getting research into practice

STOPPING DEFORESTATION

WWF's living forests challenge

A global analysis using IIASA models shows that more than 230 million hectares of forest will disappear by 2050 unless action is taken. A new WWF (World Wide Fund for Nature) report proposes that policymakers and businesses unite around a goal of zero net deforestation and forest degradation (ZNDD) by 2020 as a groundbreaking global benchmark to avoid dangerous climate change and curb biodiversity loss.

The highly proactive and interactive WWF went to Indonesia in April to launch the first chapter of its *Living Forests Report*, Forests for a Living Planet, at the Business 4 Environment Global Summit (B4E), co-sponsored by the company Global Initiatives and the Government of Indonesia. It was a bold move to bring home to business and government leaders the folly of squandering forests for short-term profit taking, when governance and economic incentives could keep forests standing with longer-term benefits for the whole global community.

The vision advocated by the WWF at B4E was equally bold: "Zero Net Deforestation and Forest Degradation (ZNDD) by 2020." ZNND, says WWF, would not only stem the depletion of forest-based biodiversity and ecosystem services and associated (GHG) emissions, but also address the many targets of the Millennium Goals and the UN conventions on biodiversity and climate change.

Perhaps the boldest step of all was to highlight the "Living Forests Model," developed by the WWF with IIASA. Outside the research world, models are frequently unsung workhorses, producing results that give insights into the world's most complex and apparently intractable problems. WWF judges that the time is now right to visibly demonstrate *one*, that effective environmental policies are based on serious scientific data and the sophisticated methodologies developed to interpret them, and *two*, that these policies need urgent implementation. "'The Living Forests Model' shows that conserving our forests is possible—and urgent. But it won't be easy," said Rod Taylor, WWF International Forests Director.

The first chapter of the report introduces the "Living Forests Model"—an integrated version of IIASA's tested G4M and GLOBIOM models—and shows how models, rather than making exact predictions, inform the policy debate with respect to the important issues of population rises, food prices, pollution, biodiversity, and livelihoods. It also shows geographically explicit land-use change under different scenarios. It features a reference

THE NEED FOR URGENT ACTION IIASA's Living Forests Model compares gross deforestation under the Do Nothing Scenario, Target Scenario, Target Delayed Scenario, and Half Measures Scenario. The numbers represent cumulative deforestation between 2010 and 2050. Under the Do Nothing Scenario, the area deforested is greater than the current total forest area of the Democratic Republic of Congo, Peru, and Papua New Guinea combined. (Source: *WWF Living Forests Report*, Chapter 1)

"Do Nothing Scenario" and demonstrates how this would change if measures were introduced to rein in deforestation and forest degradation. It also features other scenarios that change key assumptions in the Do Nothing Scenario.

The WWF plans a year-long conversation on the options and opportunities for achieving the Living Forests Vision. WWF and IIASA will use the "Living Forests Model" to explore current and potential future land-use trends, including how growing global consumer demands affect what we produce, the knock-on effects on GHG emissions, and the impacts of these trends on resources and prices. More chapters will be released throughout 2011. ∎