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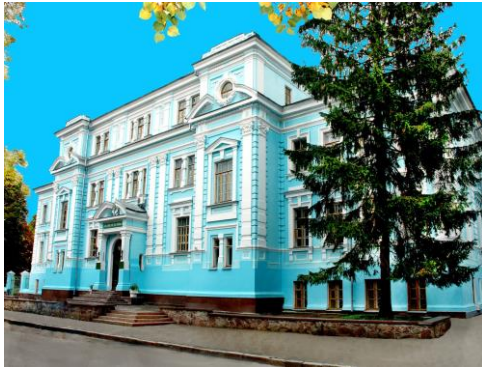
Federal Ministry
of Food
and Agriculture



AFC
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by decision of the
German Bundestag



Organic Agriculture – Past, Present and Future

Kiew, 27.09.2018

Elisabeth Rüegg

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The COA Project

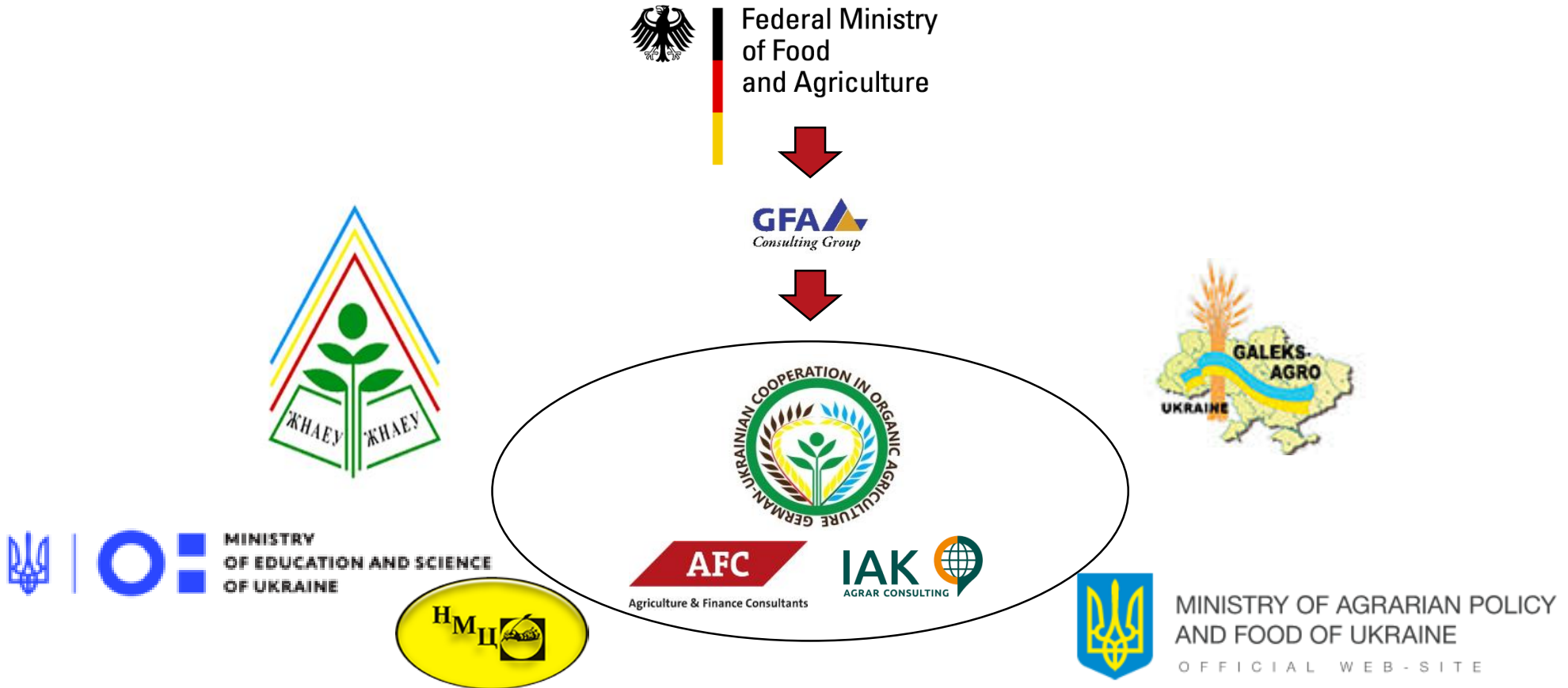


German-Ukrainian Cooperation in the field of organic agriculture (COA)



The aim of the project is to contribute to the development of organic agriculture in Ukraine by strengthening the education and training of specialists and executives.

Project Setup



The Bilateral Project is fully financed by the German Federal Ministry of Food and Agriculture.

Project Approach



Result 1:

Organic farms

Result 2:

Academic teachers from Universities and Colleges; specialists and experts

Result 3:

State Service of Ukraine On Food Safety and Consumer Protection

Result4:

Ministry of Agrarian Policy and Food of Ukraine

Результат 1:

Зацікавлені існуючі органічні ферми здобули технічні знання, необхідні для покращення методів виробництва та успішного збуту продукції.

Результат 2:

Викладачі професійно-технічних навчальних закладів та університетів, а також приватних надавачів послуг із підвищення кваліфікації пропонують якісні та практично орієнтовані курси в галузі органічного с/г.

Результат 3:

Персонал регіональних державних органів у галузі сільського господарства на рівні областей і районів здатний надавати першу інформацію в галузі органічного с/г.

Результат 4:

Персонал Міністерства аграрної політики та продовольства та підпорядкованих йому органів спроможний краще підтримувати та регулювати органічне с/г в Україні.

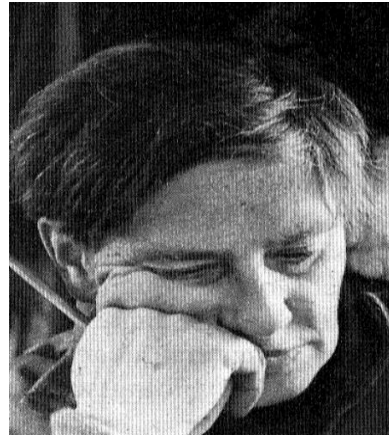
Organic 1.0



Organic Agriculture initiated by pioneers...



Sir Albert Howard



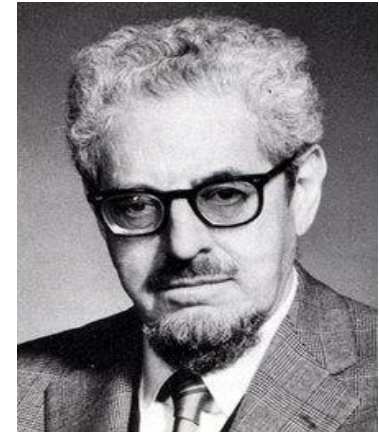
Lady Eve Balfour



Dr. Rudolf Steiner



Rachel Carson

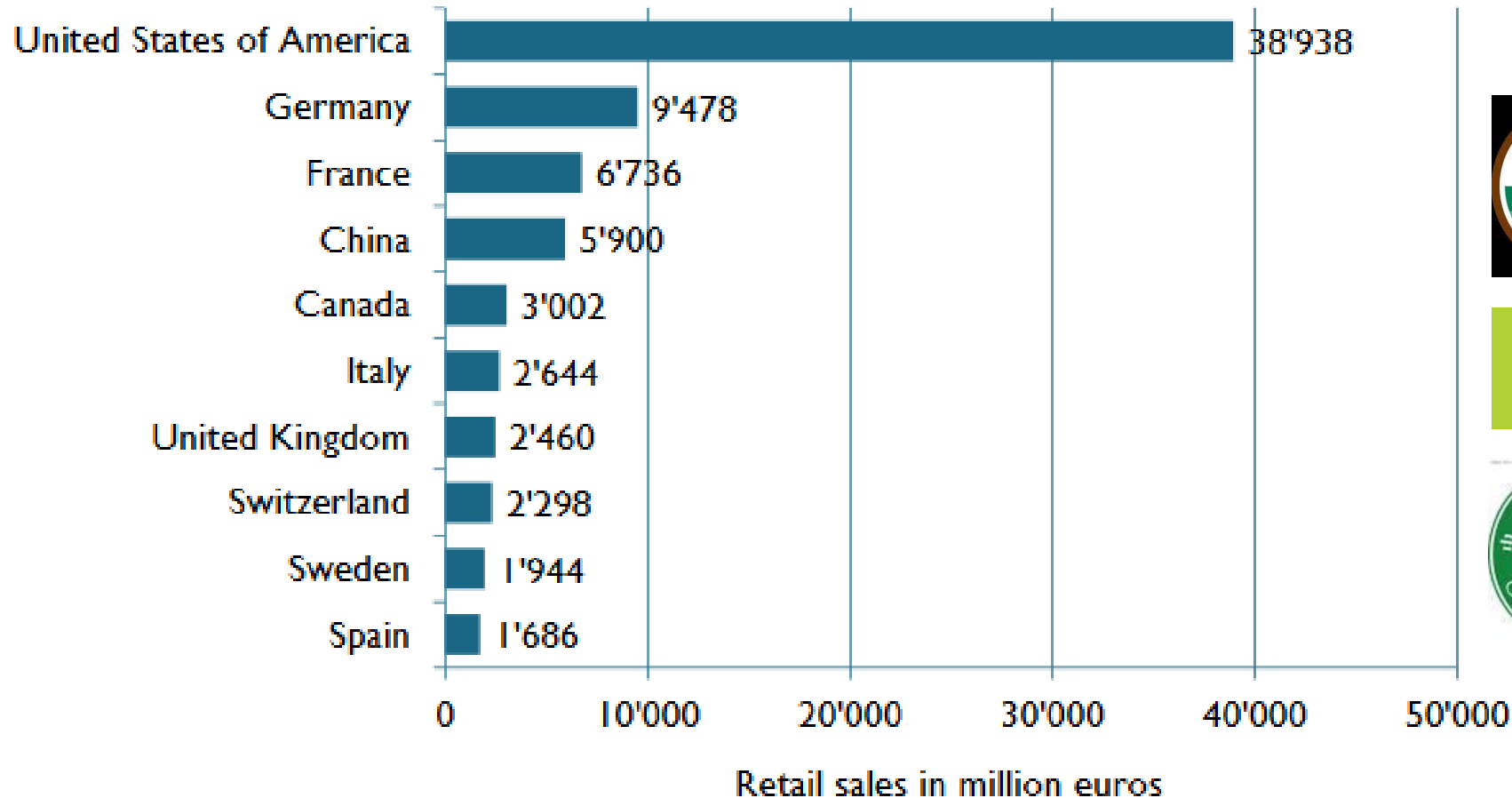


J I Rodale

The second phase started in the 1970s...

- Definition of production standards.
- Public recognition of organic agriculture as a sustainable and healthy production method.
- Introduction of 3rd party certification systems along with government regulations.
- Period of sustained growth up to the current € 85 billion sales in certified organic products.

World Market



Global organic market at € 84.7 billion

World Production



Region	Organic agricultural land [hectares]	Regions' shares of the global organic agricultural land
Africa	1'801'699	3%
Asia	4'897'837	8%
Europe	13'509'146	23%
Latin America	7'135'155	12%
North America	3'130'332	5%
Oceania	27'346'986	47%
World	57'816'759	100%

2,7 millions organic farmers worldwide

Additionally 39,7 million ha



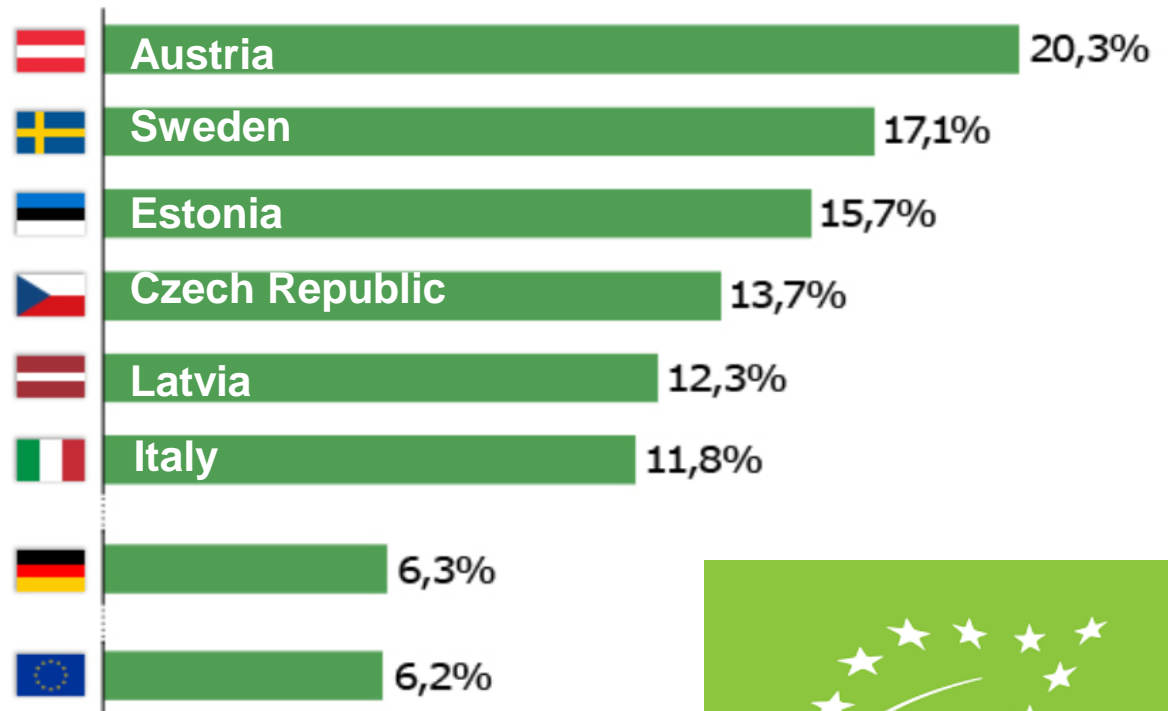
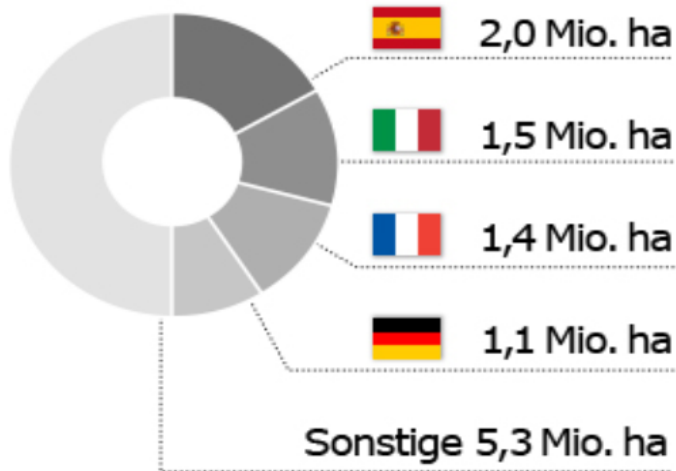
wild collection areas and areas for beekeeping

Organic Agriculture in the EU



Shares of the total agricultural land 2015

Ökologische Anbaufläche
Insgesamt 2015: 11,1 Mio. ha

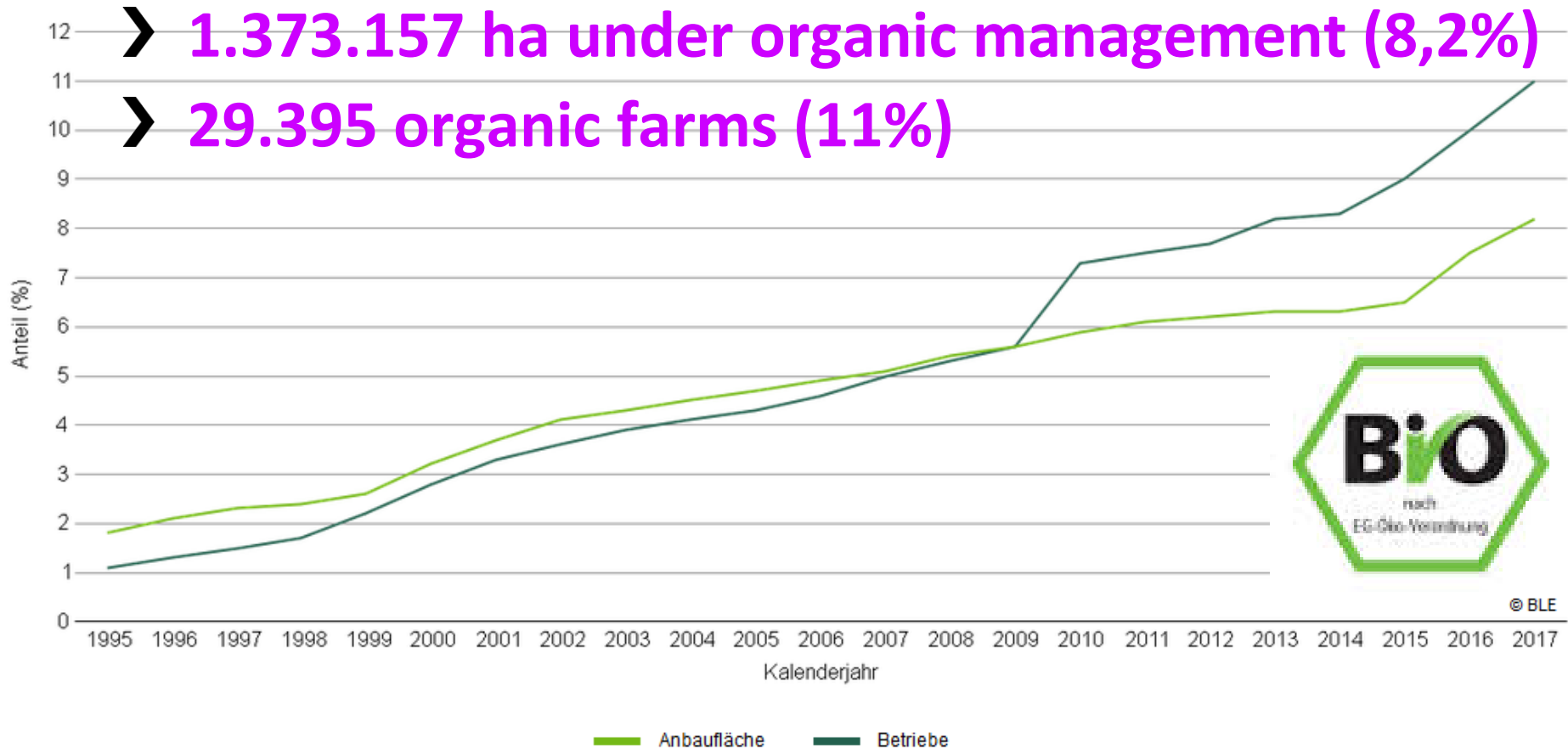


Source: Eurostat, 25.10.2016

Organic surface and number of organic farms

➤ **1.373.157 ha under organic management (8,2%)**

➤ **29.395 organic farms (11%)**

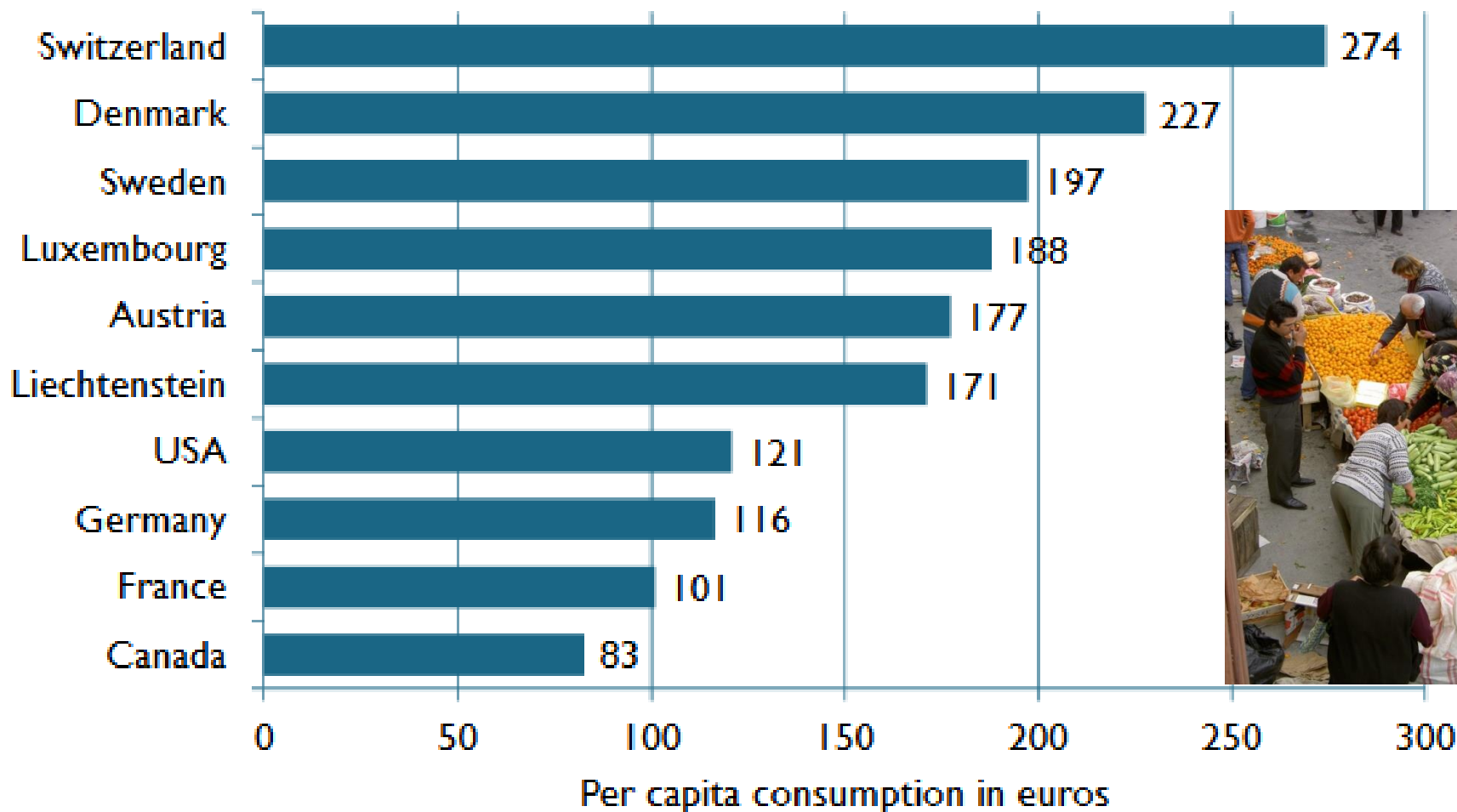


Source: BLE, 2017

- Germany is the **biggest** market for organic products in Europe.
- At the same time consumers are the **most demanding** once with high quality expectations.
- Organic production, however is only slowly increasing and there is a **growing need for imported products** at the same time.

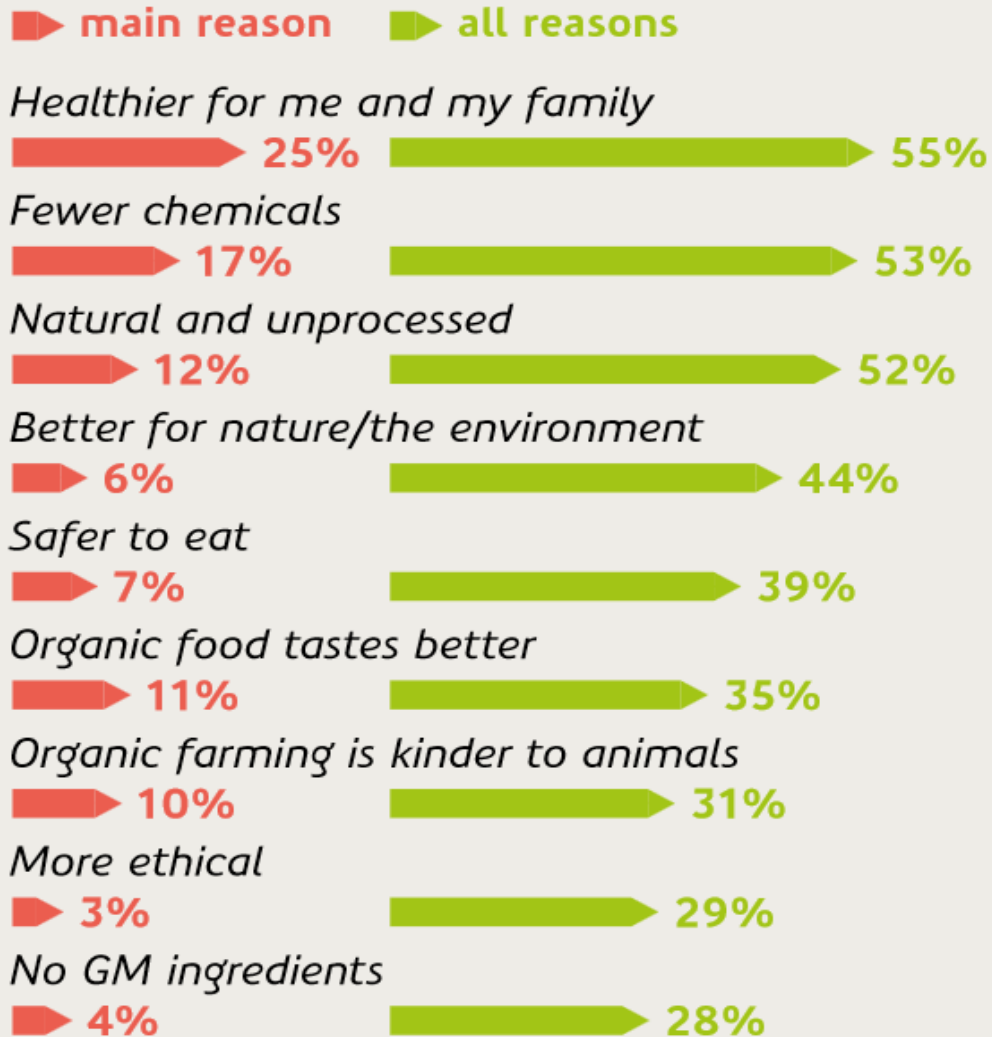


Organic Agriculture Today



Source: FiBL-AMI survey 2018

Top Reasons for Buying Organic



October 2012. Source: Leapfrog Research/Organic UK

Consumer's Choices

- Regional aspect
- Traceability
- ...



Can Organic Farming Feed the World?



Yes! **ORGANIC** farming
can feed the world

Science shows that organic farming can produce enough food to feed a growing world population while protecting our health and the environment.

Get the facts at www.foe.org



<https://www.theguardian.com/sustainable-business/2016/aug/14/organic-farming-agriculture-world-hunger>

Is Organic Farming a Win?



ORGANIC farming is a win, win, win

Science shows that organic farming protects us from toxic pesticides, is more profitable for farmers, and conserves the soil, water and biodiversity that we need to feed the world for generations to come.

Get the facts at www.foe.org



Benefits of Organic Farming?



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ORGANIC farming protects
the earth for a healthy food future

Industrial agriculture costs the world \$3 trillion annually in environmental damage. Organic farming builds healthy soils, conserves water, protects the health of people, pollinators and other living things.

ORGANIC farming is
a climate solution

In times of drought and flood, organic outperforms industrial agriculture. It also conserves water, saves energy and captures more carbon in the soil.



Organic Agriculture Facts



The FiBL DOK trial - biodynamic (D), organic (O) and conventional (K) - is the world's most significant long-term field trial comparing organic and conventional cropping systems since 1978:

- Organically grown crops require 30-50% less energy per unit area (including energy for the production of fertilizers and pesticides). Even though yields in the conventional system are higher per unit area, energy usage per unit of yield is lower by 19% in the organic systems.
- In the biodynamic system, soil organic matter (humus) content remained stable for the first 21 years of the trial while it declined in all other systems. Differences in this respect between the biodynamic and the purely mineral system are significant.

Organic Agriculture Facts



Organic higher yields in climate extremes

- Organic systems have higher yields than conventional farming systems in weather extremes such as heavy rains and droughts. (Drinkwater, Wagoner and Sarrantonio 1998; Welsh, 1999; Lotter 2004)
- The Wisconsin Integrated Cropping Systems Trials found that organic yields were higher in drought years and the same as conventional in normal weather years. (Posner et al. 2008)
- The Rodale FST showed that the organic systems produced 30 per cent more corn than the conventional system in drought years. (Pimentel D 2005, La Salle and Hepperly 2008)

Conclusion

Between niche and mainstream: is organic agriculture agronomically and socio-economically adapted?



Innovation
needed!

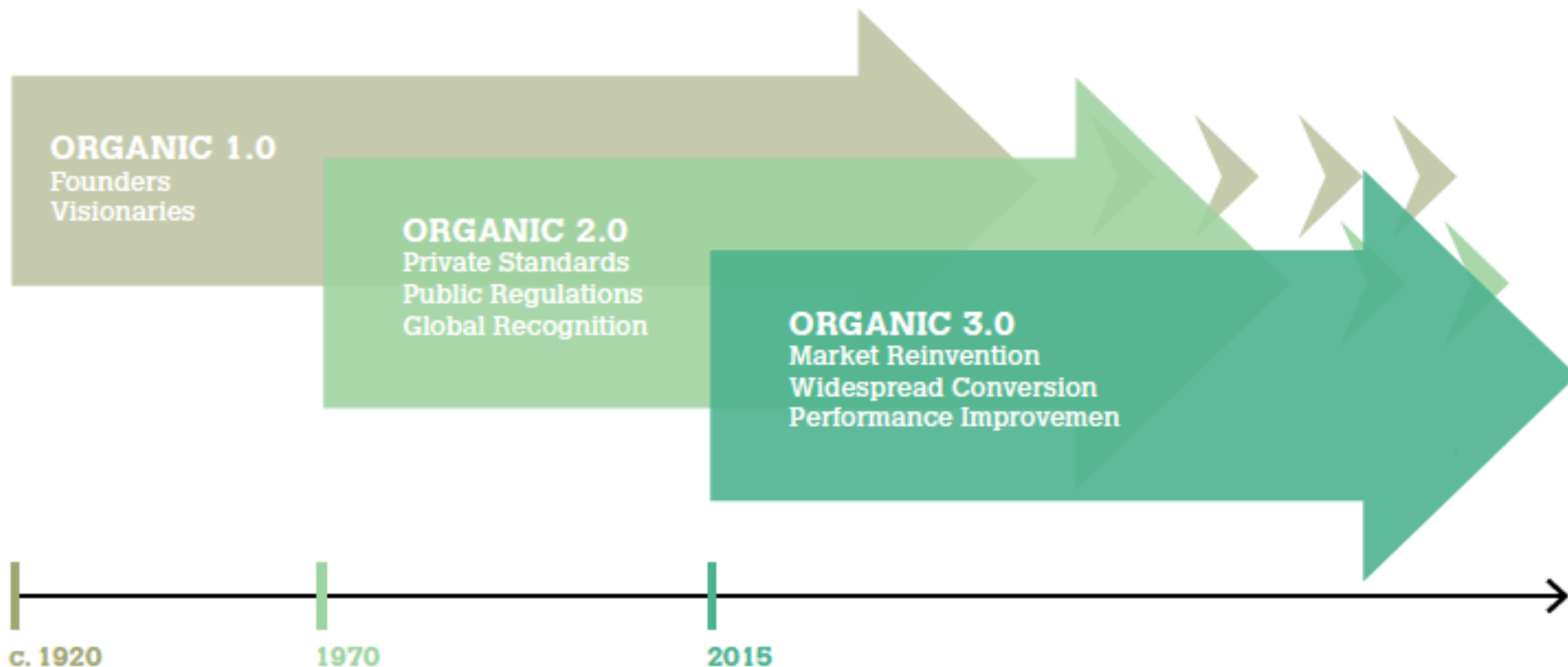
- Technically immature
- Economically hardly competitive
- No true cost accounting

Policy
change
needed!

What is Organic 3.0?



This is the third phase of the global organic movement – and the future of organic agriculture



Organic 3.0



The strategy for Organic 3.0 includes six main features

1. A culture of innovation, to attract greater farmer adoption of organic practices and to increase yields.
2. Continuous improvement toward best practice, at a localized and regionalized level.
3. Diverse ways to ensure transparent integrity, to broaden the uptake of organic agriculture beyond third-party assurance and certification.

Organic 3.0



4. Inclusiveness of wider sustainability interests, through alliances with the movements and organizations that have complementary approaches to truly sustainable food and farming.
5. Holistic empowerment from farm to the final product, to acknowledge the interdependence and real partnerships along the value chain.
6. True value and fair pricing, to internalize costs, encourage transparency for consumers and policymakers and to empower farmers as full partners.

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