



# Wetlands and sustainable livelihoods: From vicious circle to virtuous cycle

Wetlands are essential for humans to live and prosper. They provide freshwater and ensure our food supply. They help sustain the wide variety of life on our planet, protect our coastlines, provide natural sponges against river flooding, and store carbon dioxide to regulate climate change.

## From vicious circle...

Alarmingly, 64% of the world's wetlands have disappeared since 1900, and freshwater species populations declined by 76% between 1970 and 2010. The wetlands that do still remain are often so degraded that the people who directly rely on them for fish, plants, and wildlife – often the very poor – are driven into even deeper poverty.

## To virtuous cycle...

Enabling people to make a decent living while at the same time ensuring that wetlands can still provide their essential benefits, do not have to be conflicting goals! In fact, the new United Nations Sustainable Development Goals underline that reducing poverty actually demands that we also protect and restore ecosystems such as wetlands.

## Creating the right conditions

There are multiple models outlining how to promote sustainable livelihoods in wetlands, and they share several key points:

1. Understand peoples' needs, especially how vulnerable they are to shocks and natural disasters, and how the seasons affect their incomes.
2. Provide them with many different sorts of 'capital' including:
  - products harvested from wetlands such as reeds, rice, fish, etc.
  - training and knowledge in using wetlands wisely
  - a voice in planning how local wetlands should be used
  - basic equipment and tools
  - credit, cash or micro-loans
3. Identify who can actually provide these resources – often governments, NGOs or community organizations – and help them make the changes happen.

## Case study: Senegal

### Mangrove restoration to ensure sustainable livelihoods

Senegal still has some 185,000 hectares of mangrove estuaries in the Casamance and Sine Saloum regions, but 45,000 hectares have been lost since the 1970s. Healthy mangroves serve as effective salt water filtration systems, provide protection against storms, and act as nursery grounds for fish.

The world's largest mangrove reforestation project is under way here thanks to Danone and the Livelihoods Carbon Fund, who are working with the Senegalese NGO Océanium. This project:

- has replanted 79 million mangrove trees on more than 10,000 hectares
- promotes the restoration of rice paddies
- will produce up to 18,000 extra tons of fish annually, along with shrimps, oysters, and molluscs
- plants trees that will store 500,000 tons of CO<sub>2</sub> over 20 years
- has mobilized the efforts of 350 local villages and 200,000 people

