# How to create a settlement profile?

The aim of the project named 2020-1-SK01-KA204-078246 – NICOLE is to help local decision-makers in creating a settlement strategy that is sustainable and that creates a livable environment for the future generation in the settlement. To facilitate this, we have created a methodological guide, customizable settlement profile samples, together with a collection of best practices, which present sustainable settlement strategies and ideas.

This guide will help you create an individual settlement profile for your settlement.

Among the intellectual products of the project is an Excel file with 3 sheets.

The name of the first page is Overview. This shows the average structure of settlement profiles, but depending on the problem to be solved or prevented, several categories can be omitted or added in different ways. How can we work, for example, with the data of the natural environment in different cases? If the basic problem is the general health of the residents, then we can look at data that directly affects health (how clean is the air?; are there parks, forests or enough green space where residents can interact with nature?; are there nearby clean and sustainable water source? etc.). If the basic problem is the emigration of young people, then it may be that the natural environment is not favorable enough for them to want to start a family in the settlement. In short, an indicator can be useful for examining several things.

The second tab is called Indicators. This is required for the drop-down menus when creating the settlement profile, there is nothing to do with it. At the same time, the guide provides help on how to use these indicators for the profile. This list and the accompanying explanations are not complete, a lot also depends on the existing problems and local peculiarities.

## **BASIC INFORMATIONS**

Location: indicators belonging to this group are area, population, population density, territorial division, distance from centers and altitude. These are the basic characteristics of the municipality, which help to establish the possibilities of future developments.

Natural environment: this group includes topography, waters, climate and soil composition. Similar to on-site data, it helps to understand the basic environment of the settlement.

## **SOCIETY**

## **Population**

Population size: the current (latest) population figure in the area in question (usually reported on January 1 of each year).

Population distribution by sex: the percentage of men and women in the total population. Ideally, the gender ratio is around 50%.

**Korfa**: the number (proportion) of people living in the 1-99 age group as a percentage of the total population. Ideally, the age group shows a higher proportion at the bottom and in the middle (children under 15 and active-age workers), but a higher proportion of the elderly can show an improvement in mortality rates and an increase in life expectancy.

Aging index: shows the age group distribution per hundred inhabitants. Its interpretation is similar to the previous indicator.

Demographic changes: the total increase / decrease within the population - the difference (absolute) or index of the number of inhabitants at the beginning and end of the observed period, i.e. the difference compared to the population at the beginning of the period and multiplied by 100. The indicator monitors the increase / decrease of the population during a given period. Natural movement is primarily influenced by the age structure of the population, migration by the attractiveness of the area and the equipment of the housing stock. In general, the most favorable is long-term mild growth (in some cases even stagnation of development), without significant fluctuations on both sides.

Natural reproduction: the difference between the number of births and deaths during the observed period.

Migration: the difference between the number of immigrants and emigrants in the observed period.

Population by educational level: the number of persons older than 15 years of age with a given educational level (general school, secondary school without high school diploma / high school diploma, university) within the total population. Higher education means better employment opportunities. On the other hand, especially in recent years, there is an increasing demand for certain types of professions that do not require a high school diploma, which favors students of vocational schools.

Life expectancy: the approximate life expectancy of people born in a given year.

Composition of households: the total number and composition of households given as a percentage - complete families, incomplete families (including families with/without children, single-person households).

Changes in household composition: the evolution of the structure of individual household types. The proportion of complete families with children has been decreasing for a long time, while all other categories are increasing.

Housing

Total number of houses and apartments: the basic indicator is usually given so that other indicators can be compared (converting the value to 1 house/apartment).

The number of inhabitants per house/apartment: the ratio of the population to the number of houses/apartments; (%); the indicator shows the population of houses/apartments. In the case of a higher value for houses, this indicates a higher proportion of residential buildings. In the case of a higher value of the apartments, it may mean unfavorable characteristics, however, other indicators, such as the structure and area of the apartments, should still be monitored.

Family/apartment houses (apartments) ratio: the ratio of apartments in family and apartment buildings and other buildings in relation to the total number of inhabited apartments. The proportion of single-family houses is highest in small settlements and decreases as the size of the settlement increases.

Age, area, room of apartments: construction time of the houses; the average living/usable area of the apartments (m2); the number of rooms in the apartment.

The indicators monitor the more detailed characteristics of the apartments, thus determining the equipment of the apartments. Newer and larger apartments are qualitatively better in terms of housing stock.

The technical equipment of the apartment: the total number of apartments equipped with gas, water supply, sewer, toilet and bathroom. The higher the value of the indicator, the better the quality of the housing stock in the area.

Legal use of the apartment: personal, organizational, institutional, etc. owned apartments, the number of rental apartments, privately owned apartments and apartments in condominiums out of all apartments in total. In big cities, all types are more diverse.

Apartment construction: the number of newly built apartments per period. The so-called intensity of housing construction can be calculated, i.e. the number of newly built apartments per 1,000 inhabitants (usually per year). The housing construction intensity index is a basic indicator of the housing construction attractiveness of individual areas. The higher the indicator, the more significant the increase in the number of residents in a given area.

Proportion of family houses and apartments from newly built apartments: monitors the ratio of apartments/family houses, can be compared over time.

**Equipment, community and leisure**: all indicators in this chapter express whether and to what extent the municipality has adequate service facilities. The more equipped the settlement, the more attractive the housing there, but at the same time the location of these facilities in the area has a great impact on housing and satisfaction. It is not possible and expected that every municipality has all the tools, but the accessibility of these facilities is important - they should not be far away and they should be easily accessible by road. Good transport accessibility is especially necessary for essential health facilities, social services, shops and schools.

The presence of health care facilities in the settlement: this indicator measures the quality of life of the examined settlement. This is one of the reasons why it is necessary to integrate small settlements / independent settlements into larger administrative units capable of creating and operating the aforementioned facilities.

The equipment of health facilities: the equipment of hospitals, pharmacies, dispensaries, the structure of the skilled workforce, etc.

Capacity of health facilities: number of beds in hospitals, number of doctors, etc. per 1,000 inhabitants of the area. The latest trends in the healthcare industry require optimal utilization of hospital and social care beds. In particular, the quality of life in social care homes and nursing homes depends to a large extent on the bed density of the premises and the number of available nurses per inhabitant.

The presence of social care institutions in the settlement: day care and boarding homes for the elderly.

The equipment of social care institutions: the number of beds in the institutions, the number of social workers, etc.

Cultural facilities in the settlement: the cultural centers built by the municipality for its own sporadic events are not always taken into account in the statistics, but they can be useful from the profile point of view.

Sports facilities in the settlement: existence of different types of sports facilities in the settlement.

Equipment and structure of sports facilities: this may include playground equipment, gymnasiums, stadiums, etc. equipment.

Hospitality facilities in the settlement: restaurants, pubs, pastry shops, etc.

Retail establishments in the settlement: grocery stores, convenience stores, etc.

Equipment for retail facilities: grocery stores, markets, supermarkets, technical stores, etc. supply, workforce.

Post office in the settlement: existence of postal services in the settlement, including courier companies.

Education and training facilities in the settlement: nurseries, kindergartens, primary and secondary schools, alternative education units in the settlement. If one of them is missing, it is also necessary to consider where it can be used nearest.

Sports facilities within the educational institution: kindergarten, elementary school, secondary school, etc. equipment (tracks, sports equipment, etc.).

More detailed characteristics of the schools: this can be tracked individually, but in the case of kindergartens, elementary schools, and high schools in the given area, also in summary - school types and capacities, student numbers, number of classes, other student statistics.

The number of civil society organizations in the settlement: active, formal civil organizations, non-profit organizations, clubs, etc. number.

Association activities: the number of active associations in the settlement.

The number of residents with membership in associations (or the proportion of residents in % of the total population): the indicator measures active citizenship within the settlement. It is not exclusive, one community goal can mobilize many people, but this can only be demonstrated by a survey related to the given goal.

## Health and safety

Number of residents with serious health problems (cancer, stroke, heart attack): the number of local residents with serious health problems, if available or relevant to the profile. This indicator (if available) can measure the quality of the natural environment in compliance with the GDPR, but resulting from toxic waste landfills in the affected area of the settlement or unhealthy lifestyles (lack of sports and exercise opportunities and thus reduced/limited physical activity of the residents) dangers too.

The percentage of the unvaccinated population (not only related to Covid): the number of people who are against vaccination or who refuse collective protection (except for cases recommended by a family doctor). The indicator can demonstrate the lack of quality health education, the influence of disinformation online platforms and the need for stricter measures during pandemics.

The percentage of Covid victims within the local population: the number of deaths due to lung problems or other severe forms of Covid. The indicator can indicate the health status and vulnerability of the population, the trust in the health and scientific sectors, as well as the need for municipal and health intervention and quarantine.

The percentage of residents who experienced/survived Covid: the rate of infection. The indicator measures the immunity rate of the population, the quality of measures to prevent the spread of the disease and the rate of the spread of Covid.

# War

The number of refugees accommodated in public and private facilities: the indicator measures the settlement's ability to accommodate and help war refugees, as well as the population's willingness to help refugees.

**Number of war refugees employed locally**: refugees who found work locally. The indicator measures the capacity of the local economy to accommodate external labor, as well as the innovative thinking of the local population for the utilization of local resources (human, material, natural).

Number of refugee children attending local schools: the indicator measures the capacity of local educational institutions to accommodate children, pupils and students. The indicator can indicate the need for local teachers, the need for financial resources and is also linked to the accommodation indicator.

The number of facilities able to provide assistance to refugees: accommodation, catering, workplaces, health and social services, etc. The indicator measures the existence/availability of

support and logistics (aid centers) established by the state or civil society. The indicator can also be relevant at the level of larger units or at the county or regional level.

The percentage of refugees within the population: the indicator measures the growth and composition of the local population due to the war.

The number of refugee-related crimes and conflicts (including cases committed against refugees and by refugees): the indicator is useful in the fight against nationalism, fascism and manipulation. It also measures the impact of the presence of refugees on xenophobia and real crime.

The percentage of the increase in unemployment due to war: the indicator measures the increase in the unemployment rate due to the economic crisis related to war conflicts, including the direct determining factors (e.g. the increase in fuel, food and energy prices).

War-related increase in poverty (loss of jobs, increase in food, fuel and energy prices): the indicator is particularly useful for measuring the number of residents who have fallen below the poverty line set by national policies and programs due to the war and its impact.

**Crime**: the total number of crimes in the area, the number of criminal cases, the structure and development of crimes and criminal cases, the transparency of crimes.

Traffic accidents: the number of traffic accidents on the given road or area.

# NATURAL, URBAN ENVIRONMENT

# Transport

Length of different types of roads: it is possible to monitor bicycle paths, highways, public roads (including those of class I, II and III) and railways (including multi-track, electrified ones) in the monitored area.

Road density: the ratio of the length of individual roads to the area of the affected area (km / km2). The density of roads is highly related to the population density of the area. Higher density means better transport options, but on the other hand, it has a negative effect on the natural environment.

Existence of other transport facilities (e.g. airport, port, cable car): other modes of transport complement the basic transport network, especially the distance to the airport has a great impact on the development of the area.

Number of public transport connections: usually the number of daily/weekly connections of different types of transport means (most often bus or train) stopping in certain areas (towns) is given. It is also possible to monitor the existence of district / regional / capital flights, the number of connections or the travel time of individual flights. The goal is to create the best possible transport links, which means greater satisfaction for the residents, but also a lower need for individual transport and thus a better state of the environment.

Number of passengers: the number of persons transported by means of transport, or the number of persons transported per unit of time (day, month, year). The derived indicator is the utilization of connections (in %), i.e. the ratio of the number of transported persons to the capacity of each connection.

Technical infrastructure: The indicator of the equipment of the technical infrastructure directly affects the livability of the given settlement. Adequate technical equipment is now considered standard. Currently, the coverage of the area with digital technologies is becoming more and more important, and the existence of alternative energy sources shows the added value of the area.

The number of households connected to basic technical networks: the number of households connected to public water supply, electricity supply, gas pipelines, sewerage (including wastewater treatment).

Proportion of houses/apartments connected to the relevant technical networks (in %): the proportion of all houses/apartments in the given area.

Settlements / houses covered by digital technologies: the number (proportion) of settlements covered by the relevant mobile network, internet service provider or television service provider, or the area of its territory or the number of houses.

Areas / houses with alternative energy sources: the number of facilities using alternative energy sources - wind, water, sun, solar energy, power plants, photovoltaic elements, biomass production facilities. It would be interesting to know the number of objects connected to the listed devices, as well as their power or the ratio of their power to the total energy production of the area, but the data can be difficult to find.

Household energy consumption: average water, heat, gas, electricity consumption per person or per household, broken down annually. The indicator is especially important in the recent period, due to the energy crisis and the significant increase in energy prices.

#### **Natural environment**

# Air pollution

The number of days in a year when the air pollution standard was exceeded: emissions of CO, NOX, SO2, solid particles and other substances according to air quality measurement stations (there are always more than one in the region) for a given period (year), the derived indicator the number of days in a year when the air pollution standard is exceeded. The aim is to reduce air pollution as much as possible, and fortunately this trend seems to be fulfilled by the use of more environmentally friendly energy sources.

## Waste production

The amount of waste in total or per inhabitant: if available, the structure of the waste should also be taken into account (municipal, compostable, hazardous waste, etc.). The goal is to reduce waste production, but rather the production is increasing.

Amount of sorted or recycled waste: here, on the contrary, the goal is to increase the proportion of sorted waste in the total waste production. This is partially fulfilled.

# Temperature

The annual or monthly average air temperature in the country, region or individual stations, deviation from the average air temperature: annual/monthly average air temperature in the country, region or individual stations, deviation from the average air temperature. The average air temperature has been rising for a long time, while the amount of precipitation tends to decrease. The main goal is to stop the increase in the average air temperature and to reduce dramatic weather fluctuations.

#### Rain

Average annual/monthly total rainfall: the deviation from the average total rainfall for the country, region or gauge stations.

## Water

Amount of waste in watercourses: the amount of waste materials in watercourses tends to decrease in the long term, this favorable trend must be maintained.

## Protected areas

Number and area (ha) of protected areas in the following categories: large (national park) and small (protected area of local importance, etc.).

Ecological stability coefficient: the ratio of the area of so-called stable and unstable landscape elements in a given area. Stable elements include forests, permanent grasslands, orchards, gardens, vineyards, hop gardens and bodies of water, unstable elements include fields, built-up areas and other areas. The higher the value of the indicator, the more stable the area and thus the more sustainable it is in terms of further development.

Species composition of forests: the proportion of individual tree species as a percentage of the total forest area; the most heterogeneous and diverse forest is ideal.

# Impact of climate change

## Drought

Number of water-related "problems" due to drought during the year: number of days when the settlement faces water-related "problems".

The amount and sources of water available for the settlement: the indicator measures the availability and vulnerability of the settlement's water sources.

## Flooding

The number of properties damaged by floods: the number of properties at risk due to their location in areas potentially affected by floods.

#### Fire

Number of fire prevention measures introduced in the settlement: education-based, so-called "soft" measures, including prohibitions, technical measures (fire prevention corridors, wetlands, sinkholes).

## **ECONOMY**

## Entrepreneurship and employment

The structure of economic units: the composition of enterprises (as a percentage of all enterprises) according to the main economic activity.

Number of entrepreneurs: it can be tracked either absolute or projected per 1,000 economically active residents of the area. The indicator monitors how active citizens are in terms of economic activity. Higher values indicate more activity in the area.

Unemployment: the absolute number of unemployed or expressed as a percentage of the economically active (unemployment rate). The unemployment rate is a basic economic indicator. The lower the value of the indicator, the more stable the area's economy, but below a certain minimum, it indicates a lack of skilled labor.

The evolution of unemployment: the evolution of the percentage of the unemployed over time.

The structure of the unemployed: the number or proportion of all unemployed people can be tracked, e.g. duration (long-term unemployed), age (young/old unemployed), state of health, gender, etc. according to

Number of vacancies: the absolute number of vacancies or the number of job seekers per 1 vacancy.

The structure of the employed: the number and proportion (in %) of the employed in each sector - primary (agriculture and forestry), secondary (industry and construction) and tertiary (other sectors); sometimes the quaternary (science, research, education) is also separated. A higher proportion of workers in the tertiary sector and the quaternary means an economically more stable and developed area.

Going to work: the proportion of commuters compared to the economically active population (%). The indicator shows the area's job opportunities, transport options and residents' willingness to go to work. If commuting is predominant in the area, it is generally more attractive for housing. It is also possible to track other indicators of commuting to work (commute time, frequency), including the individual settlements between which it takes place, the largest employers in the area, etc.

## **Industry**

Gross domestic product: the total GDP per capita, which can also be tracked according to economic activities. This is the total monetary value of goods and services created in a given area in a given period (usually one year) and is an indicator of the development of the state economy.

The composition of the industry: the share of individual industrial sectors in the area (engineering industry, chemical industry, food industry, etc.) as a percentage of industrial production. It shows the composition of the industry, in which some diversification is favorable.

Size of industrial areas by industry: size of industrial areas (in km2) for basic industries.

Agriculture: indicators from the field of agriculture show the expansion of agricultural production in the area and the way of farming. It is not possible to say clearly which values are optimal, because the scale and structure of agricultural production are largely determined by natural conditions. In the case of yield indicators, the goal is usually the highest values of the indicator.

Agricultural area and proportion of agricultural land: area (in km2 or hectares) or share (in %) of all agricultural land and each type of land - arable land, orchards, hops and vineyards, lawns and gardens.

Area of agricultural crops: the area of each crop (in hectares) - cereals (wheat, rye...), legumes potatoes, sugar beets, industrial crops (rapeseed, soy...), fruits, vegetables.

Harvesting of agricultural plants: the mass of the harvested plants in total and separately - the yield can be determined, i.e. the yield per area unit (in t/ha).

Number of animals: the absolute number of individual farm animals in animal husbandry - cattle, pigs, poultry.

Products of animal husbandry: the amount of milk expressed (in liters) or milk yield (1/1 dairy cow), the number of eggs (in total or per hen), the weight of processed meat of cattle, pigs or poultry (in t).

Services: service indicators and tourism have a double meaning for the affected area. From the point of view of tourists, higher values of the indicators create better conditions for tourism, and from the point of view of the local population, they improve the economy of the area. Therefore, the goal is the appropriate offer and structure of accommodations, as well as the appropriate number of vacationers, which determines the indicator of the number of accommodations.

Accommodation equipment: the equipment of all types of accommodation in the monitored area. You can also monitor the number of rooms and beds in these facilities. The total number of beds also indicates the accommodation capacity of the examined area.

The structure of accommodation: the individual types of accommodation – hotels, pensions, holiday homes, campsites, etc. number and ratio.

The number of persons accommodated: usually the number of persons accommodated daily at the given accommodation is given, generally the annual number overall.

Utilization of accommodation capacities in the area: expressed as a percentage - the indicator can be calculated from the number of beds for a given period (usually a year) and the total bed capacity of the accommodation facilities in the examined area.

Other services: the number of establishments providing other services (hairdressers, repair shops, etc.) in the settlements; it can also be calculated per 1,000 inhabitants of the settlement or other area. The indicator is important for residents, the higher its value, the more attractive the area is for housing.

## Other

Belonging to small regions and local action groups: a higher value means a better degree of cooperation in the given area.

Territorial coverage with spatial planning plans: spatial planning documentation of larger spatial units, spatial planning plans of municipalities (including their actuality), other spatial planning documents, such as natural (landscape) units. Higher values assume easier and more coordinated development of the area.

Building authority, registry office, police: is there a branch office or captain's office in the settlement, and how many settlements are covered by each.

Sights: for example, a castle, a castle, a museum, an observation tower, a fortress, caves, rocks, dams, etc. The indicator can be found either on the basis of a more detailed map or on the basis of local knowledge of the area. (This is only a list of selected tourist attractions, it is possible to customize and list more depending on the specific location).

The third page is called the **Territory profile**. On this page, you can select which indicators you need to complete or partially profile a given area. Next to each indicator, you will find a drop-down list where you can see which databases you can search to find relevant information. If you select a database, a link or additional information will appear next to it.

Not all indicators are available locally, however many databases offer additional information if you contact them directly.

The most used databases are KSH and TeIR. In all cases, the census data is also available in a series-by-settlement version, other information is often only available at the county or district level. It is worth contacting the managers of the databases to see if they only have data on the settlement level.

In several cases, individual data are available from different sources. In Hungary, the authorities often request statistical reports from various institutions and organizations, with the help of which detailed databases are created in relation to a wide variety of topics - from the performance of the students of individual schools to bird deaths around the settlement, including the protected values of the settlement.

In order to get a deeper picture of the investigated area - whether it is a settlement, a local action group, a micro-regional partnership or something else - we recommend that you also look up the relevant EUROSTAT data. The data itself can be compared on a regional, national and