## Producer country file

## **The banana in the French West Indies**

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The number two European banana production zone behind the Canaries, the French West Indies (Guadeloupe and Martinique) face numerous challenges, including frequent climate vagaries, high production costs and increasingly restrictive phytosanitary regulations. Despite these growing constraints, and production below the 200 000-tonnes mark for the past three years, the FWI industry is holding up, and undergoing a profound transformation. On the one hand, the productive fabric has been able to adapt, and very guickly at that, to the principles and techniques of agroecology in a tropical environment, to cope with changes to the European regulatory framework in terms of pesticide use. On the other hand, and thanks to a downstream strategy focused on differentiation and sustainability, the industry has been able to harness consumer demand for healthy produce of French origin. Thanks to this, the banana grown in the FWI, which is recognised as a world laboratory for good social and environmental practices for this crop, is now firmly established on the Mainland French market.



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Banane

#### History

It was during the 16<sup>th</sup> Century that the banana was introduced to the French West Indies from neighbouring islands colonised by the Spanish. The wars fought between the Spanish, British, French and Dutch throughout the Caribbean stimulated trade between the islands, and in particular boosted planting of emergency food crops and reserves for the various navies and local populations. French colonists arriving on Martinique and Guadeloupe in the 16th Century at first used the banana only for shade in the cacao and coffee plantations. It was much later, from the 1920s, that the dessert banana became a diversification and export crop in the FWI. Quick to plant and bear fruit, especially after the cyclones which ravage coffee and cacao plantations, it was deemed useful by growers, and made rapid progress as a credible alternative to traditional sugar planting. Banana production developed at this time in a fragmented agricultural landscape, alongside food crops and livestock farming. It quickly became one of the top agricultural speculations on both Martinique and Guadeloupe, alongside sugar cane.





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#### Location – Martinique

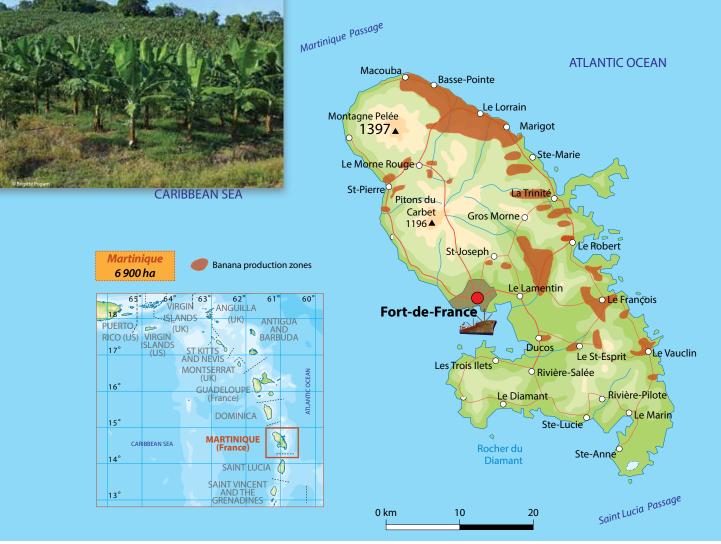
Bounded by the Atlantic Ocean to the East and the Caribbean to the West, Martinique extends over approximately 70 km long by 30 km wide. This volcanic island is characterised by its rough and varied terrain. The north is mountainous, with Mount Pelée and various volcanic ranges from which the main rivers flow, and the climate is wet-tropical, with alternating dry and wet seasons. The south contains a succession of plains and hills, peaking at less than 500 metres in altitude, and the climate is rather dry. The centre of the island is characterised by generally small and fragmented plains. Martinique has a varied range of soils. The banana planted area extends over 6 900 ha (2019 figure, including fallowed areas). Before 1990, the banana planted area was concentrated in the Atlantic north-east area, in the zone of Le Lorrain and Le Marigot. Cultivation only became possible in south-east Martinique thanks to the development of irrigation from the 1990s, in the Le Vauclin zone.

		2015	2017	2010
		2015	2017	2019
Banana planted areas	Guadeloupe	2 013	1 859	1 471
	Martinique	5 708	4 567	5 059
	BGM*	7 720	6 426	6 530
Fallowed areas	Guadeloupe	627	616	1 379
	Martinique	1 024	2 320	1 839
	BGM	1 651	2 935	3 218
Total banana areas	Guadeloupe	2 639	2 474	2 850
	Martinique	6 732	6 887	6 897
	BGM	9 371	9 361	9 748

#### Banana – French West Indies – Banana areas in hectares

\* Guadeloupe and Martinique bananas

Sources: professionals and national authorities



Map developed using data from DAAF Martinique

#### Location – Guadeloupe

With a surface area of 1 438 km<sup>2</sup>, Guadeloupe is the biggest island in the FWI. It is situated in the middle of the arc formed by the West Indies archipelago, in the Windward Islands. It comprises two twin islands separated by a narrow sea channel known as "Rivière Salée": Grande-Terre to the east has flat terrain, while Basse-Terre to the west has rough terrain, dominated by the Soufrière Volcano (1 484 metres). Nearly 80 % of banana farms are located on the broad slopes of Basse-Terre, with its highly fertile volcanic soil. The annual rainfall is high (between 2 000 and 3 500 mm in the banana zones), but unequally distributed because of the terrain and a dryer period from December to May, known as Carême. Hence on the limestone plateaux of Grande-Terre, the traditional sugar cane production zone, irrigation is a must. The banana planted area extends over 2 850 ha (2019 figure, including fallowed areas).

62

63

200 VIRGIN 61

60





Map developed using data from DAAF Guadeloupe

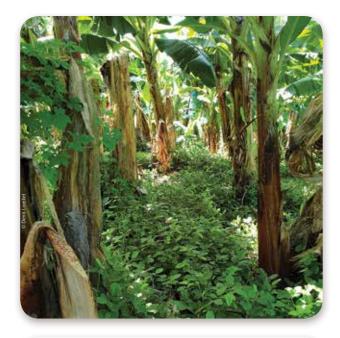
#### **Production – Martinique**

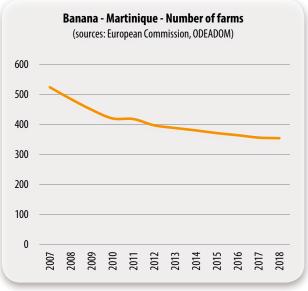
The production growth from 2008 to 2014 was due in particular to plantation renewal and to the better yields obtained, especially through implementing and spreading innovative cropping techniques harnessing preventive measures and better fertility management, under the Sustainable Banana Plan (see Sustainable Banana Plan inset) developed with the support of the State and European aid (see POSEI inset). Hence yields climbed to on average 32.5 tonnes/ha in 2015 (excluding fallowed areas), although they ranged from 10 tonnes/ha on smallholdings measuring less than 5 ha, up to 50 tonnes/ha on farms measuring 50 ha or more. Growers have implemented and spread agro-ecology based practices. This move toward a more virtuous, though more labour-intensive, production system, has been accompanied by a concentration trend. The average farm size went from 12.1 ha in 2002 to nearly 20 ha in 2015 (excluding fallowed areas). Production is now based on medium-sized facilities, highly specialised in the banana. Hence in the space of seven years and ahead of the commitments made to reduce pesticide use, the sector has become a benchmark in terms of minimising environmental impacts, while continuing to offer its employees very high-level social conditions. It remains one of the island's economic engines: the leading private employer with 10 000 employees currently working for the industry in the FWI, with 63 % of the agricultural workforce.

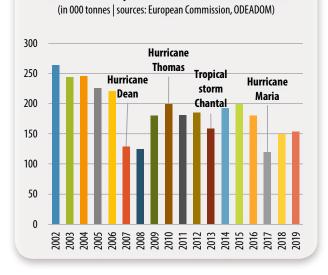
Given the urban development pressure, the useful agricultural surface area (UAS) has been falling for over twenty years. The UAS now represents just 21.9 % of the territory, as opposed to 28.4 % in 2000. This considerable overall fall is reflected in the banana sector, the number two agricultural activity in terms of surface area behind livestock farming grassland production, and ahead of sugar cane. Productive banana surface areas went from 7 400 ha in 2002 to just 5 000 ha in 2019.

In parallel, in the space of fifteen years, the number of farms focused on export bananas has practically halved, going from 688 in 2003 to just 354 in 2018. Besides the increased competition on the European market and production aid reform, production costs are high. The minimum gross wage is around 1 500 euros per month, and employees enjoy all the advantages of French labour law.

The fact remains that climate vagaries are frequent, and shape production: following Cyclone Dean, the entire banana planted area on Martinique was ravaged, with production reaching a low in 2007. Thereafter, surface areas and production took an upturn, despite Cyclone Thomas in 2010 and Tropical Storms Rafael in 2012 and Chantal in 2013. In 2015, exports reached practically 200 000 tonnes. However, more recently and especially since 2016 and 2017, following Tropical Storms Matthew and Maria, the fall in production and surface areas has been confirmed. In 2019 and 2020, Martinique was hit by a severe drought, reducing production a little bit further.



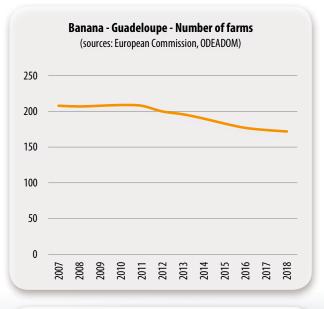




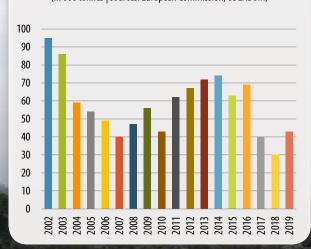
Banana - Martinique - Evolution of marketed volumes

#### **Production – Guadeloupe**

The farms are small for topographical and also historical reasons, with small and medium growers in the majority. From 2010, production made distinct progress, setting a new record in 2014, by producing more than 70 000 tonnes in a surface area of around 2 000 ha, i.e. with a yield of nearly 35 tonnes/ha. This success was due to the production recovery process in 2006 and consolidated by the Sustainable Banana Plan, the design of which was wellsuited to Guadeloupe's particular production facilities, and which improved competitiveness through concentration of surface areas. However, the banana sector had registered a distinct downturn from the 1980s, which can be explained by high land pressure, due to a dynamic demographic trend. Urban development projects reduced access to agricultural land, making it difficult for young farmers to become established. As a result, Guadeloupe's useful agricultural surface area has decreased by 25 % since the early 2000s. The productive banana planted area went from approximately 2 000 ha in 2015 to 1 400 ha in 2019. On top of that, production costs are very high. Unlike the sugar cane, situated primarily on the large plains of Grande-Terre, banana production is concentrated in zones which are not always mechanisable, due to the rough terrain (mountainous). So the crop is highly labour-intensive, and the workforce subject to French law. In addition, the tropical climate exposes the production to relatively frequent climate vagaries: cyclones, winds in 2007, 2010 and 2011, volcanic ash in 2010 and drought in 2015, 2019 and 2020.



Banana - Guadeloupe - Evolution of marketed volumes (in 000 tonnes | sources: European Commission, ODEADOM)



#### Agronomics

There are serious agronomic and climate constraints on both islands. Phytoparasitic nematodes and weevils are for the time being no longer of primary concern, thanks to a patient remediation campaign: agro-ecological management of soil parasites with large-scale fallowing, crop rotations and sound planting stock (vitroplants). Conversely, it is control of black sigatoka, which appeared in 2010 on Martinique and in 2012 on Guadeloupe, which is posing the most difficulties. Sigatoka management has becoming especially complex since the industry has had to adapt to the new prohibition of aerial spraying for pest management. Furthermore, the gradual ban on use of several molecules, as well as a reduction in the number of authorised treatments, makes disease management extremely complex.

So in the space of two decades, the FWI production model has fundamentally changed, to adopt a set of principles and techniques based on acro-ecology: alert-based sigatoka treatment, sound planting stock (vitroplants), weevil trapping using pheromones, sanitary defoliation, service plant cover enhanced by combinations with the banana plants or crop rotations, remediative fallowing, etc. Over time, Martinique and Guadeloupe have become by far among the best-performing dessert banana production and export zones, situated in wet tropical environments, in terms of reducing and mitigating environmental impacts. This agro-technical expertise enables growers to offer a wide range of products, and capitalise on the efforts made in the field. This encompasses organic, a newcomer which is set to expand, zero pesticide residue, as well as pesticide-free or custom ranges such as Carrefour's "Filière Qualité" banana.

Efforts are also being made in varietal diversification. Cirad, supporting the production industry and in interaction with IT2, has developed a conventional creation and varietal selection programme, which is aimed at obtaining varieties tolerant or resistant to diseases and pests, but also at diversifying a production model based for decades solely on the Cavendish group. The Pointe d'Or<sup>®</sup>, which exhibits a very good resistance to black sigatoka, is the first variety from this programme to be produced in the FWI, and to be placed on the market in France.

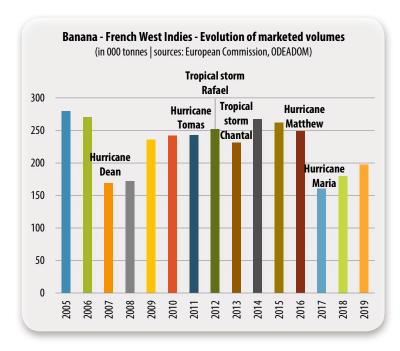
#### Organisation

Since 2012, growers have been grouped in two growers' organisations: Banamart on Martinique and LPG (Les Producteurs de Guadeloupe) on Guadeloupe. While in 2004 Martinique had four coexisting growers' groups (Sicabam, Gipam, Cobamar and Banalliance), since the 1st of January 2012 Banamart has been Martinique's sole planters' organisation.

Exports from the two islands all pass via the same marketing channel: UGPBAN (the Guadeloupe & Martinique Banana Growers' Groups Union), which since 2003 has governed all the growers' organisations in the FWI. In January 2009, the ripening centres of Fruidor group (9 in Mainland France) stepped up their production capacity, to a level of around 200 000 tonnes. In January 2020, the group acquired three new ripening centres belonging to Canavese, with a potential of 39 000 tonnes, taking Fruidor's ripening capacity to 240 000 tonnes, and making it the French number one.

In 2015, UGPBAN carried out custom industrial developments on its Dunkirk warehouses, as part of the launch of the FWI banana "francité" concept [Frenchness], which stands out for its innovative packaging. The bananas, already precut in bunches of 3, 5 or 6 fingers, are repacked in 14.5-kg net open top boxes of 80 pieces, and sashed together in batches or bunches before ripening in Fruidor's network. This major financial and human investment is part of a differentiation approach aimed at enhancing the origin. The sashed "francité" banana now represents 15 to 17 % of the total FWI supply.

In order to offer their customers a wide range of products and guarantee them a supply in case of climate vagaries in Martinique and Guadeloupe, the ripening centres are procuring from a wide range of origins. This unified organisation has invigorated the sector through implementing effective marketing and promotional policies.





The sector is also supported by numerous French public bodies. ODEADOM (Office for Development of the French Overseas Agricultural Economy) is managing the EU's POSEI programme, which provides production aid to offset the lack of competitiveness of European origins in relation to other suppliers to the EU market (dollar, ACP - see POSEI inset). When the first Sustainable Banana Plan was implemented in 2008, IT2 (Tropical Technical Institute) was set up. It contributes to coordinating research and development actions, and to supporting dissemination of technical knowledge to farms. French research centres, Cirad chief among them, handle the agricultural research locally, and maintain very close, long-standing relationships with the profession. Finally, DAAF (Martinique Directorate for Food, Agriculture and Forestry), the regional arm of the French Ministry for Agriculture, supports the agricultural profession. We can also mention the Chambers of Agriculture or Fafsea (training).

#### Exports

Europe's number two banana production zone after the Canaries, the FWI ship nearly all of their production to Mainland France. After hitting a ceiling of around 250 000 tonnes between 2014 and 2016, volumes shipped are now struggling to reach 200 000 tonnes. Since the transit of Cyclones Matthew and Maria in 2017 and 2018, and due to the growing production constraints, exports have never managed to regain their historic level.

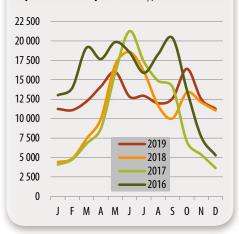
On the Mainland French market, bananas from Martinique and Guadeloupe hold a 25 to 30 % market share, with the rest going to the ACP and dollar origins. Within the space of a few years, the FWI banana has been able to strengthen its position on the French market, thanks to a new segmentation and to marketing efforts focusing on France as the origin. In addition, the recent craze for "eating French/local" has also made a big contribution to its consolidation on the market.

Bananas from Martinique and Guadeloupe are segmented in several ranges. On the one hand, the Planter section (premium), which complies with a strict set of specifications, and the Country section (category two), which are both all cultivated on the plains. The Mountain section bananas are grown at an altitude of more than 250 m.

The segmentation strategy was reinforced in 2015 with the launch of French bananas sold individually, and is continuing to move forward through diversification. Currently there are no less than three different sashed products: the French banana, Kids' French banana and Fairtrade French banana. The Kids' French banana is characterised by a smaller size and lighter weight, enabling smaller fruit to be used. Since 2017, the Fairtrade French banana has certified fruit from smallholdings (4 hectares on average), providing a revenue 20 % above the average annual premium price. Finally, the Organic French banana has appeared just recently, though the quantities remain very limited, with just 500 tonnes in 2019.

Varietal diversification is another avenue of development, with for the first time in 2020 the attempted marketing of a new, non-GMO variety: Pointe d'Or<sup>®</sup>. The fruit of this new variety presents different characteristics to Cavendish in terms of taste, grade, length, impact sensitivity, etc. Hence a test phase to adapt and attune to the logistical and marketing constraints of the downstream segment of the industry is currently in progress.

#### Banana - Martinique - Monthly incoming shipments in Europe (in tonnes | professional sources)



Banana - Guadeloupe - Monthly incoming shipments in Europe (in tonnes | professional sources)





#### Logistics

Logistics are shared between the growers on Martinique and Guadeloupe. Four CMA-CGM container ships (dedicated to the line Martinique -Guadeloupe - Dunkirk - Zeebrugge - Rotterdam - Le Havre - Montoir) transport all the bananas to Europe on a weekly basis. The voyage time is 13 days: one sailing per week out of Fort-de-France (Martinique) on Wednesday, stopping in Pointe-à-Pitre (Guadeloupe) on Saturday and arriving 9 days later at the port of Dunkirk (France) on Monday. Since 1998, the majority of volumes have been unloaded in Dunkirk, where there are two facilities for container transfer, quality control and shipment management to the ripening centres.



### **POSEI** aid

Since 1993, the EU has supported the European banana industry in the form of financial aid for production and investment, within the framework of the Common Market Organisation for the Banana (CMOB) and of the social cohesion policy. This support system was reformed in 2006, and since then, European banana growers have received 278.8 million euros every year within the framework of POSEI programmes, which comprise specific measures to ensure the continuity and development of agricultural production in the remotest regions, taking into account the handicaps specifically due to their isolation. This programme finances operations aimed at stimulating and professionalising production, structuring the industries, maintaining and improving the living standards of the growers (revenue, jobs, etc.) according to the qualitative and quantitative level of their production.

Of this total annual budget allocated to the banana, 129.1 million euros (i.e. 46 % of the total) goes to the French West Indies, with Martinique receiving 75 %, i.e. just over 96 million euros, and Guadeloupe 25 %, i.e. just over 32 million euros. The planters must maintain a minimum production level (80 % of the historic benchmark in a normal year, barring climate vagaries) to receive the full aid. Since the 2018 campaign, planters engaged in producing organic bananas have been able to access POSEI aid, with an adjustment to the calculation factoring in the loss of potential yield due to the organic mode of production. Finally, since the 2020 campaign, a specific system has provided adjusted aid to planters suffering big losses caused by black sigatoka, and employing sustainable management practices (defoliation).

As part of the seven-year renegotiation of the EU budget and of the CAP reform, negotiations are in progress for all agricultural aid allocated by the European Union for the period 2021-2027. While there are questions over changes to the overall POSEI budget, especially because of the departure of a major contributor to the EU budget, the United Kingdom, the European Parliament has decided to maintain the budget for the period 2021-2027. The final decision is to be made public in late 2020.

### **Banana** French West Indies

#### The Sustainable Banana Plan

Launched in 2008 by the French Ministry for Agriculture, the primary objective of the Sustainable Banana Plan is to reduce pesticide use in banana cropping systems in the FWI, and promote more sustainable agricultural production in environmental, economic and social terms. It brings together the banana industries of Guadeloupe and Martinique, IT2 (Tropical Technical Institute), the local authorities and Cirad. It is derived from the same rationale which guided the Grenelle Environment Laws and the Ecophyto Plan, which set out to halve the quantities of pesticides used by 2018. In particular, it incorporates an R&D aspect and a socio-economic aspect aimed at valuing and safeguarding the agricultural workforce, and maintaining production, an engine of the local FWI economy.

The review conducted of the first Sustainable Banana Plan 2008-2013 hailed the good results obtained by the industry in terms of the environment: the objective of a significant reduction in pesticide use in banana plantations was achieved, with for example in Martinique a 51 % decrease in quantities of active ingredients per hectare. This fall was due in large part to a marked and long-term reduction in nematicide and insecticide use, and to a lesser degree to a reduction in herbicide use, alongside increasing use of service plants and new planting techniques. Research and trials are conducted by Cirad. Hence new varieties of disease-resistant or tolerant non-GMO banana plants are being investigated and tested, and innovative cropping techniques respecting the environment and local biodiversity are being developed: sanitary defoliation against sigatoka, the generalised implementation of service plant cover, use of pheromone traps against weevils, soil remediation in terms of phytoparasitic nematodes through fallowing and crop rotations, etc. IT2 is contributing to the creation and transfer of innovations, as well as supporting the growers.

With the Sustainable Banana Plan, the industry is expressing its desire to continue with the appropriation of sustainable agriculture methods by growers and to keep innovation at the centre of its strategy. The objective is not to seek productivity at any price, but rather to produce a universally renowned sustainable banana, which complies with very high-level socio-economic and environmental standards. The second Sustainable Banana Plan 2016-2020 is an extension of this effort, which has profoundly altered the production sector in the French West Indies, and contributed to making the FWI a world laboratory for good social and environmental practices. Hence the sector guarantees for the FWI the production of an agro-ecological banana more respectful of the environment and human health, and for European consumers, the fruit of the highest quality and safety.