

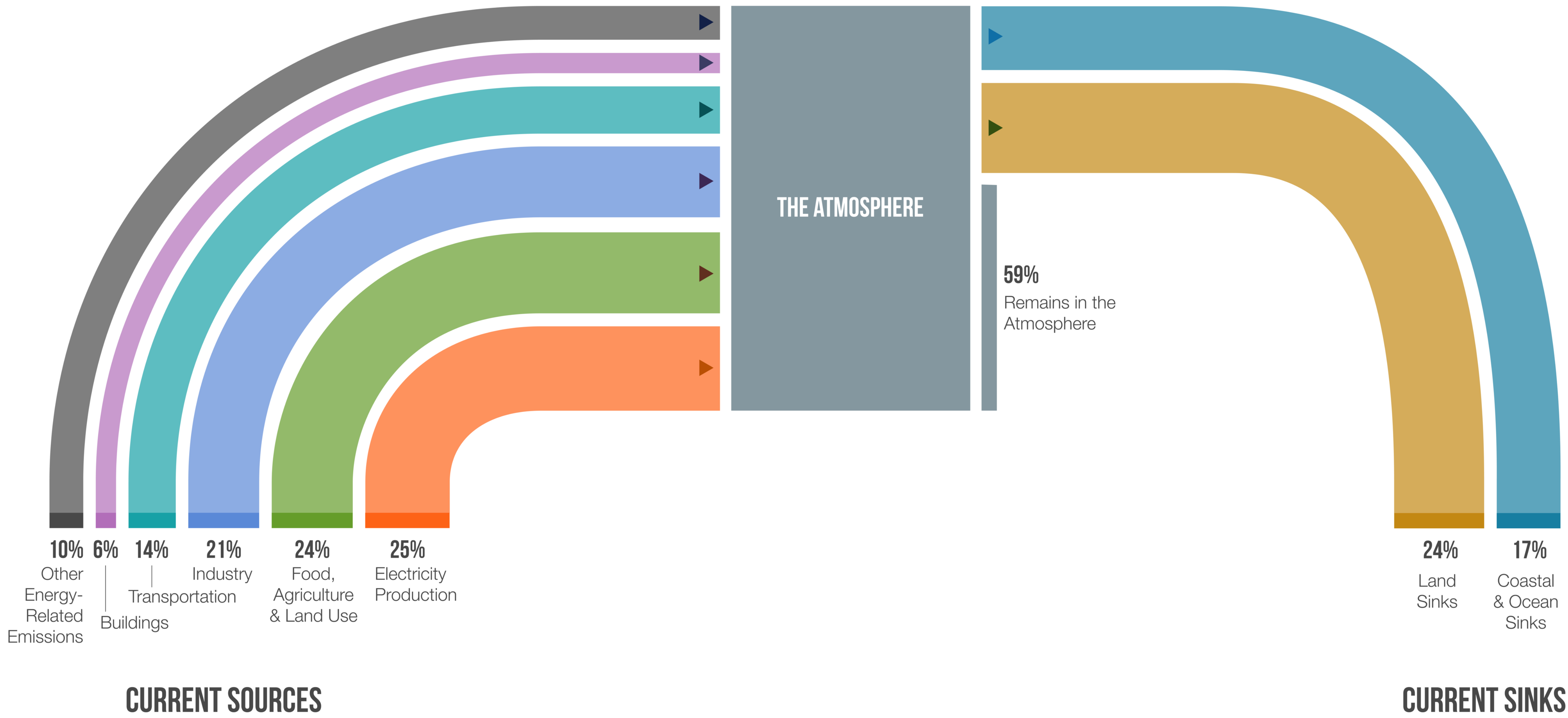


Resilient & Sustainable Land Management Practices

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Project Drawdown

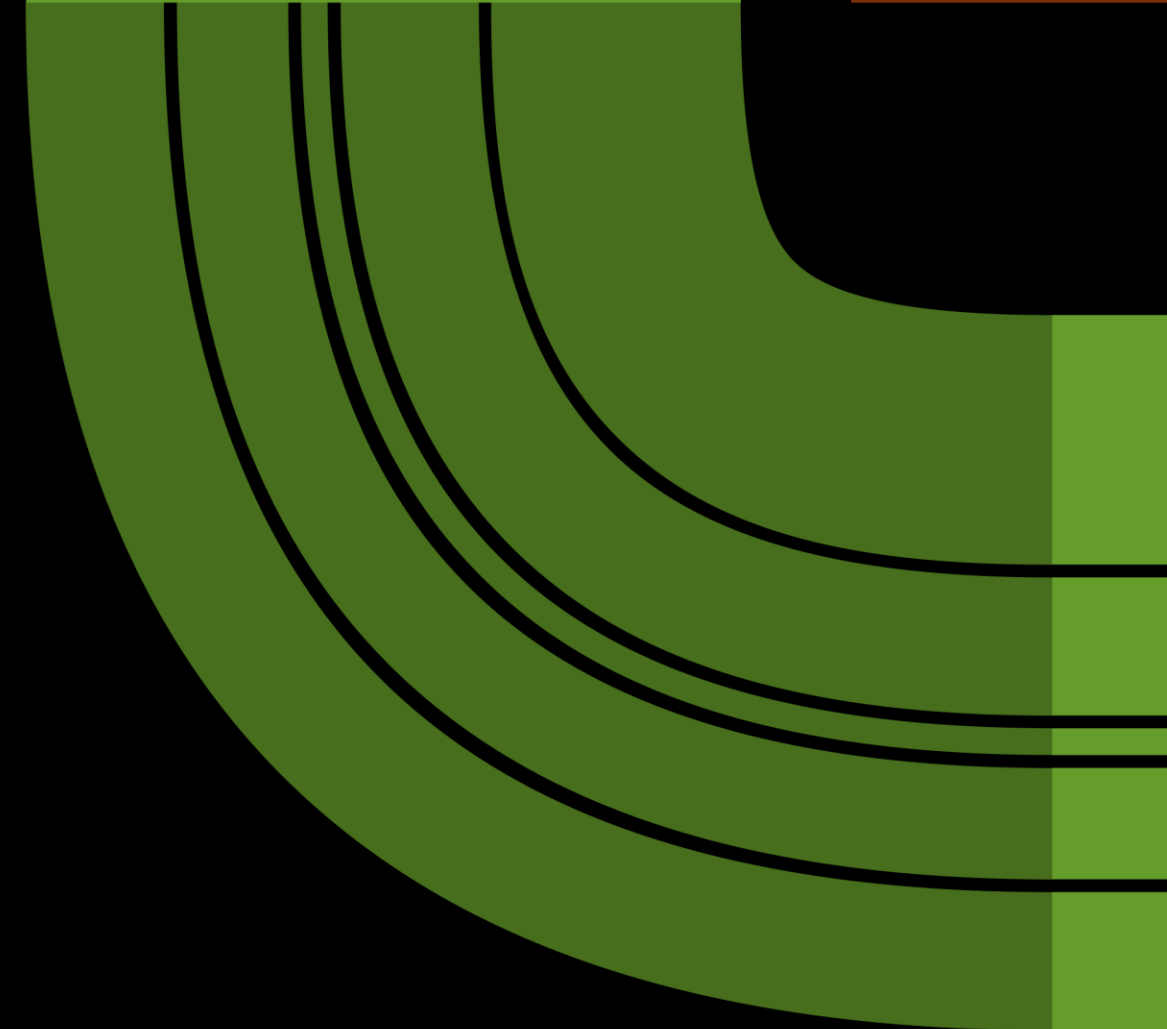
DRAWDOWN

FOOD, AGRICULTURE,
AND LAND USE





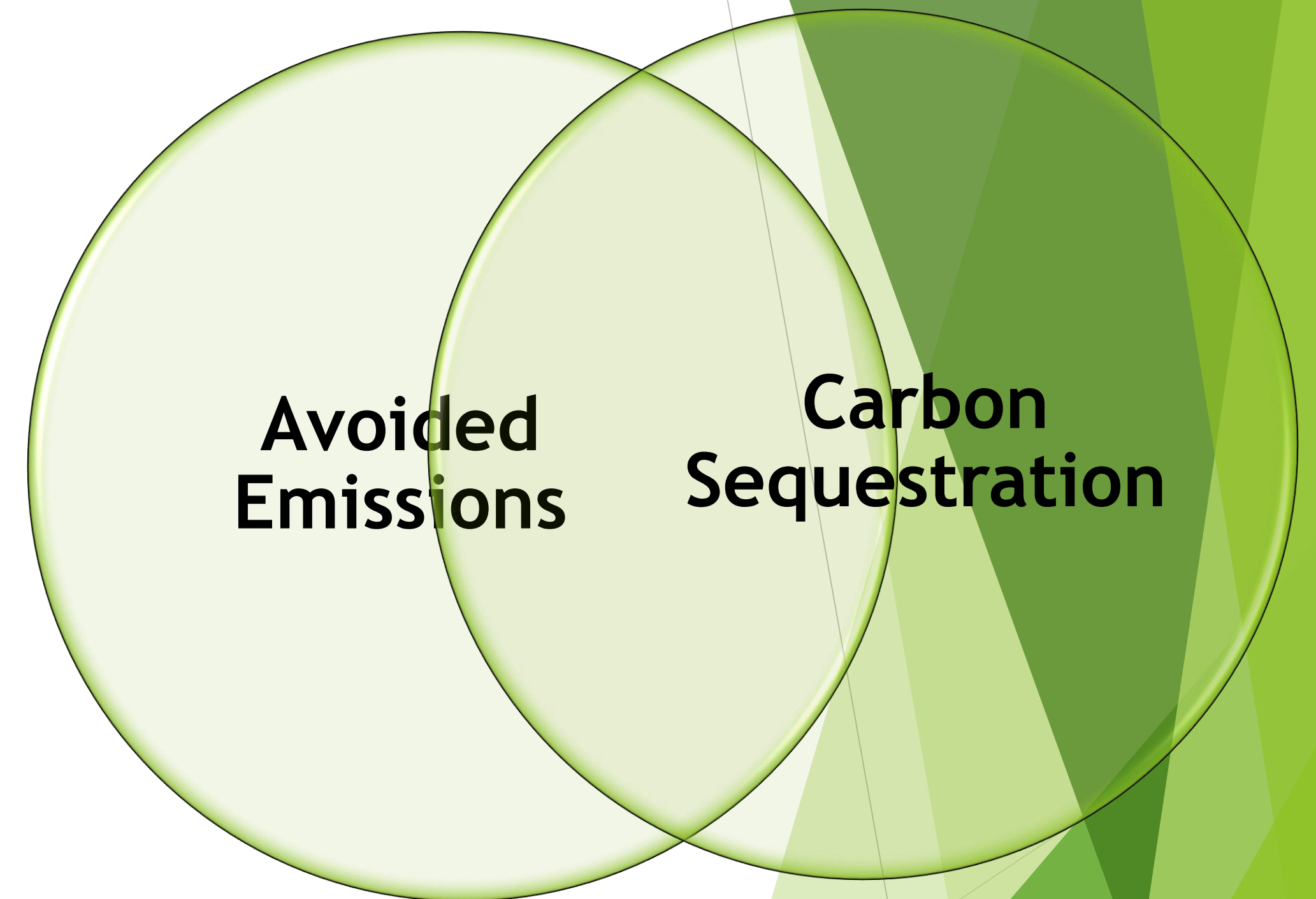
How can we reduce the pressures on ecosystems and land while meeting the growing demands for food and fiber worldwide along with addressing the issue of climate change?



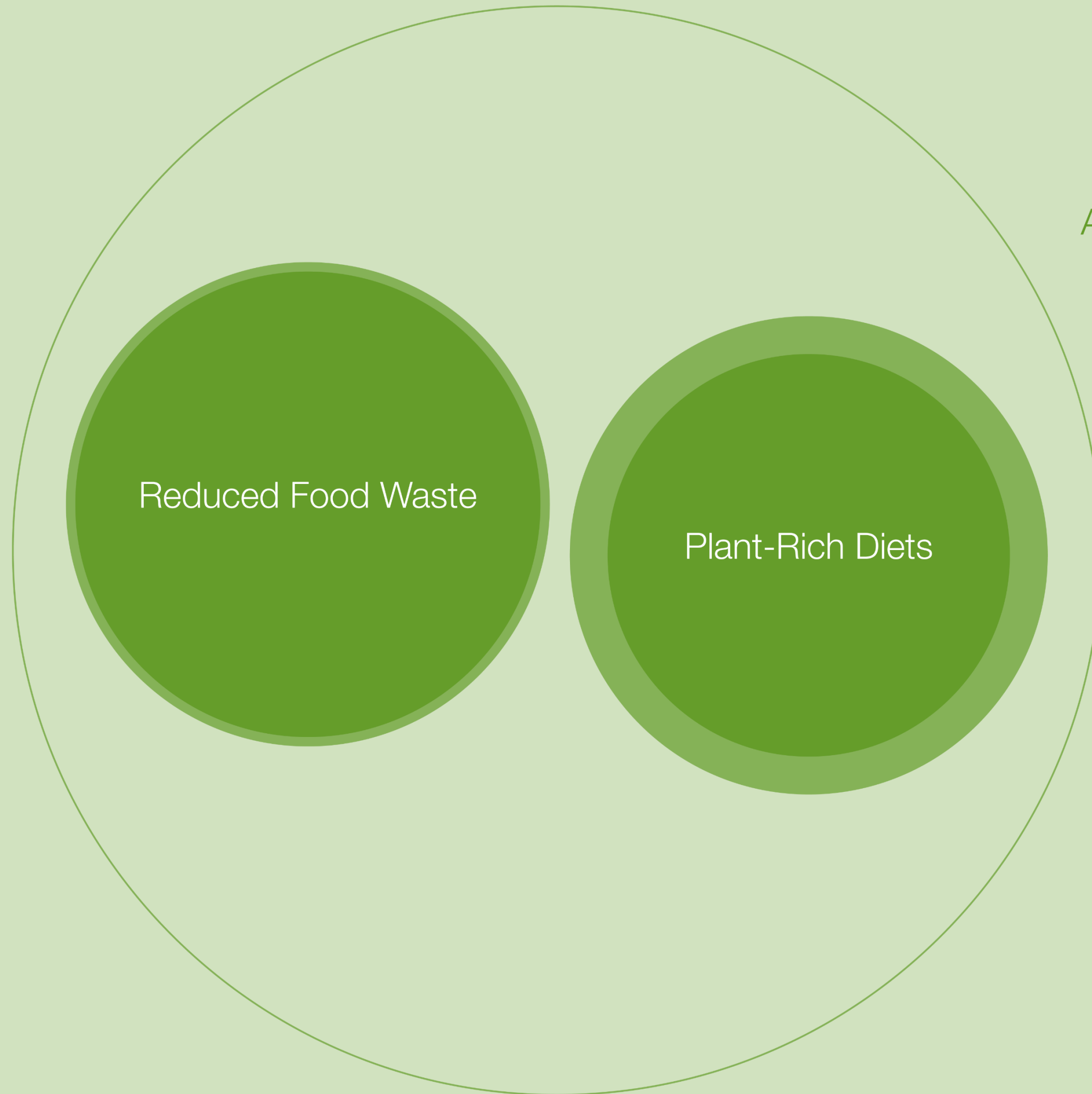
- 9%**
Deforestation & Other Land Use
- 5%**
Methane from Animals
- 1%**
Methane From Rice
- 4%**
Nitrous Oxide from Fertilizers & Manure
- 5%**
Other Food, Agriculture, Land Use

KEY ANSWERS

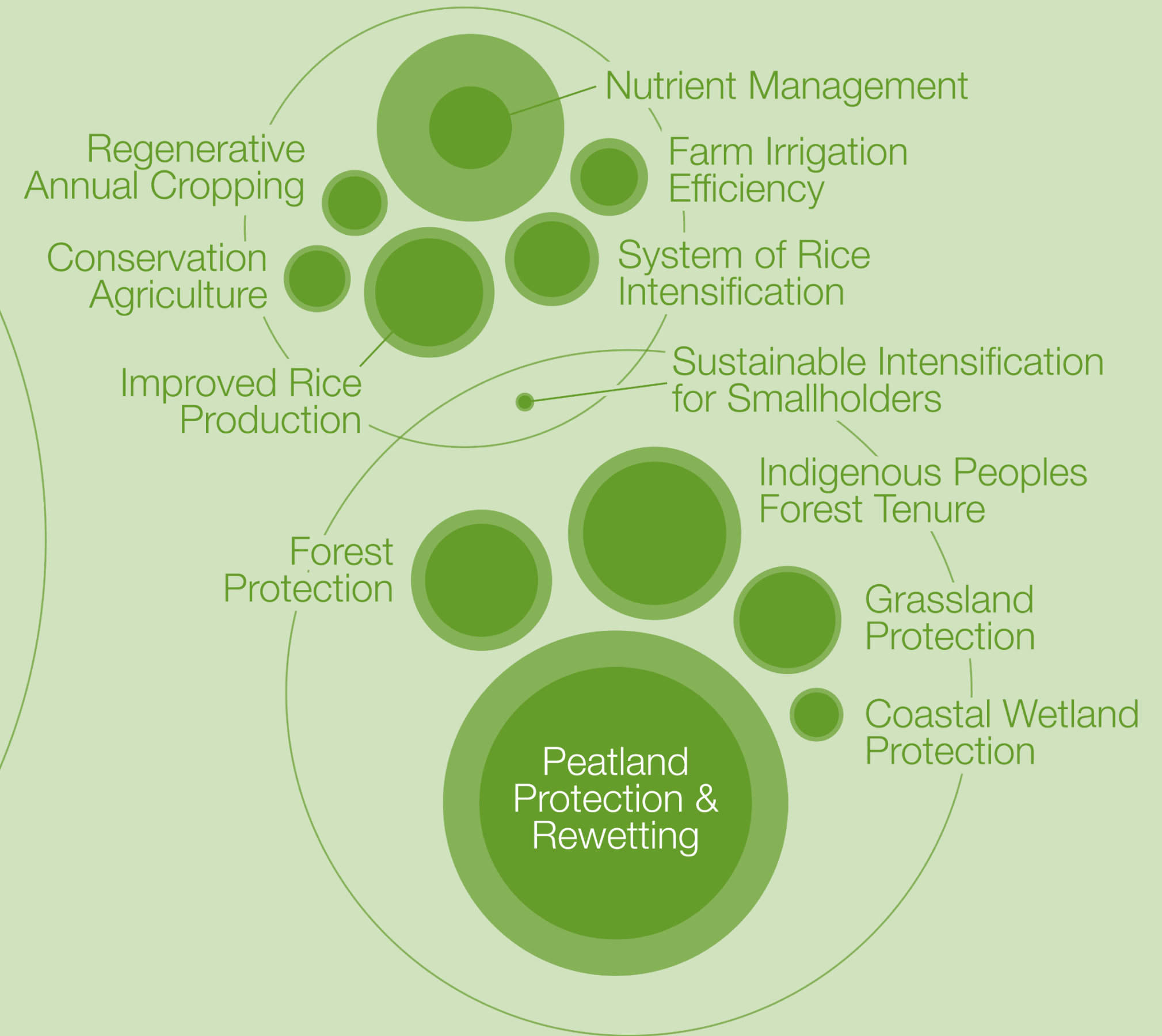
- ▶ **Protect Ecosystems**
- ▶ **Restore Degraded Land**
- ▶ **Shift Agriculture Practices**
- ▶ **Address Waste and Diets**



ADDRESS WASTE & DIETS



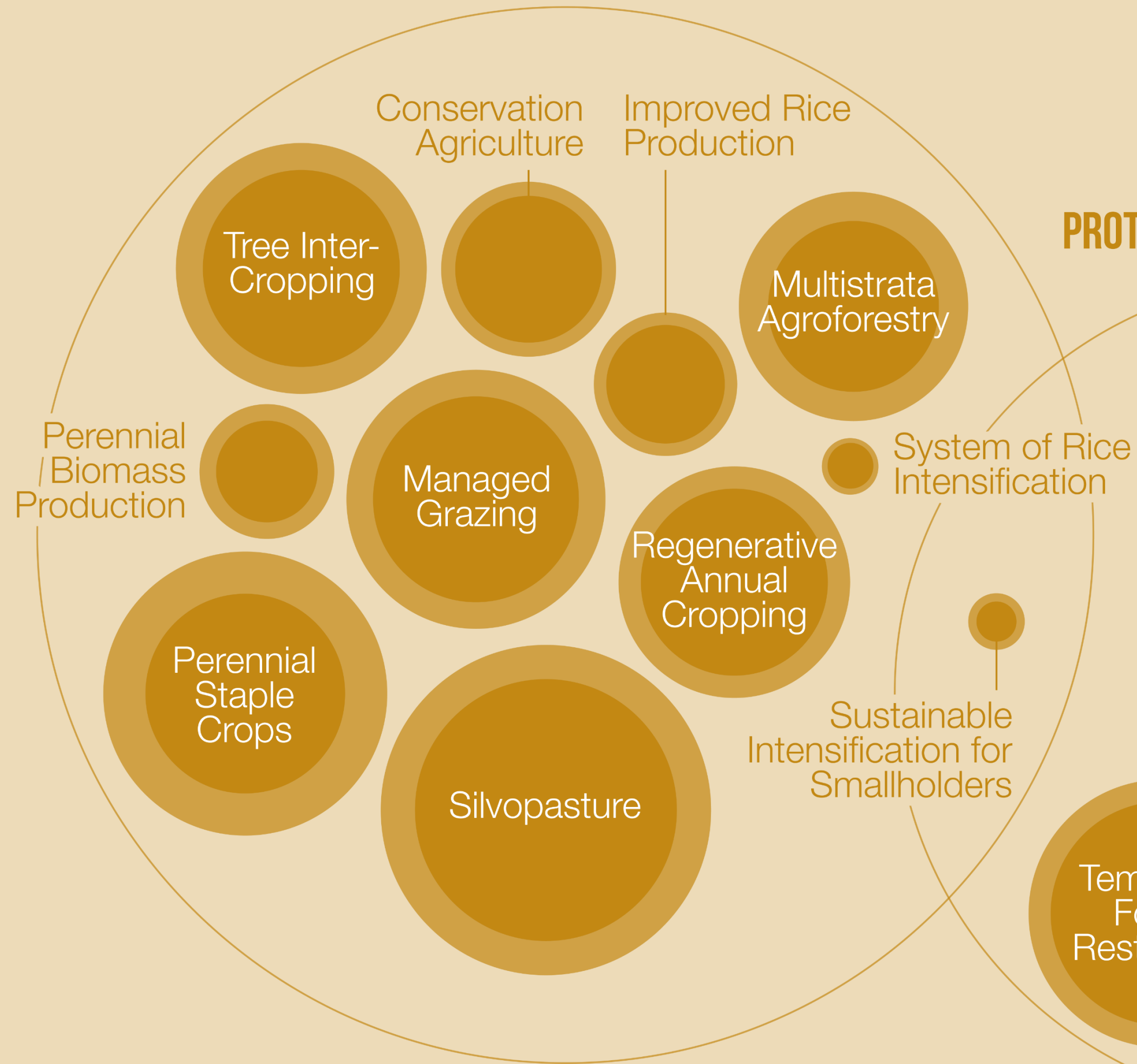
SHIFT AGRICULTURE PRACTICES



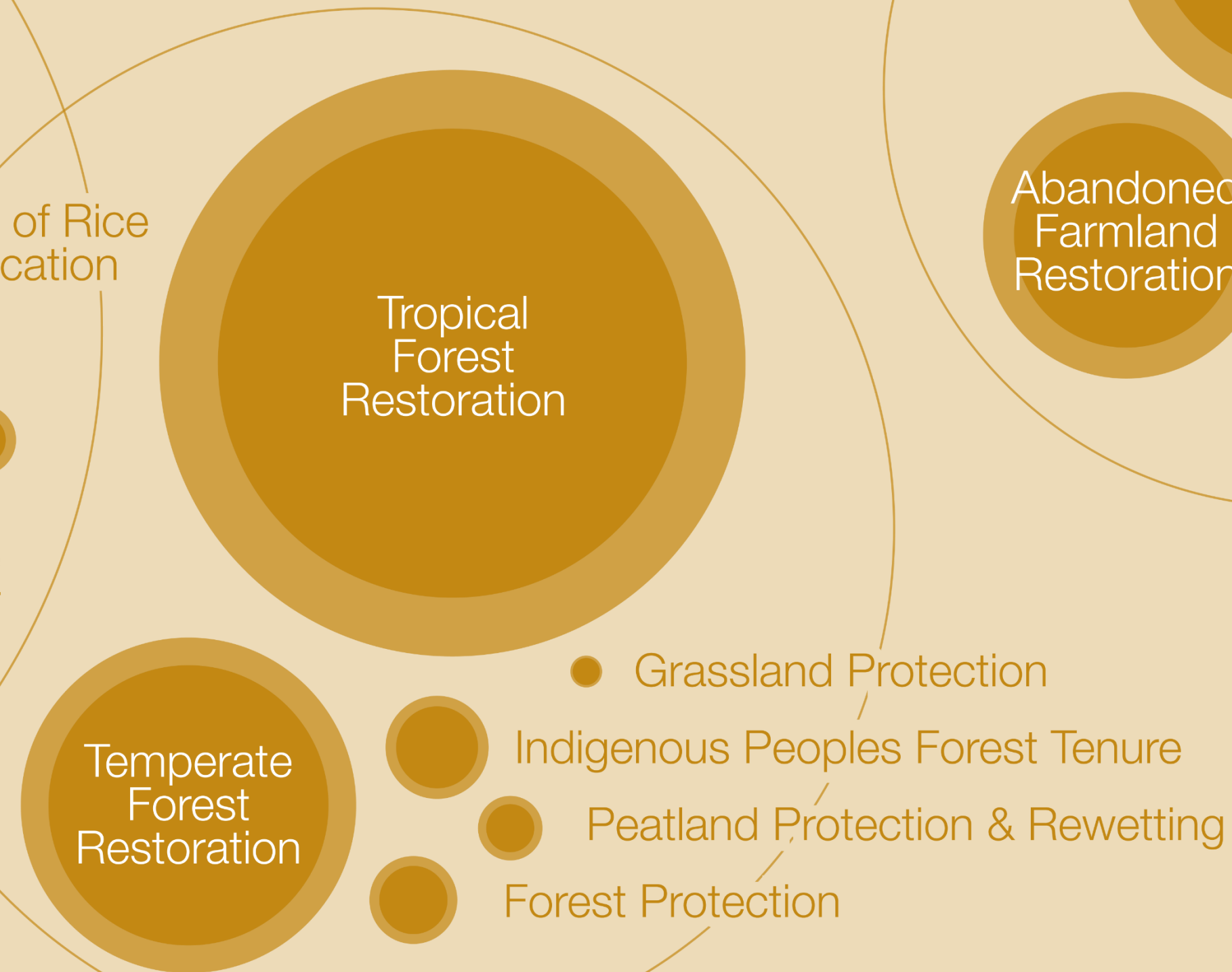
PROTECT ECOSYSTEMS

FOOD, AGRICULTURE & LAND USE

SHIFT AGRICULTURE PRACTICES



PROTECT & RESTORE ECOSYSTEMS



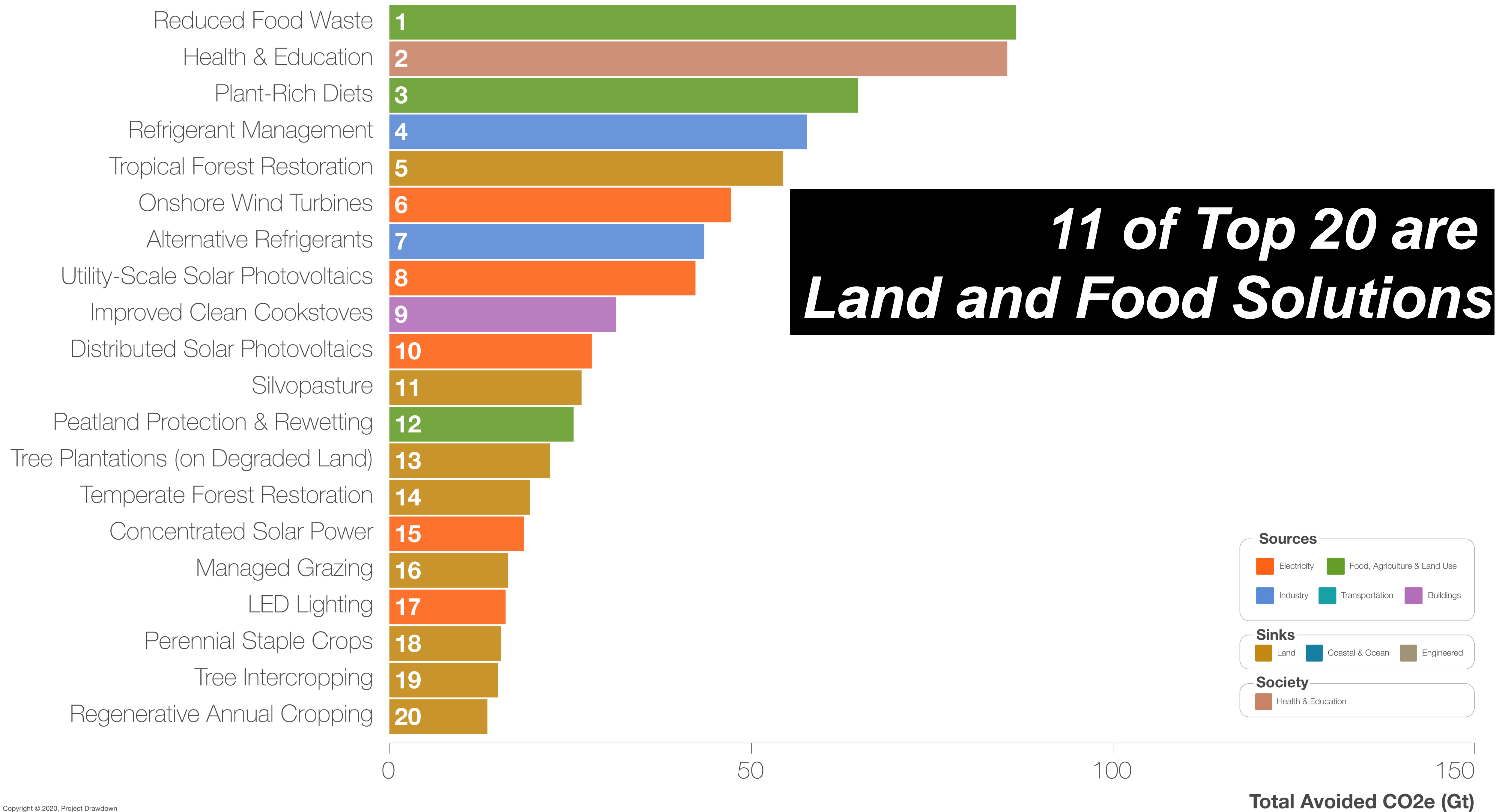
USE DEGRADED LAND



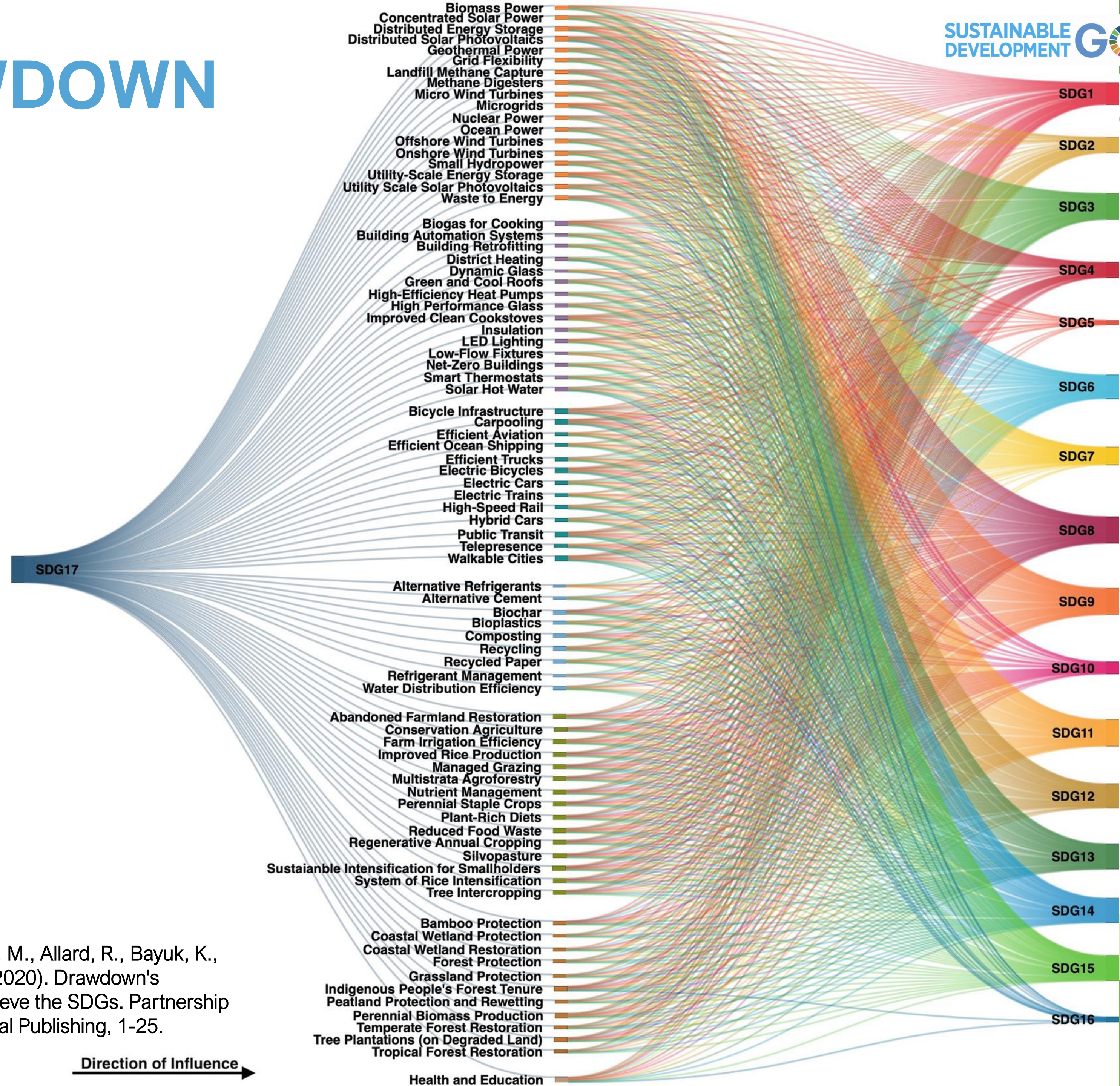
ADDRESS WASTE & DIETS



LAND SINKS



THE DRAWDOWN SYSTEM



Source: Frischmann, C. J., Mehra, M., Allard, R., Bayuk, K., Gouveia, J. P., & Gorman, M. R. (2020). Drawdown's "system of solutions" helps to achieve the SDGs. Partnership for the Goals. Springer International Publishing, 1-25.

Direction of Influence →

Improves Soils

Improves Biodiversity

Improves Environment

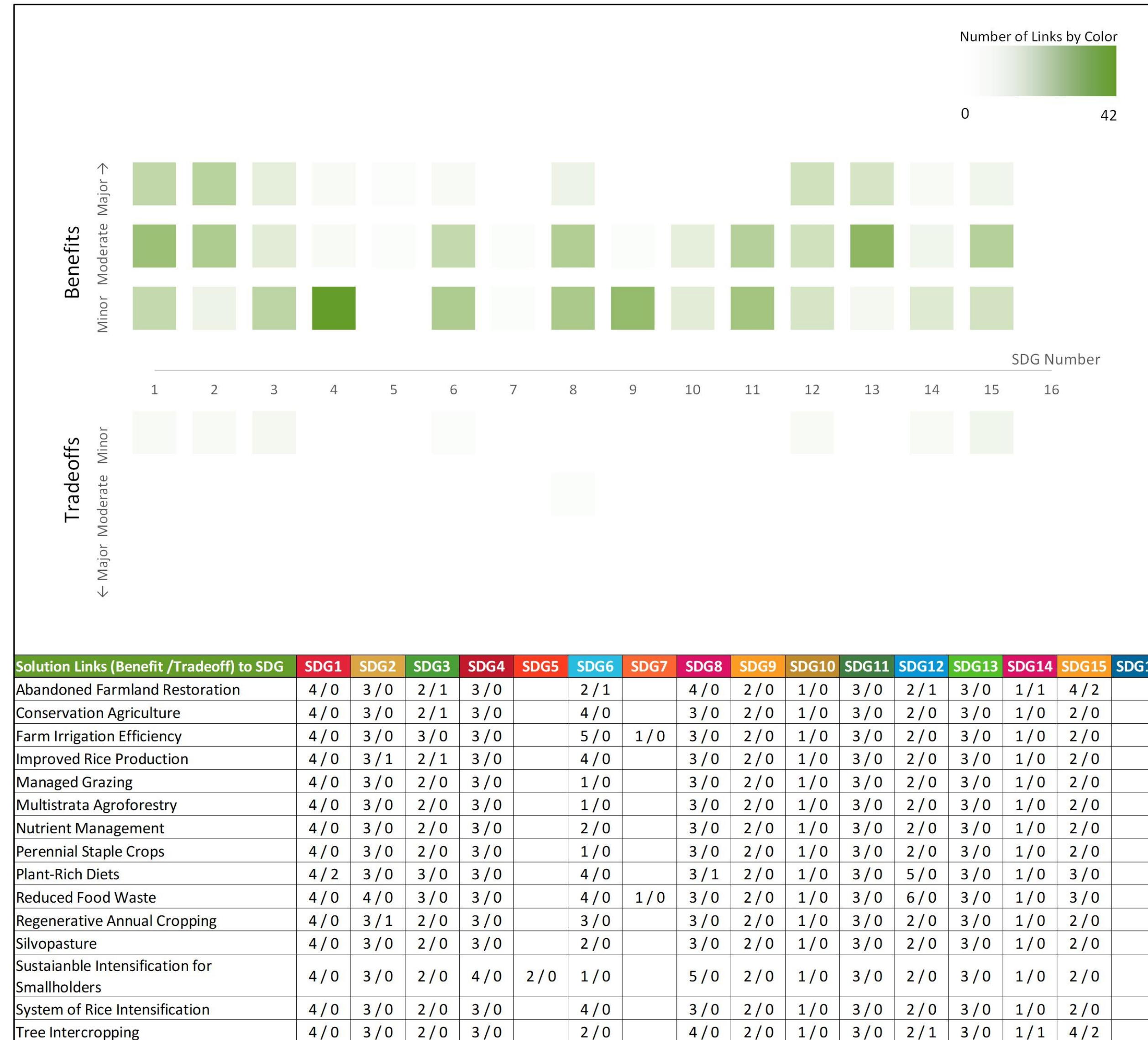
Builds Resilience

Livelihood Security

Water Security

Food Security

Social Security



Source: Frischmann, C. J., Mehra, M., Allard, R., Bayuk, K., Gouveia, J. P., & Gorman, M. R. (2020). Drawdown's "system of solutions" helps to achieve the SDGs. Partnership for the Goals. Springer International Publishing, 1-25.

Shade-grown coffee has become an option to recover degraded lands and avoid forest encroachment in surrounding areas.

Coffee agroforestry systems help connect forest fragments, creating wildlife corridors.

Trees and coffee plants help sequester carbon during their lifetime.

Leaf litter that serves as protective mulch gets incorporated into the soil and adds organic matter that maintains healthy soil structure and recycles nutrients.

Tree roots help to prevent soil erosion and soil runoff, allowing the filtration of water to

Trees from the leguminous family fix nitrogen in the soil, contributing to the enhancement of nutrients, and increase protein food sources for livestock.

Agroforestry systems provide farmers with income diversification (crops and forestry).

Shade-grown Coffee

Micro-organisms, such as bacteria and fungi, and invertebrates such as insects, arachnids and earthworms contribute to the delivery of essential regulating services (pest and disease control).

Shade-grown coffee has a variety of plant species that support wildlife, improve habitats and enhance biodiversity.

Shade contributes to climate regulation, mitigating the effects of climate change.

Trees help protect quantity and quality of water supplies via greater retention of water in the soil and increased infiltration.

Soil acts as a carbon sink, storing organic carbon for long periods of time and reducing CO₂ emissions.

KEY INSIGHTS

- ▶ Essential for climate mitigation and adaptation
- ▶ Have many “co-benefits” including *Food Security*
- ▶ Savings significantly outweigh costs
- ▶ Need financial, political and technological support for *Advance Adoption*

BUILDING A REGENERATIVE FUTURE



WE ARE THE RE-GENERATION



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