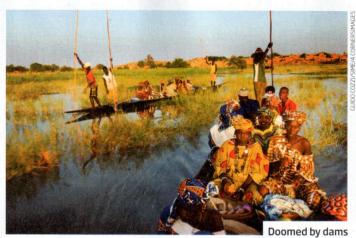
Aral Sea disaster will be repeated in Mali

SEEN from space, it is a vast green and blue smudge on the edge of the Sahara desert. Close up, it is a watery wilderness of lakes and flooded forests and grasslands, home to 1.5 million fishers, cattle grazers and farmers, and millions of birds wintering from Europe.

But the inner Niger delta in northern Mali, one of the world's largest wetlands, could soon run almost completely dry every fourth year. Massive engineering works on the Niger river, West Africa's largest river, are set to turn the delta into a desiccated sump. The result would be a "human catastrophe as vicious and shameful as the drainage of the Aral Sea" in central Asia by Soviet engineers, warns Jane Madgwick,



head of Wetlands International.

The first threat comes from the Malian government itself. It has sanctioned a series of schemes to extract water from the Niger river just upstream of the delta to irrigate thirsty crops such as rice, cotton and sugar. The two largest projects, due to be completed by 2015, will provide

water for the South African sugar giant Illovo and a Chinese state enterprise. They could take the entire river flow during the dry season, says hydrologist Leo Zwarts of the Dutch consultancy Altenburg & Wymenga.

The coup de grace for the wetland would then be a hydroelectric dam 1000 kilometres upstream, planned by Mali's neighbour, Guinea. The Fomi dam, which has funding lined up but no start date, is designed to capture much of the river's wet season flow, and would prevent the annual flooding of the wetland.

Zwarts has now modelled the consequences of these projects for the inner Niger delta for Wetlands International. The delta varies in size from year to year, depending on rainfall in the region. During the last major drought in 1984, three-quarters of it dried out. Fishing failed, cattle died and most of the people fled.

Zwarts's study, presented at the World Water Forum in Marseille, France, last week, warns that the dam and irrigation schemes would make a disaster like the 1984 drought likely on average every four years. While increasing Mali's production of commercial crops, the projects would cause extreme poverty and force more than a million people into migration, says Madgwick. Fred Pearce

NewScientist Connect

LIFE LIFT OFF

NEW SCIENTIST CONNECT

We all know it's not rocket science trying to find that special someone with whom we connect, even though it sometimes feels that way. Which is why we've launched New Scientist Connect.

Meet like-minded people who share similar interests to you - whether you're looking for love, or just to meet someone on the same wavelength, no matter where you are in the world.

Start your search now at: http://dating.newscientist.com



