Introduction

The purpose of this paper is to provide Sustainable Finance Stream participants with some insights about venture capital as a financing instrument for protected areas, covering its advantages and inherent risks when compared with other financial instruments. The paper will cover briefly the recent trends in the development of markets for environmental products and services, the participation of private sector agents as either suppliers or consumers of these goods and services, the role of other actors as catalyzing agents for the growth of these markets, and the associated increase in private investment in sectors which can be linked to protected areas and biodiversity conservation.

I will describe the main characteristics of venture capital as a financial instrument and, drawing from experience in the management of biodiversity linked investment, highlight the difficulties associated with adapting these types of investment models to biodiversity linked sectors, and more specifically to protected areas. Finally, this paper will intend to open the debate on the most suitable venture capital model for protected areas and the key complementary actions needed to address the risks of this type of investments.

Products & Services for Protected areas

The work of economists in the past few years demonstrates the existence of a number of products and services that are provided by ecosystems found in protected areas. These services are supplied in the form of public or private goods, depending on their nature or the regime in which they are offered. As an example, public goods can include ecosystem services such as watershed protection or carbon sequestration, whereas private goods can range from recreation services to harvesting of actual goods, such as non-timber forest products. Although society has enjoyed these products and services for a long period of time, their actual commercialization is scarce and many times unregulated. In recent years some markets have been formed through the implementation of innovative public policies (such as the implementation of quota systems for fisheries or polluting rights). Alternatively, in the case of some private goods, trade has taken place informally with little or no regulation. Informal harvesting of non timber forest products or illegal hunting are quite common in protected areas, and occur many times with no

1 For a more complete description of these products & services: Financing Protected Areas – Guidelines for Protected Area Managers. Financing Protected Areas Task Force of WPCA, Economics Unit of IUCN. Adrian Phillips (Ed) (2000)
authorization from regulators, and little or no control over the impacts on the ecosystems where they are harvested.

Parallel to the development of innovative public policies that motivate market creation, there is a demand driven pressure for products that have certain attributes which are beneficial to environmental conservation. Individual consumers, especially in developed economies, are becoming increasingly interested in the origin and production process of the goods they consume. This preoccupation arises as a result of an increase in health concerns (increased with food scares such as mad cow disease) as well as a greater concern for the environmental impacts of production processes, responding to very effective awareness campaigns of environmental groups. Consumer consciousness has prompted an increasing interest in goods and services that incorporate what can be called “environmental values” because of the low impact techniques with which they are harvested or produced. ²

The result of consumer pressure for these attributes has been the creation of niche markets for differentiated products that can guarantee these attributes. Markets for organic agricultural produce, sustainably harvested timber, non-timber forest products and low impact nature tourism look to satisfy these preferences. A key element to the development of specific markets for these products has been the surge of independent certifiers, who have gradually developed specific criteria that guarantee low impact to the environment for the productive activity being certified. Through the use of certification, producers can label their products and therefore transmit to consumers the environmental conservation values attached to them. An example of certification is the Forest Stewardship Council (FSC) certification criteria, which provide a framework for sustainable harvesting practices for timber and non-timber forest products, by defining specific management criteria in terms of environmental and social impacts as well as specific conservation policies for the area under management. Consumers acquiring products with the FSC label will know the product was produced under specific standards and reduced environmental impact, and that the forests where the product originated are also managed according to these standards. Similar certification criteria have been developed for organic products, and are gradually being developed for the tourism industry.³

**Increasing private sector participation**

In most sectors the pioneering players to adopt sustainable practices were environmental organizations. However, as the markets started to develop, private sector players entered these niches through start-up investments, or via the conversion of their operations to certified sustainable practices. Although the size of the companies varies depending on the sector, small producers are still dominant in these markets. Gradually, medium size companies are also becoming active in these sectors, focusing especially in the distribution and commercialization elements of the value chain. The positive trends of the markets called the attention of investors, which were attracted by high levels of growth of some of them (20% per year on average for the last 10 years in the case of the organic markets), and looked to capitalize on this growth. Investments in small and medium scale projects have surged on a global basis, concentrating mostly on organic agriculture, but also looking at sustainable timber and non-timber product production as attractive investment options. A number of successful investments in the area of conservation tourism have also signaled the potential of this niche sector.


³ Despite the instrumental role of certification standards as information tools, the large number of standards and labels has been a source of confusion for consumers, who have a limited capacity to scrutinize the specific requirements of each certifier. An example of the large number of certification standards is in the tourism sector; a survey of the different certification standards undertaken by the Institute of Policy Studies identified more than 100 different ecolabels, each responding to the specificities requested by the independent group. The result of such large amounts of standards is a lower credibility (see *Protecting Paradise: certification programs for sustainable tourism and ecotourism*, IPS, Honey M. and Rose A.).
Venture capital as a financing tool for emerging markets for environmental products & services

Traditional financing options for private investments range from the “high risk – high return” venture capital to conventional bank loans that look for safer and more conservative returns. Emerging, high growth sectors have traditionally been the target of venture capitalists, which invest equity capital, trusting the market potential and the entrepreneurial capacity of the managers. This type of investment has been widely used in technology-related sectors, where conventional debt or equity financing is hesitant to enter. In exchange for the high risk taken, venture capitalists will normally expect larger returns for their capital than conventional equity investors, and will impose on entrepreneurs certain conditions that guarantee their sale of equity stake to third parties such as multinational companies (or through the stock market in more developed economies) within a reasonable period of time (3-5 years).

In light of the potential opportunities presented by markets for environmental services and products, a number of private sector investors started prospecting opportunities in these sectors. The characteristics of these markets attracted venture capital as an alternative source of financing to traditional bank lending, which considered some of these initiatives still too risky.

Opportunities for protected areas

Markets for products and services such as conservation tourism, sustainable timber or non-timber forest product extraction, or even ecosystem services, can present attractive sources of income for protected areas and their surrounding communities. Protected areas have potential for a varied number of business opportunities, which could be developed by private entrepreneurs or neighboring communities, within the specific parameters and regulations of the area in which they will operate.

Enabling productive projects for private sector actors in protected areas with specific profit sharing agreements can provide an alternative source of financing, while at the same time ensuring the productive activities are developed within defined standards. Under certain specific conditions, venture capital investors could finance this investment. However, the experience to date has proven necessary to adapt the traditional venture capital model to the reality of remote areas in which these businesses are developed, as well as to the degree of development of the industries in which they will be active.

Main challenges of venture capital investments in biodiversity related investments

During the period 1999-2003, A2R, a fund management company based in Brazil, acted as pioneer investor in environmental businesses in Latin America, by undertaking investment in sustainable timber and non-timber harvesting, and also leading the management of Terra Capital Investors, an initiative of the IFC and other multilateral and private investors, which was the first venture capital fund specifically targeting business sectors that also offered positive biodiversity impacts. As part of its activities, A2R prospected a large number of investment opportunities in the sectors of organic agriculture, sustainable tourism, timber and non-timber forest product extraction, and sustainable fisheries, and undertook a number of venture capital investments in these sectors. Although the work of A2R was not focused on protected areas, these experiences have offered important lessons on the feasibility of venture capital investments in the sectors described above, as well as on the challenges associated with the development of successful private ventures in areas that are rich in biodiversity.

Drawing from the experience of A2R, there are a number of challenges faced by venture capital when investing in economic activities which are compatible with biodiversity conservation. Some of these challenges can be addressed through specific actions such as capacity building. However, others would entail adapting the investment model to the actual environment in which the investment is made.
Management capacity
One of the key elements of successful venture capital investments lies in the talent of the entrepreneurs in successfully managing their businesses. In the case of biodiversity linked businesses, in light of the remote locations in which businesses operate, entrepreneurs are rare and with little access to business training. Moreover, the training of employees, the capacity to develop commercialization channels and to implement strategic partnerships are serious challenges faced by entrepreneurs. In order to increase the chances of success, we recommend the implementation capacity building programs to assist entrepreneurs in the development of business plans, implementation of such plans, and training of personnel.

Liquidity
As described below, in order to guarantee returns, venture capitalists will look to sell their equity stake after a relatively short period of time, and at a multiple of their initial investments. The size of the companies active in these sectors makes any sale of equity in public stock markets unrealistic. On the other hand, in order to justify acquiring these businesses, strategic buyers such as multinational companies will look for medium to large-scale operations, and will therefore want a certain degree of consolidation prior to any acquisition. An alternative possibility, which entails the acquisition by the partnering entrepreneur, will require more patience from venture capitalists, and will entail serious sacrifice from entrepreneurs. Liquidity might represent the most difficult challenge of venture capital investments in biodiversity-linked markets.

Local regulations not guaranteeing enforcement of contracts; informal, unregulated environments faced by companies.
Venture capital models were developed in economic environments where contracts were clear and enforceable. When adapting these models to developing economies, venture capitalists have come to realize that the enforceability of contracts might not be the same, and the venture capital investors might be exposed to further risks and liabilities than originally foreseen. Investors will need to adapt the investment models to local realities to reduce these risks.

A different problem has to do with uneven competing conditions. Certified companies in the timber and non-timber forest products sectors commit to complying with government regulations and controls, and to adopting formal practices in the relationship with suppliers, employees and government authorities. Unfortunately, it is still common in rural and remote areas, especially in developing countries, to have a large number of companies operate with little or no compliance to regulations. As a result, companies that aim to adopt formal practices required by certifiers might face higher costs that their competitors and therefore certain disadvantages when competing in similar markets. A more uniform enforcement of regulations is key to maintaining competitive conditions for sustainable investments.

Need multilevel strategic partnerships
Most of the businesses operating in the sectors we prospected required a number of multilevel partnerships in order to be successful. These partnerships were normally required with surrounding communities (which would guarantee a source of raw materials or would act as service providers), municipal governments (to guarantee basic needs of surrounding communities, a requirement of certain certifiers), state governments (to engage a more stringent enforceability or negotiated exemptions), institutions interested in capacity building, as well as strategic partners that could contribute to the commercialization of products.

Need to develop specific biodiversity impact guidelines for each productive activity
One of the most demanding tasks faced by Terra Capital as an investment fund looking to maintain biodiversity was the development of specific biodiversity management plans for each investment possibility, which included management practices and monitoring variables. Although the work of certifiers such as FSC provides a good first step to developing these standards, specific biodiversity related
guidelines might be required to guarantee the impact on protected areas is limited and well monitored. This entails a significant amount of work that can prove cumbersome when dealing with private sector actors.

**Need to align objectives & return expectations with investors**

Venture capital is an interesting alternative to finance productive entrepreneurial activities within protected areas, however experience has shown that despite the high growth and good potential of these markets, the constraints attached to the sectors of activity will tend to jeopardize final returns, making these investments less attractive (from a pure return perspective) than conventional venture capital financing. Target investors should be motivated not only by financial returns, but also by the impact on conservation attained with this type of financing. Similarly, adapting liquidity expectations to the timing and maturity of these sectors, which is of longer term, will also guarantee better chances of success.