Environmental solutions

The Eden Project Mission

Part I

Biggest greenhouse in the world
After restoring the Lost Gardens of Heligan, near St Austell, Cornwall, and their development into a highly successful entrepreneurial business, Tim Smit, leading protagonist in the project, wanted to further strengthen the 'power of plants' to attract even more people to this part Cornwall. He had the 'brain storm' to build the largest greenhouse in the world, but why and for what reason? Together with Philip McMillan Browse and Peter Thoday, already expert consultants and colleagues of Tim Smit's on the Heligan Project, the decided mission was to transport 'The Eden Project' into one of the wonders of today's world.

Sustainable development
It was decided that the Eden Project had to be the biggest conservatory in the world, symbolic in people's imagination. An article written by a visitor to Heligan Gardens as they were in the 1850's, described a greenhouse as "full of strange aromatic plants, spices and tropical fruits". This supported the idea of a conservatory to demonstrate the importance of 'Man's relationship with plants' in a more holistic approach to life. A major evolutionary step forward, away from traditional botanical gardens that were established in the 19th century for scientific and commercial reasons, especially during the colonial period, concerned with plants for plants' sake. It was soon realised by Peter Thoday and Philip McMillan Browse that an institution was needed to bring together commercial forces exploiting plants and environment and groups concerned with conservation, hitherto in camps diametrically opposed; the former ignoring the latter and the latter, seemingly powerless, ringing alarm bells and waving banners. An institution in which the issues of agricultural and industrial exploitation of the environment and the indispensable need for conservation could be discussed and a permanent dialogue established to promote sustainable development of the world's flora.

A question of age-group?
The Eden Project has become an institution in which, the general public is made aware of what it can do to help on environmental issues, in the informal, multidimensional and enjoyable setting of the biomes and their various displays of plants. Thus enabling many more people to take part in what is rapidly becoming one of the most important political debates in Human history. Tony Kendle, Director of Horticulture, points out that "fundamentally, people have become disconnected from an understanding of how plants and nature sustain their lives. The most important mission behind Eden is to reconnect people to plants and to give them some of the basics on the arguments and language of conservation issues". A subject that appears squeezed out of the imagination by television and technology, rendering behaviour that belies the belief that environmental issues are past solving, especially in the absence of immediate political action on a global scale. The Eden Project tries to bring conservation issues down from a distant (or lost) horizon, close-up, with the message that important change can be made at an individual level. "A root cause of environmental destruction stems from specialist training in which all disciplines and subdisciplines are taught as separate unrelated subjects".

Politics of Conservation
The results of a recent sociological study reveal that the most widely spread fear amongst people, regards the survival of our planet and our species and exceeds ordinary personal worries. The responsibility of resolving many conservation issues rests on the shoulders of today's younger generation; the decision
makers of tomorrow. How to formulate measures of sustainable development that pay the people and companies that practise them? How to gain political votes for spending money today in order to pre-empt problems of tomorrow? What is the point of one Country implementing responsible conservation policies, if another ignores them? Do we hear the siren that insists that conservation issues require redistribution of wealth throughout the world? When might the word 'biodiversity' become an embarrassment! The older age groups, that constitute an important segment of visitor numbers, can also make their contribution felt on these issues. Education is fundamental to Eden and regular educational programs are held for all ages and abilities, for students and teachers. The new educational resources building due for completion in the spring of 2005 will reinforce this objective.

Popular holistic approach - on the one hand
To attract visitors, the Eden Project generates an exciting venue (scale, architecture, engineering, plant displays) though not disparagingly as the descriptions 'Horticulture Disneyland' and 'Theme Park', might evoke. The average spend of each visitor in 2002 was £13.50 divided between ticket sales, meals and purchases and turnover was in excess of £20 million. Cynics might argue that the reasoning behind the way in which conservation issues are presented to the visitors is merely an attempt to justify an exciting visit and an 'easy read' to guarantee commercial success as per the tabloids. In the long term The Eden Project will be measured by its economic success and its influence on people and government to effect positive change on conservation issues in Great Britain and worldwide.

Mark Paterson, an expert Guide at Eden, points out that visitors fall into three main categories: those that have heard about the place, may or may not be interested and generally make a very short visit. The second group consists of those who have heard about it, genuinly want to see it and to understand what it is about. The third group comes with some innate knowledge and wants to add to that knowledge. Visitors of the second category can quickly qualify to the third and maybe some in the first category will be promoted following a second visit. Particular consideration will now be given to attracting more visitors from the teenage and twenties age group.

Visitor numbers on hold
The number of visitors for 2002 was a fraction short of 2 million. This number is considered the maximum that the current site and facilities can cater for. It could be larger if ways could be found to increase visitor numbers in the slack period between the end of October and beginning of March. The main increase however will derive from the completion of phase 4 of the development that will include the new Dry Tropics Biome, a new visitor Gateway Building and lifts, due for completion by Easter 2005. In the meantime, the entrance fee will be increased and visitors will be tempted to spend more during their stay. In order to maintain an annual growth rate of 3% over the next ten years (starting from the base of 2 million) some promotional activities will seek to bring more foreign visitors to the site. According to David Meneer, Marketing Director, currently, a mere 6% of the total visitors come from abroad and half of these are English speaking. Culturally, Eden retains that rather 'anglo-saxon' culture (Great Britain, USA and the Commonwealth) extending to a few other countries such as Japan (that surprisingly counts almost 2000 members in the Japanese chapter of the Royal Horticultural Society). But there is great future potential for expanding the internationalization of Eden in Western Europe although this implies coping with foreign languages (administration, correspondence, guides, promotional literature, display labels, stories) and perhaps in the provision of a foreign visitor centre.

Restoring the local economy
Eden makes a major contribution to conservation by demonstrating to visitors why conservation is necessary, what it means and why people should get involved, but it is also a major restoration project.
The Eden Project was built in a disused china-clay quarry at Bodelva one of many in this area of Cornwall. One of its major functions is to restore this mining area; providing jobs for local inhabitants and attracting tourists. In 2002, it contributing some £160 million to the local and regional economies. Furthermore, the sales outlets within Eden (shops and restaurants) give priority to locally made produce.

Getting the balance right
The role of Eden is to open up a dialogue with the general public on basic issues of conservation, including ethical and sociological aspects. It is essential to move away from purely academic-scientific presentation. Displays combine groups of different plants as they might be found in their natural environment together with just a few labels; too many and curiosity can seriously hold up the flow of visitors on busy days. The plants themselves can be appreciated as things of beauty. Another important objective is to bring science and art together. In some cases the art-work is static; sculptures and other art-work relating to plants or evocative of particular climates that create an artistic dimension just as you might find in Italian or oriental gardens. In other cases, it consists of dynamic performance art (theatre, concerts and work-shops) that use plants and the Eden environment as theme and back-drop. The outdoor Arena has a capacity for 3000 people. The idea of 'nature in art' and 'art in nature' can be happily mused upon while walking through the Eden biomes.

The importance of being independent
The Eden Project will move forward through reinvestment of operating profits in order to maintain visitor turnover and to strengthen educational and professional activities associated with conservation issues. But the cost of repaying interest on loan capital is and will be substantial. Then comes the cost of depreciation. It is thus very tempting to accept financial contributions from various sponsors but Tony Kendle underlines the absolute need to remain independent. The Eden Project is wholly owned by the Eden Trust, a UK registered charity. The Eden Project is operated on behalf of the Trust by Eden Project Ltd, a wholly owned subsidiary.

Professional profile: the other side of the coin
The operation of Eden relies on academic and scientific staff. Hidden from the eye of the visitors, is the immense day-to-day work of maintaining the site, that from above gives the impression of a lunar University campus. Eden employs a team of curators and horticultural scientists to assure the correct environmental conditions in the Biomes (during opening hours, a compromise is made in the Humid Tropics Biome between what the plants need and what the visitors can support) and healthy plants in terms of growth and nutrition and freedom of insect pests and diseases. In such large structures, this is complicated pioneering work that requires a high level of knowledge, skill and determination. There is also the work of indoor and outdoor landscape design, transportation and planting. New plants are sourced from abroad and acclimatized in the Project's Watering Lane Nursery before being planted in the biomes. Other plants are raised from seed or grown on from cuttings. Scientists are also involved in data processing and taxonomic identification (Eden belongs to 'PlantNet' that connects Botanical Institutes throughout the world). On-going research also concerns temporary exhibits, domesticated crops and their stories. The attitudes of scientists and other professionals toward how the Eden Project should undertake its mission might well differ from those who are more involved in presenting Eden to the general public; a botanist might assert that Eden is a place to showcase plants not art! But in reality the display features are complementary; one side highlights the other and both can learn from one another.

Collaborative Partnerships
Eden is developing as a centre of excellence to tackle the difficult questions of conservation. The greatest challenge for the next century is to bring together alliances to face these complex problems and new
approaches will be discussed and evaluated within the Eden structure and network. It is developing a major International Forum that will draw experts from relevant organizations, corporations and governments into debate over a number of days each year.

The 'Foundation Building' is the central point for the organization of education and training programs, science communication and research, in collaboration with its various partners. There is already an impressive list of partners including Botanical Gardens, Universities and Colleges in Great Britain and abroad. Corporations such as Unilever, John Lewis Partnership, Boeing and Rio Tinto also have partnership interests. The Global Conservation Trust sponsored by the FAO (United Nations Food and Agriculture Organization) seeks to guarantee public ownership of the world's main food crops and seeks a head office. Other organizations support Eden in terms of the development of exhibits and other more specific activities. These include the Royal Botanic Gardens of Kew and Edinburgh, World of Music and Dance, International Institute for Environment and Development (IIED), October Gallery and Rainforest Concern.

The Eden Project is inspiring as it is big, where every plant has a story to tell. The arguments on which it centres are undoubtedly those that will have a great influence on our lives into the next century. Grateful thanks to members of The Eden Project staff. Edward Bent July 2003