The Challenge of a Sustainable Territorial Inclusion in France

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Abstract

A successful transition towards a more sustainable society cannot afford to ignore the existing vulnerabilities. Apart from social and economic inequalities, territorial disparities represent a specific issue that the sustainability transition can either reinforce or mitigate. In a country like France, the Yellow Vests movement revealed the necessity of a more inclusive path to sustainability. Building on existing literature, we propose to analyze territorial inequalities and challenges in a context of sustainable development objectives, focusing on several key determinants of well-being (employment, education, and, in a more prospective manner, health and social relations). We suggest some perspectives to integrate territorial inclusion challenges into the sustainable development framework and policy design.

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Introduction

The coming social, economic and environmental challenges call for a reexamination of public policies. In this context, sustainable development is an important concept to understand and answer those challenges, from the international to the local level. Originally defined by the United Nations as a universal call to a development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland Report, 1987), its main characteristic is to focus on the intersections of the economic, social and environmental dimensions. In the French context, a specific event highlighted the complexity of designing equitable and efficient sustainable policies in the intersection between the environmental, economic and social dimensions. In 2018, the Yellow Vests protests denounced the increase of the carbon tax on fuel. This tax was one of the public policy tools to fight climate change: by increasing the price of fuel, the consumption behaviors were expected to change toward less polluting habits. In just a few weeks, the protests became larger and concerned not only the price of fuel, but a more systematic feeling of being "left behind" or not being considered in public policies, in particular in the policy making of sustainable measures and fight against climate change[1]. The Yellow Vests movement showed in France the necessity of a more inclusive transition toward a more sustainable way of life. The coming challenges require a renewal and a consolidation of the analysis of territorial disparities, to draw solutions for a future considering both the equity and sustainability of public action. The sustainable development approach calls also for the use of a broader set of tools of analysis and indicators to measure development as an improvement of the quality of life in all its dimensions, and not only through its economic and restricted definition of gross domestic product (GDP) evolution. As an answer to this challenge, a growing economic literature has focused on individual and subjective well-being to enlarge the scope of public policy intervention.

The policy brief has the ambition to show how fertile is the intersection between the well-being and the territorial approach to motivate the evolution of public policies, at the service of a sustainable and

[1] For a more complete overview of the Yellow Vests movement and its interpretations, one can refer to sociological contributions such as Filleule, Hayat and Monchatre (2020).

inclusive future. Per many precious publications, including the World Happiness Reports, as well as OECD (Fleche et al., 2012), the Stiglitz-Sen- Fitoussi Commission (2009) or Adler and Fleurbaey (2016), the economics of well-being offers a wide range of useful research, reflections and empirical evidence to draw different areas of intervention and transformation. When exploring the territorial specificities in the best-known determinants of individual well-being, three questions arise: what are the main inequalities, what are the challenges we face in those specific issues and do we have some insights to make future sustainable policies more inclusive at the local level?

First, the policy brief describes the contributions of the territorial level analysis and of the economics of well-being, insisting on the intersection between the two approaches. Then, building on French material, we analyze territorial inequalities and challenges in a context of sustainable development objectives, focusing on several key determinants of well-being (employment, education, and, in a more prospective manner, health and social relations). Finally, this brief proposes some insights and perspectives to integrate territorial inclusion challenges into the sustainable development framework and policy design.

1. The intersection between territorial level analysis and the subjective well-being approach

1.1. Territorial analysis

1.1.1. The definition of "territory" adapts to the issue considered

Depending on the specific history of each country, the challenge of territorial inclusion covers a wide range of issues. In France, where history has shown important movements of political, cultural and economic concentration in the Parisian region, the issue of territorial inclusion is a major political topic. Recently, the French Yellow Vests protests put light on some territorial disparities (in terms of economic opportunities, conditions of living, necessity to use the car, etc.), claiming for a better understanding of the specificities of the territories, and a better inclusion of territorial specificities in the design of public policies. The protests also revealed a widespread feeling of living in "abandoned territories", a feeling of not being considered during policy-making processes for living far from decisions centers (in particular the Parisian region). Finally, from a social science perspective, this specific political moment showed the limits of analytical and in particular statistical tools researchers and public policy designers had to understand the movement at first, and more generally, to answer the issues it raised. A wide range of public statistics is available at a local level and was used for different types of analysis. Other type of data, mainly individual data, has long been inaccessible to many researchers for confidentiality reasons. Progress in access to confidential data in a secure way,

and the use of other sources of data like Twitter allow to have very localized data. Nonetheless, studies on French inequalities focus more often on other categories like social class, occupational status, income, education level rather than in using the territorial categories.

How to define a "territory"? It includes at the same time geographical, spatial dimensions, and a more subjective definition: a territory is a place where one lives, the local country, the small homeland, the region, the county, for which limits and identification are not direct. Then, the definition has the advantage, from a public policy point of view, to adapt to the topic considered and act at the best scale (city, county, region…).

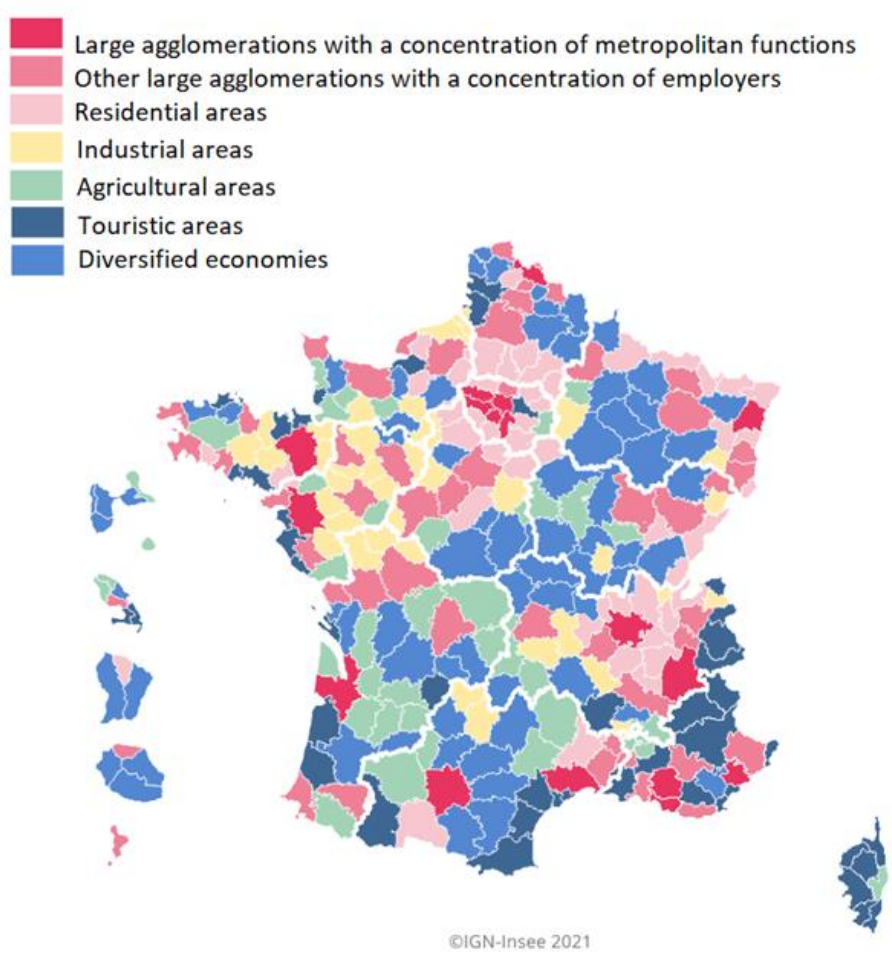
The challenge of territorial inclusion can be defined as follows: an objective of reducing the existing disparities within and between territories in the economic, social and environmental dimensions. It implies the guaranteeing of equal access to social, political and economic opportunities and amenities everywhere for everyone, reducing the divergence of dynamics between declining and expanding territories (in the case of France for example), and adapting public policy challenges to local features.

1.1.2. The heterogeneity of situations revealed by the territorial analysis: the example of employment areas

The plural of the "territories" encompasses the heterogeneity observed, that is beyond the usual opposition rural/urban. As an example, from an economic point of view, the French National Institute of Statistics (Insee) categorizes seven economic specializations of a territory, defined as an "employment area"[2]. It describes a patchwork of territories where economy is oriented towards metropolitan activities or specific to large cities, residential economy, industrial specialization, agricultural prevalence, tourism, or diversified (mix of industrial and agricultural employment) economy (Figure 1).

[2] An employment area (*zone d'emploi*) represents the geographical space in which the major part of the active population both works and lives.

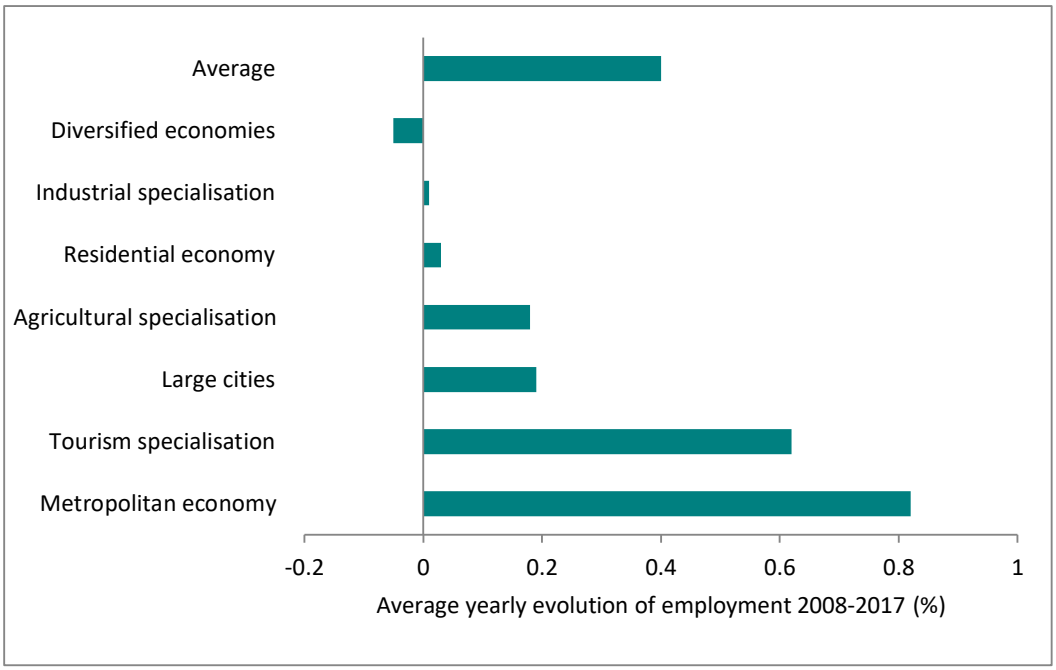
Figure 1 : Description of economic territories in France



Source: Insee (2021)

For the last year, (Figure 2) it is clear that metropolitan areas and tourism-oriented areas are the most dynamic in terms of employment. Some territories, even if predominantly rural or remote, are particularly dynamic because of tourism but are also more exposed to sectorial shocks. Some of these areas show increasing exposure to climate change's consequences. Mountains areas, for example, suffered from the sudden stop of tourism during the pandemic which induced a sectorial shock and, in the medium run, the increasing scarcity of snow during winters linked with global warming threatens the economic equilibrium. In the medium run, the rising waters threaten the economic dynamism of littorals.

Figure 2 : Economics specialization of territories and differentiated dynamics of employment in the recent period



Source: Insee (2021)

Reading: In average, employment grew by 0.8 % every year between 2008 and 2017 in territories characterized by a metropolitan economy.

Other categories of territories confirm the increasing gap in terms of economic dynamism. Before the mid 2000's, total employment grew relatively similarly in different areas. In the 1990's for example, the annual evolution of employment was around 1.3 % in small cities, intermediate areas and metropolitan areas of more than 500 000 inhabitants. Statistics for the 2006-2013 period show only negative evolution lying between -0.8 to -0.3 % per year, except for the largest areas of more than 500 000 inhabitants (0.1 to 0.4% average annual growth).

The analysis of a phenomenon at different local scale gives some insights on inequalities and disparities that could be unobservable at more aggregated geographical levels. To inform public policies at this level, statistics in terms of local employment, level of education, access to universities and demographics are essential to capture ongoing dynamics and evolutions, and additional subjective material comes to complete those observations. In particular, subjective well-being analysis can help to identify or to confirm public policy drivers and programs in a more direct link with the targeted localities and populations. In their study of the territorial social discontent, Algan, Malgouyres and Senik (2019) proposed to analyze the effect of territorial recent evolutions. Their main results show that a deterioration of certain local variables (degradation of employment rates, increases in local

taxes, closing of amenities…) created territorial unease, suggesting that territorial disparities translates into a lower level of the overall subjective well-being of local populations.

1.2. Subjective well-being tools of analysis for a multidimensional approach

Indeed, subjective well-being, understood as how people feel and how they evaluate their life, is particularly informing for empirical analysis. Subjective well-being approach relies on auto-evaluative questionnaires about different aspects of life. Evaluating subjective well-being consists in self-declared level of life satisfaction (cognitive evaluation) based on 1 to 10 scales but also with several evaluation of different emotions (hedonic evaluation) such as feeling of happiness, anxiety, the sense or meaning of one's life, of the quality of relationships, etc. Questions are typically in the form of "From a general point of view, are you satisfied with your life?" or "In the last two weeks, how many times did you feel sad/happy?". A large set of factors (objective and subjective) and complex interactions between them affect subjective well-being. Beyond individual life trajectories and events, the collective dimension of well-being is important: economic, environmental and social factors influence individual metrics. The idea to measure directly the satisfaction of life or the feeling of happiness of people integrates the scope of economics and other social sciences. Subjective well-being questions have been progressively included into major national and international surveys[3] since the 1980's. It has appeared in the public debate as complement or alternative to the GDP measure of collective progress. Public policy's scope integrates gradually this kind of indicators to measure social progress and to evaluate public programs. In that perspective, the Stiglitz-Sen-Fitoussi report on the "measure of economic performance and social progress" sheds light upon the multi-dimensional characteristics of well-being and calls for a more systematic inclusion of subjective well-being indicators.

Research on the domain of subjective well-being presents some important results on the determinants of individual well-being. Income is a major determinant of well-being: there is a strong relation between higher income and higher life satisfaction, both at the individual and at social (i.e. cross-country) level. Nonetheless, the relation between the two variables is quite complex. A substantial part of the economics of happiness' literature try to understand the Easterlin Paradox (Easterlin, 1974): there is no evidence that happiness increases in line with economic growth. Several explanations of

[3] The EU-SILC survey (European Union Statistics on Income and Living conditions – *dispositif SRCV* for its French part ruled by the Insee) contains subjective well-being measures since 2010. At the world scale, the Gallup World Poll survey is a precious input for the yearly World Happiness Report. It gives comparable measures of subjective well-being among more than 150 countries in the world and puts light on the actual research in the well-being field. The European Social Survey, every two years, and the World Value survey also include subjective well-being questions.

the paradox coexist: the relative income might be more important for subjective well-being than the absolute level as people compare to others; individuals adapt to higher income such that in the long term, life satisfaction does not increase with income. There might also be other factors that both influence income and well-being such as employment or education level. Indeed, Helliwell (2008) showed that a significant number of variables drive well-being metrics: besides income, health status, being employed or not, and social contacts are among the most influential. Well-being also varies over the life cycle (Blanchflower and Oswald, 2008), following a sort of U-shaped curve with a minimum point of well-being reached in the late 40's. Other important factors, as education, do have a moderate direct impact on well-being but also have major indirect effects (Flèche et al, 2012).

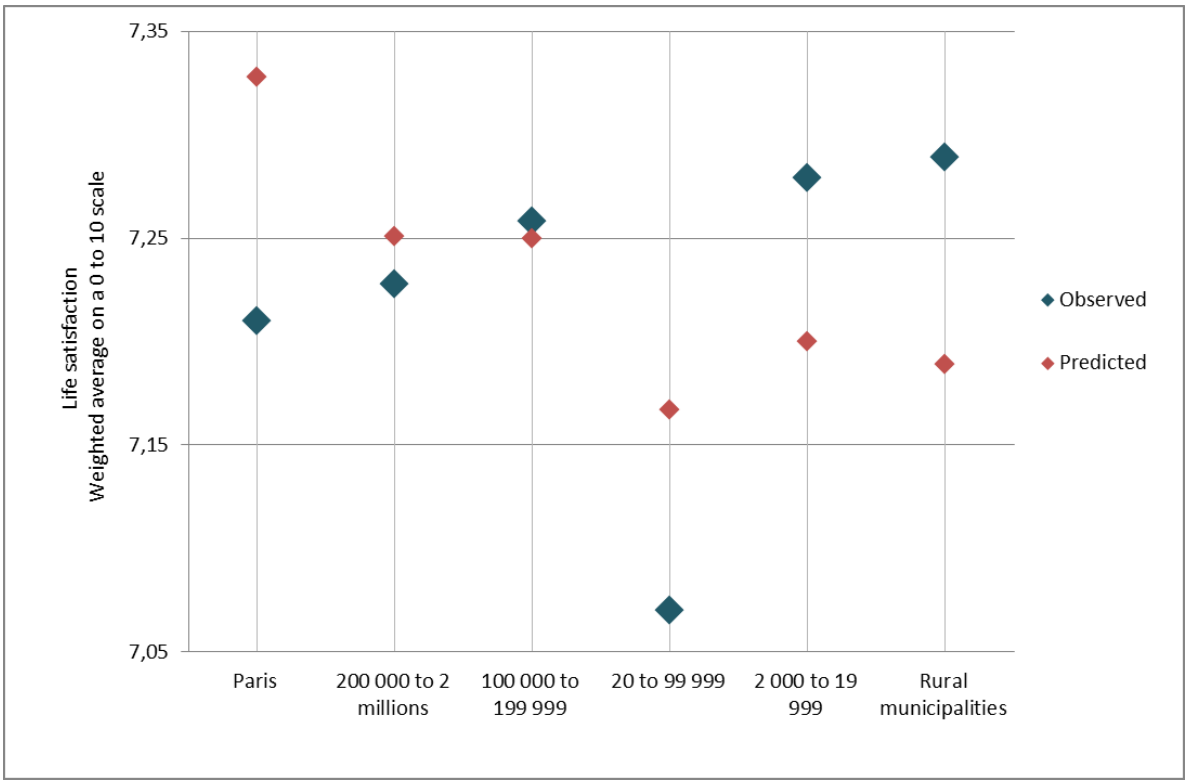
1.3. Local determinants of subjective well-being

The economic literature on subjective well-being allows for a better understanding of the factors influencing well-being metrics of life satisfaction and emotional well-being. Occupational status, income, quality and intensity of social relations, and health status are among the most important, directly linked with individual well-being. In addition to those individual factors, local characteristics also influence subjective well-being, such as inequalities (Decancq et al, 2015), neighborhoods' effects (Ludwig et al, 2012), proximity to airports (because of noise) (Van Praag and Baarsma, 2005), and the proximity to nuclear plants (Danzer and Danzer, 2016). Some of those factors are also related to environmental concerns such as the effects on well-being of floods (Luechinger and Rashcky, 2009), of air quality (Luechinger, 2010) or the installation of wind turbines (Krekel and Zerrahn, 2017).

In the French context, the Well-Being observatory of the Cepremap provides multiple insights on the territorial dimension of well-being indicators. Surveys show for example that living in some territories negatively correlates with individual well-being, as observed for example in Péron and Perona (2018) and in Perona (2019). Figure 3 sheds light on two important facts. The first one is that people living in rural areas are relatively more satisfied with their life and people living in areas of intermediate size (between 20 and 100 000 inhabitants) declare a relatively low level of well-being in average. A second observation is that the predicted average life satisfaction given age and income is lower for people in rural areas and higher for people in urban areas compared to the observed levels of life satisfaction. This result comes from an analysis that compares the observed average (without trying to understand which factors could explain its level or the differences between levels) with the very basic econometric specification that includes only two well-known determinants of life satisfaction: age and income. Statistically, those two variables explain a large part of the individual well-being, but here, the important discrepancies between the observed and the predicted life satisfaction in the Paris area and in a medium size area (20 000 to 100 000 inhabitants) calls for further investigations. In Paris for

example, income is high in comparison to other areas, but potential congestion effects (air pollution, traffic jam, etc.) might affect individual life satisfaction in a way that the higher income does not compensate for. However, how to explain the specific effect in intermediate size areas? Are they so different in terms of well-being factors?

Figure 3 : Life satisfaction and the place of residence's category



Source: Perona (2019)

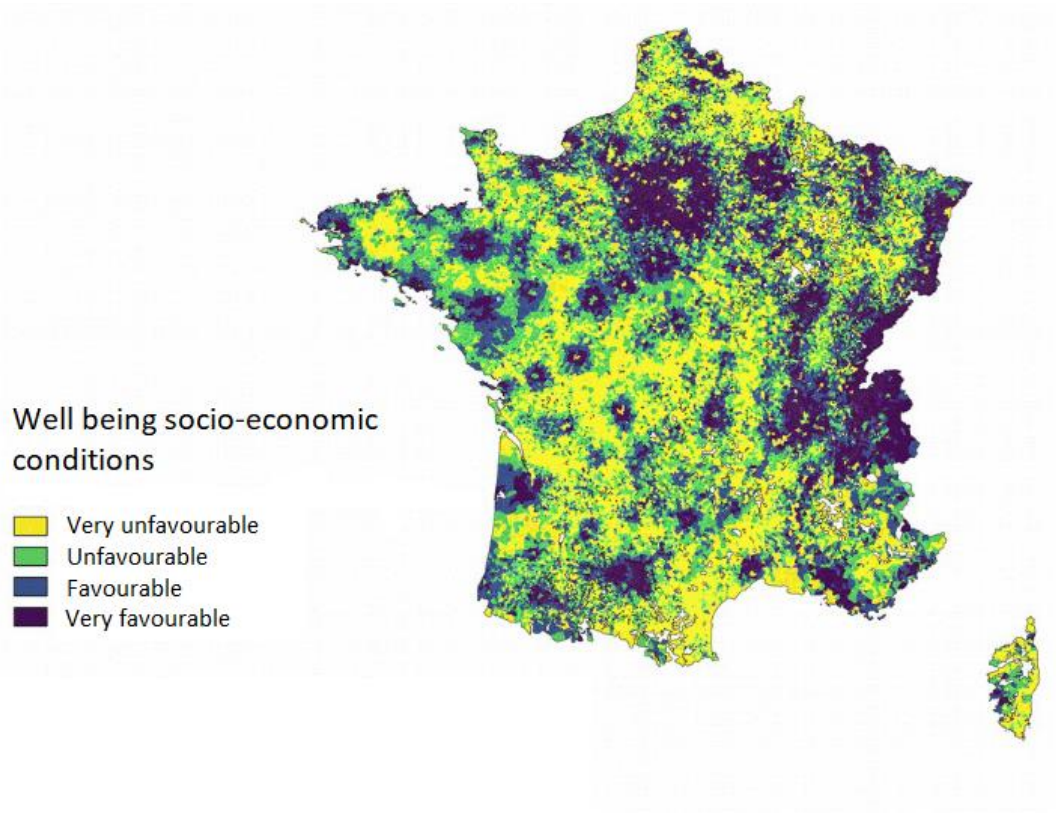
Reading: The average declared satisfaction with life is 7.06 on a 0 to 10 scale for respondents living in intermediate size areas (between 20 000 and 99 999 inhabitants). Their estimated (predicted) level of life satisfaction given the age and income of the same respondents is 7.16.

1.4. How to consider local conditions of well-being for territorial and sustainable public policies?

The low average life satisfaction observed in intermediate urban areas appears to be partly the result of the concentration of the different socio-demographic characteristics that predict a low level of well-being at the individual level. In particular, we observe a higher share of people without diploma, or with lower level of education than in rural or metropolitan areas, a population slightly older in average, a lower median income and an over representation of financially fragile households. Beyond the socio-economic structure that is less favorable to a high average of life satisfaction, a territorial specificity remains. Indeed, we observe a higher share of unhappy individuals in each category of age or

occupational status in intermediate areas (Perona, 2019). Nonetheless, it is difficult to have local indicators of individual well-being, due to limits of individual surveys but some technics can approximate well-being at the local level. It is possible to draw a model that creates a link between individual factors of life satisfaction and their equivalent at le local level. Building on the observation of a potential effect of local area, on determinants of well-being and on statistics at the local area level, Algan, Beasley, Cohen, Foucault and Péron (2019) propose a model of the local socio-economic conditions for the French metropolitan territory. This model takes into account employment, median living standard, structure in terms of age, occupational categories, level of education in each commune, weighting all these characteristics according to their relative importance in explaining well-being[4]. The model gives the following map of the socio-economic conditions of well-being (figure 4).

Figure 4: Socio-economic conditions of well-being



Source: Algan, Beasley, Cohen, Foucault & Péron (2019)

Reading: Statistical model based on the main local and individual socio-economic determinants of well-being (income, employment, age and education structure…). At the municipality level, areas in yellow present relatively to others very unfavorable conditions for a high level of well-being

[4] The entire econometric model is available in Aglan, Beasley, Cohen, Foucault and Péron (2019). Coefficients derived from the model give more weight to income and unemployment status and share of inactive population, than the age structure, the dummies for Paris and Lyon area and finally the average educational structure.

Some zones that are the most economically dynamic also concentrate high level of determinants that favor high levels of life satisfaction. Among them, largest cities (metropolis) such as Paris, Lyon and Bordeaux are the most dynamic, as well as some other important cities and their area of influence and the frontier zone at the east of the country. The least favorable zones as defined by the model are in the northern part of the country and southeast of Occitanie. In Algan, Beasley, Cohen, Foucault & Péron (2019), we find a correlation of 0.4 between the indicator of socio-economic conditions of well-being and the intensity of Yellow Vests' mobilization in the early phase of the movement measured as the number of street demonstrations, route blockages and pickets per inhabitants, in November 2018. To capture the local variations in well-being, other indicators at the local level might be also used, in particular those relying on evolutions: Algan, Malgouyres and Senik (2019) show that negative evolutions of important determinants of well-being explain more collective manifestation of social unease like the Yellow Vests protests and local abstention than the simple present statistics.

As a synthetic measure of multidimensional interactions, the well-being approach is a precious key to inform public policies. Many precious publications, including the World Happiness Reports, as well as OECD (Fleche et al., 2012), the Stiglitz-Sen- Fitoussi Commission (2009) or Adler and Fleurbaey (2016), showed that the economics of well-being offers a wide range of useful empirical evidences to draw different areas of intervention and transformation. In this perspective, the transition towards a more sustainable development pattern represents a major challenge for two reasons. Firstly, and focusing on climate change, its consequences are likely to affect differently the well-being of populations and to hit fragile territories. Secondly, contradictions between objectives can arise: the policies that the government might implement in order to answer to environmental challenges, for example, can either reinforce existing inequalities at the local level or create new territorial gaps. At the same time, it represents the opportunity to understand the recent dynamics and to answer to the challenge of territorial cohesion. Thereafter, we explore four determinants of subjective well-being from a territorial perspective (employment, education, health and social links) and their implications in terms of territorial inclusion.

2. Understanding territorial inclusion challenges

2.1. Employment

2.1.1. The territorial inequalities in employment opportunities

In France, several economic dynamics created a relative concentration of the economic activity in a limited number of areas. In 2020, the 17 metropolis areas concentrated 30% of the population, and 36% of the total employment. Historical processes of de-industrialization, policies favoring the

economic concentration and the urban agglomeration in large cities reinforced the divergence of economic dynamics, resulting in high unemployment rate in specific local areas. In particular, the erosion of the productive fabric[5] and the waves of industrial relocation of the production left large regions in the north and east of France very affected. The 2007-2008 financial crisis accelerated this already existing gap: while territories presented relatively parallel dynamics of employment before the crisis, between 2006 and 2013, only the urban areas over 500 000 recorded an increase of employment[6]. Figure 3 shows very high levels of unemployment in the northern regions and in the southeast as well as in the overseas territories. At the individual level, unemployment is a strong factor of poor well-being, even controlling for the effects of income, qualification, familial situation, etc. Using large samples, Helliwell (2008) estimates that being unemployed is associated to a loss of well-being of 0.7 to 0.9 points on a 0 to 10 scale. As a comparison point, it is similar to the difference of well-being between the first and the fifth income decile. The effect of being unemployed compared to being employed, retired or looking after a family has negative effects on all metrics of subjective well-being that goes beyond the loss of income. Losing one's job has very strong and long-lasting negative effects that overpass the loss of income: non-pecuniary effects on social relations, on the feeling of being useful, and self-esteem (Clark and al., 2018). Literature also showed that local job market features matter in this relationship between work and satisfaction: Clark and al. (2010) find strong effects of the regional unemployment level on men having good jobs prospects. The idea is that insecurity on the local labor market is a source of degradation of well-being as it brings fear of losing its own job[7]. The quality of the job is an important determinant of job satisfaction and overall individual well-being. Besides the income, three domains are central, in particular for employees. The first one is the job security and perspectives of career development. The second one concerns the content of the job: interesting jobs and employee autonomy are determinants of job satisfaction, while jobs on assembly lines are associated with low job satisfaction. Finally, the working environment appears as central for subjective well-being: good relations with management and colleagues is one of the most important factors of job satisfaction[8]. This individual unhappiness translates into macro level observations: the regions where unemployment and insecurity of jobs for those employed are high show persistent low

[5] See Aglietta and Ragot (2015) for a complete overview of the macro and microeconomic changes in France over the period.

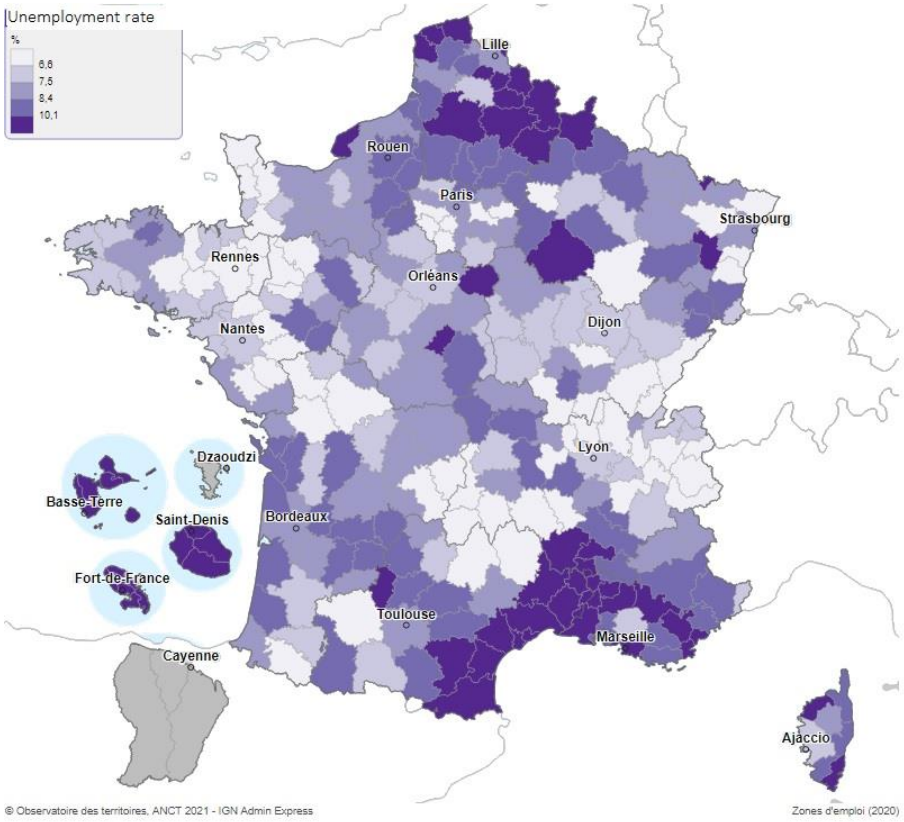
[6] Source: Insee. For a complete approach, one can refers to "*La France et ses territoires*" publication (Insee, 2021). For an analytical perspective of those figures and a general overview of the impact of the Covid crisis, one can refer to Jean-Noël Barrot's report (2021).

[7] According to empirical estimates in the British context, a 10% rise in unemployment at local level implies a reduction of life satisfaction of the employed population by 0.14 point. Similar results appear in the German and Australian context (see Clark and al., 2018).

[8] A substantial amount of research can be found on those topics, such as Clark and al. (2010), OECD (2013), or more recently, and in the French context, Senik (2020).

levels of well-being in France, in particular in the northern regions (Leker, 2016) but also in a part of the Mediterranean coast.

Figure 5: Unemployment rate in France by zone of employment (2020)



Source: Observatoire des territoires, ANCT et Insee

Reading: Unemployment rate is high relatively to the average (more than 10 % of active population) in employment zones colored in dark

Given those findings, employment needs to remain central from a territorial inclusion point of view, including the quality of employment. One important policy consideration has been to adopt an economic perspective and encourage the mobility of workers. Recently, the mobility tends to stop increasing. Factors such as an insufficient offer of social housing can explain this slowdown, but other reasons might be complementary. Indeed, a recent study from the General Commissariat for Territorial Equality notes that geographical mobility can represent an important source of opportunities for some categories of workers among the most qualified and belonging to the highest social categories. On the contrary, they can represent a real constraint, and injunction for less qualified workers and working-class categories (*Commissariat général à l'égalité des territoires*, 2018). To encourage workers willing to move, it would be necessary to enlarge the social housing's offer targeting mobile precarious

workers, but a complementary approach consists in encouraging the possibility of local jobs creation and opportunities for those who are not mobile.

2.1.2. Can environmental policies create employment synergies?

The economic literature as well as prospective publications propose several ways to re-allocate employment across territories. The academic literature in economic geography importantly underlines the positive agglomeration effects resulting from the concentration of economic activity: a better circulation of information, positive spillovers in terms of innovation, concentration of human capital, growing market size, reduction of the transportation and coordination costs, etc.[9]. It partly explains the concentration dynamics that we observed in the latter decades. Without ignoring or renouncing to those important positive effects, a transition towards newer strategic sustainable activities could represent an opportunity to invest in areas that did not benefit from the recent evolutions: environmental preservation, waste management and organic and sustainable agriculture. Moreover, the positive agglomeration effects described also result in a form of congestion in large cities (Combes, Duranton and Gobillon, 2019). This congestion is likely to lower the quality of life of residents and to create or increase local social and economic fractures: public transportation and strong investments to make high environmental quality housing affordable is essential to guarantee the social inclusion of urban deprived areas and address the urban pollution challenge.

The transition towards a more sustainable way of consumption and production (low carbon pathway) can either reduce existing territorial inequalities or induce additional gaps. According to Eurostat statistics on employment and growth, jobs in the environmental economy sector[10] grew by more than 40% between 2000 and 2018, from 2.8 million full-time equivalents (FTEs) to almost 5 million[11] at the European level. The prospective World Employment Social Outlook (ILO, 2018) estimates that job creation will overpass job loss during the transition path towards a "limited to 2-degree Celsius climate change" economy. Further work and estimations would help to understand better the implications of sustainable development in terms of employment. In France, before the pandemics, environmental

[9] See the seminal papers of Krugman (1991) or Porter (1996)

[10] The environmental economy is defined at the European level as "Environmental goods and services that are products manufactured or services rendered for the main purpose of:

- preventing or minimising pollution, degradation or natural resources depletion;
- repairing damage to air, water, waste, noise, biodiversity and landscapes;
- reducing, eliminating, treating and managing pollution, degradation and natural resource depletion;
- carrying out other activities such as measurement and monitoring, control, research and development, education, training, information and communication related to environmental protection or resource management."

[11] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Environmental_economy_%E2%80%93_statistics_on_employment_and_growth

employment grew faster than employment in general. The jobs in the domain of environmental protection, waste management and resource efficiency -in particular in the energy sector- become more and more important. To ensure an inclusive transition, new local equilibriums in terms of loss and creation of jobs will require special attention from policy-makers. On the one hand, this attention is important to ensure that the job losses, in the affected sectors of brown energies, transport, and fossil fuel related industries, do not automatically cause deeper gaps in the economic dynamics among territories. On the other hand, it might help policy makers and economic actors to influence processes of job creation in a way that it does not only benefit the already dynamic areas.

2.2. Education

2.2.1. Education for social inclusion and well-being

Schooling encompasses a set of challenges and their potential answers, in a long-term approach, both in the individual and in the collective perspective. From a well-being point of view, higher levels of education measured by individual diploma translate into higher levels of well-being in all its dimensions: happiness, satisfaction with life, interpersonal trust, etc. (Clark et al., 2018; Beasley et al, 2018). Besides the effect of higher revenue associated with a higher level of education, empirical evidence strongly suggest that schooling has many positive non-pecuniary effects on the ability to cooperate, socialize, and develop social skills (Oreopoulos and Salavnes, 2011). From a collective point of view, the social benefits of education translate into better economic outcomes (productivity, innovation, productive advantages...) and might favor social inclusion, bringing a higher level of trust. In France, policies were developed aiming at the democratization of secondary education with the objective of bringing 80% of a cohort to finalize their higher secondary education[12]. The higher education system followed the same dynamics. In the French system, students chose before entering high school between three tracks: technological, vocational or general track. The administrative authority in the field of education concerns different levels of territorial jurisdiction (municipality for primary schools, *Départements* and *Régions* for high schools, etc.). However, programs and teaching are elaborated at national level, and extra funds are devoted to deprived areas (*Réseau d'éducation prioritaire*, who targets at the educational institution level) to reduce pre-existing social and economic inequalities.

[12] Primary education refers to education that generally start around five or six years old and that do not require previous education. Secondary education follows the primary education, the lower secondary education corresponds to « *collèges* » in the French system, where the basic education continues with more subject-focused and specialised teachers. The higher secondary education refers in France to « *lycée* », where students spend usually three year and enter around 16 years old. Tertiary education refers to higher education system that provide supplementary skills like universities programs etc. (OECD definition).

2.2.2. Territorial inequalities in the access to tertiary education in France

Yet, territorial differences in educational attainment is still one of the most important factors that explains the persistence of territorial inequalities. In particular, it determines unequal opportunities to improve one's standard of living (understood as social mobility). Access to education and social mobility represent an important factor of well-being worth to consider, both because it implies higher income and non-pecuniary benefits. Indeed, it influences the perception that individuals can have of themselves and the way they perceive social justice. In the French context, the feeling of social justice (which comprises components such as intergenerational and relative social mobility) correlates with metrics of subjective well-being, in particular life satisfaction. As explored by Forsé and Parodi (2014), the perceived situation in terms of social mobility, in particular in relative terms (compared to the average social mobility) is correlated with a higher level of life satisfaction. At the same time, people thinking that society is unfair show lower levels of well-being. Even if this feeling has a lot to do with individual situation (occupational status, income, working conditions…), data suggests that respondents living in rural or intermediate size areas are more likely to think that society is unfair than the people living in bigger cities or metropolitan areas. One hypothesis is that opportunities in terms of improving one's living conditions are not necessarily the same between territories.

In the US, Chetty et al (2014) proved that the social mobility (understood as a superior income compared to the parents) depends statistically on the county one grew up, other things being equal. In the case of France, among the few studies exploring this topic, Derbhécourt (2015) shows that there is a "geography of social mobility". The gaps in economic dynamism do not explain much the difference observed in the upward social mobility of descendants of workers and employees (working class), but is mainly linked with the educational level. In particular, the access to tertiary education appears as a central determinant of social mobility: territories where a large fraction of the population graduated from tertiary education are also the most favorable to ascendant social mobility for working class children and offer them better possibilities (Dherbécourt and Kenedi, 2020). Several obstacles influence the choices of students in their decision to access or not certain types of education. Some obstacles are related to individual characteristics (gender, social and economic background) but others are territory-specific. In particular, differences in access to information and unequal local educational supply reinforce disparities in educational outcome, especially for students that do not enjoy a favorable family background (Beaud, 2002). The major part of the higher education supply is concentrated in the Parisian region, and in biggest metropolitan areas (Guillois, Lafargue, Monso, 2014), despite recent improvements through the opening of vocational and technical advanced studies establishments. In addition, regarding top leading schools, Bonneau, Charousset, Grenet et Thebault (2021) show important inequalities in the access of "Grandes écoles" (leading schools in the French

system) between students from the Parisian region and non-Parisian regions. They show that 20 % of the difference is due to differences in school achievement and the socio-economic structure of the region, while the other 80 % of the gap remains unexplained. The main hypothesis is that Elite schools and the upstream preparatory classes recruit mainly in the Parisian area because they are particularly concentrated, creating strong inequalities.

2.3. Health and social life

Other factors of individual well-being represent ongoing or coming challenges for territorial inclusion. In particular, health and social links need specific attention from a social and economic perspective.

Health is one of the most important factors influencing well-being, in all its dimensions: physical, mental, disability… Some research has showed that mental health can have stronger effects on well-being than physical health (Dolan, Peasgood and White, 2008) and it has been proven that disability implies a persistent degradation of individual well-being (Lucas, 2007). As the Covid-19 crisis highlighted, long lasting health crises affect individuals directly and deepen already existing health inequalities. In France, besides high levels of social inequality in health care, the territorial inequality in the access to health (infrastructure, medical workers...) is also a challenge for inclusive territorial policies. Askenazy and Martin (2015) and Askenazy, Dormont, Geoffard and Paris (2013) underline the persistence and the importance of territorial health inequalities. Men living in the Parisian region have a higher life expectancy of 1.5 to 2.5 years compared to the national average, while men in the northern regions have a deficit of life expectancy of almost three years. Differences for women are less important. A part of these inequalities is explained by the socio-economic differences: education, occupation, income are important determinants of life expectancy and we observe concentrations of unfavorable socio-economic conditions in some areas, and a concentration of favorable conditions in others, in particular in metropolitan areas[13]. Nonetheless, the territorial dimension remains a major factor, both in terms of health spending and in the access to performant health infrastructures (Gobillon et Milcent, 2013), strongly suggesting that a part of the disparities in life expectancy comes from an inequality in access to health care.

Another important point for territorial inclusion in a context of a transition toward sustainability concerns social links. As the literature on well-being shows, social relations strongly influence several well-being outcomes such as life satisfaction (Helliwell, 2008). In the surveys, one can observe quality of social links through questions about the frequency in which the respondent meets relatives, the

[13] One can note that the mortality after 60 years drives mainly this inequality in France, and not the infantile mortality but this issue can remain important in other context to qualify health territorial inequalities.

feeling of getting support, or the feeling of loneliness. In France, social links seems to be altered in intermediate areas: respondents declare on average a satisfaction with their relationships with friends and family of 0,1 to 0,2 point lower than in other territories (Péron and Perona, 2019). Recently, in France, several studies explore the relative decline of collective social life in intermediate size areas that could be an explanation of the lower level of satisfaction with interpersonal relations (Estèbe, 2018; Roux, 2018)[14]. In the attempt to explain the Yellow Vests movement as well as other demonstration of collective unease (abstention in major elections…), Algan et al (2019) strongly suggest that local social life have been weakening with the progressive disappearance of public services and local shops in some areas. Reviewing several types of amenities and facilities, the study finds that the disappearance of small shops and facilities (groceries, pharmacy…) as well as the increase of the distance to daily life amenities are associated with a higher level of discontent at the territorial level. This analysis converges toward the sociological observation: in some remote rural areas, the only agent of the central state and public policies are the local police forces, and the places of socialization like local bars, pubs and small restaurants hardly attract clients. Local places of socialization, local events are not central anymore in the local life, as people tend to meet their friends and relatives at home (Coquard, 2019). The remoteness from basic services is not only an issue for demographically declining rural areas, but also for specific urban areas where local supply is insufficient to cover population's needs.

3. Perspectives for inclusive policies at the territorial level

The analysis of inequalities at the territorial level is central to design policies aiming to reduce social and economic gaps. The subjective well-being approach highlights the importance of a multidimensional overview of a territory, the specific challenges of the area and the needs of the population. To ensure a sustainable development, the focus on economic outcomes is necessary but not sufficient to promote and implement territorial inclusion. The necessity for sustainable public policies to adapt to local needs and challenges call for a reexamination of some aspects of policy design. This dynamic has started in France.

[14] The social links as defined here can refer to the concept of "social capital" Robert Putnam developed (Putnam, 2000). This concept lie on the thesis that, at the territorial level, a flourishing economy and a high level of political integration translates into high level of social capital (set of norms, social values like trust, and social networks through volunteering etc…). It underlines the influence of local features on social relationships between inhabitants of a same territory.

3.1. From zone-based policies to experimentation

One of the main French policies in terms of inclusion of territories in the economic dynamic consists in zone-based policies. Since more than twenty years ago, in some specific and well-defined territories suffering from diverse disadvantages (high poverty rate, population decline, mountainous relief, geographical remoteness...), the economic support takes the form of a package of temporary tax exemptions (both local and national taxes) for firm creation and/or social contributions on the new hiring. Two of them are central: the ZRR (*Zones de revitalisation rurale*/ Zones of rural revitalization) in rural areas, and the ZFU-TE (*zones franches urbaines – territoires* d'entrepreneurs/Free urban zone-business territory) in urban areas but there are almost 10 different types of zones, some of them overlapping. This policy appears as complex (Blanc and Louwagie, 2018), not sufficiently targeted (of the more than 21 000 of the French municipalities –60%- are involved in at least one of the zones), and their economic efficiency has not been proven. Academic policy evaluations find very low to no effects on local firm creation or employment both in the urban context (Malgouyres and Py, 2016) and in the rural context (Behaghel, Lorenceau and Quantin, 2016). Zone-based fiscal policies are not sufficient to tackle down the differentiated dynamics in terms of economic outcomes and employment, calling for a complementary or a different approach.

Public employment relocation from large cities to smaller areas is an often-cited tool to answer the challenge of a better territorial share of employment. In France, there are two types of public employment: one is local and includes all type of local and decentralized services (social aid, local public transportation...) and the other type refers to the national public sector employment (i.e. national public sector such as defense, justice, education, ministries and their regional or local delegations, etc.). Public employment represents approximately 20 % to 30 % of total employment, depending on the territory. It appears that the first type (local public employment) is distributed among territories and citizens, resulting in a relatively equitable access to public services among the French territory[15], but that the second one is more concentrated in the aforementioned dynamic areas. Some parts of national administration have been displaced from the Parisian region towards other parts of France but other opportunities to reallocate public employment still exists by developing inter-regional administrations. Such policies can rely on the transition towards numeric procedures and potentially targeting areas that are both facing high unemployment, demographic decline and low level of non-local public employment like the north of France or some southeast counties. Nonetheless, it is difficult to estimate the second order effects of such policies in terms of economic dynamics: in the

[15] With the notable exception that the local services (at the municipality level) are partly dependent on the total budget (i.e. relative wealth) of the municipality, creating unequal access to services like childcare or local social support as described in Dherbécourt and Deschard (2019).

English context, Faggio and Overman (2014) do not identify any effect of the increase in public sector employment on local private labor markets, even if it results in a change in the structure of the private sector at the local level. It also underlines that more systematic studies and evaluation could be done following the reallocation of French public sector employment, both focusing on the local effects on employment but also on the potential effects on social life in the territory: demographic dynamic, amenities, cultural life, etc. Because it is under public decision, the territorial allocation of public employment comes first as a tool, but policies in favor of the development of private sector employment in declining areas are complementary and its benefits require supplementary evaluations.

Progressively, innovations in public policy design aim to limit centralized approaches (from the Parisian political center of decision) and account better for territorial characteristics, history, vulnerabilities and assets. They rely on a contractual set up between all involved actors (central administration, policy makers, local elected representatives of the region, *département*, municipalities, economic actors, etc.) and the strategy is to design a more complete policy for an entire area at the appropriate level. It has been encouraged following the diagnosis of the relatively inadequate results of past territorial inclusion policies following the Yellow Vests protests (Algan and al., 2019) and, more recently, in the anticipated aftermath of the pandemic crisis that hit territories in different ways (Barrot, 2021). In the French institutional context, it requires major changes in the French law to ease administrative processes encouraging local experimentations, transfer of economic and administrative activities to less concentrated areas and to empower local authorities and representatives to design local development projects. Specific attention might be necessary nonetheless on two salient points. First, as public investment is oriented toward this new kind of policy design, systematic evaluation on clear and pre-defined criteria would permit to assess their efficiency and to describe what works and what to improve in terms of cooperation and economic, social and well-being outcomes. Secondly, a majority of those new engagements are decided based on “call for projects”, for which local authorities and representatives issue a proposal. This ability to present and develop a proposal is very likely to depend on the human and financial resources of the area. Then, without specific attention and supplementary support to already fragile areas, this type of policy design could also create or increase existing gaps between targeted territories.

New dynamics in terms of access to public services also emerged with the creation of local public services houses in some small cities and rural areas. The aim is to centralize in one place several public services: tax service, social services, post office… A complementary approach could consist in designing a policy based on mobile public services, groceries, health care, depending on the needs of the

territory. The idea would be for the service to move from an area to another at a certain frequency. This could reinforce social links in remote areas, promote the inclusion of territories through the access to basic services, create a collective moment and place, adapt to the local needs, and hypothetically reduce carbon emissions by decreasing commuting.

3.2. The challenge of ensuring equality of opportunities in a sustainable perspective

The educational topic covers two issues: the social mobility demand of society and the territorial inclusion challenge to ensure equality of opportunities. A sustainable educational policy would consist on treating both issues jointly, but it seems there are two different time horizons. The first one is a long-term answer to the challenge of the access to higher education. For the general part of the challenge, it might be a policy aiming at creating local subsidiaries of larger universities, for example, for the first years of higher education. The future needs in terms of the skills and knowledge required by sustainable activities (integrating national and international and, in particular, commercial challenges) can be the basis to build vocational programs of education and continuous training to adapt to future territorial challenges and create direct bridges between local schools and local employment[16]. However, the lack of adaptability of the trainings is a risk that requires evaluation, as employment and economy might move faster that the educational supply. This is why the educational background is also essential to develop the adaptation skills of future workers. However, implementation can take a long time. In the short term, good options to contribute to solve the territorial inclusion challenge in education are financial subsidies for student mobility (especially for disadvantaged students), and targeted programs encouraging students from rural or deprived urban areas to apply in other regions (i.e. by informing them of education opportunities in such regions).

The health dimension is also crucial to ensure equality of opportunities and to reduce territorial gaps. An innovative public health approach consisting in giving access to local and immediate health support ("*Aller vers*") seems to reduce a part of those inequalities, as experimented during the vaccination campaign by the French National Health service (*Assurance Maladie*). A systematic evaluation should allow to draw some useful insights for a more inclusive public health policy, but probably some

[16] As an example, the project of an offshore wind power plant in the territory of Fécamp in Northern Normandy increased the demand for specific skilled workers in the territory: boilermakers, welders, but also all administrative and support staff (human resources...) and in the long run a variety of technicians devoted to the maintenance and logistics, with maritime expertise... Specific trainings and tertiary education curriculum have been created in the area. Other transitional activities like agriculture are likely to require new skills and training to move towards a more sustainable system (organic production, agro-forestry, conservation of landscapes...).

important investments are still necessary in the national health system and in particular in hospitals to ensure an equal access to high performing health infrastructure.

From a general perspective, the multidimensional and territorial analysis framework can help evaluate the impact of public policies and projects. A large set of public data and statistics are available in France at a very local level which allow studying the evolutions of "objective" variables that are related to the well-being, quality of life and dynamism of an area[17]. It is more difficult to build subjective well-being local measures, as data on subjective well-being most of the time comes from national surveys that are not a representative sample of the local population. Nonetheless, some local measures of the inhabitants' well-being can emerge. In the United Kingdom, the What Works Wellbeing Center proposes several tools to understand local needs and to quantitatively measure the well-being impact of local projects[18]. Qualitative investigations would also permit to measure more precisely and understand better the interactions between the different factors of well-being at the local level. For example, there is a lack of information on the multidimensional impact of the launch of a new economic activity such as a factory or a public service relocation at the territorial level, such as in terms of employment, improvement in the standards of living, but also in terms of social links (associations, local cultural life, etc.) or access to health services.

Conclusion

A successful transition towards a more sustainable society cannot afford to ignore the existing vulnerabilities. Apart from social and economic inequalities, territorial disparities represent a specific issue that the sustainability transition can either reinforce or mitigate. The growing literature on new geographical economics and on well-being economics, as well as a growing set of available data at the territorial level, can contribute to the development of transitional objectives on the main collective determinants of well-being. This gives an opportunity to adapt future policies to the present and coming challenges. Dynamics can be thought at the scale of a city, of a rural area, of a metropolitan network, or at a regional level, depending on the actors involved and the local issues. Developing socio-economic projects that foster employment, education, health, social links and the overall quality of life of the residents could contribute to defining a new way of designing public policies, with precise objectives regarding improvements in the determinants of well-being and environmental imperatives.

[17] Péron (2019) proposes a multidimensional indicator of the vulnerabilities at a territorial level built on long-term available statistics to identify declining territories and partially evaluate targeted public intervention.
[18] See for example this report : https://whatworkswellbeing.org/resources/understanding-local-needs-for-wellbeing-data/ or this toolkit : https://measure.whatworkswellbeing.org/

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