is theory that dictates what we observe
Albert Einstein (quoted in Bowkett, 1996)

In this paper I will present, as a case study, how we in the Australian Cooperative Research Centre for Sustainable Tourism have approached the problem of producing and delivering strategic knowledge to enhance the environmental, economic and social sustainability of tourism. I hope this will serve as useful background to the exciting challenges you have in Panama in developing a nature based tourism economy. Although Australia and Panama are very different, they have one thing at least in common—the importance of nature and landscape in defining the image of their country and the potential to commodify these beautiful, unique and valuable natural environments in enhance the economic development of their communities.

Meeting the research needs of the Australian tourism industry

The Australian tourism industry has grown rapidly within the last decade and now contributes significantly to the national economy. In 1997 tourism earned $16 billion in exports, accounting for approximately 8% of gross domestic product. Recent research indicates tourism is the largest industry sector employer (Bureau of Tourism Research, 1997); in excess of one million Australians are employed as a result of travel and tourism. It is widely agreed by industry advocates that tourism development has progressed to a point where many key issues must be addressed to assure continued success. This is driven by many factors, including: the 2000 Olympic games which will focus international attention on Australia; a competitive global market; the diversification of tourism products to meet the demands of the increasingly discerning consumer; increasing density of development in the coastal zone; an identified need for regional development; and greater awareness of the social and environmental impacts of tourism.

In a recent industry report to the federal government Hutchison (1997) highlighted the urgent need for a substantial increase in the information and knowledge base upon which industry policy, planning, investment and management decisions are based. In particular he indicated that:

◼ a sound research and statistical base for the tourism industry is critical to maintaining its international competitiveness;

◼ the data available to enable sound infrastructure investment, appropriate product development and effective marketing strategies is either scarce, deficient and in the case of most small businesses, non-existent;

◼ tourism research is desperately needed by all tourism businesses and by governments to provide satisfactory evidence of return on investment; and

◼ the foundation of future tourism rests with small developing businesses primarily in the regions of Australia and it is here that data was found to be significantly deficient.

Important statistical and market data is collected and analysed by the Australian Bureau of Statistics, Bureau of Tourism Research (BTR), Tourism Forecasting Council, and federal and state tourism authorities. However, little strategic work is done to understand the:

◼ dynamics of source markets;

◼ subtle and every changing motivations and desires of the postmodern tourist consumer;

◼ structure of particular tourist systems;

◼ yields, costs, benefits and alternatives for various tourism systems;

◼ principles of sustainable planning of destinations, natural resources, infrastructure and regions;

◼ development of reliable predictive models for sustainable tourism products;

◼ travel and tourism impact and opportunities of changing technologies; and so on.

The attractions of Australia's unique natural heritage and climate are recognised as primary industry strengths for international competitiveness (Hutchison, 1997) including, but also surpassing, icons such as Uluru, the Great Barrier Reef, and kangaroos and koalas. Even the Australian 'beach' image is dependent upon natural coastal environmental assets. Tourism, more than any other industry sector, relies on the maintenance of environmental quality. As well, ecotourism is often considered to be a viable alternative landuse in sensitive natural areas, as well as a source of funding for managing rare species, threatened habitats and protected areas. However, little research has been carried out to provide a sound basis for these developments.

Thus, despite it's immense value to the Australian economy, employment, environment, and regional development (in particular indigenous development), the research and development (R&D) investment in tourism by the private and public sectors is minimal (Table 1). What research is done is not based on effective collaboration between industry and academic researchers resulting in duplication of effort, poor strategy development and an overall waste of very limited resources.

The failure of tourism research in Australia

Table 1 clearly demonstrates a major market and public policy failure. Why?

Table 1. **Research and development effort by industry, 1994-95** (adapted from Hutchison, 1997; p54).

	Industry product as share of GDP	Industry share of total exports	Govt R&D expenditure as share of		Total R&D expenditure as share of	
			Industry product	All Govt R&D	Industry Product	Total R&D
	%	%	%	%	%	%
Agriculture, forestry, fishing & hunting						
	3.2	21.1	4.1	27.4	5.3	9.5
Mining						
	4.4	36.0	0.7	6.5	2.7	6.7
Manufacturing						
	14.8	18.4	0.4	11.3	3.5	29.2
Transport & Communications						
	9.1	8.3	0.2	2.8	1.8	9.2
Tourism						
	7.1	12.6	0.03	0.4	0.06	0.2
All Industries						
			0.5		1.8	

The failure of the Australian community to provide effective strategic knowledge to its tourism industry may be attributed to:

▌ the systematic failure of the market to provide the required research investments;

▌ the historical distribution of Australian public research investment away from service industries; and

▌ the separation between research suppliers and users in many sectors of the Australia economy.

Failure of the market.

 i) It is estimated that 80% of the Australian tourism industry comprises small to medium-sized businesses (Ruthven 1998) (as tourism is not an 'official' industry category, reliable policy data is notoriously difficult to obtain). Operators in these size-classes lack the capacity to conduct research into anything other than their own historical performance.

 Some of the larger enterprises, such as Qantas, obviously invest heavily in research. However, many of Australia's large tourism enterprises are multinational and invest their research dollars in North America and Europe.

 ii) Beautiful but fragile natural areas are commonly sites of tourism activity, but any environmental impacts are external to the commercial success of individual operators. These

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externalities, which tourism has in common with other industries operating in sensitive environments, has resulted in an underinvestment in associated environmental research.

iii) Regional economies in Australia are suffering from an historical downturn in commodity prices, particularly for agricultural products. This is devastating many communities. While tourism is one of the few sectors of the economy with the potential to deliver sustainable regional development, structural impediments inhibit development outside the major gateways and cities. Consequently there is insufficient impetus to stimulate investment in producing strategic regional tourism knowledge so essential for infrastructure and product development and marketing.

A bias against service industry research

Service industries comprise 75% of the Australian economy and account for 80% of total employment, yet it is estimated public research investment into service sector problems is only a tiny fraction of total public research investment (Mercer, 1998). This may be attributed to the historical dependence of the Australian economy on primary production, which is still reflected in public research policy. For example, agricultural research occurs in seven large university faculties; in many divisions of the Commonwealth Scientific and Industrial Research Organisation (CSIRO); through well resourced state agriculture departments (for example the Queensland State Department of Primary Industries runs over 30 well equipped and staffed research stations and laboratories); and in 14 cooperative research centres. Indeed, total public sector investment in agricultural research is several orders of magnitude greater per GDP dollar than in tourism (Table 1). In addition, the major source of federal government grants for innovation in the private sector, the AusIndustry R&D Start Program, recognises only activities developing 'physical' products for 'manufacture'. Social and business research into human behaviour, business systems, information needs and so on are considered as 'market research' and hence ineligible for grants.

The gulf between research providers and users

It is estimated that 50% of growth in OECD economies can be attributed to the uptake by industry of research innovation (CRC Association, 1997a). However, the degree of uptake in Australia is far from optimal (CRC Association, 1997b) and industry investment in research and development is well below the OECD average. In Australia there exists a separation between the operational spheres of researchers and research users. This may be partly attributed to a view espoused in a Draft Industry Commission Review of Research that researchers 'cannot be trusted to set the research agenda' (Cullen, 1996) and a tendency towards anti-intellectualism in Australian culture. The 'ivory tower' mentality prevalent in academic institutions may serve to reinforce these views. Government and industry investors clearly expect that research will benefit socio-economic objectives beyond simply the advancement of knowledge (Turpin et al., 1996). Conversely, all aspects of the research continuum, from basic (advancement of knowledge, development of theory, diversification of concepts) to strategic and applied (practical innovation relating to a defined application), have values which might not be appreciated by those not directly involved with research (Cullen, 1996). The issue, more specifically, is that there exists a communication breakdown in which research outcomes and their value are not made clear to the potential research users, and this is

partly due a limited awareness in the research community regarding the nature of issues which are relevant to the users.

In an attempt to address, in at least some small way, the chronic lack of strategic information for the tourism industry, the Australian Government established a nationally funded Cooperative Research Centre for Sustainable Tourism.

The Cooperative Research Centers Program

Forging collaborative partnerships

The failure of the market to invest or participate in research with long-term and strategic benefits has implications for national economic, environmental and social welfare. An essential role of government is to address such failures. One policy initiative, introduced in 1990, was to establish the Cooperative Research Centres (CRC) Program. The objectives of CRC program are to:

- Establish internationally competitive industry sectors through supporting long-term, high quality scientific and technology research.
- Stimulate a broader education and training experience, particularly in graduate programs, and enhance employment prospects of students through involvement in major cooperative, user-orientated research programs
- Capture the benefits of research by strengthening the link between research and its commercial and other applications
- Utilise national research effort and resources more efficiently by promoting increased co-operation and building stronger research networks.

CRCs provide a focal point for research within a nominated field by attracting funding, formulating strategic research plans and disseminating outcomes. They are generally based at universities or CSIRO, with management boards including representatives from private organisations and public sector agencies; thus linking researchers with research users. Broadly, research users and researchers jointly select research projects, which are funded by the research users in addition to a public seed grant. The research institutions receive funds to undertake the nominated projects, but also contribute 'in kind' resources, such as time and infrastructure. The unique feature of the CRC program is that it strengthens collaboration by putting in place formal long-term strategic contractual agreements between research providers and research users in the public and private sectors (CRC Association, 1997b).

By 1997 there were 67 CRCs covering a wide range of disciplines, from agriculture, mining and manufacturing technology to information and communication technology and environmental management; and from 1997 one in Tourism.

The CRC for Sustainable Tourism

Vision

In August 1997 the concerns of the tourism industry were heeded with the establishment of the CRC for Sustainable Tourism (crcTourism). Through this organisation an initial injection of

$14.72 million of public funds over seven years have been committed to help develop 'a dynamic, internationally competitive and sustainable tourism industry' by 'delivering strategic knowledge and products to business, community and government to enhance the environmental, economic and social sustainability of tourism'.

Structure

CrcTourism is incorporated as a limited liability company. All partners (Box 1) are shareholders in the company and contribute substantial cash and in kind resources each year of the seven year initial life of the company. Industry participants (Box 1), while not shareholders, contribute to individual projects and programs. A board is responsible for the management of the centre and comprises one director from each participant plus two independent directors. Under the board, the crcTourism management structure incorporates: executive, finance and audit, management, research and industry committees, plus an industry forum. In practice crcTourism operates on a national level; while the 'headquarters' are at Griffith University, most of the subprogram coordinators are based at participating universities. In addition, 'geographical nodes' are being established in each of the states and territories, which both facilitate national coordination of research and allow a focus on local tourism problems.

The board, various committees and the industry forum are the means whereby the stakeholders have input into the research strategy. Industry committees have been established by Tourism Council Australia (TCA) to review each research program and evaluate research proposals for industry benefit, prioritise them and suggest potential industry participants.

Box 1: Participants in crcToursim as of March 1999

Tourism industry association partners	University partners
Tourism Council Australia	Griffith University
Australian Federation of Travel Agents	James Cook University
	Northern Territory University
	University of Queensland
Government partners	
Tourism Queensland	University of New South Wales
Tourism New South Wales	Southern Cross University
Tourism Tasmania	Victoria University
Western Australian Tourist Commission	La Trobe University
Canberra Tourism and Events Corp.	University of Tasmania
NSW Parks and Wildlife Service	Canberra University
Tourism Victoria	Murdoch University
	Edith Cowan University
	University of Technology Sydney

Industry participants	
Qantas Airways Ltd	Touraust Corporation
Gold Coast City Council	Warner Brothers Movie World
Conrad Jupiters	American Express
Compaq	Restaurant & Catering Association
Ernst and Young	Atlas Travel Technologies

Programs

Through the initial stages of collaboration crcTourism was able to broadly identify key areas for targeting strategic research. This was the basis for the three research and development and two education and extension program areas, under which major sub-programs and individual projects are being developed (Box 2).

Box 2: crcTourism programs

1.   Tourism planning and environmental management R&D

Aim:

Develop improved ecosystem, environmental and heritage management tools and planning systems to: enhance the quality of tourism products; reduce compliance costs; ensure the sustainability of underlying ecological processes and heritage values; and deliver increased economic, social and cultural benefits to the community.

Sub-programs:

◼ Tourism development and ecosystem management in the coastal zone.
◼ Best-practice environmental management in tourism—a crcTourism/TCA 'Green Leaders' initiative: tours; lands; and sites.
◼ Wildlife tourism—identify and realise opportunities for wildlife tourism and propose measures to facilitate its sustainability.
◼ Planning for sustainable tourism—construct principles to guide the planning and regulatory framework for tourist development.
◼ Mountain tourism—identify and realise opportunities for mountain tourism and propose measures to facilitate its sustainability

2.   Tourism information technology, engineering & design R&D

Aim:

Address engineering, technological and infrastructure issues of specific relevance to the tourism industry by developing cost-effective low-impact technologies for construction, maintenance and operation of tourist resorts; developing cost-effective low-impact engineering solutions for coastal tourism developments; and enhancing the competitiveness of travel and tourism by better use and application of information technology.

Subprograms:

◼ Coastal amenities and the coastal zone.
◼ Waste management, water supply and associated environmental impact issues.
◼ Physical infrastructure design and construction.
◼ Travel and tourism information technology.

3.	Tourism policy, products & business R&D

Aim:

Provide a research foundation for the strategic development of the tourism industry through broad based research projects covering the structure and dynamics of tourism markets, product development, impact assessment, policy and planning frameworks and strategic enterprise management.

Sub-programs:

- Consumer behaviour, market segmentation and marketing.
- Events tourism: the role of events in destination development and marketing.
- Tourism economics, policy and planning.
- Strategic management, business planning and development.
- Regional tourism.

4.	Tourism training and education

Aim:

Through education, training, and developing cross-institutional and industry links, (including international ones), enhance the quality of postgraduate training, improve the delivery and industry relevance of travel and tourism education and training, to facilitate a more internationally competitive tourism industry.

5.	Tourism industry extension

Aim:

Facilitate linkages between users and researchers to: focus research; encourage direct industry involvement in projects; transfer technology into industry; and market research products nationally and internationally to grow crcTourism's research business.

Collaborative research case study 1: Enhancing Wildlife Tourism in Australia

Wildlife tourism is one of the fastest growing sectors of tourism worldwide, estimated to generate an annual revenue of US$47–$155 billion (Higginbottom, 1998). Further, because wildlife are often most abundant far from major urban development, wildlife tourism can provide a much needed boost to depressed economies in rural areas—an issue particularly relevant to Australia. The unique fauna of Australia are a potential tourism resource for both international and domestic markets: according to an international visitor survey (Higginbottom, 1998) the most frequent factor in influencing visitors' decisions to come to Australia is wildlife/nature; and more than four million Australians visit captive wildlife facilities such as zoos each year. However, this potential has not yet been systematically explored and effective marketing approaches to promote wildlife attractions have not been developed.

While having considerable economic potential, wildlife tourism based on free ranging animals has the potential to destroy the very resource on which it is based. For example, there are concerns about the impacts of whale watching and artificial provisioning of wildlife for tourism in Australia; yet there have been few attempts to assess or monitor such effects.

Research on wildlife tourism requires investigation of the interactions between the tourists; the tourism operations and operators; the wildlife species and the habitats upon which they depend; and the host communities. Such research requires an interdisciplinary approach bringing together biological, social, and economic perspectives, as befits the CRC model. The strategy for research within the crcTourism wildlife tourism subprogram is three-staged. The first stage will involve collation and analysis of existing information and views of key stakeholders. This will provide guidance as to priority issues to be addressed by the wildlife tourism industry and to provide a direction for future research within the subprogram. The second and major research stage will focus on field research to derive lessons for the future directions and management of wildlife tourism, but will also feed directly into product development. The final phase will use these results to develop policies and products to directly support sustainable management and development of the industry (box 3).

Participants in this program come form many of the crcTourism partner universities together with an extensive range of industry enterprises and government agencies and are coordinated by Dr. Karen Higginbottom from Griffith University.

Box 3: Projected outcomes of the wildlife tourism subprogram

1. Ready access by interested bodies to a spatially referenced database of wildlife tourism activities, resources and regulations.
2. Establishment of a strategic direction for the development of the Australian wildlife tourism industry, with full recognition of the constraints involved.
3. New wildlife tourism activities exploiting previously unrecognised opportunities.
4. Improved market and financial viability of wildlife tourism, with respect to individual operators and the regional and national economy.
5. Improved presentation and marketing of wildlife tourism.
6. Reduced negative impacts of wildlife tourism on wildlife and the natural environment.
7. Improved conservation benefits from wildlife tourism.
8. Improved social and economic benefits of wildlife tourism.
9. Integration of wildlife tourism into regional tourism development.
10. Implementation of policies, strategies, legislation and other institutional instruments to facilitate sustainable development of wildlife tourism and appropriate management of wildlife-tourist interactions
11. New products which will assist in sustainable development and management of wildlife tourism.
12. Enhanced co-operation between natural resource managers and tourism managers in the management of wildlife tourism.

CrcTourism delivering strategic knowledge to the international community: crcTourism international programs

Tourism is a global industry that links Australia economically, politically and culturally to key partner countries in Asia and beyond. The international market is extremely competitive and sensitive to many economic, social and environmental variables in origin and destination countries.

For example, the present turmoil in Asian economies is currently impacting severely on various tourism sectors and destinations. crcTourism operates not only in Australia, but seeks to interact with international partners in both a commercial and research capacity. At present crcTourism is active in China, Nepal, Bhutan and Papua New Guinea. In less developed countries, crcTourism aims to work with local people to enhance conservation and community development opportunities through sustainable tourism enterprise. In addition, crcTourism has recently been appointed as the international environmental tourism research provider for the World Travel and Tourism Council (WTTC).

A key component of crcTourism's international program is the delivery of conservation and sustainable tourism expertise to countries lacking specific human resources and research dollars.

Ecotourism working for Asia's biodiversity

The tourism-conservation-research alliance

Conserving the world's biodiversity requires strategic knowledge, sound public policy and a committed community working through effective local, national and international institutions. It also requires money. Money for conservation of nature (a public good) has traditionally come from public sources; local and national government and international organisations. But the demands on the limited supply of government finances are ever increasing, resulting in totally insufficient amounts allocated to undertake the mammoth amount of research, management and protection required to conserve the world's biodiversity, their habitats and beautiful wild places. Nature conservation even has to compete with other environmental expenditure including the huge sums required to improve waste management systems and to rehabilitate our water and atmosphere.

Environmental finance is hard to obtain in western countries, but almost impossible in developing countries which must give priority to human development policies. Current world financial problems will only reduce availability of government funding.

Conservation as a landuse has to compete with agriculture, forestry, manufacturing, mining, residential development and so on, all of which bring direct financial benefit to local and regional communities. For communities in developing countries in desperate need of development it is hard for conservation to compete for space.

Ecologically sustainable tourism on the other hand does not need to modify the natural environment; indeed it flourishes when environments are conserved or rehabilitated to their most beautiful natural state. Tourism can also deliver sustainable development to local and regional communities, often to people with little other economic opportunities. Tourism can also do much more than this if it is structured to directly assist conservation through funding ongoing protection of biodiversity, delivering injections of money over the long term for major conservation and research developments and educating visitors to positively change their behaviour and attitudes towards conservation.

CrcTourism is working with conservation agencies and researchers in selected countries to develop ecotourism that works for nature conservation and the sustainable development of local, often remote, communities.

Collaborative research case study 2: Wolong Nature Reserve, China

Ecotourism in China

The tourism industry in China is already the sixth largest in the world; in 1997 US$12 billion was generated from foreign tourists (World Tourism Organisation, 1997). The nature-based component of the industry is still in its infancy over much of the country, however protected area mangers sense that the 1990s is a turning point as the number of tourists pouring into nature reserves rapidly increases (Wang *et al.*, 1998).

Much of the tourism occurring in China's nature reserves is *en masse* and poorly targeted, posing a serious threat to the conservation values and the nature experience (Han et al., 1998). In part, this is because many of China's nature reserves are newly constructed or underfunded and lack the research background and administrative sophistication to manage ecotourism. This situation is being addressed by protected area managers, which have recently initiated reviews and strategy development for ecotourism. Among the recommendations for action in a recent report (Han *et al.*, 1998) is the establishment of demonstration sites for ecotourism.

Wolong tourism and the Giant Panda

There is probably no other symbol that evokes the global effort of conservation more than the Giant Panda of China. The Chinese government with the World Wide Fund for Nature (WWF) and various international zoological associations have, over the last 30 years, put in place a range of policies and strategies to conserve the Panda including establishing a network of nature reserves, the most important of which is Wolong Nature Reserve. The managers of Wolong have an enormous responsibility to protect the conservation values of the reserve but the money that they have to undertake this massively important task is inadequate. For example, at this point one quarter of Wolong's Panda population are in captive breeding enclosures, which serve both as a tourism attraction as well as a research and conservation endeavour.

At present Wolong receives 70,000 visitors each year, only 10% of which are foreigners. This is despite its many attractions: it is one of the most biodiverse areas of the world, containing many rare and endemic flora and fauna species; a Himalayan-style landscape ideal for mountain trekking; a 2,500 year old history of civilisation, providing rich cultural experiences; and it is only 2 hours from Chengdu, a city of 6 million. Thus, there exists ample potential to develop an enhanced and viable ecotourism industry. At present, limitations include: low accommodation capacity and quality; outdated and limited information displays; inaccessibility of scenic resources; a lack of tourism services; conservation-tourism conflicts; and the finite capacity of reserve administration to introduce education and training programs.

Recognising the potential and the need, crcTourism proposes to work in collaboration with Chinese Bureau of Forestry to support the development of a world-class model ecotourism enterprise at Wolong Nature Reserve. Project development and management would be controlled by the members of this partnership, drawing on their combined high level ecotourism and conservation expertise plus local knowledge. Funding for the project would be raised by floating a company on global stock exchanges and seeking ethical investors. While the project would be internationally funded and supported, a local focus is intended. Entrance fees and a percentage of turnover and profits will be reinvested in the reserve for research, conservation management and to train

managers and operators. Community development potential also exists for the approximately 5000 people living in Wolong Nature Reserve.

A major objective of the ecotourism developments (box 4) will be to facilitate the dissemination of ecotourism and conservation expertise in China by developing a working demonstration model and establishing an education and training institute.

Box 4: Ecotourism development in Wolong Nature Reserve

Following discussions with the director of Wolong Nature Reserve,
the following ecotourism developments are proposed:

■ A high quality ecotourism village
■ A visitor centre/semi-natural panda viewing activity to provide a world-class, state of the art 'Giant Panda experience' which will minimise the interaction between visitors and the Panda research and captive breeding program
■ A 300 ha rehabilitation enclosure for Giant Panda (soft release) with regulated visitor access
■ Improved low-cost accommodation facilities
■ Ecotourism, wildlife viewing and adventure activities
■ International ecotourism and conservation training institute.

Collaborative research case study 3: Bhutan

Bhutan is the world's only remaining Buddhist kingdom of 46,500km2, landlocked between China and India. The terrain is rugged in the north, with the Himalayan Mountains projecting south to meet the subtropical plains. The culture is strongly Buddhist, and religious practices and festivals are still a major part of life for the 600,000 inhabitants. Government policies reflect the Buddhist philosophy of nature by enforcing 60% retention of total forest cover and other conservation policies (McLaren, 1998). Consequently, this small nation possesses largely untouched biological wealth: more than 700 bird species; 5000 plant species, among them 50 endemic rhododendron species; and 160 mammal species, such as Himalayan musk deer (Moschus moschiferus), Asian elephant (Elephas maximus), greater one-horned rhinoceros (Rhinoceros unicornis), tiger (Panthera tigris), snow leopard (Panthera uncia), bharal or blue sheep (Pseudois nayaur) and takin (Budorcas taxicolor). Unlike many nations, Bhutan can boast a complete representational protection of its rich range of habitats (WWF, 1996).

Despite this biological and cultural wealth, Bhutan is one of the world's poorest economies. Bhutanese rely heavily on shifting agriculture and grazing as well as wild flora and fauna for subsistence. Export opportunities are limited, with timber production limited by the strict conservation policies (WWF, 1996), and hydroelectric power generated by the numerous rapidly flowing rivers is the major export to India. A viable alternative is the development of an effective ecotourism industry, for which the pristine natural environment and fascinating culture are important elements.

At present there is one airport in Bhutan and 35 tourism agencies which offer mountain trekking plus cultural and wildlife tours, generally lasting between one and three weeks. In the early 1990s there were up to 4000 international visitors per year, but numbers have declined since the

government introduced a US$200/day tourist fee in 1997. 35% of the fee goes to the government, and while the balance is retained by the tourist operators, the profit margin is apparently small, plus very little direct benefits to conservation or for community development (McLaren, 1998). Despite this, there is a desire within the community for an enhanced ecotourism industry. For example, ecotourism is a major component of the draft 5-year management plan for the country's largest protected area, Jigme Dorji National Park (JDNP; McLaren, 1998). However, the government in concerned to ensure tourism development does not occur at the expense of a strongly traditional Buddhist culture.

A major barrier to sustainable ecotourism development in Bhutan is a drastic deficit of research; with little statistical data, and no resource base or library of information and a lack of expertise. CrcTourism has been asked to work with authorities in Bhutan to assist in strategically developing tourism that Bhutan wants.

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Second Presentation:

"ECONOMIC DIMENSIONS OF HERITAGE TOURISM THROUGH A TOURISM-CONSERVATION-RESEARCH PARTNERSHIP"

Presented by: Theodore Panayotou
Harvard Institute for International Development

Nine Key Questions

1. What are the market drivers of experience-management-based heritage tourism?
2. How does experience-management-based heritage tourism differ from sun-and-sand tourism and conventional ecotourism?
3. How do Tourism-Conservation-Research partnerships contribute to the national economy?
4. How does TCR contribute to employment in novel ways?
5. How do TCR partnerships contribute to quality, carrying capacity, economic security, and sustainability, or in other words, to sustainable competitiveness?
6. How can TCR investments create positive externalities and raise the rate of return to existing tourist investments?
7. How can experience management become a potent force for conservation and an effective instrument and source of financing?
8. How does the Tourism-Conservation-Research partnership respond to the perennial challenges of these three sectors?
9. What are the main areas of economic research needed to establish the competitiveness and sustainability of TCR as an engine of growth in Panama?

1. What are the market drivers of experience management based heritage tourism? [Table 1]

▌ Demand Side
- Demographic trends (baby-boomers approaching retirement age)
- Rising real incomes (upmarket, experience-intensive heritage tourism is income elastic)
- Rising educational levels (a larger percentage of educated tourists opt for heritage tourism)
- Increased health consciousness (causes a shift from sun-and-sand tourism to natural and cultural tourism)
- Increased environmental awareness (leads to rapidly growing demand for non-destructive experience of natural and cultural sites)

■ Supply Side
  - Falling real travel costs (means that formally distant or inaccessible natural and cultural sites become physically and economically more easy to access)
  - Advancing information technology (favors knowledge-intensive, experience management based heritage tourism)
  - Growing knowledge about biodiversity, ecosystems and native culture (it enriches the tourist product with educational and scientific value moving it upmarket where price elasticity is lower)
  - Diminishing supply of natural and cultural sites (due to deforestation, land use change, urbanization and industrial development) increases the value of remaining sites and of heritage-based tourism.

Table 1. Market Drivers that are Transforming Natural and Cultural Experience from a Backdrop to the Tourist Product into the Centerpiece

	Conventional Tourism	Heritage Tourism
Demand Side		
■ Demographic trends	+	+
■ Rising real incomes	+	+++
■ Rising educational levels	+	+++
■ Increased health consciousness	-	+
■ Increased environmental awareness	-	+++
Supply Side		
■ Falling real travel costs	+	+
■ Information Technology	+	+++
■ Diminishing supply of natural and cultural sites	-	+++
■ Growing knowledge about biodiversity, ecosystems, native culture, etc.	0 or -	+++
+ positive; +++ highly positive		
- negative		
0 no effect		

2. How does experience-management-based heritage tourism differ from sun-and-sand tourism and conventional ecotourism? [Table 2]

■ it has a higher degree of active participation by the visitor
■ it is non-extractive; it adds value rather than deducts
■ it is non-consumptive; it permits repeat use of the same product
■ it is more education and income elastic than conventional tourism
■ it is more price inelastic (it allows for more product differentiation and less market substitution)
■ it is more sustainable—it does not degrade its own resource base but it invests in its better understanding and protection

Table 2. Comparison of Different Types of Tourist Product

|	Degree of visitor participation	Production of tourist product	Consumption of tourist product	Sustainability
Sun & sand tourism				
	passive	extractive	consumptive	?
Conventional ecotourism				
	semi-passive	semi-extractive	semi-consumptive	?
Experience-management based heritage tourism				
	active and participatory	non-extractive adds value	non-consumptive repeat use of same product	sustainable

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3. How do TCR partnerships contribute to the national economy? [Figure 1]

▮ Contributions of tourism to national economy:
  - value added
  - foreign exchange earnings
  - tax revenues
  - employment
  - multiplier effects (or backward and forward linkages)

▮ Heritage tourism makes all these contributions as well as having more benign social impacts compared with traditional leisure tourism (of the sun-and-sand variety). Compared to traditional ecotourism, it also has the advantage of having more benign impacts on natural systems because much of the access is contextual. It also contributes to the conservation of natural and cultural heritage and the generation and dissemination of knowledge, itself a source of further contributions to the national economy.

4. How does TCR contribute to employment in novel ways?

▮ A major contribution of tourism-conservation-research partnerships is the generation of novel employment opportunities in conservation and sustainable resource management for local communities.
  - these opportunities can indeed be substantial for a country that seeks to develop heritage tourism into its principal industry

Figure 1. Reciprocal Benefits from Tourism-Conservation-Research Partnerships
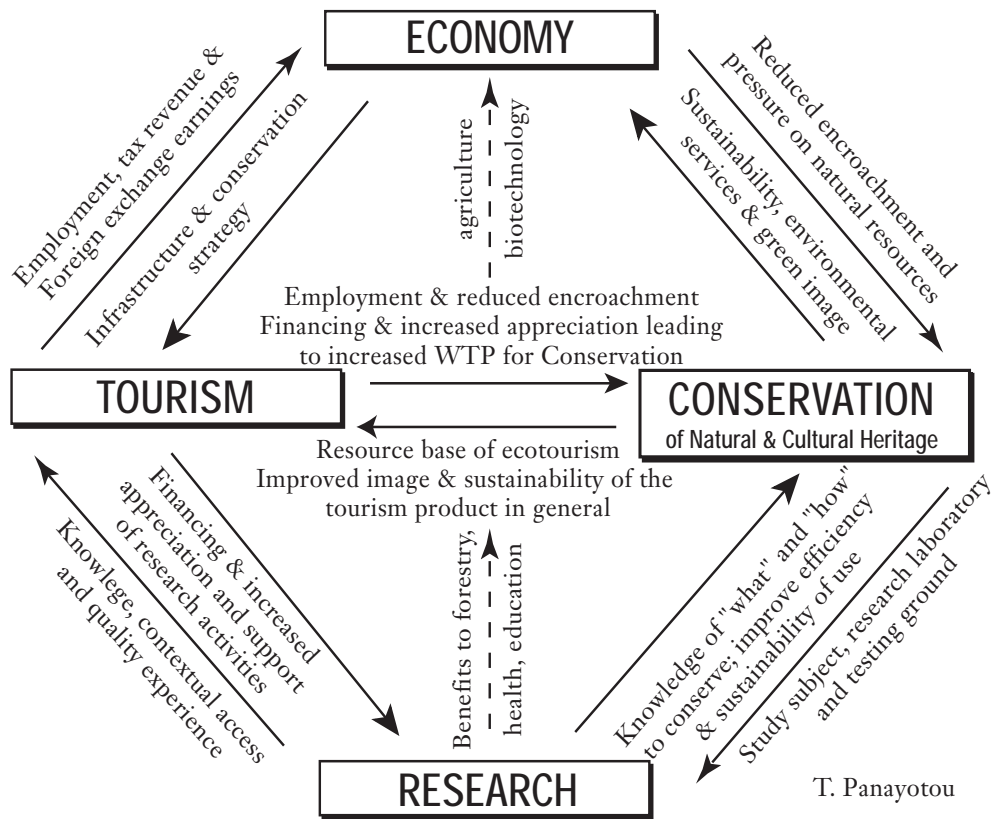
- however, the contribution of such employment opportunities in conservation and sustainable resource management go far beyond their dollar value and the numbers of people they employ

▮ By far, the largest value in such employment opportunities lies in the reduction of encroachment of natural resources that they bring about.

▮ Encroachment, poaching and other destructive activities such as slash and burn agriculture are reduced because:

- better employment opportunities are available to local communities
- the livelihood of these communities is now linked to the survival of those resources rather than their destruction, as was the case previously
- local communities are in the best possible position to prevent encroachment and poaching by outsiders

▮ A tourism-conservation-research partnership also provides opportunities and incentives for local and indigenous people to

- benefit from tourism by being directly involved in the management of heritage resources
- capacity, economic rationale and incentives to keep their culture and traditions alive and evolving

∎ At the same time, involvement of the local people:
- enhances the quality and genuineness of the tourist product and its marketability
- makes tourist development more compatible with and fitting to the climate, landscape, cultural context and local characteristics

Thus, heritage tourism becomes a powerful force in the conservation of culture and nature, making economic growth compatible and mutually reinforcing with sustainability.

5. How do TCR partnerships contribute to quality, carrying capacity, economic security and sustainability, or in other words, to sustainable competitiveness? [figure 2]

A. Quality:

∎ richer and more pristine environments

∎ less wildlife habitat disturbance

∎ fewer encounters of fellow tourists

∎ information, knowledge and interpretation of observed/experienced environments

∎ richer and more diverse experience

∎ combination of the familiar with the exotic

∎ participatory learning, experience enrichment and more active (as opposed to passive) enjoyment of leisure

∎ tailoring to individual tastes/preferences by varying the degree of involvement and intensity of experience

∎ targeting up-market segments

B. Carrying capacity (expanded trough)

∎ information/deeper knowledge

∎ education of tourists—better behavior—fewer impacts

∎ training of guides and tour operators

∎ contextual access

∎ multi-destination routes

C. Economic Security of Investment

∎ protection of the resource base and the flow of "raw material"

∎ acceptability by local communities

∎ future market

∎ employee loyalty

∎ "control" of entire product cycle, from the source of raw material to customer satisfaction and impact on environment

D. Sustainability

∎ consistent/convergent with nature and culture

∎ more cultural and natural resources conserved and available for future generations

∎ more knowledge generated and available for future generations

∎ the ultimate resource base is information and knowledge which are inexhaustible and the only sustainable source of growth in post-industrial societies

∎ consistent with Panama's image and comparative advantages as a service economy that leapfrogged the "dirty" stage of industrialization
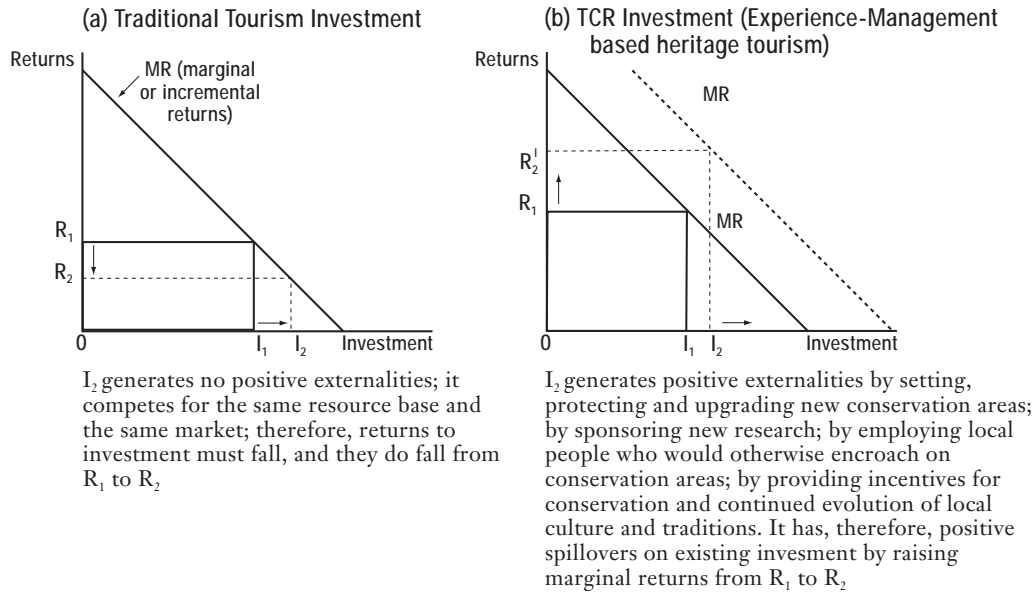
Figure 2. TCR as strategy for sustainable competitiveness
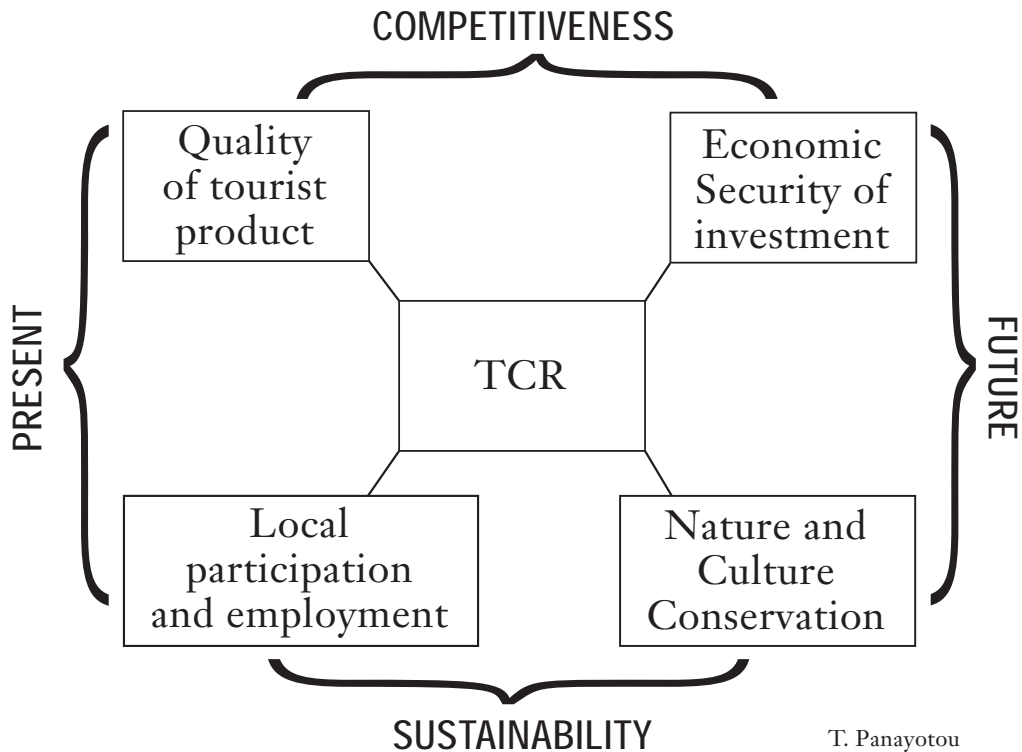
6. How can TCR investments create positive externalities and raise the rate of return to current tourist investments? [Figure 3]

∎ by protecting and upgrading new conservation areas

∎ by sponsoring new research and interpretation of existing research

∎ by employing local people who would otherwise encroach on conservation areas

∎ by providing incentives for conservation and continued evaluation of local culture and tradition

∎ by raising the general awareness and appreciation among the public, the industry and tourists of the value and fragility of natural and cultural heritage

[This contrasts with traditional tourist investments that result in negative externalities and a fall in the return from existing investments, see Figure 3.]

Figure 3. In Contrast to Traditional Tourism, TCR Investments Increase the Return to
Existing Investments

(a) Traditional Tourism Investment

(b) TCR Investment (Experience-Management based heritage tourism)

I_2 generates no positive externalities; it competes for the same resource base and the same market; therefore, returns to investment must fall, and they do fall from R_1 to R_2

I_2 generates positive externalities by setting, protecting and upgrading new conservation areas; by sponsoring new research; by employing local people who would otherwise encroach on conservation areas; by providing incentives for conservation and continued evolution of local culture and traditions. It has, therefore, positive spillovers on existing invesment by raising marginal returns from R_1 to R_2

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7. How can experience management become a potent force for conservation and an effective instrument and source of financing?
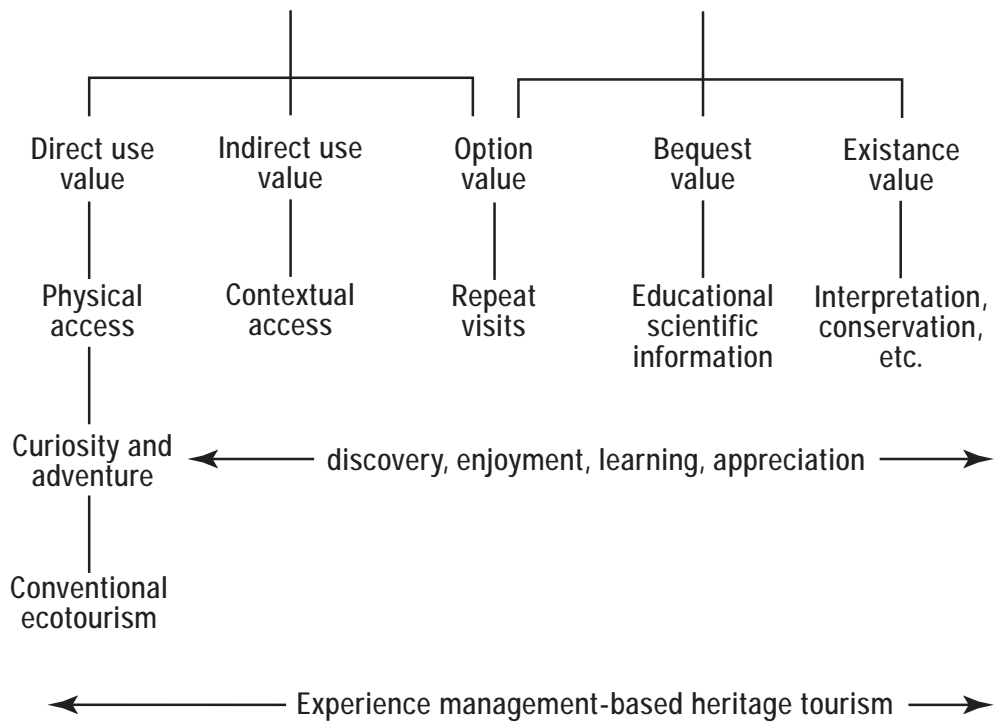
▮ Experience management transforms visitor satisfaction into a resource for conservation by:
- altering behavior on-site towards lower-impact on natural and cultural assets
- increased environmental awareness resulting in more environmentally sound behavior in place of origin
- increased WTP for conservation
- political support for conservation causes

▮ Experience management can serve as a zoning tool by helping to delineate
- tourist staging areas
- distant viewing areas
- contextual access areas
- physical access areas

[And the type of infrastructure for each]

[Transferable development rights can then be employed to conserve private lands that fall within conserva-tion areas—trading with development areas.]

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∎ Experience management can also serve as a vehicle for spreading tourism-generated benefits into environmentally and culturally sensitive areas by extending contextual or virtual access while restricting physical access.

∎ Advancement of knowledge about the history, diversity, uniqueness, fragility and other characteristics help safeguard the asset.

∎ Experience management can directly serve as a financing source and instrument for conservation through:

- patronage of heritage resources

- sponsorship of research for the generation of knowledge and interpretation

- monetary donations to conservation areas for protection and management

- entrance fees for areas with physical access

- establishment of conservation and research funds

∎ In contrast to conventional tourism that captures only the direct use value of cultural and natural assets, experience management-based heritage tourism captures, in addition to direct use value through physical access, indirect use value through contextual access, option value through repeat visits and bequest and existence value through educational information and interpretation (see Figure 4)

Figure 4. Total Economic value of Cultural and Natural Assets

Direct use value	Indirect use value	Option value	Bequest value	Existance value
Physical access	Contextual access	Repeat visits	Educational scientific information	Interpretation, conservation, etc.

Curiosity and adventure ←——— discovery, enjoyment, learning, appreciation ———→

Conventional ecotourism

←——————— Experience management-based heritage tourism ———→

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8. How does the Tourism Conservation Research Partnership respond to the perennial challenges faced by these three sectors?

Tourism: By adding value to tourism resources (both natural and cultural) and using them creatively and sustainably without debasing, cheapening or destroying them.

Conservation: By helping understand, appreciate and conserve as many as possible of the disappearing habitats and critical ecosystems without creating ecological islands in a sea of human activity that are inevitably doomed.

Research: By making the long-term scientific research more appreciated by funders, policymakers, and the market so that sufficient financial and other resources are allocated to research to identify, study, and catalogue (and hopefully conserve) species, ecosystems and cultures before they disappear.

- Experience management-based heritage tourism reconciles:
    - the visitors' satisfaction
    - the tourist industry's profit maximization (long-term)
    - the local people's stake in the resources, claim on a livelihood, and desire to preserve customs and culture
    - the global community's interest in better knowledge and understanding of its natural and cultural heritage (history, culture, and biodiversity)
    - future generations' interest in sustainability
- A TCR partnership is the most promising and synergistic approach to implementing experience-management-based tourism that is internationally competitive and environmentally sustainable with widely shared benefits.

9. What are the main areas of economic research needed to establish the competitiveness and sustainability of TCR as an engine of growth in Panama?

- Identify private and public TCR investments that will generate high financial and economic returns.
- Integrate TCR into a model of the national economy and estimate under plausible scenarios the potential contribution of TCR to the economy in terms of investment, employment, value added, government revenues, multiplier effects and intersectoral linkages.
- Demonstrate how TCR would improve quality and competitiveness, ensure the security of investment and promote the sustainability of the resource base.
- Formulate economic incentives and other instruments which will (a) attract TCR investors to Panama; (b) mobilize private resources for conservation and research; (c) motivate conservation and improvements in Panama City including the clean up of Panama Bay and the effective protection of the Panama Canal watershed.
- Demonstrate how Panama can exercise regional and international leadership by providing a flagship model of a sustainable and highly competitive service economy through TCR and similar partnerships.

Notes to Dr. Panayotou's presentation

Dr. Panayotou's remarks about the need to focus on the up-market segment of tourism provoked a lot of questions. Specifically, many groups feared that by focusing on high rates (less people and more money), a substantial number of people would be taken out of the market, since they would not be able to afford the high prices. This strategy would also greatly constrain and restrict the economic opportunities for local and indigenous communities, relegating their participation to the low end of the service sector instead of providing opportunities for entrepreneurship at the local level, such as for smaller scale tourist facilities run by the local communities.

Dr. Panayotou responded to such concerns by stating that opening Panama's natural and cultural resources to all kinds of tourism would impose a cost on those resources that would not be sustainable in the long-term. That does not necessarily mean that only five-star hotel tourists could bring benefits to the economy. For the lower-end of tourism you could have ecotourism activities with very low costs and impacts, where the net benefits could still be great, provided these people are guided and taught about the surroundings. Dr. Panayotou expressed that there is a lot of evidence around the world showing that the damage caused to the environment (national parks, coral reefs, etc.) is proportional to the number of people that are let into those areas. The situation may vary in certain places, but generally, if you want to maximize the net benefits and minimize the environmental and cultural damage, it is better to focus on the up-market segment of tourism (although not necessarily to the exclusion of the lower scale tourism). In any case, an analysis of environmental, social and cultural benefits and costs must be taken into account.

It is also important to identify the different segments of the market, such as the retired people, the honeymooners, the scientific tourists, the students, etc. What services does each of these segments want? How much are they willing to pay for it? How much is it going to cost for Panama to provide those services? Dr. Panayotou also reminded conference participants that it is important not to confuse quality and scale. In Iceland, for example, small farmers run many ecotourism operations. These high quality excursions allow you to spend ten days "working" in a small dairy farm. Although the dairy industry is currently unprofitable in that country, these farmers have found their niche in tourism. Smaller farms charge higher rates than the larger farms. This example could be applied to Panama's indigenous people, who could provide an intimate, high quality product. TCR projects will aim at preserving Panama's culture. Therefore, indigenous communities will have an important role in the upper end of the tourism product, providing their valuable knowledge about lands, biodiversity and the use of traditional herbs and medicines.

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Part C

WORKING GROUP DISCUSSIONS

Working Group 1:

ENGAGING EXPERIENCE-MANAGEMENT WITH NATURAL AND CULTURAL RESOURCE MANAGEMENT

1. **What are the opportunities and logistics of conservation patronage in the natural and cultural contexts?**

In the natural context, there is an opportunity for Panamanian citizens to become involved at the grassroots level. In the area of bird conservation and habitats, the Panama Audubon Society has been involved in promoting citizen involvement for ten years, giving lectures and conducting bird watching classes. A strategic alliance like TCR should provide conservation benefits that allow Panamanians to become more aware of their natural heritage and the protection of resources.

A unique opportunity that must be seized is the great attention currently given to the Canal's history. It is increasingly evident that a lot of effort must be put into the preservation of this resource, in particular the canal watershed and the management of its biodiversity systems. Watershed management encompasses different aspects of environmental conservation, and requires looking at the whole picture, rather than just narrowing the focus to saving the trees or saving the soil. Watershed management is critical for the economic well being of Panama as a whole, and not just for the tourism industry.

The example of Costa Rica can be used in the discussion of opportunities for conservation patronage in the natural context. Costa Rica has been able to "sell" its natural resources quite effectively because of its enormous diversity of habitats that can be visited and the ease of moving around between habitats. Similarly, Panama should focus on diversity and not just one type of ecosystem or habitat. In addition, since everything is relatively close in Panama and transportation is in fairly good shape, tourist packages should allow visitors to go to a variety of natural settings without much difficulty and in a short time. This opportunity does not exist in, for example, Peru or Brazil, countries with a great variety of habitats but spread over a much larger area and connected with poor infrastructure. There are unsuccessful aspects of the Costa Rica experience that represent things that Panama should avoid or at least control to a greater extent. For example, some coastal parks in Costa Rica have been overused and degraded from tourism use. In this case, ease of access is an issue that has to be addressed. And although Panama is a small country, the issue of access in terms of infrastructure is still a concern.

In the cultural context, there are opportunities and logistics that can be identified from the interaction with local communities, not only indigenous groups, but also all groups located around

areas of high environmental or ecotourism value. A great opportunity in Panama is the fact that most of its indigenous communities are organized and are capable of negotiating as represented groups. For example, one indigenous community has created a non-governmental organization called "Guanamera Emberá Chagres", in the Chagres River basin. By the same token, the group "Aventuras y Maravillas" has developed the conscience necessary to be the main preservationists of their own habitats. Another opportunity presented in terms of collaboration with the communities is the possibility of creating local assemblies to work with governments and communities, where work and investment opportunities in the areas of ecotourism or conservation could be discussed, facilitating coordination and management among different entities. All in all, it is obvious that the TCR alliance must incorporate local communities in its work, since the communities themselves must learn to become self-sustaining with this new model. Otherwise, paternalistic models will be perpetuated and communities will keep expecting problems to be solved from the outside.

From the tourism industry's perspective, there were expressions of concern regarding a generalization by researchers and scientists about tourism entrepreneurs. This generalization assumes that the industry always lacks a respect for the conservation of nature, introduces new biological species, or destroys the resources. But in many ways, the ecotourism resort owner or manager is the ideal person to advocate conservation. In contrast to the scientists who leave the area once their research is finished, the investor must remain where his or her project is for a long time.

There are a number of possible patronage tactics that could make the opportunities described above work within the TCR context. As illustrated by the portfolio of projects described in Section 1 of this report, sponsorship of parks and lands, interpretive centers, and financial support to students are some of the ways through which the industry can be involved. Some hotels have already committed to providing sponsorships to individuals that would like to do their research in the hotel region, with the researchers acting then as naturalists in residence for the tourists. Another patronage opportunity could be the creation of alliances with local communities. A specific program could, for example, sponsor a group of students from Panama and abroad who would come to Panama and stay with the communities. The students would build relationships with indigenous peoples, help in the maintenance of the communities' culture, and provide financial support from their stay. The resort or tourism operation would greatly benefit from the sponsored student who could work in the hotels as a naturalist or history guide. It is important to note that in most cases these students are already sensitized to the culture, physical environment, and philosophy of the people with whom they are going to interact, from hours of reading and lecturing. This is an example of scientific tourism, an activity that generates 30 million dollars a year in Costa Rica.

In order to take advantage of the opportunities and logistics for conservation patronage, it is important to minimize the constraints and attend to the needs that Panama faces in its heritage tourism development. The needs include more advocates for conservation and heritage tourism, funding for conservation, and an effective management of conservation areas. A tactic to address the need of more conservation and sustainable tourism advocates is the creation of an ecotourism association at the national level. This entity would bridge the gulf between hotel owners and managers, other members of the private sector, local communities, government natural resources agencies, government tourism agencies, and academics/scientists. Since ecotourism is a dynamic field,

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it requires frequent discussion among players that customarily do not talk to each other across the table. There are examples of the success of these national-level organizations in Indonesia, Kenya and Belize.

Sponsors from the private sector have already offered to provide donations to support the conservation of heritage sites and scholarships for research at specific sites. Another way to address the need for funding for conservation and sustainable tourism is the creation of a trust for the conservation of protected areas, such as the "PACT" (Protected Areas Conservation Trust) in Belize. Using the PACT example in Panama, the trust could charge every tourist to Panama a user fee upon departure, in addition to his or her normal airport exit fee. Once the trust reaches a substantial amount, funds should be distributed into three areas: government agencies responsible for natural resources management, conservation NGOs and other community development bodies, and communities living in or around protected areas. The fund could be operated as a loan system to allow it to grow, with funds borrowed at a low interest rate. Trust funds could also be used to provide technical support to teach communities how to write project proposals and how to come to a consensus upon what projects to pursue.

In terms of the management needs of an effective TCR alliance that includes local communities, a very recent example in St. Lucia could be used as a model. In this Caribbean nation, a co-management agreement has been established between the Department of Forestry and a local community in the southern part of the country, a protected mountainous area where infrastructure is deficient. The need for a management agreement was prompted by the interest of an increasing number of people in climbing up a mountain passing through the community, an activity being marketed from outside of the community. The strategy used to nurture this co-management agreement was to address the community development needs with some seed funding, improving trails through the community and providing human resource development training to support their ability to function both as guides and as owners, operators and micro-enterprisers. This best practice experience shows that collaboration between parties that have not traditionally communicated can provide long-term management benefits to natural heritage areas, such as those in Panama.

2. **How can we build strategic alliances with local and indigenous communities based on the reciprocity of benefits, mutual respect, and the sharing of native knowledge?**

One way of building these alliances is to provide financial support to indigenous communities so that they can make the necessary investments to offer a high quality tourism product. For this purpose and in addition to the above recommendations, it was suggested that the government should establish credit facilities so that communities will have access to funds. In addition, a tax or contribution from larger scale operators could go towards a fund to promote a greater involvement of the communities. This fund would provide credits for investments by local communities, thus enabling opportunities for entrepreneurship. In addition to funding opportunities, indigenous communities need technical assistance (business and tour-guide training) to establish their own businesses and run them profitably, at a small or large scale. Local communities would also benefit from training in the area of fundraising, which would allow them to take advantage of available international funds for

their enterprises. In programs involving local communities, we should be careful not to emphasize scale over quality; a program run by an indigenous group can be a high quality, intimate experience. Tourists may be interested in ethnographic research, such as use of herbal medicines.

Alliances with the communities can also be built by using some of the profits from the tourism activities to support the education system in those communities. In particular, local schools should be enhanced at the pre-school and elementary level, so that the educational infrastructure grows as the resort grows, and a steady stream of educated employees becomes available. Local school children should also be allowed to participate in nature tours, in order to educate them about heritage tourism activities and the conservation of their own resources.

Community leaders need to be fully informed of the benefits and costs of a particular tourism activity, so that they are able to negotiate and decide what kind of alliance is best for them. It is also important to explain to the communities how a research (and tourism) project can be economically beneficial to them in the long-term. The need for guards represents job creation, and road improvement allows farmers to work more efficiently. Publication of this kind of information with user-friendly terminology needs to be disseminated at the local level.

The TCR plan is based on 18 routes that must involve a variety of players in order to provide diversity around a theme. It would then be beneficial to develop and market tourism packages that build partnerships between large hotel operators and indigenous communities like the Kuna Indians, where the Kuna do not just become workers for the corporation but they are also productive individuals that contribute to social and economic development. Indigenous communities can participate as tour operators themselves and also in conserving, translating and generating knowledge used by the heritage tourism industry. Different kinds of experiences can be packaged together, from the very luxurious to the very authentic. In Kenya, for example, package tours offer a way to "hand over" tourists from 5-star hotels to native reserves; the income goes directly to and stays in the local communities. This type of partnership would also allow for marketing packages that reflect the reality of indigenous societies.

In engaging native groups in the TCR alliance, we should be careful not to overlook those indigenous communities that are not currently well organized. It is important to remember that the Kuna are not the only indigenous group in Panama. There are seven indigenous communities in the country, with completely different social structures and history, including the Ng\be, the Bugle, and the Naso (Teribe), the latter having a similar territorial control to the Kuna's. When groups possess territorial control over the natural resources of a site, they will demand certain guarantees in terms of culture protection and entrance permits. Thus, commercial alliances between hotel chains and tourism operators on one side and indigenous communities on the other will be required. NGOs like CEASPA can help with marginalized communities. There may be a key role for specialists to help engage communities, develop community extension services, outreach or reconciliation.

In order to build alliances based on the reciprocity of benefits and mutual respect, it is also essential that tourism operators and other business people receive training with respect to the area of operation. This includes learning about the indigenous lifestyle and traditions, their beliefs and reality. Thus, tourism programs originating from these alliances will be based on this knowledge, communication among the groups will be enhanced, and many problems will be avoided.

3. How can we energize the local history and culture through the tourism-conservation-research (TCR) alliance?

It is important that tourism development does not occur in an ad hoc fashion, but that Panama plans what kind of tourism it wants to attract, i.e. high quality based on information, knowledge and discovery. Research and transfer of information on the value of heritage resources can energize the local history and culture. However, local people in the routes need to be educated as to the value of research and the costs and benefits of tourism activities. Stakeholders will be motivated to participate if they are involved in administration, management, and control of resulting resources.

In order to energize the local history and culture through sustainable tourism a key requirement is infrastructure. Sarigua, for example, is a very interesting deflated Precolumbian site lying

find that there is simply nowhere to stay. Hotel services are essential for the concept of routes to work.

Many conference participants agreed on the importance of designing and developing two or three initial routes that could serve as demonstration models for the future, starting on a small scale and targeting places that create the best impression. The route that currently offers the greatest variety of tourist potential is the Trans-Isthmian Route, including Panama La Vieja, Portobelo, Camino de Cruces, and many famous historical sites along the Canal. Facilities for this route include accommodations at the city of Panama and the soon-to-open Gamboa Tropical Rainforest Resort. However, many times the biology of a place is emphasized to the detriment of the cultural resources, instead of considering how both contexts can work together. Portobelo, for example, has no hotel facilities. Other next steps are to provide an interpretive center and to identify knowledge gaps.

One of the central concepts of the heritage routes is the interpretive center. If the tourist can not follow the TCR routes, he/she can go to the interpretive center and get a comprehensive synthesis of history, biology and ecology. As interpretive centers are developed for the different routes, it is important to consider how the generation and use of quality knowledge is interconnected to the way this knowledge is transmitted to the tourist and to the communities that will be managing the tourists. A group of trained interpreters capable of digesting and transmitting the scientific information to the tourist is needed to bridge the gap between the scientists and the tourists.

A key challenge for TCR in energizing Panama's history and culture through sustainable tourism is also the question of leadership. It is essential to identify who will analyze the different kinds of tourists' economic classes and ethnic origins, formulate tourist packages accordingly, and market them. An entity must also give guidance to the various communities as well as to the entrepreneurs about the appropriate kind of facility needed for each particular group of tourists. For these various roles, it was suggested that a close cooperation between the TCR alliance and IPAT should exist. In addition, leadership at a variety of levels should be considered.

4. What are the key challenges for integrating tourism quality with environmental and cultural carrying capacity?

While the concept of environmental carrying capacity has received a lot of attention in the conservation community, the meaning of cultural carrying capacity is not so clear. In contrast to envi-

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ronmental carrying capacity, cultural carrying capacity must be defined in relative, rather than absolute terms. It is important to recognize that cultures change all the time, whether or not they receive a lot of outside influence. Integrating tourism quality with cultural carrying capacity requires the establishment of a continuing dialogue between the tourism industry and the indigenous communities, so that the communities understand clearly what experiences the tourists would like to have during their visit. If the tourist traffic in the end precipitates changes in the very things that the tourists are coming to see, then the situation will not be sustainable. Thus, a key challenge is to identify exactly what it is that the tourist wishes to experience by going to a particular local community and how those particular aspects can be preserved.

Carrying capacity is also a dynamic concept that varies in time and space, given the evolution of nature, industry and tourists. Site-and time-specific research must be carried out frequently to determine at a given point in time and for a particular type of tourism, how much impact is acceptable. This issue of the acceptable level of impact is one reason that the partnership tourism-conservation-research is required. One of the main tasks of the TCR partnership should be to determine the quality of tourism in Panama and the carrying capacity of the routes, identifying the cultural and natural resources that are attracting the tourists and at what level of traffic these resources can be preserved. Carrying capacity needs to be defined and agreements made among key stakeholders as to acceptable limits and costs for violations.

It was evident during the conference that there are many examples of cases where tourism activities have been in conflict with the carrying capacity of the sites where those activities take place. For example, each cruise visiting the San Blas area brings about 1,000-2,000 passengers to the islands, a number of people larger than the number of inhabitants in some of these islands. Thus, it is important for tourism operators to realize that different sites posses a specific carrying capacity. Measurements of carrying capacity should also take into account impacts on community values such as tranquility and health, the "psychological carrying capacity."

One challenge that the TCR alliance must face in order to address these conflicts is the need to do research on the carrying capacities of different sites. In order to establish the limits in terms of pollution, climate, emissions, etc. that a place can sustain, it is necessary to answer questions such as how many people can enter a site and how frequently, how long they can stay, what kind of materials the tourists can bring and use, how waste is treated, etc. Another challenge is the establishment of agreements and contracts among key players that will be based on the answers to the previous questions. A suggested way to address this challenge is to set a cap of total aggregate environmental impact that could be accepted, and then allocate that impact into different products, allowing for trade among these products and granting some of these rights to the communities as well. This is one way in which you maximize the value for the acceptable environmental impact. It is important to note that regulations for acceptable impacts cannot be done on a case by case basis, rather they must be set for the whole country. In addition, a system of penalties needs to be established that will enforce these regulations and agreements.

5. How can we integrate the design of quality heritage experiences with the need for community participation and research in sustainable resource management?

In integrating the design of quality heritage experiences with community participation and scientific research, historical and archeological sciences play a key role. There are a number of routes that have been designed around the value of certain historical and archeological sites. Panama does not have many monuments; thus the tourist value of a site depends on the research activities that are taking place at such a site. If there is an excavation open and tourists can see skeletons, pottery, and other findings, they tend to stay longer at that site. Because the value of archeological sites is enhanced by active research, the TCR alliance will need to consider who will finance that research. It is important to note that this kind of activity is different in many ways from "conventional" research, because it must contain the synergy that becomes the attraction to the tourist. It is also important to note that Panama has a very weak structure for the protection of archeological sites and no academic structure for archeological sciences.

The preservation of sites and the conservation of valuable findings, including protection and monitoring activities, are also integral parts in the design of the tourism product. The experience of national and international conservation NGOs should be of great value in this respect. In addition, as the quality experiences are designed, scientific capabilities provided by STRI and other organizations will be needed for activities such as the training of qualified guides and those responsible for monitoring programs. Financial support for these activities will be needed from the early stages of the TCR plan, since these activities involve the development of large databases and require skilled labor.

For the TCR alliance to effectively design quality heritage experiences it must manage for satisfaction of four sectors: 1) tourists, who must be totally engaged and value added to their travels; 2) the business sector, which needs a return for their investment; 3) knowledge providers, who will add value to the resources and 4) people in the local area who will make sustainable the conservation of sites.

6. What kind of monitoring processes must be in place in order to measure the impact of tourism activities upon the natural and cultural resources of the site?

Before the TCR plan begins to develop massive projects of sustainable heritage tourism, it would be advisable to conduct surveys and compile resource inventories that are broad-scaled and site specific in order to:
∎ Obtain solid baseline data before tourism begins and establish control sites to be monitored
∎ Note current conditions before impact occurs
∎ Involve local communities early on in shaping goals of projects, identifying potential impacts and creating simple, effective and realistic indicators of impact
∎ Establish simple broad indicators, e.g. keystone or constructive species, which can serve as flagships for determining impact
∎ Determine carrying capacity (acceptable impact levels) both cultural and biological
∎ Establish national databases that can be shared

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Working Group 2:

INFRASTRUCTURE AS A TOOL FOR INVIGORATING THE VALUE OF NATURAL AND CULTURAL HERITAGE

Discussions in this workshop opened with presentations by four different architects. These presentations emphasized reuse, development and sustainability of infrastructure. Common topics of the presentations focused on the theme, the production of new identities and the preservation of old identities. Presentations also emphasized the relationship between local and global forms of culture, capital, and social organization.

Ben van Berkel discussed the Erasmus Bridge in Rotterdam, which integrates the landscape through infrastructure, connecting the civic life of the city with the identity of each linking point. The political intention behind the building of this bridge was to promote new development through high quality projects. This project's coherence and sense of identity could be extrapolated to the TCR plan, since public science could provide each project with its own identity, which in turn would be related to the whole.

Alejandro Zaera-Polo provided information about three projects that involve multi-modal transportation systems (systems that produce exchange between land and water, or land and air, etc.) and also involve the re-use or recycling of an existing infrastructure for the purpose of tourist or urban development. These projects have sought to avoid two oppositions that very often appear in the development of these types of projects. The first is the idea that local processes and global processes must remain separate. The other opposition is that between development and historical heritage. It was proposed that infrastructure is also part of the heritage. The new infrastructure can and should be developed out of latent traces: it is almost as if we had to reconstruct the landscape and its geology, taking into account some of the already existing conditions.

The first project was in South Korea, where a large urban development was constructed on the waterfront. In this project, the geometry and physical structure of the existing infrastructure was used to create the basic traces for the project. The second case involved the redevelopment of an existing harbor infrastructure right next to the center of Santa Cruz de Tenerife (Canary Islands), turning the infrastructure into a new area of facilities to increase both high quality tourism and services for the citizens. The third project, in the port of Yokohama, Japan, also tried to reuse an existing pier used for cruise traffic. However, in this case the traces of the city were much less important than in the previous case and therefore the design and the efficient performance of the whole infrastructural system became much more important.

Greg Lynn's presentation described the transformation of a New York City 1900s vintage ice factory into a Korean Presbyterian Church. Because there were no precedents for a church of this scale (with a capacity of 3,000 people) for Korean Christians, the architects tried to generate an image of the Church that would combine the history of the factory and the history of the site. In order to achieve this, computer software was used to simulate acoustics, diagrams, and other kinds of functional constraints.

Edward McGrath and Gustavo Arango presented a project that provided a small interior addition of office space to a bank. Their strategy was to use glass and metal, materials that were not found in the rest of the existing building. Their concept was to respect what there was in the building, even though this was not an architectural landmark. By using materials that are not found in the rest of the building, it is possible to differentiate between past and present. The idea of acknowledging existing things also informs the other project of Arango, McGrath & Miro, a house by a lake in Arkansas. The intention of the house design was to "learn" from the landscape, to take its variety and diversity of scales into the existential level of everyday experience.

1. What are the key issues for devising an effective strategy of site selection for sustainable tourism development?

The TCR initiative seeks to integrate three disparate kinds of activities that would seem in conflict with each other but at the same time can provide mutual benefits. In addition to Panama's rich biodiversity and the distinctiveness of its many ethnic communities, a key issue in devising an effective strategy of site selection is questioning the assumption that development and destination should always go together. Instead of looking for the best destinations and then dropping development right on top of them, an alternative strategy might be to identify the negative impacts of the tourism industry on the architectural, environmental, ecological and urban sectors. Then, the location of tourist staging areas must be negotiated on the most impacted zones in the country, rather than in the most pristine ones. Although this might suggest problems for developers, unique solutions need to be devised to entice investments into those zones. A nodal, rather than a suburban poles strategy for land development is recommended for attracting people into these zones.

One of the interesting subtexts emerging from the presentations was the difference between a "predating" tourism and the "quality of the experience", a difference that reiterates the conflict between development and preservation. Traditionally, the use of "themes" (such as in Disney World or Las Vegas) has attempted to solve this conflict. However, this strategy produces a fracture between real conditions and their potential representation. The identity of a country should not be established by the manufacturing of a false history or culture or even the selective representation of true history through themes. Once a nation begins to implement a thematic strategy for cultural heritage, it is open to a lot of competition and it also risks degrading what is truly historic.

In the case of Panama, a site selection strategy must take into account natural, cultural and urban elements. Focus should be on these attributes as a whole, without trying to determine their relative importance. The Government should legally designate some of Panama's landmarks as historic districts. Infrastructure icons in Panama, such as the Canal and the Pan-American Highway, must be emphasized and embraced. Rather than developing new roads and new nodes of tourist

attraction, it may be better to take advantage of the existing cities and communities along these icons. However, it is important to remember that the Canal Zone has been a protected area throughout this century, with very restricted development since the water for the canal comes precisely from the Chagres drainage basin within the Zone.

The problems of tourism development cannot be separated from general infrastructural problems because the infrastructure must meet not only the needs of tourism, but also those of the citizenry as a whole. A TCR master plan of infrastructure needs to identify ways through which value is added to the local communities while also increasing the value of Panama as a tourist attraction. Tourist development will require a lot of infrastructure, both new and upgraded. To the extent possible, this should be coordinated with the interests of the citizenry and it should also address the deficiencies that already exist in the national infrastructure.

2. What are the defining elements of a national strategy for transportation in an economy driven by heritage tourism?

In terms of transportation, it is important to consider what people will see as they first enter the city and how much flavor of the country a tourist will get as they enter the city from the airport. Panama has a very nice airport right next to the Canal (Albrook). When a plane descends to that airport, the first impression one has is of lushness, greenery and nice architecture, followed by a beautiful bridge over the Canal and a view of ports and Panama la Vieja, the city that was founded in the 16th Century and destroyed in the 17th Century. This first impression provides many images and information, a very different experience from the impression that one gets today when landing at the corridor airport (Tucumen), where one is confronted by some of the best examples of complete ugliness to be found anywhere, followed by traffic delays of 50 to 70 minutes before reaching the city.

3. What is the role of architects of international profile in building the cultural prominence of Panama?

Integrating the Canal Zone to Panama's urban core, which concentrates more than half of the country's population, constitutes an enormous challenge of contemporary urban planning and design. At the end of 1999, thousands of hectares of land and secondary forest will have to be integrated. There is very little local expertise in managing large quantities of public land, since Panama City has historically developed around private haciendas and the private sector has determined land use patterns. So far, it is not clear what the impact of recent infrastructure projects, such as the North and the South Corridors, will be on the integration of the reverted land and the rest of the area. The attention that Panama will receive in the year 2000 as a result of the Canal transition presents an unprecedented opportunity to compensate for this lack of expertise. For example, an international architectural contest to plan and design the integration of the former Canal Zone with Panama City and Colon could attract high level architects who would bring their skills and expertise to bear on the project.

4. How can we provide for excellence of experience-management through visual identity and sense of place?

The strategy "99 to 1" was proposed as a viable way to provide visual identity and sense of place to a site. This strategy calls for localizing the development of a site on one percent of it, where this development can accommodate 99% of the tourist population and the necessary infrastructure. Architecture can play a key role here, with the design of facilities that can accommodate large concentrations of people while at the same time giving the appearance that there are not too many people around. The other side of the 99 to 1 concept is that 99% of the site accommodates the other one-percent of the tourists. This part of the tourist population might be called "hard eco-tourists", since these are people who do not mind spending several days hiking through the rain forest without access to a hot shower or a dry bed. Thus, the site is essentially being undeveloped, except for the one percent of it devoted to its infrastructure, while the revenue flow justifies the protection of the other 99% of the site.

Frank Gehry's signature building in Bilbao provided a visual identity and a sense of place to that city. In fact, Bilbao has not been the same since the building of the Guggenheim Museum, and part of the reason is that one's perception of the city is different. Visitors are now sensitive to some local elements that might not have been noticed before, such as the way the bridge works or how the industrial part of the city is related to local conditions. So, in addition to acting as a tourism magnet, the project also had an interpretive side—reinventing Bilbao and making the city more valuable. However, the museum was only one component of a whole strategy that included the political and public will, a new subway system designed by Sir Norman Foster, a new theater, a new senate building, and a large number of other new buildings. This coordinated effort put the city into a new public, political, social and cultural space. It is important to note that these are long-term investments that will contribute to the city's appeal to its own inhabitants. Increasing the sense of cultural ambition of the city had as a byproduct an increased level of tourism.

The Panama Canal constitutes a similar consensus building tool that could integrate issues of political will, urban development and infrastructure. In particular, the turnover of the Canal to Panama at the end of 1999 presents a historic opportunity to address questions of national identity. A signature project in the Canal Zone could also be the City of Knowledge, a project that was mentioned the first day of the conference, where various foreign universities are interested in establishing offshore campuses in Panama for a variety of study and research purposes. Local architects should be given the opportunity to provide their architectural point of view to the project, a case similar to what occurred in Brasilia or Mexico's University City.

The ongoing project of Colon-Fort Sherman was explored in particular detail by this infrastructure workshop. General recommendations for this project included:

▌ Ensure the urban stability of the city of Colon and its metropolitan area as the focus of this project; and ensure its growth as an area of concentrated human activity and productivity
▌ Broaden the role of Colon from its traditional function as a provider of secondary services to the port and Free Zone by transforming it into a tourist destination that would serve as the trans-oceanic cultural, financial, tourist, scientific, academic and governmental axis of Panama

∎ Strengthen Colon's position as a regional center for exports of goods and services, by invigorating its land and air links with Panama City. The possibility of an international airport could be considered

∎ Produce a master plan to ensure that development of the Colon-Fort Sherman's cultural, economic and tourist potential mainly benefits the city and its inhabitants

∎ Extend the TCR concept of "quality experience" to "quality life", as a consequence of an environment that provides and consumes first level tourism experiences. Transform Colon-Fort Sherman into a live experiment where novel techniques and employment opportunities are created

∎ Provide an adequate connecting component between the "Interpretive Center" and the city, so that the former acts as a catalyst for new projects and investments in the area

Specific objectives for this project included:

∎ Promote the adoption of strategies and incentives that give back to Colon the totality of its urban functions, offering full residential, cultural, medical, recreational and educational facilities to the business and bureaucratic community that resides or will settle in Colon

∎ Stimulate through fiscal mechanisms the creation of an Industrial Park, as a complement to Colon's focal role in the transoceanic axis

∎ Induce the establishment of a high-technology exhibit and demonstration center in Colon, as a complement to the Free Zone activities

∎ Distribute concentrated cores of activities throughout the city of Colon and its metropolitan area, to stimulate diversified development, local identity and controlled impact

∎ Maintain a walking scale of movement in the urban center. Utilize low impact public transportation. Interconnecting links (land, air, water) must be located in the periphery of the urban center

∎ Maximize the public use of land/air contact lines, maintaining at all times their full and free access by city residents

∎ Improve environmental conditions of the urban center

∎ Identify and preserve specific locations that define the urban singularity of the area. Consider the possibility of declaring the city—or part of it—a protected area

∎ Use the interpretive center as the accelerating agent of change and transformation, emphasizing the fact that the city and its residents are the first priority, with tourism support as a complementary benefit

∎ Make Ft. Sherman a low- and medium-density residential cluster, tied to the city of Colon through various modes of maritime transportation

∎ Limit the development of Fort San Lorenzo to the most elementary sanitary facilities, as well as didactic and discrete signaling. The site must preserve its current character and its rather "difficult" access

∎ Consider Colon 2000 and other large scope initiatives—including the interpretive center—as extensions of the urban design. Use and function must be complementary

Working Group 3:

THE ART OF HERITAGE INTERPRETATION

1. How can interpretation be used as a catalyst of heritage product development?

Discussion regarding this question opened up with presentations from the group's Chair and Co-Chair, the former providing a theoretical background to the concept of interpretation, while the latter provided a pragmatic approach to the issue of international heritage tourism from the industry's perspective.

The first presentation explored the topic of interpretation as the link that relates three elements: tourism (operating through the tourism industry and their economic activities), heritage (comodified into various products), and places (with place managers setting the goals). There are places that are multifunctional and tourists who are themselves multimotivated. They are not just interested in heritage and certainly not just interested in one aspect of heritage. It is a mistake to believe that the relationship between heritage on the one side and tourism on the other is automatically harmonious. The opposite of automatic harmony is automatic conflict, a very popular idea particulary among academics. Interpretation then can be the way in which we can avoid an automatic conflict situation between the product and the resource and create a consensus for some sort of mutual benefit.

Heritage is a peculiar relationship between the past, the present and the future. Heritage therefore is a contemporary product or function, identifying which elements and aspects of culture and nature should be passed on to future generations because they will be needed. Heritage tourism exists within lots of other tourisms, special interest tourism, place specific tourism, culture tourism, art tourism, earth tourism, etc., all of which overlap to produce ultimately what can be defined as heritage tourism.

Every place on this planet has a past, every group of people has a culture. As far as the tourism industry is concerned, heritage is a free resource, a zero-price public good. The economics of heritage is essential, since any zero-price resource will be in high demand by an industry which is looking for rapid change and a highly flexible product line development. So, heritage is important to tourism, but is tourism important to heritage? Tourism is not the major use of heritage anywhere in the world. Tourism makes use of only about five percent of all historic buildings in the world. Around the world, ninety-five percent of historic areas or historic buildings are never seen by tourists. Most cultural festivals are never visited by tourists. Tourism just is not an important use of

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heritage in most places most of the time, because it is highly selective. Tourism selects the best, the largest, the most spectacular, the most marketable and leaves the rest.

The main use of heritage is political or social. Heritage has developed historically to support and legitimate political ideologies and governments. The concept of "national heritage" was invented in the 19th century and was pursued most effectively by Europeans for purely political reasons and to justify governments. The concept was used for social reasons as well, as "socialization heritage" was a means to socializing people into rules and laws of a society.

Thus, the question is how do we fit the tourism use of heritage into all of these other uses? Are different heritage uses contradictory? Heritage has enormous externalities. The challenge is to create a system of adjustment between the tourism product and the heritage resource. Interpretation can act as a recognition and an understanding of this challenge as well as an action to solve it.

The second presentation examined international tourism as an important force in today's society, emphasizing its dimensions, dynamic factors and trends. The presentation constituted a useful frame of reference for later discussions about the relationships among culture, nature and tourism. Every day during 1997, international tourism generated US$1.25 billion, representing about 8.5 percent of international commerce and more than one third of service imports. For example, tourism generated more income in 1998 for Mexico than petroleum exports. In the last ten years, most of the international tourism (59%) went to Europe. In second place, the Americas attracted 20% of world tourism, followed by East Asia and the Pacific. It is important to note that 20-25 years ago, 97% of world tourism occurred in 15 countries only, most of them in Western Europe and North America. In 1997, this situation changed drastically: the top 15 countries only attract 67% of global tourism, while the rest is shared by other destinations. These top countries now also include Asian and Eastern European nations.

In terms of projections for the next 10-20 years, a number of social, technological, economic and political variables will influence tourism development. These include changes in society and tourism purposes (more young and retired people and single women), technology effects on information and distribution aspects of tourism development, infrastructure and transportation, economic integration and globalization, and a greater freedom of movement among states. For the Americas, it will be increasingly more important to attract not more visitors but rather more income from tourism. Sun and beach tourism will still comprise most of the tourism in the Americas, but as part of a more complex and participatory package that includes environmental and cultural elements. Ecotourism has been extremely popular in the 1990s, and other types of tourism have also had to make rational use of natural and cultural resources. Current trends indicate that tourists are more interested in education and learning during their experience. There is also a greater demand for new places or the last frontiers in the world, such as Patagonia, the Galapagos Islands, and Central American forests and volcanoes.

The concept of interpretation originated in the U.S. National Park System in the early 1950s, as an educational activity to teach or instruct pleasure seekers in esoteric fields such as science (biology, geology, archeology) or art, as a contribution to the tourist experience. Thus, it is an educational activity which does not aim to simply communicate factual information, but rather to reveal meanings and relationships that a tourist or park visitor attaches to the place, through the use of

original objects by first-hand experience and sometimes through illustrative media. The social definition of a leisure setting, the place were people go to have fun, is different from the social definition of a classroom, where there are grades and accountability and there are teachers and learners. It´s a whole institution that is designed legally, culturally and socially, in order to produce educated learning individuals who can advance to a series of officially defined grade levels. All that is put to the side when a person goes on a trip, goes to a place to have fun. Thus, the challenge for an interpreter or an interpretation specialist, the person who offers or provides interpretive services is different from the challenge of an instructor or teacher.

All tourists, despite their differences and the various ways we can categorize them, are pleasure seekers. The outcome, the experience between their ears, is evaluated on the basis of how much enjoyment they had. Through that enjoyment they may come to appreciate a culture or an environment, the right of an animal to live, the beauty in a butterfly´s wings, the grandeur of a coral reef or a mountain range. And those are legitimate, bonafide outcomes. Interpretation then becomes an important delivery system of activities and media programmed in space and time to facilitate the intellectual dimension of a defined experience, according to the tendencies and preferences of a defined market segment.

Heritage products must not freeze the experience of life in the past, they should rather develop thinking processes and attitudes which are oriented towards the evolution of culture and the development of people in a more proactive and creative way. In many ways, it can be concluded that interpretation itself is the heritage product and a market-driven process. Education is the key to the process and product of interpretation. We can interpret a specific resource in infinite ways.

2. What is the process needed to develop heritage themes into heritage itineraries (pooling conservation and research benefits of heritage-centered tourism)?

Interpretation involves first the selection of elements that will produce a tourist product. Selection is not a permanent or static process. Market tendencies and preferences change as the audiences change. Secondly, interpretation is thematic. Through theming, you can create many different products from one resource, depending on the market. To put these two elements together, a combined and diverse effort is needed. It begins with the travel distribution system, the points of sales in the countries being targeted. Another vital element is the tour operator, who employs the tourist guides and some of the interpretive personnel. The conservation and cultural heritage community must also be engaged, since they are the specialists who know how to operate museums, art galleries, national parks, marine preserves. Large and small hotel owners are providers of interpretive services, not only serving the role of facilitating experiences but also offering interpretation, whether it is conducted (personal presentations, talks and guided tours) or a self-guided provision of printed exhibits, panels, brochures, and audiovisual programs.

In the development of heritage itineraries it is important to learn from previous experiences in other parts of the world, such as the "Mayan Route" or the "Silk Route". Since these two routes have been very successful, it would be beneficial to find out what was done right in the early stages, how they were popularized, and how they brought together the tourism sector with cultural her-

itage, natural resource managers, and scientists. A useful resource for this purpose is a series of publications on good practices describing how to involve the community in making decisions. The Canadian product club is another successful operative model that has taken heritage type products and brought them to the market place with collaborative efforts involving the communities.

The TCR heritage routes concept is a powerful tool for grouping and interpreting destinations, monuments and other attractions. These routes need to be ranked in order of importance and priority. Selected routes need to be expanded with substantial interpretive content and details, followed by publications and other information for distribution and use by involved organizations and the media.

3. How much capacity building is needed for heritage interpretation? (special focus: scholarships funded by the tourism and hotel industry)

There are two broad categories of expertise that are needed by the providers of interpretive services. The first is content. Panama has a wealth of this kind of expertise, given STRI's presence as well as many good universities and other institutions of education and research. The second category is method. Most scientists are not very adept at communication. Method expertise involves psychology of communication, understanding of marketing, audiences, delivery systems, the ways of appealing to the minds and the hearts of people.

Other kinds of training that are needed include design and writing for interpretation, such as writing scripts for audiovisual products, marketing strategies, monitoring product quality, designing interpretive trails. There are long-term educational requirements for training and transfer of professional skills required by the tourism industry that will require significant changes in curriculum according to the needs and experiences of the tourism business. There should be an established school with certification programs, such as the U.S. National Association for Interpretation. Certification is an on going process. Universities in Panama should include interpretation courses as part of their curriculum.

4. Define the opportunities and logistics for conservation and research patronage using heritage interpretation as a tool (from both visitor satisfaction and industry commitments.)

A number of models can be used to identify opportunities and logistics for conservation and research patronage. In the U.S., research cooperatives involve universities and industry partners in a form of cooperative or advice boards that set the research agenda. The research agenda is reviewed at least once a year to prioritize research projects. One of the difficult balances is that some of these players contribute more to the research budget than others do, which results in expectations of greater control over the research questions. This would be a challenge that Panamanian universities would have to work out. But the concept has worked in other places, especially if there is guaranteed funding.

Interpretation of the heritage resources is a common approach for tourism nowadays.

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However, this approach is highly contemplative: tourists go to a place where they are given some information that increases their knowledge about that place. We need to change this approach from watching and knowing to doing and participating. It would be advisable to add a component to the Panamanian tourism system, particularly in terms of heritage tourism, so that the tourist not only increases his/her knowledge but also actively participates, thus enriching the tourism experience. For example, you could take a tourist to watch the turtle hatchling process, which would be a fascinating experience. However, you could also allow them to protect the turtles, assist in counting and measuring the eggs, and participate in other aspects of the experience, which would make that experience a lot more satisfying. While the tourists would contribute to the monitoring process, they would also be willing to pay higher prices to be able to participate more actively.

5. How can we maximize the authenticity and the educational value of heritage experience within the time and space constraints of the tourist visit?

A focus on the authenticity of the heritage experience calls for the participation of local people in the interpretive process. An example could be taxi drivers, who really understand the city or town where they work. Other examples include maids, waiters, public service providers in general, all of whom should have a substantial orientation in the process of heritage interpretation. Local participation in the interpretive process should enrich the authenticity of the experience, while also supporting sustainability in the communities.

The TCR alliance should focus on legitimate ways of ensuring appropriate integration of research, science and traditional knowledge systems in a fair and honest way in the interpretive process. The consistency of interpretation should be maintained through strong incentives for the interpretive specialists.