Ecosystem services are about the benefits ecosystems provide to people. While the notion of ecosystem services often conjures images of forests and natural areas, ecosystem services are very important in agricultural landscapes because of their critical role in achieving food security, livelihood security, and increasing human well-being.

The vision of the CGIAR Research Program on Water, Land and Ecosystems (WLE) is to secure the sustainable provision and equitable distribution of ecosystem services in deprived agricultural landscapes across the globe. We aim to achieve this by applying and integrating ecosystem service and resilience (ESR) concepts into development and resource management decisions in agricultural landscapes.

**Ecosystem Services and Resilience Framework**

Ecosystem services are about the benefits ecosystems provide to people. While the notion of ecosystem services often conjures images of forests and natural areas, ecosystem services are very important in agricultural landscapes because of their critical role in achieving food security, livelihood security, and increasing human well-being.

The vision of the CGIAR Research Program on Water, Land and Ecosystems (WLE) is to secure the sustainable provision and equitable distribution of ecosystem services in deprived agricultural landscapes across the globe. We aim to achieve this by applying and integrating ecosystem service and resilience (ESR) concepts into development and resource management decisions in agricultural landscapes.

The ESR Framework is the conceptual basis for WLE’s approach to managing ecosystem service flows, grounded by our five core principles.

We seek to identify when, how and where selected ecosystem services can be sustainably harnessed to improve outcomes for poor communities and to work with decision-makers to make these outcomes a reality.
Better ecosystem service management can:

1. Provide a sustainable and equitably distributed supply of ecosystem services that are of direct importance to human well-being, e.g. food, fibre, biofuel, water. For example, by ensuring long-term supplies of fodder for livestock (above and below ground biomass), or reducing soil and water pollution from nutrient run-off.

2. Reduce the risk and severity of system shocks on lives and livelihoods. For example, providing water storage and drainage areas to reduce flood risks, or mitigating heat waves through open spaces and vegetation that provide shade and encourage airflow.

3. Open up new and alternative opportunities for income generation, e.g. income from increased food productivity, eco-tourism, payment for ecosystem service schemes, or costs avoided where ecosystem services reduce the need for technological interventions.

Achieving the above outcomes requires the integration of ecosystem service and resilience thinking into decision-making across all sectors involved in the management of ecosystems and their benefits to agricultural regions. The map below shows some examples of how the Ecosystem Services and Resilience Framework could work in practice.

Examples of applying the ESR Framework

- Habitat connectivity and pest control by birds in Costa Rica
- Payment for water-related ecosystem services in Peru
- Reduce pressure on ecosystem services in the Volta River Basin
- Managing ecosystems to support agricultural growth corridors in East Africa
- Rice production in the Mekong wetlands

Learn more about Ecosystem Services & Resilience: wle.cgiar.org/esr