World leaders have broken their promise to slow the rate of biodiversity loss across the planet, say scientists tracking everything from vanishing languages to shrinking forests.

Animal populations are down 31 per cent since 1970, shorebird populations have dropped 52 per cent, while forests have shrunk three per cent, mangroves by 19 per cent, and seagrass beds by 20 per cent, says an international team that lays out the gloomy situation in a report to be published Friday in the journal Science.

The team points to "a few encouraging achievements" but says international leaders' eight-year-old commitment to slow biodiversity loss by 2010 has not been met and pressures facing Earth's biodiversity continue to mount.

Human consumption of the planet's ecological assets is still rising — and is up a whopping 78 per cent since 1970. World fisheries are in more trouble than ever with "79 per cent of fish stocks over-exploited, fully exploited, or depleted," says lead author Stuart Butchart, a British scientist with the UN Environment Program World Conservation Monitoring Centre.

The situation is not much better for birds, he says, with North American grassland and arid land bird populations down by almost 30 per cent.

"It is shocking," Butchart, says of the erosion of the natural world that has continued since world leaders signed the 2002 Convention on Biological Diversity to slow biodiversity loss.

"Government leaders made this commitment in recognition that we are destroying nature across the planet and our synthesis provides overwhelming evidence that they failed to deliver on those commitments," Butchart said in an interview Thursday.

He says there is both a moral and economic imperative to better protect the planet.

"It's important not just because all nature has intrinsic value — and what right have we got to destroy it, or prevent future generations from having the opportunity to benefit and appreciate it," says Butchart, "but also because we obtain huge economic benefits from biodiversity, clean drinking water, pollination of our crops, healthy soils."

The report includes data from conservation bodies around the world that track bird and animal populations, fish stocks, coral reefs, rainforests, and even the number of human languages.

Twenty-two per cent of the 6,900 languages are spoken by fewer than 1,000 people and "are in danger of disappearing within this century," the report says.

There are a few positive trends: waterfowl populations in North America and Europe are up 44 per cent since 1980 due to wetland protection and more sustainable management; the water quality in Asia has improved 7.4 per cent since 1970, and there are now about 133,000 protected areas covering 12 per cent of the planet's land mass. There has also been plenty of talk about tackling biodiversity loss, with 87 per cent of countries having devised national biodiversity strategies and action plans.

"But an 'action plan' is not action," says co-author Daniel Pauly, a fisheries specialist of the University of British Columbia, stressing the needs for a lot more concrete change.

Less than one per of the world's oceans are in marine protected areas — a tiny fraction of the 20 to 30 per cent of the oceans that need protection if fisheries stocks are ever to rebuild, says Pauly.

While the number of parks on land has increased, many of them are small, not strategically located to protect biodiversity, or lack proper protection.

"Paper parks," says Pauly.

The report, to be presented at the May meeting on the biodiversity convention, calls for governments to reverse detrimental policies, integrate biodiversity into land-use decisions, and boost funding for policies that tackle biodiversity loss head-on.

"We are rapidly destroying the natural capital on which we depend," says Butchart.