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How have Europe's outermost regions dealt with the economic and social consequences of the COVID-19 crisis?

Effects, policies and recommendations

Abstract: Our paper contributes to the literature by documenting how regions have experienced and managed the COVID-19 crisis, particularly for regions that are largely understudied and whose territorial characteristics (related to hyper-remoteness and poverty) deserve greater attention. To do so, we studied regional strategy and planning documents and conducted 32 semi-structured interviews with public authority representatives, sectoral actors and civil society groups. We show the socio-economic consequences of the crisis and local policy responses. Our paper proposes a reflection in terms of public policies on what could be the 'World after' in the outermost regions (ORs) and highlights how the COVID-19 crisis can be seen as an opportunity to design and implement future territorial development policies more adapted to the context and territorial characteristics of these regions. Building a resilience policy in the ORs requires strengthening the territories' capacities, which involves their structural equipment.

Keywords: COVID-19, outermost regions, remoteness, smallness, poverty, local policies

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1. Introduction

The COVID-19 pandemic has caused an unprecedented crisis in social, political and economic systems, not only in Europe but worldwide (Jeanne et al., 2022). Since February/March 2020, European countries, regions and cities have taken various measures to try to contain the spread of the virus (ESPON, 2021; Dentinho & Reid, 2021; Bourdin et al., 2022). While these measures have slowed the spread of the pandemic (Bourdin et al., 2021), this has been accompanied by significant socio-economic consequences (ESPON, 2022). In this regard, European cross-border regions were particularly affected by covidfencing processes (Medeiros et al., 2021). These measures, while aimed at relieving the pressure on health systems, have led to abrupt changes in how people work, study, shop, socialise and travel. The effects have also been felt in many sectors of economic activity (Bonet-Morón et al., 2020; Houston, 2020).

Various scientific studies show that the regions that have been subject to strict containment measures for the most extended period of time have been socially and economically the hardest hit, even more so than those regions with the highest mortality rates (Kapitsinis, 2020; Bourdin et al., 2022). The greater sensitivity of the outermost regions to economic downturns—a result of their high rate of micro-enterprises and self-employed workers, their hyper-remoteness and their dependence on a few economic sectors, such as tourism (Mazzola et al., 2022)—makes them more vulnerable to the current crisis. Therefore, our article aims to examine the effects of the crisis in the European Union (EU) Outmost Regions (ORs)¹ and the local policy responses made by these regions to mitigate the crisis. Moreover, far from being a crisis with only negative consequences, the pandemic could also have beneficial effects, such as benefiting digital transition, sustainable mobility or the strengthening of partnerships between economic development stakeholders at the local level (ESPON, 2022). Therefore, our article also seeks to determine to what extent the COVID-19 crisis has presented opportunities for ORs.

Our article contributes to the literature by analysing how local governments have managed the COVID-19 crisis. So far, while we have identified many articles on the geography of COVID-19 and its socio-economic impacts, we have yet to identify any work on how regions in general, and particularly outermost or island regions, have provided local policy responses to the effects of the

crisis. Given the specificities of the ORs, it seems relevant to focus on these territories, as their specific constraints make the analytical task more difficult. To do so, we studied regional strategy and planning documents and conducted 32 semi-structured interviews with public authority representatives, sectoral actors and civil society groups.

In the rest of this article, we propose a literature review that presents the socio-economic and governance context of the ORs in which COVID-19 was introduced. We then present the methodology adopted. Subsequently, our results are presented, in which the socio-economic consequences of the crisis and local policy responses are highlighted. Finally, our article proposes a reflection in terms of public policies on what could be the 'World after' in the ORs and to highlight how the COVID-19 crisis can be seen as an opportunity to design and implement future territorial development policies more adapted to the context and territorial characteristics of these regions.

2. The outermost regions: a particular context in which COVID-19 has intruded

The COVID-19 pandemic has had significant impacts on the global economy and society, that are likely to be felt for years to come. The pandemic has resulted in the loss of millions of jobs worldwide², particularly in industries such as tourism, hospitality, and retail. Consequently, many countries experiencing recession and negative growth rates. According to Mahler et al. (2022), the pandemic has had a disproportionate impact on marginalized communities, with many people experiencing increased poverty and inequality. Another consequence of the pandemic is the disruption of global supply chains, leading to shortages of essential goods and services (Zu et al., 2020). Finally, governments around the world have implemented significant stimulus packages to mitigate the impact of the pandemic and have also increase their spending on their healthcare system, resulting in increased government debt (Tandon et al., 2020). In the EU, the socio-economic consequences were important (ESPON, 2022). For example, the pandemic has led to a contraction of the EU economy. The European Commission estimates that the EU economy contracted by 6.1% in 2020 and the unemployment rate in the EU increased from 6.7% in February 2020 to 7.8% in January 2021. Regarding the ORs, the consequences were also important, due to their characteristics. The closure of borders and restrictions on travel have led to a significant decrease in tourism, which is a major source of revenue for many regions. ORs have also faced challenges in terms of transport and logistics, including the delivery of essential goods and medical supplies. In the ORs, the pandemic has led to significant disruptions in education, with many students facing challenges in accessing online education, due to limited access to internet. In general, ORs have been hit harder, as they have specific characteristics that make them vulnerable to shocks. These are reviewed below.

The outermost regions are considered special under European legislation (i.e. a *lex specialis*). According to Article 349 of the European Treaty, outermost status refers to the

structural social and economic situation of the French overseas departments, the Azores, Madeira and the Canary Islands, which is compounded by their remoteness, insularity, small size, difficult topography and climate, economic dependence on a few products, the permanence and combination of which severely restrain their development.

In fact, the geographical constraints are such that the Treaty provides for specific treatment³ for these structurally weak territories (Box 1). These territories are characterised by both a small surface area and a topography (mountainous, volcanic, covered by dense forest, etc.) that reduces the use of the already reduced surface area. It is therefore difficult to envisage an exploitation of the territory that would allow significant economies of scale. This limits the potential of growth engines that could counteract the phenomenon of poverty. Moreover, their hyper-remoteness directly affects the conditions of development. Indeed, this constraint of distance from the 'Old Continent' implies less cooperation, or at least more difficult direct cooperation. Whereas during the COVID-19 crisis, cross-border cooperation was implemented, for example, between French and German regions to relieve saturated health services, such

cooperation was made more difficult by the hyper-remoteness of the outermost regions (ESPON, 2022).

Box 1

The Structural Fragility of the Outermost Regions

The structural fragility of the outermost regions:

- high dependence on external trade with low regional integration;
- economic specialisation (preponderant weight of certain sectors, such as tourism, specialisation of agricultural production, etc.);
- entrepreneurial fabric composed of more than 95% of very small enterprises (SMEs), which are considered more sensitive than large enterprises to economic shocks; they have less equity capital and achieve lower margins than their counterparts in continental Europe;
- weight of the informal sector;
- a poverty rate that is much higher than on the European continent; and
- small land area combined with difficult topography.

Source: European Commission. (2018). Regional policy & outermost regions.

http://ec.europa.eu/regional_policy/en/policy/themes/outermost-regions/

Despite the acknowledged dynamism of their economic activity, the overseas economies are still marked by a high level of poverty, compared to the intensities that characterise continental regions (European Commission, 2021). Inequalities are more marked there than elsewhere. Betancort et al. (2019) noted that, for the Canary Islands, there are many inequalities in terms of opportunities, whether related to gender or education. This poverty is particularly linked to their insularity and isolation. As Deidda (2016) pointed out, insularity is a geographical constraint that generates the economic and social peripheralisation of people and places. He added that this handicap can have impacts on the capacity of these regions to be able to achieve the Sustainable Development Goals. In these regions, the proportion of the population living below the poverty line (almost 40%) is significantly higher than the EU average. For example, Audoux et al. (2020) noted a level of poverty for the inhabitants of the five French overseas departments, particularly French Guiana and Mayotte, that is systematically higher than in all other regions of continental France. In Mayotte, 77% of the population lives below the poverty line, which is more than 200,000 people (Merceron, 2020). This prevalent poverty in terms of living standards, housing conditions and difficulties in accessing high levels of education has inured many inhabitants to shocks (Armstrong & Read, 2021). These conditions of economic poverty can also be observed in housing, which is often precarious, even unhealthy. There are more fragile buildings in these areas than in the rest of Europe (Clair et al., 2019). For example, 37% of single-family homes in Mayotte are tin shacks. 97% of these precarious dwellings have no sanitary facilities, 62% have no running water, and 78% have a degraded or absent electrical installation (Cottureau, 2021). In addition, access to running water and electricity remains a problem for some dwellings, with significant consequences for health and living conditions. These housing conditions are conducive to the emergence of several health risks and the development of pathologies such as respiratory, infectious and waterborne diseases (Bonifay et al., 2017).

The regional development literature has identified the main determinants of gaps between developed and (ultra)peripheral regions (Licio & Pinna, 2021). Several papers highlighted the risks associated with the misuse of regional policies and how this can imply bad habits and rent-seeking behaviours and generate consequences similar to those studied in the paradox of transfer and Dutch disease literature (Poirine, 1995; Croissant & Jean-Pierre, 2002). Other contributions include differentials in R&D spending (De Groot and al., 2019) and in the quality of the labour

force (Capello & Nijkamp, 2019; Diebolt & Hippe, 2022). The existence of wage rigidity can also explain development gaps (Baddeley et al., 2000). Moreover, several authors (Pounder & Gopal, 2020; Gutiérrez-Romero, 2021) have pointed out that the still-large presence of the informal sector arrested the development of lagging economies, especially island economies.

From the same perspective, other contributions have focused on the mechanisms and factors that may underlie the existence of development traps and show the importance of some key factors in the different growth patterns of islands and regions (Diemer et al., 2022; Mazzola et al., 2022). Polyzos and Tsiotas (2020) highlighted that the lack of digital and transport infrastructure could explain why peripheral regions experience difficulties in breaking out of their development trap. Moreover, where air and port infrastructure exists, operators and companies are often in a monopoly or quasi-monopoly situation, resulting in high transport costs for consumers (Campos et al., 2015). The challenge of mobility and accessibility is therefore significant for these regions, as transport infrastructure, which is on average less developed than in the rest of the EU, causes traffic congestion problems. For example, it can take several hours to travel a few kilometres in Mayotte, due to saturated road infrastructures and the absence of a public transport network (currently under construction). These problems are all the more important as services to the population are often concentrated in the capital. A person living in the south of the island has to come to Mamoudzou to go to an administrative service such as Pôle emploi (national employment agency).

Moreover, the small size of these regions means that their consumer market is necessarily small. In addition, many of these regions do not have land borders that would allow them to sell their goods more easily (Felsenstein & Portnov, 2005). As a result, it is more difficult for firms to have a large enough market to grow, unless they decide to export. However, SMEs tend to have more difficulties exporting (Ratten et al., 2007), partly due to a weaker entrepreneurial spirit and inadequate infrastructure (Baldacchino & Fairbairn, 2006).

Finally, because of their ultra-peripheral nature, these regions are also more vulnerable to economic shocks, as their economies are often not very diversified and depend heavily on imports. In most of these regions, given their environmental and landscape heritage resources, tourism is a major source of income. But this asset can impede development (Chaperon & Bramwell, 2013) and can even have dramatic effects on the economy in times of economic crisis (Duro et al., 2021). Economic fragility is also linked to a high dependence on imports of strategic resources, such as energy or industrial products (Katircioglu, 2009).

Far from being independent of each other, the difficulties encountered in these specific regions are systemic, and this systemic character reinforces the mechanisms of precariousness for the local populations. This may therefore explain why a higher than average share of the population is without jobs and on minimum social benefits, and why there is a higher than average share of low-skilled jobs (Di Cataldo and Rodriguez-Pose, 2017). Consequently, any unfavourable economic shock experienced by these economies is not neutral and can significantly affect populations with vulnerable living standards. This fragility must be understood in terms of the vulnerability of jobs for those employed and a drop in purchasing power in the event of an inflationary shock.

Faced with this multitude of causes that can hinder the dynamics of peripheral regions, one of the interests of this paper is, through an analysis of the effects of the COVID-19 crisis, to point out the relative importance of these different brakes on the dynamics of regional economies and their resilience.

Regional resilience refers to a region's ability to withstand and recover from significant disruptions or challenges, such as natural disasters, economic downturns, or social and political unrest (Hassink, 2010; Gong and Hassink, 2017). Resilience involves a combination of preparedness, response, and recovery measures that help regions to adapt and bounce back from these challenges (Christopherson et al., 2010). Several researchers have identified key factors that contribute to regional resilience (Psycharis et al., 2014; Giannakis and Bruggeman, 2017; Houston, 2020). Regions with a variety of industries and businesses are less vulnerable to

economic shocks or downturns. However, as mentioned before, ORs have not a diversified economy. The access to reliable infrastructure, including transportation, energy, and communication networks, is also crucial for a region's resilience. Due to their insularity, distance from the mainland, small size, and limited resources, ORs have less infrastructures capacities. However, despite these challenges, ORs have demonstrated resilience in many areas. ORs have shown resilience in the face of natural disasters and climate change (Ribalaygua et al., 2019). Many of these regions have experienced extreme weather events such as hurricanes, floods, and droughts, and have developed effective emergency response plans to minimize the impact of these events. They have also implemented measures to adapt to the changing climate, such as developing renewable energy sources and implementing sustainable land-use practices. Overall, ORs still face challenges in areas such as economic growth, social development, and infrastructure. It is for these reasons that EU has implemented a range of policies to support these regions, including financial assistance, capacity building, and research and innovation programs (Mendez et al., 2019). With the pandemic, the resilience of ORs was at stake. In this context, due to the ORs specificities, analysing how local authorities have managed the pandemic and tried to cushioning the shock and ensuring greater resilience seems relevant.

3. Methodology

To explore the effects of the crisis in the ORs and to analyse the local policy responses made by these regions to mitigate the crisis, we have carried out an in-depth exploratory study based on three case studies: the Azores, La Réunion and Mayotte (Figure 1). The selection of these case-studies was based on the deep knowledge that the authors of this paper have on these specific territories and on their position in the bottom of the group of the less socioeconomically developed EU regions. This case study approach makes it possible to highlight the specificities and commonalities of the different territories studied, especially in a public policy analysis context (Weimer & Vining, 2017). These three regions were chosen for various reasons. Firstly, we wanted to have an intra- and inter-country analysis. We therefore chose one Portuguese island (the Azores) and two French islands (Reunion and Mayotte). Furthermore, we thought it would be interesting to analyse the case of Mayotte because it is the poorest region in the EU (and de facto in France) and the conditions of ultra poverty make it very vulnerable a priori.

+ short description of case studies

We conducted a multi-methods research for the three case studies, combining a documentary analysis and semi-structured interviews. For the documentary analysis, we collected strategic and planning documents at the regional and local levels describing the effects of the COVID-19 crisis and the policy responses implemented. Then, we conducted 32 semi-structured interviews with representatives of public authorities, private actors and civil society (see list of interviewees in Appendix 1). It should be noted that it was not easy to have access to the various stakeholders. Indeed, given the urgency of the situation at the time of the interviews, access to actors was limited and we were not able to interview all the people we would have liked to. This is one limitation of our research. In Mayotte, we had easier access to the interviewees because we had many local contacts and the small size of the island facilitated networking. The interviews were mostly conducted face-to-face but also online due to restrictions related to the health crisis. Each interview lasted between 45 minutes and two hours. Our interview guide addressed several main themes concerning the socio-economic impacts of the COVID-19 crisis; the types of local policy responses made and their effects; and a more general reflection on what the interviewee had learned from the crisis and how to design a 'World after'.

Following these interviews, we triangulated the information gathered through these interviews with the information from the document analysis. We manually categorized the qualitative data (Saldaña, 2021) based on criteria deduced from the literature on the specific conditions of ORs (smallness, hyper-remoteness, socioeconomic challenges (high levels of unemployment, high

dependence on external trade, weight of the informal sector and a lack of diversification in their economies) and a specific legal status).

4. Results

4.1. The effects of the crisis in the ORs

First, in economic terms, there are differentiated effects over time. During the containment period, businesses closed temporarily. The closure of air links and the limitation of freight by ship affected value chains. Afterwards, and thanks to national and European measures to support economic activities, the vast majority of businesses were able to resume their activities. Locally, the authorities often also put in place aid for small businesses, but several testimonies from managers report that these were very difficult to obtain and that the amounts remained insufficient as a real lever. According to the interviewees, the main problem today is supply on the one hand and the increase in the price of transport and goods on the other. Additionally, the reactivation of key local economic activities such as tourism was partly affected by a lack of workers in the post-pandemic scenario.

Most of the elected politicians interviewed stressed a form of resilience, despite the sometimes brutal impact of the crisis in these regions. One elected official from La Réunion even mentioned the existence of a net creation of businesses and jobs. This can be explained by, among other things, the fact that most of the aid for economic activities was conditional on the effective declaration of employees, obliging some companies to declare jobs that were not declared before the crisis. From this point of view, the crisis and the mechanisms for conditioning aid have had positive effects on the fight against the informal sector, which, according to several authors, is an obstacle to development (Pounder & Gopal, 2020; Gutiérrez-Romero, 2021). On the other hand, as was the case of the Azores, inhabitants living in an informal economy (Silva et al., 2014) and did not benefit from state social support to mitigate the social impacts of COVID-19.

Thanks to employment plans, such as the Petrel plan⁴ in La Réunion, a favourable socio-economic ecosystem has been created in the ORs which aims to (i) strengthen employment and integration aid, (ii) improve support for beneficiaries of minimum social assistance and (iii) encourage support for vocational training for job seekers and apprenticeships. This Petrel plan, which had been initiated before the pandemic, was accelerated by the crisis. From this point of view, COVID-19 has acted as a catalyst for measures such as this.

As a corollary to this management of the COVID-19 crisis, during this first phase there was an overall drop in unemployment rates in most of the outermost regions, with the exception of the Canary Islands and Madeira (see Table 1). This is probably due to the effect of the massive 'whatever it takes' scheme for the French regions (ESPON, 2022) and the greater exposure of the Canary Islands and Madeira to the cessation of the tourism sector (less dependence for the Azores).

Table 1

Unemployment Rates in ORs

	2019	2020
Guadeloupe	21	17
Guyana	18.3	17.1
Martinique	15	12
Mayotte	30	28
La Réunion Island	21	17
Canary Islands	19	25
Madeira	7	10.7
Azores	6	5.5

Since the summer of 2021, clear signs of economic recovery have been observable, particularly in certain sectors, such as construction, which sometimes lacks the capacity to accept new orders due to a lack of manpower or raw materials/materials. On the other hand, other economic

sectors, mainly related to the hotel industry (restaurants, accommodations, bars, etc.) are still far from pre-COVID-19 activity figures. Many interviewees mentioned the strong impact of the crisis on the tourism sector, and consequently on the whole economy. This is in line with the effects of dependence on this particular sector (Duro et al., 2021). Several explanations can be put forward: on the one hand, the recovery of tourism in the world remains moderate (Sharma et al., 2021), and according to the interviewees, the outermost regions are not immune to this; on the other hand, several elected representatives interviewed explained to us that as the COVID-19 crisis made workers in this sector aware of their working conditions, they are not necessarily inclined to work in tourism again.

The pandemic has also highlighted the import dependencies of these regions. Several of the planning documents analysed highlight the need to move towards greater food and industrial self-sufficiency, as disruptions in supply chains have had unprecedented economic consequences for these regions. As Katircioglu (2009) pointed out, this dependence is systemic, and it is difficult to find adequate solutions in territories characterised by remoteness and smallness.

On the social front, there has not been the systematic increase in inequality that might have been expected. However, several interviewees indicated that state aid to support economic activity would eventually come to an end, and that the effects of the crisis will likely be felt at that time. Several local authority representatives pointed out that people on minimum social benefits and civil servants have not been affected in terms of reduced income. On the other hand, some private sector employees lost part of their income, or even their jobs, when public aid was insufficient to maintain their businesses. But one of the immediate impacts of COVID-19 was that it immediately halted the informal economy, such as the selling of fruit and vegetables on the roadside, undeclared work on building sites, and childcare. However, great concern was quickly expressed by the poorest inhabitants, for whom this work was vital. Several NGO representatives emphasised that some people in ORs worked daily out of necessity, as they lived in very precarious social conditions. This is particularly true in Mayotte. As a result, the population very quickly felt the need for food aid and help with access to water. The pandemic therefore very quickly worsened the living conditions of the most disadvantaged, who found themselves crammed into precarious housing. At the local level, the municipalities and decentralised authorities, in conjunction with NGOs, tried to find solutions to these problems relating to the social vulnerability of a large part of the population by distributing food vouchers and installing new water fountains and ramps. From this point of view, the crisis has made it possible to target more people who were not 'in the limelight'.

At the level of the regional authority, taxation has suffered a shock, particularly due to reduced travel (fuel taxation has fallen) and lower consumption and, therefore, imports (leading to a reduction in revenue from dock dues in the French outermost territories). In the French overseas departments, fuel taxation differs from that on the continent. In this context, the tax revenue from fuel consumption is directed mainly towards the regional authority. Similarly, dock dues tax local and imported products differently. Different rates or exemptions are applied—on the proposal of the regional authority and with the authorisation of the European Commission—as a means to support the competitiveness of local production or to reduce the price of essential goods. Therefore, any reduction in consumption due to a crisis can have an effect on tax revenues. This is a problem that several local elected representatives mentioned to us in their interviews.

Finally, another important aspect related to the impacts of the crisis is the effects on governance. As the Territorial Agenda 2030 points out, 'Territorial cooperation on common objectives is essential to increase the resilience of municipalities, regions and countries, while strengthening their recovery process'. However, according to the interviewees, the COVID-19 crisis will have strengthened this cooperation between policy sectors, levels of governance and different groups of society in the outermost regions in order to ensure that no one is left behind, not only in recovering from the current crisis but also in the transition to a fair and sustainable Europe. Thus, in the short and medium term, the COVID-19 pandemic has led to a strengthening of existing

collaborations between stakeholders, but also to the initiation of new collaborations between public authorities and local associations. In the outermost regions, our interviews show a real willingness on the part of the regional executive to involve the heads of networks, with a desire to work together both bilaterally and multilaterally. In this sense, the crisis will have made it possible to progress at a faster pace than expected and to accelerate the change of posture of the actors. However, our analysis highlights the maintenance of a form of expectation vis-à-vis the State and the EU in terms of logistical and financial support.

4.2. Local policy responses to the crisis

The fight against poverty, inequality and social exclusion has been the top priority of all structures and policy makers during the different waves of COVID-19. However, the measures put in place were not necessarily long term and were more palliative measures than actions aimed at reducing the impact of future crises (ESPON, 2022). Nevertheless, it should be stressed that these measures to mitigate the consequences of the crisis have been effective overall and have helped to avoid a major social crisis.

The reactivity of the authorities at different levels has been decisive in this context. In the different regions analysed, this responsiveness was clearly observed through the financial tools deployed. Several of the interviewees nevertheless pointed out that the mobilisation of this financial aid remained complex, as with other territorial development aid programmes.

A distinction can be made between support and recovery tools. The former were more specifically put in place by the states during and after the containment. They include measures such as national solidarity funds, which have made it possible to cushion the emergency needs and socio-economic consequences. The European Commission also reacted swiftly, immediately adapting its intervention mechanisms to the emergency. Several interviewees told us that this expenditure at the beginning of the pandemic was then reintegrated into the European React-EU scheme.⁵ The crisis has made it possible to accelerate the deployment of funding mechanisms, which had previously been criticised for being too viscous and cumbersome to implement (Bachtler et al., 2023). According to several private and civil society actors, the support measures deployed have made it possible to breathe new life into business activities and to promote the digital and ecological transitions. To date, territorial development actors are mobilising both classic tools (Operational Programme 2021-2027) and specific tools created to revive the economy (REACT-EU) (Bachtler et al., 2023).

Some of the measures taken by local authorities have been proactive. In other words, they are long-term actions aimed at anticipating possible future crises (ESPON, 2022). Among these measures we find those concerning the fight against 'illiteracy' because, according to several NGOs interviewed, the low education level of the population is an obstacle to the use of digital tools. However, a digital transition is necessary in the outermost regions. This means not only improving digital accessibility (telecommunication infrastructures, etc.), but also developing its use. Thus, mobile digital access points were financed during the crisis in the Azores, La Réunion and Mayotte. Digital mediators are available to accompany citizens and help them carry out online procedures and administrative tele-procedures, with the possibility of printing, photocopying, scanning and surfing the Internet. The aim is for the entire population to have access to Internet connection points and places where they can carry out their administrative procedures and access various services online. In addition, for La Réunion and Mayotte, a digital voucher tool dedicated to very small businesses has been set up to maximise their activities via digital technology (in particular, to help digitise trade). Companies have also benefited from the deployment of an online application tool that integrates the accounting chain in a dematerialised way, saving time for teams and companies. These digital tools have made it possible to support the regularisation of businesses towards the formal economy.

Proactive measures also include those that support purchasing power. During this crisis, the prices of several goods were subject to upward pressure, either because of shortages or because of breaks in certain value chains. This capacity to contain prices also owes a great deal to the

presence of an important readability tool: the Price Quality Shield (PQS). The PQS takes the form of a basket of basic consumer goods, the prices of which are observed and changes authorised within the limits of maintaining the price of the overall basket. The PQS has been in place on La Réunion Island for almost ten years and was then extended to the other French overseas departments. This measure is seen as a primary means of combating the high cost of living. When we look at the governance put in place to provide rapid responses to the pandemic, we can see that the urgency of the situation sometimes led to a lack of consultation between stakeholders (Sahel, 2016; Strickling & Hill, 2017), resulting in the implementation of similar actions that overlapped. Several actors (associations, elected representatives, etc.) denounced the lack of dialogue with the regional state services, which occupied a sort of principal position. For example, some communes in Mayotte decided to rapidly distribute food parcels containing basic necessities (oil, flour, sardines, etc.) on their own, which sometimes led to large gatherings of people who did not respect the barrier gestures. However, all the organisations and structures learned a lot from their mistakes in the first wave, and the continuation of the food aid and home help policy—particularly for the most vulnerable people—ran much more smoothly in subsequent waves.

5. Recommendations: towards agile, frugal and innovative policies for greater resilience

5.1 'Preventing is better than curing': the need to build up resilience mechanisms

The COVID-19 pandemic has shown that the forms and origins of crises can be very diverse, and that their effects are increasingly systemic, affecting health, the economy and the living environment, ultimately affecting the most fragile among existing populations. On the front line, the territories are discovering their great vulnerability and capacity to react, adapt and transform themselves in the hope of being better prepared for future crises.

Local authorities have many levers to act in the face of challenges that are also local, such as the management of water and energy, the preservation of soil and natural environments, and the development of the circular economy. These initiatives and actions set up to combat the effects of the COVID-19 crisis have provided an opportunity to open a dialogue with various local players—such as elected representatives, economic players, associations and residents—to develop responses adapted to the realities on the ground and to present and future hazards.

More than ever, and the COVID-19 crisis has reminded us of this, it is essential to co-construct genuine territorial resilience strategies. Resilience can be defined as the capacity of people, communities, institutions and businesses to survive, adapt and develop regardless of the types of shocks and acute internal or external crises they experience (Rizzi et al., 2018). In the context of an uncertain future, to say the least, co-constructing a resilience strategy for ORs is crucial. Against this background of hyper remoteness and the specificity of poverty and limited resources, it is a matter of working towards effective and pragmatic solutions. The ecosystem of actors in the territories in question needs to evolve to make it more flexible and adaptable to changes and hazards. Therefore, a systemic and operational approach is necessary and must be based on several guidelines, with the idea that they should be agile (given the territorial characteristics of these regions), frugal (given the limited resources and means of these regions) and innovative (because only intrinsically innovative measures will make it possible to meet the challenges of future crises). The key word in these approaches to greater resilience is anticipation. With regard to the specificities of the ORs, several guidelines have been identified:

(i) Inclusion: the construction of a resilience strategy must be based on the broad consultation and involvement of stakeholders, thus implying shared governance and territorial cooperation. Inclusion must also be understood in its "social" sense; in other words, it should involve the construction of a strategy that does not forget anyone and which involves even that first of all endeavours: ensuring that future shocks do not amplify the social inequalities that are already prevalent (ii) Integration: the resilience strategy should be integrated in the sense that it should

be designed so that different stakeholders work together in its implementation to achieve multiple benefits.

(iii) Territorial intelligence: the resilience strategy must be built in such a way that there are learning effects from previous shocks, that feedback and the sharing of good practices are organised, and that experiments are proposed and then generalised if they prove positive. Moreover, territorial intelligence also implies anticipation and strategic vigilance.

(iv) Robustness: the resilience strategy should be designed to limit the spread of potential failures and damage generated by a shock.

(v) Sobriety: in a context of significant land constraints and limited resources, it is crucial to identify ways to make more efficient use of available resources.

5.2. Multi-stakeholder and multi-scale cooperation as a determining factor

The pandemic will have had its virtues for the outermost regions, particularly in terms of organising the coordination of actors in crisis management, identifying the measures to be taken as a priority in the event of future crises, and implementing actions that are likely to last beyond the crisis and that will make it possible to improve their resilience. Our study highlights the need for the vertical (Europe-State-Region) and horizontal (between local authorities on the territory) coherence of public policies. Given the small size of the regions concerned, the stakeholders in territorial development tend to know each other well. If until then the actors did not systematically collaborate on files that they could have managed together, the pandemic will have triggered a real desire to work more often on joint files/projects. The responsiveness of the stakeholders was also decisive and must be highlighted here. Consequently, the actors must continue to share these cooperation practices to avoid the possible overlapping of policies, which is always harmful to the main beneficiaries. Our interviews also highlight that the pandemic will strengthen the political alliances of all political forces aligned with the same policy objectives to resolve or mitigate the negative impacts of the pandemic.

Finally, given the specificities of these territories, it seems essential to progress in the application of the principle of subsidiarity in differentiation, decentralisation and deconcentration. The COVID-19 crisis demonstrated that, faced with a complex and unprecedented situation, it was a situation for which the real solutions for resilience were built, both for the inhabitants and for those in the field: to provide assistance to the most deprived through meal baskets, to find solutions to house people other than at home and to isolate those who are contagious, to provide masks, to educate the population in barrier gestures, and to find solutions to continue providing pedagogical and educational support to children who do not have access to computer resources (ESPON, 2022).

In those ORs where an 'economic continuity unit' and/or a 'resilience plan' working group have been set up, it seems important to be able to continue these initiatives over time, as they enable cooperation, territorial dialogue and information sharing. From this point of view, the creation of a 'territorial committee for the cohesion of aid and support systems' would make it possible to identify the available aid systems put in place by the various parties in order to (i) avoid any redundancy in the aid deployed, (ii) allow for better visibility of this aid, and (iii) collectively foresee the needs in terms of support and find solutions adapted to the stated needs.

Finally, this analysis of the multi-scale cooperation dimension would not be complete without mentioning the issue of cooperation between territories (whether or not they are outermost regions) in their respective basins. The example of the necessary health solidarity deployed in the Indian Ocean between La Réunion and Mayotte (and also with neighbouring countries South Africa, Madagascar and Mauritius) for the evacuation of residents or European nationals appears to be a perfect illustration supporting the fact that the strengthening of territorial resilience must also be imagined beyond geographical borders.

6. Conclusion

Our paper contributes to the literature by documenting how regions have experienced and managed the COVID-19 crisis, particularly for regions that are largely understudied and whose

territorial characteristics (related to hyper-remoteness and poverty) deserve greater attention. The COVID-19 crisis has highlighted the capacity of public authorities at different levels (European Union, States, regions, municipalities, etc.) to mobilise collectively to deal with such a shock. This mobilisation has often taken the form of compensation or mitigation measures via financial arrangements that are sometimes on a large scale and which take the form of 'whatever it takes'. Even if they had the merit of limiting the negative consequences of the pandemic, they did not aim to follow an original and innovative path of recovery, creating a new balance and following a process of transformation to do things differently compared to the way things were done prior to the crisis. While this 'checkbook policy' has, on the whole, helped to cushion the crisis, it has not necessarily created the conditions for building a genuine resilience policy. However, building a resilience policy in the ORs requires strengthening the territories' capacities, which involves their structural equipment.

From this point of view, future policies must aim to consolidate the adaptation capacities of the outermost regions. For if the stakeholders' expectation is that the tools should remain in place, there is a great risk that the construction of a resilience policy will be transformed into the construction of a palliation policy, which would be tantamount to a step backwards. However, the challenges facing the ORs require that the outermost territories be given the necessary and sufficient capacities to implement local policies to consolidate genuine territorial resilience. This requires continued investment in the major areas likely to improve resilience in the various transitions facing these economies: digital, ecological, energy and accessibility. The degree of importance varies according to the context of the ORs concerned, particularly when it comes to maintaining the effort on heavy infrastructures, or rather giving priority to investments in soft areas: R&D, ecosystems, construction of networks, and so forth. This differentiation between ORs may also concern the priority issues in the major transitions in ecology, energy, waste management, digital technology and inclusion.

The topicality of the question posed in this article, and the urgency of the measures implemented, are evidenced by the EU initiative called Next Generation EU,⁶ which plans to invest 750 billion euros over the period 2021-2027 to address the negative impact of the pandemic (European Commission, 2020). This initiative is based on three pillars, namely (i) supporting Member States with investments and reforms, (ii) boosting the EU economy by encouraging private investments and (iii) taking into account the lessons of the crisis. More than ever, our results resonate with the strong support of the EU (confirmed in the European Commission's Communication to the Outermost Regions of 5 May 2022) to not only unlock growth and development potential, but also to improve the capacity of cities and regions to withstand future shocks. As the Commission reminds us, it is up to local authorities to use their judgment and set the right priorities.

From this perspective, emergence from the COVID-19 crisis highlights the challenges facing the ORs: reducing the vulnerability resulting from their isolation and dependence on several resources, and better managing the development of their territory to accelerate the transition to a more sober operation. There is also the issue of housing and living conditions, and the balance between the high, or isolated, and coastal parts of the territories. One of the outcomes of this crisis, and not the least, is the rediscovery of the fundamentals of each peripheral region with regard to nature and all its potential to offer the territory development levers associated with the energy and agro-ecological transition, the potential of the blue economy, and innovative social solutions to consolidate their living together within their geographical borders or between neighbouring countries. The challenge for the future is to implement policies based on locally available resources in order to build more resilient territorial policies. From that perspective, the experience of going through this crisis shows, at different levels, that there is no fatality for these regions, but often opportunities to be seized in order to change their practices and the habits and behaviors of their stakeholders in order to position themselves on previously unimaginable trajectories.

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Appendix 1

	Type of organization	Name of organization	Position of interviewee	Date	Case study
1	Municipality	Angra do Heroísmo	Mayor	Nov-22	The Azores
2	Municipality	Praia da Vitória	Mayor	Dec-22	The Azores
3	Regional	Azores Government	President Accessor	Dec-22	The Azores
4	Local association	Farmers association of Terceira (AAIT)	President Accessor	Dec-22	The Azores
5	Local association	Youth Association of Terceira (AJIT)	President Accessor	Dec-22	The Azores
6	Local association	Social Solidarity Association of Terceira (ASSIT)	President Accessor	Dec-22	The Azores
7	Local association	Angra do Heroísmo Chamber of Commerce: CCAH	President Accessor	Dec-22	The Azores
8	Local government	Regional Council of La Réunion	Deputy Director General for Economic and Enterprise Affairs	Jan-22	The Reunion
9	Private Sector	Medef de La Réunion	President	Jan-22	The Reunion
10	Local government	AGILE (Agency for Local Initiatives in European Affairs)	Director	Feb-22	The Reunion
11	Public Authority	Primary Health Insurance Fund	General Secretary	Jan-22	The Reunion
12	Public Authority	Prefecture of La Réunion	Secretary General for Regional Affairs	Feb-22	The Reunion
13	Public Authority	Regional Health Agency	Director of Public Health	Jan-22	Mayotte
14	Public Authority	Regional Health Agency	Environmental Health Prevention Officer	Feb-22	Mayotte
15	Local government	Dembéni Mamoudzou Agglomeration Community	Director of Environment and Sustainable Development	Nov-21	Mayotte
16	Local government	Dembéni Mamoudzou Agglomeration Community	Administration and Finance Officer	Dec-21	Mayotte
17	Local government	Dembéni Mamoudzou Agglomeration Community	Study Officer for the Fight Against Substandard Housing	Jan-22	Mayotte
18	Local government	Dembéni Mamoudzou Agglomeration Community	Administration and Finance Officer	Feb-22	Mayotte
19	NGO	Red Cross	Coordinator of a Mobile Social Team	Dec-21	Mayotte
20	NGO	Red Cross	Head of Department Reception and Guidance Social Watch	Jan-22	Mayotte
21	NGO	Red Cross	Volunteer	Feb-22	Mayotte
22	University	University Centre of Mayotte	Director	Dec-21	Mayotte
23	Public Authority	Directorate for the Economy, Employment, Labour and Solidarity	Inspector of Health and Social Action/Head of the Solidarity and Integration Unit	Jan-22	Mayotte
24	Private Sector	Company (industrial sector)	Company Director	Jan-22	Mayotte
25	NGO	Médecins du Monde	General Coordinator	Jan-22	Mayotte
26	Public authority	National Agency for Employment	Director General	Jan-22	Mayotte
27	Public authority	National Agency for Employment	Director of the Kaweni Branch	Jan-22	Mayotte
28	Public authority	Prefecture	Sub-Prefect	Dec-21	Mayotte
29	Public authority	Prefecture	Delegate of the Prefect	Dec-21	Mayotte
30	Public authority	Prefecture	Policy Officer Social Cohesion/Fight Against Poverty	Dec-21	Mayotte
31	Public authority	Departmental Union of City Social Action Centers	President	Jan-22	Mayotte
32	Public authority	Departmental Union of City Social Action Centers	Director of the CCAS of Dzaoudzi Labattoir	Mar-22	Mayotte

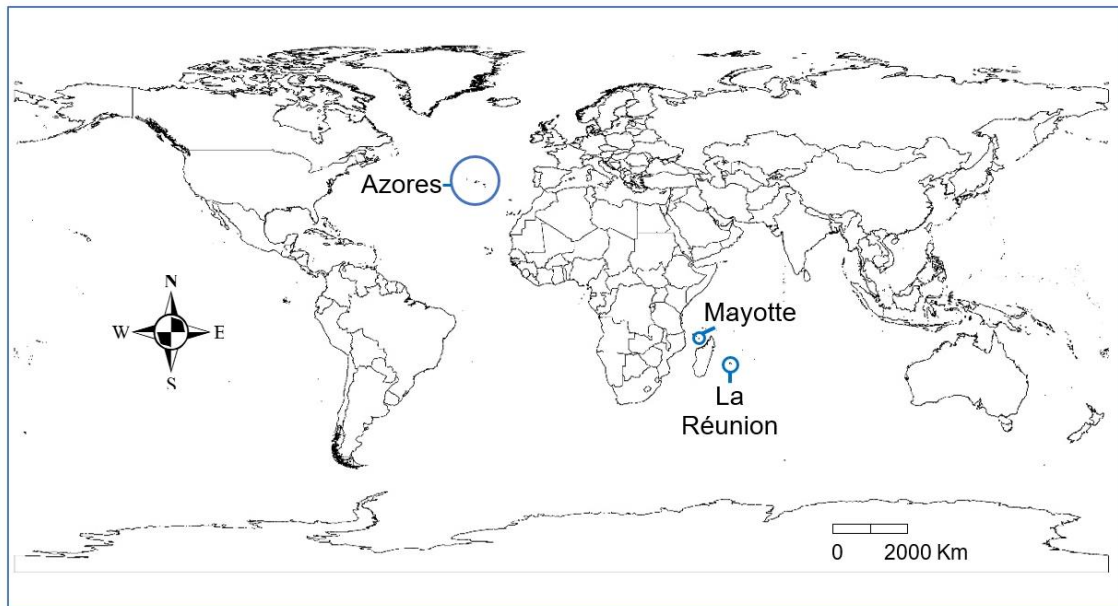


Figure 1. Case Study Locations. Source: own elaboration.