Executive Summary

The Republic of Côte d’Ivoire is located in West Africa and shares borders with Liberia and Guinea to the west, Ghana to the east, and Mali and Burkina Faso to the north; to the south lies the Atlantic Ocean. The country covers an area of 322,463 km², of which 318,003 km² are land and 4,460 km² water. According to World Bank estimates, Côte d’Ivoire has a population of 20.81 million spread across 31 administrative regions, twelve districts, and two autonomous districts.

Côte d’Ivoire gained independence from France in August 1960 and in the two decades that followed, made huge economic progress through growth in the export of various agricultural products, primarily cocoa. When the price of cocoa began to fall in the 1980s, the country fell first into economic decline and then, in the 1990s, into political turmoil. There was a military coup in 1999, and in 2000 conflict became open and widespread. Despite reconciliation efforts on the part of the key political actors, in 2002 a mutiny of disaffected soldiers in Abidjan grew into a full-scale rebellion. The rebels of the Ivory Coast Patriotic Movement (Mouvement patriotique de Côte d’Ivoire) seized control of the north of the country from the national government and from then on Côte d’Ivoire was in practice governed as two administrative units, with a buffer zone (termed the Zone of Confidence) in the middle. Abidjan continued to be the de facto capital of the National Government, while Bouaké, just north of the Zone of Confidence was the de facto capital of the forces controlling the country north of the zone.

In 2010, after a decade of negotiations, an election was held in which all the major political formations took part and people from all the geographical and social parts of the country voted. The independent election commission of Côte d’Ivoire declared Alassane Ouattara the winner, but the incumbent president, Laurent Gbagbo, did not concede defeat. As a consequence, violence broke out yet again. In April 2011 forces loyal to Alassane Ouattara captured Laurent Gbagbo and in May 2011, Ouattara took up the role of president.

The new government of Côte d’Ivoire, which came into power after the 2010 elections, made a formal request to UNEP for a post-crisis environmental assessment (PCEA). In responding to the request, UNEP conducted a desk study and remote

A number of local experts joined the assessment mission
sensing analyses and a scope of work was agreed with the Government for field work. Fieldwork for the PCEA was conducted in June and August 2013. A number of national experts joined the field work. Chemical analyses of the samples and further remote-sensing studies were conducted between August and October 2013. During 2014, the draft report was prepared and submitted to the government and external peer reviewers.

The report studied the following environmental issues which had direct or indirect linkages with the conflict:

- forests, including national parks and classified forests,
- environmental degradation of Ébrié Lagoon;
- environmental issues related to unplanned urban expansion;
- industrial and artisanal mining and their environmental footprint; and
- risk of oil spill along the Côte d’Ivoire coastline.

In addition, the study also looked at how the institutions overseeing natural resource management and environmental governance were impacted by the conflict.

**Key findings**

1. There is significant and ongoing deforestation, primarily caused by conversion of classified forests into agricultural lands. The situation is grave and unless addressed comprehensively, it may not be possible to retain ecologically sustainable levels of forests in Côte d’Ivoire.

2. All national parks in the country were affected by the conflict, some more severely than others. The Comoé National Park and Marahoué national park lost significant flora and fauna while the damage to flora in Tai National Park was limited. The animal population in Tai National Park, especially the Chimpanzees, was severely affected with the population dropping about half.

3. The city of Abidjan has doubled its population during the conflict period while urban service provisions have stagnated or deteriorated. This has resulted in range of environmental issues including water pollution, inappropriate disposal of hazardous and municipal waste and severe land degradation.

4. The Ébrié Lagoon, which was already severely polluted even before the conflict, has been further degraded due to disposal of solid and
liquid waste and unplanned land reclamation. There is evidence of heavy metal and pesticide pollution in the fish in the Ébrié Lagoon which needs to be addressed as a matter of priority to better protect the health of the community.

5. The mining sector in Côte d’Ivoire has not gone at a pace similar to its neighbours primarily due to the insecurity caused by the conflicts. There is limited investment in the industrial mines while the artisanal mining sector is flourishing. There are serious health and safety issues in the artisanal mining sector which need to be addressed.

6. The risk of an oil spill affecting Côte d’Ivoire increased significantly during the conflict period due to expanding oil exploration in the Gulf of Guininea, including in Côte d’Ivoire waters. However, the capacity to deal with an oil spill has in fact deteriorated, making the country doubly vulnerable.

7. There are number of Ministries and institutions in Côte d’Ivoire who have overlapping responsibility for environmental management. Not all of these departments co-ordinate their activities effectively adding to the environmental challenges facing the country.

Key recommendations

The study has made a number of technical recommendations to deal with the various environmental challenges facing the country. It is clear from all the evidence and analysis presented in this report that Côte d’Ivoire has many environmental challenges. The causes of the environmental degradation of Côte d’Ivoire are complex. Remedial action will have to go far beyond the technical solutions to individual environmental problems that are specified in this report. There are broader actions that need to be taken in order to get the country back on a path of sustainable growth and once again make the country a model for the whole of Africa.
While there are a number of very serious challenges to the country’s environmental sustainability, there is also some cause for hope. The population density is still low, about 60 people per km², and only 50 percent of the population still lives in rural areas. Much of the land is suitable for agriculture and being in the tropics, is not subject to extreme weather. The country has plenty of high-value resources (e.g., oil, copper, gold) and owing to its geographical location, could well become the service hub of the region.

Côte d’Ivoire is also fortunate in that the political situation is now more stable, with major hostilities between the two rival formations having ceased and the government now legitimate and internationally recognized. With the exception of a few pockets in the west, there is peace across the country and a mood of growing confidence and security, all of which will help to drive development. Furthermore, even though much of the physical infrastructure has been degraded, the country has retained a core of civil servants and professionals, and more are willing to return to their work if the present peace continues. Lastly, since hostilities have ended and legitimate government has returned, Côte d’Ivoire has begun to regain its status as the economic hub of Francophone Africa—a status that is confirmed by the return of the headquarters of the African Development Bank, which had left Abidjan during the conflict.

The following recommendations are presented with the anticipation that they will receive attention from individuals and institutions far beyond those within the environmental community:

1. **Urgently halt continued deforestation; reforest at a grand scale, adequately protect and manage areas of conservation value**

It is clear from the analysis presented in this report that damage to the country’s forests is substantial and widespread. Degradation has been the prevailing trend for over a century, but one that has accelerated enormously over the past ten years. The damage will not be reversed by a few well-intentioned actions, be they a few evictions or a program of replantation at a local level. Rather, the government needs to examine the *totality* of forestry and protected areas, considering all the ecological, agriculture, industrial, socioeconomic, and security factors that are involved, and to do so *at once*. Only then will the government be able to envisage the 50-year plan that will be necessary, and to design a sustainable approach to the management of the country’s forests and national parks.

*Reforestation should be a priority*
A strategic approach to forest management in Côte d’Ivoire must balance the need for access to land for a decent and sustainable livelihood with the need to preserve enough contiguous areas of forest so that the integrity of the ecosystem can be guaranteed. This process should start from commitment at the highest level to halt and reverse the forest degradation. This approach should measure the economic value that has been lost in the process of degradation, as well as that which might be generated by emissions trading, payment for ecosystem services, and the reduction of emissions for deforestation. All these must be done at a national scale if there is to be a master plan for the regeneration of the ecosystem and the forests of Côte d’Ivoire.

2. **Reverse the unsustainable growth of Abidjan**

Most large cities in the developing world have expanded in recent decades, but Abidjan’s growth has been explosive. More to the point, it has been unnatural in that it was driven not by aspiration but by fear. As a result, it is unsustainable. The environmental damage caused by that growth is immense: groundwater sources have been depleted, and Ébrié Lagoon is highly polluted. Abidjan no longer offers the quality of life it once did. Its infrastructure from water supply, sanitation and waste management, to education and health care has suffered.

It is still possible to restore Abidjan’s former environmental quality even with its current population of five million, but the resources needed to do so would be vast. More important, it would be neither an efficient nor an appropriate response to this urbanization crisis. The civil war drove large numbers of people to Abidjan over a short period of time, and a brief period of peace will not be enough to persuade them to return to whence they fled. Better economic opportunities, infrastructure, and social services, and the long-term stability of the country, will induce people to return to their former homes. Furthermore, as inertia is often the partner of suspicion in these situations, incentives will need to be offered to encourage people to leave the city.

3. **Establish Ébrié Lagoon as an engine for economic revival in Abidjan**

At present, Ébrié Lagoon is a foul, unsightly water-body that does not offer aesthetic or ecosystem benefits to the population. However, the UNEP assessment has shown that only 10 percent of the lagoon is subject to severe anthropogenic impact. The lagoon could recover.

The Ébrié lagoon can become a growth engine promoting tourism and other economic activity
To allow that recovery to happen, the government would need to remove the present accumulation of pollution, prevent further encroachment, and control or stop the use of the lagoon as a dumping ground for solid and liquid waste. Such a recovery would not only make an immeasurable difference to the lives of Abidjan's citizens, it would also drive the city's economic growth. The lagoon could still offer opportunities for commercial and artisanal fishing, recreation, fast and efficient water transport, tourism, and a waterfront worthy of the region's economic hub.

Ébrié Lagoon will not be transformed from its current polluted state into a prime mover of Abidjan’s economy by uncoordinated policy initiatives to clean it up or to prevent encroachment. As in the case of forest regeneration efforts, the efforts here need to be long term, coordinated, and substantial. UNEP recommends the formation of an Ébrié Lagoon Authority, to be tasked with long-term planning. Authorities in other countries have managed to ensure effective coordination between the relevant municipalities and government departments so as to implement measures to improve the environmental quality and productivity of bodies of water like the lagoon.

**Way forward**

Many reports in the past have addressed the individual issues assessed during this survey. For experts who have been following the story of Côte d’Ivoire, neither the conclusions nor the recommendations found in the report will be entirely new. This report only presents them in a holistic fashion.

The decision makers in Côte d’Ivoire are cognizant of the environmental challenges faced by the country and are aware of potential solutions. However, resources to deal with these issues are severely lacking. With the country coming out of more than a decade of conflict, there are more urgent pressures that require attention, such as job creation and delivery of social services (i.e. education and healthcare). Nonetheless, long-term sustainable development of the country depends on ensuring environmental sustainability, a point that is obvious but not always easy to put into practice.

Côte d’Ivoire would need both significant internal mobilization of funds and external support to deal with environmental issues identified in the report. Luckily, many of these issues have the potential to bring in return on investment in the medium term, such as restoring national parks and promoting tourism, and clean up of Ébrié Lagoon and promoting a range of economic activities therein. The key, therefore, is to bring environmental issues to the forefront, design a number of tangible interventions and create the appropriate market conditions so that capital could be directed towards these efforts.