



Understanding novel value chains and webs of the macauba palm, an alternative oil crop in Brazil

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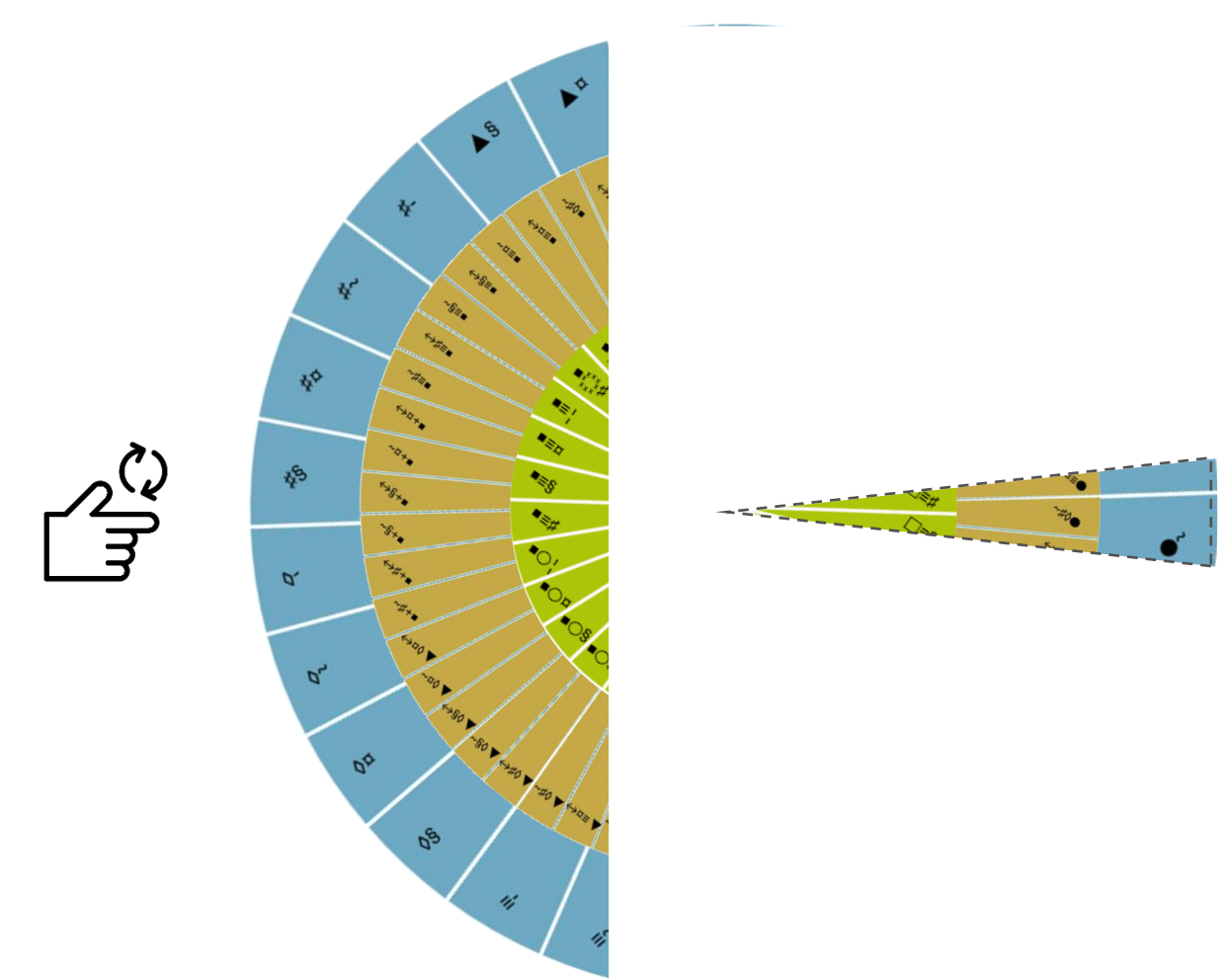
Context

- The macaúba palm (*Acrocomia aculeata*) is a novel crop, currently entering the cultivation phase in Brazil
- Macaúba fruits yield vegetable oils (from pulp and kernel) as bases for a variety of applications in biobased sectors, as well as a range of materials from fruit by-products
- Research and development from pre-breeding to value-added products support the implementation of macaúba value chains and webs (MVCW)
- Entrepreneurs lead knowledge transfer and the development of MVCW processes, while governance strategies are being established
- Ensuring a successful crop introduction and steering MVCW towards sustainability are strategic goals of the macaúba innovation system in Brazil

Value chain and web scenarios

The building blocks of the MVCW – **agricultural production**, **fruit processing**, **products and markets** – display different and non-mutually exclusive scenarios based on varying parameters:

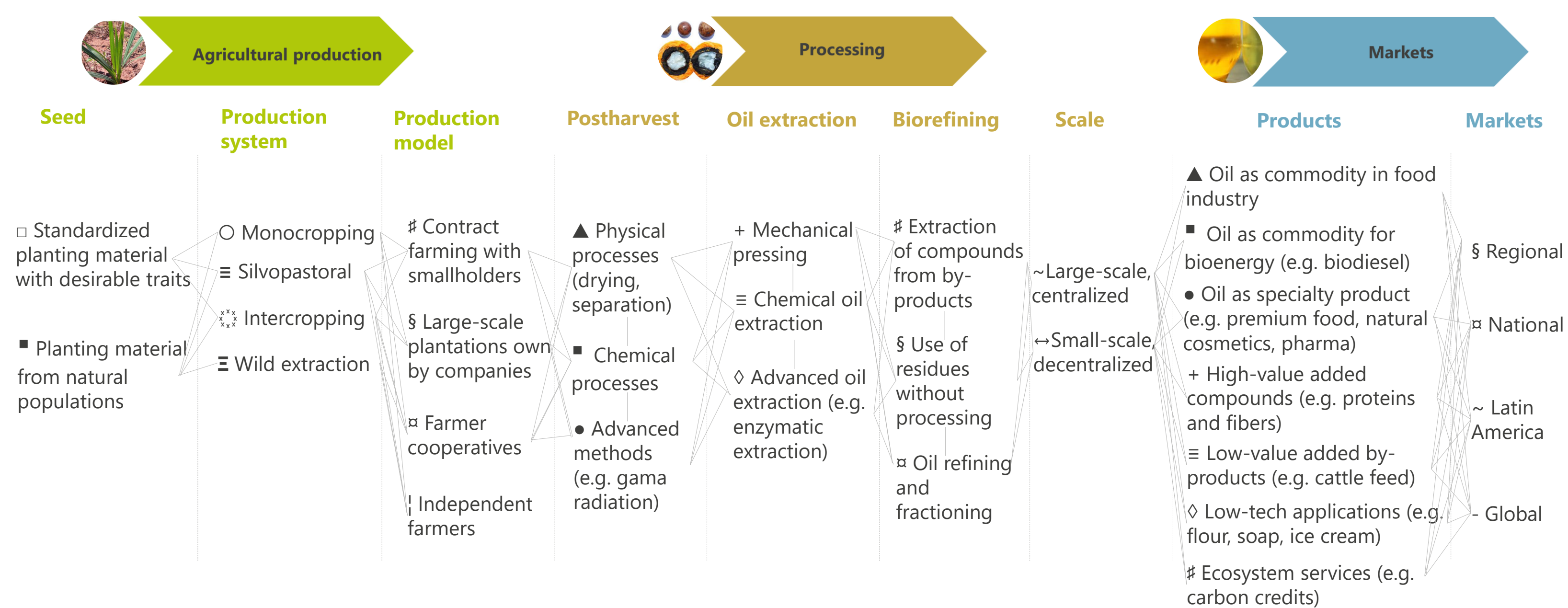
Scenario builder for macaúba value chains and webs (see legends below)



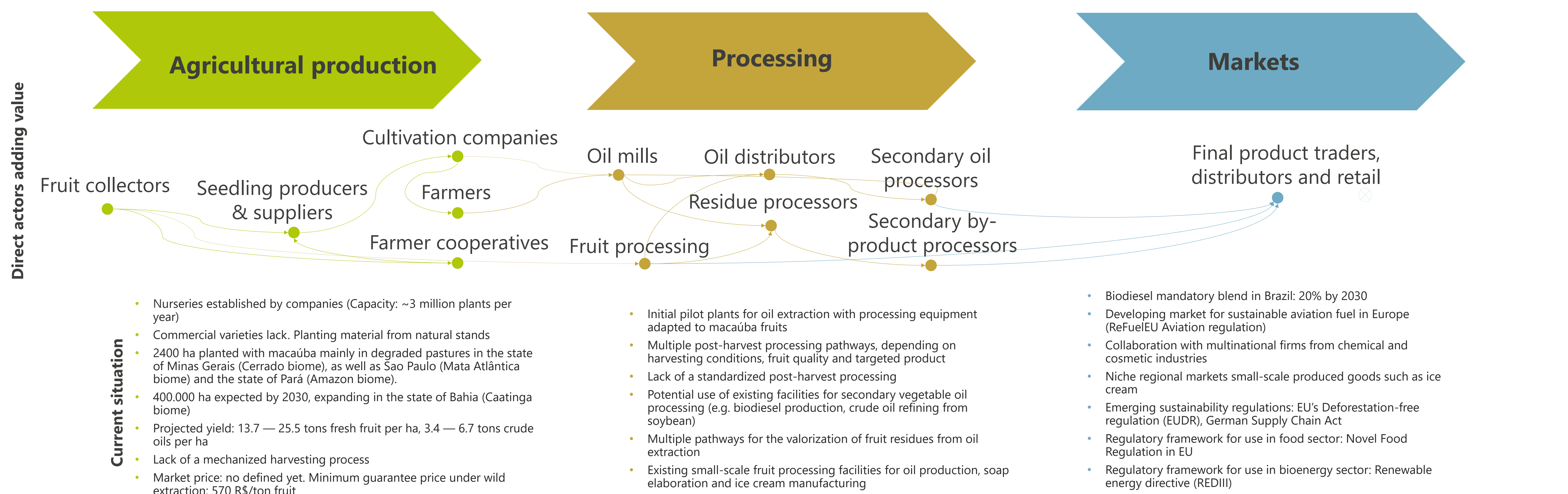
Research aims

The work package **Value web analysis and implementation strategies** of the project AcroAlliance aims at:

- Integrating knowledge related to seed, agronomy, post-harvest, biorefining and product development
- Identify stakeholders and key criteria for MVCW implementation
- Identify, assess and conceptualize MVCW scenarios
- Identify strategies for the development of MVCW



Value chain and web structure



Enabling environment and supporting services

Government:

- Agricultural Zoning of Climate Risk (ZARC) – Embrapa
- Minimum Price Guarantee Policy for Sociobiodiversity Products (PGPMBio)
- Pro-macaúba law (19.485/2011)
- National Program for Biodiesel Production and Use/Social Biofuel Seal

Research and innovation:

- R&D led by federal and state research institutes and universities of Brazil
- R&D in start-up and companies
- Open innovation models through partnerships between industry and research institutions (national and international)

Funding mechanisms:

- IADB - Climate Investment Funds
- Restoration Seed Capital
- Carbon credit markets
- Private investment in start-ups and incumbent firms

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FUNDED BY

With support from

Federal Ministry of Agriculture, Food and Regional Identity

by decision of the German Bundestag



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