

---

# INED's strategic orientations

2021 - 2025

---



## CONTENTS

<b>1</b>	<b>INED: 4 DEFINING CHARACTERISTICS.....</b>	<b>5</b>
1.1	A key actor in population science research.....	5
1.2	An organization that encourages transversality.....	7
1.3	An attractive institution for training in research .....	8
1.4	An active publisher and disseminator of scientific knowledge.....	8
<b>2</b>	<b>FROM 2020: OPERATING IN A NEW ENVIRONMENT .....</b>	<b>9</b>
<b>3</b>	<b>SCIENTIFIC ORIENTATIONS AND RESEARCH PROJECTS .....</b>	<b>11</b>
3.1	Crises and populations: disruptions, continuities, transformations.....	11
3.1.1	Developing research on ties between population and the environment.....	13
3.1.2	Demographic and social effects of the covid-19 pandemic in France and across the world .....	14
3.1.3	Political and socioeconomic disruptions and demographic dynamics .....	15
3.2	Observation and measurement: critical and historical perspectives .....	16
3.2.1	New data, new issues.....	17
3.2.2	Developing innovative tools and methods .....	20
3.2.3	Critical scrutiny of data, observation categories, and analytic categories .....	20
3.2.4	The historical approach: crucial for contextualizing sources, data, and ideas .....	22
3.3	Leading one's life: choices, opportunities, and constraints at different phases in the life cycle .....	22
3.3.1	Childhood, education, transition to adulthood .....	23
3.3.2	Unions, fertility, parenthood, and family.....	24
3.3.3	Gender and sexuality: changing practices and norms .....	26
3.3.4	Life trajectories, inequalities, and socioeconomic mobility.....	27
3.3.5	Aging: where, how, with whom? .....	29
3.4	Population health: does progress equally benefit all?.....	30
3.4.1	Describing and understanding inequalities in health and mortality.....	30
3.4.2	Longer lives: how long, and in what state of health? .....	31
3.4.3	Sexual and reproductive health and rights: progress and threats.....	32
3.4.4	Health issues in global south regions.....	34
3.5	Space, mobility, migration: individual trajectories and public policies .....	35
3.5.1	The home, a home: housing, space, living conditions .....	36
3.5.2	Life trajectories, movements and mobility, regional dynamics.....	37
3.5.3	Issues and studies specific to overseas france .....	38
3.5.4	Migrants and their close relations: family trajectories, forms of sociability, transnational networks.....	39
3.5.5	Immigrants and minorities: inequalities, discrimination, racism.....	40
<b>4</b>	<b>NATIONAL AND INTERNATIONAL STRATEGY.....</b>	<b>42</b>
4.1	Ined's institutional position on the campus condorcet site and site-related strategies.....	42
4.1.1	Designing, conducting, publicizing, and promoting population science research.....	43
4.1.2	Increasing INED attractiveness and drawing power .....	47

4.2	Ined's position and drawing power at the international scale.....	48
4.2.1	Growing INED's international renown and influence .....	49
4.2.2	Making the Institute still more attractive to the international scientific community.....	50
4.2.3	Deepening and extending our implication in partnerships and networks .....	51
<b>5</b>	<b>WORKING TOWARDS SHARED POPULATION SCIENCE .....</b>	<b>52</b>
5.1	Developing an INED plan favorable to open science .....	52
5.1.1	Broadening open access to INED Éditions publications.....	52
5.1.2	Facilitating and broadening access to data.....	53
5.1.3	Fostering and supporting research sharing practices .....	54
5.2	Strengthening the "science and society" tie .....	55
5.2.1	Working to diffuse scientific culture and the scientific method, combating innumeracy .....	56
5.2.2	Informing and providing scientific grounding for public debate on major social issues.....	58
5.2.3	Creating conditions for exchanging with the nonacademic world .....	59
<b>6</b>	<b>ACCOMPANYING RESEARCH WORK.....</b>	<b>61</b>
6.1	Modernizing, simplifying, sharing management procedures and tools, bringing work groups closer together.....	61
6.1.1	Modernizing, simplifying, and sharing procedures.....	61
6.1.2	Modernizing, simplifying, and sharing management and research support tools .....	62
6.1.3	Bringing work groups closer together, providing needed organization management equipment.....	62
6.1.4	Innovatively combining remote and on-site working .....	62
6.2	Digitizing research accompaniment activities, systematically monitoring new technological advances.....	63
6.2.1	Further developing knowledge transfer .....	63
6.3	Further developing internal communication .....	64
6.3.1	Improving in-house information-sharing .....	64
6.3.2	Creating a welcoming collective environment.....	65
6.3.3	Developing, and more fully informing researchers on, materials for promoting their studies and/or presenting them to a general audience .....	65
6.4	Taking into account the environmental and social impacts of research activity .....	65
	<b>Appendices.....</b>	<b>66</b>
	Appendix 1: recommendations from the Hceres [high council for the evaluation of higher education and research] report on the 2014–2018 period.....	66
	Appendix 2: method.....	69
	Scientific orientations taskforce .....	69
	"Institution" taskforces .....	69
	Consulting staff not on taskforces .....	70

# 1 INED: 4 DEFINING CHARACTERISTICS

---

## 1.1 A KEY ACTOR IN POPULATION SCIENCE RESEARCH

The French Institute for Demographic Studies or INED (Institut National d'Études Démographiques) is France's smallest EPST [Public scientific and technological institution] and an essential national and international actor in the field of population science. Research studies conducted at INED describe and work to understand changes underway within populations in such areas as fertility, unions (formation and dissolution), mobility, migration, and mortality. The issues they handle involve gender relations, intergenerational balances, and social or geographic inequalities. A considerable proportion of INED research studies focus on France, but international comparison is also key and used with great frequency. Several studies focus on other geographic areas; for example, INED has a long tradition of conducting research on the Global South.

INED is distinguished for its expertise and innovative approaches in quantitative data analysis methods. But its savoir-faire has come to include the systematic combining of quantitative and qualitative procedures and processes. Our general approach to categories and concepts, indicators and analytical methods, and data quality always encompasses both theory and a critical perspective.

INED researchers come from a wide range of disciplines: demography, of course, but also sociology, economics, history, geography, statistics, anthropology, epidemiology, and medicine. In addition to many specific collaborations between INED researchers and researchers working in other institutions either in France or abroad, we have formalized several highly productive institutional partnerships. The Individus-Populations-Sociétés (iPOPs) Laboratory of Excellence or Labex (<https://www.ipops.fr/>), jointly run by INED and several French universities, is an excellent example. INED also co-runs—with the Université Paris 1 Panthéon-Sorbonne and support from six partner universities, eight PhD programs, and ten research units—the École des Hautes Études en Démographie (HED), which has recently won funding from France's Investments-in-the-Future Program (PIA) in connection with France's new Graduate School for Research (EUR). Jointly with the École des Hautes Études en Sciences Sociales (EHESS), INED runs the EUR's Gender and Sexuality Studies (GSST) department and is a partner of the Paris Graduate School of Economics (PGSE), a component of the Paris School of Economics. We also manage the Institute for the study of longevity, aging, and old-age situations (ILVV: <https://www.ilvv.fr>), a Scientific Interest Group (GIS) headed by an INED researcher; and we coordinate the RE-CO-NAI research platform [Child cohorts tracked from birth], in which the National Institute for Health and Medical Research (INSERM) is a partner, a project likewise funded by the Investments-in-the-Future Program. INED also belongs to the Institut Convergences Migrations (<https://icimigrations.fr/>), the Institut du Genre [Gender institute] GIS (its director and assistant director are both INED researchers), the CREAPT [Research center on work experience, working ages, and working populations] GIS, and the CIST (Collège International des Sciences des Territoires), whose assistant director is an INED researcher.

Internationally, INED has strong relations with all the major European and American demographic study centers. It is a long-standing member of the Generations and Gender Programme (GGP) coordination team, together with the Netherlands Interdisciplinary Demographic Institute (NIDI), the Max Planck Institute for Demographic Research (MPIDR), and the United Nations Economic Commission for Europe (UNECE). We also support the European Doctoral School of Demography (EDSD), an international research training program for doctoral students. We have also long partnered with various Global South countries on training programs and data collection and research projects. On its site, the Institute hosts the International Union for Scientific Study of Populations (IUSSP) and the International Association of French-Language Demographers (AIDELF)—realities that likewise attest to its strong international vocation and position. Furthermore, we are a leading actor in the production of large international databases.

### INED's official missions

INED's missions as defined by Article 3 of Order 86-382 of March 12, 1986, are as follows:

To undertake, develop, and encourage research on all aspects of population and populations, either on our own initiative or at the request of the French government;

To conduct, promote, and/or assess all research useful to demographic science and likely to increase demographic science's contribution to France's economic, social, and cultural advancement;

To collect, centralize, and promote all French and non-French research studies in its field of activity; this includes keeping the government and public authorities informed on newly acquired scientific knowledge and providing expert policy assessment and support, particularly for policies that seek to meet social and educational challenges related to its field of activity;

To help train researchers through research in its areas of competence;

To keep the public informed on demographic questions;

To ensure international dissemination of French demographic research, and to develop awareness of demographic information through the use of French.

In compliance with Article 2214-3 of the French Public Health Code, INED presents an annual report on the demographic situation in France and analyzes national abortion statistics. This information is published in an annually recurring article—"La Conjoncture Démographique de la France"/"The Demographic Situation in France"—in the journal *Population* (<http://www.revue-population.fr/conjoncture-demographique-en-france/>), published by INED Éditions.

## 1.2 AN ORGANIZATION THAT ENCOURAGES TRANSVERSALITY

Research at INED is organized into units or teams (Unités de Recherche or URs), of which there are currently ten, as follows: “Fertility, Families, and Couples” (UR3); “Gender, Sexuality, and Inequalities” (UR4); “Mortality, Health, and Epidemiology” (UR5); “Housing, Spatial Inequalities, and Trajectories” (UR6); “International Migrations and Minorities” (UR8); “Economic Demography” (UR9); “History and Population” (UR11); “Mobility, Trajectories, and Territories” (UR12); “Sexual and Reproductive Health and Rights” (UR14) (a team that includes researchers from INSERM, Université Paris-Sud, and Université de Versailles-Saint-Quentin-en-Yvelines); and DEMOSUD-Demography of the Global South (UR15). An eleventh, institutionally mixed team (UMS) working on the French Longitudinal Study of Children, or ELFE, includes researchers from INED, INSERM, and the Établissement Français du Sang [French blood institute], and is hosted at INED. Its work is to produce and diffuse data from the ELFE longitudinal cohort study; it is run by the research community in charge of designing that study's consecutive surveys.

Each UR can invite four academics or outside researchers as associates, to be appointed by the INED directorate for renewable periods of one to three years. Associated researchers' work may either fit in with the given unit's areas or study or opens up new research avenues. URs can also host outside academics on leave for one or two semesters (the Institute hosts an average of seven academic staff per year).

INED researchers may belong to two research units equally with no priority given to either affiliation. INED research questions often call for multidisciplinary treatment, and the intersections and interactions between them justify these dual memberships. The Institute's research structure also encompasses three transversal research groups—the Biographical and Multilevel Approach Group, the Old Age and Aging Group, and the International Perspectives Group—an arrangement that allows for regular exchanges (monthly seminars, study days, training) on methodologies or shared research topics.

INED organization includes a feature rarely found in EPSTs. All INED research support services (Surveys, Statistical Methods, Publications, IT and Information Systems, International Affairs and Partnerships, Communications) are transversal and their non-researcher personnel (other than secretarial staff) are available to assist all researchers. Moreover, the library and documentation services of the Campus Condorcet at Aubervilliers, where INED is now located, are shared by all on-site partner institutions, in the framework of the Campus's GED comprehensive documentation center. Non-researcher civil servant staff employed by the CNRS, EHESS, the Campus Condorcet Public Establishment (EPCC), and INED and now working at the GED have been grouped together into the Campus Condorcet Documentation Center Support Unit, which, together with INED's many other support services, accompany researchers at every stage in their research projects: budgeting, public procurement, human resources, contracts and accords, legal or logistical questions, and other matters. The recent creation of a “support steering service,” which groups together hitherto dispersed areas of competence (public procurement and purchases management, financial management), is likewise in the spirit of transversal management.

### 1.3 AN ATTRACTIVE INSTITUTION FOR TRAINING IN RESEARCH

INED is the only EPST with a survey support service, a point that also distinguishes it from its foreign counterparts. We are therefore in a position to produce original data that enrich public statistics while also being diffused across the scientific community and presented in various forms to a wide audience. Our Surveys service plays a pioneering role in innovative population survey design, particularly in connection with the issues being researched—most notably, sensitive subjects—and data collection methods. The Surveys service has organized surveys of hard-to-reach population subsets (e.g., people experiencing homelessness), groups rarely covered by INSEE [Institute for Statistics and Economic Studies] (e.g., prison inmates), and highly specific groups (e.g., adopters and adoptees, candidates for assisted reproductive technology procedures, victims of genital mutilation, African village populations surveyed at regular intervals, and others). INED has also developed a reputation in migration studies and surveys of immigrants and their descendants (the Trajectories and Origins or TeO surveys, the Migration Between Africa and Europe or MAFE survey, the Migrations, Family, Ageing survey), studies of interpersonal violence (the Violence and Gender Relations or VIRAGE survey), work–family balance (Families and Employers), couples, the family and intergenerational relations, gender (ERFI and EPIC), end-of-life, and in retrospective life-history data collection. Some of these surveys were conducted jointly with INSEE, INED's historical partner. Finally, there is the French Longitudinal Study of Children (Étude Longitudinale Française depuis l'Enfance or ELFE), which is tracking a cohort of 18,300 children born in metropolitan France in 2011 from birth to their twentieth birthday.

### 1.4 AN ACTIVE PUBLISHER AND DISSEMINATOR OF SCIENTIFIC KNOWLEDGE

INED research studies focus directly on major issues of the contemporary world: demographic aging, demographic growth and development, international migration, changing fertility trends and partnership norms, and many others. Individual behaviors of the sort often implicated in private life drive these radical changes, which in turn influence behaviors. It is therefore not surprising that the public takes an intense interest in INED study findings, along with various civil society actors such as teachers, companies, and, naturally, public decision-makers; INED researchers regularly draw on their expertise to inform and advise French national authorities in charge of demographic and social questions.

In fulfilling with its official missions (see Box, p. 6), the Institute ensures that all types of audiences have access to research findings, particularly via our rich and dynamic website, which offers animations and learning materials on population questions, and our monthly bulletin, *Population & Sociétés*, available in both French and English. With assistance from the Communications Department, researchers also disseminate their findings to the media through press releases, press conferences, and widely read and cited websites posting news stories by researchers and academics, such as *The Conversation*, jointly run by experts and journalists. INED belongs to the Population Europe network, which regularly diffuses scientific information on population questions affecting Europe. Our researchers' publications are now accessible on the Archined open archive (<https://archined.ined.fr/>).



Since its founding, INED has been distinguished for its many fine, clearly identified scientific publications. Its publishing operation, INED Éditions, is a label of quality with a long-standing catalogue developed over many decades that includes books, periodicals, and working papers on particular topic areas. Each of its six collections follows its own clear editorial line. INED Éditions is also known for its bold translation policy. Our bilingual quarterly journal, *Population*, enjoys international renown and recognition for its high scientific, and graphic, quality.

## 2 FROM 2020: OPERATING IN A NEW ENVIRONMENT

---

In the next five years, INED activity will be heavily affected by five major changes in the Institute's environment.

The first of these is the change in our location. INED has now moved onto Campus Condorcet, joining a strong research collective endowed with excellent facilities, including a comprehensive documentation center, a project incubator center, a conference center, and accommodation for guest researchers. We now share a campus with the Institut de Démographie of the Université de Paris (IDUP), the École des Hautes Études en Sciences Sociales (EHESS), and the École des Hautes Études en Santé Publique (EHESP public health training school), which operates out of the Maison des Sciences de l'Homme Paris Nord (MSH). Being on this site will make existing joint research and teaching programs easier to roll out, and it will be instrumental in fostering new ones. It will also facilitate interactions among humanities and social science disciplines. Being on Campus Condorcet will also have a strong positive impact on all the activities involved in promoting research and sharing knowledge and methods, as well as on INED support services.

The second major change is that France's National Open Science Plan is now underway. As a data producer and research publisher, INED has been working for several years to improve sharing of research material and results. In 2019, it materialized this policy by creating Archined, an archive open to the public, and our own DataLab, designed to make INED research survey data and INED-run contextual databases accessible to researchers. In the coming years, we will be putting in place a local Open Science plan with three main objectives: widening open access to INED publications while keeping a close eye on economic balance in this sector; increasing the accessibility of INED-produced data available while complying with the imperative to protect personal information; and encouraging the sharing of research practices.

The third change came about with new laws on access to French administrative data. Two bills passed in 2016, one on health data and the other on achieving the goal of a "digital republic," have now made such data available to researchers. In addition to using the data in and for themselves, it is now possible to match up information from a range of different areas and actors, thereby making it possible to develop synergies between administrative and survey data. For example, a partnership between INED and the National Education Ministry's Department of Evaluations, Prospects, and Performance (DEPP) is currently being negotiated that would enhance tracking of the ELFE and EPIPAGE 2 cohorts by allowing researchers to include the national mathematics and French evaluations of all students entering middle school. The ability to compare a variety of sources is a great research opportunity, one that will lead, for example, to improved knowledge of relatively

infrequent family situations that are difficult to observe through large public statistics surveys. There are also many possible uses researchers could make of the Demographic Files on Housing and Individuals (Fidéli). Data from France's National Health Data System (SNDS)—INED has been granted access to the last five years of individual data—are already being used in several research projects. INSEE's Ongoing Demographic Sample (EDP), which brings together a wide range of data of various origins, will make it possible to validate each source and analyze its strengths and limitations.

However, there are some drawbacks to this new situation. It takes time to access these complex data, constructed from an accounting rather than a research perspective, and using them requires specific skills to understand their properties and limitations; they must also be used in a secure, restricted framework. The cost of accessing data through the Secure Remote-Access Center (CASD) is rising. Additional human resources will be needed to support researchers planning to use these data. Moreover, at this time, access to the health data requires certain software. That researchers cannot access long series of causes-of-death data—which used to be obtained through INED–INSERM accords—is highly problematic. It should also be stressed that EDP-Santé health data often include little if any sociodemographic information. Progress has been made, as the EDP has now been matched up with the health data (resulting in EDP-Santé); however, given that this source is not exhaustive, those improvements cannot resolve all the problems.

The fourth development dates further back and concerns funding for research studies, particularly surveys. The danger is that institutional funding will be reduced as survey costs rise. INED needs stable funding—a point stressed by the HCERES (see Appendix 1)—if we are to pay for the extensive data collection operations that are still absolutely necessary to pursuing study of certain questions and population subsets. National-level research grants, including from France's PIA, are a major source of funding together with international grants, but because they only cover a limited time and research projects cannot be sure to secure them, they are also a major source of instability.

The last change in INED's environment is the prospective implementation of the LPPR law (Loi de Programmation Pluriannuelle sur la Recherche), making it mandatory for institutions such as ours to draw up a multiannual research programming plan. As of this writing, the National Assembly has passed the bill. LPPR is going to change the research landscape. To begin with, clauses on human resources (the bill's Title II) will have considerable impact on HR management at INED; the clause on open-ended contracts concerns us directly, given our involvement in long-term projects such as the Re-Co-Nai ELFE cohort, as does the clause establishing a legal framework for postdoctoral contracts. Wage scales are scheduled to be revised, and INED will need to apply the new scales to its personnel. Changes in National Research Agency (ANR) operation will have an impact on research project support and how research is practiced at INED, given how successful we have been at winning ANR grants—our rate is much higher than the national humanities and social sciences average. At this stage, it is hard to anticipate the effects of these changes on research, research support service needs, and the Institute's partnership policy.

### 3 SCIENTIFIC ORIENTATIONS AND RESEARCH PROJECTS

---

In the next five years, INED's scientific orientations and projects will focus on five major research *areas*, each subdivided into three to five sections. Some of the areas were already defined as part of previous comprehensive research plans, attesting to continuity in INED activity over recent years. The first area is crises and how they interact with demographic phenomena. This area most closely corresponds to the recent and ongoing pandemic situation, although some of the crises to be studied are long-lasting by their very nature. It is also an area where INED plans to intensify its efforts, namely on the question of relations between population and the environment. The second area covers issues related to observation modes and analytic methods. In addition to the key role of surveys and increasing use of new types of data, the emphasis here is on two approaches of great importance at INED: a critical perspective on data and analytic categories, and historical study. The next three areas are thematic and call to mind the three fundamental factors of demographic dynamics. But here they have been considerably renewed, as they encompass the much wider range of subjects now studied at INED and the diverse approaches used in conducting those studies.

This way of structuring our scientific orientations was developed collectively over several stages that are detailed in the Appendices. When the entire range of INED research is examined, it becomes clear that certain questions and approaches are relevant to and operative in all of our projects. Gender concerns, the life course or biographical approach, international comparison of public policies, and comparative analysis of policy impacts on demographic behaviors (see box below) are common to and used in all INED research studies. Demographic aging is also a cross-cutting phenomena as it involves problems studied by way of mortality and fertility analysis or in terms of family and intergenerational solidarity, and because it has multiple implications for social, health, and economic policy. In the architecture of our scientific orientations and research projects, aging issues come to the fore in Sections 3.3.5 (regarding the economic and social issues involved in demographic aging) and 3.4.2 (health).

INED studies emphasize analysis of inequalities of all sorts (related to gender, age, region, social position) to an uncommon degree. When INED researchers were asked what major issues Institute research should focus on in the next five years, the majority of them cited inequalities, particularly social ones. So inequality might have been designated an area in its own right, but this would have thrown the overall architecture of the plan off-balance. The problematics of how inequalities are observed, produced, and reduced are nonetheless a central concern here, as attested by the occurrence of the word in a number of different area and section headings.

#### 3.1 CRISES AND POPULATIONS: DISRUPTIONS, CONTINUITIES, TRANSFORMATIONS

Taken together, events of the last decade project an image of a disrupted, shaken world. Crises of all sorts (migration-related, economic, social, political, health-related, and humanitarian) have been roiling the world while the deep, lasting phenomena of global warming and its environmental consequences, demographic aging, and world population growth continue to threaten world equilibriums. Some crises are occurring at the level of the planet; others concern

specific geographical or geopolitical regions or particular population groups. Demography and demographics are relevant here in two ways: as a cause or aggravating factor in certain crises and as phenomena affected by crises (their impacts on fertility, mortality, and population movements). For demographers, who are necessarily familiar with inertia in demographic phenomena and analysis of long-term transitional processes, crises raise the questions of what breaks in continuity and transformations they cause, and how they fit together with transitional processes underway (the demographic and health transitions). Crises also reveal and amplify inequalities.

### **Geographic coverage and international comparisons**

Research conducted at INED covers a large part of the world, thanks in particular to the solid network of international partners we have developed over the years. INED collaborates extensively with European and North American universities and demography institutes. Collaborative projects in those parts of the world very often include international comparisons. The recent creation in 2016 of an “International Perspectives” research group gave those studies new visibility while opening up opportunities for comparing experiences and competencies beyond group members’ geographic areas and disciplinary fields. INED also contributes to international projects that use a wide range of international databases, including (among many others) the Human Mortality Database (HMD), the Human Cause-of-Death Database (HCD), the International Database on Longevity, contextual databases of the Generations and Gender Programme (GGP), and the European Union Family Policy Dataset (EUFamPol). Our relatively new DataLab is in charge of maintaining and diffusing data from these bases.

The Institute also has a long history of doing research on Global South countries. One of our research units focuses exclusively on this area and covers the entire range of demographic issues: fertility and nuptiality, internal and international migration, urbanization, mortality, and health, notably sexual and reproductive health. Many projects focus on the particular situation in Africa: unprecedented demographic increase, persistently high fertility, and slower, less assured health progress than on other continents. INED has a strong, long-standing commitment to several demographic tracking sites in Senegal, Mali, and Burkina Faso, and a likewise long-standing policy of partnering with African national statistics and research institutes. We have also long been engaged in research on the Arab and Muslim worlds (particularly North Africa, Iran, and the former Soviet republics of Central Asia). Studies of those countries show how the profound change processes underway in them—demographic transition, economic development, the digital revolution, energy transition, and others—are related to and interact with each other in a context where people’s aspirations are taking on a more individual cast. INED is also recognized for its expertise on the demographic giants China and India.

This first area comprises several sets of research studies that take on the above-cited questions. The first set investigates ties between population and the environment, a research terrain INED moved into long ago. Relations between development and the environment are still an issue; and climate change is raising many questions relevant to Global North as well as Global South countries. The second set looks at the effects of the COVID-19 pandemic. The third set covers

other major disruptions—political or socioeconomic, present or past—and how they relate to demographic dynamics.

### 3.1.1 Developing research on ties between population and the environment

Interactions between population and the environment are complex and multiform. Moreover, the very term “the environment” covers highly diverse realities: climate and its many effects as they characterize life milieus; air, water, and ground pollution; exposure to pollutants at home or in the workplace; work organization, etc. INED research encompasses all these dimensions. In line with earlier studies at the Institute, this research section will assess the overall state of systemic ties between population and the environment across the planet. Projects underway on the effects that populations have on the environment and those that environmental changes have on populations in both the Global North and South will be pursued. They focus on a wide range of environmental changes, from gradual changes related to increasing settlement density to sudden changes due to disasters or violent weather events. Studies are being developed on ties between family dynamics and access to resources (land, water, wood) in high population growth regions of East Africa, while studies of resilience following cyclones in Eastern India are continuing. Both of these sets of studies use qualitative survey series to supplement existing quantitative data, notably census data. We are hoping to set up a doctoral research network on demographic factors of resilience to environmental shocks and disruptions that would combine analysis of data from standard demographic sources (censuses and surveys) and environmental data sources (weather stations and space data). The network would be headed by INED and would involve a considerable number of partners, particularly African universities and statistics institutes. We are also taking part in an interdisciplinary project headed by France's National Research Institute for Sustainable Development (Institut de Recherche pour le Développement, or IRD) that will cross-check demographic data from population observation sites in Senegal with environmental data.

Increasing numbers of research studies on Global North countries are focusing on ties between work and the environment. One example is research that aims to quantify the environmental impact of practices in the research world; for example, what a researcher's carbon footprint is. INED research is also closely attentive to the effects of workplace exposure on workers' health. A study underway focuses on the concept of “attributable fraction,” widely accepted as an accurate indication of the proportion of morbidity–mortality due to work and the environment; the aim is to identify the drawbacks of that indicator and propose new indicators. Another project uses a reflexive perspective to assess what we learn from systems for monitoring the health impacts of industrial activities (specifically, the monitoring systems used by Santé Publique France, the country's regional health agencies [Agences Régionales de Santé or ARS], and ad hoc surveys conducted by local residents) and to identify the blind spots in those systems. As part of the ELFE cohort study [French Longitudinal Study of Children], data is being collected on different types of environmental exposure (pesticides, endocrine disruptors, air pollution, X-rays, ultraviolet rays, etc.) to learn how they impact child health and development. Another project will describe households'

environmental protection behaviors and analyze connections between pro-environment behaviors and gender inequalities (see 3.2.1).

### 3.1.2 Demographic and social effects of the covid-19 pandemic in France and across the world

From the onset of the COVID-19 crisis, INED began designing its own research projects and joining projects conducted by outside partners, all in the interest of deciphering the impact of the pandemic and lockdown and analyzing the inequalities that have manifested themselves in this context. These studies are not limited to short-term effects but extend to mid- and long-term ones as well.

The first set of studies focuses on the health impacts of the crisis. At the very outset of the pandemic, INED set up a dedicated internet platform for critical presentation and analysis of international data on COVID-19-related deaths (<https://dc-covid.site.ined.fr/>) that documents the data collection methodologies used in the different countries. Mortality analysis will be pursued and honed—always from an international perspective—through examination of mortality structure by sex, age, and cause-of-death, and by relating it to available data on case prevalence. The impact of the pandemic on health-care consumption, particularly hospital care, will be studied for France using medical-administrative data from the National Health Data System (Système National des Données de Santé or SNDS) (Projet COVID-HOSP). INSEE's Échantillon Démographique Permanent or EDP [Permanent Demographic Sample] is now being enriched and matched up with SNDS data, meaning that researchers will be able to identify affected immigrant and second-generation groups and access information on sociodemographic and economic profiles at a local scale. This source will also be used to study how ethno-racial and spatial inequalities are implicated in whether people seek health care for COVID-19 and how early or late they do so. Some studies cover neighboring European countries hard-hit by the pandemic. Epidemic dynamics in Italy and England-Wales will be modeled at the subnational scale (using information from Google's Community Mobility Reports database) to help understand observed territorial differences. At the European scale, INED is participating in IMaGiNE EURO, a WHO-funded project to collect data in ten countries on child delivery during the health crisis. The impact of the pandemic and lockdown on recourse to abortion will also be assessed. Finally, INED is contributing to an international project run by the European Pregnancy and Paediatric Infections Cohort Collaboration (EPPICC) and the Collaborative Initiative for Paediatric HIV Education and Research (CIPHER) that will describe the epidemiology of COVID-19 in HIV-positive children.

The COVID-19 pandemic, together with the lockdowns necessary to prevent its spread, have put people's housing, employment, and income situations as well as their family relations and work-life balance arrangements under strain—these are lasting effects. Moving beyond strictly epidemiological questions, INED decided early on to conduct general population surveys (COCONEL) to learn about the effects of lockdown. It also took part in Sapris surveys (SAnté, Pratiques, Relations et Inégalités Sociales pendant la crise COVID-19) of 130,000 volunteer respondents who were already part of large national health survey cohorts



(Constances, Etude Familiale E3N-E4N, ELFE-Epipage2, and NutriNet Santé). We are also participating in the EpiCOV national cohort survey, based on a sample of 135,000 individuals representative of the adult population in France. INED is in charge of the sociodemographic modules (daily life and employment) for this survey. Taken together, these data will improve our knowledge not only of the social disparities (in occupation, origin, and gender) implicated in exposure, infection, and developing life-threatening COVID-19, but also on the living conditions of households under lockdown. They will enable researchers to measure the short- and long-term changes the pandemic caused for households after nonessential social activities were stopped, mobility reduced, schools closed, and as households' financial and employment conditions worsened during lockdown. Also, to supplement the COCONEL survey and as part of doctoral thesis fieldwork, life history interviews were conducted by telephone or videoconference to access people's subjective experiences and representations of lockdown and to better understand how households were managing to juggle the different dimensions of their lives and handle the tensions caused within couples and families by the adjustments that had to be made. These surveys will enable researchers to measure the impact of lockdown on various dimensions of family and social life—housing conditions, household composition, domestic and parental work-sharing, demographic events, employment and work arrangements, relations with neighbors, children's schooling and well-being—and on existing social, gender, and ethno-racial inequalities in these areas. All of the surveys will work to situate the COVID-19 pandemic and the spring 2020 lockdown period in France within inhabitants' life trajectories and long-term social situations. This crisis has the potential to lastingly transform societies (causing a major economic crisis, affecting movement and mobility, speeding up recourse to remote working, impacting gender and intergenerational relations, etc.). INED researchers will not simply describe those effects but also analyze how they interact with demographic events.

### 3.1.3 Political and socioeconomic disruptions and demographic dynamics

This section is concerned with the effects of economic or political crises on individual and collective behaviors in different spheres of society.

Several studies focus on forced population movements or movements made under duress, displacements usually due to repressive state policies or adverse prevailing conditions in the territories people leave: economic or social crises, wars and severe conflicts, etc. Rather than study policies themselves, decision-making processes, or policy implementation, which, taken together, constitute the overall context, INED studies position themselves at the level of the affected populations, who have no real choice but to adapt as they are either forced to stay or move, to adapt their demographic and socioeconomic behaviors to given situations. Some examples are postponing the formation of a family or a couple, losing or changing jobs, undergoing economic difficulties that leave people more vulnerable than before, etc.

Economic crises have major effects on demographic behaviors. An unstable economic environment, characterized by a high risk of unemployment and discontinuous occupational careers, leads individuals to postpone forming a couple and/or having children. Economic instability affects different social groups differently, which may go some way to explaining

observed differences in demographic behaviors. The effects of the 2008 financial crisis and those related to the economic slowdown caused by the COVID-19 pandemic (see 3.1.2) will continue to be studied.

Whatever their nature, crises have varying timespans. Some of their effects may be temporary, in which case individuals adapt their behaviors at a given moment but can later return to what was normal for them; other crises bring about sudden and ultimately definitive changes in societies, which severely and durably affect social cohesion. Societies may have great trouble regaining that cohesion after armed conflicts, for example.

The link between crises and societies is under study in different regions of the world in connection with a range of concerns. Historical studies underway at INED draw on archive material to track forced population movements during the Stalinist period, focusing on exile trajectories and the mass displacements caused by that authoritarian regime. These studies discuss processes that developed in the past and belong to a long history of displacement policies and to family histories that extend over several generations. They are particularly attentive to returns from exile and the various mechanisms involved in (re)integrating into the country of origin.

The political crises that shook up a great number of Arab countries occurred at different moments and differ in magnitude and in the impacts they have had on the societies involved. The repercussions on individual behaviors of the 2011 political crisis in Tunisia have been studied via a nationwide survey aiming to capture the social transformations that have occurred (ETST 2017). More broadly, that study describes and analyzes the demographic effects of 21st-century economic, political, social, and health crises on Mediterranean Basin countries.

The DEMOcrises project focuses on a different world region, Latin America. In the last several decades, this part of the world has been hit by substantial economic and political crises and armed conflicts that have given rise to humanitarian crises. The DEMOcrises project (a Marie Skłodowska-Curie grant in association with Johns Hopkins University) will provide precise demographic assessments to improve our understanding of the complex dimensions of the humanitarian crisis in Latin America. The model will be Venezuela. Because migration became Venezuelans' only possible survival strategy, its crisis came to engulf the entire continent. No Latin American country has been spared the effects of Venezuela's collapse.

## 3.2 OBSERVATION AND MEASUREMENT: CRITICAL AND HISTORICAL PERSPECTIVES

INED's heavy investment in innovative data collection operations—run by its Surveys and Polls department—is a key feature of the Institute's identity, one that distinguishes it from its counterparts in other countries. INED can furnish social science and humanities research with infrastructures that meet international standards, a major reason it regularly wins national and European funding. In the next five years, a number of core programs and highly innovative data collection operations will either be developed or completed. Alongside and in some cases in addition to surveys, data not designed for research purposes but rather “recycled” to that end



are being used with increasing frequency and raising new questions that INED—specifically its Statistical Methods and Legal departments—will be examining very closely. The Institute is pursuing its efforts to be on the cutting edge of methodological innovations in mathematical demography and statistics. Two other key features of INED's identity are our close attention to data quality and our critical thinking on categories used in both data collection and analysis. The last section in this area showcases the disciplinary approach of history. INED researchers have produced many studies in the field of historical demography, some of which are mentioned below in topic area presentations. This section is meant to give the historical demography approach to population science the visibility it deserves.

### 3.2.1 New data, new issues

Survey data is an essential “raw material” for INED research. While INED researchers make considerable use of data collected by other organizations, the Institute enjoys a fine reputation as an essential data producer, especially in conjunction with sensitive subjects and the design and implementation of innovative survey protocols. These INED-run operations are at different stages of progress. Several field surveys (Trajectoires et Origines 2, or TeO2; Immigrés chinois à Paris et en région parisienne, or CHIPRe; Migrations Famille Vieillessement 2, or MFV2; Fin de Vie DOM [on end-of-life in France's overseas *departments*]) are underway, but the COVID pandemic has complicated and delayed data collection operations. New surveys are being designed. Theme-centered projects in the third area—specifically, the Fécondité [Fertility] survey project; the new Generations and Gender survey wave (GGP2020), which is competing for inclusion in the European Strategic Forum on Research Infrastructure (ESFRI) road map; the ENVIE [Desire] survey on the emotional lives of young adults (JEUNES project of the Agence Nationale de Recherche or ANR); the second edition of the Familles et Employeurs survey (FAMPEMP2); future waves of the ELFE cohort survey and the Eurocohort project (including France's involvement in a project for a new, European-scale child cohort survey)—will require heavy data collection. The AMP-Sans Frontières survey [Assisted Reproductive Technology (ART) Without Borders] on the use of ART outside the French legal and medical framework offers an excellent illustration of INED study innovativeness and resonance with societal issues. These ambitious surveys take up social questions in public debate: falling fertility, changing contraceptive possibilities and options, the bioethics questions implicated in access to ART, work–family reconciliation arrangements, high-risk behavior and uses of technology among young people, forms of intergenerational solidarity, gender relations, the role of informal caretakers, and the well-being of children. They will provide both researchers and policymakers with essential data for capturing long-term developments and radically new trends in all these areas. In response to the recommendations of the HCERES [French High Council for the Evaluation of Research and Higher Education], INED has submitted a project called Observatoire LifeObs for integration into the PIA3 [third installment of France's Investments-in-the-Future national research funding program]. If the project is chosen, funding will be secured for all these surveys. Meanwhile, a key goal for the ELFE cohort [French Longitudinal Study of Children], funded by Investments-in-the-Future through 2024, will be to obtain new funding to ensure continued child cohort follow-up.

Other surveys are at earlier stages of development. This category includes a planned survey on inmates after prison, a survey project on friendship relations called Contacts, and one on how couple members share “environmental protection” tasks. The ELFE institutionally mixed research unit (UMS Elfe) is preparing a direct survey of cohort adolescents (aged 13) that will take up issues specific to that age (addictions, mental health, attitudes toward the body, etc.). It will be a challenge to have this population participate directly, as adolescents are seldom questioned in surveys.

In the sphere of methodology, INED's SES is working on questionnaire and survey conducting procedures (multimode survey development), new means of contacting respondents (multilingual approaches), qualitative approaches and methods (focus groups, cognitive approaches, and sensitive subject survey methods using interviews, and cards/maps), as well as specific sampling methods, including use of INSEE's Fichiers Démographiques sur les Logements et les Individus, or Fidéli files [Demographic Files on Housing Units and Individuals] and using the snowball method to access hard-to-reach, seldom surveyed population groups. For example, the sample used in the TRUST survey of young men having sexual relations with other men that put them at high risk for HIV infection was drawn using the Respondent Driven Sampling method (RDS). This survey, funded by the ANRS [National Health Research Agency], investigates these young men's sexual practices and sexual and socialization networks in order to help get them into combined prevention programs such as pre-exposure prophylaxis, or PrEP. The AMP-Sans Frontières survey, meanwhile, uses participatory research methodology.

In the last ten years, use of quantitative sources other than survey data has greatly increased. Though this material, called “management data,” is produced by public administrations or private companies for non-scientific purposes, it can be of use in research. For example, some of the data allow for passively following individuals—an extremely valuable feature.

While administrative data have long been used at INED, thanks among other things to our historical proximity to INSEE, the sources of such data have changed greatly in the last few years. Today, INSEE's Permanent Demographic Sample (EDP) is widely used by Institute researchers, as are its Fidéli files; both can be used in connection with a wide range of themes, including partnership and family trajectories, children's living conditions, international migration, residential mobility, and gender gaps in retirement pension systems. ANR's Big Stat project, which investigates how the mass management data and survey files now available for demography research are used, has been a major catalyst for INED's use of these data; it has centralized research problematics in this area, facilitated data sharing among users, and pushed forward dialogue with data producers. These avenues should be pursued further because collaborative research is a key asset in transferring the knowledge and know-how needed to use these databases.

The 2016 creation in France of the National Health Data System (SNDS) has likewise opened up new research opportunities. INED has recently launched a considerable number of health research projects that use those data; specifically, projects on infertility treatment (ANR StimHo), pregnancy outcomes, and end-of-life, as well as on the impact of the COVID-19

pandemic. Likewise, the health data have made it possible to renew research on abortion (studies instituted by France's Code de la Santé Publique). Abortion statistics used to be obtained through forms filled out before or after abortion procedures. Those forms have been replaced by access to CNAM databases (Caisse Nationale de l'Assurance Maladie, France's national health insurance fund). Researchers can now access exhaustive data on the previous five years or over 20 years (sample at 1/100) from CNAM databases and use it to track health-care consumption trajectories and reproductive histories. For the ELFE cohort survey, this kind of data will provide reliable complementary information on health-care consumption, thereby reducing the burden of data collection for participants. They will also make it possible to do passive health-related tracking of irregular survey participants.

Population science researchers at INED and elsewhere can now mine the lode of companies' and corporations' "sleeping data": partnership agreements with companies enable them to use those data free of charge and in compliance with the same personal data protections that apply to more traditional sources. "Sleeping data" include data from company and administration personnel files, website user data, metadata on interindividual exchanges and interactions or intracity movements, etc. Researchers can use them to study a range of diverse phenomena: career trajectories, gender inequalities, couple formation modes and digital sociability, movements within a given city and how they change over the day. They are different from traditional survey data in that they are often exhaustive, longitudinal (by way of panels), quickly accessible, and cost-saving because they eliminate data collection costs. They are also gathered in a highly specific way. Management files record traces of practices and events rather than responses to questions. Still, certain precautions must be taken in using them, related to anonymity, consent of studied groups, caution in generalizing findings (companies may represent particular cases only; the data may contain only cursory individual sociodemographic characteristics), and the need to clean and recode data or digital traces.

Last, INED is starting to use satellite data. Institute researchers are taking part in a feasibility study run by the Laboratoire d'Informatique Paris Descartes or LIPADE [Laboratory of Informatics Paris Descartes] on the automatic production of contextual and environmental indicators based on remote sensing data in Africa—data that could be used to understand demographic changes at fine-grained geographic scales. The project would use open-access Sentinel2 images produced by the European Space Agency. A grant application has been submitted to the Data Intelligence Institute of Paris. There is also a plan in synergy with Diginove to investigate the possibilities of estimating populations using Sentinel2 images. This could open the way for a CIFRE Program thesis [Industrial accords on training-through-research]. Funding would be provided to hire a doctoral student in accordance with CIFRE Program objectives. Finally, Institute researchers are exploring the possibility of collaborating with the Centre National d'Études Spatiales (CNES) to use Spot and Sentinel images to capture changes in human settlement and forest cover in western Uganda over the last 30 years, a project that would combine and compare satellite data, census data, and qualitative surveys, and that could conceivably be extended to the outskirts of Kampala.

Some processes and mechanisms cannot be statistically objectified, however. It would be hard to capture individuals' subjective representations, aspirations, or the meanings they give

to their life trajectories using quantitative surveys. Some population groups cannot readily be studied under the constraints of “traditional” surveys or longitudinal tracking. It is therefore useful to combine qualitative methods (ethnographic interviews, life narratives, personal archives such as letters, photographs, and personal accounts) with quantitative ones, and INED researchers often use the former. The combination sheds light on the processes operative upstream and downstream of quantitative analysis and enables researchers to identify statistically marginal phenomena or those that concern a statistical minority of the population under study.

### 3.2.2 Developing innovative tools and methods

Loyal to its origins and identity, INED is on the cutting edge of research in mathematical demography and demographic methods. The objective is to use mathematical and statistical tools to measure demographic processes and their interrelations and to formulate projections on how those processes will evolve in the future.

INED research studies here focus primarily on mortality and include several different projects on measuring and projecting level indicators, mortality by age, and mortality differentials and inequalities. Other projects will apply new types of mortality indicators (Cross-sectional Average Length of Life, or CAL; Lagged-Cohort Life Expectancy, or LCLE; Modal Age at Death, and others) that will supplement the most frequently used indicators, such as life expectancy, and enable researchers to better understand how mortality has evolved over time and across populations.

Another direction in this research section is to develop new model life tables, specifically for children between 0 and 5 years (see also 3.4.4). The objective here is to model how mortality risk varies day by day or month by month between the ages of 0 and 5 years in order to better understand underlying mortality factors and detect and correct defective data. Projects on data smoothing techniques are motivated by this same concern to correct data and so to capture real mortality trends more accurately.

Improving mortality projection techniques is also an important focus of mathematical demography research at INED. Here the point is to use new indicators developed elsewhere whose regularities and inertia reduce mortality projection uncertainty.

Our research in mortality measurement is conducted interactively with several different international organizations (United Nations Population Division, UNICEF, WHO). A number of the projects cited here directly impact how these international organizations fulfill their mission to track mortality trends at the international level. INED is also a reference when it comes to synthesizing knowledge in demographic analysis; there are plans to develop manuals in this field in both French and English.

### 3.2.3 Critical scrutiny of data, observation categories, and analytic categories

Researchers designing surveys reflect on both how these crucial work instruments have been used and how they might be better used in the future. For example, some have attentively studied the methodology used in the Etude des Parcours Individuels et Conjugaux, or EPIC

survey [on individual and partnership trajectories]. Do respondents speaking in the presence of their partner narrate their partnership history the same way as when the partner is not there? Do partners tell the same story of how they met? How are we to interpret the spontaneous or less-than-spontaneous way respondents cite important dates (wedding day or the day the couple entered a formal civil union)? In preparing the second edition of the Familles et Employeurs survey, researchers will be testing to see whether sufficiently precise information can be collected on partners' respective work lives and working conditions by questioning one partner only (about both their own and partner's situation). The data collection problems that arise in connection with multiresidence—most notably double-counting, particularly of children—are another matter for critical reflection. Meanwhile, a study supported by the Institut Convergences Migrations and the Conseil Général governing body of the Seine-Saint-Denis *département* focuses on how census data is collected in that *département*. Finally, INED researchers are working on the new challenges of conducting sexuality surveys in the digital age.

In Global South countries, the amount of demographic data available has increased considerably in recent years. Though civil registers are missing some information, most of these countries now have several censuses and demographic surveys at their disposal for monitoring demographic trends since the 1960s. The situation remains far from satisfactory, though, due to uncertainties about data quality and therefore about estimations based on those data. Using, comparing, and analyzing data from a range of different source types (demographic tracking, local and national surveys, population censuses) and the related metadata are key activities in INED research on Global South countries. They enable researchers to better understand observed differences and more accurately describe situations and trends in spheres ranging from health to fertility and family.

The categories used in collecting and analyzing data also come under critical scrutiny at INED. For example, how the word “couple” is defined is an important issue; existing definitions are constantly being called into question. A collective work coedited by INED researchers on how to statistically capture gender and sexual minorities is being drafted. INED is also contributing to the debate on ethnic statistics by studying how stances on this issue have varied over time and space. The GLOBAL RACE project (ANR in partnership with Sciences Po; see 3.5.5) includes documenting and mapping official statistics uses of ethnic and racial categories in conjunction with antidiscrimination policies in ten European, North American, and South American countries. Simultaneously, a research program is underway to study how categories used in 20th-century France to identify colonial migrants living in metropolitan France were formulated and applied. Last, a joint project with the Fondation Maison des Sciences de l'Homme, the University of Brasilia, and the Moscow Academy of Sciences will analyze how “otherness” is “collected” and categorized in those three countries' public statistics, and the fit between those collection practices and the respective countries' social policies.

There are also studies either planned or in progress on institutional classifications and terminology: the construction of a “socio-occupational nomenclature” (Profession-Catégorie Sociale, or PCS) to describe the unit “Households” in France and thereby meet the need to characterize household social positions; investigation of the new issues that arise for France's

current PCS when it comes to capturing economic precarity and new legal statuses; inquiring into regional (territorial) nomenclatures and typologies to facilitate critical comparisons between historical periods and the present time. There will also be historical studies on these questions. A history study of how labor was measured from the 17th through the 20th century is underway. Another history study will focus on the work of Jacques Ferdinand-Dreyfus (1884–1943), an actuary at the Ministry of Labor.

### 3.2.4 The historical approach: crucial for contextualizing sources, data, and ideas

The historical approach to demography, in interaction with contemporary studies, is of considerable import in INED research. The idea that unifies historical studies done at the Institute is the importance of contextualizing historical material. Studies of the intellectual history of population science and economics are done at INED that draw on hitherto unexploited archive material; they provide researchers with important knowledge on the discipline's fundamental texts and lead to publishing critical French editions of those texts. An INED study of the Physiocracy movement (1756–1789), for example, aims to situate it within the Enlightenment not only from an intellectual but also a social and cultural perspective.

Historical research studies may also cover more recent periods. Examples are a study of the connections between medical and demographic knowledge in the 19th century, and a study of how consanguinity came to be problematized socially and scientifically in the 20th century. The latter focuses on how the vast, ill-defined research fields of the time took up the question of “consanguineous unions” when the social sciences and biology were not yet clearly differentiated from each other.

Historical studies conducted at INED also encompass long-term developments in the French population, with particular attention to structural changes—aging, socioeconomic developments—that have affected that population. In the coming years, two major research areas will be investigated: the long-term transformation of the labor market that began with the rise of wage-labor and the workers' rights—to retirement, unemployment compensation, health protections—that were part of it; and the effects of state building, apprehended through military conscription and the extension of welfare policies to the nation at large.

All of these studies have a strong methodological dimension, in line with recent developments in the discipline. Those developments themselves are subjects of vigorous international debate. INED researchers in this field aim to participate in thinking on historical demography in light of the many technical innovations that have appeared in recent years, from optical character recognition to automatic person matching.

## 3.3 LEADING ONE'S LIFE: CHOICES, OPPORTUNITIES, AND CONSTRAINTS AT DIFFERENT PHASES IN THE LIFE CYCLE

From childhood to adulthood, from retirement to old age, life is punctuated with “events” that correspond to stages, breaks in continuity, bifurcations, or transitions, depending on how they



are experienced. Some of those events—the ones covered in 3.2 (“Unions, fertility, parenthood, and family”)—are demographic in the strict sense of the term: having a child, getting married or forming a couple, separating, losing a life partner. But events in this sphere commonly called “private” interact in many ways. The experiences a person has in childhood and their early schooling trajectory strongly influence their later family and occupational life and path, which likewise interact with each other, as the issue of work–life balance illustrates. The question of gender relations is also fundamental in these matters. Youth is the period in which people construct their sexual identities. Later in life, retirement and old age are also likely to bring about fundamental rearrangements. Generally speaking, “private life” is not as private as all that: it unfolds in a social, cultural, economic, and political environment made up of opportunities and constraints. It also inherits content from previous generations, resulting in a variety of inequalities—notably between men and women—that often make social mobility difficult. One objective of family policies is to mitigate those inequalities; such policies play a crucial role in individuals’ lives.

### 3.3.1 Childhood, education, transition to adulthood

Research studies on these subjects show that childhood and the transition to adulthood are crucial periods in a person’s life trajectory. By studying them, researchers attain a better understanding of individual trajectories and the inequalities observed in a population at large. This section brings together studies on that composite period of life, emphasizing how inequalities are produced from the moment a person is born, throughout their childhood, and all the way to the start of adulthood.

One segment of this research seeks to understand the impact of family characteristics and childhood experiences (poverty, parents’ separation, migration, and others) on individuals’ life trajectories. A key question here is the impact of those experienced situations and events not only on health but also cognitive and socio-emotional development. In this connection, researchers are particularly attentive to methods for measuring childhood poverty in all its dimensions. INED is heavily involved in research on these questions, as attested by our status as coordinator of the ANR EGAL survey (Emergence of health Gaps in early Life: A dynamic analysis of three national birth cohorts) and our implication in the international EU Horizon H2020 Lifecycle project (run by Erasmus University). Other studies focus specifically on individual transitions to adulthood (educational, occupational, etc.), working to determine which sociodemographic factors affect them. The ELFE study, meanwhile, takes into account the diversity of young people’s social life experiences (leisure activities, friendships, relations with adults, etc.). In the coming years, the study will be directly questioning adolescents, producing an unprecedented corpus of data on this pivotal age.

Inequalities within the population at large develop well before adulthood. INED is participating in the international Development of Inequalities in Child Educational Achievement project, or DICE (French segment funded by the ANR’s Open Research Area), which focuses on inequalities in scholastic performance and how different contextual features (access to formal daycare arrangements or early schooling, for example) can either aggravate or help reduce existing inequalities in scholastic performance, early learning, cognitive skills, etc. Income inequalities

impact children directly from a very young age. A study underway focuses on differences in parents' spending on their children by social group.

Several studies in this section target specific population groups. Longitudinal follow-up on respondents and qualitative interviews from the ELAP survey (Étude sur L'accès à l'Autonomie des jeunes Placés)[on access to autonomy of young people living in foster care institutions in France] are being used to study these young people's outcomes after they leave the institutional structure (for example, whether they become parents, acquire financial independence, etc.). Other studies, drawing on panels used by the Department of Evaluation, Prospects, and Performance (DEPP) of France's National Ministry of Education, focus on the life trajectories of disabled children. For example, all persons with cystic fibrosis in France are followed by a national organization that collects information on them from birth to adulthood.

Several projects in this section, including the ELFE study, rely on data from international child cohorts. Many diverse disciplines are involved in producing those data, greatly enriching the analyses. Moreover, the ELFE study uses scientifically validated scales for measuring child development, quality of life, and cognitive skills, making international comparisons possible, comparisons that bring to light the role of national context in producing inequalities and facilitate study of factors that promote or hinder child development and well-being.

### 3.3.2 Unions, fertility, parenthood, and family

In France and Global North countries generally, men's and women's family trajectories have become more diverse and complex with the increase in union breakups and blended families. Couple formation changed over the 20th century. Online dating services can now be observed, showing how people get matched up based on explicit preferences and indicated choices. A project to use mass data from a dating site will enable researchers to analyze how this matchmaking market operates in 16 European countries. This way of meeting potential partners can lead not only to affective and/or sexual relationships but also to the formation of different types of couples: cohabiting partners, partners who continue to live in two separate homes. The length of relationships formed this way varies. In stable couples, the questions of partnership and family roles are ongoing ones. The main episodes of partnerships are occasions for establishing practical arrangements on domestic work-sharing and work–family balancing—arrangements that vary by social milieu. Decisions may be reached through negotiation; choices may be formalized; they may be made under varying types of constraints. When young couples postpone the birth of their first child, this implies an explicit decision to have a child in the first place *and* makes it easier to choose not to. But people do not always have full control over their behaviors. Some couples run into medical difficulties when they try to conceive or in bringing a pregnancy to term, whereas for others an unplanned pregnancy can disrupt family life. After a child is born, labor market and childcare availability constraints have to be dealt with.

The diversity of INED research topics in this section corresponds to the wide variety of partnership and fertility behaviors observed, from intensive childbearing and parenting to childless couples; from means for achieving work–family balance to the limitations that come



with staggered working hours; from partners' negotiations and arrangements on domestic task-sharing to domestic violence. Intergenerational relations are also becoming more complex due to falling mortality. Family solidarity of various kinds is strong in France and ranges from parents helping their adult children look after their children to children helping aged and now dependent parents. Most of these studies also observe and attend to various forms of gender inequality. Likewise, union breakups often lead to reconfigured socioeconomic situations that are significantly different for women than men. Family trajectories after union breakups may include repartnering and forming a blended family made up of several existing ones whose contours then get redrawn in conjunction with individual, family, or occupational trajectories. These studies draw on a varied corpus of data: INED surveys (life course and partner choice surveys, the *Familles et Employeurs* survey); other French data, notably from INSEE surveys (*Famille et Logements* [Families and housing], Budget de Famille, Emploi du temps [Time-use], the Permanent Demographic Sample (EDP), Génération); and international surveys (Generations and Gender or GGS [ERFI in French]). Wherever possible, INED researchers use the historical depth these data offer to retrace the histories of certain behaviors. The process is never complete, and the above-cited surveys must be redesigned and redone regularly. Obtaining funding for these INED-run operations is a key concern and activity at the Institute (see 3.2.1).

Diversification of family and occupational trajectories has produced new inequalities not only between the sexes but also between social groups in a context of rising economic and occupational uncertainty. INED studies will examine these inequalities closely. Context, too, works to construct social differences, in that behaviors may be influenced, limited, or contained by a person's immediate human surroundings and life milieu and the social and institutional context of everyday life. Paternity leave options, legal frames for life-partner relationships (marriage and marriage contracts, civil unions, cohabitation) and parent-child relationships, normative social policies on unions and parenthood—all of these surrounding conditions help explain national specificities. Once again, international comparisons are highly useful in assessing the impacts of institutional environments on behaviors.

Research problematics in Global South countries are considerably different, and the situations studied there vary widely. INED has long been following fertility and nuptiality trends in Africa. Today's rebounding fertility in Egypt and Algeria call into question the demographic transition theory. Marriage, still perceived as necessary in southern Mediterranean societies, has become an increasingly difficult goal to achieve in them, and singlehood is rising. That an increasing number of women are now continuing their education is very likely contributing to these developments. Studies underway on these questions compare and combine analysis of census data and qualitative interviews.

In West Africa, where fertility is still relatively high, research is examining women's reproductive choices under existing structural and normative constraints, taking into account their contraceptive practices and recourse to abortion as well as gender relations and the relational nature of procreative and contraceptive processes. These studies use a qualitative approach; moreover, the Indepth network that routinely collects data at rural demographic tracking sites can now take into account a new module on reproductive and contraceptive

histories. In sub-Saharan Africa, fertility is generally falling, but sudden jolts and accelerations are also observed, and nuptiality is changing along with household and family configurations. Research on East Africa focuses primarily on family configurations as revealed, on the one hand, by demographic data (surveys and censuses) enriched by information on household structures, unions and marriages, and reproductive histories; on the other, by how people living there perceive their experiences. A survey on Kenya and Uganda is currently being designed together with the Graduate Institute of International and Development Studies (IHEID), involving the universities of Geneva, Makerere, and Nairobi, and the African Population and Health Research Center (APHRC). Comparisons of parents' child-gender preferences will be done at a broad international scale (covering not only Africa and Asia but also former Soviet countries) using census data made available by IPUMS-International. These studies on changes in the family, nuptiality, and fertility will fuel general reflection on social policies in these countries, where the family—particularly children—plays a key role in individual and family strategies for combating poverty.

### 3.3.3 Gender and sexuality: changing practices and norms

While the theme of inequalities between men and women cuts across INED research, gender is a focus of study in its own right. The research in this section concerns gender identities and the various types of logic that drive differentiations between men and women and their situations. The recent emergence of new identities termed nonbinary are a methodological challenge. How might gender be objectified in a way other than the category of sex? This development coincides with theoretical renewal. Gender relations are increasingly understood in terms of their interrelations and interactions with other types of social relations, particularly those of age, class, and race (intersectionality). These issues and research questions are central to several studies underway at INED, some focused specifically on sexuality and violence (see box below).

Since the 1990s, INED has regularly produced major surveys on sexuality that represent unprecedented and highly informative tracking of sexual practices and norms in France. That effort is now being renewed with the *Enquête sur la Vie Affective des Jeunes Adultes* (ENVIE–ANR JEUNES) survey [Survey on the emotional lives of young adults]. Focused specifically on young people's sexuality, the survey is updating both knowledge and methodology, the latter thanks to its innovative relational approach for capturing romantic and affective relationship diversity. INED is also taking part in the upcoming edition of a general population survey on sexual health (*Sexualités et santé*, E3S, INSERM–ANRS). The research projects derived from these surveys study sexuality in connection with three questions: practices, including new digital practices such as online dating and the use of pornography sites; sexual fantasies and the gender relations that structure them; sexual norms, such as consent, and the tensions around it. Homosexuality is also a fundamental focus of this research, with studies that aim to capture the social demography of gay and lesbian populations in a context of much greater social acceptance. Researchers are also critically examining and reflecting on the indicators used to study these groups. The studies have a strong comparative dimension, focusing in particular on practice and category differences. One example is a new comparative study of

LGBTQ parenthood in France and the United States (Marie Skłodowska-Curie grant in association with the University of Texas at Austin).

Understanding gender relations is essential to understanding violence. INED's VIRAGE surveys (Violences et rapports de genre) of the general population in metropolitan France, and their recent extension to France's overseas *départements*, are now providing benchmark data on the subject, data currently being analyzed in several studies at INED or partner institutions. Focused on sexual and domestic partner violence among other issues, these projects are concerned with both the types of logic that drive gender violence (here the direct focus is on perpetrators) and the consequences of sexual violence on life trajectories, particularly sexual and emotional lives and health histories. A specificity of these surveys and studies is that they cover sexual violence against and as experienced by men (rather than only women).

#### **A benchmark center for research on violence**

INED has become a reference for scientific research on violence. Its Violences et Rapports de Genre surveys (VIRAGE 2015) [Violence and gender relations] and the VIRAGE survey adapted for and conducted in overseas French *départements* (VIRAGE DOM) encompass verbal, psychological, physical, and sexual violence suffered in different contexts. The surveys are updating what was learned from the precursor ENVEFF national survey (Enquête nationale sur les violences envers les femmes, 2001) [on violence against women] while widening coverage to include men. VIRAGE findings on all these areas of France have been published in a collective work released January 2021, and first findings on violence in the Guadeloupe, Martinique, and Reunion *départements* were presented in those *départements* in 2019. Analyses presently underway overseas (ANR VidOM) will not only furnish data that complete the picture of violence in France but also stimulate thinking on violence as an analytic category and on the best indicators and methodological tools for apprehending it.

A closely related issue that has emerged in recent years as both a concept and a focus of study is gynecological and obstetrical violence. The question is now an integral part of research projects on and sexual and reproductive health and rights. The issue of violence is also central to research on connections between demographics and political violence, the subject of a study on mass displacements caused by authoritarian regimes and political exiles' trajectories.

#### **3.3.4 Life trajectories, inequalities, and socioeconomic mobility**

Family events (births, unions, separations, the death of one's life partner) frequently and sometimes lastingly impact individuals' socioeconomic trajectories, affecting standard of living, wealth, job opportunities, and occupational dynamics. Research on these questions brings to light effects that differ by age, sex, and socio-occupational status, clarifying that partnership and family trajectories can be an important component of inequality dynamics in the population. The projects in this section explore various dimensions of inequalities and socioeconomic mobility as they relate to family life. They draw on a range of different data

sources (longitudinal surveys, public administrative data [particularly tax-related], company “sleeping data” files, qualitative interviews) and often involve international comparisons.

Analysis of partnership trajectory determinants and economic impacts and how they have been evolving over generations will be further detailed by differentiating the mechanisms at work by sex and social origin. “Matrimony” strategies and behaviors will be studied here in connection with legal regulations in effect, which vary by type of union, how resources are shared and not shared within couples, and how they get divided in the event of separation or death. The objective is to assess the impact of critical work-related events (unemployment, retirement, occupational changes) on conjugal trajectories. The effect of those trajectories—more likely than before to be discontinuous—on labor supply, standard of living, and wealth accumulation will also be studied. Another area of interest is ties between partnership trajectories, health, and quality of life (sleep quality, among other criteria), and how they differ by gender. These studies work from data contained in INSEE's *Histoire de Vie et Patrimoine* survey [on life histories and wealth], thoroughly revamped in 2014 with a longitudinal component.

We will continue to pursue studies on inequalities in men's and women's shares of domestic work and parenting activities and how they evolve with age and from one generation to the next. New INED survey projects (in connection with the GGS and FAMEMP2 surveys) will be done on interfaces between family life and work life and the role played in men's and women's socio-occupational trajectories by unequal division of domestic work and parenting activities within couples. FAMEMP2, the new edition of the Familles et Employeurs survey (first edition, 2004), will measure trends in the prevalence of work life versus personal life conflict and work to understand people's strategies for fitting together their jobs and family lives, assessing the effects of those strategies on careers, well-being, and inequalities. It will also analyze the effects of company practices in this area, from the standpoints of both employers and individuals (see 3.2.1). One of several innovations in this survey compared to the first edition is that the question of balancing private and occupational lives will be extended to caregivers of dependent persons (rather than just parents caring for children). Studies of the factors that account for differences between men's and women's occupational trajectories will be pursued using data from longitudinal surveys and qualitative interviews, and consolidated through analysis of personnel files from major companies that INED has signed agreements with. Those files provide access to more than ten years of data on individual careers, original data that will enable researchers to pinpoint the moments that gender pay gaps occur in occupational trajectories and how company policies contribute to socio-occupational mobility and inequality dynamics. They can also be used to identify the ways company structure is implicated in gendered career inequalities. A study underway will pursue the history of social mobility across careers in France from 1970 to 2015, working to break down and distinguish the effects of age, period, and cohort. Using data from the *Histoire de Vie* survey [Life history] (INSEE 2003), researchers will reconstitute individuals' socio-occupational trajectories to study their determinants (particularly family-related ones). Social mobility dynamics will also be examined from a generational perspective over three generations (self, parents, children) using data from the *Biographie et entourage* survey

[Event history and contact circle]; those findings will then be compared to those from a study of Quebec.

New research studies on the impact of family, social, and employment policies will be developed, also for international comparison. Evaluation of different social policies and systems, specifically those related to caregiving (childcare, aid to persons caring for dependent relatives, work–life reconciliation) will be of prime importance.

### 3.3.5 Aging: where, how, with whom?

Older persons—a strongly growing segment of the population—are a group whose living conditions and ways of life are undergoing profound change as social inequalities in old age increase. Studies in this section will analyze in fine detail the social developments affecting various aspects of older persons' living conditions from retirement to, for many, extremely old age. The crucial issue here is to ensure that analysis and assessment of retirement and dependency policies are founded on precise knowledge of older persons' behaviors and ways of life. It is important to capture the great diversity of experiences of old age and to understand how resources are evolving—monetary, family and health-related, needs, wishes and aspirations—as people grow older and from one generation to the next. Through its involvement in the Institut de Longévité, des Vieillesse et du Vieillissement (ILVV) [Institute for the study of longevity, aging, and old-age situations and experiences], INED plays a major role in structuring and coordinating research on advanced old age.

Analysis of residence changes upon retirement and further on into old age—particularly the move to a nursing home—will be pursued in greater detail. Trends in these phenomena over the last decades will be identified using census data. How they are related to retirement, partnership events, and dependency will be explored using Fidéli fiscal data, EDP data, and data from longitudinal surveys such as SHARE (Survey of Health, Ageing and Retirement in Europe). In the framework of ANR ELVIS (Étude Longitudinal sur le Vieillissement et les Inégalités Sociales) [Longitudinal study of aging and social inequalities], a range of data sources (administrative data, large panel surveys, life narratives) will be used to characterize how the many dimensions of inequality (family, residential, economic) develop up to retirement and evolve through old age. Generational dynamics will be assessed by comparing retiree cohorts.

Postretirement material conditions are a major concern. Fidéli and EDP data will be used to describe how those conditions relate to conjugal trajectories past age 50—a seldom studied question. Studies on the role played by social protection systems, particularly the retirement system, in inequalities after retirement and in older age will be pursued. Matched demographic and administrative data (for France and other European countries) will be used to assess the degree to which different retirement systems take into account partnership and family trajectories and the gender inequalities they cause. INED researchers working collaboratively with the Institut des Politiques Publiques [Public policy institute] will use a microsimulation approach to evaluate different life-partner rights arrangements, such as

pension sharing in case of divorce and the move to extend the right to a share of a deceased spouse's pension to types of union other than marriage.

Last, INED researchers will focus on family relationships and parent-to-child and child-to-parent family assistance behaviors. Assistance to elderly dependents is the other major concern of old age social policies. The nature and determinants of "informal" assistance provided by a spouse to their dependent partner and by children to dependent parents will be analyzed in conjunction with formal arrangements and programs. Administrative data, survey data, and monographs will be used to analyze public policies on caring for dependent older persons in connection with two main research concerns: regional inequalities in care facility supply, and how public policy is positioned regarding family solidarity.

### 3.4 POPULATION HEALTH: DOES PROGRESS EQUALLY BENEFIT ALL?

The health transition theory formalized the health-related and socioeconomic factors and dynamics that lead to higher life expectancy, but not everyone benefits in the same way from progress in this area. Studying the profound inequalities in health and mortality is a fundamental research undertaking at INED. Those inequalities are found at two different levels: between subpopulations within a given country and between countries or geographic regions. The first section of this research area covers the first of those levels: inequalities by gender, sex, and social position, primarily within Global North countries. The second section is also mainly concerned with Global North countries, those that completed their epidemiological transition long ago; it probes what has happened in them since then, especially the question of mortality at extremely advanced ages. The third section works in counterpoint, taking up health issues in Global South countries, whose situations suggest that the epidemiological transition theory may not be fully generalizable. Studies in the last section cover sexual and reproductive health and rights. Here again, we can question whether equality has been achieved: either certain medical treatments and techniques are not universally used, or conditions for accessing them are themselves a source of inequality.

#### 3.4.1 Describing and understanding inequalities in health and mortality

This section analyzes social, gender, and regional differences in health and mortality, differences constructed throughout a person's lifetime and already present at birth. In this respect, birth weight is an explanatory variable. Researchers are using data on three national child cohorts (France's ELFE cohort, the United Kingdom's Millennium Cohort, and the United States' Early Childhood Longitudinal Study) to do cross-country comparisons of birth weight variations by parents' socioeconomic status and to analyze impacts of poverty and deprivation on young children's health.

The inequalities constructed throughout a person's lifetime are also being studied in adulthood, with particular attention to the impact of working conditions (notably, being unoccupied). Such inequalities are at the core of the WELLWAYS project, which examines how a sum of "adverse situations" degrades individuals' well-being and what resources modulate those harmful effects. Researchers are investigating social disparities in health and mortality



risk factors (smoking, alcohol consumption, sleep quality, for example), paying close attention to cohort, age, and gender effects. The gender question runs through all these research studies. It is central to the INED-run *Genre et Inégalités de Santé dans Constances* project (ANR GINCO) [Gender and Inequalities in Health in the Constances Cohort] and the GENDHI project (Gender and Health Inequalities: From Embodiment to Health-Care Cascade) run by INSERM and the Paris School of Economics. These studies draw on a range of sources: the Constances cohort, *Santé et Itinéraire Professionnel* (SIP), *Conditions de Travail* [Working Conditions], *Surveillance Médicales des Expositions aux Risques Professionnelles* or SUMER [Medical Surveillance of Occupational Risk Exposure], the European Working Conditions Surveys, the *Emploi du Temps* [Time-Use] survey. Other projects focus on inequalities as they affect the impact of the COVID-19 pandemic (see 3.1.2) and mortality differentials between immigrants and their descendants (the second generation) (see 3.5.5).

The analytic scale in most of these studies is national, but INED is also concerned to study subnational health and mortality disparities wherever relevant data is available. One project bears specifically on health inequalities related to social disparities in the Seine-Saint-Denis département just north of Paris. Another combines ethnographic and SNDS (*Système National des Données de Santé*) data to assess social disparities in access to Hospital-at-Home for cancer patients in the Île-de-France region (including Paris) and study access conditions for this service. The questions that drive analysis of regional variations in mortality—Are they an effect of context? An effect of the characteristics of individuals who live there?—are not new. Another, historical study examines the role of urban infrastructure (water access, sewer system, etc.) in inequalities in death in Paris over the 19th and 20th centuries. INED is also taking part in the REDIM study, a large-scale comparison of subnational disparities in cause-specific mortality across 20 European countries, funded by a European Research Council (ERC) starting grant. Yet another project, funded by the US National Institutes of Health, focuses specifically on geographic variations in mortality in France and the United States.

Analysis of the immediate circumstances surrounding social disparities in mortality and health requires establishing mortality tables and calculating total and healthy life expectancy indicators. INED is a long-standing contributor to this scientific undertaking. One of the difficulties of doing research in this field is accessing data files that include information on health or mortality and socioeconomic status. A study underway aims to model EDP [Permanent Demographic Sample] mortality data to be able to draw up mortality tables by educational attainment and socio-occupational category on a routine basis. Another project will study mortality in the United States by socioeconomic category.

### 3.4.2 Longer lives: how long, and in what state of health?

In countries with high life expectancy, the two unknowns are how far into advanced age life expectancy gains can continue and the concomitant question of elderly persons' health. The COVID-19 pandemic has confirmed the fragility of this population group, which we already knew was vulnerable to seasonal flus, heat waves, and winter cold. What will health and mortality come to in these countries during this highly unusual period when the full effects of demographic aging are also making themselves felt? The cardiovascular revolution of the

1970s disproved the pessimistic life expectancy assumptions predicted by the epidemiological transition. What new advances can be expected from progress in medical therapy, especially treatments for cancer and degenerative diseases? INED researchers are taking on these questions by analyzing trends in causes of death and comparing those observed in France with trends found for other countries. It is important to point out here that having access to SNDS data is not enough to successfully conduct these studies, which require access to a warehouse where all causes-of-death files produced by INSERM since the 1960s appear to be stored; matching with other databases would not be required.

INED's expertise in constructing long time-series for mortality indicators by cause is internationally recognized. The Institute is currently working on such series using mortality data from the United States, Japan, and Germany. In partnership with the University of California at Berkeley (UCB) and the Max Planck Institute for Demographic Research (MPIDR), INED's DataLab (<https://datalab.site.ined.fr/fr/donnees-agregees-contextuelles/>) constructs and maintains the Human Mortality Database and the Human Cause-of-death Database. We are also a major international actor in multiple-cause-of-death analysis (encompassing all causes mentioned on death certificates), an innovative approach that can capture multimorbidity at time of death. The DataLab will also be hosting the International Database on Longevity (IDL), which covers people aged 105 or older (super and semi-supercentenarians). These validated data can be used to test the shape of the mortality curve at oldest-old ages. A specific validation process is underway in the French Caribbean to check whether the observed high frequency of supercentenarians in Guadeloupe and Martinique corresponds to reality and, if so, to try to explain it.

INED is likewise recognized for our expertise in calculating and analyzing healthy life expectancy trends. The Institute participates actively in the REVES network (Réseau international sur les espérances de vie en santé: International network on healthy life expectancy). Production and analysis of nondisabled life expectancy series will continue at the national and international levels; also at the French département scale using data from the 2014 Vie Quotidienne et Santé survey [Daily Life and Health] and the segment of the Migrations, Famille, Vieillesse survey on overseas départements (see 3.5.3). These analyses will be supplemented by GINCO project studies of connections between biological functioning, chronic diseases, and dependency.

The phenomenon of increased survival at ages when people's health may be quite poor is partly responsible for our societies' current acute concern with end-of-life. INED was behind the first national survey on end-of-life in France (Fin de Vie, 2010). That survey is currently being conducted in the country's overseas *départements* (see 3.5.3), and work has started on designing the second edition of the survey in metropolitan France.

### 3.4.3 Sexual and reproductive health and rights: progress and threats

In the current, fast-evolving legal framework, sexual and reproductive rights are making remarkable progress, but they are also being subjected to new threats and dangers. In many countries, including European ones, access to abortion is blocked in the name of religious or



ideological convictions or pro-birth policies. In France, nearly half a century after passage of the Loi Veil legalizing abortion (1974; law named for its promulgator, Health Minister Simone Veil), exercising that right can still be a complicated matter for some women. French society is divided on several other procreation-related proposals (extending access to assisted reproductive technology [ART] to all women, using oocyte vitrification to enable women to conceive at advanced ages). In the French context, where sexual and reproductive health is heavily medicalized, that medical framework is coming in for strong criticism. Trust in doctors has been undermined to a degree (see the recent emergence of such themes as gynecological and obstetrical violence and the movement to reject hormonal contraceptives). These new questions will be explored using an intersectional approach where gender inequalities will be considered in relation to age, class, and race. Particular attention will be given to the issue of accessing sexual and reproductive health care and the exercise of sexual and reproductive rights by migrants and racialized groups.

Access to sexual and reproductive health and rights are studied from several disciplinary perspectives at INED. History sheds considerable light on contemporary debates on these issues. One project aims to retrace the battle against sterility in France and how it developed—the history of “ART before ART” (1920–1980). Another will study the history of prenatal care and surveillance over the 20th century. INED has conducted statistical, epidemiological, and sociological studies in this area for many years. One priority in the coming years will be to return to the question of contraceptive practices, practices recently disrupted by the medical crisis around birth control pills; the next Fécondité [Fertility] survey will explore these questions in greater detail. Analysis of abortion use in France will continue, with an SDNS data-based study of how abortion fits into women’s reproductive histories. The data will also be used in a research study on pregnancy outcomes. Two studies—a comparative project on miscarriages in Europe and a study of reproductive health determinants among migrant women in Finland—will extend these investigations to other European countries. The issues of sexual and reproductive rights will also be studied at several research sites in Africa and Asia (see 3.4.4).

SDNS data will also be used in the StimHo study on ART-related hormonal stimulation treatments in France. The first project analyses have found frequent discontinuities in treatment and a considerable level of not using it. This observation raises new research questions, particularly on social and regional inequalities in access to these treatments. The FemPrim project is specifically interested in inequalities in sexual health-care supply and use in the Île-de-France region. Research will also analyze variability in professional health-care practices (between midwives, GPs, gynecologists) as a function of their personal characteristics, the geographical context and organization of their practice, and the social positions of their (women) patients.

INED has also committed to collecting data to estimate and describe ART use outside the French legal and medical framework (see 3.2.1, AMP-sans-Frontières project [ART Without Borders]). The Institute is taking part in the international EU-funded B2-InF project (Horizon 2020) for assessing young people’s knowledge and expectations of ART in eight European

countries. Meanwhile, ELFE cohort data will be used to study how children born through ART are developing.

### 3.4.4 Health issues in global south regions

In recent decades, most Global South countries have enjoyed rapid progress in health. Nonetheless, their mortality rates remain relatively high due to a combination of infectious-parasitic diseases (malaria, HIV/AIDS, tuberculosis, and others) and noncommunicable diseases (cardiovascular diseases, cancer, respiratory diseases, and others). Development and urbanization have led to increased prevalence of what are called social diseases (obesity, high blood pressure, and others) that is linked to the diffusion of new ways of life (unbalanced diet, lack of physical exercise) that amount to risk factors. INED studies take into account health and mortality throughout the life cycle and at the international scale (modeling), drawing on national surveys and local data (demographic tracking systems).

The Global Age Patterns of Under-Five Mortality project (see also Section 3.2.2), funded by the U.S. National Institutes of Health and that we are jointly conducting with the University of Pennsylvania, the London School of Hygiene and Tropical Medicine, and Johns Hopkins University, aims to measure and understand variations in mortality between the ages of 0 and 5. Based on a mass of existing data on the subject (civil register information, demographic and health surveys, demographic tracking system data), this project aims to update mathematical models of child mortality by sex and age in severely underdeveloped countries.

Health conditions overall are least favorable on the African continent. Research has long neglected the question of adult health there due to the high priority of child, maternal, and reproductive health, but progress made in those areas has now partially reoriented research. INED is actively implicated in this directional change and is conducting research on such subjects as the health of twins, mental health throughout the life cycle in connection with poverty, disabilities, multiple causes of death, and end-of-life circumstances. A detailed study of adult health in urban areas is now being designed that will draw on data collected with the Population Observatory of Ouagadougou in Burkina Faso.

Since the start of the AIDS epidemic, INED has been heavily involved in research on issues related to HIV infection. One example is the ANRS-funded PRINCESSE project (Agence Nationale de Recherches sur le Sida [AIDS] et les Hépatites Virales), which follows 500 female sex workers in Ivory Coast. The purpose is to set up, document, and analyze a community health-care program combining HIV screening, pre-exposure prophylaxis (PrEP), immediate postinfection HIV treatment, treatment for hepatitis B, and sexual and reproductive health care. We have been doing research for many years in Thailand, one of the Asian countries hardest-hit by the AIDS epidemic. The Sidaction-funded TEEWA-2 survey (Teens Living with Antiretrovirals), already underway, captures the health and social impacts of this burden on adolescents born with HIV. This original nationwide data collection process, which uses hospital data and a questionnaire together with a control group, will provide precious knowledge on a vulnerable population observed at a critical age for individuals' future trajectories.

A joint project in the area of sexual and reproductive health and rights is being designed with the Niakhar observatory in Senegal, the Taabo observatory in Ivory Coast, and the Nahuche observatory in Nigeria to examine women's contraceptive practices and recourse to abortion in contexts where the latter practice is heavily stigmatized (see 3.3.2). Qualitative data will be collected to supplement these reproductive histories. Women of childbearing age who have had an abortion have already been interviewed in Ivory Coast and Burkina Faso, along with their families and health-care professionals (MiFaCi project, in collaboration of Doctors of the World, the Centre Population et Développement, or CEPED, and the University of Bouaké in Ivory Coast). Finally, a project is being developed to explore ties between reproductive events and health, and the consequences of unplanned births on mother's and child's health in Global South countries.

### 3.5 SPACE, MOBILITY, MIGRATION: INDIVIDUAL TRAJECTORIES AND PUBLIC POLICIES

All the studies in this fifth area focus on the dimension of space and are motivated by the issue of inequality in all its variations. They analyze space and residential and geographic movement and mobility in connection with life trajectories. Since the early 2000s, French society has been heavily impacted by deepening inequalities in housing that affect spatial population distribution. Situations of residential vulnerability have also increased. The studies in 5.1 account for these changes and analyze the factors that drive them, from the respective roles of public policies and the market to the effect of immediate human surroundings on social integration processes. The studies in 5.2 analyze the tie between life trajectories and movement-mobility on the one hand, regions and public policies on the other, in a context marked by a shift to regional-level social policymaking.

Two sections focus on transnational migration movements. One covers the impact of transnational movements on individuals' life event histories (fertility, family trajectories, transition to adulthood, relational network, moves back and forth between countries of departure and arrival, etc.). A key focus in this set of studies is the effects of migration on family members who did not leave (exchange of material goods, the development of family trajectories that encompass several countries). The issue of integrating into destination countries is mentioned in this section but is even more central to the last section, which takes it up directly in relation to inequalities between immigrants, their descendants, and destination country populations—questions analyzed in light of the immigration, integration, and antidiscrimination policies in effect. The TeO2 survey [Trajectories and Origins 2] will be a precious source of material for these studies.

Last, INED has contributed considerably over the past decade to improving statistical knowledge of France's overseas *départements* and communities by way of several surveys on various subjects. In those areas, major population issues (demographic aging, migration, and others) take highly specific forms compared to metropolitan France. The research projects made possible by these new data are covered in a dedicated section, 5.3.

### 3.5.1 The home, a home: housing, space, living conditions

The health crisis that began in France in spring 2020 cast new light on the crucial place of housing in social life. At the time of this writing, many activities take place in the home, providing a glimpse of major changes that may be expected in the coming years—massive use of remote working and hybrid forms of work, the development of online education and training, etc.—changes fostered and facilitated by the digital and technological revolution. Nonetheless, the housing market in France is quite stretched. Prices in urban conglomerations are rising together with rental occupancy levels and seasonal tourist rentals, and France's social housing capacity is nearly saturated. All of these developments condition households' housing choices and how people's residential trajectories unfold.

INED research analyzes three ways in which housing contributes to social integration. The first set of studies analyzes households' material living conditions, access to different housing market segments, and how residential mobility and daily commuting are evolving—all in a context of deepening socioeconomic inequality. They take into account the impact of national and local housing construction and infrastructure building policies, including policies to achieve balance in social housing supply across regions, plan and build socially diverse neighborhoods, support working-class home ownership, and realize major public transportation construction projects. The second set focuses on people at the margins of ordinary housing: without a home of their own or living rough, living in institutions, informal occupancy situations, shelters. The objective is to document the residential trajectories of vulnerable populations who, for a number of reasons—only recently arrived in France, the informal nature of their status (refugees, first-generation migrants), not publicly visible (single-parent families), or spread throughout France (young people in precarious circumstances or undergoing social status decline, second- and third-generation immigrants, etc.)—are seldom reached by major public statistics surveys. These groups, whose numbers are growing, raise challenges for a range of policy sectors: poverty reduction, immigration, student housing, affordable housing, etc. The third set of these INED studies works to analyze ties between household housing conditions and the other dimensions of social life: employment and work, family and partnerships, domestic work-sharing, solidarity and mutual assistance among neighbors and in local spaces. For example, the *Mon quartier, mes voisins* survey [My Neighborhood, My Neighbors], for which data collection is now complete, probes the role of relations between neighbors. Here, housing is seen not only as an indicator of disparities in household living standards and ways of life but also a circumstance that conditions access to other types of goods and services essential to social integration and mobility. There are also more specific studies underway on students' residential and educational trajectories, situations that have been particularly impacted by the economic and social effects of the COVID-19 pandemic, as revealed by the *Coconel* survey (see 3.1.2). Connections between educational institution supply and geographic mobility, along with the impact on student trajectories of moving out of the family home and the conditions in which that move occurs, are being analyzed using data from administrative sources, statistical surveys, and detailed life-story interviews, especially with young people of working-class background and precarious or vulnerable groups.

### 3.5.2 Life trajectories, movements and mobility, regional dynamics

INED has been developing and conducting life history surveys (3B, *Biographie et Entourage*) and surveys with a life history dimension (*Histoire de Vie* 2003, ETST [Tunisia] 2016, EDER [Mexico] 2017) for many years. An entire set of methods, some from other research fields, have gradually been applied in analyzing individual trajectories. Taking into account ties between individuals (family, work-related, etc.) and individuals' relationships with their social, institutional, and urban environments enriches our understanding of the sequences of family, occupational, or migration events that punctuate individuals' life paths. These approaches also account for the many ways individuals are located in and move around in space. The notion of *entourage* (family, friends, close relations, immediate network)—which has proved highly operational for understanding the diversity and complexity of family ties in the present time—is designed to widen our understanding of an individual's social reference group. INSEE's 2011 *Famille et Logements* survey was the first to explore multiresidence, making it possible to revisit family configurations and how they affect individual behaviors. The first *Famille en Polynésie Française* survey (*Feti'i e fenua*) will enable researchers to detail movements and constraints specific to a fragmented territory and the types of family settlement they give rise to (see 3.5.3).

A crucial feature of this research is that it investigates individuals' geographic movements in conjunction with the regional dynamics they generate. Movements at the individual scale affect regional demographic and social composition. Individual movement and mobility is one of the most powerful drivers of such social and spatial filtering processes as sociospatial segregation and gentrification, and the regional inequalities they produce. Conversely, changes in regions' physical and social characteristics affect individuals' movements. In this sense, geographic movements and mobility are a relevant angle for studying how existing regions are currently being reshaped and recomposed. Mexico City, like most Latin American metropolises, bears the marks of a settlement process wherein intra-urban mobility is the main force driving change in socially based dividing of space. This research analyzes residential mobility and daily commutes at the scale of the entire city to discover and describe the variety of inhabitants' experiences and the variety of contexts they live in as they pertain to mobility.

While analysis of residential moves and mobility reveals relatively long-term spatial segregation processes—gradual social transformation of residential space—daily movements and commuting are implicated in short-term, daily, even hourly social changes to regions, changes that also diversify their uses and inhabitants. The development of social segregation on a daily basis—over the timespan of a single day—is seldom studied in the literature. In addition to studies of these issues in Paris and the greater Paris region, research is underway in Latin American metropolises, where the issue of segregation is particularly acute, being present in urban configurations and inhabitants' representations.

At quite another time scale, analyzing entire migration trajectories advances our understanding of how regions get recomposed over the long term. The demographic and social transformations of particular regions can be analyzed as different phases of residential

settlement at the scale of individual lives and over generations. Analysis of data from the 2017 Enquête démographique rétrospective (EDER) [Retropective demographic survey] on Mexico gives us a clearer picture of the migration dynamics that have unfolded consecutively over the past several decades across Mexico.

The relevance of the life history approach for analyzing how major Latin American cities have evolved seems particularly strong given that the rapidity and intensity of 20th-century urbanization there corresponds fairly exactly to the length of a human life. Urban growth is slowing today; neighborhoods are aging; and more cities than before are implicated in daily intra-urban movements and commuting. One research project underway studies the gradual reorganizing of the former outskirts of Bogota, Buenos Aires, and Santiago—now located just outside these cities' historical centers—to identify the specificities of the processes affecting these spaces.

Last, there are also two projects that study regional transformations in France since the 1970s in terms of spatial and social movement and mobility. One examines the spatial inscription of immigrants in rural and exurban spaces in metropolitan France to determine how those spaces have been recomposed; the other focuses on how areas in Île-de-France and along the Seine axis have been evolving. By fitting together the individual and aggregate scales, these two projects, each in their own way, offer a new perspective on social and spatial filtering processes in these areas.

### 3.5.3 Issues and studies specific to overseas France

Over the last ten years, production of statistics on France's overseas *départements* and communities has improved considerably. INED has contributed to this development by designing and collecting data, jointly with INSEE, for the Migrations, Famille et Vieillessement survey (MFV) [Migration, Families, and Aging] (2011); collecting data in France's newest *département*, Mayotte, in 2014; and, most recently, extending the VIRAGE survey on violence and gender relations to the overseas *départements* [Guadeloupe, Martinique, French Guiana, Reunion] (2018). Two surveys are underway in those *départements*: the second edition of the Migrations, Famille et Vieillessement survey (MFV2) in Guadeloupe, Martinique, French Guiana, and Reunion, and the extension of the end-of-life survey to those *départements* (Fin de vie DOM). Meanwhile, data collection for the Enquête Feti'le fenua (the first Famille en Polynésie Française survey), conducted jointly with the Institut Statistique de Polynésie Française (ISPF), has just been completed; qualitative follow-up surveys are being prepared. Also, INED is assisting the statistical institute of New Caledonia in conducting the MFV there. Collection of supplementary VIRAGE survey data has also been planned in the framework of ANR VidOM (qualitative follow-up surveys, focus groups, interviews with local actors, ethnographic observation periods, media archives, and anti-violence campaign support). Last, the Trajectories and Origins survey on the diversity of the population of metropolitan France will study migrants in *la métropole* born in overseas *départements* and their descendants.



All of this material will facilitate continued study of sociodemographic transformations underway in the overseas *départements* (changes in family structure and behaviors, aging, migration acceleration, and internal movements). With regard to aging, particular attention will be paid to measuring disability-free life expectancy—and therefore loss of autonomy, the latter a condition already found more frequently in overseas than metropolitan France as demographic aging accelerates in the Caribbean and, to a lesser degree, Reunion. A study on how this situation may best be handled through both institutions and family solidarity will also be conducted, given the degree of economic instability and vulnerability found for large proportions of these aging populations. Meanwhile, knowledge about gender relations in these *départements*, specifically gender violence, will be updated from an intersectional perspective; that is, by examining how power relations involving sex, social class, and racialization fit together and how they are implicated in the occurrence of violence and experiences of its victims. Feti'i e fenua data, combined with census data, will enable researchers to describe territorial organization in Polynesia in terms of mobility and family functioning, also relating it to public infrastructure and health, education, and transportation policies (ANR ATOLLS). Another project will generalize from this work, identifying the mechanisms (public services, economic development, and others) that govern sustainable settlement of population groups and families in administrative territories made up of islands and archipelagos.

Several projects will study trajectories between overseas and metropolitan France. Archival and administrative data from the Ministry of Justice will fuel a study of the trajectories of senior civil servants assigned to overseas territories since 1958. In connection with the question of governance in overseas France, researchers will use the TeO and MFV surveys to describe the individual and collective trajectories of migrants from overseas *départements* and relate their migration trajectories to their family trajectories (unions, separations, fertility behaviors). The following section examines these same questions as they apply to migration generally; that is, to migrants of all origins.

### 3.5.4 Migrants and their close relations: family trajectories, forms of sociability, transnational networks

The body of research in this section falls somewhere between life trajectory studies and studies of international migrants' geographic trajectories. The underlying question is, what kinds of interaction may be observed between migration movements and family and social life? At what ages and when do young immigrants leave the parental home? Whom do they marry? What attitudes do they have toward unions outside marriage? Does migration affect fertility, and if so, how? Do the life trajectories of the second generation more closely resemble those of their parents or native French trajectories? These are some of the questions that the projects in this section work to answer, using public statistics data sources such as the EDP and major INED and INSEE surveys like Trajectories and Origins (TeO) and TeO2, Migrations Family Aging (MFV) and MFV2, as well as census data. Most of the projects focus on France. There are also studies of Mexico that draw on that country's EDER survey [national life history] (see 3.5.2) and investigate the same questions. Their objective is to

relate internal and international migration to other dimensions of migrants' life histories (Migrations et FAMilles MEXicaines project).

International migration is often thought of simplistically as settlement in another country followed by more or less successful socioeconomic integration. In reality, a considerable share of migrants return to their countries of origin, while some go and settle in a third country, and yet others engage in circular migration, going back and forth between their home country and the receiving country. Studies drawing on EDP data are updating what we learned when return migrations were first taken into account in assessments of inequalities between natives and migrants. It is also important to mention that even migrants who settle permanently in the destination country often maintain close contact with their home country. Easier communication modes and faster, cheaper international travel have enabled a considerable number of immigrants to live “bifocally,” simultaneously pursuing their personal and economic interests in the home and destination countries. One objective of INED researchers working on such projects as TEMPER (Temporary versus Permanent Migration) and ChIPRe (Chinese Immigrants in the Paris Region) is to restore the full complexity of these interactions. The ChIPRe project will shed light on the role of social capital and social capital structure in the lives of Chinese immigrants in Paris and the greater Paris region. INED is also involved in the REFPoM project on health risk factors among Central Asian migrants in Russia, an ethnological study focused on informal individual, family, and collective practices.

### 3.5.5 Immigrants and minorities: inequalities, discrimination, racism

In France as in most European countries, public opinion is expressing increasing mistrust of governments and their migration policies, from migration flow management to migrant integration policies. An entire set of INED research studies bears precisely on the composite issue of immigration, integration, and antidiscrimination policies. They aim to analyze the social context in which those policies were produced and assess their effects. One historical study focuses on immigrant integration mechanisms during France's 30-year period of economic growth (1945–1973). INED is also taking part in the European Upstream project, which analyzes government integration policy strategies in the Netherlands, France, Spain, Great Britain, and Poland. The INED-run ANR GLOBAL RACE project (to be completed in 2021) analyzes the different ways in which racism and the concept of race have been reconfigured since 1945 with the instituting of antidiscrimination policies. It will examine the various theories and practical strategies around the notions of race and ethnicity as they have been developed in science and academia, state policies, and by social movements.

A major part of the scientific efforts in this section will center on the second Trajectories and Origins survey (TeO2, 2019–2020), the fieldwork for which will soon be complete. More than ten years after the first TeO (2008–2009), this new survey, a joint INED–INSEE project, will enable researchers to study integration and discrimination in France in a quite different context from 2008. While the general structure of the questionnaire has changed very little, TeO2 will be a powerful instrument for studying intergenerational integration processes in immigrant families. For the first time, researchers will be able to analyze socioeconomic variables in families of foreign origin over three generations: immigrants, their children, and



their grandchildren. A new project entitled 3GEN and focused on the closely related question of social disadvantage transmission in immigrant families over three generations has just been awarded ANR funding.

INED has long conducted research into socioeconomic inequalities between immigrants and their descendants and native inhabitants, and on the discrimination that immigrant families undergo. A study underway uses data from the Emploi survey to clarify income inequality between immigrants' descendants and natives; another focuses on immigrants' access to French citizenship and economic integration. In the area of health, the mechanism that explains the relatively low mortality rates found for immigrants in all of the world's major destination countries is self-selection. But a current project funded by the U.S. National Institutes of Health has shed light on another mechanism that few studies have remarked: self-selected departure from the destination country; specifically, immigrants in poor health returning to the country of their birth upon or some time after retirement.

The French media has given considerable coverage to the vulnerability of immigrants and ethnic and racial minorities to COVID-19 and the other problems caused by the pandemic. Research studies underway in this area will be pursued to refine that diagnosis and better understand what accounts for this situation. INED researchers working on the EU LifeCycle project (see 3.3.1) are particularly interested in health inequalities between very young children of immigrants and their native counterparts. It is also useful to focus more closely on particular pathologies or subgroups. For example, INED is taking part in a study of ties between migration and schizophrenia conducted by the Hospital Henri Mondor in the Val de Marne outside Paris. And given the growing numbers of mixed marriages between immigrants and native French, it is relevant to extend health and mortality analyses to multicultural families, the most intimate frame for intercultural interaction.

## 4 NATIONAL AND INTERNATIONAL STRATEGY

### 4.1 INED'S INSTITUTIONAL POSITION ON THE CAMPUS CONDORCET SITE AND SITE-RELATED STRATEGIES

To fulfill its missions of conducting and promoting French population science research and contributing to training in research and through research, and with support from our iPOPs (Individuals, Populations, Societies) Laboratory of Excellence, INED has positioned itself as a network leader, formalizing relations with partner universities, consolidating ties and developing and supporting research projects. INED's vocation is to conduct, organize, run, and promote research throughout France; due to the relative isolation of population science researchers, we do not belong to any joint CNRS-university research units. The relevance of our network leader strategy has been confirmed by the fact that together with the University of Paris 1, we obtained the creation of a Graduate Research School (EUR) network—the Higher School of Demographic Studies (HED)—which we run jointly with that institution and that also encompasses the Universities of Amiens, Bordeaux, Strasbourg, Paris 5, Paris Nanterre, and Saint-Quentin-en-Yvelines.

INED now shares the Aubervilliers site with many of its most important partners: the University of Paris 1, the University of Paris Nanterre, and EHESS, the partner with which it runs the Gender and Sexuality Studies (GSST) program, as well as other partners with which we have already collaborated, such as the University of Paris 8; the University Sorbonne Paris Nord, INED's fellow member in the Alliance Sorbonne-Paris-Cité; the École Pratiques des Hautes Études (EPHE), with which it is associated through the Institute for the study of Longevity, Aging, and Old Age Situations (ILVV); and of course the CNRS, with which INED has signed a framework accord to facilitate mobility between our two institutions.

Indeed, perhaps the most important change from our previous five-year contract is that we are now physically close to many of our key partners; we are all on the same site. This means that an important component for this new contract will be contributing to Campus Condorcet scientific life and thereby fulfilling INED's mission of developing, running, and promoting French population science research.

#### INED's position nationally

During the 2016–2020 contract, INED's position changed. After the consecutive departures of EHESS, EPHE, the Fondation Maison des Sciences de l'Homme (FMSH), and the École Nationale de Chartes (ENC) from the HÉSAM (Hautes Écoles Sorbonne Arts et Métiers) institutional consortium, followed later by those of the École Nationale d'Administration (ENA) and the École Supérieure de Commerce de Paris Europe (ESCP), INED found itself in a situation where it had few disciplinary fields in common with the remaining HÉSAM consortium institutions. Our administrative board therefore voted in June 2018 to leave the consortium as well. Meanwhile, the University Sorbonne-Paris-Cité consortium (USPC), to which INED now belongs—together with the CNRS, INRIA (Institut National de Recherche en Science et

Technologies du Numérique), INSERM, and the IRD (Institut de Recherche sur le Développement)—changed status upon fusing with the Universities Paris Descartes and Paris Diderot and the Institut de Physique du Globe de Paris, becoming the University of Paris. This last entity then joined with the Université Sorbonne Paris Nord, INALCO (Institut National des Langues et Civilisations Orientales), and the Institut d'Études Politiques de Paris, better known as Sciences Po, to form the Alliance Sorbonne-Paris-Cité, a new consortium of which INED is now a member.

INED has signed an accord with the University Paris 1, ESCP Business School, and the FMSH that grants it the status of associated member of their consortium. That text, examined by the Conseil National de l'Enseignement Supérieur et de la Recherche (CNESER) in October 2020, will have to be reviewed and possibly revised in the framework of the government order on grouping higher learning institutions.

INED has been a partner of the CNRS-funded Institut Convergences Migrations (ICM) since its founding in 2017. ICM is scheduled to continue through 2027 and will ultimately have 200 researchers working on migration. ICM joined Campus Condorcet in 2019.

In 2018 and for a ten-year period, INED became a stakeholder, together with University of Paris 1, in the École des Hautes Études Démographiques (HED), a multi-institution graduate research school (EUR). Furthermore, the INED-run iPOPs LabEx has received funding for another five years.

INED and EHESS co-run the Gender and Sexuality Studies (GSST) in the EUR framework.

INED is a partner in the Paris Graduate School of Economics (PGSE) of the Paris School of Economics.

On December 19, 2019, INED moved to Campus Condorcet in Aubervilliers; it is the only one of the Campus Condorcet Public Establishment's 11 institutional members to have its headquarters on campus.

#### 4.1.1 Designing, conducting, publicizing, and promoting population science research

The first objective of INED's site-related policy is therefore to develop, run, and promote population science research. That we host approximately 40 associated researchers and have an active policy of hosting academics and other professionals on leave, financed by the iPOPs LabEx, explains our ongoing relations with population science researchers in a considerable number of universities. Those researchers work in institutionally mixed units whose most immediate research topics are in some cases quite remote from demography and population science—an observation that encourages us to bolster our network leader strategy to more effectively bolster this research community, spread out as it is over several sites, and to emphasize partnerships with other EPSTs to obtain collaboration in developing and running network activities. In this last connection, INED is now working with the Institute for Research on Development (IRD) on matters related to population monitoring sites in sub-Saharan

Africa, and with the National Institute of Health and Medical Research (INSERM) by way of multidisciplinary teams conducting general population studies.

#### *4.1.1.1 Structuring and steering activities with partners*

Our site-related policy is clear and “relevant,” according to the last report of High Council for the Evaluation of Research and Higher education (HCERES) evaluators: INED “has clearly positioned itself as the coordinator of the population science field at the scale of France.” The report continues: “It now needs to emphasize long-term strategic thinking on its strong points” and “start thinking strategically about the emerging approaches that will be coming to the fore at the international scale.” This recommendation is part of our first objective, which is to set up a strategic foresight committee composed of INED administrative board and scientific council members and other experts to develop a long-term strategy. To inform our thinking, we will need to establish a clear map of teams working on INED projects beyond the first circle of our own permanent researchers and the second circle of associated researchers. This should give greater visibility to INED’s standing and influence and establish connections between our institutional collaborative projects, research collaborations, and the topic areas in question. To correctly identify those teams, we will need to consolidate our recently installed research contract managing system.

#### *4.1.1.2 Training, sharing knowledge*

Providing training in and through research is a key component of INED’s role of developing, running, and promoting population science research. It is one we have been developing for several years and that is still evolving. Having the EHESS on Campus Condorcet with us—three-quarters of PhD students hosted at INED are enrolled in EHESS graduate programs—together with the demographic institute of the University of Paris 1 (IDUP) will be important in further developing our hosting policy and improving the quality of training in and through research.

INED already has charters for hosting doctoral and postdoctoral students. The latter charter actually defined postdoctoral research work contracts in advance of the aforementioned bill on multiannual research programming being examined by the National Assembly. And through our involvement in the three graduate school programs cited above, INED is actively helping to train doctoral students. Its hosting policy is clear: every hosted PhD student is supervised by an INED researcher who becomes either their thesis supervisor or co-supervisor. To facilitate the implementation of this policy, INED needs to communicate more fully with the graduate research departments involved. The HED, GSST, and PGSE graduate school programs play a fundamental role in this regard. INED must also be more active in assisting the professional integration of early-career researchers. Our iPOPs LabEx is there to co-fund fourth-year PhD students who have already been offered jobs as half-time temporary research or teaching assistants. This iPOPs funding is part of specific accompaniment for students completing their thesis. INED also needs to acquire fuller knowledge of the professional outcomes of PhD students it has hosted in the past and how the careers of its postdoctoral fellows are evolving. The office in charge of doctoral and

postdoctoral affairs will be tracking this information, with assistance from the International Affairs and Partnerships and Human Resources departments.

Regarding INED researcher supervision of PhD students, support will be arranged for researchers wishing to be accredited to supervise research (e.g., a period working in an outside laboratory, professional mobility funding, etc.).

Last, INED will be applying to host the European Doctoral School of Demography (EDSD) on Campus Condorcet (see 4.2.3.2, p.51).

#### *4.1.1.3 Fueling population science research and advising on public policy*

Population science research draws on major public statistics surveys and INED research surveys, with our surveys often functioning as prototypes for the public statistics surveys either in terms of data collection protocols or the shaping of research questions. Such surveys need to evolve along with research questions and society itself, and to be developed in accordance with international standards. This is one INED characteristic highlighted by the HCERES: “The venerability of this institution, the permanent civil servant status of its researchers, and the wealth of its existing surveys are important factors in its recognized competence in research activities and public policymaking assistance.” Not just INED researchers but the entire research community uses these surveys: from 2016 to 2019, 310 of the 534 scientific publications drawing on INED surveys were by non-INED authors. The major transformations underway in European countries, including France, must be captured by our major surveys, and INED needs to be able to fund them. The Re-Co-Nai cohort study is guaranteed funding until 2024, ensuring only that we will be able to collect information on these children up to their 13th birthday. Likewise, INED needs to be able to continue taking part in the GGP; funding for this has not yet been secured.

#### *4.1.1.4 Promoting statistical methods and surveys in the humanities and social sciences*

With its combined use of qualitative and quantitative methods, its researchers' and IT specialists' expertise in statistical processing and survey methods, INED stands out in the humanities and social sciences. These original features—still more salient on Campus Condorcet—confer an essential role on us when it comes to teaching and promoting such methods and helping to structure networks in this sector. We therefore need to position ourselves as a major actor in the transfer and sharing of statistical analysis methodology and survey methods not only at the national level and in partner institutions but also, more broadly, in social science experimentation with and around Big Data and in developing expertise in the area of health data. Due to its membership in the Alliance Sorbonne-Paris-Cité, INED is already a member of the University of Paris Data Intelligence Institute of Paris, and we have been active in designing its calls for projects and developing interdisciplinary connections between mathematics, digital science, physics, life sciences, and social sciences. Additionally, INED will be organizing applied statistics seminars on Campus Condorcet, together with sessions on survey methodology at the weekly *Lundis de l'INED* Monday seminar; we will also be requesting the Établissement Public Campus Condorcet (EPCC) to announce these events so that the on-site scientific community can participate.

We also hope to organize on-campus events in connection with CNRS specialists' MATE-SHS [Methods, Analysis, Terrains, Surveys—Social and Human Sciences] network.

#### 4.1.1.5 *Contributing to the scientific dynamic on Campus Condorcet*

INED spent several years preparing for the move to the Aubervilliers site, preparation that included working directly with the other institutions to develop a strategic campus-wide plan that will fit together our various projects. The whole coheres, and each establishment is now moving forward with actions to develop components of that strategic plan. INED's particularly heavy involvement is in the "migrations" component and in topic areas at the interface between social science and health. While its engagement in the migrations component needs no explanation since migration, alongside fertility and mortality, is an essential factor in population change, the second topic resonates deeply with INED studies in the areas of public health, mortality, and reproductive health (see the Five-Year Research Plan) as well as the Re-Co-Nai cohort infrastructure coordinated by INED, which links up with other INESERM-supported cohort studies in the framework of *France Cohortes*. Moreover, INED is a stakeholder in the Institute for the Study of Longevity, Aging, and Old Age Situations (ILVV), which structures and gives visibility to research and calls for research projects in that major area. We are also a member of the Gender Institute and the International College of Territorial Sciences research federation (CIST); the CIST held a major conference on Campus Condorcet in late 2020. Our implication in these numerous groups and structures can only contribute to the scientific dynamic on Campus Condorcet.

In addition to the GED (Grand Équipement Documentaire) comprehensive documentation center created and used by all Campus institution members, there are many other opportunities to develop synergies among Campus Condorcet institutions. INED has already begun developing ties with the EHESS publishers, Éditions de l'EHESS, around questions of digitization, publication formats, translation, and publication accessibility. A key focus of these discussions is Open Access (see Section 5.1 on Open Science, p.53). Every on-campus publisher has a range of savoir-faire to transmit. For example, Éditions de l'EHESS has mastered the Métopes process [Methods and Tools for Structured Publishing] while INED is known for its expertise in publishing graphs and figures. Moreover, the Fondation Maison des Sciences de l'Homme (FMSH) is an INED Éditions distributor.

INED will also suggest creating a Campus Condorcet taskforce or professional network to facilitate the sharing of experience and designing of collaborative digitization projects.

Last, to fully develop synergies and be as active as possible in Campus scientific life, INED will need to further develop its strategy for communicating with Campus members in a way that integrates Établissement Public Campus Condorcet (EPCC) strategy and that entity's own position.

#### 4.1.2 Increasing INED attractiveness and drawing power

How to enhance the attractiveness of research work and the research profession was a clear concern in legislative deliberations on France's new research programming bill. The question has also been discussed at INED and concerns all jobs at the Institute. After we announced INED's plan to move to Campus Condorcet, job applications diminished because potential candidates were not attracted to the new geographic location. Now that INED is settled in Aubervilliers, it needs to appropriate this new territory and learn more about the hiring possibilities it offers.

##### *4.1.2.1 Promoting INED infrastructures*

Clearly one of the best ways to bolster INED's attractiveness and drawing power is to promote its infrastructures to the research community. We will therefore continue to actively pursue our policy of hosting academics and researchers on leave, with special attention to assisting them in obtaining accreditation to supervise research and involving them in Institute life. We will encourage both early-career and experienced researchers either at or outside INED to propose research projects which, if accepted, we will then be able to fund, and to help them with the formalities involved. In this outreach work, we can rely on the Department of International Affairs and Partnerships.

##### *4.1.2.2 Drawing on Campus Condorcet infrastructures to bolster INED's attractiveness in France and internationally*

INED should also be able attract researchers through Campus Condorcet infrastructures, particularly the project incubation center, which can host research projects for limited periods and is located near the INED building. The new GED comprehensive documentation center will also draw researchers, increasing the attractiveness of the site and so of its institutional members. Last, Campus Condorcet has temporary housing facilities for researchers as they look for permanent housing in the greater Paris area. We need to organize internally to make the most of all these infrastructures, which INED helps to finance.

Furthermore, it would be worthwhile to commission the Établissement Public Campus Condorcet (EPCC) to represent its members in relations with local actors, especially the Île-de-France Regional Council, specifically to develop a support policy for hosting research staff in a way that takes into account the issue of work-life balance and assists partners of new recruits in their job search.

##### *4.1.2.3 Equipping Campus Condorcet to serve research*

INED already shares its staff restaurant with personnel from other institutions, and we hope to make other services available, such as our photocopying service, the only one on campus. We will be asking Campus Condorcet members if they need these services; if so, we will develop an offer to meet those needs. The matter will be handled sequentially by forecasting the activity thereby induced and any changes in HR and equipment, defining an appropriate economic model, and formalizing a roadmap to be examined first by INED, then by its partner institutions.



#### 4.1.2.4 *Ensuring consistency between EPCC and INED building-related strategies*

Last, INED will work to ensure that its building-related strategy is consistent with that of the Établissement Public Campus Condorcet, official manager of Campus Condorcet. The issue here is to organize an efficient system that will be clear for other users of the INED headquarters building. This will make it easier to organize and keep track of construction and repair work, maintenance, and cleaning operations. The idea has been floated of having the EPCC turn over management in this area to INED; the valuable skills and experience acquired in managing our former buildings could now be applied on campus.

Besides managing and keeping track of construction, repair, maintenance, and cleaning work, INED's head office will need to be equipped to manage all security and safety risks of Institute activity, which now unfolds almost entirely on the Campus Condorcet site.

## 4.2 INED'S POSITION AND DRAWING POWER AT THE INTERNATIONAL SCALE

INED researchers are heavily involved in international research networks and work in close collaboration with researchers throughout the world, a reality attested to by the increasing proportion of articles they publish with researchers whose institutional affiliations are outside France. Our International Affairs and Partnerships department supports and encourages this activity through its work of formalizing partnerships and assisting in the development of international projects. The Institute currently coordinates three projects of the EU's Marie Skłodowska-Curie Actions researcher mobility program and one strategic partnership involving four European partners and funded by the ERASMUS+ program. We are also involved in two EU Horizon 2020 projects (Early-life Stressors and LifeCycle Health, and a segment of the B2-InF [Be Better Informed About Fertility] project on young people's knowledge and expectations of assisted reproductive technologies), and we participate in most large-scale EU projects involving population science, notably as a historical partner in the Generations and Gender Program (GGP), which is currently preparing its candidacy for inclusion in the European Strategic Forum on Research Infrastructure (ESFRI) road map. We are actively involved in the Réseau Recherche Europe or RRE [Research Network Europe] of the Alliance Sorbonne-Paris-Cité, and our Department of International Affairs and Partnerships is implicated in awareness-raising events and trainings for its researcher community.

The Department of International Affairs and Partnerships also steers a program for hosting researchers from abroad. Every year, INED hosts approximately 60 such researchers, many from Global South countries; funding is available for stays ranging from two weeks to three months. Longer stays, including sabbatical years, can also be organized. Meanwhile, our outbound mobility program funds INED researchers for one-to-four month stays at foreign institutions.

INED researcher publications and our INED Éditions in-house publisher are two other vectors that work to enhance our international standing, renown, and influence. One of INED's official missions is to communicate demographic information in the French language, and while we are ever attentive to the use of French in researcher exchanges and publications, we have also long been engaged in translating and publishing in English. Two of our periodicals, the journal *Population* and

the monthly bulletin *Population & Societies*, are published in full in both French and English. We also use English as well as French in our communication and promotion actions.

The 2019 HCERES evaluation paid tribute to INED's ongoing activities with the main European demographic research centers, its strong ties with several North American universities, and its collaborations with sub-Saharan Africa. It also noted positively the exchange and collaboration accords we have signed with our main international partners and our energetic policy of publishing in English. The three goals of INED's international strategy in the next five years are to further increase our standing and influence, strengthen our attractiveness, and develop new partnerships.

#### 4.2.1 Growing INED's international renown and influence

INED is already internationally recognized as a major population science research actor. Our publications, specific communication tools, and our support for outbound INED researcher mobility will work to achieve this goal.

##### 4.2.1.1 *Developing international dissemination of INED publications*

International diffusion of INED publications can be improved. We plan to publish more books in English over the 2021–2025 period. We will also be increasing diffusion of our publications across Africa. Additional actions will be taken to improve diffusion of *Population* among English-language readers and broaden *Population & Sociétés / Population & Societies* readership. More emphasis should be placed on subjects likely to interest an international—and particularly an English-language—readership.

##### 4.2.1.2 *Improving communication tools*

INED will be bolstering its current Communications Department actions, namely by posting in English on social media to more effectively reach the international scientific community and by having more existing material translated into English. We will continue to pursue our visibility strategy of having a strong participatory presence at the major international conferences and conventions (PAA, EPC, IUSSP, AIDELF, and others), notably by continuing to have an INED publications and information stand at all these events.

##### 4.2.1.3 *Encouraging and facilitating international mobility*

In terms of research topic areas, use of the comparative approach, and partnerships, INED is resolutely international. Institute researchers are our most important ambassadors; they contribute greatly to our international renown and standing. We need to support their international mobility, and will be taking actions to this end; e.g., optimizing their conditions abroad and ensuring are they better informed—namely through the intermediary of Horizon Europe's Marie Skłodowska-Curie program—of any long-term mobility opportunities not already listed by the Department of International Affairs and Partnerships.

## 4.2.2 Making the Institute still more attractive to the international scientific community

### 4.2.2.1 *Facilitating international recruitment and hiring*

The HCERES report encouraged INED to further internationalize researcher recruitment and hiring at all levels: PhD students, postdoctoral fellows, and permanent researchers (see Appendix 1). We will be acting to better inform the international community of INED hiring opportunities by setting up bilingual multimedia communication supports to present these opportunities. We plan to start a specific newsletter for PhD students and postdoctoral research fellows. There will also be targeted actions at international conferences. The EU's HRS4R qualification [Human Resources Strategy for Researchers], which INED is applying for in fall 2021, will be an opportunity to promote INED's HR best practices and so to make the Institute more attractive to researchers from all horizons.

Last, INED will be making its specific job-qualifying examinations (*concours*) accessible online, a task that will mobilize the human resources and legal departments together with the IT service.

### 4.2.2.2 *Enhancing the attractiveness of publishing with INED Éditions*

Other actions will aim to make publishing with INED Éditions more attractive to international researchers and potential authors. We are working to better define where Population is positioned in relation to other journals in the field. Depending on the findings, it may be relevant to implement a new communication strategy to promote the specificities of this journal, the English version, and the journal's Early-Career Researcher Prize. Attention will also be paid to publishing on topics of international scope and concern, and to outreach actions to attract new contributors.

### 4.2.2.3 *Attracting applicants for Marie Skłodowska-Curie and European Research Council grants*

Last, we need to increase the number of non-French guest researchers, namely by attracting researchers who have been awarded Marie Skłodowska-Curie and ERC grants. To this end, we will be conducting a benchmark study of hosting conditions at European universities and research institutes that receive ERC grant winners. This also involves identifying future external ERC grant candidates and giving them incentives to carry out their projects at INED.

### 4.2.2.4 *Improving guest-researcher hosting conditions*

We will be deliberating how best to improve hosting conditions for researchers on INED's International Affairs inbound mobility program. Here we will make the most of the varied opportunities that follow from INED's situation on Campus Condorcet (housing, the possibility of holding joint lectures with campus partners, meetings with other teams, etc.). For example, the partnership agreement being drawn up with the EHESS will allow for organizing events and encounters in conjunction with both institutions' hosting programs.

### 4.2.3 Deepening and extending our implication in partnerships and networks

#### *4.2.3.1 Reinforcing tracking and follow-up of current international partnerships*

INED will reinforce its partnership strategy by designing development and tracking tools. Current collaborations will be mapped out to identify relevant partnership actions and define a strategic road map. The Administrative Board will receive regular reports on existing and prospective partnerships. We will more effectively keep track of all international partnerships already formalized by framework accords, a main concern being to inform INED researchers more fully of the opportunities offered by these accords. Meanwhile, the international component of our future partnership with the EHESS will be gradually enhanced.

#### *4.2.3.2 Supporting INED researchers applying for European and international project grants x*

The development of new partnerships will likewise be boosted by INED researcher grant applications for European and international projects. The Department of International Affairs and Partnerships will take actions to improve INED researcher awareness of these opportunities through targeted diffusion of calls for research and by organizing information sessions that will include briefings on the experiences of researchers currently working on grant-funded projects.

The number and strength of our grant applications will be bolstered by our international-standard, national-scale data—a strong point highlighted in the HCERES report.

#### *4.2.3.3 Bolstering our exchanges with international scientific associations*

INED's international visibility can also benefit from its ties with such professional groups as the European Association for Population Studies (EAPS), the International Union for the Scientific Study of Population (IUSSP), and the Population Europe network. However, INED's international contact file needs to be updated. In the coming period, we will also be acting to increase the visibility of our partnerships with United Nations organizations (the UN Population Division, Population Fund, the World Health Organization, UNICEF, and others) and with the European Commission.

#### *4.2.3.4 Hosting the European Doctoral School of Demography*

INED has been a partner in the EDSD since its founding. The School offers high-level training in demography to students with a Master's degree planning to do a PhD. This international PhD training program has already been hosted at INED, from 2007 to 2009. Several INED researchers teach or have taught in it, and many former EDSD students have done research stays and/or been hired at INED. The EDSD is key to the vitality of the segment of the European scientific community working on population questions and issues. To renew INED's involvement, we will be applying to host EDSD on Campus Condorcet from fall 2023.

## 5 WORKING TOWARDS SHARED POPULATION SCIENCE

---

### 5.1 DEVELOPING AN INED PLAN FAVORABLE TO OPEN SCIENCE

INED has long been involved in the Open Science movement to make the direct products of research—data as well as publications—openly accessible. As a major producer of sociodemographic surveys, we have already made all data collected since 2000 available to the scientific community via what is now the Quetelet-PROGEDO Diffusion platform. And in recent years, the Institute has concretized its favorable attitude toward accessible publications in two ways. First, as a publisher, we have increased the range of our open-access publications. While all issues of the monthly bulletin *Population & Societies* were already freely and immediately accessible, together with one or more articles from each new issue of the journal *Population*, we have now made all *Population* articles freely available in French and English one year after publication. Second, articles and other publications by our researchers, most which are not published by INED Éditions, are now being filed on Archined, the archive we created in March 2019.

In the coming years, INED plans to pursue its pro-Open Science policy, making research findings more cumulatively available, more transparent, and accessible to a wider public. Our heavy involvement in relatively controversial societal issues requires us to facilitate access to immediate research products, not just summaries or popularizations, so as to extensively and accurately inform decision-makers and bolster citizens' trust in science. However, it is also important to be “as open as possible and as closed as necessary.” Access to INED publications cannot be widened without careful thinking and deliberation on the underlying economic models and without protecting the intellectual property rights of INED researcher-authors. Moreover, access to INED-produced data must be consistent with respondents' rights.

#### 5.1.1 Broadening open access to INED Éditions publications

##### *5.1.1.1 Amplifying our online access policy*

To significantly widen access to its publications, INED Éditions plans to explore various means of uploading them. Existing works and new releases in INED's various series or collections will be made available on Open Editions in accordance with the Freemium model providing free access to texts in .html format. To comply with the Plan S project and more effectively attract researcher-authors, the journal *Population* is contemplating making all its articles immediately accessible. The monthly bulletin *Population & Societies* will be put on the INED website in .html format, and INED Éditions will be working to determine how best to make publication content available online for people with hearing or reading difficulties.

##### *5.1.1.2 Linking publications to the data used in them*

INED Éditions plans to make data cited in our existing books and articles more widely accessible. New digital appendix formats will be made available to book authors while *Population* authors will be able to provide a link to the data used in their articles.

In addition to access to data used in or related to publications, INED is interested in experimenting with new publishing techniques that combine content of different types—text, sound, video, data visualization, and others—in various online formats. This type of publishing is particularly relevant for population topics that require regular updating (e.g., the “Demographic Situation in France”) and any presentation that would be improved by including nonprintable objects, such as audiovisual archives, animated figures and graphs, searchable databases, etc.

While the Open Science movement aims to facilitate access to data and is favorable to publicizing them, population science, especially in France, does not yet have enough opportunities for publishing “data papers”; i.e., data set descriptions. We will be working to change this.

#### *5.1.1.3 Supporting publishing innovations*

All such innovations call for major adjustments to publisher production systems: changing economic models, revising author contracts and permissions, adapting production techniques to new formats, taking advantage of new means of processing and stocking data while making sure to meet FAIR criteria (Findable, Accessible, Interoperable, Reusable), making editorial policy clearer and more informative—all fundamental tasks that need to be done if we are to meet the stated objectives.

### **5.1.2 Facilitating and broadening access to data**

In 2019, INED set up its own DataLab to make survey data available and keep up aggregate and contextual databases that are useful to understanding sociodemographic phenomena. We will soon be creating a dedicated DataLab website, also accessible through the INED site, to ensure better visibility for INED data.

#### *5.1.2.1 Overhauling the survey data upload system*

INED has been making its surveys available since 2000. It is also responsible for providing data from the international Generations and Gender Programme, but our system for doing so is now obsolete and must be revamped. In the short term, we will optimize the data documentation process to reduce the time it takes to render the data usable to researchers; we will also be renovating the survey catalogue to make it more user-friendly. These changes will have to be compatible with the Quetelet-PROGEDO program, of which INED is a member.

In addition to surveys dating from 2000 on, INED has a wealth of surveys conducted since the Institute's founding; these need to be inventoried, and all data not yet centralized through the DataLab must be recovered. Once this process is complete, we will be able to target which archived surveys should be made available first. With information technology changing rapidly, we will also need to tackle the question of how long existing formats are likely to remain operable.

Last, accessibility to Re-Co-Nai cohort data needs to be improved. The research teams using these data need more support; the variable selection protocol needs to be simplified and clear, instructive data description provided. We will need to investigate possibilities for matching up the cohort with other sources, such as the French national health insurance's SNIIRAM system or National Education Ministry data, in consultation with data producers in compliance with overarching RGPD data protection regulations. There are ways of reinforcing the cohort data management and monitoring group, but this can only be done if that infrastructure is integrated into the France Cohortes set of services.

#### *5.1.2.2 Broadening access to contextual population data*

The DataLab currently manages 11 open-access aggregate and/or contextual databases created in connection with various research projects. Maintaining, updating, building on, and diffusing this material requires setting priorities. The Developed Countries Demography databases, which include otherwise unpublished demographic data, might be updated to fuel innovative online publication of information about the state of the population across the world. Moreover, population data related to the various topics discussed in the yearly *Population* articles on the demographic situation in France published in the 50 years since the journal's founding have been updated and harmonized and will soon be made available on the INED website.

#### *5.1.2.3 Promoting rational, cautious opening of data sets*

Most of the data from surveys conducted at INED amount to protected personal information that cannot be put on open access. Only researchers and accredited master's program students can access them, through the well-established Quetelet-PROGEDO Diffusion system. However, INED needs to act to promote use of its data by familiarizing foreign researchers and students with them.

Meanwhile, some survey data contain confidential information that requires more secure handling than Quetelet-PROGEDO Diffusion can provide. INED needs to set up regulatory procedures and specific techniques to respond to requests to access those data.

INED surveys often take up societal topics and issues that are of interest to the public. While under no circumstances can data on individuals be made publicly accessible, we are examining whether we can make simplified aggregate databases internet searchable.

Regardless of data confidentiality level, INED must maintain its investments in excellent data description and documentation so that all data will be correctly used and understood.

### **5.1.3 Fostering and supporting research sharing practices**

The success of Open Science cannot depend solely on the diffusion of new practices within the scientific community.



#### *5.1.3.1 Further developing the Archined open archive*

By uploading their publications onto open archives, researchers play a key role in sharing research findings. INED's open archive Archined, in operation since 2019, will need to be adjusted to contain more publications. Technical changes will be made to adapt this tool to user needs both by making the site more ergonomic and offering new functions (e.g., online discussion of preprints). These changes will be made in consultation with other users of Polaris OS open source software. We will launch targeted publicity campaigns to increase submissions of newly published texts and related data. A retrospective archiving program will be developed to increase our stock of accessible earlier references—an opportunity to determine what books and books chapters are not covered by France's Digital Republic law (a question that does not arise for journal articles).

#### *5.1.3.2 Developing new pro-Open science services*

Open Science has given rise to a profusion of new tools and practices that need to be made visible and accessible to researchers. We will use INED's internal communication tools to diffuse scientific and technological information on Open Science matters, assisted by the Campus Condorcet GED comprehensive documentation center. Resource contacts will be appointed to handle such practical aspects as drawing up "data management plans" and assigning permanent logins and diffusion licenses. Researchers will be given practical research grant application instructions that explain and clarify Open Science requirements. Training sessions and seminars will be organized on subjects linked to Open Science (such as tools for sharing codes and ensuring analysis traceability and reproducibility). Early-career researchers will receive particular attention through the organizing of PhD student seminars.

#### *5.1.3.3 Working toward an Open Science plan at INED*

INED is already part of France's PNSO national Open Science plan. However, social science specificities and INED research interdisciplinarity mean that additional thinking and deliberation is required. After a period of in-house dialogue, this concrete commitment to Open Science may well be formalized institutionally by drafting a Plan for Open Science at INED. Deliberations would focus on publishing practices, for example (and INED's position when it comes to paying publishing costs), the research evaluation system, and the question of how much time should elapse before data are made available. Founding declarations and statements, such as the 2017 Appel de Jussieu pour la Science Ouverte [Jussieu University call for Open Science], the Initiative for Open Citations (I4OC), and the San Francisco Declaration on Research Assessment (DORA) will provide guidance for this work.

## **5.2 STRENGTHENING THE "SCIENCE AND SOCIETY" TIE**

Disseminating scientific culture and knowledge acquired in the population science field is one of INED's key official missions and of fundamental significance for the Institute. Findings from our research studies are regularly cited to help understand society, inform and provide scientific

grounding for public debate, and combat misinformation. INED addresses a broad and diverse audience, including teachers and students, public decision-makers, journalists, civil society actors, and the public, and it uses several different channels to do so. Our actions help constructive dialogue between science and society to grow and blossom, and promote interactions between researchers, decision-makers, and citizens.

To strengthen ties between population science and society, INED plans to organize its actions in this area over the next five years around three major endeavors: developing scientific culture and combating innumeracy; informing and offering guidance for public debate on major societal issues; and creating conditions for exchanging with the nonacademic public.

### 5.2.1 Working to diffuse scientific culture and the scientific method, combating innumeracy

Scientific culture has been declining, and innumeracy—that is, being unable to do numerical calculations or reason mathematically—is on the rise. Meanwhile, science and technology are advancing with increasing speed, as is societal change, a situation that regularly elicits open, democratic, well-documented debate and requires citizens to have some scientific culture to understand the issues involved in those changes.

In response to these observations, two of our major objectives are to develop people's scientific culture—that is, their ability to use both scientific knowledge and scientific procedures and reasoning—and to combat innumeracy.

#### *5.2.1.1 Strengthening our ties with the world of education*

Students in France are first made aware of demographic issues in primary schools, and they continue to learn about such issues through secondary school. This is why INED plans to work with school curriculum designers and actors at all levels, including the Ministry of Education and textbook publishers. The aim is to contribute our expertise in presenting certain topic areas and geographical distributions and concentrations, and to make recent data available. We will also act to inform students and education actors about the profession of population science researchers; partnerships with organizations like ONISEP [National Department for Information on Education, Occupations, and Training] could also be developed. Last, INED will make sure that all the teaching and learning resources it has developed (filmed seminars, videos, etc.) are correctly referenced and easily accessible.

At a more local level, in conjunction with the program we have developed with the Médiathèque Marguerite Duras (in Paris's 19th arrondissement) and the Médiathèque Dorian (in the 11th arrondissement), INED will be developing ties with actors in the Seine-Saint-Denis département [where Campus Condorcet is located], especially with schools, to offer them population science awareness-raising and popularization materials and events. Since taking up residence in our new Campus Condorcet headquarters in late December 2019 we have already made contact with the six middle schools and three high schools in Aubervilliers, and in 2020 we were able to organize a few brief moments of exchange between students and INED researchers at the Fête de la Science and the "Migration Images" Festival. Similar actions will be developed to diffuse scientific culture to more

distant students and audiences thanks to contacts yet to be made with local associations and actors.

#### *5.2.1.2 Explaining how research is constructed and figures obtained*

Scientific culture is not a matter solely for primary, middle, and high school students but also for journalists, public decision-makers, and citizens in general. Scientific research takes a long time to construct, meaning that its time frame is different from media time. Furthermore, scientific research involves critical analysis that on some occasions identifies methodological weaknesses or calls research findings into question. Presenting scientific ways of proceeding to a more general public seems more necessary now than ever before, as does making audiences aware of the fact of “scientific uncertainty.” It is with this objective in mind that INED will be producing new learning materials on how research studies are constructed, and deliberating on how best to present, and bring back, science-grounded debate.

Moreover, at a time when digital operations are ubiquitous in our lives and data of all sorts accumulate at increasing speed, the question of data production and analysis is crucial. Here again, learning materials will be developed to explain how data are collected and processed and what a statistical research survey is—this could be done jointly with INSEE—and to present the sources used for demographic data. We will also be designing material to instruct not only students but also media representatives and public decision-makers on how to read figures, graphs, and tables, and how to identify what they show and do not show. INED researchers will work jointly on this project with the Statistical Methods service and Communications Department. Ideally, we will be able to collaborate with other members of Campus Condorcet making efforts in this area, which might lead to sharing experiences and practical techniques.

#### *5.2.1.3 Working collaboratively with professional mediators of scientific research and knowledge*

INED has already worked in the past and now works quite regularly with some of the professional actors who mediate scientific research and knowledge. In the last three years, we have established a framework accord with the Musée National d'Histoire de l'Immigration in Paris, holding our first joint annual conference in 2019; worked with the Palais de la Découverte on the *De l'amour* exhibition; and, in spring 2020, joined the online media outlet *The Conversation*. To help INED research to reach a still broader swath of the public, we will be consolidating existing partnerships and working to develop new ones—with the Office for Museum Cooperation and Information Communication (OCIM), for example, and the national network of professionals working in scientific, technical, and industrial culture (AMCSTI). We will work with Institute researchers to get their articles published in *The Conversation* and, if possible, increase the number of articles published, especially in English. We are also exploring the possibility of new framework accords or partnerships with Universcience, the Musée de l'Homme, and the Museum National d'Histoire Naturelle with an eye to jointly organizing a show around the birth of the eight-billionth human being (expected to occur in 2024). Partnerships with national media

outlets like France Culture and scientific YouTubers will also be investigated. The Institute will continue taking part in the Higher Education, Research, and Innovation Ministry's nationwide *Fête de la Science* program when the year's theme resonates with demographic questions. Last, plans are afoot for a "Cinéma et Démographie" festival, in partnership with a media outlet and/or university that offers a filmmaking program (Paris 1, Paris 8, Nanterre, among others), to be held in Paris and Seine-Saint-Denis movie theaters.

#### *5.2.1.4 Designing innovative publishing products*

To reach a still wider audience, INED will be working to design innovative publishing products, among them a new online publishing model that can offer material at different levels of difficulty by connecting research articles with texts for a wide readership. We will also be working to present the information in Population's yearly article on the demographic situation in France—supplemented with data on the population of Europe and the world—in a wide range of formats (data visualization, uploaded database, presentations of concepts and measures, etc.) Other types of products, such as animated graphs and other animations, will also be explored, along with *bande dessinée* [comic strip] formats.

### **5.2.2 Informing and providing scientific grounding for public debate on major social issues**

INED-conducted research studies and survey results feed and fuel public debate in a range of arenas, from the media to parliamentary commissions and nonacademic public bodies. Researchers have fully integrated the work of scientific mediation into their practices—it is one of INED's official missions—and have long been active in efforts aimed to create the conditions for dialogue between the scientific community and public decision-makers, civil society actors, and the citizenry.

#### *5.2.2.1 Measuring the degree to which INED research is taken into account in parliamentary work*

INED researchers are regularly called on to speak to parliamentary committees and members of the Economic and Environmental Council (CESE) and the General Inspectorate for Social Affairs (IGAS). In 2019, for example, they participated in 26 parliamentary hearings. The Institute is concerned to measure the degree to which the French parliament takes its research into account in its work. In addition to counting hearings of its researchers, we will try to establish closer relations with public decision-makers before bills dealing with subjects studied at INED are drafted and in connection with restoring survey findings. (These contacts might take the form of small institutional meetings, breakfast gatherings to exchange information, etc.) We will also be tallying citations of Institute studies in legislative bills and reports, and undertaking to measure our institutional partners' familiarity with and use of INED research studies.

#### *5.2.2.2 More effectively diffusing and promoting survey findings and data*

We will be bolstering our communication actions to publicize INED research study and major survey findings. While press releases are regularly sent out to the media, we will also start sending summaries of main findings to public decision-makers and their collaborators. A dedicated space on the INED website will also be set up for presenting findings and the data they are based on; this will include topic-specific listings that cover scientific publications in the given area from the last ten years, interviews with researchers, videos, animations, working papers, and other material.

#### *5.2.2.3 Battling fake information, prejudices, and stereotypes and improving INED's ability to react effectively to current events*

Given the persistence of certain prejudices and the rise of fake news, particularly on social media, INED proposes to mobilize its researchers' expertise to shed scientific light on current events and develop partnerships with such media outlets as *Le Monde's* "Les Décodeurs," *Libération's* "Checknews," and "Vrai ou fake" at Francetvinfo.fr to ensure rapid diffusion of population data. Ad hoc formats will also be explored, such as a dedicated page on the INED website.

### **5.2.3 Creating conditions for exchanging with the nonacademic world**

In response to the major challenges of our time, civil society is expressing an increasing demand to converse with the scientific community. On their side, researchers are working more and more with local actors. Further developing interactions between research actors, scientific mediation professionals (e.g., journalists), citizens, associations, and decision-makers will foster and facilitate such exchanges and allow us to grasp a greater proportion of the range of perspectives that exist on major social issues such as migration and related phenomena, changes in the family and couplehood, population aging, assisted reproductive technologies, and others.

#### *5.2.3.1 Holding seminars that are open to nonacademic actors*

INED will be offering a series of seminars that encourage dialogue between researchers and nonacademic actors around such cross-cutting themes as inequalities and crises. Some will be held in partnership with other Campus Condorcet institutional members. The Communications Department will be developing means to assist researchers in organizing these seminars.

#### *5.2.3.2 More effectively integrating the business and private-sector world into research*

INED is attentive to changes in the world of enterprise and is working to develop research transfer with major companies, namely in conjunction with assessing France's occupational gender equality policy. In this area, unprecedented partnerships have been developed between Institute researchers and a few major companies (L'Oréal, Michelin, an airline company). New collaborations with professional networks and trade unions will be developed, as well as teaching sessions for employees enrolled in ongoing education or occupational training programs.

Likewise, to strengthen our exchanges with the socioeconomic sphere and help facilitate company hiring of PhDs, INED will continue to host doctoral students on CIFRE [industry training-through-research accords] contracts.

#### *5.2.3.3 Exchanging with, informing, and working pedagogically with public decision-makers*

INED research results and findings are of interest to the public sphere and can be useful in designing and evaluating public policy. They can also be useful to actors called upon to implement those policies: social protection organizations, associations, and companies. Because INED's research is on population, the societal impact of its studies is diffuse, indirect, yet very strong. This is why it is important to accompany public decision-makers. We plan to make contact with associations that bring together elected officials, organizing roundtable discussions with parliamentarians and targeted interventions in institutions; and to have INED researchers do presentations in training programs at France's elite education institutions (the École Nationale d'Administration, or ENA; the Institut de Hautes Études pour la Science et la Technologie, or IHEST; the École Nationale Supérieure de Sécurité Sociale, or EN3S; and others) and in professional networks.

All these actions will increase INED's visibility as a key specialist and go-to institution on population questions. In parallel, we will be working to draw up a charter defining the Institute's specific scientific expertise and drafting a five-year activity report on all the actions INED takes to strengthen the "science and society" tie.

#### *5.2.3.4 Better identifying and promoting citizen-science actions*

Because INED research is based on data collected from individuals, the "science and society" tie helps binds all our research together. Citizen-science actions have developed rapidly in the last few years, as attested by the increasing number of research projects involving nonscientists and a sharp increase in scientific publications on such projects. INED will continue to develop citizen-science research projects based on partnerships with local associations and actors (see Part 3 of this document), and to promote the diversity of approaches and modalities used in Institute research, as well studies in which INED researchers participate.

Last, the Institute will investigate the possibility of starting a project in the spirit of the "Service to the Community" projects developed at the University of Quebec at Montreal, the idea being to further knowledge and skill-sharing among all research project partners so as to collectively produce new knowledge of a kind likely to culminate in social innovations.

## 6 ACCOMPANYING RESEARCH WORK

In the next five years, INED will bolster the position of its research support services and all activities that serve research upstream and downstream of the scientific work and activities it involves. Upstream support activities serve to organize Institute management and, more broadly, the material and immaterial working environment. They assist researchers in preparing their studies (methodological support, expert technical advice, project engineering, trainings, etc.). Downstream support activities are the classic ones of management (human resources, funding-related activities) and publicizing, assisting in the diffusion of, promoting, and archiving research studies and findings.

INED's research accompaniment in the new period will be specifically oriented toward (1) modernizing, simplifying, and sharing management procedures and tools; (2) adapting procedures and tools to digital processes and systematically monitoring new technological advances, and (3) further developing internal communication. Last, in response to the social and environmental responsibility (SER) question, we plan to start (4) a transversal study covering all activities involved in carrying out the Institute's official missions. All support services and departments involved in assisting research work will be called on to participate in the deliberations, design, and implementation of this study.

### 6.1 MODERNIZING, SIMPLIFYING, SHARING MANAGEMENT PROCEDURES AND TOOLS, BRINGING WORK GROUPS CLOSER TOGETHER

#### 6.1.1 Modernizing, simplifying, and sharing procedures

Continuous with actions undertaken in the 2016–2020 period, we will be working hard to simplify and share the management procedures used at INED. This is consistent with the plan to map out key processes to highlight management issues, particularly risk management; e.g., management of financial and legal risk, administrative risks related to the fact that some documents are still in paper form, etc.

One fundamental aim is to improve INED management quality by ensuring the safety and security of the data and texts produced here. In this connection, we will be particularly attentive to financial and human resources processes, some of which require a rapid switch to complete digitization and dematerialization in connection with the project to revamp INED's IT system (see below). From this perspective, dematerialization will involve developing digital means to process, exchange, and store information without the material support of paper.

Formalized or updated procedures will be shared using a method yet to be determined with as many INED staff as possible in the framework of a digital anthology of internal acts and procedures.



We will also focus on improving and modernizing archive management. The coming period is a particularly opportune time to continue that effort, already underway, notably by developing a plan of action on electronic data (archives).

#### **6.1.2 Modernizing, simplifying, and sharing management and research support tools**

The work on processes (mapping, formalizing, updating) will be done in a manner consistent with work underway on the project to overhaul the Institute's IT system. This project is a response to a series of concerns and problematic areas that are particularly salient at INED: obsolete HR and finance management software; the need to adapt the system to recent regulatory changes (e.g., the Déclaration Sociale Nominative [by which employers will now transmit company data for the purpose of integrating and paying their social contributions to state collection organizations]); the need to develop interfaces between administrative and research data; the need for technological support for drafting, verifying, and managing contracts and decision-making.

On this last point, the proposal has been made to construct an interoperable system of data and indicators for tracking management activity and quality that could be used at all INED levels of responsibility.

#### **6.1.3 Bringing work groups closer together, providing needed organization management equipment**

Modernization will go together with a set of actions designed to bring closer together the various INED work groups engaged in assistance, support, and research. To begin with, manager and assistant group will be reinforced by organizing an internal professional network to be run by the actors themselves, with the objective of connecting administration to research. The aim is twofold: to participate actively in the functional linking of key INED management missions and operations, on the one hand by bolstering the pivotal role of management work, and, on the other, improving career prospects in this area by organizing dedicated professional trajectories.

More broadly, forward-looking management of staff, jobs, and skills (FMJS) will be helpful in managing organization, notably in the form of a map of jobs and skills at the Institute and by revising key hiring-related processes (e.g. Human Resources Strategy for Researchers or HRS4R), training processes, and professional development processes.

#### **6.1.4 Innovatively combining remote and on-site working**

Last, our recent health crisis experience is an incentive to innovate in combining remote and on-site working. To do so, we need to develop a technical environment that will facilitate remote working (e.g., infrastructure that virtualizes work environments, acquisition of mobile equipment) while continuing to improve on-site installations and working conditions on Campus Condorcet (e.g., optimizing workspaces, setting up videoconference rooms, etc.). In this process, we will be particularly attentive to research data security, storage, and access.

To access sensitive demographic research data that raise issues of long time-series preservation, we will be assessing how best to develop our data conservation capacities.

Moreover, the experience of transplanting INED to Campus Condorcet, followed by the experience of lockdown, made clear the need to improve EPCC reactivity in response to unexpected adverse events in INED's computer room. It is imperative to set up an externalization system so that some of our IT infrastructure is located outside Campus Condorcet.

## 6.2 DIGITIZING RESEARCH ACCOMPANIMENT ACTIVITIES, SYSTEMATICALLY MONITORING NEW TECHNOLOGICAL ADVANCES

### 6.2.1 Further developing knowledge transfer

INED is structured around research support services of many kinds, making it possible to capitalize on and redistribute the knowledge acquired through experience and experiments in conjunction with various projects. In the 2021–2025 period, we will be reinforcing skill transfer and returns on experience in our research support services.

In-house training is our first means to meet research support needs effectively. It enables us to identify resource people while fostering user exchanges. Internal training has been in place for several years now, enabling the various groups in the institution to familiarize themselves with the scientific IT tools and analytic methods traditionally used in it. The Statistical Methods service in particular provides expertise on analytic tools and methods.

In the last few years, new, continually enriched data sources have appeared, among them administrative and health databases. Using these sources requires particular skills that we have already developed at INED to provide researchers with optimal practice guidance. In addition to the individual support arrangements already in place, data user clubs will be set up that will enable support services to accompany groups of researchers using the same datasets, notably through scheduled information exchange sessions and specific training modules. Some of the data in these new “lodes” are unstructured (textual or network model data) and require a differentiated approach that in turn requires original data and data-processing operations. INED has long invested in these areas, namely through training modules and in collaboration with the EHESS. Another new source is website data, which raises a considerable number of both legal and technical questions.

Proper use and analysis of these different types of data require specific methods and appropriate training. For all these research accompaniment activities, partnership arrangements (with the CNRS, Sciences Po, and other institutions) have made it possible to offer the relevant training to social science practitioners, notably through the MATE-SHS professional network, run by engineers whose job is to produce, process, analyze and represent Humanities and Social Sciences (SHS) research data. The goal today is to enhance knowledge transfer through new training arrangements and new formats that emphasize interactivity.

Last, these various training areas have to meet new research support needs and guide us in drawing up a list of engineers' different areas of expertise so they can meet researcher needs as directly as possible. Training today must be adapted to remote working, meaning that training formats need to be redesigned. Teaching modules are one new support that could be offered. Although remote teaching should not take the place of classic in-person training, which is more likely to foster learner interactions, the development of these additional formats will provide wider access to Subject Matter Experts' skills. However, considerable in-house deliberation between the engineers providing the training and our research support services, particularly IT, will be required if everyone concerned is to be able to make good use of new remote communication services. We will also need adequate remote-learning broadband and audio-video equipment. Last, these developments will require training the instructors to fine-tune their presentations and adapt their instruction materials to the new environment.

In the next five years, we will also be pursuing our quality control activity. Quality control is of course a crucial component of science, whose procedures and findings are by definition reproducible. Quality monitoring has long been done at INED and needs to be continued, built upon, and promoted. We must also continue to track closely the arrival of new techniques so as to offer our research teams access to new tools and functions (e.g., the Git2 code management platform) and to languages aimed not only to pursue but also to simplify quality control, namely in connection with data access and process flow memory.

### 6.3 FURTHER DEVELOPING INTERNAL COMMUNICATION

Internal communication at INED aims to promote a shared vision of the Institute, foster collective inter-service and departmental exchanges, and develop institutional culture. In the next five years, the Director of the Communications Department will be working hard to attain these objectives. Among other things, she will be working to encourage and facilitate internal information-sharing, bolster work groups and their cohesion, and more effectively communicate on available material for promoting research studies and/or explaining them to a general audience.

#### 6.3.1 Improving in-house information-sharing

Efficient in-house information circulation is essential because it facilitates exchanges between support services, departments, and research units as well as collaborative work throughout the Institute. It is also key for maintaining ties with itinerant staff and integrating staff being hosted at INED for a limited time.

The INED intranet management software is out-of-date, so we will be revamping the whole intranet site to provide a pleasant, user-friendly tool adapted to the new collaborative work standards. A modernized intranet could facilitate knowledge and experience-sharing on research practices, for example. We will also be starting a comprehensive monthly internal newsletter covering service and department news, scientific activity at INED, and information on our academic and institutional environment, to be sent to all staff. To improve information

collection and exchanges on communication best practices, the Director of Communications will start and run an internal communication correspondents network.

### 6.3.2 Creating a welcoming collective environment

Every year, 30 to 50 people—PhD students, postdoctoral students, researchers, technicians, administrative staff, and others—join INED work teams. We have a hosting system in place to facilitate their integration and develop a feeling of belonging to the Institute. However, the new working conditions to which the Institute has been subjected since the beginning of the pandemic suggest the importance of strengthening cohesion among staff categories and promoting collective intelligence. This could take the form of capitalizing on our common values and organizing unifying events at which staff of all sorts and statuses can meet and converse. Such events could be either strictly professional (e.g., researchers presenting projects to support services and departments) or more social (celebrating staff successes); it might even involve sports events. And we will work to obtain technological tools that will compensate for social distancing.

### 6.3.3 Developing, and more fully informing researchers on, materials for promoting their studies and/or presenting them to a general audience

INED has a large range of tools and actions for diffusing its studies and making them accessible to various readerships. To facilitate researchers' presentations and popularization efforts and help them choose the best tool for achieving their objectives, all existing forms of Communications Department assistance in this area will be listed and detailed on Intranet. We will also develop and present our research teams with communication instructions kits (how to organize a seminar, record a video, present INED and INED professions and jobs to students, use science and society tools when applying for grants, etc.).

Since INED studies regularly receive media coverage, we will also be offering regular training sessions on how to interact with the media. We will also monitor developments in scientific communication practices and techniques, transmitting all findings to researchers. Last, we will develop communication activities in support of INED's Open Science policy.

## 6.4 TAKING INTO ACCOUNT THE ENVIRONMENTAL AND SOCIAL IMPACTS OF RESEARCH ACTIVITY

When we were formalizing these strategic orientations, the INED community clearly expressed the wish that the Institute include a Social and Environmental Responsibility component. Our comprehensive, transversal response is likely to unify support and research staff around the need to take into account the social and environmental effects of research activity. In this connection, the missions and activities involved in accompanying research work will receive particular scrutiny.

## APPENDICES

---

### APPENDIX 1: RECOMMENDATIONS FROM THE HCERES [HIGH COUNCIL FOR THE EVALUATION OF HIGHER EDUCATION AND RESEARCH] REPORT ON THE 2014–2018 PERIOD

The HCERES transmitted its evaluations of research and institutional operation at INED for the 2014–2018 period in October 2019. In addition to commending our long-standing, tried and tested research strategy, characterized by a combination of top-quality scientific publications and regular production of original surveys, the evaluation committee applauded the excellence of research done at INED and our exceptional know-how and skill at conceiving, planning, organizing, and conducting surveys, particularly longitudinal ones and surveys on sensitive subjects. At that time, the committee deemed that “giving priority to the themes of relations between population and the environment and between health inequalities and social inequalities, to the multidimensional, contextualized approach to life trajectories, to the study of new forms of family life and sexuality, and to public policy analysis generated a coherent, relevant program.” The report likewise noted the Institute’s skill in transferring its expertise to academic partners, public decision-makers, and private companies, as well as its efforts to diffuse scientific culture to a wide audience.

It formulated several recommendations in different areas; the main ones follow:

#### Research

“International comparison, already a strong feature of INED research studies, could be taken further, particularly in analyses of social, family, and migration policies. This inflection would give INED studies additional international renown and influence.”

“It seems desirable to further bolster the use of administrative data—as INED is planning to do—namely with an eye to longitudinal study of interdependencies between health and life trajectories. Significant resources would be needed to make the most of these complex data, which were not designed for research use. Doing more administrative data matching, a highly promising procedure, will require additional research and support staff; the Institute would do well to publicize this priority more clearly.”

“INED’s strong involvement in data production is one of its specificities and should be maintained. The wealth of its existing data offers considerable and growing depth of field—a potential that may have been underestimated.”

“Though INED now has a support cell for constructing research projects and has obtained very good results over the past decade in applying for external grants from the national Investments for the Future program, the National Research Agency, and private companies, the Institute’s self-evaluation report is right to point out that little in the way of grants has yet been obtained from the European Research Council.”

### *Institutional strategy and operation*

In general, the HCERES evaluation committee called on INED to organize its institutional strategy more in terms of plans of action by major activity area. In determining the institution's strategic orientations, detailed plans of action by activity area were prepared, in each case by a taskforce made up of the relevant actors.

### *Training researchers*

"The PhDs (and postdoctoral fellows) [hosted at INED] are recruited overwhelmingly in France. Achieving greater international scope would require widening candidacy calls and changing selection procedures."

"The main doctoral schools that PhD students hosted at INED come from belong to either the EHESS (École des Hautes Études en Sciences Sociales) or the Université Paris 1-Panthéon-Sorbonne, neither of which is a member of the Sorbonne-Paris-Cité academic consortium that INED itself belongs to. It is somewhat hard to read the scientific and thematic logic of these different partnerships."

"INED researchers' direct involvement in thesis supervision is greater now but could be further strengthened, namely by having junior researchers acquire their HDR accreditation [to supervise PhD research] earlier [in their career]."

"Population sciences are only taught in a few master's programs in France, and INED has little power to organize them. It would be worthwhile exploring ways to strengthen those training programs."

### *Surveys*

Major research surveys are a mark of INED's identity and excellence, but the committee observed "a persistent difficulty to ensure that [major surveys] receive lasting funding." "Uncertainties about funding major surveys and databases are leading some researchers and the Institute administration to engage in what are in some cases excessively time-consuming funding searches (for example, funding for the VIRAGE (Violence et rapports de genre) survey required 19 accords). Projects involving several institutions are now being planned in conjunction with PIA3 [the third set of Investments-in-the-Future] grants on infrastructure; the outcome [for those projects] seems particularly crucial."

The committee suggested that INED should "develop even more innovative data collection procedures."

### *Publishing*

The committee would have liked more precise information on the publishing costs for the Institute (book publishing, Population, and Population and Societies).

"The specificities of Population compared to other major international journals in the same field should be more strongly and clearly affirmed. The journal is attracting an increasing number of submissions

(thanks in part to the 2016 creation of the Early-Career Researcher Prize). It would be good for submissions to increase still more and come from more diverse sources.”

The committee called on INED to continue to pursue its “energetic, forward-looking Open-Access policy.”

### *Publicizing, promoting, and communicating*

The committee highlighted the Institute's dynamic actions to promote its work and recommended that they be more fully coordinated and structured.

The “visibility [of the mass of existing INED surveys] would improve if its generalist website [www.ined.fr](http://www.ined.fr) gave them more importance by updating the list of publications related to each survey or survey series, whether focused on France or situated in an international comparison perspective. Some data sets are under temporary embargo or lasting restrictions due to anonymity breach risks; the rules for accessing those data, particularly via the CASD [Center for Secure Data Access], could be made clearer and more explicit so that greater scientific benefits could ultimately be gained from the observations, often collected at high cost.” “INED Survey Department diffusion of data sets to non-INED researchers also might lead to more methodical reviews [of INED research].”

“Citations of INED's scientific publications could be tracked more systematically.”

### *Administrative management*

The institution's internal organization makes sense. It needs to be adapted to the Institute's situation on Campus Condorcet.

Institute governance “draws on collective intelligence but still lacks steering and decision-making guidance instruments.” It would be good to “move toward a new information system that includes research activities.” Budget and financial strategy should be developed in a way that consolidates Institute funding.

It would benefit INED's human resources policy to be “more voluntaristic and better equipped to respond to new challenges.” It would be advisable to set up a “plan for stabilizing support operations, by increasing the proportion of permanent civil servants.” The integration of INED staff into Campus Condorcet's GED comprehensive documentation center needs to be followed closely.

Not enough international researchers are being recruited. “Procedures for recruiting PhD candidates and researchers should evolve so as to better align them with INED's ambition to strengthen its position in international research.”



## APPENDIX 2: METHOD

INED's strategic orientations were formulated in two distinct phases, one focused on the five-year research plan (Section 3 of this document), the other on the "institution" component (all other sections).

### Scientific orientations taskforce

Initially, a small group of ten researchers met three times between the end of June and mid-July 2020. Its deliberations were based on questionnaires answered by permanent and associated researchers and PhD students and postdoctoral fellows. That material described studies underway or in the planning stage. One question asked what four topics (at the most) should be emphasized in the next five years. Responses were analyzed textually. At the last group meeting, researchers worked to reconcile preferences and identify a structure for the Institute's scientific orientations. A structured overview of research conducted at INED was drawn up that shows the coherence of the total set of research studies, a coherence underlying the variety of subjects and disciplines. This group then became heavily involved in writing up this component of the five-year plan.

### "Institution" taskforces

Five taskforces worked on the "institution" component of INED's strategic orientations for the 2021–2025 period. All the services and departments concerned by these sections were represented in those groups. Researchers (two per group) also took part in the group discussions. The taskforces drew up a set of tables, each one detailing for the group in question the objectives to meet, actions to be taken to reach them, and means needed to take those actions.

**1. Open Science** (taskforce steered by the director in charge of INED research diffusion and promotion)

→ Services and departments represented in this group: Publications, Surveys (SMS), with contributions from Statistical Methods, the legal department, archives, the data protection delegate (DPD), International Affairs and Partnerships (IAP), the scientific integrity officer, and Communications Department (DCom)

**2. Population science and society** (taskforce steered by the Director of Communications)

→ Services and departments represented: DCom, IAP, Publications, SES, director in charge of INED research diffusion and promotion, editor-in-chief of the INED website

**3. INED's international position and attractiveness** (taskforce steered by the acting head of research with support from IAP)

→ Services and departments represented: DCom, IAP, delegation in charge of doctoral affairs, Publications

**4. National partnerships and Campus Condorcet site policy** (taskforce steered by the Director of INED, with input IAP)

→ Services and departments represented: IAP, Information and IT Systems service (SISI), Secretariat General, DCom, Publications, SMS

**5. Accompanying research** (taskforce steered by the Secretary General)

→ Services and departments represented: all Secretariat General services and support-providing departments.

**Consulting staff not on taskforces**

The documents produced by these groups were sent to all INED staff. Research unit and support service reactions were transmitted to the Director's office and discussed in a meeting with research unit heads and later in a meeting between support service and department heads. Time was set aside during the drafting of this document and before its completion for researchers to read over the comprehensive research plan component.