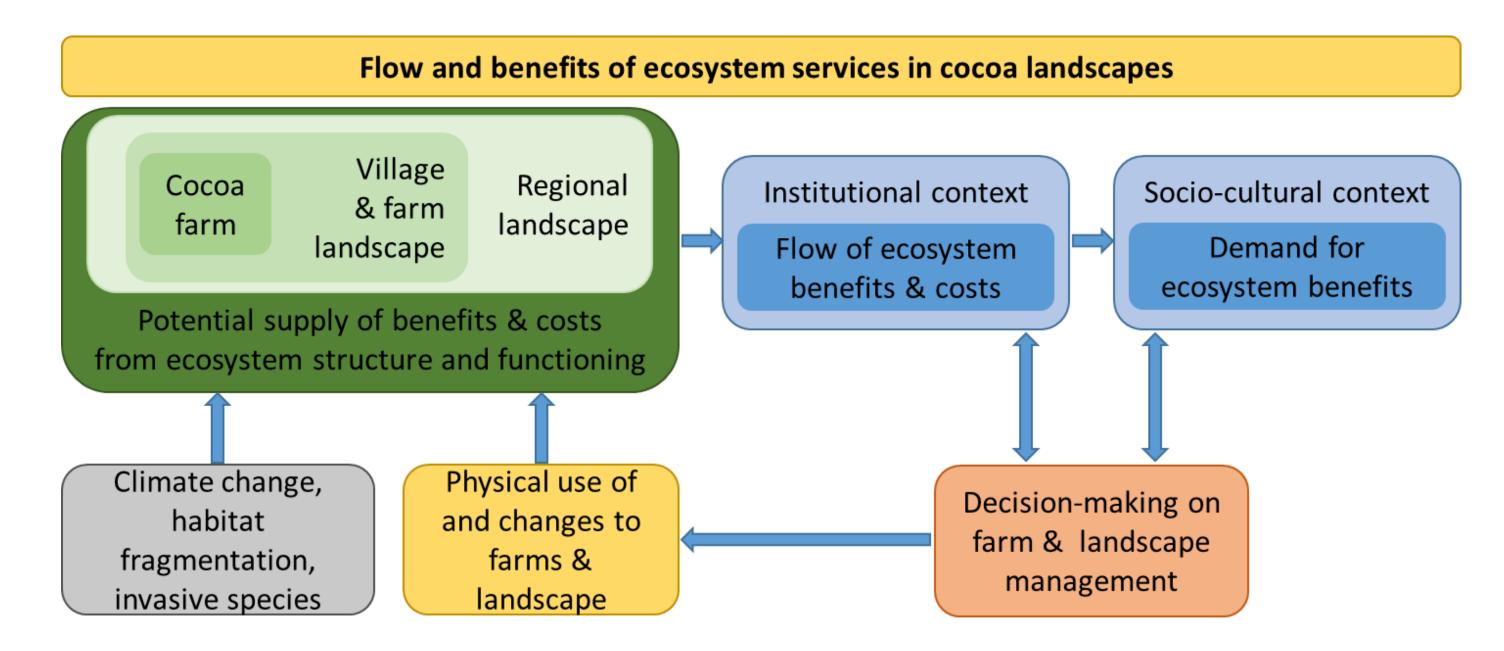
### Introduction

The natural capital (e.g. soils, trees, forests) held within cocoa production areas, supports and provides a suite of benefits (ecosystem services) supporting cocoa production and other local and global objectives.

#### **Ecosystem services in cocoa landscapes Cultural Provisioning** Supporting Regulating Aesthetic Nutrient cycling •Food •Climate Spiritual Wood and fibre Soil formation Diseases and pests Recreational Primary production •Fuel •Water (light, water, nutrients) Fresh water Erosion Pollination Carbon sequestration

The long-term sustainability of cocoa production depends on how interventions within cocoa systems **might affect the delivery of these benefits at different scales**. For example interventions addressing sustainable intensification, climate resilience and adaptation, multiple benefits to farmers, zero deforestation.



To support this, we are developing a toolkit to facilitate planning for ecosystem services in agricultural landscapes, focussed on cocoa landscapes.

# Toolkit to plan for multiple benefits

The toolkit will go beyond simply providing guidance on tools for assessing the status of ecosystem services, to help users **plan to** *improve* **the supply of desired ecosystem services.** This will be in the context of interventions that seek to improve the productivity and sustainability of cocoa farming.

The toolkit is structured around a step-by-step workflow guiding users in their choice of existing tools that can be applied in each of the steps.

The toolkit will allow different types of users to select tools for the appropriate spatial scale and resources available.

#### Potential users of the toolkit

- Organised groups of cocoa farmers and their representatives;
- Local and national government agricultural and land use agencies;
- Local land management authorities or organisations;
- Private sector actors supporting landscape approaches as part of their sustainable sourcing strategies;
- NGOs in sustainable agriculture and natural resource management.



## Structure of the toolkit

This toolkit provides a series of steps, guidance and tools to help analyse and plan cocoa production systems for multiple benefits at the plot to landscape scales.

It will guide users in making choices among existing tools, with options for high and low technical expertise and resources, including the use of computer models at larger scales or more participatory ground-based approaches.

The toolkit aims to help users plan to improve the supply of desired ecosystem services in a multi-stakeholder process, taking into account existing land and resource use during decision-making.

Planning steps: For each step the toolkit will provide guidance as well as a list of relevant tools and publications.

- 1. Establish the planning process and team
- 2. Map stakeholders
- 3. Agree the planning process with stakeholders
- 4. Identify the demand for ecosystem services and reduced dis-services
- 5. Identify and assess the flow of ecosystem services and dis-services
- 6. Identify which farm and landscape elements supply the ecosystem services and dis-services
- 7. Consider the likely impact of future (climate) change and other pressures on flows of ecosystem services and dis-services
- 8. Plan how to promote desired ecosystem functioning and services

## Questions the toolkit can help answer:

- What benefits, or dis-services, are currently derived, by whom, from cocoa production systems at the site and landscape scale?
- How might changes in cocoa production systems affect the supply of desired ecosystem services and dis-services at different scales?
- What aspects of cocoa production systems can be modified to improve the supply of desired ecosystem services? Including in the face of future change?

#### Survey

The UNEP-WCMC team are currently at the stage of designing the toolkit and workflow, and we seek expert advice on its usefulness and possible improvements. If you would be able to assist us, we would be very grateful if you could please complete this **15 minutes survey by 27th January 2020.** You can access the survey <a href="mailto:here">here</a> or request the link from Abigail.Burns@unep-wcmc.org.

### References

Bubb, P., Soesbergen, A.V., Bisht, N., Singh, G., Joshi, S., Aryal, K., Danks, F.S., Rawat, G.S., Bhuchar, S., Wu, N., Kotru, R., Yi, S. (2017) *Planning management for ecosystem services – An operations manual.* ICIMOD Manual 2017/5. Kathmandu: ICIMOD

#### Contact

Marieke.Sassen@unep-wcmc.org