Farming the Future – Building Rural Networks for Climate-Adaptive Agriculture

European Network for Rural Development

Netherlands **Belgium**

Showcasing Agroforestry as Climate Smart Agriculture

Building rural networks for climate-adaptive agriculture.

Agroforestry is *"the deliberate integration of woody vegetation (trees and/or shrubs) as an upper storey on land, with pasture (consumed by animals) or an agricultural crop in the lower storey.*
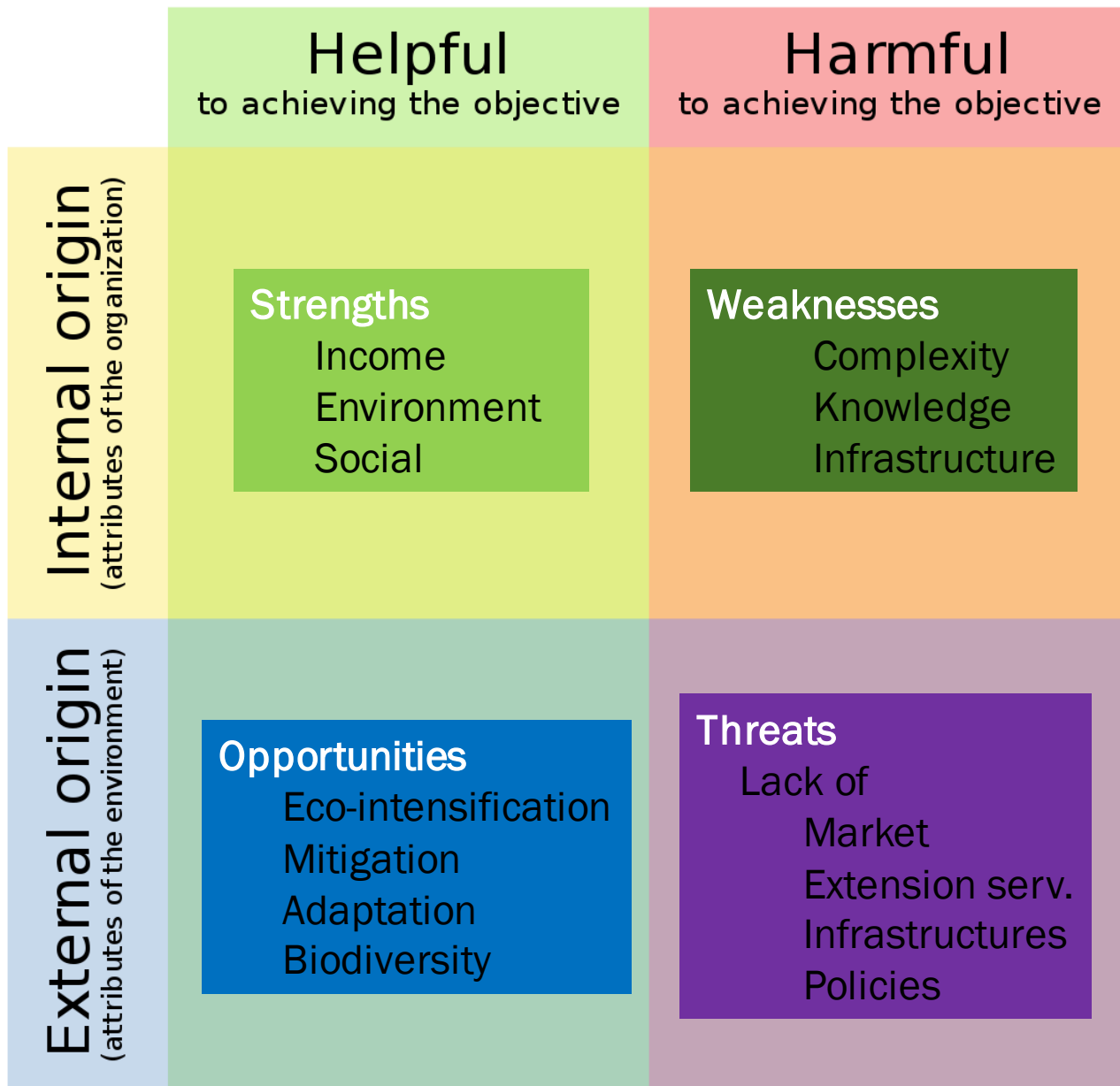
WOODY:
  Evenly or unevenly distributed
  Borders inside plots
PARLIAMENTARY SESSION AFINET (9/12/2019)

Sustainable land use (FAO)
Climate Smart Agriculture

Photo: Eurídice Leyequién
Location: Alphen, Noord Brabant, The Netherlands

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	Helpful to achieving the objective	Harmful to achieving the objective
Internal origin (attributes of the organization)	**Strengths** Income Environment Social	**Weaknesses** Complexity Knowledge Infrastructure
External origin (attributes of the environment)	**Opportunities** Eco-intensification Mitigation Adaptation Biodiversity	**Threats** Lack of Market Extension serv. Infrastructures Policies

Source: PARLIAMENTARY SESSION AFINET (9/12/2019)

Climate adaptive agriculture through diversification, crop, livestock & tree

- No increase in N inputs over time & resources' circularity

- Increase profitability through crop diversification & lower risk
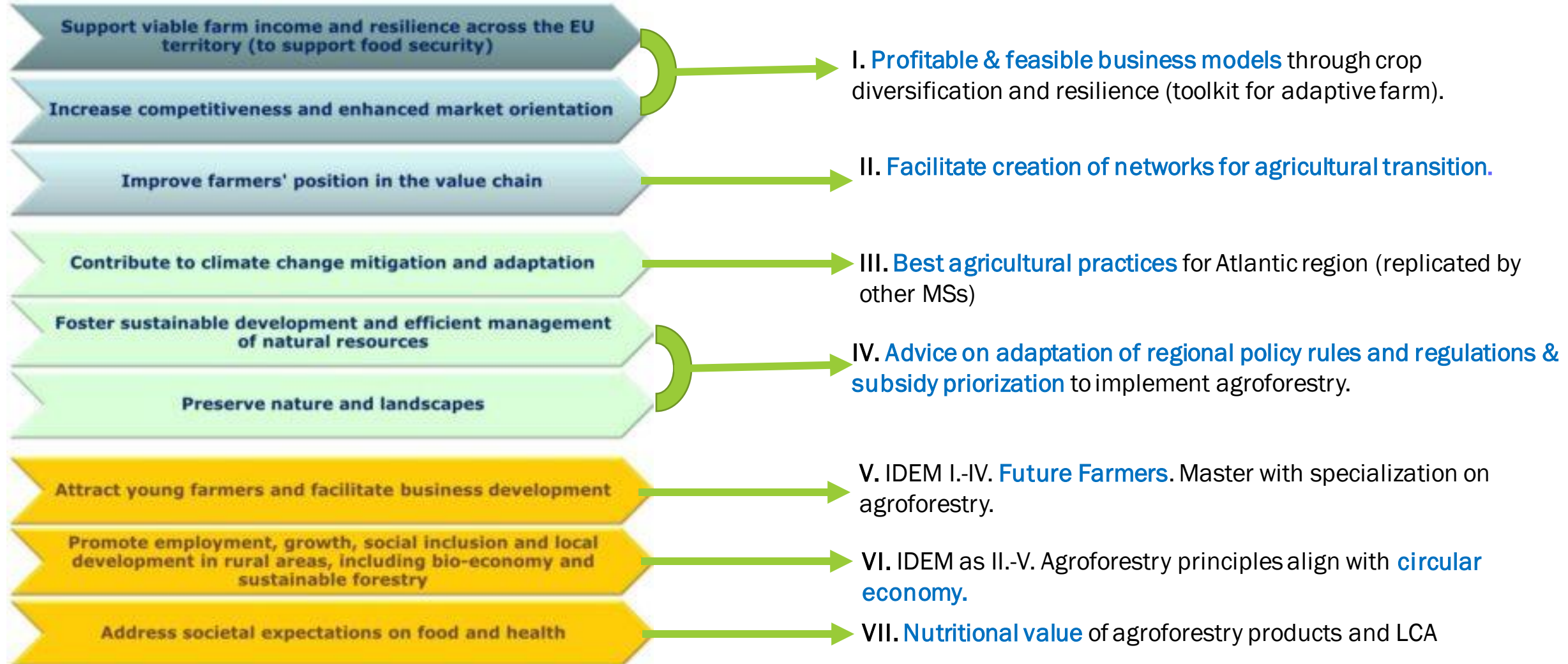
- Decrease in P & K inputs

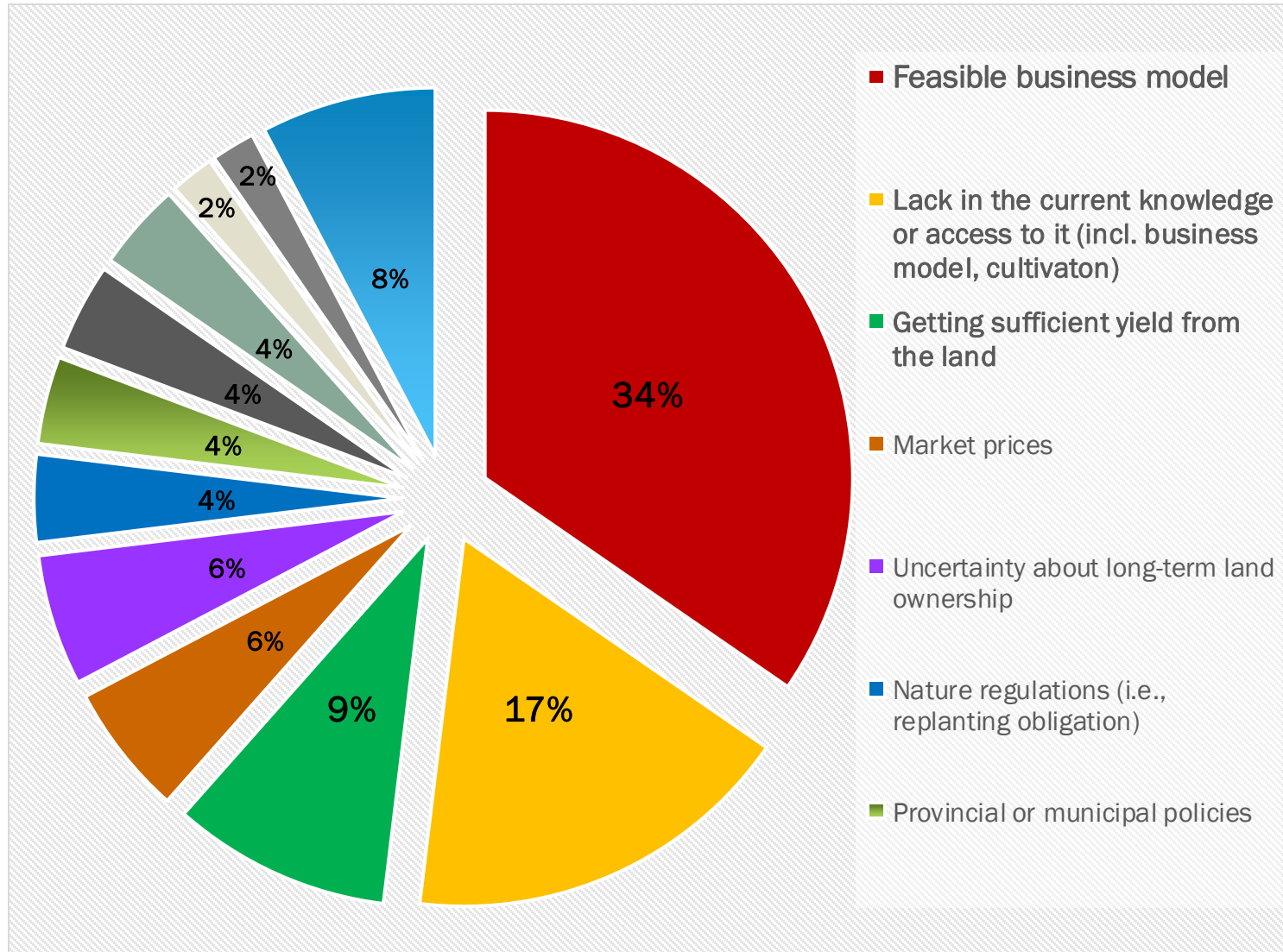- Yields are stable and resilient against erratic weather variation

- Increase soil C sequestration

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AGROFORESTRY INNOVATION NETWORKS

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Contribution to environment and/or climate, and economic/social terms

EU Objectives

Support viable farm income and resilience across the EU territory (to support food security)

Increase competitiveness and enhanced market orientation

I. Profitable & feasible business models through crop diversification and resilience (toolkit for adaptive farm).

Improve farmers' position in the value chain

II. Facilitate creation of networks for agricultural transition.

Contribute to climate change mitigation and adaptation

III. Best agricultural practices for Atlantic region (replicated by other MSs)

Foster sustainable development and efficient management of natural resources

Preserve nature and landscapes

IV. Advice on adaptation of regional policy rules and regulations & subsidy priorization to implement agroforestry.

Attract young farmers and facilitate business development

V. IDEM I.-IV. Future Farmers. Master with specialization on agroforestry.

Promote employment, growth, social inclusion and local development in rural areas, including bio-economy and sustainable forestry

VI. IDEM as II.-V. Agroforestry principles align with circular economy.

Address societal expectations on food and health

VII. Nutritional value of agroforestry products and LCA

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Lessons learned for upscaling and replication

Legend:
- Feasible business model
- Lack in the current knowledge or access to it (incl. business model, cultivaton)
- Getting sufficient yield from the land
- Market prices
- Uncertainty about long-term land ownership
- Nature regulations (i.e., replanting obligation)
- Provincial or municipal policies

Pie chart values: 34%, 17%, 9%, 6%, 6%, 4%, 4%, 4%, 4%, 2%, 2%, 8%

Key 1. *Profitable business models*

Efforts needed at different levels:

(a) Farm level = Profit & Loss models

(b) Provincial/municipal level = Adaptation of regional policy (e.g., obligation for replanting)

(c) National level = Alignment of national policies with EU. NL=> CAP subsidies for agroforestry. Crop code for agroforestry.

Challenge = Agroforestry is perceived as too risky investment, especially in the initial costs. Support by provinces varies greatly.

What are the main barriers to implement agroforestry? (N=52, <u>already implementing</u>)

Source: Preliminary results of online survey of Farm Life

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Lessons learned for upscaling and replication

Legend:
- It doesn't suit my business
- Getting sufficient yield from the land
- Lack in the current knowledge or access to it
- Feasible business model
- Agroforestry imago
- Skeptical towards government approach
- Market prices
- Not land available
- Others (incl. laws & regulations)

Pie chart values: 52%, 9%, 9%, 8%, 5%, 4%, 3%, 3%, 7%
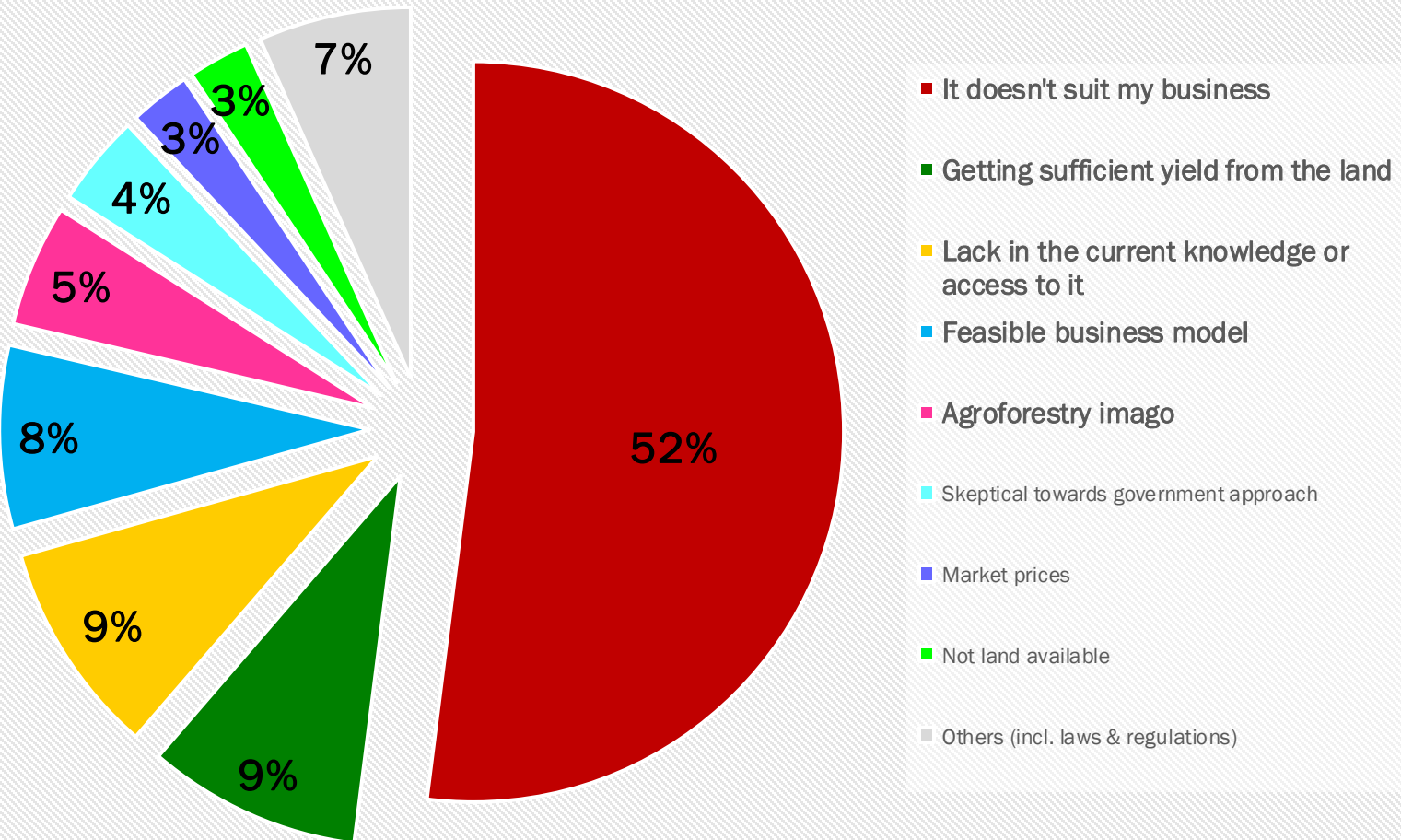
Key 2. *Farmers Networks*

Network creation for knowledge sharing, brokering, and advocating:

(a) Farm level & *Provincial/municipal level* = Farmer-to-farmer advocacy, to see is to believe. Facilitated by provinces/municipalities ($)

(b) National level = Facilitation and subsidies for network forming.

Challenge = Knowledge is still incipient and fragmented in NL. Knowledge is not provided centrally and is not always validated.

What are the main barriers to implement agroforestry? (N=77, <u>not yet involved</u>)
Source: Preliminary results of online survey of Farm Life

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Lessons learned for upscaling and replication

Key 3. *Governance*

(a) **Legal framework**. Agricultural land should not become conservation land, exemption of e.g. replanting obligation

(b) **Subsidy program**. Economic incentives - minimize risks: **covering initial investment & first 5-6 yrs**. E.g. in BE, 1-time planting subsidy (maximum 80% of costs, excl. VAT), through Programma voor Plattelandsontwikkeling (PDPO III).

(c) **Room for experimentation** temporarily **exempt from specific regulations, additional funding**.

(d) Subsidies need to be smart to give **room for innovation while minimizing risks.**

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Future CAP interventions to mainstreaming or replicating AGROFORESTRY

Pillar I

AF FULLY ELIGIBLE FOR DIRECT PAYMENTS:
Arable and permanent grassland when

i. 'AF **option**' included in: arable land, permanent grassland and permanent crops.

ii. Recognition of **ecosystem services**

iii. **AF part of Greening and Ecoschemes**

iv. **Management plan** incl. minimum tree density (selected by member states), i.e. initial and final tree density.

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Future CAP interventions to mainstreaming or replicating AGROFORESTRY

Pillar II

AF FULLY ELIGIBLE FOR PAYMENTS:

AGRICULTURAL LANDS

i. AF on agricultural land incl. maintenance payments (as of afforested/reforested lands)

ii. Improved management and recovery of already existing agroforestry lands. Management plans eligible

FOREST LANDS

i. Establishment & maintenance of forest farming and forest grazing (if not included as Established Local Practices).

ii. Support management improvement of forest farming and forest grazing of existing agroforestry areas.

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Agroforestry for climate adaption.

https://www.farm-life.eu/