TRACKING CURRENT AND FORECASTING FUTURE LAND-USE IMPACTS OF AGRICULTURAL VALUE CHAINS

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WELCOME & INTRODUCTION

LCA DISCUSSION FORUM 67

Co-organized by

RELIEF PROJECT

Goal: To improve the **reliability of the environmental footprinting** of products with an emphasis on achieving a better understanding of **different sources of variability** across product life cycles.

Project acronym:	**RELIEF**
Project full title:	**RELIability of product Environmental Footprints**
Project type:	**European Industrial Doctorate (University-Industry collaboration)**
Period:	**2015-2019 (4 year project)**

PARTNERS & STUDENTS

GOAL OF THIS WORKSHOP

Discuss current and emerging approaches:

1) to <u>track the current</u> locations of crop production systems in complex supply chains to support spatially resolved impact assessment

2) to <u>predict future locations of crops</u> in the context of megatrends such as climate change and increasing demand for agricultural raw materials

3) to allow for <u>spatially resolved consideration</u> of environmental impacts of land use change

PROGRAMME

| Time	Topic
9:00	Welcome and introduction
9:25	Session 1 – **Tracking and inventorizing (current) land use and land use change** *Jürgen Reinhard, Sybrand van Beijma, Dan Moran, Javier Godar*
11:20	Coffee break
11:40	Session 2 – **Forecasting (future) land use and land use change** *Aafke Schipper, Peter Verburg, David Leclère*
13:50	Lunch
14:10	Short presentations
14:55	Coffee break
15:15	Session 3 – **Environmental impacts of land use change** *Stefanie Hellweg, Tim Newbold, Perrine Hamel, Benedetto Rugani*
17:00	Wrap-up, announcements and farewell

FRAMEWORK FOR THE ASSESSMENT OF RENEWABLE RAW MATERIALS

ABOUT UNILEVER

EVERYDAY, 2.5 BILLION PEOPLE USE UNILEVER PRODUCTS

85%
OF THE PEOPLE WHO USE UNILEVER PRODUCTS ARE IN DEVELOPING AND EMERGING MARKETS

EVERYDAY AROUND **90 MILLION HOUSEHOLDS** BUY A UNILEVER PRODUCT

WE OPERATE IN **>190 COUNTRIES**

3 CATEGORIES

FOODS & REFRESHMENT

PERSONAL CARE

HOMECARE
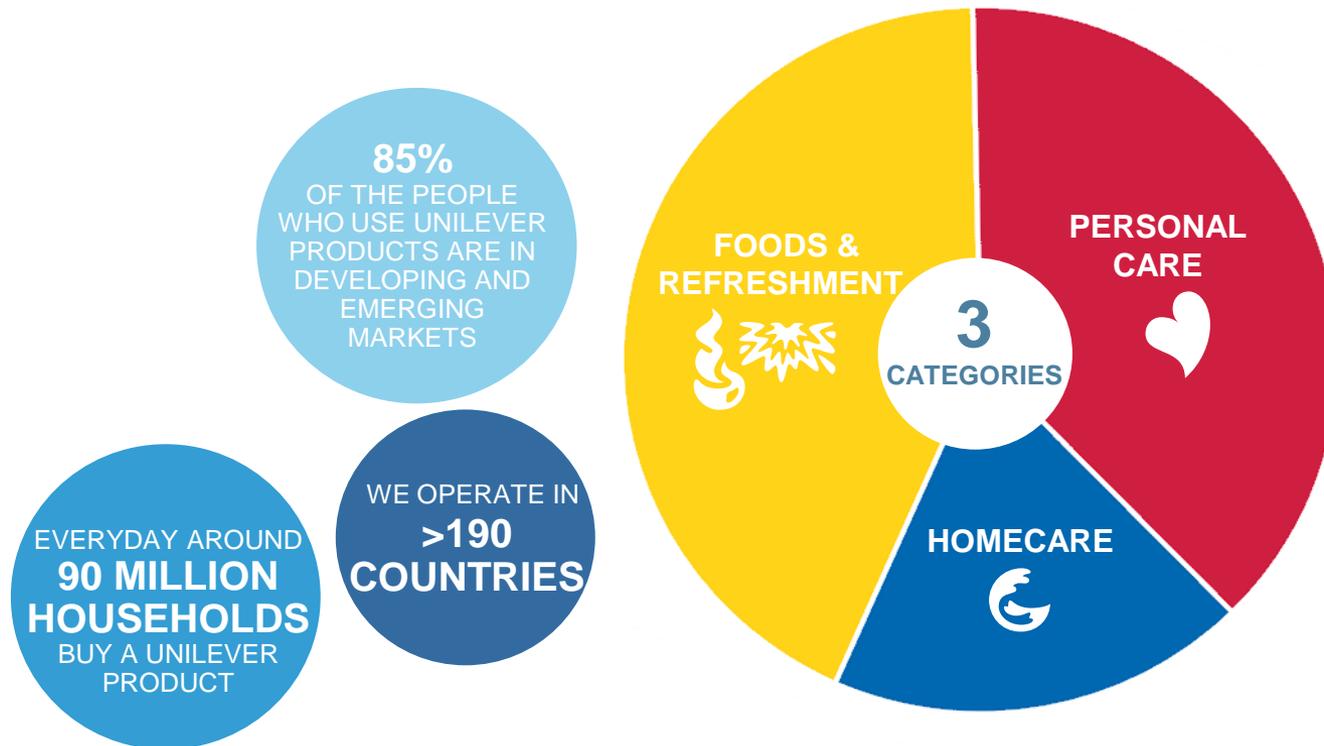
NEXT GENERATION IMPACT ASSESSMENT

Petro-based

Bio-based

Scale Assessment

Spatially Explicit

UNILEVER
SUSTAINABLE LIVING PLAN
SCALING FOR IMPACT

HELPING TO ELIMINATE DEFORESTATION

IMPROVING WATER, SANITATION & HYGIENE

CHAMPIONING SUSTAINABLE AGRICULTURE & SMALLHOLDER FARMERS

Modelling Uncertainty & Variability
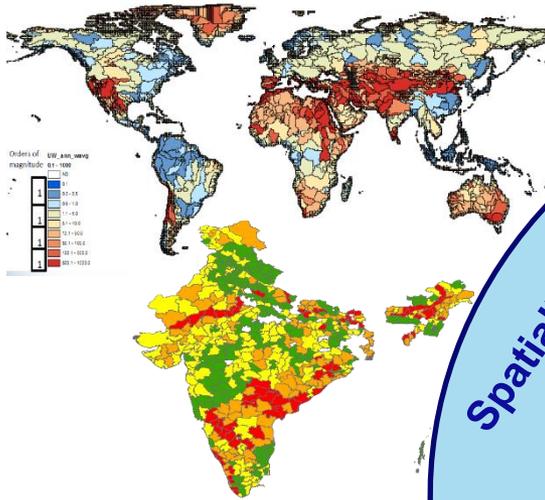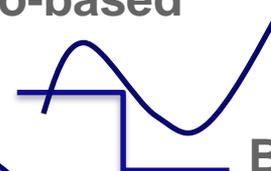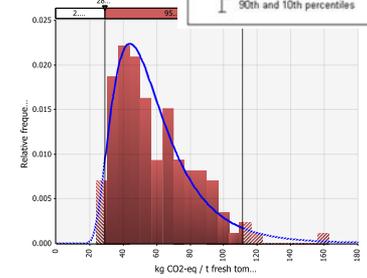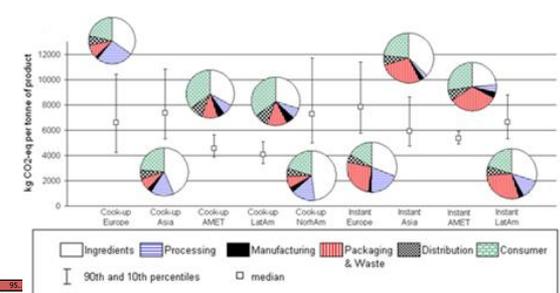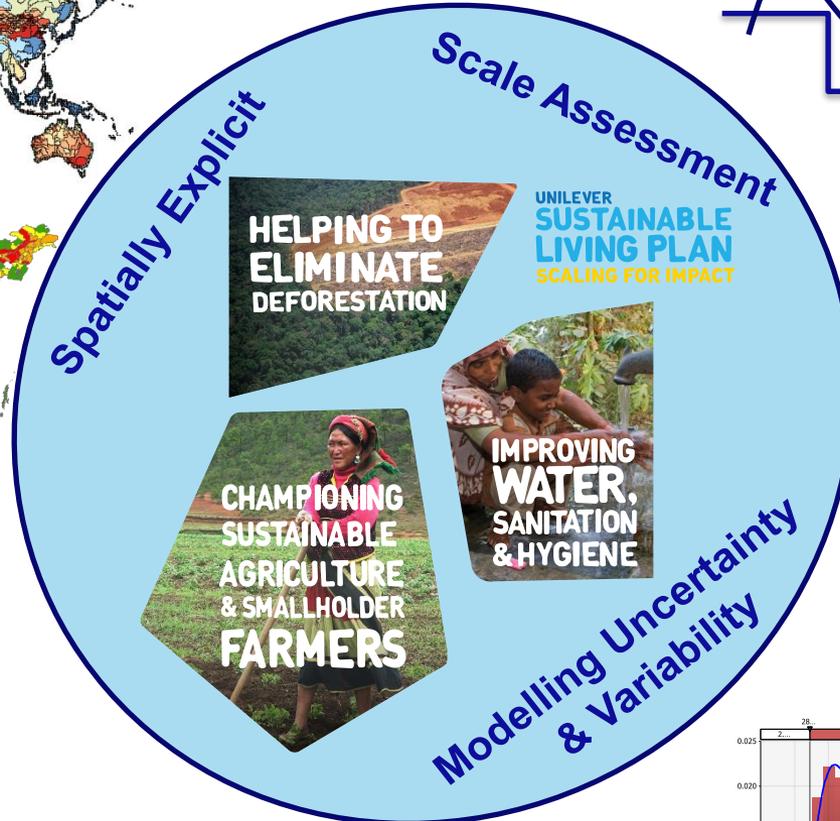
BIO-BASED FRAMEWORK

The Generic Model:
Segmented by the Questions we are seeking to answer

	CURRENT	FUTURE
SYSTEM	What is the impact of the current supply base of material/crop x?	What is the impact of the cumulative system effect of a new supply base for material/crop x?
SUPPLIER	What is the impact of my current material supply/site of crop x?	What is the impact of a new supplier of material/crop x? Or current supplier in the future

BIO-BASED FRAMEWORK

Examples of models relevant to the categories of questions

MODELS:
• Attributional LCA
• Modular extrapolation (MEXALCA)

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What is the impact of my current material supply/site of crop x?

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CURRENT

FUTURE

MODELS:
• Predictive LCA (LUCI-LCA)
• Land Change Modelling
• Crop Modelling – climate impacts

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