

Keynote Address—Forest Management, Climate Change, and Biodiversity: Advancing an Understanding of Caribbean Forest Dynamics and Creating Long-term Regional Networks

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Marilyn Headley*

I deem it an honor to have been asked to present the keynote address for this, the 16th Caribbean Foresters Meeting (CFM). I am even more excited about having accepted your invitation to participate in what I consider to be an extremely worthwhile activity within the Caribbean region, especially among individuals who are able to speak “trees”. Jamaica has been participating in the CFMs from the very early days. I recall the wonderful experience I had here in the Dominican Republic in 1998. In June 2006, when Jamaica hosted the 13th CFM, the experience was a most fruitful one as we gained tremendous insight into the challenges and opportunities common to our respective countries. An added feature of the meeting was that we forged friendships and partnerships, several of which are still thriving. I know that this meeting will result in many new friendships and networking opportunities among Caribbean foresters; these connections are very important for us as a group. We must ensure that we keep in touch and not wait until the next CFM to contact our colleagues.

Forestry in the Caribbean Under Threat: A Collaborative Imperative

Ladies and gentlemen, everybody else in the world is finally recognizing what we foresters have known for a long time: sustainable forest management (SFM) is critical to healthy lives and healthy economies. Forests remain the lungs of the earth on which we depend for our very existence.

State of the world’s forests

In its 2012 State of the World’s Forest Report, the Food and Agricultural Organization (FAO) indicated that forests currently cover about 4 billion ha, or about 31% of the earth’s land-surface. Forests, as described in the FAO’s 2005 Millennium Ecosystem Assessment and 2007 Fourth Assessment Report, provide approximately 1.6 billion people with food, medicines, fuel, and other basic necessities, and over two thirds of known land-based species live in forests. However, as population and economic activity increase worldwide, our need to protect and conserve our forests has, in several instances, been diminished by national development

*CEO and Conservator of Forests, Forestry Department, 173 Constant Spring Road, Kingston 8, Jamaica; mheadly@forestry.gov.jm.

imperatives, resulting in widespread deforestation. On a global level, it is estimated that approximately 13 million ha of forest are lost per year.

At the 10th session of the United Nations Forum on Forests (UNFF) held in Istanbul, Turkey, in April 2013, the global community agreed that the underlying causes of deforestation and forest degradation are interrelated and are often socio-economic in nature. These causes include:

- Poverty
- Lack of secure land-tenure patterns
- Inadequate recognition within national laws and jurisdiction of the rights and needs of forest-dependent indigenous and local communities
- Inadequate cross-sectoral policies
- Undervaluation of forest products and ecosystem services
- Lack of participation
- Lack of good governance
- Absence of a supportive economic climate that facilitates SFM
- Illegal trade
- Lack of capacity
- Lack of an enabling environment, at both the national and international levels
- National policies that distort markets and encourage the conversion of forests to other uses

There is global acknowledgment of the causes of deforestation and possible approaches to managing them. Although there is no single, global, legal instrument that specifically addresses forests, the UNFF and the UN General Assembly adopted the non-legally binding instrument (NLBI) on all types of forests in 2007. The purpose of the NLBI is to provide a framework for national action and international cooperation and to strengthen political commitment and action at all levels to implement effective sustainable management of all types of forests and to achieve shared global objectives on forests.

The four shared, global objectives that were developed in the NLBI provide clear guidance for future work on the International Arrangement on Forests.

They seek to:

1. Reverse the loss of forest cover worldwide through sustainable forest management, including protection, restoration, afforestation, reforestation, and increased efforts to prevent forest degradation.
2. Enhance forest-based economic, social, and environmental benefits, including improving the livelihoods of forest-dependent people.
3. Increase significantly the area of sustainably managed forests, including protected forests, and increase the proportion of forest products derived from sustainably managed forests.
4. Reverse the decline in official development assistance for sustainable forest management and mobilize significantly increased and additional financial resources from all sources for the implementation of SFM.

In addition to the NLBI and the global objectives, various aspects of forestry have been incorporated in other UN Conventions:

- Climate Change Convention
- Convention on Biological Diversity
- Convention to Combat Desertification.

Other conventions of relevance are:

- Ramsar Convention on Wetlands
- World Heritage Convention
- Convention on International Trade in Endangered Species
- Ozone Layer Convention
- Indigenous and Tribal Peoples Convention
- International Tropical Timber Agreement

Though they are limited, these conventions must be utilized to bring about change within our respective countries. We have to seek to halt deforestation and its effects, which include the depletion of biodiversity by destroying habitat, interference with plant reproduction, and the fragmentation of contiguous forest areas that collectively have caused ~8000 tree species—9% of the total number of tree species worldwide—to come close to extinction. Deforestation is also responsible for contributing approximately 20% of annual greenhouse-gas emissions, thus magnifying the effects of climate change, which include more warm days and nights; an increased percentage of total annual rainfall from heavy rainfall; an increase in the frequency, intensity, and duration of tropical storms and hurricanes; and rising sea levels.

Caribbean reality

Ladies and gentlemen, as citizens of Caribbean states, these are important facts for us to acknowledge because they affect the foundation on which many of our economies are built. Our countries are homogenous in several respects, especially our strong dependence on tourism. For many of our economies, including Jamaica, tourism is the #1 source of income/foreign exchange. Increasingly, tourists are coming to our shores to enjoy a different type of tourism, one that is ecologically based and highlights our unique flora, fauna, and largely undiscovered landscapes. There is great potential in this area, according to the International Ecotourism Society:

- Ecotourism has been growing 20%–34% per year since the 1990s.
- In 2004, ecotourism/nature tourism worldwide grew 3 times faster than the tourism industry as a whole.
- Nature tourism is growing at 10%–12% per annum in the international market.
- Sun-and-sand resort tourism has now matured as a market and its growth is projected to remain flat. In contrast, experiential tourism—which encompasses ecotourism, nature, heritage, cultural, and soft-adventure

tourism, as well as sub-sectors such as rural and community tourism—is among the sectors expected to grow most quickly over the next two decades.

- United Nations Environment Programme (UNEP) and Conservation International have indicated that most of tourism's expansion is occurring in and around the world's remaining natural areas.
- Sustainable tourism could grow to 25% of the world's travel market within the next several years, taking the value of the sector to £250 billion (US\$473.6 billion) a year.
- Analysts predict growth in eco-resorts and hotels, and a boom in nature tourism—a sector already growing at 20% a year—and suggest that early converts to sustainable tourism will make market gains.

All of these potential benefits are threatened by climate change, which is expected to shake the very foundation on which the region's tourism and evolving ecotourism industry are built. Scientists predict that climate change will impact forest biodiversity, the ability of forests to provide soil and water protection, habitat for species, and other ecosystem services. Forest ecosystems identified as being particularly vulnerable to the impacts of climate change include mangroves, tropical forests, cloud forests, and dry forests.

It doesn't seem that we will be able to escape the impact of deforestation, forest degradation, and climate change. This change will be manifested with extremes in temperature, increases in tropical cyclones (typhoons and hurricanes), droughts, and floods, making tourism destinations more vulnerable to natural disasters. The stark reality is that sooner or later, the very sea and sand as we know them today may well soon disappear and the sun will be too hot for tourists to enjoy for prolonged periods.

Our shared Caribbean situation also extends to agriculture and its importance to many of our societies. Climate change and deforestation are already affecting our yields and the types of crops we are able to grow. Agricultural productivity, and hence food and nutrition security, will be significantly impacted by climate change as critical components of the agro-ecosystem are affected, e.g., water, soil, and pests.

International and local response

Forest management does not represent a panacea for climate-change adaptation and the retention of biological diversity, but it has a significant role to play. There have been some positive outcomes that should be highlighted.

Public awareness. Considerable efforts are being made to educate the global public regarding various environmental issues such as climate change and global warming. The United Nations (UN) must also be commended for the organization and promotion of the International Year of Forests, in 2011. For me, this effort represented one of the largest attempts by any international body to highlight forest protection and management as a global challenge that has local effects. This UN educational endeavor relating to the forest had a global audience who were shown images of the devastation taking place in various regions of the world, and more importantly, how countries were seeking to mitigate the effects of deforestation.

In general, public education about the forest environment has grown by leaps and bounds over the last decade. In addition, with many of our countries receiving grant funding from international donors, there is greater emphasis placed on public education. Many bilateral, multilateral, and project agreements include a structured public-education component. As environmental issues take center stage, more governments are required to put in place formal programs to educate their citizens about the importance of forest conservation and preservation.

Participatory forestry. There is a global move towards more involvement in forestry by community-based and non-governmental organizations (NGOs). According to studies carried out by the FAO and reported on by the Caribbean Natural Resource Institute (CANARI), prior to 1997 there was no evidence of specific policy guidance on participatory forest management in any single Caribbean country. Since that time, many if not most countries have added stakeholder-participation components to their policies and legislative frameworks. In Jamaica, communities, especially those closest to the forest, are eager to participate in the establishment of local forest management committees (LFMCs). Community involvement is fast becoming entrenched in forest management throughout the Caribbean region. With a sense of ownership comes greater responsibility to protect and conserve. In Jamaica, the first LFMC was launched in 2000; to date, 13 LFMCs have been formed, and several others are in various stages of the process. The LFMC concept stresses sustainability, and most communities are not averse to earning income from the forest while guaranteeing that the resource will be there to serve other generations. The communities also assist with enforcement efforts as additional eyes and ears to observe ongoing activities.

Legislative framework. Legislatively, the Caribbean states continue to move in the right direction by adopting legislation on sustainable forest management. Unfortunately, many of the laws are neither applied nor sufficiently enforced, due largely to lack of human and financial capacity. Increasingly, however, in the face of limited resources, some countries have opted for public/private partnerships in which supervision and control functions are delegated. In addition, with funding from international partners, several countries are reviewing their legislative frameworks to make their laws more responsive to changing environmental challenges. In Jamaica, with funding under the African, Caribbean, and Pacific-Forest Law Enforcement, Government, and Trade (ACP-FLEGT) Program, my agency reviewed and updated the 2001 Forest Policy.

The process involved a wide range of stakeholders who provided us with recommendations and comments that contributed significantly to the final draft. The policy draft was submitted to the Cabinet, and we are awaiting final approval. Following approval, we will begin to revise the current Forest Act. We anticipate that Jamaica will have a more effective Act at the end of the process. Other Caribbean countries including Trinidad and Tobago, St. Lucia, and Grenada, are also revising or have recently revised their legislation. The ACP-FLEGT program still has funding available; each country should try and access these funds to help update existing legislation.

Regional networking

There have been improved networking opportunities over the years, as seen in this meeting and other CFMs. The FAO regional office has organized numerous meetings which enable foresters in the region to meet and share ideas on various topics. CANARI has also played a very significant role in facilitating networking opportunities to discuss participatory forest management and forest policy in the Caribbean region.

Words of caution

I am fully aware that our respective governments are committed to improving standards of living through economic growth for their citizens. Unfortunately over many decades, in spite of our collective efforts, development has negatively impacted our forests as areas have been cleared for housing, mining activities, road construction, hotels, and the tourism industry. Undoubtedly, development initiatives should and must be undertaken. What I suggest is that governments across the region consider using a “no-net-loss” approach to balancing growth and forest conservation. That is, whenever trees must be removed for development projects, other areas should be identified where trees are then planted to compensate for the removal. Though not the ideal, this proposal is a reasonable compromise. However, there are some forests in our respective countries which should never be removed because of their significance, e.g., the Cockpit Country in Jamaica. We must protect these forests. We should solicit support from the NGOs, community groups, and the general public to fight these battles. Some forests simply cannot be replaced.

As international attention turns towards addressing the ramifications of environmental degradation, and catch phrases such as climate change and global warming take center stage in negotiations, our policy- and decision-makers sometimes inadvertently forget that forest management and reforestation are linked to many environmental problems. With so many sectors getting involved in the climate-change discussions, we may be losing focus on the root cause of many of the problems—deforestation. We should not allow this to happen. Therefore, it is important that we, through our various public awareness and education programs, promote the relevance of our work and link it to real issues such as national development, risk management, climate, and disaster mitigation.

The way forward

As we move forward as a region, there are imperatives that must be followed. First, there has to be greater synergy among our countries with respect to the sharing of experiences, research, and general information. Based on the homogeneity of the region, each country can benefit from the lessons learned from its neighbor. Cooperation must exist not only at the level of administrations or governments, but also at the academic and institutional levels. Where regional institutions exist, governments and interest groups must be willing to provide funding to assist in strengthening these organizations to meet the growing informational and technical needs of countries across the region. Ladies and gentlemen, we have had little

support for our forestry work; therefore, we must employ creative ways and means to move forward in the face of economic challenges.

I suggest that greater independent funding should be made available to improve public awareness. We need a sound plan so that we can tap into funding to undertake public education campaigns on any environmental issue and other forest-related activities. We should not only focus on seeking international funding, we have to get private companies to become much more involved in our forestry programs. We need to ask that companies move from just including the word “green” in their tagline, to actually planting some trees, protecting our remaining forests, or sponsoring our public awareness activities. The petroleum companies in Trinidad and Tobago have been approached, but we need more examples like these in other countries.

Finally, to improve our networking capabilities we must consider acting as a united Caribbean group in all future UNFF negotiation sessions. Forest conservation efforts would benefit because we would have a stronger position on matters which are important to us.

In conclusion, I am suggesting that a collaborative approach to forest management be the bedrock of all activities geared towards forest protection and conservation. Failure to maintain the delicate balance between development and sustainable forestry will result in the devastation of many of our economies. Public education is a key component, and increased funding should be allocated to making citizens aware of their environment and the impact of their activities on their lives and the lives of the future generations. Good luck in your endeavors. Thank you!