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SURE Farm

Generationswechsel und Landwirtschaft 4.0: Qualität vor Quantität!

Alfons Balmann

ENASP Konferenz „Gesundheit hat Zukunft“, 28. und 29. September 2020 in Berlin

Leibniz Gemeinschaft

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in Transformationsökonomien

SURE Farm

Generational Renewal and Farming 4.0: Shifting the focus from "more" to "more successful"!

Alfons Balmann

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Farming has a future!

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- Everywhere!
  - Sectoral
  - Regional
- But…

… there is a need to change

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- Expectations of the society
  - Animal welfare
  - Mitigation of climate change
  - Protection of biodiversity
  - Reductions of emissions
  - Soil protection
  - Food security
  - Contributions to rural development

➢ How to manage trade-offs?
  - What are the priorities of society?

➢ Which fundamental direction?
  - „Ecological turn“ vs. „Sustainable intensification“

Agriculture will change

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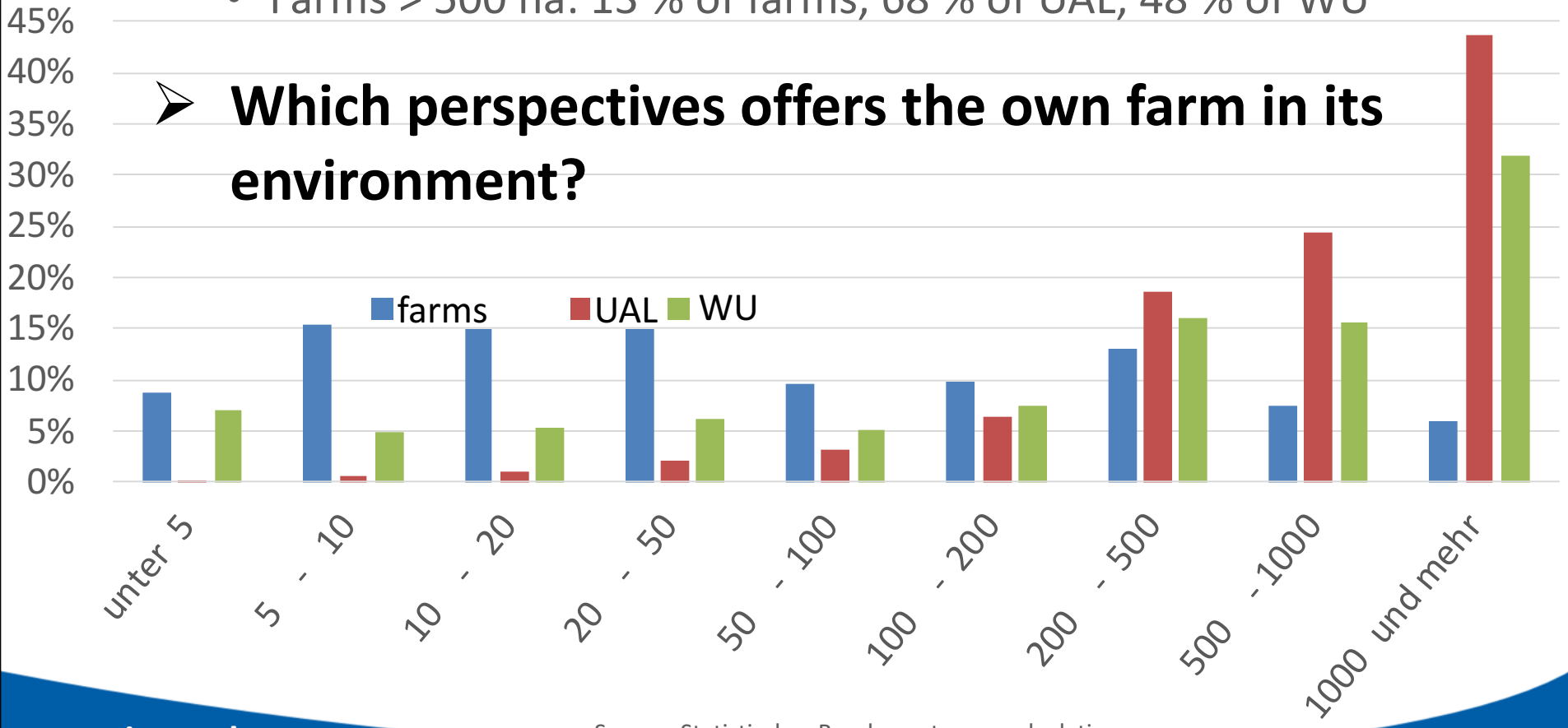
- Most products produced by large farms!
  - Share of farm size classes in East Germany (2016)
    - Farms > 500 ha: 13 % of farms, 68 % of UAL, 48 % of WU

➢ **Which perspectives offers the own farm in its environment?**



Source: Statistisches Bundesamt, own calculations

Agriculture will change

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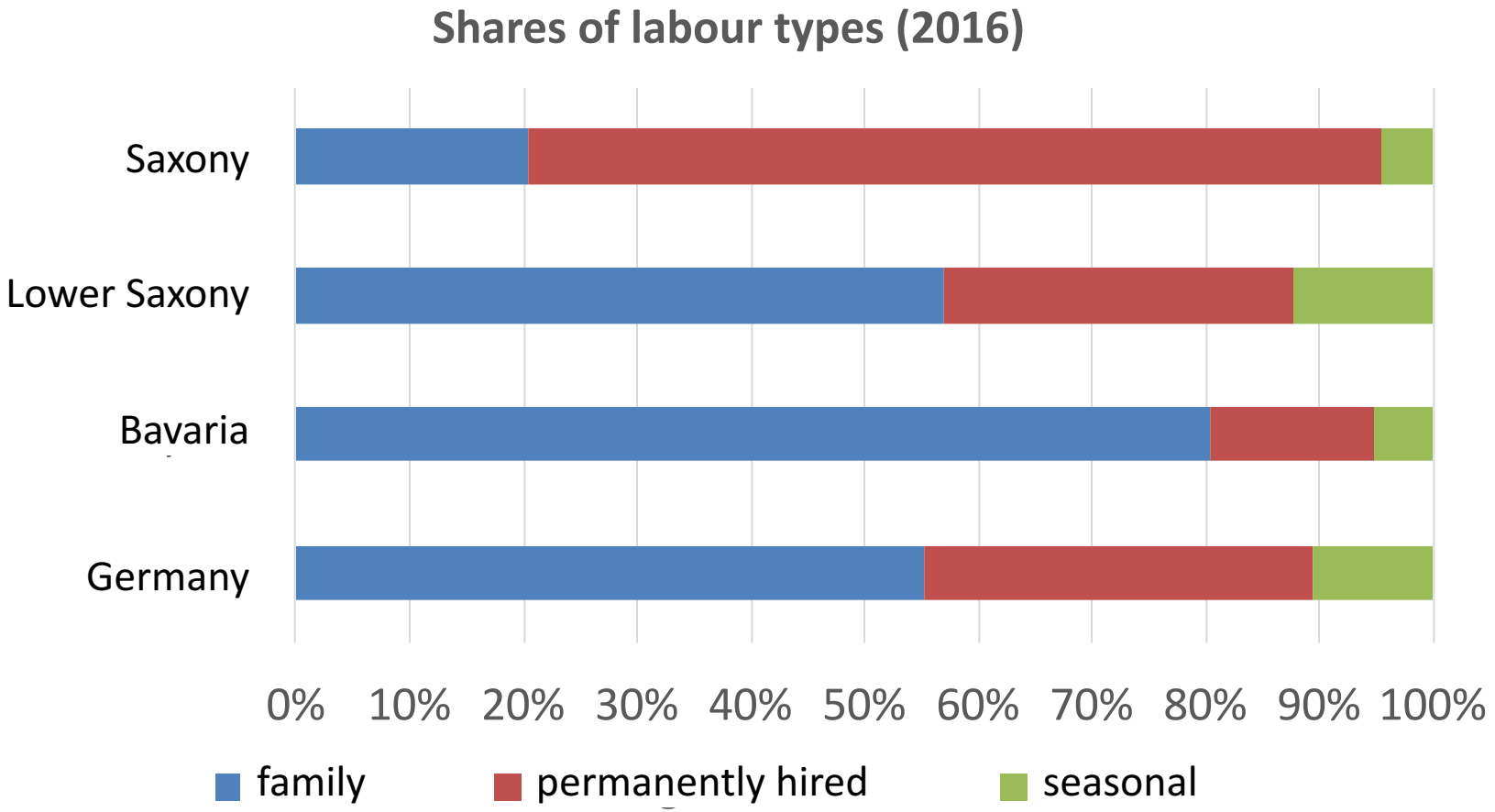
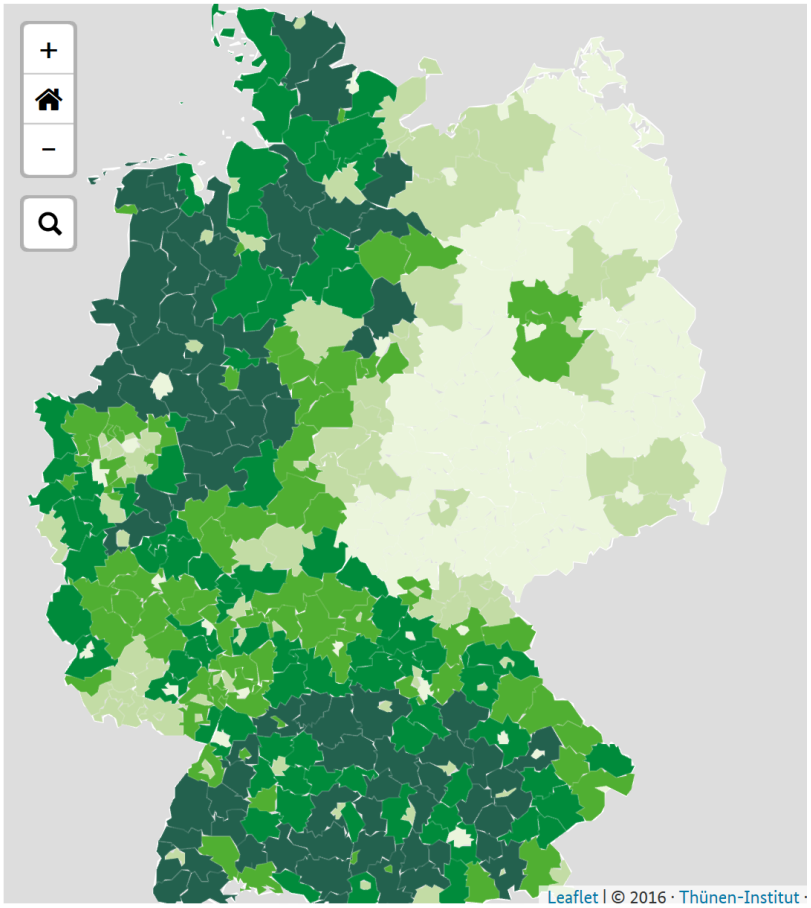
- Farming is increasingly based on hired labor!



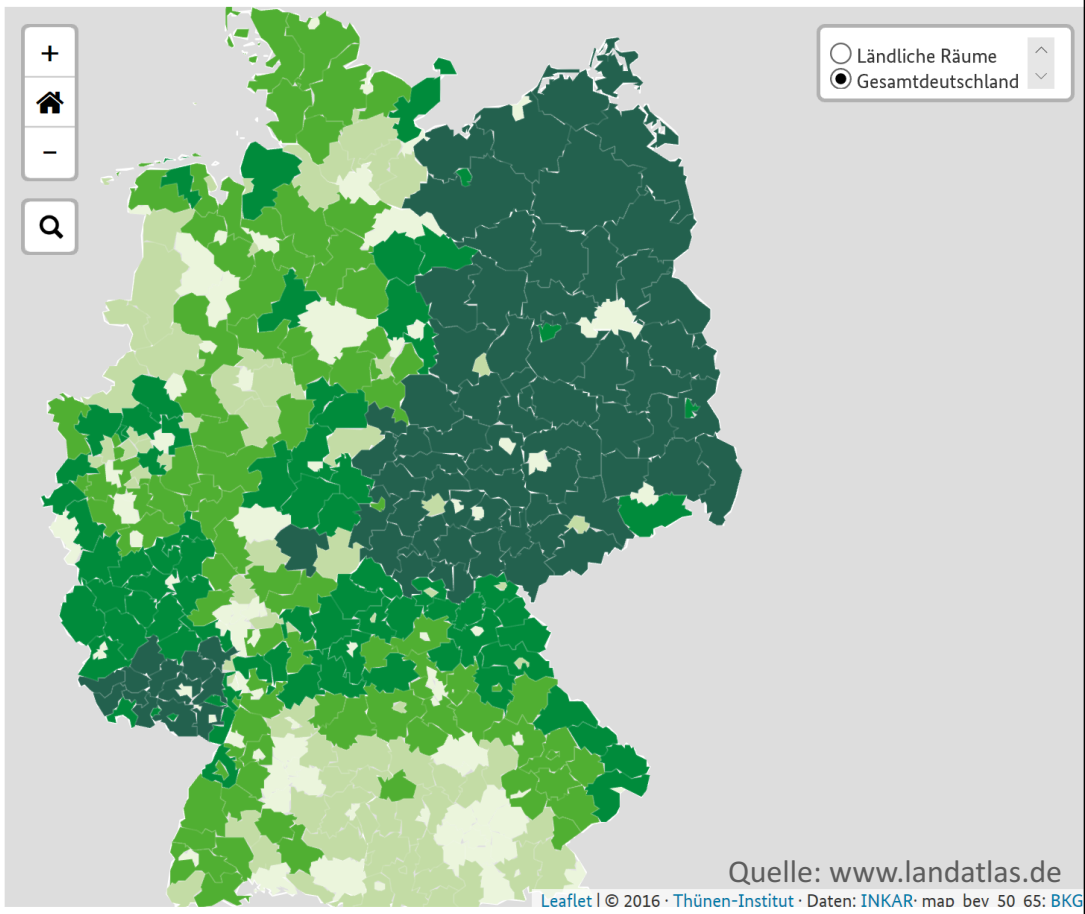
Source: Statistisches Bundesamt, own calculations

Age structure in Germany (2013)

Age group 6 to 18 years



Age group 50 to 65 years



Share of age group 6 to 18 years

- weniger als 9,7 Prozent
- 9,7 bis unter 11,1 Prozent
- 11,1 bis unter 11,8 Prozent
- 11,8 bis unter 12,4 Prozent
- 12,4 Prozent und mehr

Share of age group 50 to 65 years

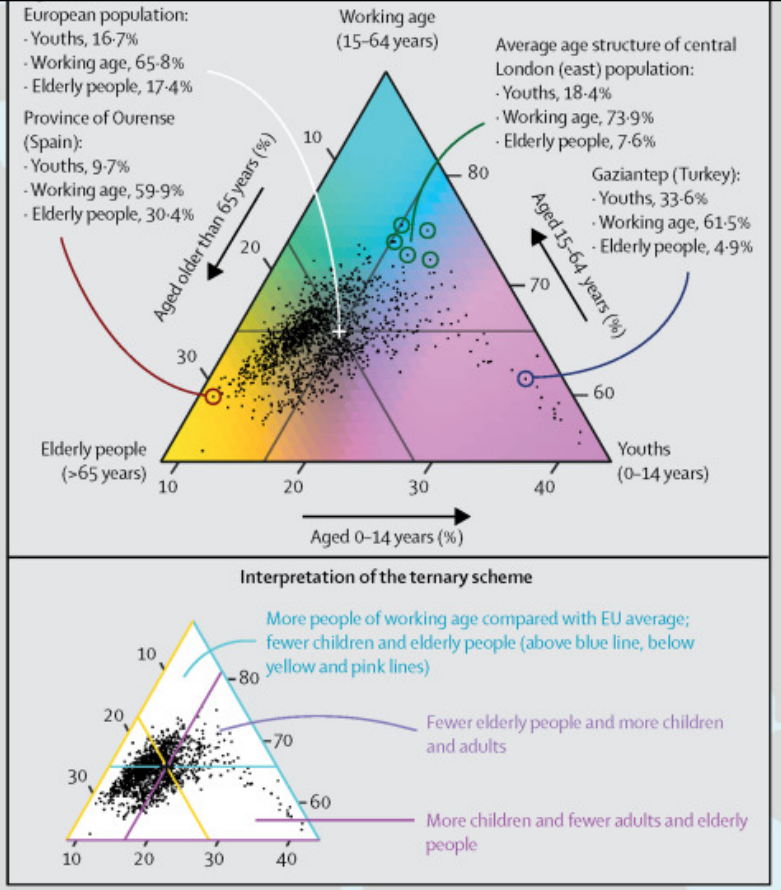
- weniger als 20,7 Prozent
- 20,7 bis unter 21,7 Prozent
- 21,7 bis unter 22,7 Prozent
- 22,7 bis unter 23,9 Prozent
- 23,9 Prozent und mehr

Quellen

Daten: Fortschreibung des Bevölkerungsstandes des Bundes und der Länder

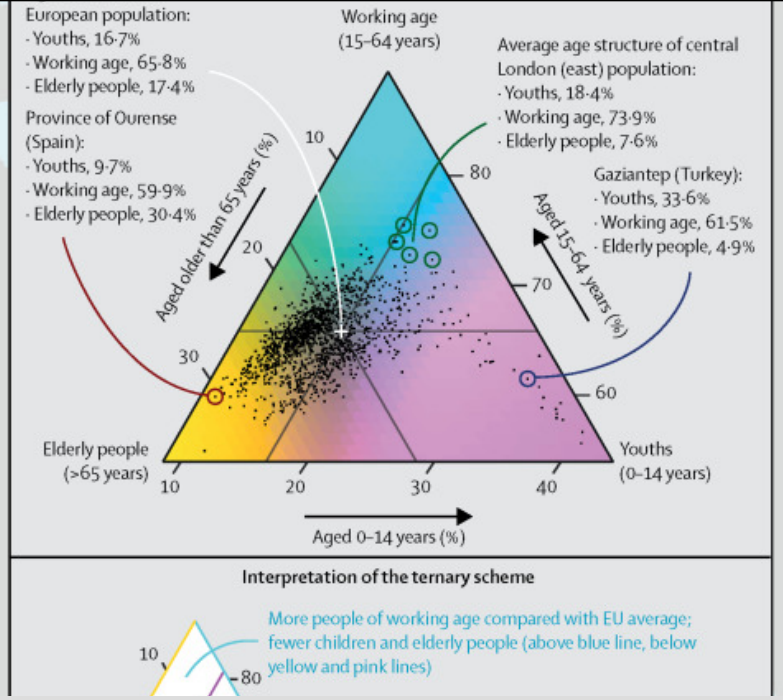
Räumliche Auflösung: Landkreise und Kreisfreie Städte

Age structure in Europe (2015)



THE LANCET, https://doi.org/10.1016/S0140-6736(18)31194-2

Age structure in Europe (2015)



- **The Generation of Baby Boomers will have to be substituted by Generations Y and Z**
  - Gen Y and Z are much smaller in size
  - Agriculture competes with other sectors
  - Rural areas compete with urban areas
  - Different mentalities
  - Grown up in a digital environment

Agriculture will change

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- New technologies: digitalization, biotechnology,…


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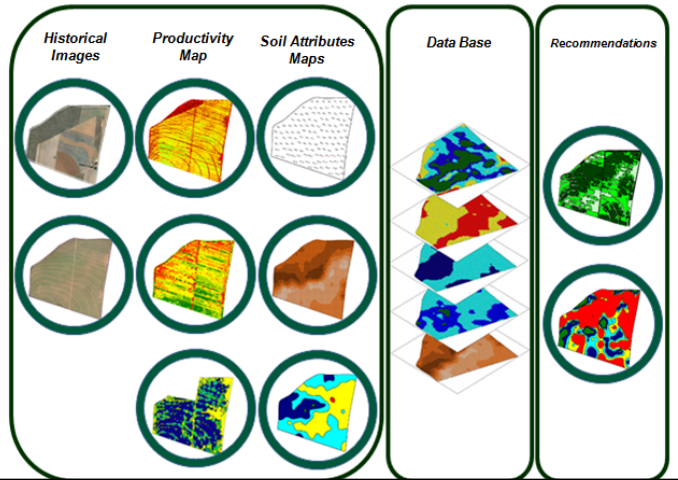
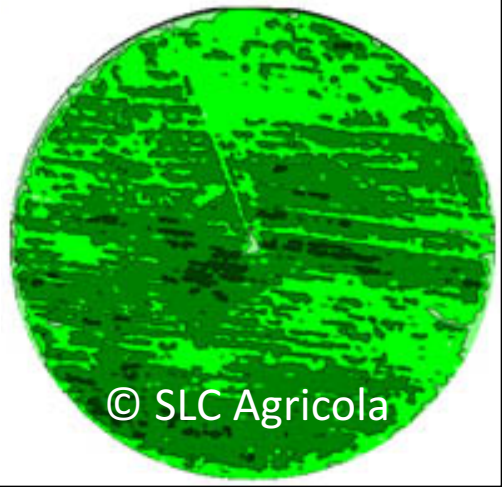
Ernesto del Aguila




© SLC Agricola

Agriculture will change

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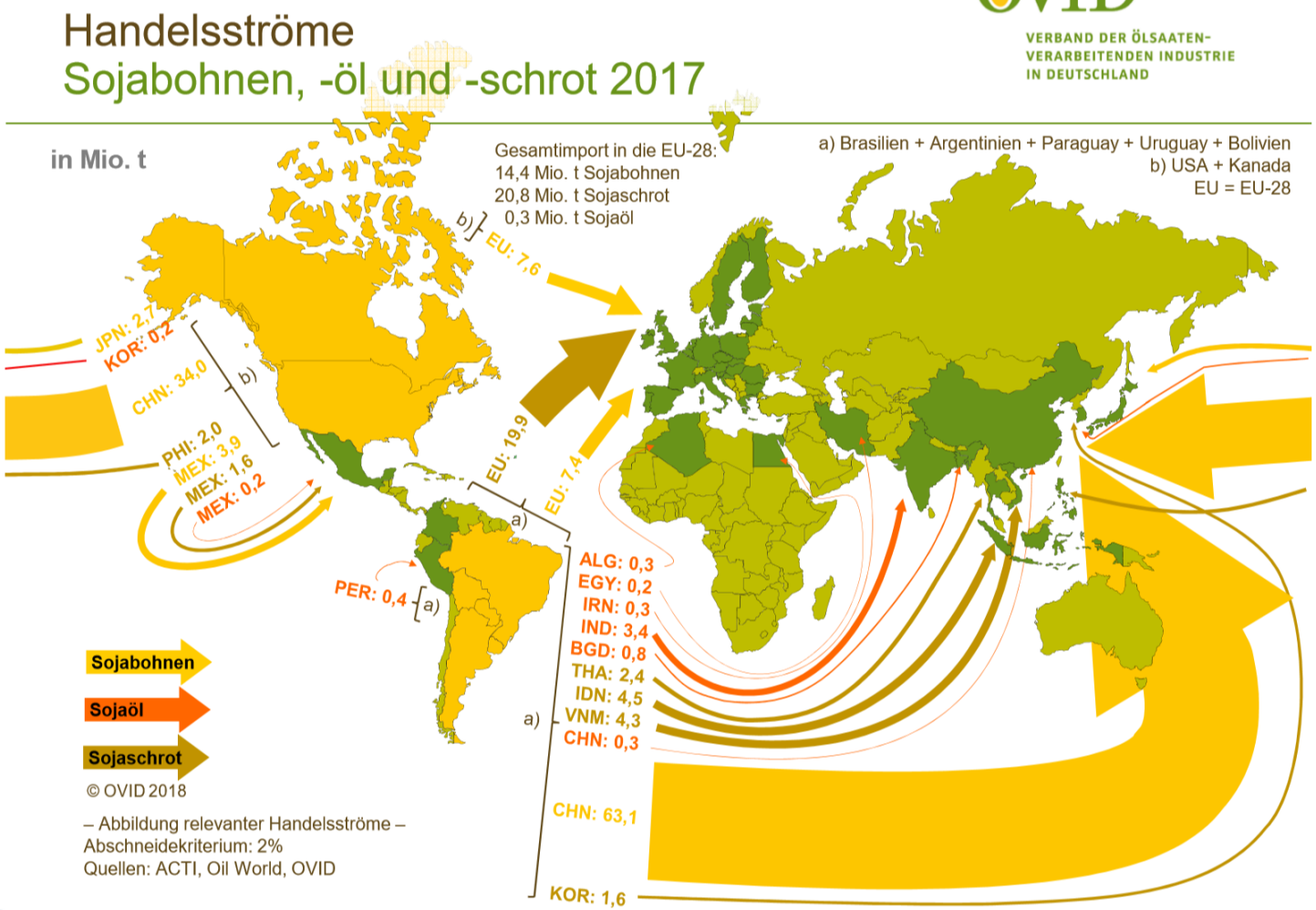
- Globalization



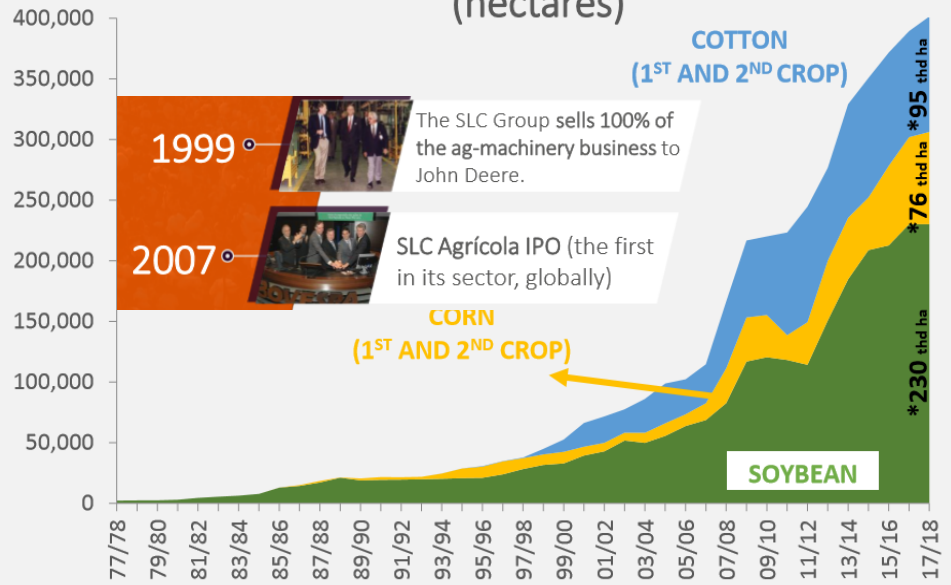
SLC Agricola's Business Model and Brazil's Agricultural Potential

SLC Agrícola

Aurelio Pavinato, CEO

June, 2018

PLANTED AREA EVOLUTION PER CROP (hectares)



22

*Planted Area: 2017/18 crop

SUSTAINABLE PRODUCTION SYSTEM

26

CERTIFICATIONS

SOYBEAN

- RTRS
- CRS
- ISCC
- ADM Responsible Soybean
- ProTerra Foundation
- FEMAS
- Soja Plus

COTTON

- BCI Better Cotton Initiative
- ABR Algodão Brasileiro Responsável

INTEGRATED CERTIFICATION

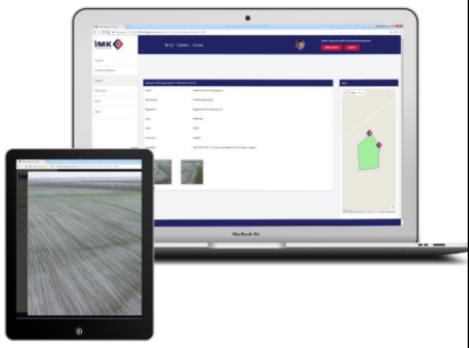
- ISO 14.001
- OHSAS 18.001
- NBR 16.001
- ISO 9.001

E-PORTAL

- all internal documents – transformed into e-form
- quick approval and response of everyone involved
- 40% shorter time for resolving internal issues & questions
- access from everywhere (PC, tablet, phone)

MOBILE AGRONOMIST

- operative e-mapping of all field operations
- real-time distant control of crops quality
- real-time reporting on agronomists' work
- database of field operations & vegetation stages history



PANORAMA – LAND BANK CONTROL

- more than 30 000 land plots digitalized
- proper land management
- all data on land plots owners at one place
- unified register of all land lease agreements

PREAGRI – GEOPORTAL

- all IMC geodata – in one place with 24/7 access
- NDVI maps – tracking field conditions
- weather stations data
- drone routes, photo & video
- seeding rate and yield maps
- soil analysis

WIALON – GPS MONITORING

- all machinery and cars tracked
- speeding control (safety; field operations accuracy)
- precise field works calculations
- proper logistics & planning

What do the trends mean?

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- Speed of structural change will increase!
  - Integration of farms in more sustainable value chains
    - Adressing concerns of society
    - Higher private standards, diversification of standards
  - Larger, more efficient farms will take over functions
    - Land use, production,…
  - Digitalization and robotics will substitute scarce labour
    - But skilled managers and workers still needed
  - Scarcity of qualified labour will continue and increase
    - Salary levels will need to increase
    - Migrant labor may become even more important
    - Potential farm successors may find promising jobs on large farms
    - Need for attractive rural infrastructures for young families!

Challenges for farm management

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- Further increasing capital intensity!
  - Required investments for creation of one job already now > 1 Mio. €
  - ➢ Enormous responsibility
- Persistently small margins!
  - The technological treadmill will continue!
  - Persistent competitive and performance pressure!
- Further increasing management requirements
  - E.g., communicative skills
    - Externally with market partners, public administration, society, media
    - Internally with family, employees, friends
- Persistent pressure to develop and improve!
  - Mentally demanding!

Challenges for farm succession

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- Farm succession is long-term decision!
  - Need to think decades ahead
  - Need to think particularly about:
    - Does the farm provide long-term opportunities?
    - Does my farm has a suitable business environment?
    - Am I a manager?
    - Am I an entrepreneur?
    - …
- In case of farm succession
  - Need for specific training, coaching, mentoring
  - Need for consulting on the succession process
    - Legal issues, conflict management,…

6 summarizing theses

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1. Agriculture and agricultural skills are also needed in the future
2. Agriculture has to change, but there are trade-offs!
3. Agriculture will change, because there are numerous drivers working in parallel!
4. Management requirements and the responsibility of farm managers will increase and will cause high mental loads
5. Young people should differentiate between farming as a profession and farm succession
6. Agriculture has to engage for attractive rural areas

Further information

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SURE Farm

https://www.surefarmproject.eu/

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www.iamo.de

SURE Farm

Den Blick schärfen: erfolgreicher Generationswechsel in der Landwirtschaft ist mehr als Hofnachfolge sichern

Business Brief
Mai 2020

Die Landwirtschaft muss um die junge Generation mit anderen Sektoren und städtischen Gebieten konkurrieren, die einen flexibleren Lebensstil und oft höhere Einkommen bieten.

Motivation

Das SURE-Farm-Projekt zielt darauf ab, die Widerstandsfähigkeit der europäischen Landwirtschaftssysteme besser zu verstehen und Empfehlungen für ihre Verbesserung zu entwickeln. Ein landwirtschaftliches System wird durch seine Funktionen, lokalen Bedingungen, Akteure und Interessengruppen charakterisiert. Wichtige Akteure und Betroffene sind die Landwirtinnen und Landwirte, die junge Generation, soweit sie potenziell daran interessiert ist innerhalb des Agrarsystems zu arbeiten, Verbände, Finanzinstitutionen, Genossenschaften und andere Akteure der Wertschöpfungskette, NGOs, die Zivilgesellschaft und die öffentliche Verwaltung. Die Resilienz bzw. Widerstandsfähigkeit des Agrarsystems wird definiert als seine Fähigkeit die gesellschaftlichen Funktionen auch in einer immer komplexeren wirtschaftlichen, sozialen, ökologischen und institutionellen Umwelt gewährleisten zu können (Meuwissen et al. 2019). Zu diesen Funktionen gehören die Bereitstellung von privaten Gütern, wie landwirtschaftlichen Produkten, Einkommen für die in der Landwirtschaft Tätigen und ländliche Gebiete, ebenso wie die von öffentlichen Gütern, wie Biodiversität, Landschaften, Verbrauchergesundheit und Ernährungssicherheit.

Ein wichtiger, längerfristiger Baustein für die Resilienz eines landwirtschaftlichen Systems stellt der Generationswechsel dar. Agrarsysteme sind für die jüngere Generation nur dann attraktive Betätigungsfelder, wenn sie langfristige Perspektiven bieten. Innerhalb der EU unterscheiden sich die regionalen Agrarsysteme hinsichtlich ihrer organisatorischen und demografischen Merkmale, ihrer Produktionssysteme und ihrer natürlichen, institutionellen und infrastrukturellen Bedingungen vor Ort enorm. Dementsprechend ist der Generationswechsel vielschichtig und hängt mit vielen verschiedenen Fragen zusammen, z.B. ob und wie landwirtschaftliche Betriebe die Betriebsnachfolge organisieren sollten, wie landwirtschaftliche Betriebe die ausreichende Verfügbarkeit von Arbeitskräften sicherstellen können, wie sie sich an den Generations- und demografischen Wandel anpassen und darauf vorbereiten können und wie die jüngere Generation von den Ausbildungs- und Beschäftigungsmöglichkeiten in der Landwirtschaft profitieren kann.

Ausgehend von den zentralen Ergebnissen des SURE-Farm-Projekts soll in diesem Business Brief das Bewusstsein in der Landwirtschaft für die Chancen und Herausforderungen im Zusammenhang mit den verschiedenen Aspekten des Generationswechsels geschärft werden.

Was bedeutet Generationswechsel?

Angesichts der Dominanz der Familienbetriebe in der EU ist die innerfamiliäre Betriebsnachfolge immer noch die häufigste Form des Generationswechsels. Während die innerfamiliäre Nachfolge oft so interpretiert wird, dass Kinder formell die vollständige Kontrolle über den Betrieb ihrer Eltern übernehmen, gibt es andere Formen des innerfamiliären Generationswechsels. Zum Beispiel Kinder, die einen Teil des landwirtschaftlichen Betriebes übernehmen oder als bezahlte Angestellte in den Betrieb eintreten - oft in speziellen Arbeitsrollen und mit dem Einbringen neuer Fähigkeiten und Kenntnisse - während ein Elternteil die formale Betriebsleitung behält.

Dieses Projekt wurde vom Horizon 2020 Forschungs- und Innovationsprogramm der Europäischen Union gefördert. Grant Agreement No. 727520

Weitere Informationen:
www.surefarmproject.eu

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SURE Farm

Policy brief on future farm demographics and structural change in selected regions of the EU

Policy Brief
March, 2020

Executive Summary

Farm demographics has been recognized as an important driver of structural change in European agriculture. Focus groups and computer simulations on farm demographic change were used to better understand its role for the case study regions of the Altmark in the eastern part of Germany and Flanders in the northern part of Belgium. According to these analyses, many potential agricultural entrants are deterred by what they view as a poor quality of life that farming offers. This applies to farm successors as well as hired workers. For higher attractiveness of agriculture, policy objectives should address the social image of farming as well as revitalize rural areas. Increasingly critical is the demand for skilled hired labour. However, policies dealing with farm demographic change ignore these needs and focus almost exclusively on farm succession. Particularly, the direct payment system, including additional support for small farms and young farmers, must be re-evaluated for its effectiveness. The analyses provide evidence that this system constrains European agricultural development more than assists it; ultimately preventing farms from adapting and transforming.

Future farm demographics has to be seen in the wider context of demographic change and the young generation's expectations

Future farm demographics and general demographic change

In recent years, the topic of farm demographics has been a major concern of the EU and continues to be addressed in the proposals for the future Common Agricultural Policy (CAP). The concerns are driven by the ongoing decrease in the number of agricultural holdings and the fear that a large number of farms may have no successors. These fears are fuelled by an inverse age-pyramid of farmers, persistently poor income opportunities, long working hours as well as agriculture's declining reputation due to continuous public concerns about, e.g., animal welfare and environmental effects.

Irrespective of the situation in agriculture, Europe and particularly rural areas are experiencing a major demographic change. In the 2020s and '30s, the Baby Boomer Generation will retire with Generation Z as their future replacements. Generation Z is not only much fewer in numbers but has grown up in a completely different environment. They are digital natives who have never experienced borders within the enlarged EU. This will affect their expectations about their career, preferred lifestyle, and their mobility. While agriculture could benefit greatly from the competencies of Generation Z, neither the sector nor the rural areas currently offer adequate career and lifestyle perspectives to attract the next generation.

Farm demographics is more than farm succession

Regarding future farm demographics, the SURE-Farm project differentiates between farm succession within the family and the general availability of labour willing to work in agriculture. This differentiation is motivated by the overall increasing role of hired versus family labour. The increasing role of hired labour in the EU is in part a consequence of the significant share of corporate farms and large family holdings in the New Member States which entered the EU post-2003. Moreover, the EU enlargements allowed many people to migrate and work in the farming sector in the Old Member States, benefitting the growing larger family and corporate farms. This migration includes permanent as well as seasonal labour, particularly in animal husbandry and the fruit and vegetable sector.

This Project has received funds from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 727520

More info:
www.surefarmproject.eu

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