

Newsletter from African protected areas

#132, July 2019 - www.papaco.





Chosen demographics

Ours is a time of essential changes.

Renounce flying in order to preserve the atmosphere? Give up animal derivatives in order to limit deforestation? Stop using plastic, disposable, non-degradable? So many evolutions that will, undoubtedly, become necessary if we are to meet the increasing number of goals that we set for ourselves in order to save the planet. Urgently.

These transformations have the elegance of resting on choice: one can choose to eat less meat, to drink less milk. One may prefer to ride a bike rather than drive a car, to board the train rather than the plane. One can choose a glass bottle over a plastic one, or use paper packaging rather than plastic. On all these aspects in general – only in general, because situations remain where the room for choice is thin or nonexistent - we can decide to prioritize our comfort and bad habits, or to join the collective effort that will contribute, perhaps, towards our salvation.

There is one area where this freedom of choice becomes even more important: reproduction. As humankind grows and its needs multiply, debate has probably never been more necessary since Malthus initiated it in 1798. In the name of a certain form of ecology, women (and in certain cases men) are choosing not to have children. They are known as Ginks: Green Inclination No Kids. The logic behind this somewhat extreme position is that each additional child comes with its future ecological footprint, and that our beloved Earth can bear no more.

We are only in the early stages of this type of radical behavior, but it is likely to spread around, like the currently emerging 'Extinction Rebellion' movement which promotes societal change through subversive protest. Because ultimately, that's the matter at hand: a societal change is needed, of which we perceive only the sprouting and do not yet envision the final shape. And yet, this change is under way.

How on earth does this have anything to do with our protected areas?

Population (and sometimes overpopulation) is a key element in the equation of our parks' future. So much so that increasingly, conservation NGOs add a chapter on family planning to their 'protection of nature' component, and to their traditional local development activities. This usually involves providing local populations with access to information on birth control and contraception when they are not already available locally.

Talks of reproduction are an opportunity to reflect on the health of the mother and the child, family well-being, the quality of education, the control of human needs or simply the freedom to choose. But for many, this approach is still associated with population control and imported or imposed choices, making it one of the most controversial subjects around. One that it is impossible to discuss serenely here, which is a shame, because it is not without environmental consequences.

The only thing that ultimately matters is whether freedom of choice should be offered to all future mothers. This includes the more than 200 million women all over the world who have no access to contraception. If our Ginks have the opportunity to decide in full awareness of how they intend to play their role of mother (which they do not refuse, by the way, some preferring adoption), isn't it fair that the same possibility be offered to all? And if it happens, incidentally, through the work of conservation NGOs, is this really a problem?

Gudpury James

NAPA #132, July 2019 - www.papaco.org

Our courses

End of session

To ask your questions and request your certificates of completion, contact us on <u>Facebook</u> or send an email to moocs@papaco.org.

THE MARCH TO JUNE SESSION IS OVER NEXT SESSION: 16 SEPT TO 15 DEC 2019

Kegister on : mooc-conservation.org





NEW MOOC: New technologies

We are launching another MOOC this year, and we're sure it will stimulate your grey cells. The last couple of sequences are being shot as we speak, and the launch is planned for **14 October 2019**, a month after the start of the session! Registrations are already open on <u>mooc-conservation.org</u>.

Duription. As the field of new technologies is booming and connectivity is more and more available, it is important that protected areas take advantage of the digital revolution. The MOOC TECH will introduce the context of these technologies applied to conservation, existing techniques and material, their prerequisites, their scientific and/or technical basis, their opportunities and limitations, their uses on the ground etc. Enablers related to communication, data storage, software, energy availability will be exposed and new developments such as blockchain will be presented along with examples from the field.



In addition to PAPACO's page, join the 6,000 members on the <u>Facebook</u> <u>group</u> dedicated to MOOCs. All links and useful information is on <u>papaco.org</u>. <u>@Papaco_IUCN</u> <u>facebook / IUCNpapaco</u> Also read the neuvletter of the IUCN programme of protected areas (GPAP)



NAPA #132, July 2019 - www.papaco.org Student testimonials

Chewe Chiti, Zambia



My name is Chewe Chiti, a 25-year-old Zambian who holds a bachelor's degree in Wildlife Management from The Copperbelt University - the 2nd largest learning institution in Zambia.

I currently work for an NGO called Conservation Lower Zambezi which operates in the Lower Zambezi National Park and its adjacent game management areas. The organisation works hand in hand with the Department of National Parks and Wildlife in carrying out anti-poaching activities, human wildlife conflict and it also works with the communities around the lower Zambezi ecosystem. I work as an assistant data management/assistant operations officer and my work involves managing the organisation's Geographic Information Systems, training wildlife police officers on the proper use of PDAs (GPS, CEDARS-Cybertracker),

downloading data from PDAs and inputting it in different databases which include SMART (Spatial Monitoring and Reporting Tool). I then use the data collected from the field to plan patrols and deploy officers in the field as appropriate. I also assist in conducting briefings before officers go to the field and debriefs after they come back from the field. There we discuss the challenges they faced and propose future solutions.

When I learnt about the MOOCs that IUCN was offering I was very exited as I knew I would learn a lot, and that it would help me improve conservation efforts in Zambia and come up with solutions which will help uplift the livelihood of many people living around areas with wildlife.

I took the MOOC on Law enforcement specifically because I wished to gain the necessary skills that would help me better plan for patrols in protected areas, in an effort to combat poaching and other threats to biodiversity. I wanted to learn how the Law applies to the conservation of nature. Zambia has 20 national parks of which about only 6 generate income and contribute to the country's development. I consider this to be a problem and my passion to try and find solutions to change this led me to take the Protected Area Management in Africa MOOC in which I have learn a lot on how we can better manage our protected areas in Zambia.

My interest in understanding how different ecosystems work led me to take the MOOC on Ecological Monitoring. I must say I have learnt a lot from this MOOC on why EC is vital to protected areas and I intend to apply my newly acquired knowledge to the protected area I currently work in.



Ilia Kunchulia, Georgia



Ilia Kunchulia is a Georgian PA specialist who was recently appointed as a member of the Expert Assessment group for the Green List in Georgia. As such, he will help define Georgian PAs' management's commitment and compliance with Green List's requirements and good management practices. In order to deepen his knowledge on PAs' management and valorisation he enrolled in IUCN-Papaco's MOOC 'Valorisation of PAs resources' in March 2019 and completed the course in June 2019.

Even before Papaco's MOOC, Ilia had extensive knowledge on Georgian PAs. As a PhD student and a researcher at Georgian Technical University working on soil genesis, classification and mapping in the Trialeti Range in Lesser Caucasus, he had the opportunity to work with various Georgian PAs including Algeti National Park, Ktsia-tabatskuri managed reserve, Tetrobi managed reserve, Nedzvi managed reserve and Birtvisi Natural Monument. Before that, from 2015 to 2018 he worked for the Global Forest Coalition on a Community Conservation Resilience Initiative (CCRI) project, which deepened his knowledge on the role of local communities and legal aspects related to PAs and ICCAs in Georgia.

Ilia's testimony, below, shows how professionals working in PAs all over the world can deepen their knowledge through online training and face new and exciting challenges such as conducting Green List evaluations.

"PAPACO'S Protected Areas Valorisation MOOC was a very well-structured and efficient online course, which, together with the provided reading materials, gave me a holistic view on goals of protected areas, all associated ecosystem services, the role of local communities and indigenous people in achieving the objectives and sustainable tourism in PAs. The course showed me the importance of proper communication with society from PA's management in general and locals and visitors of the park in particular - that is crucial in terms of supporting sustainability of conservation activities and assessment of values provided by PAs and ICCAs. The gained knowledge will help me in my work and study as it covers all basic aspects of natural benefits and socio-cultural values provided by protected areas."

Please share your MOOC experience with us. If you'd like your testimonial to be shared in future NAPA, send your story and a photo to moocs@papaco.org.



IUCN Green List

Green List retreat in Kenya: feedback from the stakeholders

By Beatrice Chataigner - IUCN-Papaco

What is the Green List (GL) of Protected Areas (PA) - reminder

The IUCN Green List of Protected Areas (Green List) is a global standard for best practices in terms of governance and management of PAs. The Green List standards are meant to encourage, measure, celebrate and share the success of protected areas in achieving conservation impacts. By complying with the Green List standards, national governments and their community partners in conservation will meet the commitments embodied in the CBD Strategic Plan for Biodiversity and particularly Target 11.

The Green List is anything but a 'pass or fail' process. PAs can apply as many times as needed until they reach the GL standards. PAs committing to the GL proceed to a self-assessment against the GL standards at their own pace, taking time to develop approaches that will help them to meet every GL indicator. The self-assessment process can take up to 5 years and PA managers can get inspired by the success stories of PAs that have already been nominated on the GL in order to innovate and overcome their own challenges. In that sense the Green List also acts as a capacity building tool for enhancing governance and management effectiveness processes in PAs.

Kenya: the Green List pioneer in Africa

The first country to commit to the Green List process in Africa was Kenya. The Kenyan EAGL was created in 2013 and since then has gone through two rounds of GL nominations. Three conservancies have been nominated on the Green List: Lewa Wildlife conservancy (in 2014), OI Pejeta conservancy (in 2014) and OI Kinyei conservancy (in 2018).

After those 5 years of experience, the EAGL members and

the representative of the 3 GL PAs have discussed the lessons learnt so far from the GL process in Kenya, in order to draw a road map of what they want GL processes to be like in Kenya for the next 3 years. This article provides a quick feedback of these discussions as they may be relevant for PAs in other countries.

Feedback from GL sites

The GL self-assessment brings clarity

'The GL self-assessment really helps to make the link between the management plans, the strategic plans together with the conservation outcomes. It is not necessarily easy but crucial to do so. The GL also provide a good validation in terms of governance performances, conservation impacts, and community outreach impacts.' (G. Chege, Lewa Wildlife Conservancy).

Understanding and boosting GL benefits for PAs

Before engaging in GL processes, one should be aware of the work load that it requires and prepare accordingly. It is crucial to get the full support of the higher hierarchy of the PA and allocate sufficient staff time through the GL self-assessment process. To do so, the PA first needs to be convinced of the benefits that the GL can bring in terms of enhancing internal monitoring processes and in terms of marketing exposure. In other words, the PA should be able to clarify the following questions:

- What are the tangible benefits of the GL for my PA?
- To what extend is the GL fully recognised and acknowledged in my country (here, Kenya)?
- Can the GL label lead to increased opportunities for financial support?

The best way to enhance GL PA exposure to marketing/ fundraising opportunities is to strengthen the communication on GL at African and global levels. To this end, the Kenyan team proposed to take advantage of the powerful communication tools that are already locally available and to align and combine them with the GL global communication strategy.



Scaling up sound support to assist GL applicants throughout the GL process

GLPA emphasized that once engaged in the process, there is no way a PA can make it without tight support from the GL mentor. The commitment and expertise of the GL mentor is indeed crucial to guide and assist the PA in understanding each criterion, what evidence they need to provide and how to demonstrate conservation impacts for each of their values.

Additionally, to facilitate the engagement of new PAs in the GL process, user-friendly practical guidance should be made available in accessible formats, in line with with conservancy managers, parks wardens and various other stakeholders' expectations. The future the Kenyan GL handbook will address that request and will not only list the benefits that the GL can bring to Kenyan PAs but also detail the practical steps that PAs need to take to join the GL process in the Kenyan context.

The GL roadmap for Kenya

Innovative suggestions came up during the discussions aiming to address the above-mentioned PA needs such as:

- Setting up a GL communications group to increase the scope of GL PAs exposure and to share the best practises and lessons learnt through social media campaigns and other communication tools.
- Developing a simple step by step GL handbook for Kenyan PAs on the benefits of the GL and on how to join the GL process.
- Developing a peer-to-peer mentorship provided by PAs that are already nominated on the GL to new potential GL applicants starting by the PAs neighbouring GL nominated sites.
- Promoting the GL as a guidance for good conservation practices and lobbying for integrating the GL into national and local policies.

These recommendations are all included in the GL 2019-2021 roadmap for Kenya. The roadmap can certainly be helpful to other established or future GL countries and will contribute to build an EAGL network aiming at sharing lessons learnt and optimize the use of the GL to support PAs in achieving better conservation impacts. | IUCN Green List



NAPA #132, July 2019 - www.papaco.org

Featuring this month



By Nigel Dudley

This year, we launched a new MOOC on the valorisation of protected area resources. Here are a few extracts taken from the course. Registrations for September are open, for the full description of our MOOCs and to register, go to: <u>mooc-conservation.org</u>.

MODULE 1 – Protected area ecosystem services

What are ecosystem services?

Ecosystem: community made up of living plants and animals, along with nonliving components such as air, water, and soil. The various components are not isolated, but they interact with each other in complex ways that we still often don't fully understand. Most ecosystems periodically go through change and regeneration.

Natural ecosystem: ecosystems that are more-or-less like they would be if humans were absent. This is an approximation, as all ecosystems now show the impact of human interventions.

Cultural ecosystem (or cultural landscape): ecosystems that we have altered more dramatically.

Ecosystem services: benefits that humans gain from the natural environment and from healthy, properly-functioning ecosystems.

Providing ecosystem services is a key part of the protected area's objectives, although doing so should not undermine its nature conservation objectives. In some places they may be the only natural ecosystems remaining and therefore the only source of some ecosystem services.

The range of ecosystem services

The Millennium Ecosystem Assessment divided ecosystem services into four main types: supporting, provisioning, regulating and cultural services.

Supporting services: are those ecosystem processes and functions that keep life on the planet running.

Provisioning services: various tangible resources that protected areas either provide directly or help to support.

Regulating services: role of natural ecosystems in helping to control the impacts of long-term climate change, weather events, the water cycle, earth movements, and key natural processes that have an impact on agriculture.

Cultural services: immaterial services that impact people's cultural, psychological and spiritual links with the natural world.



Food security

This topic includes both provisioning and regulating services: ecosystem services that either directly supply food or help create the conditions for its efficient production.

First off, protected areas can be direct sources of food. Many protected areas still allow the collection of some foods within their boundaries, as long as this is done in a sustainable way and doesn't undermine nature conservation objectives.

Sometimes a protected area can act as an occasional and emergency source of food in the event of crop failure or drought. Of course, food collection can also be a problem, like it is the case with high levels of poaching and illegal bushmeat hunting which result in the 'empty park syndrome'. Food production in protected areas doesn't



mean anything can be taken, and part of the manager's role is to control illegal extraction.

Strict protected areas, which allow little or no collection within their borders, are also important food sources, as they allow populations of food species to build up and spill over into places where collection is allowed, boosting overall food availability.

Water security

The planet has a constant amount of water, but its location, the regularity with which it arrives, and its purity alters over time. Things like pollution, changing climatic patterns, more extreme weather events and the melting of polar ice and glaciers are all causing disruptions to water supplies, putting people and ecosystems at risk.

In many cases, nature-based solutions are increasingly seen as a viable, cost effective alternative, and protected areas play a key role in delivering nature-based water management. They contribute to water security in three ways:

- Improving water quality,
- Increasing quantity of water available,
- Smoothing out fluctuations in supply.

Human security

Extreme weather events tend to become disasters because we are living in dangerous places or have removed the natural defenses that could protect us.

Disaster risk reduction (DRR): steps taken to prevent an extreme weather event or an earthquake from developing into a disaster.

There are many DDR engineering solutions (building seawalls to protect against tsunamis, barriers against avalanches and landslides, or dykes to stop flooding) but there is an increasing interest in nature-based solutions.

Climate change: adaptation and mitigation

Protected areas' managers must learn to address the potential impacts of climate change on their own protected areas and what they can and cannot do to help minimise any damage. But it is not only that protected areas face additional problems under climate change, they are also part of the solution. Protected areas have two key roles here: 1: they provide a range of ecosystem services that will help us to adapt to the harmful impacts of climate change,

2: they provide a means to mitigate climate change by storing carbon in soil and vegetation and capturing (sequestering) more carbon from the atmosphere.

Increasing climate uncertainty, the spread of new diseases, the increasing levels of acidity in the oceans and other changes all contribute to reducing food and water security, they bring new health hazards, they increase the rate of extreme weather events, drought and desertification, and generally adds to the general pressure. This means that the role of protected areas in supplying ecosystem services is even more important than before.

Cultural and spiritual values

Many protected areas have historical and cultural values running back for centuries and maintaining these values can be a key benefit of protection.

Spiritual values exist because the protected area contains an important religious building or sacred natural sites. Some sacred natural sites are very old, others emerge all the time. The presence of such a site can encourage local people to undertake conservation.

Many of the earliest national parks were set up explicitly for their landscape values and physical beauty is still a major incentive for establishment. But it is also notoriously hard to quantify. Most protected area managers understand and share aesthetic values and factor them into management.

Module 2 – Managing ecosystem services

Understanding ecosystem services

Direct use values: immediate uses we make of ecosystem services.

Indirect use values: come in more diffuse forms, and generally affect large numbers of people, which sometimes include populations far from the origin of the value. They tend to be non-consumptive values and are often regulating services.

Non-use values and/or options for future use: values of leaving a natural species or ecosystem in place even when we are not benefitting immediately from its existence.





Opportunities for protected areas to supply ecosystem services

Of course, natural and cultural ecosystems far from protected areas also supply vital ecosystem services. But protected areas do offer particular advantages. Protected areas fit into recognised governance structures and exist with a range of safeguards:

- they have defined borders, which can be used to measure carbon sinks and storage and other ecosystem services,
- they operate under legal or other effective frameworks, which provide a stable, long-term mechanism for managing land and water ecosystems, with agreed governance structures to meet a wide range of social and cultural requirements,
- protected areas are also backed by a range of supportive conventions and agreements and regional agreements, these provide policy frameworks, tools and political support.

Threats from the use of protected areas to deliver ecosystem services

The first risk is that because of enthusiasm related to ecosystem services, primary objectives of the protected area (particularly nature conservation) get side-lined. It is therefore important to keep a clear set of objectives.

Some protected area authorities, both state and private, may be tempted to get involved in forest planting schemes even if these are not in the best interests of rare species within the protected area.

Ecotourism is an important ecosystem service, as it funds protected area management and brings money and other benefits to local communities. But some protected areas are overwhelmed with visitors, to the detriment of resident wildlife and bringing problems of pollution and over-use of natural resources such as water.

One important aspect of this is managing different, and sometimes conflicting, demands on ecosystem services, while keeping in mind their various implications for biodiversity conservation.

Understanding ecosystem services from protected areas

The Protected Area Benefits Assessment Tool – or PA-BAT – is a participatory method for identifying and prioritizing the range of ecosystem services supplied by a protected area. It identifies rights holders' and stakeholders' perceptions about the ecosystem services legally obtainable from protected areas, applied in a structured workshop.

In practice, a good assessment of protected area ecosystem services should ideally have elements of both technical and community-based approaches. Specialists can provide hard data on amounts and values of particular services, and communities can share details about specific local species, cultural and spiritual values and priorities. Protected area managers and staff will have their own knowledge and opinions.

Management of direct values from protected area ecosystem services

Direct use values are immediate, tangible things that people get directly from the protected area.

They usually come in the form of harvesting like fish, fodder or herbs, but could also be cash earned from being employed as a ranger, running a tourism venture or operating a food stall at the entrance of a national park. Many direct use values will come to local communities, but they may also affect people farther away.

Here are a few examples of direct-use values: jobs, new businesses, resource provision and tourism revenues.

Management of indirect and non-use values from protected area ecosystem services

In terms of management, indirect values arising from an intact ecosystem simply means keeping that ecosystem in place. In other cases, where an ecosystem or habitat within a protected area is already degraded or has become degraded, ecosystem services can be an additional



reason, and a potential source of funding for restoration activities.

One indirect value, which is becoming increasingly important, is the role of natural ecosystems in carbon storage. This is particularly true for forests and wetlands containing peat, but is important for many other ecosystems too, including marine ecosystems.

The funding that is potentially attached to carbon capture (known as carbon sequestration) and carbon storage means that there are now a wide array of tools and approaches relating to its conservation, management, and in working out the amount of carbon in an ecosystem and calculating the relative values of different ecosystems.

Module 3 – Rights and benefits of local and more distant communities

Distribution of benefits from ecosystem services supplied by protected areas

The fact that a protected area produces a lot of ecosystem services should in theory be a big incentive for local people to support its existence and work positively to keep it in good condition. But this only works if the locals can see the benefits themselves. Eventually this can backfire against conservation.

Biodiversity rights: the right of the global ecosystem to experience rates of species extinction no greater than the norm expected through natural evolutionary processes.

It is important to recognize that benefits come in many different forms. Economic valuation alone is not enough, although it can sometimes be a very useful tool for some benefits. Culturally appropriate approaches and diverse valuations of nature are needed to identify monetary and non-monetary benefits from protected areas.

Negotiating how benefits are distributed implies making choices and trade-offs, and must ensure a just and fair distribution process.

Negotiations should be based on:

- Free prior and informed consent,
- Procedural justice, including participation, representation, accountability and dignity,
- Distributional justice, including gender and



intergenerational equity,

• Inclusion of rights, tenure and areas of conflict.

It is also important to remember that the use of ecosystem services should not undermine nature conservation in protected areas - in line with the IUCN definition of a protected area.

Where use and maintenance of ecosystem services require active management, the role of resident and local communities should be recognised, respected and supported. It is particularly important that these people should participate and be fully represented in decisions related to management, avoiding discriminatory practices against for example women, youth and children.

Participatory approaches to understanding the range of benefits supplied by protected areas

It is critical to the long-term success of protected area management to involve local communities. They should ideally be involved at every stage: from initial planning, through development of a management plan, assessment of ecosystem services, choosing appropriate management approaches, considering potential future changes and the all-important issues of monitoring and adapting management.

First of all, one must identify the different interest groups that should be included in discussions. And then identify who in each of these groups can best represent the group's interests. It's impossible to talk to everyone, but processes that leave out whole areas of interests will inevitably get



only part of the overall story. It is also important to include the more problematic groups – like those who are critical of the protected area – as well as friends and supporters. These meetings can be tricky, and you may want to involve professional facilitators or mediators to help. Excluding critics will just make them even more critical, while including them can help the process of building trust and cooperation.

Free, prior and informed consent and other principles

The United Nations declaration on the rights of indigenous peoples explicitly states that 'States shall provide effective mechanisms for prevention of, and redress for [...] any action which has the aim or effect of dispossessing them of their lands, territories or resources'.

The principle of Free, Prior and Informed Consent, often shortened to F-PIC, was developed specifically for indigenous people but can be applied to any local community, and requires their consent before any developments, resource use, or particularly demands for settlement are applied to their traditional lands.

There are many more guidelines, including decisions from international conventions like the Convention on Biological Diversity, Ramsar Convention on Wetlands and the UN Convention to Combat Desertification. These may be more or less important depending on the protected area. Any manager of a Ramsar site for instance should make sure they know what the Ramsar Convention says.

Resource-use agreements

Resource use agreement: agreement between two or more groups about the use of a natural resource.

It is an agreement between whoever is in charge of a protected area and people wanting to use one or more resources in the area. It needs to be debated and agreed by both parties and then formalized.

Every agreement will need to have the same basic elements. They must:

- Describe in very clear terms what has been agreed upon,
- List the resources it applies to,
- Define the levels of use agreed upon,

- Set zones where resource activities can take place,
- Set the time of day and year where use is allowed and whether the resource is open at any time or only at certain time,
- Explain who is allowed to carry out resource extraction; and what else is expected of them.



Payment for ecosystem service schemes

Payment for Ecosystem Service schemes, or P.E.S., are based on a very simple principle: those using an ecosystem service should pay a fee to those who manage it.

The first step in any P.E.S. scheme is to identify the source of funds. Then it's important to decide who in the community receives funding. Once the provider and recipient(s) have been identified, there needs to be an agreement about payment.

Managing expectations

It is very important not to overstate what ecosystem services offer, either in physical terms or in terms of money, opportunities, jobs, and so on. Local people will often be looking to the protected area for support and over-stating



the potential will simply risk disappointment.

This doesn't mean that you should talk down the opportunities, but that it is important to be clear about the risks as well as the opportunities. If everyone is aware of the true picture, then at least there will be no major surprises. Being open and transparent is the best way of building trust: if communities know that benefits may fluctuate over time, they are more likely to be prepared to periods of weather rather than feeling let down. Communication is, as always, at the root of success. | Registrations for the MOOC on the Valorisation of protected area resources are open: mooc-conservation.org. The next session starts 16 September.



SOLUTIONS FOR A HEALTHY PLANET

Urban EbA and DRR in the eThekwini Municipality, Durban - the Buffelsdraai Community Reforestation Programme

The Buffelsdraai Landfill Site Community Reforestation Project, implemented by eThekwini Municipality (Durban Metropolitan Area), is a flagship project that demonstrates numerous adaptation and mitigation co-benefits. The project has been highly successful in showcasing the role that natural ecosystems play in underwriting the livelihoods and resilience of people, and the role that human communities can play in supporting, restoring and protecting local ecosystems.

Full article <u>here</u>. More info on Panorama, <u>here</u>



Trees bring hope, and income, to local community members. © Errol Douwes

CONTACTS — PAPACO

geoffroy.mauvais@iucn.org beatrice.chataigner@iucn.org marion.langrand@papaco.org youssouph.diedhiou@iucn.org madeleine.coetzer@iucn.org // Programme on African Protected Areas & Conservation - PAPACO
 // PAPACO Programme officer - Green List
 // PAPACO Programme officer - MOOCs
 // PAPACO Programme officer - Green List and World. Heritage
 // PAPACO Programme officer - Communications