

The world of organic bananas

a review of production, markets, sustainability and current and future trends

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Outline

- 1) Developments in world production
- 2) The development of consumer markets
- 3) Trends and challenges facing the organic banana industry





Developments in the world production



Main organic banana production areas



Main organic production areas

Estimated Organic banana certified hectares	
Dominican Republic	20 000
Ecuador	18 830
Peru	11 000
Mexico	4 184
Colombia	4 000
Côte d'Ivoire	700
Ghana	600
TOTAL	59 154

Table 1: Summary of estimated organic banana surfaces in the main exporting countries.
Sources: Agrocalidad, Dawson and Lescot, FIBL, professional sources.

Main organic production areas

Organic banana production remains a niche, as almost 60 000 hectares of organic certified bananas were planted in the world, vs 500 000 ha for conventional export bananas.

We estimate that nearly 1.35 million tons of organic certified bananas were traded in 2021. It represents 6% of world banana trade.

Consumer markets remain very concentrated in Europe and North America

Main organic
production
areas

Future
developments

Continued production growth... but limitations for future developments ?

- Production only possible under specific Agro-climatic conditions --> low pest and disease pressure, dry areas with less than 600 mm of rainfall per year. Availability of local organic fertilizers
- The spread of diseases such as TR4, already present in 2 major organic production areas
- Crop profitability : higher costs, lower yields, lower prices, high quality standards in import markets
- Evolution of consumer demand and markets



Development of consumer markets

Europe and North America

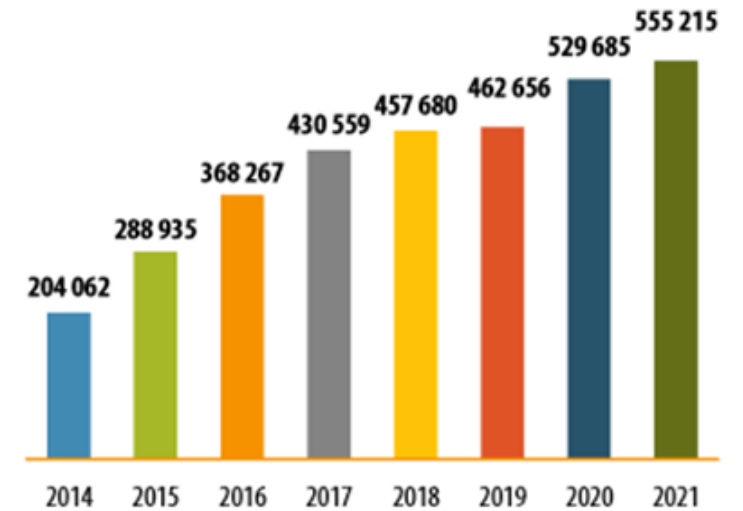


North-American market

- Second world market in terms of volumes for organic bananas : 555 215 tons imported in 2021.
- Organic bananas hold a market share of around 12% over the total banana supply
- In 2021 organic banana sales grew by 5% compared to year 2020 and 12% over the 2-year average.
- Organic banana sales are, by far, the driving force behind sales of the fresh organic produce section in the United States

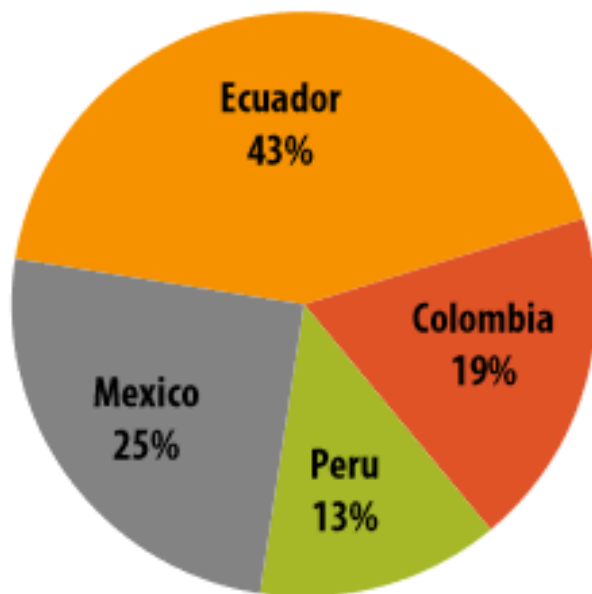


Organic banana - USA & Canada - Imports
(in tonnes | source: US Customs | Processed by CIRAD)

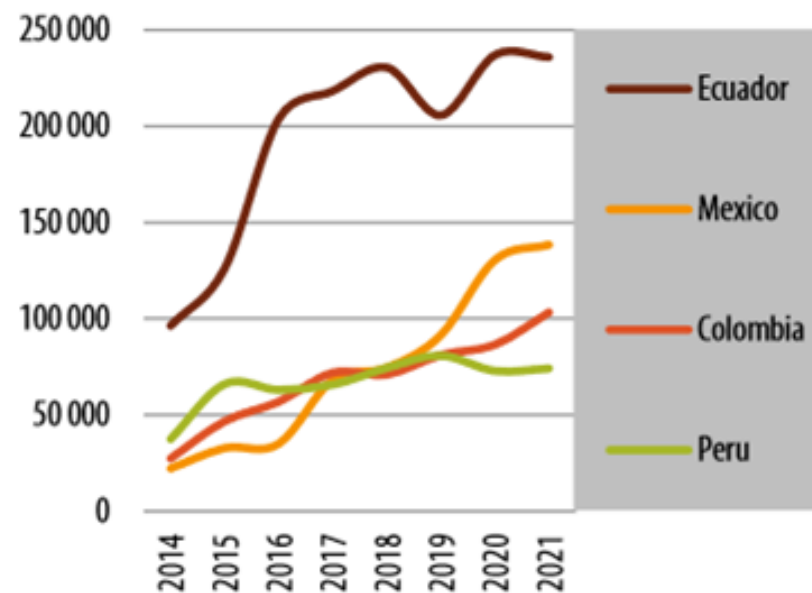


North-American market

Organic banana - USA & Canada
Market shares of main supplier countries in 2021
(source: US Customs | processed by CIRAD)



Organic banana - USA & Canada
Imports by supplier country
(in tonnes | source: US Customs | processed by CIRAD)

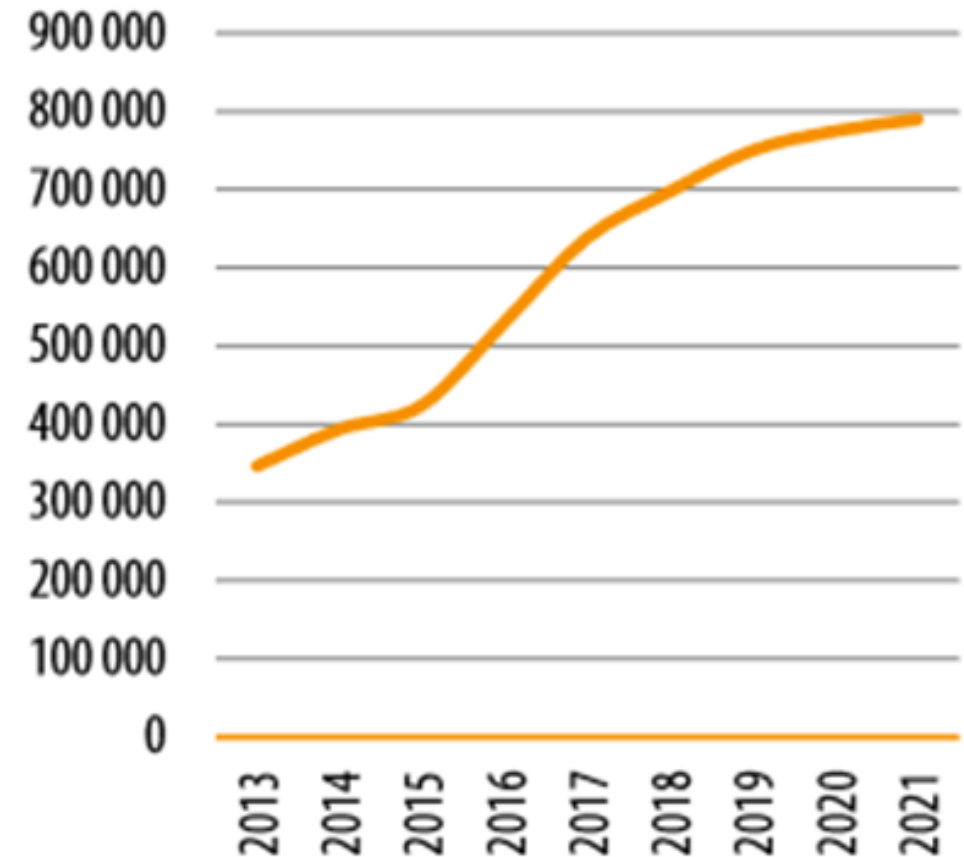


European market



- Nearly 790 000 tons of organic bananas were imported in Europe in 2021
- After a very strong growth phase between 2015 and 2019, growth has become more moderate since 2019.

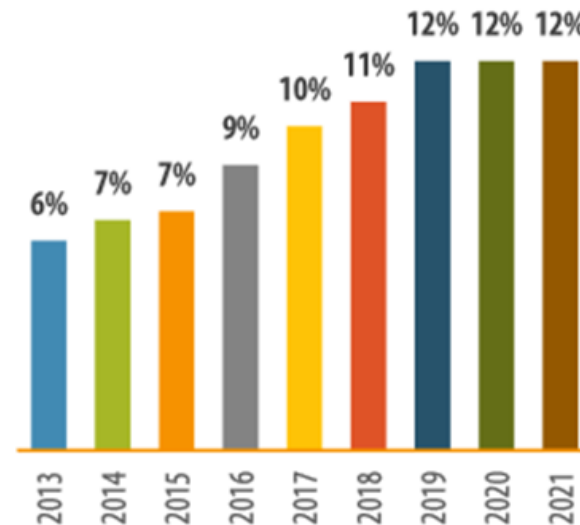
Organic banana - EU27+UK
Estimated annual supply
(in tonnes | source: CIRAD)



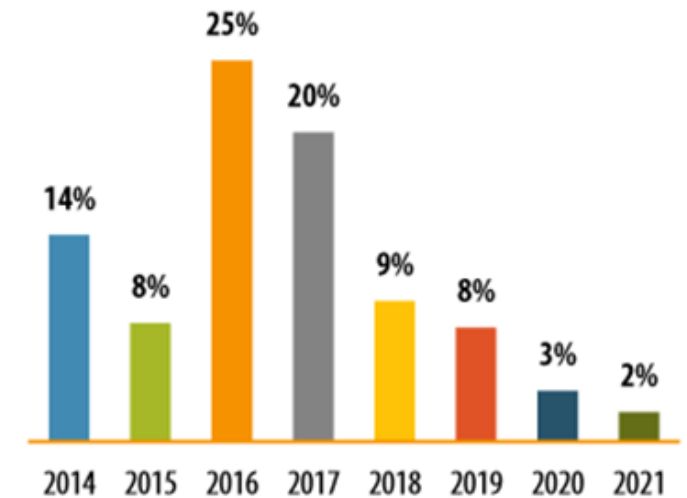
European market

- The market share of organic bananas has remained stable at 12% for the past 3 years
- The annual growth rate has been decreasing since 2018, and reached its lowest point, 2%, in 2021.
- The sector seems to be stalling

Organic banana - EU27+UK - Market share of total banana supply
(source: CIRAD)



Organic banana - EU27+UK - Market annual growth rate in volume
(sources: Eurostat, CIRAD)



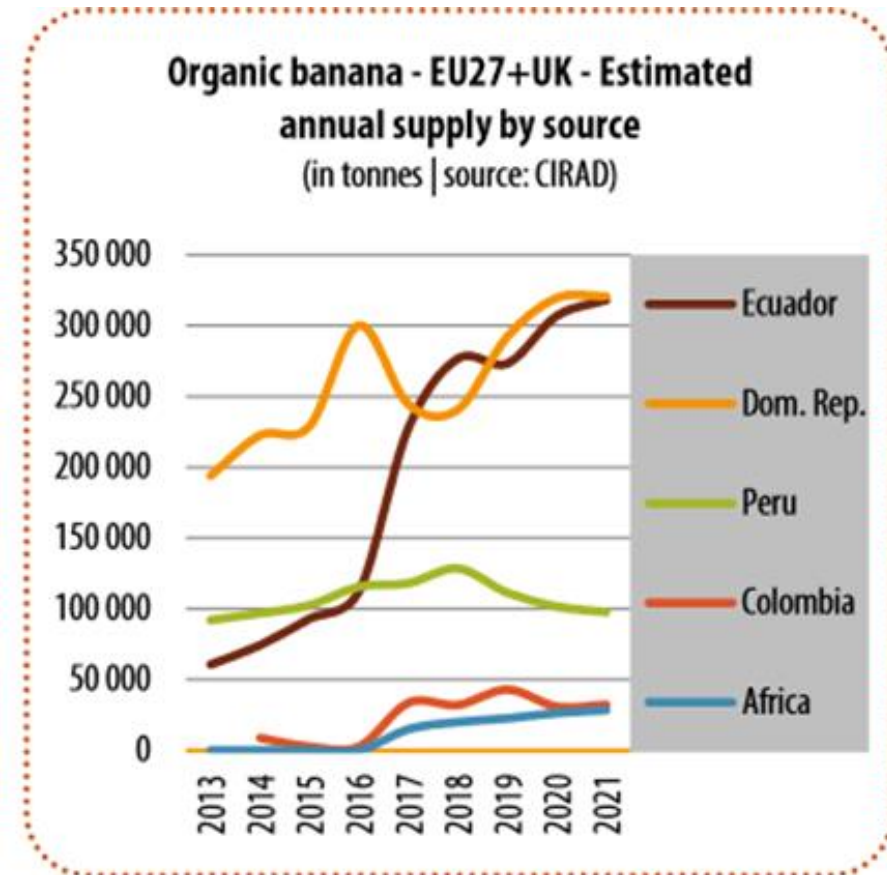
European market

The Dominican Republic and Ecuador account for 80% of the market share with volumes close to 320 000 tonnes each.

Peru comes in third position with supplies of around 100 000 tonnes, a market share of 12% and a dynamic that has been losing momentum since 2018.

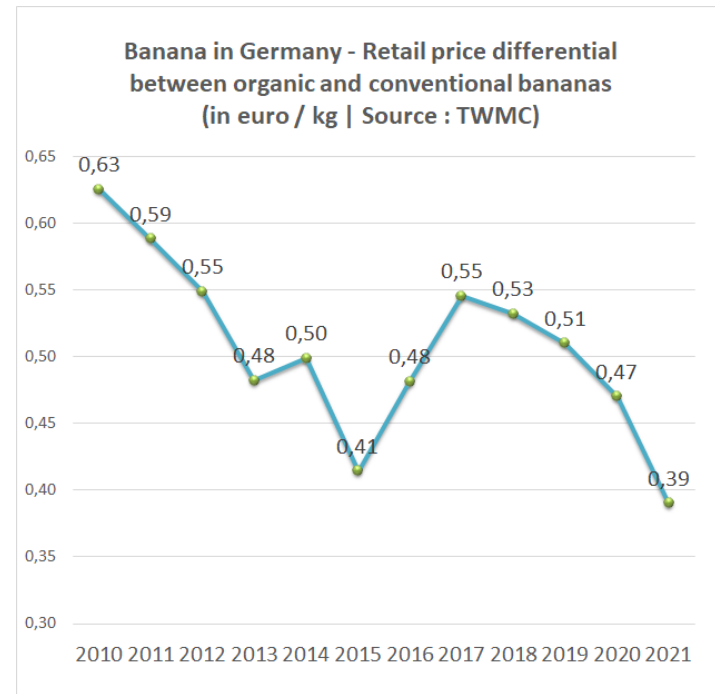
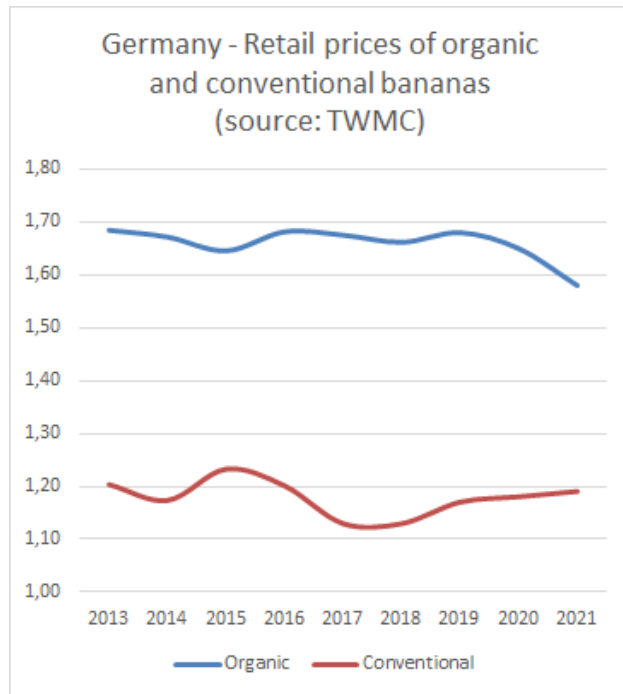
Colombia accounts for 4% of market share (over 30 000 tonnes)

African countries (Ghana and Cote d'Ivoire) are developing with also a combined market share of 4%.



European market

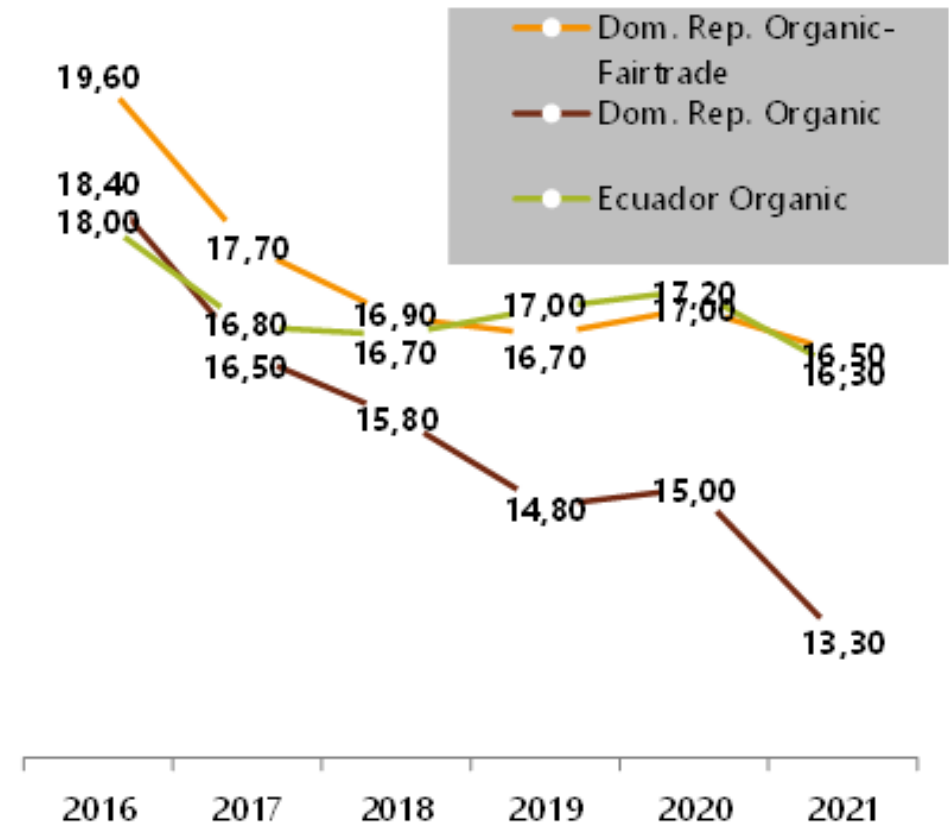
At the retail stage, the differential in prices between organic and conventional bananas is becoming narrower.



European market

As for conventional bananas, organic import prices are under pressure and keep on decreasing year-on-year

**Banana - France - Organic and Organic-Fairtrade
estimated import price**
(in euro/18.5-kg box | source: CIRAD)





European market

Why is organic banana consumption growth slowing down in Europe? Why is it lower than in North America?

- During years 2020 and 2021 – pandemic – most commercial stakeholders were very cautious with their supply and stocks, facing unprecedented and unpredictable governmental lockdown measures



- **New consumption trends...**

A low-angle photograph of two workers in green shirts and hard hats climbing a white structure. The structure has large blue letters, including 'SE' and '2022'. The worker in the foreground is pulling the other up. The background is a clear blue sky.

Trends and challenges

Growth drivers

Consumer buying behaviour and purchase intention of organic food: a conceptual framework

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Consumer's
behavioural
intention of
organic food

1515

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"The results show that among individual factors like **health concern, environment concern, knowledge and awareness, eco-labels** and **price** followed by **trust** in organic food are the most important factors in organic food purchase."

Conventional bananas: price inelastic
Organic bananas : price elastic – 1% price increase, 3% demand decrease.

Lin B-H, Yen ST, Huang CL, Smith TA. U.S. Demand for Organic and Conventional Fresh Fruits: The Roles of Income and Price. *Sustainability*. 2009; 1(3):464-478.

Organic-Plus

“organic-plus” certifications increasingly popular, especially Demeter

- Demeter: the farm as an organism, holistically and circularly incorporating nature, human beings and animals.
- It contains a social standard
- Founded on the anthroposophical principles of Rudolf Steiner.
- It is known for its use of “preparations”.
- A limit on nitrogen input to the farm.



Demeter



- Biosuisse:
 - Comprises a social standard such as Fairtrade
 - Devotes 7% of land to non-agriculture, as biodiversity space
 - Prohibits air freight of produce
- - Naturland
 - Additional restrictions on nitrogen
 - Includes a social standard

Evolution of organic regulations

- From equivalence to conformity (unless there is a bilateral trade agreement recognizing equivalence). Control bodies can no longer set their own interpretations.
- Restrictions on plant protection products – only those on the positive list – no “equivalency”-permissions by control bodies any more.
- New rules for small farmer group certification
- Increased pre-shipment residue testing

of 30 May 2018
on organic production and labelling of organic products and
repealing Council Regulation (EC) No 834/2007

CHAPTER I SUBJECT MATTER, SCOPE AND DEFINITIONS

Article 1 Subject matter

This Regulation establishes the principles of organic production and sets down the rules concerning organic production, related certification and the use of indications referring to organic production in labelling and advertising, as well as rules on controls additional to those laid down in Regulation (EU) 2017/625.

Article 2 Scope

This Regulation applies to the following products originating from agriculture, including aquaculture and beekeeping, as listed in Annex I





European Commission | **RASFF Window**

CONSUMERS TRACES ▼

NOTIFICATION 2022.1075

Chlorpyrifos detected on organic bananas from Peru.

notified 23 FEB 2022 by  Luxembourg | last update 25 MAY 2022  EC validated

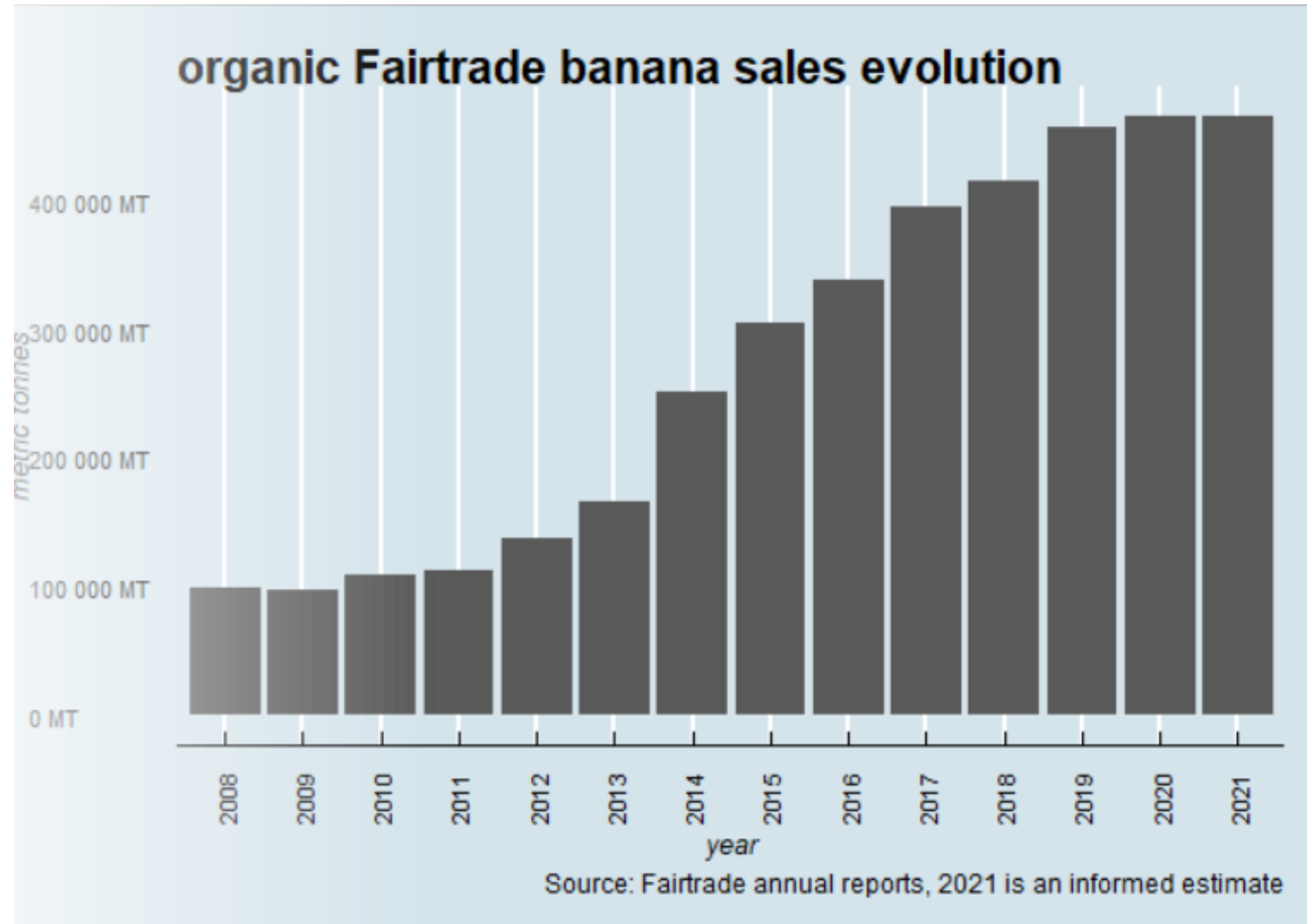
Loss of value

- Not specific to organic bananas
- High oil prices -> transport, inputs (irrigation pumps)
- Shipping lines favouring higher-paid cargo
- Increased fraud susceptibility (high cost of Spinosad e.g.).
- Commoditisation of organic bananas



Organic banana outlook

- - Organic Fairtrade banana sales worldwide seem to reach a plateau
- - Will this trend continue?
- - Will increasing prices also affect non-Fairtrade organic bananas?
- - Demand for conventional bananas: inelastic
- Demand for organic bananas: elastic (-3%) (Lin *et al*, 2009)



Conclusion

New trends and challenges are emerging for organic bananas

- the EU regulation is becoming tougher
- new private certifications are gaining popularity amongst consumers but remain niche and have high requirements difficult to meet by all producers

--> it is hard for producers to adapt to these tougher requirements and other agro-climatic limitations appear which further limit the crop's development.

Moreover, although consumption has grown in the main consumer markets, the loss of value (commoditization) leads to a lack of profitability for the different stakeholders of the value chain.

If consumption in the North American market seems to still be very active, some warning signs appear in Europe, where consumption growth is slowing down.