World forest observatory needed to monitor vital role of forests in climate deal

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A new scientific organisation is needed to monitor the commitments that will be made by developing countries at Copenhagen to cut their deforestation rates, according to research at the University of Leeds.

Existing government agencies and research groups have failed to make full use of the thousands of satellite images of the Earth's surface collected each week to monitor tropical forests.

Now, a paper published by Dr Alan Grainger in the Proceedings of the National Academy of Sciences outlines how a new body - named the "World Forest Observatory" - could use satellite images to map the world's forests and how they are changing.

The paper also contains the first inventory of national forest surveys for tropical countries - the current method of documenting deforestation. It shows that in the last 40 years only half of countries have had the two surveys needed to construct a deforestation trend. A third have had only one survey, and a tenth no survey at all.

The study follows a timely statement by Gordon Brown at a Commonwealth summit press conference in Trinidad on Friday 27th November, that satellites will be needed to monitor implementation of a Reduced Emissions from Deforestation and Degradation (REDD) scheme.

"The Prime Minister's commitment is vitally important," said Dr

Grainger. "But satellites are not a magic pill, and so far we have failed to use them properly."

"We have the technology, but not the organization. In my plan an international network of scientists, collaborating in a World Forest Observatory, would use satellites to measure the world's forests just as astronomers use telescopes to observe the stars. We could ensure that taxpayers' money is wisely spent on REDD and make major discoveries about how carbon and biodiversity are distributed in forests across the world."

His research shows that a World Forest Observatory will not just need to monitor how deforestation rates decline in future. "To prove cuts in deforestation in a REDD scheme you must know the present deforestation rate accurately. This requires two recent forest surveys, but my research shows that only half of tropical countries at most meet this criterion. So a World Forest Observatory will also have to measure current deforestation rates to provide a reliable baseline."

Dr Grainger is part of an international team carrying out a feasibility study of a World Forest Observatory, with funding from the Sloan Foundation in New York. He has also advised the UN Convention to Combat Desertification this year on how to establish a global desertification observing system.

"There is growing interest across the world in making full use of the satellite technology at our disposal to measure the planet so we can manage it better", he said.

"If governments at Copenhagen give their backing to a World Forest Observatory it could be a major outcome of the conference and be the first in a network of global environmental observatories which will make a big difference to our planet."

Source: University of Leeds (news : web)