Scientific and Technical Advisory Panel

An independent group of scientists which advises the Global Environment Facility

The Scientific and Technical Advisory Panel of the Global Environment Facility

Mainstreaming Biodiversity Workshop
Cape Town, South Africa
1–3 Oct 2013

Hosted by

SANBI
Biodiversity for Life

Scientific and Technical Advisory Panel

The Scientific and Technical Advisory Panel, administered by UNEP, advises the Global Environment Facility

STAP/GEF WORKSHOP

MAINSTREAMING BIODIVERSITY CONSERVATION IN PRODUCTION SECTORS

1 – 3 October 2013

Centre for Biodiversity Conservation

Kirstenbosch National Botanical Garden

South African National Biodiversity Institute (SANBI)

Cape Town,

South Africa

Table of Contents

1. Background and Context

The achievement of biodiversity conservation goals has been pursued with success through the establishment of protected areas for well over a century, and through in-situ and ex-situ species conservation strategies since the 1950s. However, even the most recent and ambitious spatial targets for these dual approaches encompass less than 20% of the global surface within formally established protected areas. The conservation of biodiversity and ecosystem services at extensive landscape and seascape scales has yet to be achieved. 'Mainstreaming' is a nascent approach to integrating biodiversity conservation goals at scale with those of other sectors – such as agriculture, forestry, fisheries, tourism and extractive industries. The application of the approach is now gaining considerable attention.

Mainstreaming intervention types include the incorporation of the value of biodiversity and ecosystem services into national and local financial and development planning; in policy instruments; in achieving improved management practices in agriculture and other key production sectors; in developing innovative financing mechanisms such as the payment for environmental services, as well as the certification of products and other supply chain interventions.

Since 2003, the GEF has invested over $1 600 million (with some $5 300 million in co-financing) in 327 biodiversity mainstreaming projects in 135 countries. Of these projects, 89 were at a national level and 46 at regional or global levels. Of the total investment, 48% went to 10 countries (Brazil, India, China, Mexico, South Africa, Colombia, Russian Federation, Indonesia, Vietnam and Argentina). Investments in mainstreaming initiatives by other international agencies and by national institutions is no doubt of a similar order of magnitude.

The impacts of such investments in terms of Global Environmental Benefits are difficult to evaluate. Whereas the traditional modalities of biodiversity conservation can be measured in readily quantifiable terms (e.g. area of PAs established and under effective management; population size and trend of threatened species under effective conservation), it is more difficult to measure the outcomes of mainstreaming interventions. Further, the mainstreaming approach is still in its infancy in financial and production sectors, although enjoying wide support by conventions, agencies and institutions, such as the CBD, GEF, UNDP, UNEP, World Bank, IUCN, WWF, CI, etc. As one of the main components of GEF investments in biodiversity conservation, the performance of mainstreaming projects and the science that underpins the approach needs regular review and strengthening.

During 2004, the GEF's Scientific and Technical Advisory Panel (STAP) convened a workshop in South Africa to describe principles, guidelines and activities for mainstreaming approaches that would be relevant to the biodiversity focal area and program of the GEF. The product was published as a GEF Working Paper in 2005[1], and has served as a useful guidance document for the formulation of GEF's biodiversity strategy and the GEF's growing portfolio of projects in this area. Given the importance with which mainstreaming has

[1] Mainstreaming Biodiversity in Production Landscapes (2005) - http://www.stapgef.org/mainstreaming_biodiversity_in_production_landscapes

become accepted in achieving biodiversity and human development goals, an analysis of field experience in biodiversity mainstreaming and an enhanced understanding of successes and failures in employing the biodiversity mainstreaming approaches first categorized by STAP is particularly timely as an input to the GEF-6 biodiversity strategy formulation process and to improve biodiversity project design.

2. Workshop Objectives

1. Re-examine and assess the concept of mainstreaming biodiversity based on results from current practice and relevant scientific research and redefine it as necessary.
2. Revise principles (as proposed in table 14.1 of the STAP document of 2005, below) and provide guidelines for improved project design and implementation
3. Identify linkages between the achievement of Goal A and the associated targets of the CBD strategic plan and other Aichi Targets and identify those mainstreaming actions that are likely to produce additional benefits vis a vis the achievement of other Aichi Targets.
4. Identify indicators and measuring instruments (e.g., GEF tracking tools) for the monitoring and evaluation of mainstreaming outputs and outcomes and the Global Environmental Benefits that they provide.

The workshop will be informed by a discussion document that reviews the evidence base for biodiversity mainstreaming successes and failures, and which provides a profile of GEF investments in mainstreaming projects since 2003.

Principles for Effective Mainstreaming (from GEF Working Paper 20, 2005)

Effective Mainstreaming requires –

1. Awareness and political will from the highest levels, providing support for implementation
2. Strong leadership, dialogue, and cooperation at all levels
3. Mutual supportiveness and respect between biodiversity and development priorities
4. A strong focus on economic sectors, supported by cross-sectoral approaches, securing sector-based biodiversity conservation
5. Analysis and understanding of the changing motivations and opportunities of each sector, including the effects of globalisation
6. Identification and prioritization of entry points and the development of sector-specific tools and interventions (such as international codes of conduct or standards)
7. Awareness within sectors of the relevance of biodiversity conservation and the capacity needed for implementation
8. A coherent set of economic and regulatory tools and incentives that promote and reward integration and added value, while discouraging inappropriate behaviours
9. Sustained behavioural change within individuals, institutions, and society, and in both public and private domains
10. Measurable behavioural outcomes and biodiversity gains.

3. Programme

Monday 30 September

CAPE PENINSULA FIELD TRIP to discuss mainstreaming projects

Tuesday 1 October

WELCOME AND INTRODUCTION – Chair – Brian Huntley

09:00 – 09:30 – Welcome - Kristal Maze, SANBI; introduction of participants

09: 30 – 09:45 - Introduction to workshop process and thematic discussions - Tom Hammond, STAP Secretary

SESSION 1: SCENE- SETTING KEYNOTES – Chair - Tom Hammond

09:45 – 10:15 Reflections of Biodiversity Mainstreaming principles in the GEF - Mark Zimsky, GEF Secretariat

10:15 – 10:45 Principles and realities for effective mainstreaming – lessons learned from field implementation - Nik Sekhran, UNDP

10:45 – 11:15 – Break

11:15 – 12:00 - Synthesis of lessons learned from a decade of biodiversity mainstreaming experience - Kent Redford, STAP Consultant

12:00 – 01:00 – **Panel Discussion**: Chair – Dilys Roe – Panelists *Cowling; Veiga; Vergeichik, Rapporteur - Petersen;*

01:00 – 02:00 – LUNCH

SESSION 2: POLICY AND PLANNING – Chair – Amy Fraenkel

02:00 – 02:20 pm - Lessons learnt from policy and planning mainstreaming approaches implemented since 2004 in South Africa - Kristal Maze, SANBI

02:20 – 02:40 – Economic Growth and Mainstreaming Biodiversity Conservation; the Costa Rican case - Carlos Rodriguez, CI

02:40 – 03:00 - Mainstreaming biodiversity in the Seychelles - a Small Island Developing State - Didier Dogley – Seychelles Ministry of Environment

03:00 – 03:30 – Break

03:30 – 03 50 – Mainstreaming of biodiversity into economic sectors and land-use, under GEF-funded UNDP-implemented projects, in Europe and Commonwealth of Independent States – Maxim Vergeichik,

03:50 – 04:10 - UNDP Lessons from the State of Knoledge review – Dilys Roe, IIED

04:10 - 05:10 pm - **Panel Discussion** - Chair Mark Zimsky –– Panelists - *Diaz; Sakalian; Cavalier; Wyatt; Rapporteur - Driver*

05:10 – 05:30 pm - Wrap up and close for the day, additional housekeeping/logistics messages etc

06:00 – 09:00 pm - RECEPTION – Kirstenbosch Manor House

Wednesday 2 October

SESSION 3: PRODUCTION PRACTICE – Chair – Pramod Krishnan (tbc)

09:00 – 09:20 - Market Transformation Initiative - Jason Clay, WWF

09:20 – 09:40 - Leveraging the commercial banking sector to mainstream biodiversity conservation in production landscapes - Courtney Lowrance, Citibank

09:40 – 10:00– Scaling up sustainable commodity production - Andrew Bovarnick – UNDP

10:00 – 10:30 – Break

10:30 – 10:50 - Shaping land-use practices and supply chains through commodity certification: the experience of Rainforest Alliance - Jeffery Milder, Rainforest Alliance

10:50 – 11:10 - Mainstreaming biodiversity within agriculture, forestry and mining sectors in South African grasslands - Anthea Stephens, SANBI

11:10 – 11:30 - International Trade Drives Biodiversity Threats in Developing Nations – Arne Geschke, University of Sydney

11:30 – 11:50 - Mainstreaming of Agrobiodiversity Conservation and Use- UNEP/GEF experience – Marieta Sakalian - UNEP

11:50 – 01:00 – **Panel Discussion** – Chair - Trevor Sandwith –– Panelists - *Zimsky; Driver; Child; Rapporteur - Mee*

01:00 – 02:00 - LUNCH

SESSION 4: FINANCING MECHANISMS – Chair – Kristal Maze

02:00 - 02:20 - Mobilising financing and conservation investments through PES mechanisms: the experience of Mexico – Jose Carlos Fernandez, CONAFOR, Mexico

02:20 – 02:40 - Integrated financing of biodiversity conservation and poverty reduction at national scale - Ahmed Khan, Department of Environmental Affairs, South Africa

02:40 – 03:00 – The Latin America Water Funds Partnership - Fernando Veiga, TNC.

03:00 – 03:30 - Break

03:30 – 03:50 - Mobilising finance for managing biodiversity assets and ecological infrastructure in South Africa - Mandy Driver, SANBI

03:50 – 04:10 – The WAVES initiative - Valerie Hickey, World Bank (tbc)

04:10 – 05:10 – **Panel discussion** Chair – Nik Sekhran - *Nel; Maze; Clay; Watanabe – Rapporteur – Stephens*

05:10 – 06:00 – Planning of Working Group tasks for day 3 – Chair Kent Redford

06:00 – 06:30 – Close of session

Thursday 3 October

SESSION 5: FUTURE OPPORTUNITIES – Chair – Sandra Diaz

09:00 - 09:20 - Surviving the Anthropocene: Beyond Mainstreaming to Global System Transformations - Deon Nel, WWF

09:20 – 09:40 - Why mainstreaming biodiversity is like swimming upstream, and what can

be done about it - Richard Cowling, Nelson Mandela Metropolitan University

09:40 – 10:00 - Protected areas inspiring solutions for development outcomes: trends and future directions - Trevor Sandwith, IUCN

10:00 – 10:30 – **Panel discussion** – Chair –– Jason Clay, Panelists - *Redford; Fernandez; Fraenkel; Rapporteur - Wyatt*

11:00 – 11:30 - Break

SESSION 6: PARALLEL WORKING GROUPS

11:30 – 01:00 - **Working groups** convene to synthesize responses to the Workshop Objectives

This session will be structured in **four groups** – the composition and content of these groups to be finalized on Day 2.

12. Re-examine and assess the concept of mainstreaming biodiversity based on results from current practice and relevant scientific research and redefine it as necessary. (What inconvenient truths regarding mainstreaming need to be addressed?)

(Chair - Redford; Petersen; Stephens; Veiga; Fernandez; Milder; Sandwith)

13. Revise principles and guidelines for project design and implementation. (How can the slow socio-economic processes and transformational drag of mainstreaming be accelerated?).

(Chair - Zimsky; Sekhran; Sakalian; Driver; Lowrance; Rodriguez; Child; Watanabe)

14. Identify linkages between the achievement of Goal A and the associated targets of the CBD strategic plan and other Aichi Targets and identify those mainstreaming actions that are likely to produce additional benefits vis a vis the achievement of other Aichi Targets. (How can mainstreaming interventions most effectively contribute to resolving the triple challenges of poverty, biodiversity loss and climate change?).

(Chair - Fraenkel; Maze; Nel; Bovarnick; Mee; Dogley; Vergeichik)

15. Identify indicators and measuring instruments (e.g. GEF tracking tools) for the monitoring and evaluation of mainstreaming outputs and outcomes and the Global Environmental Benefits that they provide. (What indicators and verification tools can best serve the purpose of measuring the global environmental benefits of mainstreaming projects?).

(Chair - Diaz; Cowling; Cavalier; Clay; Khan; Roe; Milder; Hammond; Wyatt; Geschke)

01:00 – 02:00 – Lunch

02:00 – 04:30 - Report back to plenary

04:30 – 05:00 – Meeting close

4. Panel Discussions and Working Group Sessions

Role of Participants –

Plenary Session Chairs - The Session Chair will not need to formally introduce the presenters - they do this themselves on the first morning. The chair will simply manage time and at the end of the presentations, hand over to the panel discussion chairs.

Panel Discussion Chairs and Panelists – The Chair will facilitate, stimulate and focus the Panel Sessions - giving each discussant 5 minutes to identify the most critical issues, evidence or key questions that arise from the presentations. After the panel has concluded, the presenters would then be invited to respond. Thereafter, all participants will enter the discussion.

Rapporteurs – These will keep a bullet-point record of key issues and responses from the panel sessions. Specifically, issues relating to mainstreaming approaches and mainstreaming challenges - need to be noted. The Rapporteurs will convene with the 'friends of the chair' (yet to be constituted) at the break immediately following each session.

Workshop products -

It is anticipated that three contributions to an overall synthesis, building on the discussion document prepared by Kent Redford, will be developed during the workshop, covering i) mainstreaming approaches, ii) mainstreaming challenges, and iii) responses to the specific workshop objectives defined by STAP.

The first and second components – on approaches and challenges – will be prepared by the rapporteurs to the panel sessions. The third component will be prepared by the four parallel working groups convened on day 3.

i). Mainstreaming approaches

The output from each session will be a 2-3 page statement of:

- the role that different approaches and tools can/should/will play in Mainstreaming,
- what has been learned to date and how robust these conclusions are,
- what important questions remain to be answered and how this could be done,
- successful and problematic case examples
- how was success/failure measured

The syntheses will build on the notes kept by Rapporteurs for the discussion panels, extending and ordering the general findings of earlier syntheses such as those indicated below.

Discussion points for consideration from Redford, Roe, etc. –

A list of **facets of successful projects** emerges that includes:

- Presence of enabling conditions/prerequisites: democratic and accountable governance, awareness and knowledge, organizational and institutional capacity, scientific knowledge (especially rich GIS systems), political will, enabling policy framework,
- Identification and involvement of all stakeholders in an iterative, inclusive fashion,
- Identification and engagement of leaders or champions for biodiversity, development, finance and civil society,
- Identification of the problem or development issue – focusing on perceived problems and felt needs. Identifying exactly what needs to be mainstreamed and into what?
- Identification of the element of biodiversity that is critical to the development issue (e.g. species, ecosystem service),
- Collection of information to make the "business case" for mainstreaming in a clear and transparent fashion,
- Identifying what risks and opportunities the biodiversity element poses to the development need?
- Identification of the key policy measures and institutions that are essential for regulating the identified problem,
- Looking for windows of opportunity: elements external and internal to the sector that catalyze awareness of the need for mainstreaming and present an opportunity to act,
- Identification of and implementation of a variety of approaches and mechanisms to achieve the mainstreamed biodiversity/development outcomes,
- Using existing implementation frameworks when possible,
- Striving for "pull" rather than "push" approaches,
- Creating a learning and listening process and develop regular means of communication and consultation,
- Allocating time as mainstreaming is a long-term process that must proceed on many tracks,
- Developing and implementing monitoring and evaluation methods that allow learning and modification of actions as the process proceeds, and
- Expecting failures which should be treated as opportunities to learn and improve

-

ii). Mainstreaming challenges

In 2009 CBD sought advice from development agencies on biodiversity mainstreaming (CBD 2009). The CBD and other sources have enumerated a set of challenges (drawn from Roe *in press* plus from Redford):

- Difficulties in the formulation of development outcomes incorporating biodiversity in programmes;
- Insufficient evidence (case-studies and success stories) on the advantages of mainstreaming biodiversity to reach development goals;
- McShane et al. (2011) conclude that in practice most apparent win-win programs involve trade-offs between desired conservation outcomes and desired social outcomes. Because these trade-offs were not expected and therefore not negotiated for the results can often be disappointment and anger.
- Results-based management is complex since biodiversity benefits are dispersed in space and time while development projects are often funded for a short period of time and decisions at the national level are often based on short term returns;
- Difficulties to raise awareness and to ensure engagement from the private sector;
- Lack of effective measurement of financial flows for biodiversity;
- Lack of systematic utilisation of economic valuation tools - both at the national and at the donor agencies levels;
- Finding biodiversity champions within ministries associated to development sectors or in ministries of finance and planning to make the case for biodiversity's critical input into their sectors;
- Current trends in funding moving away from conservation make mainstreaming activities more difficult to support
- Miteva and colleagues (2010) call for a program of research that "seeks to measure how programme impacts vary by socio-political and bio-physical context, to track economic and environmental impacts jointly, to identify spatial spillover effects to untargeted areas, and to use theories of change to characterize causal mechanisms that can guide the collection of data and the interpretation of results."
- Experience from environmental mainstreaming highlights a number of key constraints – not least the prevailing development paradigm, which treats environment as an institutional and economic 'externality'; the lack of data, information, skills and institutional capacity to work on environment- development links; the lack of successful models; and the lack of political will for change. In addition, for most developing countries mainstreaming both responds to and is

challenged by competition with many other policy priorities in the face of limited resources.

- To date progress in biodiversity mainstreaming tends to be confined to upstream outcomes in many developing countries: biodiversity is included in some development policy documents, and conversely poverty alleviation is recognised in biodiversity policy and plans. However downstream progress on the ground is thin,as development continues to drive further degradation of ecosystems and loss of biodiversity – and conversely poor people are not benefiting adequately from the services they provide in biodiversity protection.

- For example, exploitation of biodiversity can generate wealth for some, but can also increase the vulnerability of the poor and reduce their options for development. Equally, ill-planned conservation measures can equally act as a poverty trap - for example if elites ultimately control and benefit from the resource, or if poor people are denied access to a resource due to strict conservation measures.

- Making mainstreaming part of everyday practice is a long, and at times, incremental, process which requires support at different layers of institutional capacity and development planning processes. At the individual level, identification of and investments in champions and on-the-job training tied to a specific process or analysis has been found to work well.

- At the organizational level, strengthening existing systems for planning, budgeting and policy analysis are key elements.

- Long term capacity development is often required when new or complementary procedures are introduced.

- Leadership is critical both in terms of mainstreaming "champions" who can push the process forward and maintain momentum, and political will and awareness at high levels.

- Reciprocal mainstreaming – or integration – of environment and development issues is much more effective than a one-way environmental 'push'.

- Mainstreaming needs be locally owned not externally driven – although external support may needed to support capacity development and to cover the transaction costs of a participatory process.

- Mainstreaming tools and approaches need to respond to the specific country context and issue(s) of concern - there is no blueprint approach.

- Mainstreaming is an iterative process not necessarily a set of sequential steps. Flexibility and adaptive management is therefore essential.

- Mainstreaming is time and financially demanding. It requires a long time horizon in terms of monitoring of results and budget allocations.

- Mainstreaming needs to become part of the way of doing things – not something that specialists have to coordinate.

- Mainstreaming needs to recognise who holds power and therefore who needs to be engaged – Ministries of Finance, or Finance and Planning are particularly important in this regard.
- There will be times when trade-offs between development and environment cannot be avoided.

iii. Working groups synthesize responses to the Workshop Objectives

This session will be structured in four groups – the composition and content of these groups to be finalized on Day 2.

1. Re-examine and assess the concept of mainstreaming biodiversity based on results from current practice and relevant scientific research and redefine it as necessary. (What inconvenient truths regarding mainstreaming need to be addressed?)

(Chair - Redford; Petersen; Krishnan; Stephens; Veiga; Fernandez; Milder; Sandwith)

2. Revise principles and guidelines for project design and implementation. (How can the slow socio-economic processes and transformational drag of mainstreaming be accelerated?).

(Chair - Zimsky; Sekhran; Sakalian; Driver; Lowrance; Rodriguez; Child; Watanabe)

3. Identify linkages between the achievement of Goal A and the associated targets of the CBD strategic plan and other Aichi Targets and identify those mainstreaming actions that are likely to produce additional benefits vis a vis the achievement of other Aichi Targets. (How can mainstreaming interventions most effectively contribute to resolving the triple challenges of poverty, biodiversity loss and climate change?).

(Chair - Fraenkel; Maze; Nel; Bovarnick; Hickey; Mee; Dogley; Vergeichik)

4. Identify indicators and measuring instruments (e.g. GEF tracking tools) for the monitoring and evaluation of mainstreaming outputs and outcomes and the Global Environmental Benefits that they provide. (What indicators and verification tools can best serve the purpose of measuring the global environmental benefits of mainstreaming projects?).

(Chair - Diaz; Cowling; Cavalier; Clay; Khan; Roe; Milder; Hammond; Wyatt; Geschke)

5. Key Questions/Discussion Points for Plenary Speakers and Discussion Sessions

This document is intended to serve as a 'checklist' of statements, issues and questions relating to biodiversity mainstreaming to prompt discussion in presentations and in plenary discussion sessions. It is neither comprehensive nor balanced, but it is hoped that with the feedback of participants, it will grow to a form that is helpful at the workshop. It is based primarily on Kent Redford's discussion paper, but also on a range of other sources such as Roe et al. 2012; Sutherland et al. 2009; and many others – full citations are not given do avoid clutter.

The questions are arranged following the general structure of the workshop sessions, but some overlaps across sessions occur.

SESSION 1: SCENE-SETTING KEYNOTES

Discussion points from Redford etc. –

1. Various typologies are used for mainstreaming intervention types, sectors and approaches – varying according to institutional business models – including incorporation of biodiversity and ecosystem service values and sustainability into national accounting frameworks; policy and regulatory frameworks; production practices; financing mechanisms; and sustainable use. Other intervention opportunities include behavioral change, ecosystem restoration, ecosystem-based adaptation, and health. **The workshop needs to consider, very briefly, a unifying definition for mainstreaming, and a typological hierarchy/framework**.
2. Mainstreaming interventions by the GEF are directed at conserving biodiversity and ecosystem services. The relationship between these two terms is not at all straightforward despite the common assumption that ecosystem services programs conserve biodiversity, and that conserving biodiversity will secure ecosystem services. **Greater clarity on the relationship and tools used to measure impacts of projects on these two components of biodiversity is needed**.
3. There is a great deal more written about how and why mainstreaming should be done than about what has been achieved, in measured terms, from mainstreaming practice. However, detailed listings of the characteristics that underpin successful projects are emerging from reviews of case studies (See Roe 2013, and listing at end of these notes). **The workshop needs to consolidate these characteristics of successful interventions.**
4. Though "mainstreaming" has been called "integrating" biodiversity into development, it has the added meaning of modifying that into which it is

integrated – changing the valence of development policies and interventions towards consideration of the values of biodiversity. **Is there any evidence that mainstreaming has ever changed that into which it is integrated?**

5. There is a strain of mainstreaming directed at integrating poverty alleviation and biodiversity, given strength by the CBD's 2004 call (Decision VII/2) to mainstream biodiversity into poverty reduction strategies. **How well does GEF respond to this request from the parties for integrating poverty alleviation and biodiversity conservation?** (see Roe 2013).
6. For biodiversity mainstreaming TEEB (2010) has articulated six major targets for integration: economic, trade and development policies; transport, energy and mining activities; agriculture, fisheries, forestry practices; corporate strategies and operations; development policies and planning at local, regional and national levels; and public procurement and private consumption. **GEF does not address the second target – 'transport, energy and mining activities' – Is this gap important and should the GEF engage more actively with the private sector in the development of biodiversity offsets?**
7. Mainstreaming - "to internalize the goals of biodiversity conservation and the sustainable use of biological resources into economic sectors and development models, policies and programmes, and therefore into all human behaviour" (Petersen and Huntley 2005) – **How should approaches to changing behaviour be incorporated into mainstreaming projects?**
8. NBSAPs have not been fully effective in addressing the main drivers of biodiversity loss and only a few countries have used their plans as a means of mainstreaming biodiversity. **How can NBSAPs be made more effective tools for mainstreaming biodiversity?** (Roe 2013 - the NBSAPs 2.0 project addresses this gap).
9. GEF has used the Mainstreaming Biodiversity Tracking Tool to monitor progress in its projects. **Has this tool provided an adequate instrument to track performance and how can it be improved?**

SESSION 2: POLICY AND PLANNING

Strengthening policy and regulatory frameworks at national and sub-national levels; advancing biodiversity-friendly policies and legislation and their implementation, supported by biodiversity-sensitive spatial planning and capacity building.

This discussion will focus on case studies from around the globe, demonstrating successes and failures of mainstreaming approaches implemented since 2004.

Key questions for presenters –

1. How is 'mainstreaming' defined and implemented?

2. What is the desired goal of the mainstreaming activity?
3. What aspect of biodiversity and/or ecosystem services is addressed?
4. What is the nature of the investment in mainstreaming – financially, logistically, other?
5. What has worked well?
6. How was success measured and with what indicators?
7. What has not worked?
8. 8. What lessons can you draw for when, where, how and with whom mainstreaming is most likely to succeed?

Further discussion points from Redford, etc. -

1. There is a great deal more written about how and why mainstreaming should be done than about what has been learned from mainstreaming practice based on measured evidence – i.e. very limited testable information available on what works and what doesn't.
2. However, detailed listings of the characteristics that underpin successful projects are emerging from reviews of case studies.
3. There is little evidence that the mainstreaming projects funded through GEF have produced peer-reviewed articles written either by the project implementers or by others. (What peer-reviewed papers have resulted from GEF funded projects?)
4. Project implementers – very often the real 'champions' of such projects - are generally not writers.
5. Billons of dollars have been spent on mainstreaming biodiversity outcomes but there is very little robust, credible evidence on the efficacy of these actions. What measurements can be used and are the existing mainstreaming Tracking Tools adequate and appropriate?
6. In practice most apparent win-win programmes involve trade-offs between desired conservation outcomes and desired social outcomes. Because these trade-offs were not expected and therefore not negotiated for, the results can often be disappointment and blame.
7. The first generation of national biodiversity strategies and actions plans (NBSAPs) developed by Parties to the CBD had the potential to act as a bridge between conservation and development concerns, but a review in 2002 found that they "have not paid enough attention to linkages with economic policies and plans, and have suffered from a lack of integration with other national institutions and planning mechanisms...." (Swiderska, 2002).
8. Mainstreaming is an ongoing process that needs to be responsive to windows of opportunity and other unintended surprises arising from, among others, market emergence, infrastructure development, and political changes and associated shifts in power regimes (Cowling et al. 2008).
9. Implementing the operational model for most projects will take a lot of time and incur large costs, especially transaction costs. In developing countries,

donor organizations fund projects that are geared to specific deliverables subject to the time-related tyrannies of log frames, which may not be appropriate for ecosystem service projects (Cowling et al. 2008)

10. . Conservation planning needs to understand how people and nature interact in particular places. People should be offered incentives to change their behavior to conserve species (Rudd 2011).

SESSION 3: PRODUCTION PRACTICE

Production practice: improving production practice within sectors (agriculture, forestry, fisheries, etc) in production landscapes.

Experience and opportunities for expanding biodiversity-friendly production practices through the use of environmental certification and other processes and positive incentive mechanisms to improve on-the-ground practices which help reduce the negative impacts that productive sectors exert on biodiversity. Biodiversity-dependent production sectors and those with large ecological footprints that impact biodiversity-rich areas are targeted including agriculture, fisheries, forestry, tourism, and the major extractive industries of oil and gas, and mining.

Discussion points from Redford, Sutherland, Roe, and others –

1. UNEP-WCMC (2011) conducted a review of 36 biodiversity standards in certification schemes across eight industrial sectors of agriculture, biotrade, carbon offset, finance, fisheries, forestry, mining, and tourism. They found a striking lack of similarity in definitions used, components of biodiversity included and approaches required. It is clear that such differences make very difficult comparisons and cross-sector learning (see also Van Dam et al. 2010).
2. A STAP study found four main threats to eco-certification effectiveness:
   - weak certification standards
   - non-compliance with certification standards;
   - limited participation, which can stem from supply-side or demand-side factors; and
   - adverse self-selection, whereby actors already engaged in, or intending to engage in, innovative or environmentally-friendly practices disproportionally participate in the program (STAP 2010).
3. The evidence base provides, at best, weak evidence for the hypothesis that certification has positive socioeconomic or environmental impacts.
4. What is the trade-off for biodiversity between balancing production of natural resources from intensive management systems, such as plantation forestry and aquaculture, versus harvesting those resources from more natural ecosystems?

5. How can an understanding of factors affecting household decisions to invest in different natural- resource-based productive activities (e.g., agriculture, fishing, or hunting) be used to predict the biodiversity impacts of household responses to environmental change?
6. What are the impacts on biodiversity and ecosystem services of biofuel production and how will these vary by feedstock type, location, objective, and technology applied?
7. Under what conditions can agricultural intensification contribute to conserving overall biodiversity by reducing pressure to convert natural ecosystems?
8. What are the impacts (on and off site) on agricultural returns and biodiversity of "biodiversity-friendly" agricultural practices, such as organic, minimum tillage, and agro-environment schemes?
9. Under what circumstances can afforestation, reforestation, and reduced emissions from deforestation and degradation (REDD) benefit biodiversity conservation, reduce emissions, and provide sustainable livelihoods?
10. How do different forms of forest governance influence biodiversity conservation outcomes and the implementation of REDD?
11. Under what conditions is trade in captive or wild-harvested species beneficial for wild populations of the traded species?
12. What are the impacts of international trade agreements and related policy instruments on biodiversity?
13. Our findings clearly show that local threats to species are driven by economic activity and consumer demand across the world. Consequently, policy aimed at reducing local threats to species should be designed from a global perspective, taking into account not just the local producers who directly degrade and destroy habitat but also the consumers who benefit from the degradation and destruction (Lenzen et al. 2012).
14. However, whether sustainability-minded consumers and shareholders can be a force in mitigating the impacts they drive will depend on whether sustainability certification schemes will be able to overcome their current limited efficacy (Lenzen et al. 2012).

SESSION 4 - FINANCING MECHANISMS

Financing mechanisms: integrating the real value of biodiversity and ecosystem services/environmental infrastructure into development and finance planning to strengthen the case for government and private sector investment in mainstreaming processes and the inclusion of such natural capital values in national accounting frameworks; support to reform finance flows, for instance through public expenditure reviews, and to operationalize innovative finance mechanisms such as payments for ecosystem services, habitat banking, aggregate offsets, and tradable development rights and quotas.

Presentations will report on experience in building the case for government and private sector investment in biodiversity across multiple development sectors; mobilising non-traditional and innovative sources of financing.

Discussion points from Redford; Roe; GEF 6 Biodiversity Strategy, etc

1. The societal failure to adequately capture the economic value of biodiversity and the ecosystem services it provides has undermined the long-term sustainability of attempts to mainstream biodiversity which have often focused too narrowly on threat mitigation and palliative attempts to offset biodiversity loss. Hence, GEF's support to biodiversity mainstreaming actions that addresses these systemic failures is paramount. (GEF 6 Biodiversity Focal Area Strategy 2013).
2. Bottom-up implementation needs to be complemented by the policies and practices of regional and global trade and financial institutions. Of great importance is the incorporation of the value of ecosystem services into the accounting systems of these institutions (Cowling et al. 2008).
3. Although a number of approaches are currently being used to recognize, demonstrate and capture the value of biodiversity and ecosystem services, a mismatch remains between valuation work and development policy and financing. Valuation work is not leading to the development of policy reforms needed to mitigate the drivers of biodiversity loss nor is it triggering an increase in public and private finance flows on the scale necessary to address threats. There is a need for valuation work to be accompanied by policy and finance reforms such that the finance and development decisions that impact natural ecosystems and the associated biodiversity therein include appropriate incentives and price signals resulting in more cost effective and sustained management of ecosystems and biodiversity. (GEF 6 Biodiversity Focal Area Strategy).
4. Natural ecosystems should be seen as a core part of development through providing a valuable and cost-effective way to support the development process, especially for poor people (Kosmus et al. 2012).
5. But (PES) implementation has also raised quite a bit of concern that centres around the dangers of reducing the complex and multi-faceted benefits humans derive from ecosystems to a single exchange-value measure (c.f. Muradian et al. 2013).
6. A review by STAP (2010) concludes that the empirical evidence is weak from the portfolio of GEF PES projects to assess the efficacy of this "new paradigm of 'conditional conservation.'"
7. PES practice is now emerging with key characteristics – differentiated payments, spatial targeting, high conditionality, and limited side objectives (STAP 2010).
8. PES are best suited for promoting conservation on private land, but can also under certain conditions also be applied to public lands (STAP 2010).

9. One review of 36 PES projects (Kissinger et al. 2013) found that market mechanisms were an imperfect way of pricing the value of ecosystem services, particularly in the absence of enabling policies.
10. In the absence of regulations that force beneficiaries to pay into PES systems, I believe the potential of PES to raise substantial funds is more hype than hope (Ferraro 2011).
11. Most mainstreaming activities are predicated on a belief that they are win-win – a win for development and a win for conservation. This belief is based on the assumption that markets, if properly informed and incentivized will protect biodiversity. Market-based instruments are seen as having great potential by some (Kinzig et al. 2011) but also raise serious concerns for others (Lockie 2013).
12. Due to a heterogeneity of methods, and lack of clear experimental design and data collection, very little can be concluded about the effectiveness of PES (Miteva et al. 2010; Lapeyre et al. 2012).
13. REDD+ offers a significant promise to deliver biodiversity conservation outcomes, but only if care is taken to ensure projects provide ways to incorporate biodiversity into project design and monitoring (Gardner et al. 2012)
14. Examples of ecosystem based adaptation (through 'green infrastructure') include developing coastal defences to sea level rise through the maintenance and restoration of coastal vegetation, wetlands, eelgrass beds and coral reefs and conservation and restoration of forests to stabilize slopes and regulate water flows to prevent floods and landslides under heavier and more intense rainfall regimes (Munroe et al. 2011).
15. Of particular interest after recent heavily publicized natural disasters are approaches to climate change adaptation such as 'green infrastructure.' A recent TEEB study (2013) estimates that major business sectors have unpriced natural capital costs totalling US$7.3 trillion dollars, equating to 13% of global economic output. The majority of these un-priced natural capital costs are from greenhouse gas emissions, water use and land use.
16. How can biodiversity considerations be integrated into economic policies to reflect the monetary and nonmonetary value of biodiversity, ecosystem processes, goods, and services?
17. What strategies for distributing the material benefits derived from biodiversity most effectively foster environmental stewardship and biodiversity conservation?
18. How do economic subsidies affect biodiversity within the recipient country and elsewhere?

SESSION 5: FUTURE OPPORTUNITIES - Mainstreaming in a changing world

This session will address the world of the future and how conventional and non-conventional approaches will have to be expanded to embed mainstreaming practices beyond present experience, in relation to the opportunities in GEF 6 and other funding mechanisms. It will set the stage for working group discussions to follow.

Discussion points from Redford, Sutherland, Cowling, etc.

1. Mainstreaming in all of its forms and settings will only work if people change their behaviors (c.f. Schultz 2001). Yet recent work shows conclusively that increasing knowledge by itself does not lead to a change in behaviour (McKenzie-Mohr et al. 2012).
2. Effective work could be done to assess what means are most effective to promote behavioral change towards biodiversity through methods such as social marketing and community empowerment (c.f. Bolderkijk et al. 2013; Wilhelm-Rechmann & Cowling 2011).
3. Conservation is primarily not about biology but about people and the choices they make (Cowling 2006). The core question for sustainability science in our view is, therefore: how can people be influenced to act in a sustainable manner (Wilhelm-Reichmann and Cowling 2008).
4. Getting there is a social process riddled with complexity, contention, uncertainty, surprise, disappointment, and triumph. It will take a long time—in many cases, decades—to achieve this goal. The social assessment should provide knowledge on the needs, values, norms, and behaviors of individuals, institutions, and organizations in the study area. (Cowling et al. 2008).
5. People should be offered incentives to change their behavior to conserve species. Respondents, in aggregate, placed a high level of importance on context- dependent understanding of how people and nature interact (Rudd 2011).
6. What is the relationship between individuals learning about environmental problems and their conservation attitudes, knowledge, beliefs, and behaviors?
7. What are the impacts of increasing human dissociation from nature on the conservation of biodiversity?
8. What are the effects of changes in human patterns of food consumption on biodiversity (e.g., shift from bush meat to domestic meat and from fish to plant- based protein), and how are such human patterns of food consumption shaped by education programs, financial incentives, and other policy instruments?
9. What factors shape human (in)tolerance of the presence and activities of wild animals, especially where those animals induce human–wildlife conflict?
10. How do different values (e.g., use vs. preservation) and the framing of these values (e.g., ecosystem services vs. species) motivate policy makers to assign public resources to conservation programs and policies?
11. How does public involvement, especially of marginalized groups, in conservation decision-making shape the effectiveness of conservation interventions?
12. What are the impacts of free, prior, and informed consent policies on the emergence, evolution, and performance of conservation interventions?
13. How does providing information to resource users affect individual behavior and support for collective restrictions, and how does the effect vary with different means of providing the information?

14. What are the conservation impacts of corporate social responsibility regimes that are biodiversity-oriented?
15. What are the social impacts of conservation interventions, and how and why do these impacts vary among social groups (e.g., elites, poor, women, and indigenous)?
16. What are the most cost-effective means of encouraging broad, long-lasting, and active societal support and action for conservation in different contexts and among different actors?
17. What has been the effect of environmental impact assessments on biodiversity conservation?
18. Protected areas around the world do not exist as isolated islands of tranquility where centuries of evolutionary processes continue uninterrupted by humans. Rather, they are often found in mixed-use landscapes and seascapes where natural resources are intensively managed for satisfying human needs such as food, water, fuel, and wood. Protected area administrations are thus challenged to achieve their conservation objectives while land-use decisions and developments taking place outside the park borders can often work at cross-purposes to their conservation goals. (GEF 6 Biodiversity Focal Area Strategy)
19. Two categories of protected area, Categories V and VI, which, though not called as such, have the implementation of mainstreaming as part of their definitions. Category V is reserved for areas where the interaction of people and nature over time has produced an area with distinct character where safeguarding the integrity of this interaction is vital. Category VI protected areas conserve ecosystems and habitats, together with associated cultural values and traditional natural resource management systems (Dudley 2008).
20. What are the human well-being costs and benefits of protected areas, how are these distributed, and how do they vary with governance, resource tenure arrangements, and site characteristics?
21. How does the management of protected areas affect conservation beyond the boundaries of the protected area, such as through the displacement of human populations, hunting, or fishing?
22. PAs are increasingly being designated outside important sites for species conservation, despite the high proportion of such sites that have yet to be protected (Butchart et al. 2012).
23. However, recently designated PAs do not appear to have been well targeted towards these important but unprotected sites; this may have occurred for several interrelated reasons. PAs tend to be biased to higher elevations, steeper slopes, greater remoteness and lower suitability for agriculture, rather than towards locations where they can best mitigate the rapid/extensive land- use change that threatens most species. We conclude that better targeted site-scale conservation would help to address the current mismatch between expanding PA coverage and declining species trends (Butchart et al. 2012).

6. Abstracts and Outlines

(un-edited and as received at 19 September 2013)

Principles and realities for effective mainstreaming – lessons learned from field implementation - Nik Sekhran, UNDP

UNDP currently supports a large portfolio of mainstreaming projects funded by the GEF (worth $523 million), aligned with the UNDP Signature Programme on *Integrating biodiversity and ecosystem management into development planning and production sector activities to safeguard biodiversity and maintain ecosystem services that sustain human wellbeing.* Having contributed to the growth of this area of work supported by the GEF since its inclusion in the 3rd replenishment, UNDP has developed a body of work and knowledge on biodiversity mainstreaming, successes and challenges, and lessons learnt.

UNDP supports countries seeking to shift their national development trajectories to harness the positive opportunities provided by biodiversity and natural ecosystems, as a catalyst for sustainable development. Mainstreaming work enables the recognition of the real value of biodiversity and ecosystems to society—in relation to secure livelihoods, food, water and health, enhanced resilience, conservation of threatened species and their habitats, and increased carbon storage and sequestration. It calls for innovation, drawing on the potential of nature to achieve multiple development dividends in the context of our rapidly changing world, with major shifts in economic power and patterns of consumption.

This introductory talk will focus on articulating UNDP's approach to biodiversity mainstreaming, through the removal of barriers to effective integration of biodiversity and ecosystem management into development planning and production sector activities. These barriers operate at the systemic, institutional and individual levels, and include market barriers. Designing mainstreaming interventions involves selecting the best entry point in terms of these levels and may involve either a "short hook" approach – working at landscape level to maximize biodiversity compatibility, or a "long hook" approach – tackling product supply chains.

An analysis of mainstreaming projects in our portfolio shows that both approaches have been effective under particular circumstances and the talk will explore what these circumstances are, and how one ensures sharp conceptual thinking in determining the optimal entry point. This includes designing interventions at national scale that have a realistic chance of success, given the policy and institutional environment, and the governance framework in place. Here there are interesting lessons to be learnt around the kinds of landscape-scale interventions and policy / regulatory changes that have been possible in upper Middle Income Countries (such as Botswana, Bulgaria, Cuba, Lebanon, Maldives, South Africa), where a short hook approach has been used.

Even in Least Developed Countries, interesting opportunities are presenting themselves to mainstream biodiversity considerations into public sector policy and expenditure, for example, through the public policy debate in Ethiopia on foreign buy-up of land. The enormous challenge here and elsewhere may be to turn potential tipping points for widescale and irreversible conversion of natural capital – into "hot moments" for mainstreaming. The entry point for this work again depends on the governance framework in place, and may involve support for building particular pillars of society, such as the legislature, judiciary, civil society or media, in order to help bring about a shift in the national development trajectory.

The entry point is also critical in the long hook approach, varying from the level of individual consumers and retailers, to the development of national platforms in commodity sectors whose

expansion is causing rapid biodiversity loss without accompanying long-term societal benefits, for example, through the Indonesian Sustainable Palm Oil Initiative. In this kind of mainstreaming work, the choice of entry point needs to be based on a clear analysis of the market and supply chain in question, the way businesses calculate and manage risk, and the trigger conditions that enable more biodiversity-compatible investment decisions.

Finally, the talk will examine the potential for applying the mitigation hierarchy as a framework for the choices and trade-offs involved in our biodiversity mainstreaming work, balancing competing societal priorities in the face of rapid change and pressing sustainable development challenges.

Barriers-- Definition

At a systemic level, barrier removal activities may seek to influence the policy framework governing production sectors, and governance (institutional coordination, accountability etc) to address externalities. At an institutional level, barrier removal activities aim to enhance institutional capacity to address biodiversity conservation amongst industry regulatory bodies, and industry associations as conduits for enterprises. At individual level, barrier removal activities include increasing skills to determine sustainable off-take rates and development of management strategies, often working with champions. Interventions to remove market barriers may include market research, building the capacities of small to medium enterprises to negotiate higher process, promotional activities in key markets, the development of certification schemes.

Lessons learnt from policy and planning mainstreaming approaches implemented since 2004 in South Africa - Kristal Maze, SANBI

South Africa's first NBSAP, published in 2005, set ambitious objectives for mainstreaming biodiversity in a range of national policy and planning instruments and in production sectors. Through several government and GEF investments, significant progress has been made. However, until recently we have had relatively little success in mainstreaming biodiversity in the heart of South Africa's economic policy and national planning, where it is still seen at best as peripheral or a nice-to-have, at worst as a break on development. Mining, manufacturing and infrastructure development remain the dominant focus of industrial policy, and even the emerging Green Economy discourse is focused largely on energy efficiency and technological solutions.

This lack of success in penetrating the core of government's thinking prompted us in 2010 to undertake a concerted exploration of why or how we are failing in communicating our message, through a project referred to as "Making the Case". With the help of marketing experts, we developed a suit of eight "value propositions" for biodiversity, which were tested systematically with key audiences. Two clear lessons emerged: first, the strongest value proposition for decision-makers in government is that biodiversity is a national asset that can contribute to the development priorities of the country; second, the "doom and gloom" message of impending extinctions and imminent collapse, which the biodiversity sector has tended to use for decades, not only has no traction but in fact elicits apathy.

We need to show how biodiversity is relevant to government's priority issues of the day – for South Africa these are job creation, poverty alleviation and rural development. The value proposition that SANBI has spearheaded since 2011 is that of ecological infrastructure as a national asset which is under-invested in and under-realised. This message has resonated strongly with key mainstreaming targets. It has required common-sense arguments and some compelling visual images, combined with an assurance of a good science foundation. It has also required an understanding of mainstreaming as heavily context-dependent and always based on relationships built over time; and

skilful practice of the art of being in the right place at the right time with a contribution that meets the immediate need of a high-level official or politician.

This presentation will use South Africa's mainstreaming journey to explore some of the less tangible aspects of mainstreaming success from a practitioner's point of view – aspects that we believe are often missed in the formal literature and in attempts to codify a recipe for mainstreaming interventions.

Economic Growth and Mainstreaming Biodiversity Conservation; the Costa Rican case - Carlos Manuel Rodriguez, Conservation International.

Ecosystems are deteriorating worldwide, and with them, the capacity to support human well-being, a problem that is exacerbated by climate change. The Millennium Ecosystem Assessment identified the failure to value ecosystems and their services as a major contributing cause. Part of the solution to this problem lies in policy making and institutional development that takes into account the full value of ecosystem services, the benefits from ecosystems to individuals, communities and the economy.

Considerable progress in the measurement and valuation of ecosystem services has been made, and a large number of case studies and demonstration projects have been carried out. Ongoing programs such as TEEB (The Economics of Ecosystems and Biodiversity) and the Natural Capital Project are dramatically improving the broad understanding of the importance of ecosystems to sustainable growth. Valuation has been widely accepted in the environment community, but a challenge remains to engage Ministries of Finance and economic planning agencies in dialogue about growth and ecosystem services.

Equally important is the major challenge that the CBD faces after the 2010 agreement on the Strategic Plan and Aichi Targets to implement those historic decisions and translate them into real results in policy and institutional development . The COP 10 agreements called on countries to translate the Aichi Targets into appropriate national level Targets and then update their NBSAPs accordingly. The Aichi Targets provides a roadmap for achieving most of Rio+20 goals on the ground; therefore, ensuring that national level targets and strategies are technically sound and that governments are committed to implementing them is of our highest interest.

Costa Rica, a long standing nation in natural capital conservation, has a unique positioning to advance in structural reforms needed to generate political consensus around implementing the Aichi Targets. This Central American nation has in the last 25 years not only stopped deforestation but has double its forest cover while tripling its GDP/ per capita, proving that protecting nature is not a barrier to economic growth. The political and institutional lessons coming from Costa Rica are a key for nations considering options and scenarios for innovative policy development in the context of the Aichi Targets and the future SDG's.

This presentation will explain the policy tools and institutional transformation that gave Costa Rica success in its biodiversity conservation and how the transformation has provided political wisdom to ban oil, gas and gold exploitation under the understanding that the extractive activities is not the future of our economic activities. A nation with a solid PES program (budget: $30 million per year) for carbon , water and biodiversity services and a world destination for nature base tourism ($2 billion a year) has set high standards in mainstreaming biodiversity conservation as a way forward in achieving economic and social goals.

Mainstreaming biodiversity on the Seychelles – a Small Island Developing State – Didier Dogley

How is 'mainstreaming' defined and implemented?

It is the integration of the goals of biodiversity conservation and sustainable use of biological resources into national policies, strategies and legislation and economic sectors. In the case of this particular project it was implemented by involving and engaging the key stakeholders of the two main economic sectors of the country i.e. tourism and fisheries and by securing their support and participation in the implementation of projects within the natural land and seascape that they utilise for their business. It also involved the review of existing and elaboration of new and modern legislative framework for biodiversity management and conservation.

What is the desired goal of the mainstreaming activity?

Biodiversity conservation objectives are integrated into key production sectors of the economy and with the project goal to ensure that "the functional integrity of the terrestrial and coastal ecosystems is secured now and into the future, thus providing a base for sustainable development".

The key production sectors of the economy in the case of the Seychelles are the Tourism and Fisheries sectors.

The project has 3 outcomes and these are listed as follows:

Outcome 1 Systemic and institutional capacities for mainstreaming biodiversity management within and across sectors are strengthened.

Outcome 2 Methods and means for integrating biodiversity and artisanal fisheries management are in place.

Outcome 3 The tourism industry is addressing biodiversity conservation needs as part of good practice in business operations.

This UNDP supported GEF funded project focuses on two sectors—artisanal fisheries and tourism—both of which are socio-economically important for the country and have a significant impact on Seychelles' biodiversity. The project aims to integrate biodiversity conservation into the day-to-day productive practices of these sectors by removing barriers to a more sustainable set of practices. This implies demonstrating how change can be concretely promoted, establishing new standards for biodiversity management across the land and seascape, but equally creating the enabling conditions for change to happen.

What aspect of biodiversity and/or ecosystem services is addressed?

The project uses the application of management of ecosystem principles not only within protected areas but also within the wider land- and seascape, bearing in mind the importance of complementarity and spatial configuration. This implies using the ecosystems approach and the sustainable management of natural resources while applying concepts such as ecological connectivity, ecological networks and where applicable, connectivity for migratory species to ensure long term conservation and management of biodiversity and sustaining ecosystem services. It is based on the fact that biodiversity are not restricted to protected areas which are artificial boundaries created by man and the impact of anthropological activities extends beyond their specific locations.

In the tourism sector, the project works at the national level in partnership both with individual hotel

establishments and a national industry association. In addition to supporting area-based conservation and sustainable use measures, the project also works with the tourism industry in the development of Seychelles' Sustainable Tourism Label, SSTL, which is a certification scheme that creates an incentive for raising the standards of biodiversity management of hotel establishments. The project takes the approach of spatial management of land- and seascapes to heighten the conservation status of specific areas for biodiversity and artisanal fisheries management by engaging key partners in the fisheries sector i.e. the Seychelles' Fisheries Authority and a fishermen association based on Praslin Island. This includes a suite of biodiversity management measures, some of which are more 'direct' (e.g. joint or collaborative management, establishment of protected areas, and improved management of fisheries).
The project targets the 4.14 million ha of the Mahé Plateau, much of it marine. As a result of the project's work in demonstration sites and with partners in the tourism and fisheries industries, a total of 2.7 million ha within the Mahé Plateau can be said to be either under 'improved management' or 'heightened conservation status.
Through the review of existing legal framework for biodiversity conservation and management the project also aims to strengthen the systemic and institutional capacities for mainstreaming biodiversity management. The project has also successfully supported the development of all 26 districts Land Use Plans plus two for two outer islands. This is supported by a GIS Quantum database linked to an environment database to facilitate and control development in environmentally sensitive zones. This has greatly improved both the speed and accuracy of decision making in the context of sustainable development within government and the Planning Authority.

What is the nature of the investment in mainstreaming – financially, logistically, other?
The project has provided incremental financing which has enable the outcome targets set in the project document to be satisfactory achieved. Through the availability of funds Seychelles being a small nation of 85 000 people has been able to access high quality international experts who have contributed greatly towards introducing new concepts, knowhow and ideas within the framework of biodiversity conservation and management. The project has also enable the transfer of innovative tools and equipment which were not available but with their introduction work process at all levels have greatly improved.

What has worked well?

This includes a suite of biodiversity management measures, some of which are more 'direct' (e.g. joint or collaborative management, establishment of protected areas, and improved management of fisheries), while others are more 'indirect' planning tools (e.g. the Land Use Plans or LUPs).

In seascapes, the project supports improved management of fisheries across the fishable area within the shallow strata for the Mahé Plateau—some 2.65 million ha. Within that area, the project is directly helping the Praslin Fishermen Association to change fishing practices while reaping the benefits of co-managed fisheries. As a direct result of the project, a 61,167 ha 'Special Co-management Area' around Praslin Island and vicinities has been proposed in 2012, alongside a Fisheries Co-Management Plan. Both are now undergoing participatory scrutiny towards approval and implementation. Once in place, both the Co-Management Plan and the enforcement of the Special Co-Management Area will ensure a more orderly and rational use of fisheries resources by artisanal fishermen. Several destructive fishing practices have already been internally banned by the Praslin Fishermen Association—including the use of spear guns and shark gill nets. At the same time, improved practices have been adopted, such as control of catch, increased use of bamboo traps and small scale droplines. The project is also working with related initiatives on sustainable fishing in the Mahé Plateau spearheaded by the Seychelles Fishing Authority and with support from the Indian Ocean Commission. Both are project partners and co-financiers and these interventions are concerned with, for example, the pelagic strata, fishing of tuna and the reduction of by-catch and

waste in the fishing industry overall. These larger scale interventions complement well the project's niche, which is artisanal fisheries.

The full development of LUPs is another concrete way in which the project is improving landscape management and promoting conservation in Seychelles. A total of 25 LUPs covering 20,062 ha have been nearly completed in full; a 8 LUPs will be completed in early 2013, which will put all districts within the Mahé Plateau and Coetivy Island under LUPs. The Plans have effectively identified and mapped priority areas for conservation, urban expansion, housing, tourism development, agriculture and other uses. Approval of LUPs by Cabinet is the next step, making them binding. Seven LUPs are very close to approval. The project is also supporting the mapping of Key Biodiversity Areas (KBAs) and their integration into the LUPs. Identified KBAs currently cover 13,026 ha and their location and size provide a hands-on analysis of biodiversity values and ecosystem services across the landscape, including areas that should be protected, but currently are not. Both the LUPs and KBA maps represent powerful land-use planning tools that are in fact already supporting decision-making on new infrastructural developments on a regular basis, e.g. at the meetings of the high-level Planning Committee hosted by the Ministry of Land-Use and Housing.

How was success measured and with what indicators?

In general the project was seen to have very clear outcome and indicators for each activity. A few especially as far as the elaboration of legislation and associated documents are concerned the indicator needed to be redefined or reviewed to improve clarity. Numbers in the form of percentages and amounts are the most widely used indicators within the project. For example the total area covered by the 13 Land Use Plans is 13,026 ha. Of these, 11 LUPs are for the districts on Mahé Island and 2 of them on Praslin and one for La Digue Island.

The component dealing with tourism industry's contribution to biodiversity conservation as part of good practice in business operations has by project end the achieved a target of :+ 6000 ha marine and + 6000 ha terrestrial under heightened management.

For the investment by hotels and tourism businesses in biodiversity conservation it was measured in the form of US dollars e.g. two pilot projects Ephelia Constance Hotel and Denis Island, have contributed a total of US$108,000, which represents a 36.5% increase over the baseline.

In sum: the project aims to achieve 1) Joint management = 1,931.3 ha, 2) PAs = 12,770 ha3) Improved management of fisheries = 2,650,000 ha4) LUPs = 13,026 ha

TOTAL = 2,677,727.3 ha

This implies a total of 26,777 km2 of terrestrial and marine areas under improved management or heightened conservation status.

What has not worked?

The main problems that we have encountered have been linked to strong personalities dominating the fisherwomen association on Praslin. As long as the chairperson was interested and saw opportunities the programme worked well but when he decided not to support the project further he was able discourage others from participating. Within small communities wherever there are strong personalities involved they can either drive support for or against the project. In this case issues that the fishermen were encountering with the National Fishery Authority were used to disrupt the co-management initiative.
Similarly with the Sustainability label it took a major effort to get the hotels to buy in and support the initiative. Many hotels although they had already signed to similar international initiatives such as blue flag, EMS 14 001 and QMS 9000 they were reluctant to sign onto the local label. But there are now hotels that are buying into the sustainability label initiative after much consultation.

What lessons can you draw for when, where, how and with whom mainstreaming is most likely to succeed?

Some of the targets and indicators from the original design of the project were not realistic and over-ambitious and some will not be attainable by the end of the project. While conducting the midterm review the Project Coordination Unit and UNDP agreed to review the log frame (targets and indicators) for the remaining project cycle.

There were issues with the capacity within the management framework to implement the project. We had several staff change over the life span of the project. The management of the project will continue to undertake analyses to tackle issues of capacity weakness within the project coordination Unit. At the same time the implementation of the project will focus strongly on the strengthening local capacity deficits at the systemic and institutional level. Training will be provided to close the gaps and minimise the risks for the project. More in-depth risk analyses should be conducted on a quarterly basis and findings should be in- cooperated in the work programme to resolve any matters within the operational control of the project team.

For Outcome 1

The Project team contracted a group of local consultants to undertake assessment of areas of high biodiversity for informed decision-making in future land use planning and management. This study represents a total of 750 days of consultancy.

The lessons learnt was that key biodiversity areas are necessary for better land use planning, to assist decision-makers in conserving the biodiversity of SIDS. During the assessments the consultants were able to identify tools that are important and should be made available for land-use planning. Detailed species distribution maps for species-centred conservation actions were produced. Multipurpose and flexible database integrating species and ecosystems levels was also set up, containing zoological component covering the species of special concern and also integrates the ecosystem components. This database is a powerful tool for the development of national specimens collections (referenced and verifiable species records), and it should greatly improve data collection with very high quality in future.

One of the lessons learnt was that we should further develop the ecosystem approach especially in view of the relatively small spatial areas within SIDS. Furthermore, SIDS should keep exploring and documenting under-explored areas and under-studied taxa.

There has been progress in the work to revise the legislations, in particular the Physical Planning Bill (formerly the Town and Country Planning Act) and the Environment Protection Act (EPA). This signifies progress in getting the relevant institutions engaged in the course of action to ensure there is a strong foundation for more effective land-use planning in the future, especially with regards to integrating biodiversity concerns into legislations in Seychelles.

The Government recognized the **necessity to have Land use plans** for the different districts and a National Land Use Plan was developed for Seychelles. The total area covered by the 25 Land Use Plans is 20,438 ha. This implies that 100% of the land area of the three main Inner Islands has been covered by the land use plans. This clearly has a major impact on the whole trajectory of development and is a level of biodiversity mainstreaming within national development baselines that is unprecedented.

The geo-database has been established and is an important tool for inter-agency knowledge sharing and synchronization of national biodiversity data. This geo-database is an important objective of the project, to promote and strengthen the systemic and institutional capacity building for mainstreaming biodiversity management within and across sectors.

<u>Outcome 2</u> of the project aims to establish a pilot co-management system, which implies an early effort at adaptive management in fisheries in Seychelles.
The lessons learned are that in spite of the uncertainty, decision-making has to be done by both partners involved in the co-management for the system to function. Fishers knowledge and their involvement in decision making is extremely important but requires a lot of effort and the process must be well supported to secure the buy in of fishermen.

Fishers proposed management measures to contain the amount of fishing, reduce fishing on spawning aggregations, protect young fish or juveniles and provide for the ongoing activities of the PFA and PFCCC. In order to restrain the amount of fishing, fishers proposed to limit the number of traps used in the co-managed area. The stakeholders have learnt that when determining the fishing regulations, the impacts on major fish species and the different groups of fishermen should be assessed.

For outcome 3 The tourism industry is addressing biodiversity conservation needs as part of good practice in business operations of the project.
The lessons learnt are that a broad-based stakeholder consultative process is the best way to manage the project, involving all sectors, including public, private and non-for profit sectors to participate.

Civil society organizations/Partnerships: The project has successfully worked with NGO's and civil society organisations to engage them in the project activities for all three outcomes. This is important to obtain broad-based stakeholder knowledge and experience for decision-making and to adopt a stakeholder-based participatory approach to decision-making. Outcome three involves working with NGO's that assists private tourism operators to invest in biodiversity conservation in and around their establishments. A number of these NGO's have been innovative to encourage tourism operators to invest in a wetland management plan wherever one is located in close proximity of the property, or to sign a memorandum of understanding with Government institutions to assist in the enhancement and maintenance of wetlands.

Grassroots involvement
The project provides opportunities to involve communities as a key stakeholder in decision-making for all aspects and outcomes of the project and even provide consultancy opportunities for local individuals and companies to work with other stakeholder groups.

Members of the public are always consulted for their opinion about the land use plans being drafted for each district under this project and they are also invited to stakeholder meetings to provide their views about the pilot fishery co-management plan that is being drafted at this reporting period. The local communities have been innovative and have volunteered to participate in the first Seychelles Sustainable Tourism Label in order to improve the sustainability of their business operations. They were invited by local experts to share their knowledge of the biodiversity and species of Seychelles so that the information can be synthesised and entered into the biodiversity meta-database. After being provided with basic training stakeholders have been able to provide both basic and detailed additional species records for the database.

Mainstreaming of biodiversity into economic sectors and land-use, under GEF-funded UNDP-implemented projects, in Europe and Commonwealth of Independent States1 - Maxim Vergeichik, Regional Technical Advisor, UNDP

Background

The Europe and Commonwealth of Independent States (ECIS) region covers 26 countries with a total area of 24,023,993 km^2(around 16% of the world land surface) and includes the world's largest country, the Russian Federation. The ECIS is located in the Palaearctic ecozone and harbours 26 temperate broadleaf, mixed and coniferous forest ecoregions, the majority of the Palaearctic's boreal forest and tundra ecoregions, Mediterranean forests, wet grasslands and world's largest dry steppe ecoregion (Kazakhstan). The ECIS region is home to the world's largest enclosed sea (the Caspian)

and largest brackish sea (the Baltic) and harbours globally significant freshwater ecoregions that include the rivers of Europe and the Russian Far East, the deltas of the Volga, Danube and Lena, Lake Baikal(the oldest and deepest lake on the planet), and the Anatolian small lakes. There are over 36,750 protected areas in the region, covering almost 7.9% of the region's land surface. The region includes 17 natural and three mixed UNESCO World Heritage sites, 192 Wetlands of International Importance (Ramsar sites) and 98 Biosphere Reserves.

In Europe and the CIS, UNDP and GEF have supported over 60 ecosystem and biodiversity projects between 1992 and 2012. As of early 2012 the biodiversity and ecosystem portfolio of UNDP-GEF in Europe and the CIS was worth US$ 101.5 million in GEF funding, and US$ 290.5 million in committed co-financing. Projects for mainstreaming biodiversity conservation have directly benefited over 55 million hectares of land and seascapes and indirectly benefited a further 49 million hectares. Agriculture, farming, fisheries, tourism, land use planning and oil & gas are the most commonly targeted sectors. Two case studies follow which illustrate the mainstreaming work of UNDP-GEF, in Bulgaria and Belarus.

Bulgaria: developing local capacities for agrienvironmental measures in biodiversity rich grasslands

Semi-natural grasslands are some of the most valuable ecosystems in agricultural landscapes. As a result of long-term co-existence with farmers, such ecosystems are rich in species and characteristic of their bio-geographical region. Bulgarian grasslands exhibit high floristic diversity, and provide important habitats for many animal communities, notably butterflies and breeding birds. Available estimates indicate a decline in the area of semi-natural pastures and meadows in Bulgaria from 1.8 million ha. in the early 20th century to 1.2 million ha. in the 1960s and less than 500,000 ha. in the late 1990s. Recent estimates suggest that a total of 350,000 hectares of semi-natural grassland habitats in Bulgaria are important for biodiversity; these so-called 'high nature value' grasslands are home to remarkable biodiversity that includes over 51.5% of the flora of Bulgaria and 198 species of plants of international conservation importance.

In the early 2000s these remaining grasslands were in danger of disappearing as a result of privatization and land reform following the collapse of communism and the transition towards a market-based economy. Abandonment of farming, over-grazing, or even simple changes in cutting regimes, all reduce biodiversity in the grassland community as a consequence of shrub encroachment or the emerging dominance of competitive grassland species. Although this was the period of Bulgaria's accession to the European Union, whose agrienvironmental instruments cover sustainable management of species rich grasslands, Bulgaria lacked the capacity to benefit from these measures

The UNDP-GEF project *Conservation of globally important biodiversity in high nature value semi-natural grasslands through support for the traditional local economy (2007-2012)* was designed to establish local and national capacities to develop and manage agrienvironmental measures for Bulgaria's valuable semi-natural grasslands. The project set up a system of financial incentives paid to farmers for maintaining habitat in a certain condition. Under contracts, farmers agreed to carry out traditional patterns of pastoralism (herding and grazing of sheep and cattle), including the seasonal movement of sheep and cattle to higher mountain pastures for summer grazing; maintain hay-making on lowland and upland meadows for winter fodder; don't apply agro-chemical inputs such as fertilizers and pesticides. Each farmer was monitored to comply with obligations set in the payment contract. Upon completion of the project the payment scheme was incorporated in the National Subsidy scheme – so-called Axis-2, Agienvironmental Payments, under High Nature Value Farmland Scheme, financed further by European Union and Government of Bulgaria.

Key to project success was the role of the Bulgarian Society for Protection of Birds, which ran three mobile teams, advising farmers on the complexities of the agrienvironmental measures, stimulating their interest to apply for the available subsidies, advising local extension services, helping farmers correctly fill out applications for the scheme and providing support and advocacy if their subsidy applications were rejected by the authorities.The experts in the mobile teams have also been

instrumental in developing both government ordinances and the content of grassland measures included within the national agrienvironmental scheme. Already in the last year of implementation, replication of project lessons on a national scale started. Just under one payments budget line - for management of grasslands by mowing and grazing - in 2011 some 2,047 applicants applied nationwide, which is 79,580 ha of high nature value grasslands to be covered by conservation-wise management form 2011 alone.

The biodiversity impacts achieved by the project include improved management of 26,072 ha of high nature value grasslands, stability of populations of Corncrake (*Crex crex*), Saker Falcon (*Falco cherrug*), Imperial Eagle (*Aquila heliaca*). The habitat maintained will ensure stability of European Souslik (*Spermophillus citellus*, Global IUCN Red List category: Vulnerable) whose colonies define the distribution of Saker Falcon and Imperial Eagle.

Belarus: building biodiversity conservation standards into land and resource use planning.

Deciduous forests, wet meadows, fen mires, bogs, lakes and riverine ecosystems play a particularly important role in the conservation of regionally and globally significant biodiversity in Belarus. This rich mosaic of ecosystems provides habitat for a high proportion of the global or European populations of several IUCN Red Listed species, including 50% of the aquatic warblers (*Acrocephalus paludicola*), 14.6% of black storks (*Ciconia nigra*), 18% of greater spotted eagles (*Aquila clanga*), 10% of corncrakes (*Crex crex*) and 7% of great snipe (*Gallinago media*). Substantial populations of European bison (*Bison bonasus*), grey wolf (*Canis lupus*) and brown bear (*Ursus arctos*) are present too, as well as diverse orchid species and other plants of international significance. The global importance of the country's biodiversity is underscored by the presence of 47 Important Bird Areas, eight Ramsar sites, and three Biosphere Reserves.

This important biodiversity is to a certain extent secured by the protected area system (covering 7.9% of the national territory), but the conservation of biodiversity also depends on diverse, human modified semi-natural habitats outside the protected areas. Around 30% of species included in the National Red Data Book are present in these human-modified landscapes, most notably in open water areas, wetlands, drained floodplains, mature forest plantations, old landscape parks and agricultural areas under traditional cultivation. Without legal protection these biodiversity rich areas are threatened by changes in local land use, new patterns of agriculture, forestry, fisheries, and hunting. Furthermore, as these areas are lost, so the protected areas become more isolated from each other, diminishing their effectiveness as protected nodes in the ecological landscape.

The objective of the UNDP-GEF project *Mainstreaming biodiversity conservation into territorial planning policies and practices* (2010 – 2014) has been to help remove systemic, regulatory and capacity barriers to mainstreaming biodiversity conservation priorities into the territorial planning policies and practices of Belarus. Two major programmes of activity are included: enabling a regulatory, policy and institutional framework for land-use planning that reflects biodiversity considerations outside protected areas; and testing models for biodiversity-compatible land-use plans at the district level. These actions have resulted in enhanced ecosystem integrity outside protected areas in ten administrative districts of Belarus (approximately 2 million hectares). In the longer term replication of these measures could ensure the integrity of fragile ecosystems over 36% of the country.

The project has supported a new analysis and classification of biotopes of national and international significance, which will be published as the '*Directory of Rare and Threatened Biotopes of the Republic of Belarus*.' Criteria and indicator species have been specified for the designation of each threatened biotope and recommendations have been prepared on minimum standards to be observed by different economic activities to maintain the integrity of key biotopes and habitats. It is intended that these standards for rehabilitation and conservation of important biotopes will be legally adopted, helping to harmonise national nature protection legislation with international norms.

For each rare and threatened habitat identified in *Directory* a "species habitat passport" was designed, which stated the characteristics of the habitat of a particular rare species in a particular site. Once the species passport was finalized, a protection guarantee was issued, which is a document by which the land user guarantees implementation of certain conservation activities to maintain the habitat of the species in question or to avoid any negative activities. All protection guarantees issued by the project have been duly consulted with land users and land owners before their adoption by Local Councils as official documents. Once adopted, they were passed on to land users for compliance.

Conclusions

Drawing from the experience of UNDP – GEF work in ECIS, mainstreaming can deliver biodiversity results if the mainstreaming mechanism is clearly defined. As demonstrated in the cases above, these can be incentive payments, protection guarantees, or other instruments. If the project development stage confirms the specifics of the mechanism, proves that it is country-tailored and is low-risk, there is high probability that mainstreaming results will be achieved.

In ECIS UNDP GEF mainstreaming portfolio, the most successful projects were those which were developed and implemented by the same people (e.g. Belarus, Bulgaria, Kazakhstan, Kyrgyzstan). The least successful were those where project implementation teams were new compared to the project development teams (e.g. Russia Taimyr).

The experience of the mainstreaming projects in ECIS shows that there are no trade-offs between the desired conservation outcomes and desired social (community) outcomes. Ultimatley, the BD solutions – including those outlined in these case studies – have benefitted communities at no regret.

Mainstreaming of biodiversity into spatial planning is evidently one of the key issues for Europe and CIS. Before mainstreaming can proceed into industries, it is paramount to set the stage right by making sure the underlying official land use planning system does take biodiversity into account.

It is very true that the operational model for most projects might take time and incur costs larger than the current project management cost mandated by GEF. Institutional arrangements, such as the NGO mediation in the case of Bulgaria project, was a key success factor, even though it meant transaction cost.

For mainstreaming projects to be successful it is important to allow adequate project duration, set realistic deadlines, and extend projects where reasonable. Finally, it is critical to allow innovation, even if it presents risk. Neither Bulgarian, nor Belarusian mainstreaming mechanisms and approaches had been explicitly stated in the programming papers of GEF program on mainstreaming in GEF-4. Nonetheless, the innovation which came with them paid back with biodiversity results and valuable experience for wider GEF portfolio.

References

Appleton, M.R., Dinu A., Liscakova, N., Panchenko, N. & Vergeichik, M. *Biodiversity: Delivering results in Europe and the CIS*, UNDP, Bratislava, 2012

Session 3 – PRODUCTION PRACTICE

Leveraging the commercial banking sector to mainstream biodiversity conservation in production landscapes - Courtney Lowrance, Citibank

1. How is 'mainstreaming' defined and implemented?

Mainstreaming of Biodiversity in the Finance Sector

Commercial financial institutions adopt policies that require obligors to meet certain environmental and social standards, including biodiversity and ecosystem services considerations, to qualify for financing.

The most common mainstreaming instrument is the Equator Principles, a voluntary framework adopted by 78 banks globally to apply the IFC Performance Standards, including PS 6 on Biodiversity Conservation and Sustainable Management of Living Natural Resources, to all project financings over USD 10MM.

Other mainstreaming initiatives with participation by the commercial finance sector include

- Green Credit Protocols that are instituted by the Central Banks of China, Brazil, Colombia, and Nigeria and under discussion in Peru, Kenya, and Mongolia
- UN Principles for Responsible Investment, which are adopted by asset owners and investment managers
- Natural Capital Declaration
- Commodity Roundtables, including
    - Roundtable on Sustainable Palm Oil
    - Roundtable on Sustainable Soy
    - Better Cotton Initiative
    - Better Sugar Cane Initiative
    - Forest Stewardship Council
    - Global Roundtable on Sustainable Beef
- Sector or topic-specific initiatives, such as the
    - Hydropower Sustainability Assessment Council,
    - Cross Sector Biodiversity Initiative
    - Business and Biodiversity Offset Program
    - Net Positive Impact (NPI) Alliance

Implementation of 'Mainstreaming' Activities

Biodiversity and ecosystem services are integrated into a financial institution's lending and investment decisions through their policies. These policies are generally applied according to the type of financial product or service (corporate or government loans, trade finance, debt and equity underwritings, advisories, etc) and/or by sector. The approach may differ depending on the leverage provided by the type of financial product or service. For example, unlike loans, initial public offerings on a stock exchange do not have legally binding agreements between the client and the financial institution. Consequently, in these types of transactions, banks must rely on public disclosures of a company's environmental commitments rather than terms and conditions which are inserted in a loan agreement.

When a transaction is subject to an environmental policy or process, such as the Equator Principles or sustainable palm oil policy, the bank will implement a defined process that typically includes initial screening and review of the activity being financed against defined standards (e.g. IFC Performance Standards, RSPO Principles & Criteria, etc.). This process varies from bank to bank, but is usually carried out by dedicated staff (specialists or non-specialists). In contrast to development finance institutions, commercial banks have less capacity in terms of both technical expertise and dedicated staff for environmental reviews of transactions. For this reason, commercial banks rely heavily on consultants.

2. What is the desired goal of the mainstreaming activity?

From a commercial bank perspective, the primary goal of mainstreaming biodiversity into bank processes is to manage environmental and social risks associated with financings and investments. Some of the drivers for banks are

- Enhanced brand reputation;
- Getting ahead of regulatory requirements;
- Reducing operational risks associated with the client's 'social license to operate';
- Avoiding project delays or business disruptions.

Less recognized, although likely to become more important to financial institutions in the future, are the external costs associated with impacts to ecosystem services that business depends on (e.g. wetlands for flood protection, water for operations, etc). Mainstreaming activities, such as the Natural Capital Declaration led by the UNEP Finance Initiative, are in the process of addressing financial risks associated with impacts to ecosystem services.

The Green Credit Protocols are different than the other mainstreaming initiatives, in that they have dual objectives of risk management and promoting sustainable finance opportunities.

3. What aspect of biodiversity and/or ecosystem services is addressed?

Both biodiversity conservation and ecosystem services (impacts and dependencies) are addressed in these mainstreaming initiatives. However, ecosystem services are less understand and more often overlooked in the evaluation of risks and impacts by banks and their consultants.

4. What is the nature of the investment in mainstreaming?

Mainstreaming initiatives in the financial sector, particularly with the Equator Principles and Green Credit Protocols, require banks to invest in the development of an environmental management system, including internal resources to implement the system. Capacity building within individual banks, and more importantly across entire markets, is essential for successful outcomes of the mainstreaming objectives. To date, these investment needs have been largely met through the IFC's generous hosting of an annual Community of Learning, and through the investments made by individual banks to build capacity in specific markets to reduce competition and ensure a level-playing field.

5. What has worked well? How was success measured and with what indicators? What has not worked? What lessons can you draw for when, where, how and with whom mainstreaming is most likely to succeed?

The success of the Equator Principles in 2003 was contingent on capturing the majority of the project finance market globally. With the adoption of the framework by 10 banks in 2003, an estimated 70% of global project finance was subject to the IFC standards through application of the Equator Principles process. Over the past 10 years, a number of lessons have been learned

- **Level playing field within a market or sector** - Because of the competitive nature and interdependence of the financial sector (i.e. multiple banks often service the same client), it is imperative that banks operate on a level-playing field with regard to the integration of biodiversity and ecosystem services in their lending and investment decisions. For example, national banks in a particular market typically adopt the Equator Principles at the same time (e.g. Brazil, Mexico, South Africa, Nigeria). They are unwilling to adopt voluntary standards without ensuring their competitors also adopt the same standards.
- **Common understanding of the standards** – broad uptake and adoption of a standard is only as good as its implementation. This is true across all of the mainstreaming initiatives mentioned. This underscores the importance of capacity building, particularly on complex issues such as biodiversity and ecosystem services.

- **Capacity amongst all of the actors** – mainstreaming of biodiversity into financial processes provides leverage to push companies to better manage risks and impacts on-the-ground, but this also requires greater technical capacity within the companies we finance and within the consulting firms we all rely on. To this end, the Equator Principles Association has partnered with IPIECA and ICMM (the oil & gas and mining associations, respectively) in a knowledge sharing initiative called the Cross Sector Biodiversity Initiative.
- **Limits to what can be achieved without government partnership** - as the private sectors gains experience in implementing IFC Performance Standard 6, the importance of engaging with the government to achieve its objectives becomes apparent. Efficiencies are gained through landscape level planning, and government involvement is almost always needed when biodiversity offsets are contemplated.

Scaling up sustainable commodity production– Andrew Bovarnick - UNDP

Introduction

Companies that are reliant on agricultural commodities are increasingly exposed to a series of direct and indirect risks to their business: a) cost and volatility of prices, b) security of supply, c) reputation linked to environmental and social issues.

There are important issues such as farmer poverty, productivity and profitability; land use change and deforestation; greenhouse gas reductions; labor conditions; food and energy security; water scarcity and pollution; and future impacts from climate change which all threaten the integrity of supply chains, increase market risks for producers and the ability of companies to manage effectively their business and reputational risks.

Business strives to work collaboratively across the value chain to mitigate and reduce the risks and communicate their efforts to their consumers and concerned NGOs. The extent of this depends, in part, on their position in the value chain. To this end, a small number of companies came together with UNDP and the US State Department, in May 2012, to brainstorm on how best to manage their supply chains and challenges associated with sustainable agricultural commodity sourcing. **The intent was to find innovative ways for companies to consider and manage sustainability issues in their supply chains and in particular manage root causes**. This Paper is to share this work in order to engage more companies to collectively address the root causes.

Discussion

The main instruments put in place by companies to promote sustainable farming are a) supporting projects aimed at research and training farmers on good agricultural practices b) establishment of baseline sustainability standards, often through roundtables, c) sourcing and procurement policies and d) purchasing of third party certified product. The tools are in most cases closely interlinked. Certification up until now has been the most effective tool to manage reputational risks related to sustainability issues and, in some cases, drive brand value. However, whilst certification is an important tool to promote best practices and provide assurance for the avoidance of worst practices, it has not resolved all the issues which put companies at risk.

´´Often private standards fill the gap where governments do not implement/enforce standards they committed to. Although this seems to be better than complying with no social or environmental standards, this cannot be a satisfactory status in the long term as it further weakens the role of governments, particularly in developing countries. The relation between the public domain and private standards should rather be a complementary as opposed to a substituting one.´´ [2]

---

[2] Steering Committee of the State-of-Knowledge Assessment of Standards and Certification. (2012) *Toward Sustainability: The roles and limitations of certification*

Unsustainable practices persist because they are symptoms of inherent structural problems, prevalent in developing economies where many commodities are produced and sourced. Training 5,000 or even 50,000 farmers in good agricultural practices will not change all the underlying structural causes of issues such as deforestation and child labor. In spite of training, these issues will only reoccur over time and manifest themselves elsewhere unless the underlying causes are addressed. These underlying structural causes of issues are often referred to as root causes as they are at the root of the problem. These root causes go beyond what any one company or farm can solve.

Root causes can include: insecure and complicated land tenure, weak land use planning, policies and fiscal incentives promoting negative impacts, lack of production standards, weak extension services, limited access to financial services, non-monetized externalities, etc. These will vary by commodity, country and issue. Two specific examples of how root causes affect business include:

- In Indonesia, oil palm plantation companies that voluntarily convert forested land banks within their concessions to forest sanctuaries risk the District governor transferring the conserved lands to another company to produce palm. This highlights that the underlying problem is that these voluntary agreements need to be legalized so that companies have the confidence to make such commitments.

- In Colombia even the best managed and certified coffee farms were still vulnerable to storm induced flooding. Whilst tree cover on the farms helped reduce damage, watershed management plans are needed to control the flow of water from affecting farms lower down in the watershed.

Addressing root causes can support development of effective long-term solutions to sustainability problems, and be a major contributor to accelerating the scale up of certification in a given country. Higher government production standards, strengthened extension and positive fiscal incentives can improve farm practice, level the playing field and bring producers closer to certification standards.

Hence, identifying and managing root causes can overcome business risks and bring major benefits to supply chains. Companies have historically failed to address (or often even acknowledge) root causes as they are mostly beyond their traditional sphere of control and expertise. However, business should now recognize the business case for addressing these root causes and support initiatives to tackle them. Once companies determine the degree of impact of root causes on their business, they need to find the most appropriate way to engage and identify partners to tackle them.

National governments should have the lead role in addressing many root causes and specifically in improving the following: setting and enforcing baseline farming standards; providing agricultural extension services; implementing effective land use planning; reforming land tenure and rights; integrated water resource management; monitoring and enforcement of regulations and standards; introducing positive fiscal policy incentives; and investing in infrastructure and social services such as health and education. The more government can deliver on these responsibilities and address root causes the more confidence there can be of acceptable economic, environmental and social practices in production practices in origins.

Companies need to map out and select which root causes they tackle and validate and advocate for their resolution with key stakeholders. They should focus on change and traceable improvement, and work with the appropriate stakeholders including government to affect change. The suite of root causes selected to be tackled will depend on the degree of impact on the business, ambition of the intervention and what is realistic in a country, given its existing conditions. In some countries with weak governance, reaching a minimum standard in agricultural practices across the country would be a major advance. In other countries with more sophisticated governance tighter regulations and taxation might be possible. An example of a successful regulatory reform is in

Paraguay. Paraguay suffered high levels of deforestation due to agricultural expansion into the Atlantic Forest. In 2004 a legal moratorium was introduced and deforestation rates dropped by over 50%, demonstrating the impact of legal reform on land use.

It is recognized that it can take many years to address root causes whereas business requires quick wins. However, in many cases companies will be purchasing commodities from the same countries in 10 years so results, even if long-term, will still be relevant. In the meantime quick wins can still be pursued and achieved. It is also recognized that governments value hearing from companies that these are important issues to be resolved to remain globally competitive and enable progressive elements within governments to build coalitions around best practice.

Four pre-requisites were identified to effectively tackle root causes:

- Increase government sense of ownership and ability to make improvements
- National level coordination and collaboration of stakeholders and projects
- Capacity strengthening of government agencies to deliver services eg. extension
- Engagement by private sector to provide market signals, demand-side incentives and technical expertise

New forms of Public Private Partnerships (PPPs) is a beneficial option for companies to work effectively with government to tackle root causes. PPPs allow companies to become engaged beyond their purchasing power for product, allowing them to move from individual site based action to collective action to tackle root causes. There are many meaningful and compelling stories companies involved in a PPP can tell their customers and constituencies.

PPPs can be set up with a neutral convener to make a bridge between the government and companies. PPPs can establish targets and indicators and can provide transparency and accountability through monitoring systems. Within PPPs individual partners can hone in on the piece that is relevant to their values, core areas of expertise and existing projects and can bring them in to support the work.

An example of a successful PPP has been in Ghana where the Cocoa Board, COCOBOD, was given the responsibility to provide extension to cocoa farmers but had no extension officers. The Kraft Cocoa Project funded the costs of 17 extension officers to kick start COCOBOD's extension service. Once COCOBOD experienced the benefit of these extension officers it then invested government funds and brought in additional donor funds and now has a complement of 120 extension officers.

One national level PPP is the National Commodity Platforms being pioneered by UNDP. These Platforms build on the global convening powers of the commodity roundtables but are hosted by national government and focus within a specific country. The Platforms introduce codes of conduct and transparency to decision making and provide a neutral space for companies along a supply chain to engage Ministries, local government and civil society to jointly understand and tackle root causes.

Next steps

Building on certification tools is key to identify new solutions to both business and reputational risks linked to agricultural commodities. Companies should consider how their supply and the sustainability issues they are trying to address are affected by root causes. For example, will deforestation in a given region stop being a reputational risk when you have 100% of FSC certified timber in your supply chain? Will 100% certification protect your supply chain in the long-term? On the other hand, can more product be certified in a source country if certain root causes are addressed?

It is important for companies to recognize that the root causes and their relative importance to business will vary by country and commodity. Therefore an essential pre-cursor to any corporate

sustainability program is an initial analysis of what the root causes are within a given country. Root cause analysis can build on value chain analysis and ecological footprint mapping tools (eg of water use). Without a rigorous root cause analysis businesses and development partners may design costly programmes of assistance to tackle symptoms or assumed rather than actual root causes. For example to design an effective extension programme it is important to understand the root causes of poor farming practices – is it more about lack of knowledge, lack of access to technology, lack of financing or lack of market incentives, or the entire package? Understanding which the key root causes are will help shape the most effective approach.

Where the analysis identifies that risk to business of disregarding root causes, or the benefit for certification programmes of resolving root causes, is substantial, companies should consider how they can best get involved to manage the root causes. However, to start managing root causes a company may need to develop a different framework for addressing sustainability which takes a long-term programmatic approach which would include managing root causes. Within such a long-term sustainability framework and approach, specific questions to ask to manage root causes include: How to prioritize which root causes to tackle? What will be cost effective ways to manage root causes for a company supply chain? What has proven to work and be a good value investment? Who can carry out a root causes analysis? Who are the right partners to tackle root causes? Is joining a PPP most appropriate for managing root causes? Are company practices affecting root causes and need to be adjusted? The answers will pave the way for a new generation of analysis and prevention based approaches targeted at root causes.

Table 1 to illustrate roles and limitations of key instruments in use:

Instrument	**Strengths**	**Limitations**
Certification	Improves practices at a farm level Provides traceability Provides a label and a credible story of the product Very targeted and easy to communicate Provides financial incentives for producers to improve practices Accepted by key stakeholders as effective action at farm level	It is farm based and does not have the ability to tackle root causes of the sustainability issues. Huge costs to segregate certified product up the supply chain. Often does not reach the mass of unorganized farmers at the base of the pyramid. Certification costs are typically less efficient for small holders than for large plantations. Farm level not landscape permitting leakage of unacceptable practices to non-certified farm. May be perceived by governments and producers in-country as externally driven so lack local ownership.
Roundtables	Convenes global stakeholders Establish baseline standards	May not convene sufficient stakeholders at country level to obtain local buy in and government engagement Often relies on the certification systems to demonstrate progress
NGO local projects	Site specific success Relatively direct and quick impact and easy to set up	Difficult to sustain once project finishes. No scale up strategy. Results remain local not fed into national policy

Company training of farmers	Provides useful pilot lessons Farmer specific improvements	Very costly per tonne of product and seldom scaleable nor long lasting effects. Often weak links to company purchases.

Shaping land-use practices and supply chains through commodity certification: the experience of Rainforest Alliance – Jeff Milder, Rainforest Alliance

Part I. The anatomy of commodity certification: understanding the strategy

1. Define commodity certification to clarify its different elements, all of which may potentially contribute to mainstreaming: a) sustainability standards, b) verification and traceability systems, c) eco-labeling. Together these comprise "certification systems."
2. These systems, however, are only part of how we see certification functioning as a mainstreaming strategy. Additional key elements include: a) corporate engagement, and b) training producers and producer groups.
3. Brief run-down of commodity certification scale-up over the past 5-7 years to achieve significant market penetration (up to 20% for some agricultural commodities). This suggests the strong *potential* of certification to deliver large-scale benefits for biodiversity, in concert with productivity and human wellbeing.
4. Brief summary of RA's certification activities (sectors, crops, geographies, scale), shown on a global map. In addition, beyond its own standards and training activities, Rainforest Alliance supports the broader development of sustainability standards, for instance through engagement with other standards systems and ISEAL Alliance on evaluation and best practice initiatives.

Part II. Reviewing Rainforest Alliance's work in three GEF biodiversity mainstreaming projects

- ***Biodiversity Conservation in Coffee (BCC)*** project
  - UNDP-GEF project, 2006-2013 in six countries in Latin America (Brazil, Colombia, El Salvador, Guatemala, Honduras, and Peru)
  - **Project goal:** Increased conservation of globally important biodiversity in coffee landscapes by transformation of the coffee market in support of sustainable productive practices on coffee farms. **Project objective:** to increase the demand and sales of biodiversity-friendly [RA certified] coffee from a niche to mainstream product allowing for a significant growth in farmers adopting biodiversity-friendly, sustainable productive practices and showing on-farm biodiversity benefits.
  - Biodiversity goals are addressed through increase of land area under conservation-friendly-management on certified farms ("coarse filter" targets) as well as increases in keystone species on certified farms ("fine filter" targets – e.g., primates and migratory and resident birds).
  - Project investments focused on: a) engagement with market actors to increase demand and consumer awareness of sustainably certified coffee; b) engagement with producers to meet this demand while adopting practices that align biodiversity and productivity goals.
  - Key successes include significant ramp-ups of area under sustainability (RA) certification (+434%) and volume of certified coffee sold (+367%). Ecological field studies demonstrate increases in bird and tree associated with diversified agroforestry systems in certified coffee farms.

    - A key challenge was the difficulty in systematically monitoring simultaneous effects on productivity, conservation value, and market-related benefits. While focused research studies in Colombia and El Salvador were important for understanding biodiversity values on and around certified coffee farms, the project team recognized the need for a broader monitoring framework to be able to provide more generalized answers regarding the impacts of certification as a sustainability strategy.
- ***Greening the Cocoa Industry*** project
    - UNEP-GEF project, 2011-2016 in 10 countries across the world's major cocoa growing areas (Côte d'Ivoire, Ghana, Madagascar, Nigeria, Indonesia, Papua New Guinea, Brazil, Dominican Republic, Ecuador, Peru).
    - **Project goal:** Address key drivers of biodiversity loss—including habitat destruction, habitat degradation, and species over-exploitation—by supporting the development of certification systems for best cocoa management practices that conserve biodiversity, and scaling up the adoption of these systems by engaging supply chain actors to increase market demand and consumer awareness. Project investments focus on training cocoa farmers and market engagement. A key feature that links certification to biodiversity conservation in some of the sites is the use of a landscape approach—for instance in the zones around protected areas in the Bia-Juabeso landscape (Ghana) and around Tai National Park (Cote d'Ivoire)—where investments are designed to reduce encroachment pressures by supporting cocoa-based livelihoods in existing production areas.
    - Key successes to date include scaling-up of volume of certified sustainable cocoa (392,037 metric tons), number of participating farmers (172,640), and production areas covered (627,989 hectares), as of December 2012, well in excess of project targets. Additionally, RA has harnessed strong corporate interest in sustainability certification, providing a high degree of leverage of project resources. For instance, in Cote d'Ivoire, one project-supported staff person leveraged partner resources, resulting in the training of 60,000 farmers in sustainable practices. RA has developed a variety of context-appropriate training models, which it implements through its own staff as well as a range of in-country partners.
    - One challenge facing the project, and certification efforts more broadly, is that some of the areas that may be most critical to work to mitigate threats to biodiversity (e.g., in buffer zone contexts) may be perceived by companies as challenging and risky due to low crop productivity, poor market linkages, and potential risks of losing certification status. This challenge points to the importance of investing in training and market engagement to promote certification in places where it is most likely to help address key biodiversity and livelihood improvement objectives. It also highlights the significant variation in the conservation "additionality" that certification is likely to deliver, depending on context.
- ***Biodiversity and Agricultural Commodities Program (BACP)***
    - World Bank-GEF project (IFC is the implementing agency), 2008-2013 in three commodity sectors (soy, palm oil, cocoa)
    - Rainforest Alliance is a BACP grantee within the cocoa sector portfolio, working in Indonesia.
    - The project is providing training leading to RA certification, with a focus on simultaneously increasing productivity and increasing the conservation value of an existing mosaic agricultural landscape ("land sharing" conservation strategy). Successful execution of this strategy would demonstrate the possibility to meet growing demand for Indonesian cocoa without the need to put more land into production.
    - The project is also enabling RA to conduct a full field test of the systematic monitoring and evaluation framework (spanning conservation, socioeconomic, and productivity outcomes) that the organization developed partially in response to monitoring challenges identified in the BCC project.

Part III. Synthesis of lessons to guide future mainstreaming efforts (how/when/with whom)

- Mainstreaming needs to be about more than just a race to increase certified product volumes to achieve "market transformation"; it is also about the quality of the certification system, the quality of the entire approach (including supporting activities), and how certification is contextualized within a broader bioD strategy. [This is elaborated in the next three points.]
- Certification often has greater biodiversity potential when it is part of a landscape approach. This can mean different things depending on context. For instance:
    - El Salvador: certifying a critical mass of farms to create viable habitats and corridors within a mosaic production landscape
    - Bia-Juabeso, Tai National Park, central Sulawesi, and elsewhere: certifying in a buffer zone to reduce "edge contrast", encroachment, and forest degradation around core protected areas
    - Commodity plantations (banana, palm oil, etc.): incorporating habitat elements and corridors in production landscapes; engaging in landscape and watershed planning and initiatives so that production units contribute to broader conservation efforts
- As companies make large-scale commitments to sustainable sourcing (relying heavily on certification to deliver these commitments), there is some pressure to "water down" standards; there are also various efforts toward alignment (homogenization) among standards. In this context, it is important to recognize that not all certification is likely to have equivalent biodiversity benefits, and that is therefore critical to support the more conservation oriented of the standards to set a high bar that may help shape the development of the standards community overall. Doing so will help fulfil one of the original mandates for establishing third-party sustainability standards, namely to rectify market failures and inadequate governance systems in agriculture, forestry, fisheries, and other sectors.
- Greater investment in impact evaluation is critical if certification is to be credible not just to the conservation community, but also to the companies, consumers, and governments without whose acceptance and support this strategy cannot succeed at scale.

Part IV. Toward a robust evidence base on certification as a vehicle for biodiversity mainstreaming

1. As with most mainstreaming strategies, the evidence base on conservation benefits of sustainability standards and certification is inadequate, and a stronger evidence base is needed to be able to deploy and scale-up the strategy for maximum benefit.
2. Place-based evaluations using rigorous methods (e.g., quasi-experimental approaches with credible counterfactual scenarios) are critical, and where possible should be supported as part of future mainstreaming projects.
3. However, these alone are not sufficient: broader monitoring and evaluation frameworks – addressing both breadth and depth – are needed to build a evidence base that is robust and that provides place-specific data to understand variability across crop/product, geography, producer type, and other key variables. Developing such a system would entail some alignment among standards bodies, as well as greater collaboration among certifiers, researchers, civil society, companies, and others. There is interest and some possible mechanisms already in place to make this happen, but it needs to be promoted and resourced by key public, private, and philanthropic organizations that have a stake in the future of sustainability standards and certification.

Mainstreaming biodiversity within agriculture, forestry and mining sectors in South African grasslands - Anthea Stephens, SANBI

South Africa's grasslands are critically threatened and many biodiversity priority areas lie in production landscapes. This is a challenge best addressed by an approach aimed at strengthening the enabling environment, and innovating, piloting and mainstreaming new models for biodiversity management into production sectors, namely agriculture, forestry, urban development and coal mining. The Grassland Programme (a 20-year partnership between government, conservation agencies, non-governmental organisations, and private sector) has implemented this approach to sustain and secure grassland biodiversity and ecosystem services for the benefit of current and future generations. In five years of implementation, notable achievements have been in shaping policies and regulations, improving existing institutional capacity, and implementing pilot projects demonstrating biodiversity gains across sectors. Particularly significant is experience from the mining sector, where deeper engagement is enabling the development of integrated tools and products that help to ensure: biodiversity issues are consistently incorporated into decision-making processes for mining projects; high priority wetlands (of global importance) are avoided; residual impacts are offset; and proactive stewardship secures landscapes of high importance for biodiversity, energy and water provisioning. The sector demand for these tools and the leveraged finance raised from industry bodies is evidence of achievements earned in the face of lessons learnt as regards policy engagement, market-based incentives, and communicating the value offering of biodiversity using sector appropriate language. Technically proficient, cross-disciplinary teams able to develop integrated, accessible decision-support tools and guidelines in partnership with sector stakeholders, has been critical to the gains made in this multi-million dollar mainstreaming programme.

Integrated financing of biodiversity conservation and poverty reduction at national scale - Ahmed Khan, Department of Environmental Affairs, South Africa

Since its inception in 1995, the Working for Water Programme (now part of the Department of Environmental Affairs' Environmental Programmes), has grown into arguably one of the largest public funded conservation initiatives anywhere, with a budget of around R1,3 billion (US$130 million) in 2013/14. Some of the factors that have contributed to its growth and success have been documented, but it remains difficult to provide measurable evidence of the biodiversity benefits resulting from managing invasive alien plants resulting from the programme. A number of broad assessments and case studies have been conducted to unpack some of the biodiversity impacts of this initiative, but the Programme's effectiveness at a national level is still primarily judged from an employment creation perspective. The goal to set up a national level initiative managing fairly local level interventions has certainly highlighted significant challenges and constraints, but has also assisted in raising the profile of conservation initiatives focused on invasive species, more perhaps than if this approach was not adopted. We will describe some of the aspects that have contributed to the programmes' growth, impacts that have been assessed, current approaches to revisit environmental outcomes more pointedly, and how the institutional landscape has changed and will continue to change with respect to conservation and the commitment necessary to meet our future challenges effectively.

Some key talking points will include -

- The initiation of Working for Water and the context of its initial and ongoing political support
- Some documented impacts
- Baseline information around invasive species
- Future natural resource management interventions and funding mechanisms – land user incentives, community contracting and water resource management.
- Key outcomes and impact evaluation
- Awareness and advocacy
- Ongoing challenges and approaches

- Invasive species management as part of a suite of natural resource management policy mandates of government and DEA

International Trade Drives Biodiversity Threats in Developing Nations – Arne Geschke, University of Sydney

Human activities are causing Earth's sixth major extinction event an accelerating decline of the world's stocks of biological diversity at rates 100 to 1,000 times pre-human levels. Historically, low-impact intrusion into species habitats arose from local demands for food, fuel and living space. However, in today's increasingly globalized economy, international trade chains accelerate habitat degradation far removed from the place of consumption. Although adverse effects of economic prosperity and economic inequality have been confirmed, the importance of international trade as a driver of threats to species is poorly understood. Here we show that a significant number of species are threatened as a result of international trade along complex routes, and that, in particular, consumers in developed countries cause threats to species through their demand of commodities that are ultimately produced in developing countries. We linked 25,000 Animalia species threat records from the International Union for Conservation of Nature Red List to more than 15,000 commodities produced in 187 countries and evaluated more than 5 billion supply chains in terms of their biodiversity impacts. Excluding invasive species, we found that 30% of global species threats are due to international trade. In many developed countries, the consumption of imported coffee, tea, sugar, textiles, fish and other manufactured items causes a biodiversity footprint that is larger abroad than at home. Our results emphasize the importance of examining biodiversity loss as a global systemic phenomenon, instead of looking at the degrading or polluting producers in isolation.

Mobilising finance for managing biodiversity assets and ecological infrastructure in South Africa - Mandy Driver, SANBI

Initial engagement by the biodiversity sector with South Africa's National Treasury in the mid-2000s focused on the development of fiscal incentives for private landowners who voluntarily put land forward for declaration as a protected area. Central to the case made to Treasury was the assurance that fiscal incentives would be applied only to land of high biodiversity value, identified using the best available science, as well as the assurance of clear contacts with landowners and regular auditing. These contract protected areas, owned and managed by private landowners in production landscapes, are now making large contributions to meeting national protected area expansion targets, at a tiny fraction of the cost to the state of land acquisition.

Alongside this development, the latter part of the 2000s saw several attempts in South Africa to pilot market-based payments for ecosystem services (as opposed to government-funded PES-like programmes such as Working for Water). In spite of considerable enthusiasm within the biodiversity sector for this approach, it met with little success, leading to a shift in thinking from payments for ecosystem services to *investments in ecological infrastructure*.

Since 2012, the biodiversity sector has used the concept of investing in ecological infrastructure to frame its engagements with a range of other sectors, including National Treasury, Development Bank of Southern Africa, Department of Water Affairs, National Disaster Management Centre, the Presidency and municipalities. This approach has opened doors that were previously closed, most recently resulting in a major project on Ecological Infrastructure for Water Security as part of the National Infrastructure Plan, thereby accessing some of the R850 billion (approx $100 billion) earmarked for infrastructure investment in South Africa over the period 2012-2015. Key success

factors have included a logical argument using the language of development, clear links to national development priorities, proof of concept, and demonstration of affordability. Economic valuation of biodiversity or ecosystem services has not played a central role.

This presentation reflects on lessons from these various engagements in South Africa, including the relative strengths of different approaches to making the case for investing in biodiversity assets and ecological infrastructure.

Mobilising financing and conservation investments through PES mechanisms: the experience of Mexico – Jose Carlos Fernandez, CONAFOR, Mexico

Most of Mexico's forests are in the hands of local communities For over a decade, Mexico has created one of the world's largest schemes of Payments for Environmental Services (PES) as part of its policies aimed at recognising the contribution of ecosystems and to the economy and to provide direct incentives for forest owners to conserve them. The program initially recognised values associated with biodiversity conservation, hydrological services and carbon sequestration. Each track of the program had a very different impact, with the hydrological program being the most successful in terms of scale. However, the experience accumulated over the years in all three programs is providing important lessons for recent modalities being implemented for the future expansion of the program. Local co-funding mechanisms, encouraging secure long-term funding sources and blending PES as part of broader integrated landscape management approaches are some of the recent initiatives being promoted across the country. The presentation will provide an overview of the development of the PES program, key lessons learned and the rationale for the new approaches being implemented.

Surviving the Anthropocene: Beyond Mainstreaming to Global System Transformations - Deon Nel, WWF South Africa

The functioning of the Earth's biophysical systems are now so dominated by human activities that it has being suggested that the earth has moved into a new epoch, the so-called 'Anthropocene' (Steffen *et al.* 2007, Steffen *et al.* 2011). Humanity's habitation of our planet in this new epoch is precariously balanced. WWF's *Living Planet Report* (2012) warns that humanity's footprint currently exceeds the Earth's biocapacity by more than 50%. The concept of 'ecological overshoot' has been further developed by Rockstrom *et al.* (2009) who proposed nine planetary boundaries that if transgressed would lead to abrupt, large scale and dangerous state shifts, noting that at least three of these boundaries, atmospheric carbon, biodiversity loss and the global Nitrogen cycle, have already been exceeded.

Despite greater environmental awareness and conservation efforts than ever before, trends in environmental degradation continue on their negative trajectory (WWF 2012) and it is becoming increasingly clear that if these trends are to be shifted towards a more sustainable trajectory, a far more fundamental transition will be required.

Human society has already undergone at least two major global transitions in recent history (Meadows *et al* 2004). The first transition, driven by local wildlife scarcity some 10,000 years ago, was from a nomadic hunter-gatherer civilisation to a more static agricultural civilisation. The second, transition, occurred in about 1800AD when vanishing trees were replaced by abundant coal as the preferred energy source. This resulted in the industrial civilisation, where machines and not land were main means of production. This again had a significant impact on our social systems and resulted in population rocketing from 750 million to 7 billion in just 200 years. This expansion, most

of which has occurred during the last 60 years, has created its own constraints, resulting in the need for a further transition (Meadows 2004, Randers 2012).

Large scale societal transitions are typically non-linear and typically take more than one generation (i.e. 25 years) (Kemp & Rotmans 2005). Whilst such large scale social transitions cannot be engineered, they can be influenced and managed. Transition management is based a two-pronged strategy that requires incremental *system improvement* (under the existing equilibrium or 'rules of the game') and more fundamental *system transformation* (towards the new equilibrium and new 'rules of the game') (Kemp & Rotmans 2005).

Different authors have used different approaches to define the main components of a global sustainability transition. Rockström & Sachs (2013) suggest that six major structural transformations are required to ensure the world "continues to develop economically whilst remaining within the planetary boundaries." These six transformations are: 1) Energy, 2) Food Security, 3) Urban Sustainability, 4) Population, 5) Biodiversity Management, and 6) Private and Public Governance. The *WWF Living Planet Report* (2012) defines five systemic interventions for creating a sustainable planet: 1) Preserving natural capital, 2) Redirecting finances, 3) Better production, 4) Wise consumption, and 5) Equitable governance mechanisms.

The *WWF Living Planet Report* model can be aligned to two-pronged strategy recommended by Kemp & Rotmans (2000). The preservation of natural capital can be considered to be an incremental system improvement strategy that needs to happen currently under the existing 'rules of the game', whilst the other four components will require a far more fundamental system innovation and system renewal strategy that will need to fundamentally transform the 'rules of the game'.

Fundamental transformation of these large global systems will require a careful understanding of their structure. The overwhelming trend for all these systems seems to be one of increasing connectivity and concentration of flows of resources, power and decision making. For instance, if we consider global food production systems, there are probably more than 1.5 billion food producers and 7 Billion Consumers, but between 300 and 500 companies control about 70% of consumption choices (WWF 2012). However, whilst these 'pinch points' in the system may appear to be strategic leverage points, Frank & Geels (2007) warn that these points in the system may well be extremely 'locked-in' by vested interests and may not malleable for real transformational change. Frank & Geels (2007) advocate that a multi-level perspective is needed to transforming these 'locked-in' regimes.

In conclusion, this paper explores the need to move beyond mainstreaming and makes the case for more fundamental system transformation.

Why mainstreaming biodiversity is like swimming upstream, and what can be done about it - Richard Cowling, Nelson Mandela Metropolitan University

Introduction

Let's face it: most people who actually do mainstreaming find it exhausting – like swimming upstream endlessly, no respite in sight. The reality is that the mainstream world – the one still so stubbornly obsessed with short-term economic growth, and still so dismissive of the so-called wicked problems (global warming, natural capital exhaustion, inequality etc.) of the 21st Century – has the political power to desist, pay lip service to or sabotage any attempt at getting biodiversity concerns firmly entrenched in policy and practice.

My presentation asks why mainstreaming biodiversity is so difficult and provides some suggestions for overcoming the barriers to effective mainstreaming. In the first part, I talk about how human

behaviour – shaped by our long history as Pleistocene hunter-gatherers – is the root cause of our dogged inclination to discount the conservation of biodiversity and so our persistence as a species.

In the second part, I argue that effective champions and dynamic strategies are key requirements for conservation success at the project scale. For champions and strategies to be effective, they need to be embedded in a framework that facilitates social learning in response to feedbacks from research and implementation. Mainstreaming projects often fail because they lack appropriate champions, and because they lack mechanisms designed to generate well-informed feedback required for learning and adaptation.

Finally, I evaluate the effectiveness of some mainstreaming projects in which I have participated. I conclude that key limitations are the absence of rigorous social assessments to identify socio-political thresholds for stakeholder buy-in, the absence of formal research on the mainstreaming process, the lack of financial incentives for conserving biodiversity, poor governance of enabler and inheritor institutions, and project models that are linear, lack opportunity for reflection, and too short term to address the complex problem of mainstreaming biodiversity.

Our Pleistocene minds

Modern humans – people like us who communicate via language, have sophisticated technologies, experience 'genius moments', store and share foodstuffs, and use symbols in many contexts (e.g. producing art) – emerged about 160 000 years ago, most likely on the Cape south coast. For the first 150 000 years of our existence as a species, we were hunter-gatherers, dependent on daily foraging bouts for our survival. Although we lived close to nature, we did not understand its resilience to our depredations: archaeological evidence indicates repeated bouts of technological collapse owing to impacts of resource depletion and rapid climate change on prey biodiversity. We were vulnerable then as we are now.

Our evolutionary history has selected for brains that are wired to massively discount the future (tomorrow) in favour of the present (today); deal with discrete information instead of poorly defined, continuous processes; comprehend frequencies rather than probabilities; and respond positively to stories and negatively to making decisions in the absence of experience. This is why we have developed economic systems that emphasise short-term profits over long-term persistence. This is why we find it so hard to do what we need to do, namely redistribute wealth to non-kin, control population growth, and consume less.

So, in summary, mainstreaming biodiversity is hard work because almost everything in our nature is against it, largely as a consequence of our brains that are hard wired to discount the future, and, consequently, the most of institutions we have established are designed to maximize immediate material gains. Conserving biodiversity is a long-term, complex process riddled with uncertainty. Humans like well circumscribed stories with clear and immediate benefits to themselves and their kin. At times, it seems pretty hopeless, this endeavour to swim against the stream of human cognition. But we have to and here are some pointers about how to do this.

On champions, strategies and research

Very simply , conservation success at the (mainstreaming) project scale requires two things: a passionate champion and a dynamic strategy. Without the former, money will be spent, boxes may be ticked but gains are likely to be minimal; without the latter, there will be burn out. Note that I do not advocate the champion-strategy model for kinds of mainstreaming projects.

What are the characteristics of a champion? In the conservation context (other contexts will require different characteristics), effective champions have both high emotional intelligence and high self-confidence. They are able to lead in a way that stakeholders find empathetic and reassuring. They acknowledge complexity, rely on a network of loyal stakeholders for information, and are willing to

learn from mistakes. The corporatization of conservation over the past two decades – a spin-off of the neoconservative revolution of the late 20th Century – has led to a different conceptualisation of the champion: someone with high confidence and low emotional intelligence; the red coloured achiever who embraces the beguiling simplicity of the linear project cycle. Money is tight and so are timelines, so efficiency (boxes ticked per dollar spent) is lauded. Everyone is very busy, too busy to spend time in the murky world of conservation realities. The result: paper progress. Managers have an important role to play (e.g. in raising funds, lobbying decision makers and ensuring administrative transparency) but they are best distant from the project process.

The other component of conservation success, the strategy, is the dynamic heart of a mainstreaming process. It is informed by research on the socio-political, biophysical and economic realms, and from feedback from a rigorous assessment of implementation. A key institution for implementing a strategy is a project learning organization, comprising researchers, officials and civil society. The learning organization fosters both social (informal) learning, and formal research.

I want to stress the scope and importance of research in the mainstreaming process. Here, researchers are enablers, providing peer-reviewed evidence on the opportunities and constraints for mainstreaming as well as responding to research issues arising from strategy development and implementation. In reality, few mainstreaming projects support a research component, most of this is formative research on the biophysical and economic realms, and the actual process is seldom, if ever, the focus of research.

The absence of engaged research is highly problematic. Having invested billions of dollars in mainstreaming projects over the past 10 years, the GEF has scant evidence that is rigorous and credible to show for it. One of the major reasons for this is that there has been virtually no investment in research on mainstreaming as a social process. Many refer to mainstreaming as an art. If this is to mean that mainstreaming is not amenable to rigorous, scientific research, then I must disagree, and vigorously so.

Some lessons learnt

In this section of the presentation, I will discuss some lessons learnt from my personal experience in several mainstreaming projects in South Africa.

Invest in social assessments: social assessments conducted in the early phases of a project enable the identification of major opportunities and constraints for strategy development and implementation. They also enable the identification of target markets and key messages.

Financial incentives work: financial incentives that speak to growing markets are the major catalyst for mainstreaming. Unfortunately, there are not many markets of goods and services that offer realistic opportunities for effective mainstreaming.

Enabling research is essential: enabling research should be embedded in the mainstreaming process and more comparative research on mainstreaming processes is required to provide a defensible perspective and what does and does not work.

Poor governance suffocates everything: feeble and corrupt governance can undermine any good mainstreaming initiative.

Mainstreaming requires time: Effective mainstreaming requires decades of support. All successful projects have a long history. When and if the sidestream becomes the mainstream, projects will be more rapidly implemented.

Protected areas inspiring solutions for development outcomes: trends and future directions – Trevor Sandwith – IUCN

A false dichotomy is placed in the background papers regarding the 20% protected versus the 80% unprotected, and my arguments would be centred on the role of a diversity of protected area models as foundations for mainstreaming success and persistence at the whole landscape/seascape scale. The issues to consider would be how protected areas have to be governed and managed to contribute towards development outcomes while not undermining the achievement of their objectives, and how systems of protected areas themselves contribute both positively and negatively towards the broader development challenge. The presentation would consider issues such as governance, laws and institutions that support mainstreaming within and beyond PA systems and how PAs can and should feature in mainstreaming efforts.

---

7. GEF/STAP Workshop field trip

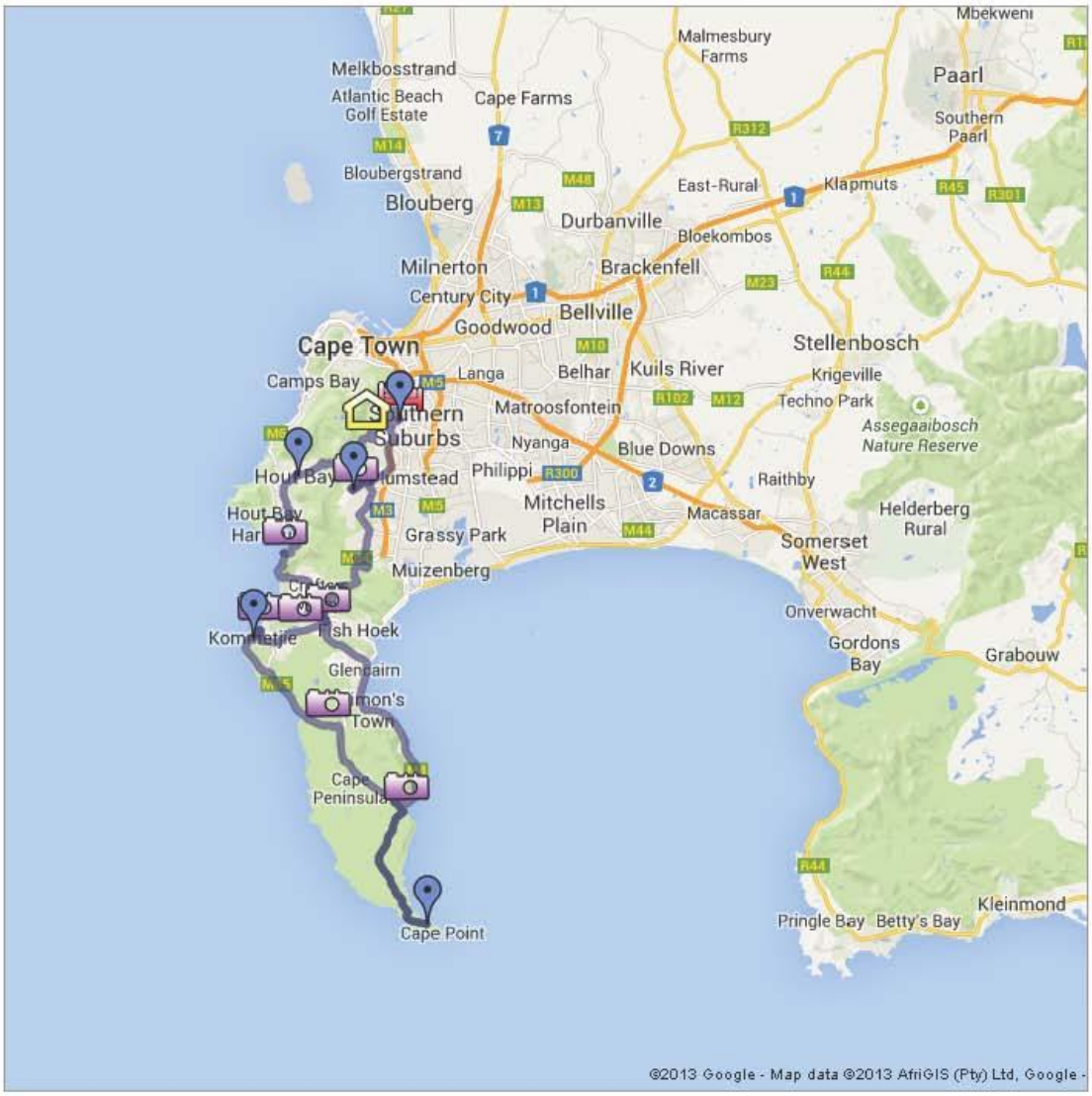
Date: 30 September 2013, Time: 08h15 – 18h00

The field trip will provide an overview of the impacts of the GEF's biodiversity mainstreaming investments on the Cape Peninsula of the Cape Floristic Region.

Approx. time	Routing & stops	Stop	Issue	GEF project link	Lead speakers
08h15 – 08h45	Board bus at Vineyard Hotel				
09h00 – 09h45	Depart Vineyard Hotel for Chapmans Peak	En route	Short overview of mainstreaming in South Africa	CAPE, Grasslands, etc	Kristal Maze (SANBI)
		En route	Introduction to CAPE	CAPE partnership	Azisa Parker (SANBI) & Jen Gouza (CAPE Implementation Committee Chair)
09h45 – 10h30	1. Hout Bay, Chapmans Peak	Stop at Chapman's Peak	Alien clearing, working for water	SANParks Invasive Alien GEF project	Paddy Gordon/ Mike Slayen (SANParks)
10h30 – 11h30	2. Drive through Noordhoek to Kommetjie	On route	Noordhoek corridor, consolidation of Park	Table Mountain Fund	Onno Huyser (WWF-SA/TMF)
11h30 – 13h00	3. Kommetjie board walk	Walk along board walk and packed lunch	Marine mainstreaming priorities	CAPE link	Dr Kerry Sink (SANBI) (at stop)
13h00 – 13h45	4. Drive from Kommetjie to Cape Point	En route	Detailed discussion on CAPE	Institutional strengthening through CAPE - CapeNature	Jen Gouza (CAPE Implementation Committee Chair) & Azisa Parker (SANBI)
13h45 – 15h15	5. Cape Point	Smitswinkel rest camp and entry into Cape Point	EPWP work - Hoerikwaggo trail and human and wildlife conflict	SANParks Invasive Alien GEF project	Paddy Gordon/ Mike Slayen (SANParks)
15h15 – 16h00	6. To Groot Constantia via Fish Hoek Valley- over Ou Kaapse Weg	En route	Mainstreaming into Land use and environmental management	CAPE link	Jeff Manuel (SANBI)
16h00 – 17h45	7. Groot Constantia	wine tasting and cellar tour	Mainstreaming into agriculture	Biodiversity & Wine Initiative	Martin Albertus (WWF-SA) & Floricius Beukes (Groot Constantia) (at stop)
17h45 - 18h00	Return to the Vineyard Hotel		Wrap –up and closure		Anthea Stephens (SANBI)

Google map overview of fieldtrip: https://www.google.co.za/maps/ms?msid=206285265202374338421.0004e693d94145189375d&msa=0&ll=-34.264594,18.465958&spn=0.431281,0.937271

Google



GEF STAP Biodiversity Mainstreaming Cape Peninsula Field Trip

An introduction to some of the GEF biodiversity mainstreaming interventions in the Cape Peninsula of the Cape Floristic Region and biodiversity hotspot.

Public · 0 views
Created on Sep 17 · By Anthea · Updated < 1 minute ago

8. List of Participants

8. LIST OF PARTICIPANTS – info as at 19 Sept.

Surname	First	Institution	Field trip	Accom	Arriv Sept.	Depart Oct.
Bovarnick	Andrew	UNDP,	y	V	29,08.45	4,23.25
Cavalier	Jaime	GEFSec, USA	y	V	29	4
Child	Brian	U. Florida, USA	y	V	30	4
Clay	Jason	WWF, USA	y	V	29,13.10	4,13.15
Cowling	Richard	NMMU, RSA	y	Kir	29	4
Diaz	Sandra	STAP, Arg.	y	Kir	29, 19.10	4, 5.45
Dogley	Didier	Seychelles	y	Kir	29,11.40	4,17.55
Driver	Mandy	SANBI, RSA	y	H	-	-
Fernandez	Jose-Carlos	CONAFOR, Mex.	y	V	29,12.15	4,20.05
Fraenkel	Amy	CBD, Can.	y	V	29	4
Geschke	Arne	U. Sydney, Aus.	y	V	27,22.25	4,13.15
Hammond	Tom	STAP, Can.	y	V	27,17.20	5,08.50
Huntley	Brian	STAP, RSA	y	V	29	4
Khan	Ahmed	DEA, RSA		H	-	-
Kinuthia	Katherine	STAP, Kenya	y	V	29,15.00	4,09.40
Lowrance	Courtney	Citibank , UK	y,y	V	28,21.40	4,18.15
Maze	Kristal	SANBI, RSA	y	V	30	3
Mee	Jessie	UNDP, RSA	y	V	28	4
Milder	Jeff	Rainforest A.USA	y	V	29, 20.55	4,16.15
Nel	Deon	WWF, RSA	n	H	-	-

Petersen	Caroline	UNDP, RSA	y	H	-	-
Redford	Kent	STAP, USA	y	V	27,13.10	5,16.45
Rodriguez	Carlos	CI, Costa Rica	y	V	28,21.40	11,15.10
Roe	Dilys	IIED, UK	y	V	29	4
Sandwith	Trevor	IUCN, Switzerl.	y	P	21,07.55	3,20.05
Sekhran	Nik	UNDP, RSA	y	V	29	4
Sakalian	Marieta	FAO, Italy	y	V	29	5
Stephens	Anthea	SANBI, RSA	y	V	29,19.10	4,16.00
Veiga	Fernando	TNC,	y	V	29,19.10	4,07.00
Vergeichik	Maxim	UNDP, Romania	y	V	29,16.26	4,17.55
Watanabe	Yoko	GEFSec, USA	y	V	29,20.55	4,14.10
Wyatt	Sarah	GEFSec, USA	y	V	28,07.55	3,20.05
Zimsky	Mark	GEFSec, USA	y	V	29	4
Mpologang	Kudakwashe	Botswana	y?	V?	29,09.45	4,15.00

9. Logistical Information and Contact Persons

Airport Transfers

On arrival at Cape Town International Airport, pass through baggage collection and in the main entrance lobby, opposite Woolworths, you will find a Shuttle service - Centurion Tours - http://www.centuriontours.co.za - where you can arrange transfer to your accommodation. You can book online if you wish. If you cannot find their kiosk, just enquire at the main Information Desk in the entrance lobby. Takes about 25 minutes to the Vineyard /Klein Boscheuvel/Kirstenbosch - fare is +- R250 (about $25).

Taxis arealso readily available at the airport. Always confirm the fare in advance if there is no meter and before getting into the vehicle.

You may refer to the Cape Town International Airport website for further information about transportation from the airport to the hotel – http://www.southafrica.info/travel/advice/ctairport.htm#.UPhJgyfLTKN.

The Vineyard Hotel can also arrange for airport transfers with Jarat Tours, either by shuttle bus, or private car. The prices range from ZAR 380 for private car, to ZAR 925 for a van. If you wish to use The Vineyard's transportation services please indicate this when making your booking. Note the cost of this service is your sole responsibility.

Meals

If you are staying at The Vineyard Hotel, or at the Kirstenbosch Guest House, your breakfast is included in the hotel rate. Lunch will be provided for meeting participants at Kirstenbosch; and dinner will be available for purchase at a number of restaurants in the area.

Visas and vaccinations

Many countries are exempt from needing a visa to enter South Africa; however, you should contact the South African Embassy, or High Commission, in your country of residence for visa requirements, as well as to obtain a visa. http://www.dfa.gov.za/webmissions/index.html.

Safety and health

Please seek advice from your doctor, or travel health clinic, about the vaccinations you may need to travel to South Africa. For individuals residing in the U.S., a source of vaccination information can be accessed at - http://www.passporthealthusa.com/

We encourage you to become familiar with the general health care and safety awareness information included in the following link –

http://www.southafrica.info/travel/advice/healthtips.htm#.UPhScSfLTKN

Exchanging currency, banking services, and credit cards

The South African unit of currency is a Rand (ZAR). You can exchange foreign currency at banks, hotels, and foreign exchange offices. US$= ~R10.

All major international credit cards can be used in South Africa. Traveler's cheques are accepted at most banks, hotels, and foreign exchange offices. Automatic Teller Machines (ATM) are widely available throughout the area.

Weather

In October, Cape Town is in spring, and the weather is typically quite good, although is nearing the end of the rainy season, so please plan accordingly. The average temperatures range between 15 and 25 celcius.

For more information you may visit:
http://www.southafrica.info/travel/advice/climate.htm#.UPhVpyfLTKM.

Electricity

Electricity in South Africa is 220-250 Volts. Electrical sockets (outlets) are typically "Type M" with some Type C & G also found in some areas.

Contacts

Thomas Hammond STAP Secretary Washington, DC Tel: 202-974-1318 Email: Thomas.Hammond@unep.org

Christine Wellington-Moore STAP Secretariat Programme Officer Washington, DC

Tel: 202-974-1303 Email: Christine.Wellington-Moore@unep.org

Robin Burgess STAP Secretariat Programme Assistant Washington, DC Tel: 202-974-1311 Email: Robin.Burgess@unep.org

Katherine Kinuthia STAP Secretariat Administrative Assistant Nairobi, Kenya

Tel: 254-20-7624159 Email: Katherine.Kinuthia@unep.org

Brian Huntley, brianjhuntley@gmail.com - mobile 072 428 7023

10.Background Papers under Separate Cover

Mainstreaming Biodiversity Conservation: A Framing Paper for the Scientific and Technical Advisory Panel of the Global Environment Facility –

Kent H. Redford, Archipelago Consulting. May,2013

Mainstreaming Biodiversity Production Landscapes. GEF Working Paper 20, 2005

Strategic Plan for Biodiversity 2011–2020 and the Plan for Biodiversity 2012-2020 and the Aichi Targets. CBD

Biodiversity and development mainstreaming – A state of knowledge review: discussion paper. IIED 2013.