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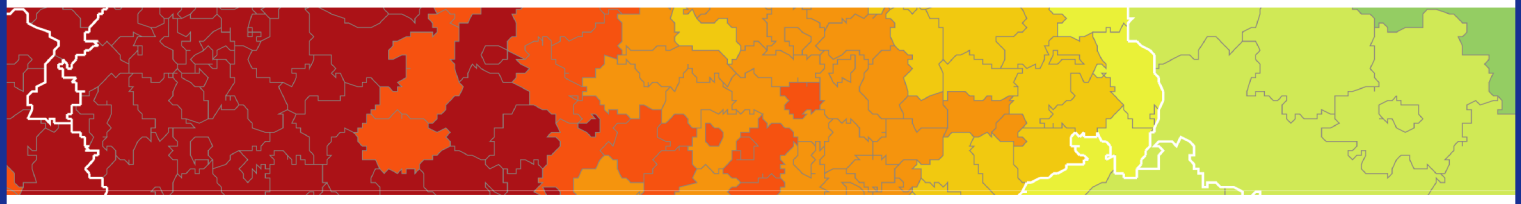

ESCAPE
European Shrinking Rural Areas:
Challenges, Actions and Perspectives for Territorial Governance

Applied Research

Final Report – Annex 9
Case Study Szentes, Csongrád, Hungary

Annex 9

This report is one of the deliverables of the ESCAPE project. This Applied ResearchProject is conducted within the framework of the ESPON 2020 Cooperation Programme, partly financed by the European Regional Development Fund.

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Final Report - Annex 9 - Case Study Report

Szentes, Csongrád
Hungary

ESCAPE
European Shrinking Rural Areas: Challenges, Actions and Perspectives for Territorial Governance

Version 21/12/2020

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Abbreviations

CAP	Common Agricultural Policy
CLLD	Community-Led Local Development
CS	Case study
EC	European Commission
ERDF	European Regional Development Fund
ESCAPE	European Shrinking Rural Areas Challenges, Actions and Perspectives for Territorial Governance
ESF	European Social Fund
ESPON	European Territorial Observatory Network
EU	European Union
EUR	Euro
FAP	Family Protection Action Plan
GDP	Gross Domestic Product
GP	General practitioner
GVA	Gross Value Added
HCSO	Hungarian Central Statistical Office
HRN	Hungarian Rural Network
HU	Hungary
HUF	Hungarian forint
ICT	Information and communication technologies
ITI	Integrated Territorial Investment
LAU	Local Administrative Unit
LEADER	Liaison Entre Actions de Développement de l'Économie Rurale
LESZ	LEADER Egyesületek Szövetsége
LAG	Local Action Group
N	No
NACE	Nomenclature statistique des activités économiques dans la Communauté européenne
NGO	Non-governmental organisation
NUTS	Nomenclature of Territorial Units for Statistics
OP	Operative programme
PROFECY	Processes Features and Cycles of Inner Peripheries in Europe
RDP	Rural Development Programme
SGI	Services of general interest
SME	Small- and medium-sized enterprises
TO	Thematic objective
UK	United Kingdom
Y	Yes

Factsheet of Szentes, Csongrád, Hungary

Map 0.0: Geographical location of Szentes in Csongrád NUTS 3 unit and in Hungary

CS area is shown in red, and the NUTS3 region in grey.

Name: Szentes district, located in Csongrád (NUTS3 unit)

Key Indicators:

Figures refer to 2017 or 2001-2017 unless otherwise specified

Total Population (persons):	39,292
Population Density (persons/km^2):	48.3
Population Change (%):	-14.9
Net Migration (per 1,000):	-33.9
Natural Change (per 1,000):	-115.4
% aged >65:	21.8
% Employed in Agriculture:	14.3 (2011)
GDP (PPS) per Capita:	14,500* (2016)

* NUTS 3 data

Typologies:

- Urban–rural typology: Intermediate region, close to a city [1]
- Border region: Programme area (internal & external) [2]
- Typology of simple shrinkage (ESCAPE project): Population decrease 1993-2033, mostly/more pronounced in period 1993-2013; slow shrinking rate (>-0,5)

[1] According to the Eurostat's urban-rural typology including remoteness, a NUTS3 region is intermediate if the share of population in rural areas is between 20% and 50%, or if having more than 50% of population in rural areas contains an urban centre of more than 200,000 inhabitants representing at least 25 % of the regional population. It is considered close to a city if more than half of the residents can reach a city of 50,000 inhab. driving 45 min.

[2] According to the Eurostat's classification of border regions, internal border refers to regions located on borders between EU Member States and/or European Free Trade Area (EFTA) countries; external borders refers to regions that participate in programmes involving countries outside both the EU and EFTA (based on the 2007-2013 cross-border cooperation programmes).

Executive Summary

The Hungarian case study area, the town of Szentes and its surroundings is located in Csongrád County, in the lowland of the Great Hungarian Plain. The wider region, Csongrád County is an intermediate NUTS 3 region neighbouring Romania and Serbia. The chosen district is a LAU 1 level unit of the state administration system where two-thirds of the population live in the (market) town of Szentes, and the rest is shared by seven villages of different size ranging from less than four hundred to more than four thousand. Due to its extended agricultural fields, population density of the district is half of the county average. Szentes district is characterised by a number of traits of inner peripherality caused mainly by its geographical position (lying in between two regional centres) and accessibility issues (main railway lines and highways avoid the town of Szentes).

Three powerful processes: demographic (legacy) effects, urbanisation and globalisation have impacted shrinkage in the case study area in the past decades.

The case study area lost about 20% of its total population over the past three decades and it is anticipated to shrink by a further 30% by 2050. Components of population dynamics and decline indicate a *specific combination of demographic factors behind shrinkage*. The most important factor in negative natural trends is *low fertility rates* mutually determined by ageing, which has accelerated in the past decades: the ratio of 65+ to 0–14 year-old population was about 0.75 in 1990, it reached a balanced status until 2001 (ageing index is 100%), and intensively increased in the past one and a half decades, up to 170% in 2017. Logically, the old age dependency rate shows the same trend: while in the early 1990s this index reached only about 20%, in 2017 every old aged person in the case study area is 'dependent' on three working age individuals. Besides natural decrease, *negative net migration* boosts population decline significantly in the case study area. It reached -4,8% from 2000 to 2017.

Whilst *urbanisation* has remained an influential driving factor of rural-urban flows, population drain triggered by *globalisation* has increasingly impacted the case study area. According to the latest migration figures, two thirds of active-age emigrants preferred Budapest and the county seats (Szeged, Kecskemét, Győr), and only one third chose villages or small and medium sized towns between 2001 and 2011. According to anecdotal evidence from the interviews, approx. 1% of the population (250–270 individuals) emigrated from the town of Szentes, especially from 2008 onwards, during and after the years of the Global Financial and Economic Crisis.

However, if the long-term dynamics of population change is considered, the leading component of population decline during the State Socialist era was outmigration which impacted demographic processes in the next two decades as well through legacy effects. Compared to legacy (demographic) effects, the ongoing high outmigration rate plays a secondary role in population shrinkage in the case study area. What is important, however, and painful in most local stakeholders' minds, is the selectivity of outmigration: negative

migration balance was particularly high among the educated/skilled citizens between 2000 and 2011.

Considering causes and path dependencies, *historical cataclysms, shock-effects of systematic changes on demographic decline were clearly identified* in the case study.

Szentes district is still a predominantly agricultural area, where an estimated 20–25% of the population is engaged in agriculture at least on part time basis, and where industrial activities – with one single exception of an assembling firm – are also linked to agriculture (storing, marketing, producing fodder, food-processing). Therefore, the population as well as the local economy have always been vulnerable to the forced re-allocation of agricultural properties: collectivisation was the first of these during the early decades of the Communist era, and "de-collectivisation" was the second such shock experience, during the years of transition after the fall of State Socialism. *Collectivisation* reshaped land ownership and production structures, influenced employment capacities of the sector, and changed settlement patterns as well: most permanent residents were expelled from their farms in the agricultural area: some of the households moved to the residential sectors of the settlements, others left. The rate of population loss during State Socialism was extremely high in the villages inducing irreversible demographic change. Outmigration from the town started later and peaked at a lower rate; it even jumped to positive for a while in the early 1990s, but soon turned to negative again. The scale of the *transition crisis* was so dramatic in the case study area, especially in villages, that, even two decades later, in 2011, the number of jobs was well below the level of 1990: it practically halved in the villages and reached only 78% in the town of Szentes. Agriculture suffered the biggest losses in terms of employment capacity, more than 60%, industry and construction lost almost 40% between 1990 and 2011, whilst services suffered the least from 1990 to 2001 and gained in the next decade 13% and 20% respectively both in villages and in the town. The 20 year time-span also covers the negative impacts of the Global Financial Crisis.

Relative economic recovery has not brought a positive shift regarding occupation structures of the town (and its surroundings), since local industries have failed to restructure towards a 'knowledge-economy'. As a result, qualified economic personnel have remained under-represented: the share of professionals (-3.6%), managers (-2.1%), technicians and associate professionals (-2.3%) was well below the national average in 2018. Decreasing clientele of public services induced by shrinkage of the population as well as by migration (to urban centres and abroad) contributes to the lower and lower representation of highly skilled population in the centre of the case study area. Shrinking human capital appeared as a painful consequence of overall shrinkage and was identified as a key problem in most interviews.

Generally, there is a consensus among local stakeholders on interrelated causes of population decline: low fertility rate, ageing of the local societies and outmigration of young, qualified people.

Concerning future pathways and coping strategies, the picture unfolding from the interviews is rather balanced. The goal of attracting industries, preferable with high value added and demand for qualified labour is still on the top of priority list at least in the town. Desired interventions addressing the quality of life and improved public services are equally present in the thoughts of local actors. The two approaches to shrinkage – mitigation and adaptation – are not set as distinctive and mutually exclusive future pathways.

Among the policy directions suggested by local stakeholders, three groups were identified: (i) direct interventions targeting young people (giving them voice, improving housing opportunities to start their independent lives), (ii) recognition that attachment to one's home town and near environment needs to be and can be enhanced through community work, (iii) measures aimed at refurbishing the built environment, providing better quality public services and attracting investments capable of offering appropriate jobs for young and middle-aged professionals; the third group can only exercise an indirect impact on shrinkage.

The case study revealed that two most promising policy tools, LEADER and CLLD, have not been performing effectively, mainly for national-level (structural) reasons. Since both CLLD and LEADER have been managed centrally at the national level, national-level delays in program-level implementation caused major setbacks at local level as well. It needs to be emphasised that, without a critical mass of financial support, the promising impact of these policy tools cannot be realised, rather, even the small amount of funding gets wasted. Positive steps in the new EC regulations towards less complicated co-financing possibilities can only be exploited in Hungary if substantial changes at national-level management can be achieved.

1 Diagnosing rural shrinkage and its contexts

1.1 The CS area: introduction

Szentes district is located in Southern Hungary in Csongrád County (NUTS 3), in the lowland of the Great Hungarian Plain. Szentes, the traditional market-town and its surroundings (seven villages) had and still have a long-term engagement with agricultural activity and food production (meat industry, intensive and extensive vegetable production etc.). Due to demographic changes (outmigration) in 1970s–1980s and the socio-economic transformations generated by the change of regime in 1990, the town and its wider area started to lose population in the early 1980s. Over the past three decades Szentes district lost about 20% of its population and can be characterised as an area with significant shrinkage in Hungary.

The selection of the case study area was driven by the intention to analyse and understand processes related to demographic dynamics and their relation to socio-economic causes and consequences of population decline in a region which – from an economic point of view – might not be regarded as a dominantly disadvantaged territory in Hungary. However, the district is classified as potentially "targeted" by regional development policies because its "degree of development" was less than the country average in 2014 when the classification was born (290/2014. XI. 26 Government Decree on targeted districts). The area seemed interesting from the viewpoint of local approaches and strategies against population shrinkage, since different bottom up initiatives of local development have been available: CLLD in the town of Szentes, while the other seven municipalities of the district (and external municipal areas of Szentes) are members of 'Alsó-Tisza Vidék Fejlesztéséért Egyesület' LEADER LAG.

1.2 The CS area in the contexts of territorial classifications

Szentes district is a LAU-1 level administrative unit within the territorial administration system of Hungary (Map 1). District ('járás') level was a traditional administrative executive level in the Hungarian regional governance structure until 1983, which was reinstalled in 2013.

As a district in the Great Hungarian Plain, which had originally a quite unique settlement structure with market towns of internal and external dwelling places, Szentes district only consists of eight municipalities: a market town, Szentes, which is the seat of the district, two larger villages, Nagymágocs and Szegvár, and five smaller villages, Árpádhalom, Derekegyház, Eperjes, Fábiánsebestyén and Nagytőke (Map 2). The district is a part of Csongrád county (Csongrád-Csanád from 2020), which is a NUTS 3 unit (HU333) in the Dél-Alföld (Southern Great Plain) NUTS 2 region (HU33).

Regarding regional typologies by Eurostat and ESPON, Csongrád County only shows a few specificities (Table 1). In the urban–rural typology, Csongrád County is classified as an intermediate region, close to a city. This city is Szeged, county seat of Csongrád, which is the

third most populated municipality in Hungary with more than 160 thousand inhabitants (40% of the county's total population). On the whole, Csongrád county is not a sparsely populated region, and nor is Szentes district, however population density within the case study area (48 persons per km2) is only half of the value of the NUTS 3 region, and both are lower than the country average.

Table 1: The CS area in the contexts of territorial classifications

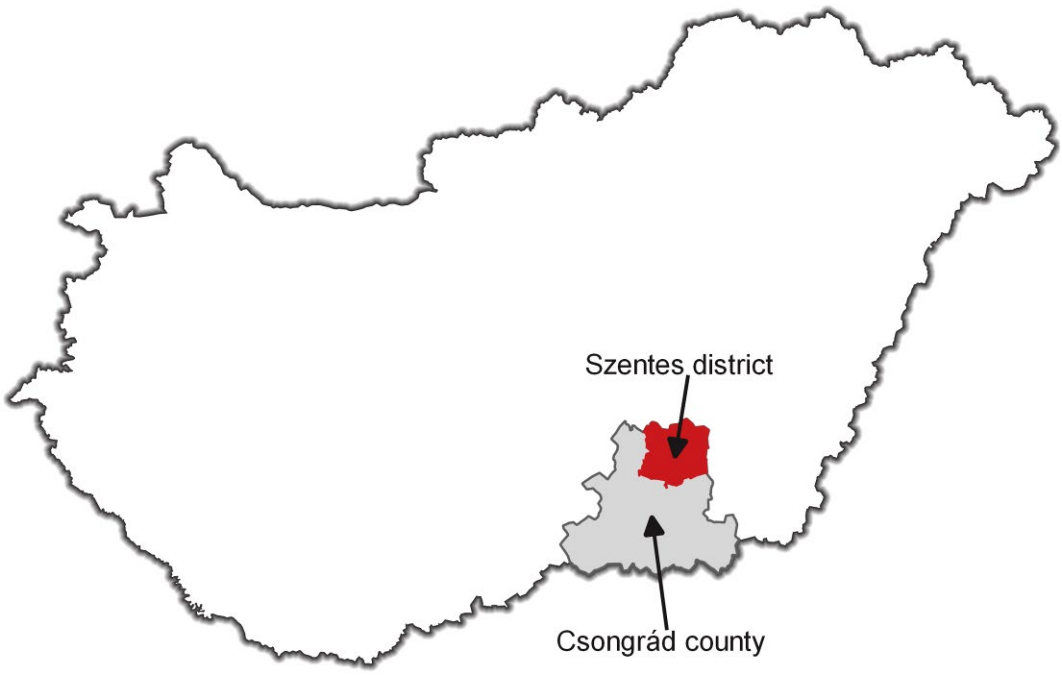
Classifications	**Positioning of the case study area**
Name	Szentes district
Scale and role in national administration (Y/N and level)	Y – járás (district), former LAU1 level
NUTS 3 unit covered by the CS area	HU333 – Csongrád
Regional typologies	
Urban–rural typology	Intermediate region, close to a city
Coastal regions	Other region
Mountain regions	Other region
Island regions	Other region
Sparsely populated regions	Other region
Border regions	Programme area (internal & external)
Inner peripheries (ESPON PROFECY)	Other region
Shrinkage typology (ESPON ESCAPE)	
Typology of simple shrinkage	Population decrease 1993-2033, mostly/more pronounced in period 1993-2013; slow shrinking rate (>-0,5)

Source: Eurostat; ESPON

Since Hungary is a landlocked country, it has no areas, which would be considered as coastal or island regions. Furthermore, Hungary has no mountain regions (according to Eurostat typologies), and, as it has been mentioned already, the case study area is flat, a rather typical part of the Hungarian Great Plain. The lowland where Szentes district is situated is formed by the surface shaping works of the (now regulated) rivers of Tisza and Körös.

Csongrád NUTS 3 unit is situated on the southern border of Hungary, and it is neighbouring both with Romania and Serbia. In this way, the county is a programme area of internal and external transnational cooperation programmes of the European Union. Szentes district itself is only touched by internal (county) borders with Jász-Nagykun-Szolnok and Békés counties.

Map 1: Geographical location of the case study area in regional and national territory



Typologies of inner peripheries, classified by ESPON PROFECY project, do not cover Csongrád NUTS 3 area. Due to the proximity of a strong regional centre with a wide array of available services (the county seat, Szeged), and the favourable accessibility conditions by car (M5 and M43 motorways, other main routes) and by train provide good connections within the county and towards other parts of Hungary despite its external border position. Regarding to the case study area, Szentes (the town) is also an important transport node, providing rail and road connections towards other parts of the county, however, main lines of connections avoid the town therefore its position in relation to accessibility of main centres of Hungary is unfavourable. Szentes also provides different kinds of educational, health care, commercial and cultural services for inhabitants of the area.

In initial typologies on shrinking areas in ESPON ESCAPE project, Csongrád NUTS 3 area is represented as a region in population decline. The first typology taking both past and projected future population change into account shows that the case study area (at NUTS 3 level) is characterised by an overall slow rate of demographic shrinkage (below 0.5% yearly population loss between 1993 and 2033). Nevertheless, population decline considering the past period (1993–2013) seem to be more pronounced than in the projected period (2013–2033).

Map 2: Location of the case study area within administrative structures (internal administrative divisions)

The typology on structural demographic shrinkage shows that the population decline in the NUTS 3 region is mainly driven by legacy-related processes. However, Csongrád county itself has an overall positive net migration rate, it is mainly due to the attractiveness of the county seat, Szeged. Other parts, rural areas of the NUTS 3 unit are emissive territories from the viewpoint of population, who emigrate from small towns (like Szentes) and rural municipalities to the regional centre and other parts of the country, especially the central region, where the capital, Budapest is seated. Besides, a bigger share of the population decline is related to natural decrease, which affects both smaller towns with ageing population and villages that have faced significant and uninterrupted outmigration since the mid-20th century.

1.3 The case study area against the region, the country and the Macro-Region

Population dynamics and demographic characteristics of the case study area indicate that the issue of rural shrinkage regarding the case study area refers to a relevant, significant and complex process. Szentes district is an average-sized territorial unit (by population numbers) within the administrative system of Hungary. The current number of its inhabitants is slightly below 40 thousand persons, but population loss in the district since the early 2000s has been very high (Table 2). Compared to the year 2000, the number of total population dropped by

7,000 persons until 2017, which means a 14.73% population loss during this period (almost 1% per year). Demographic shrinkage has affected both Szentes, the town and its surrounding municipalities.

While the European Union had an overall, significant population increase in this time (by 24 million persons), the total population of Hungary was dropped below 10 million (-4.15%). But the population decline in Szentes district is notable compared to other upper territorial levels, too. Between 2000 and 2017, Dél-Alföld NUTS 2 unit lost almost ten percent of its population, and within this area Szentes district was a dramatically shrinking part of a less shrinking region, since the population change in Csongrád county reached only 6.7% during this period.

Table 2: Basic demographic and socio-economic trends behind rural shrinkage

Indicators	**Spatial level**	**Case study area (if available)**	**NUTS 3**	**NUTS 2**	**NUTS 0, Country**	**EU28**
	Name	**Szentes district**	**Csongrád**	**Dél-Alföld**	**Hungary**	**European Union**
	Code	**076**	**HU333**	**HU33**	**HU**	**EU28**
Total population on 1 January – persons *(demo_r_pjanaggr3)*	*2000*	46,080	430,514 (2001)	1,383,497	10,221,644	487 million
	2017	39,292	401,469	1,251,924	9,797,561	511 million
Population change between 2000 and 2017 ([Population 2017-Population 2000] / Population 2000 * 100) – percentage *(demo_r_pjanaggr3)*	*2000–2017*	-14.73	-6.70 (2001–2017)	-9.51	-4.15	4.95
Population density – persons per km² *(demo_r_d3dens)*	*2000*	56.62	99.50	75.50	109.80	111.90
	2017	48.28	95.80	68.90	107.30	117.70
Total fertility rate – number *(demo_r_find3)*	*2000*	1.31 (2001)	1.21 (2001)	1.31	1.32	1.46
	2017	1.56	1.47	1.55	1.54	1.59
Net migration rate (Net migration 2000–2017 / Population 2000 * 100) – percentage *(demo_r_gind3)*	*2000–2017*	-4.79	2.33 (2003–2017)	-0.94	2.34	4.54
Population projection (EUROPOP2013) – persons *(proj_13rpms3)*	*2020*	36,568 (2021)	401,513	1,235,149	9,799,788	512 million
	2030	32,431 (2031)	389,734	1,165,338	9,679,342	518 million
	2040	28,229 (2041)	371,343	1,090,003	9,520,509	524 million
	2050	24,490 (2051)	352,760	1,013,968	9,350,135	526 million

Working age population (15-64 years old population / Total population *100) – percentage *(demo_r_pjanaggr3)*	*2000*	67.54 (2001)	68.43 (2001)	67.36	68.10	67.09 (2001)
	2017	65.47	66.70	66.38	66.82	64.98
GDP per capita – purchasing power standard *(nama_10r_3gdp)*	*2000*	-	8,700	7,700	10,400	19,800
	2016	-	14,500	13,900	19,500	29,300
GDP per capita – PPS in percentage of EU28 average *(nama_10r_3gdp)*	*2000*	-	44	39	52	100
	2016	-	50	47	67	100
Convergence of GDP per capita to the EU28 average (1 + [GDP per capita 2016 - GDP per capita 2000] / GDP per capita 2000) *(nama_10r_3gdp)*	*2000–2016*	-	1.14	1.21	1.29	1.00

Source: Eurostat, Regional statistics by NUTS classification (see table names above)

Population density within these areas has changed in line with population dynamics over these years. While Hungary as a whole, lost its position compared to the EU28 with growing population density, the overall decrease of population density within the country is small, just in the case of Csongrád county. Demographic trends in Szentes district in this sense is more similar to Dél-Alföld NUTS 2 region, since both has become a significantly more thinly populated area over the analysed period.

Components of population dynamics and decline indicate a specific combination of demographic factors behind shrinkage. The most important factor of the natural side of population change is fertility. Total fertility rates in Hungary are usually lower than the EU average. In the early 2000s, this rate only reached about 1.3 compared to the average value of 1.45 of the European Union (which is also far below the reproduction rate). Fertility rates within Dél-Alföld NUTS 2 region and in Szentes district also reached 1.3, while the value of Csongrád County was below that. Until 2017, total fertility rates increased, measured at all territorial levels of Hungary, and these values caught up to the EU28 average, except for Csongrád NUTS 3 area, which otherwise, also showed significant increase in this sense.

Besides natural decrease, the significantly negative rate of net migration also boosts population decline in the case study area. It reached -4,8% from 2000 to 2017 in the district, which is striking compared to the wider surroundings, since Csongrád county had an overall positive net migration rate during this period (due mostly to the attractiveness of Szeged, the dynamic county seat), equal with that of the positive national migration balance. Nevertheless,

the rate of immigration to Csongrád or to Hungary is only the half of the same value represents the average net migration rate of the European Union.

Future population projections indicate that in the forthcoming three decades Szentes district may suffer further significant population loss, by potentially losing the one third of its current population (24,490 projected inhabitants in 2051 – nater.mbfsz.gov.hu). This rate of population decline is remarkable within Hungary, which contrary to overall EU trends, also has the future of a shrinking country. The projected future national population decline and the potential demographic shrinkage at NUTS 3 level is much less significant compared to the case study area. And even Dél-Alföld NUTS 2 region whose demographic trends are more similar to that of Szentes district, may continue its decrease half as fast as the case study area will.

Regarding economic aspects of shrinkage, position of the case study area and its wider surroundings does not show a clear-cut image of decline. The number of economically active population (measured by the ratio working age population) in Szentes district is slightly lower than county, regional or national figures, and the share of working age population only slightly decreased between 2000 and 2017. In this sense, the situation in the case study region only differs from the EU-wide trends too.

Dynamics related to economic production is characterised by changes of GDP per capita values. On the basis of that, by taking absolute numbers into account, none of the regions meets the criterium of ‘shrinking region’ at either of scales of Hungarian territorial levels (nor in most of the EU28) regarding the period between 2000 and 2016. By comparing GDP per capita and its change measured in percentage of the EU average, position of Csongrád NUTS 3 region might be considered moderately advantageous, its catch up rate seems to be less favourable within Hungary. By 2016 Csongrád county reached 50% of the average value of EU28 GDP per capita. Among other Hungarian regions at NUTS 3 or NUTS 2 level, this seem to be a favourable position (without taking the more advantageous situation of Budapest into account), but the change of the volume of economic production only serves a lower rate of convergence (to the EU average) compared to the national level, driven by the economic dynamics of the capital region.

1.4 Characteristics and contexts of the shrinking process in the CS area

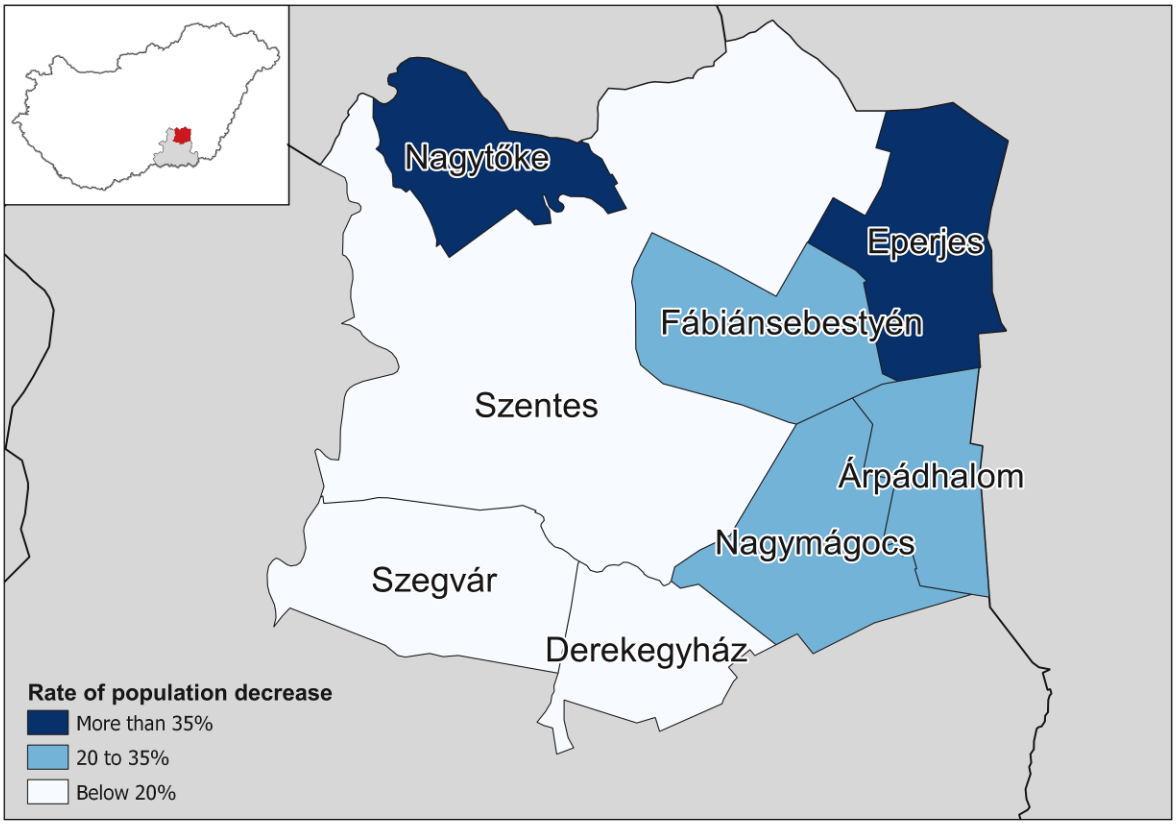
1.4.1 Characteristics of the CS area along demographic criteria (Simple shrinking)

A closer overview on demographic processes of the recent decades shows that the population of the district dropped by more than 9 thousand inhabitants between 1990 and 2017 (from 48,337 to 39,292), and has lost about 20% of its population. During this period, the population of Hungary decreased (only) by 5.5%, however which meant an overall national shrinkage by 575 thousand people (Table 3). Among municipalities of the case study

area, the least populated villages (Eperjes, Nagytőke and Árpádhalom) suffered the most population loss in terms of the rate of shrinkage (30–35% or more). In bigger municipalities, like Szegvár and Szentes, population decline also reached 15–20% since the beginning of the 1990s (Map 3).

Within the group of medium-sized towns of the Hungarian Great Plain with similar population size (20–50 thousand residents), the shrinking rate of Szentes seems to be above average, but this is not exceptional, since all the other towns of this kind in Csongrád county (Hódmezővásárhely and Makó) follow the same path. Among towns of the Hungarian Great Plain, only towns with certain socio-economic specificities – solid touristic profile (Hajdúszoboszló) or industrial capacities (Jászberény) – show less significant population decline.

Map 3: Rate of population decrease in the municipalities of Szentes district, 1990 to 2017



Source: National Regional Development and Spatial Planning Information System, T-STAR

For the CS area, the peak decade of *population decrease* was the 2000s, with an overall population loss of almost 10%. Compared to that, the intensity of demographic shrinkage was moderate in the 1990s, but during the current decade, depopulation tendencies seem to be as intense as in the 2000s. These trends affected both Szentes town and its neighbouring

villages in a similar way. These trends fit to national tendencies; however national rates of population decrease appear to be more balanced between decades. Population density of the CS area has significantly changed with population decrease between 1990 and 2017. During the analysed period, it dropped from 59 to 48 persons/km2. With this rate, population density of the district fell far below the half of the national average, while at the beginning of the 1990s it still surpassed that value.

Table 3: Basic demographic and socio-economic trends in the CS area and at national level

Indicators		**1990**	**2001**	**2011**	**2017**
Total population (number)	*CS area*	48,337	45,846	41,521	39,292
	National level	10,372,167	10,199,183	9,984,634	9,797,651
Ratio of 0-14 y.o. population (%)	*CS area*	20.35	16.21	13.42	12.76
	National level	18.89	16.62	14.57	14.52
Ratio of female population in productive age (15-45 y.o.) (%) – only age groups 15-40 are available for comparison	*CS area*	32.66	30.66	29.29	28.05
	National level	33.79	32.89	32.08	29.03
Population density (persons/km2)	*CS area*	59.39	56.33	51.02	48.28
	National level	111.52	109.66	107.36	105.35
Gender balance	*CS area*	1.07	1.06	1.09	1.09
	National level	1.08	1.10	1.10	1.10
Old age dependency rate (%)	*CS area*	21.93	24.06	28.81	33.26
	National level	19.99	22.23	24.62	27.93
Ageing index (%)	*CS area*	73.58	100.30	144.23	170.62
	National level	64.47	91.23	115.85	128.49
Crude birth rate (births/1,000 persons)	*CS area*	11.65	8.48	7.01	8.60
	National level	12.08	9.52	8.82	9.35
Crude death rate (deaths/1,000 persons)	*CS area*	16.32	14.13	17.29	16.64
	National level	13.98	12.96	12.90	13.44
		1990-2001	**2001-2011**	**2011-2017**	**1990-2017**
Population change (%)	*CS area*	-5.15	-9.43	-5.37	-18.71
	National level	-1.67	-2.10	-1.87	-5.54
Number of arrivals due to migration	*CS area*	15,954	14,267	11,569	41,790
	National level	4,449,597	4,191,687	3,502,622	12,143,906
Number of departures due to migration	*CS area*	16,829	15,906	12,105	44,840
	National level	4,454,178	4,199,289	3,502,645	12,156,112
Net migration rate (%)	*CS area*	-1.81	-3.58	-1.29	-6.31
	National level	0	0	0	0

Source: National Regional Development and Spatial Planning Information System, T-STAR; HCSO, Dissemination database

The direct demographic results of population loss impacted both age structure and gender balance of the case study area (and Hungary as well). Population shrinkage led to an intensive ageing of the Hungarian society, and this tendency is even more exposed in the area of Szentes district. Between 1990 and 2017 the share of child population decreased from 20.35 to 12.76%. In the beginning of the analysed period, this ratio was higher than the nation average (18.89%), but currently, it is well below the Hungarian average.

This trend is more striking if *ageing index* (ratio of child and old age population) is taken into account. The ratio of 65+ and 0–14 year-old population was about 0.75 in 1990, it reached a balanced status until 2001 (ageing index is 100%), and intensively increased in the past one and a half decades, up to 170% in 2017. Considering this aspect of ageing, the situation of the CS area was already disadvantaged in 1990 compared to the national average, and it has become more and more enhanced until the recent years.

The number of elderly (65+ years old) population compared to the *number of working age (15–64) population*, i.e. the old age dependency rate also shows intensive process of ageing. While in the early 1990s this index reached about 20% only, in 2017 every old aged person in the case study area is 'dependent' on three working age individuals. Regarding this ratio, disadvantages of the district was less significant compared to the national average back in 1990, but mainly due to the accelerated ageing process of the 2000s and 2010s, this gap has become more considerable.

Processes affecting age structure have an unequal impact on municipalities of the district. Ageing has resulted in the most challenging demographic situation in Eperjes and Nagymágocs regarding both ageing index and old age dependency rate, while other villages, such as Nagytőke, Derekegyház or Árpádhalom still have a relatively younger age structure (with the ratio of population 65+ y.o. less than 20% in 2017). Age structure of Szentes town is quite similar to that of other towns of the same size (of the Hungarian Great Plain), which can be represented by a higher rate of dependent elderly people, but a greater number of younger population (0–14 y.o.) too.

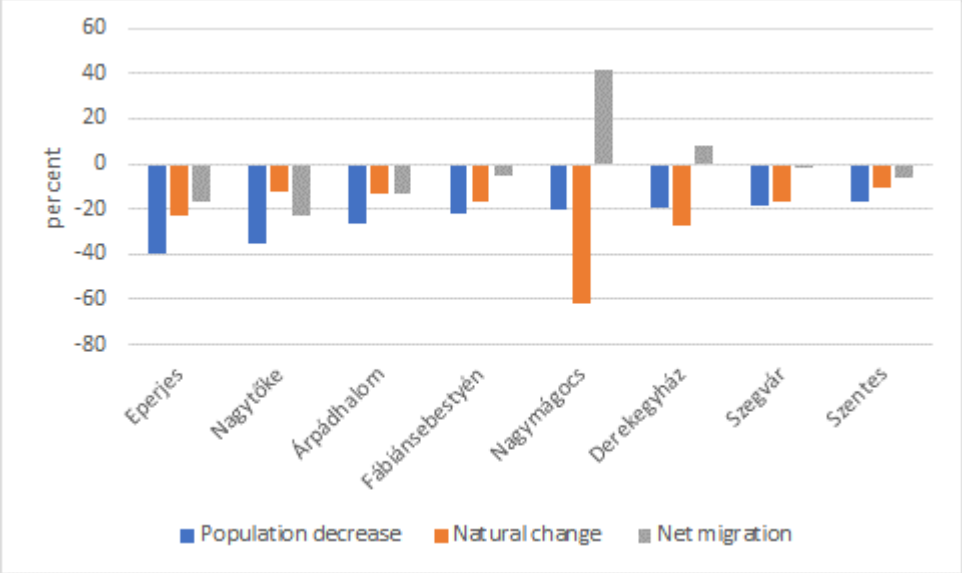
Demographic consequences of population decline are also present in the results of a changed *gender structure* in the case study area. While at national level the gender balance (ratio of female per male population) continuously indicated an increasing surplus of female population, as a side-effect of ageing process, due to the higher life expectancy of women, gender balance in the case study area has been broken over the past three decades. During the 1990s the surplus of female population decreased, while from 2001 to 2011 it notably increased again. The 2000s was also the peak decade of outmigration from Szentes district, which might also have an impact on gender structure (potentially higher outmigration rate of male population). This is not valid every municipality within the district, since in some villages (e.g. Árpádhalom, Fábiánsebestyén, Nagytőke or Szegvár) the ratio of female population shows a continuously decreasing trend.

The variability of gender structure has also resulted in the decreasing ratio of female population in productive age (15–45 years old); this ratio reduced by more than four percentage points in the CS area between 1990 and 2017 (from 32.66 to 28.05) in line with the national average.

The fall of this ratio had an effect on the number of births too. Between 1990 and 2001 crude birth rate faced a significant drop from 11.65 to 8.48 in the case study area (this is also in line with national tendencies). The decrease of birth numbers continued in the 2000s too, but this trend has stopped in the 2010s, and by 2017 it has increased again up to the level of that of the early 2000s (crude birth rate: 8.6) reflecting legacy effect of the baby boom in the first half of the 1950s.

During this period of three decades, the number of deaths also decreased in absolute numbers. This led to the reduction of crude death rates both in Szentes district and the entire country until the 2000s. Compared to the national average crude death rates were notably higher in the CS area, thus changes of this measure were also more significant during the analysed period. The positive tendencies of decreasing *death rates* stopped by the 2010s, when the value of crude death rate has reached a new peak with 17.29, and only fall back to the level of the early 1990s until 2017. In comparison, at the national level, the tendentious decrease of crude death rate lasted until the 2010s, and started to increase again by 2017. The current difference between birth and death rates at the case study level (8.6 v. 16.64) and in Hungary (9.35 v. 13.44) indicates, that quite a notable share of population loss in the CS area and in Hungary has been related to natural demographic processes that also can be driven by legacy effects.

Figure 1: Population change and its components in the municipalities of Szentes district 1990–2017



Source: National Regional Development and Spatial Planning Information System, T-STAR

Regarding the case study area, villages like Eperjes or Derekegyház show the highest rates of natural decrease between 1990 and 2017, besides Nagymágocs, whose extreme values are driven by the local elderly home (Figure 1). The natural decrease rate of the town of Szentes is far less disadvantaged compared to other municipalities of the case study area. The position of Szentes is average among other medium-sized towns of the Hungarian Great Plain.

Outmigration is also a significant factor of demographic shrinkage. Regarding international migration, Hungary was a target country during the 1990s and 2000s (mostly because of immigrants from the surrounding countries with significant Hungarian national minority), but after the EU accession and due to the effects of the economic crisis the national migration balance became negative, and until the past few years (until 2017) more people left the country than the number of newcomers.[3] From 1990 to 2017 41,790 people arrived to the Szentes district and 44,840 inhabitants left the area. This difference of three thousand people resulted an overall net migration rate of -6.31% during this period. The highest rate of outmigration occurred in the 2000s (-3.58%), when the surplus of the number of departures due to migration was more than 1,600. Outmigration from the district within the preceding and the subsequent decade seems to be less significant.

Migration figures vary among municipalities of the district. Bigger settlements like Szentes, Szegvár and Fábiánsebestyén show a slight negative net migration rate between 1990 and 2017, while the smallest villages (Árpádhalom, Eperjes and Nagytőke) can be regarded as the most emissive municipalities considering migration. Net migration rate figures for Derekegyház and Nagymágocs are positive regarding this period, in the latter case due to the mentioned elderly home. Among medium-sized towns of the Hungarian Great Plain, several ones (Jászberény, Gyula, Hajdúszoboszló etc. – the more attractive ones in terms of socio-economic features) have positive net migration rate considering the period 1990–2017. Unfortunately, Szentes is among the towns with significant outmigration: only the more disadvantaged Törökszentmiklós and Karcag produce higher negative net migration rate.

1.4.2 Characteristics of complex shrinkage of the CS area

Population shrinkage is not always coupled with economic decline, and the complex linkages between economic and demographic processes often show only indirect interrelationships of these tendencies. In this way, however Szentes district is an area of complex shrinkage in Hungary in many senses, it cannot be characterised as a disadvantaged region in decline.

[3] Since there is no statistics on international migration at the case study level, only migration within Hungary can be counted for describing movements of Szentes district's population.

Most of the indicators related to economic activity available at the case study level (district – former LAU1) are related to *entrepreneurial activity* (Table 5). *The number of enterprises* (both absolute and per 1,000 persons) have indicated significant changes in the past 15–20 years. In absolute terms, this might be observed through a drop between 2001 and 2017 (from 2,969 to 2,277). This trend might also be detected at the national level, but contrary to the case study area, during this period, the overall number of enterprises become higher again after the depression of entrepreneurial activity around 2010, which was presumably impacted by the economic and financial crisis. The decrease of the number of enterprises in the municipalities of Szentes district diversely affected these settlements (Table 4). There were only slight changes in Árpádhalom, Derekegyház or Eperjes between 2001 and 2017, while the biggest loss of enterprises (compared to the beginning of the period) took place in Fábiánsebestyén and Szentes town.

Table 4: Number of enterprises in the municipalities of Szentes district, 2001–2017

Municipality	**Small-sized enterprises** (headcount<50)		**SMEs** (headcount<250)		**Big enterprises** (headcount>250)		**Active enterprises**	
	2001	*2017*	*2001*	*2017*	*2001*	*2017*	*2001*	*2017*
Árpádhalom	18	20	18	20	0	0	18	20
Derekegyház	56	56	57	56	0	0	57	56
Eperjes	11	14	12	14	0	0	12	14
Fábiánsebestyén	175	65	177	66	0	0	177	66
Nagymágocs	128	97	129	97	0	0	129	97
Nagytőke	13	7	13	7	0	0	13	7
Szegvár	207	175	212	177	0	0	212	177
Szentes	2331	1826	2346	1838	5	2	2351	1840

Source: National Regional Development and Spatial Planning Information System, T-STAR

Tendencies related to the absolute change of enterprise numbers are mirrored by the *relative number of enterprises* (per 1000 persons) as well. In this sense the entrepreneurial activity in Szentes district falls behind the national average regarding the past two decades (e.g. 58.4 compared to 73.4 in 2017). While the trend of changes between 2001 and 2017 was similar at both levels – significant drop from 2001 to 2011 followed by an increase between 2011 and 2017 –, the current rise of entrepreneurial activity in relative terms in the Szentes district is coupled with a significant loss of population accompanied by a small decrease regarding the absolute number of enterprises. Conversely, at the national level, the current growth of enterprises per 1000 persons is due to an absolute increase of the pool of enterprises.

While entrepreneurial activity in Szentes district lags behind the national average, the position of the town itself can be regarded as average (65.6 enterprises per 1,000 persons) among

other medium-sized towns of the Hungarian Great Plain. This average position is reached among extremities considering these pool of tows, since several of these settlements (Baja, Hajdúszoboszló or Jászberény) surpass the average national level of entrepreneurial activity, while towns like Törökszentmiklós, on the other side of this range do not even reach the half of that.

Economic tendencies based on entrepreneurial activity might also show characteristic patterns by interpreting differences in the size of enterprises within the pool of these entities. Both in Hungary and in the case study area *the number and share of small-sized enterprises* (1 < staff headcount < 50) was the highest among the total number of enterprises. In the case of smaller municipalities of the district, this size-category is exclusive among local enterprises. Hungarian data on small-sized enterprises might not be completely comparable between 2001 and 2017 due to administrative changes (caused by changed legislation on registration of agricultural microenterprises), but tendencies seem to show similar trends in Szentes district and the national average.

On the contrary, tendencies related to *the number of medium-sized (50 < staff headcount < 250) enterprises* seem to be more specific and related to population decline more directly in the case of Szentes. While at the national level, the decrease of the number of medium-sized enterprises was temporary, and the number of these economic entities was higher in 2017 compared to 2001 both in absolute and relative terms, the decrease in the case study area is continuous. Between 2001 and 2017, the number of medium-sized enterprises in the district has been dropped from 25 to 15 (their relative share has also significantly decreased), which – beyond global and national economic processes – might be interrelated with the shrinking workforce (working age population) available in place, which is needed for the survival of enterprises of this size.

The ratio of SME in the total number of enterprises is almost 100% both in Szentes district and at the national level. In the case study area, as of 2017, there are only two active enterprises registered in the district beyond that scale (250 staff headcount) – there were three in 2011. Current certificates of enterprise registration tell that three enterprises have more than 250 employees in Szentes neighbourhood: HUNOR COOP Zrt. (382) with a profile of retail trade, the electro-industrial LEGRAND Zrt. (589) and HUNGERIT Zrt. (1926), which is engaged in food processing (poultry). Medium-sized enterprises

The sectoral division of entrepreneurial activity in the case study area is quite specific. In Szentes and its surroundings the share of *agricultural enterprises* is high (10%) compared to other parts of the country (4%), while industrial activity and even more the share of enterprises from the domain of services are less significant than in other parts of the country. This might be obvious since the area was traditionally a less industrialized and less urbanised agricultural region. After a drop both in absolute and relative numbers in the 2000s, agricultural entrepreneurial activity started to increase again from 2011 to 2017 (8.9% – 205; 10.5% – 239). It must be added: farming of entrepreneurial scale is much higher than 10% in

the town and its vicinity, there are approximately 100-150 intensive horticultural farms larger than 1 hectare employing at peak season 1,500-2,000 labourers as “smallholders” (őstermelő) under a different (much lighter) taxation code.

Table 5: Economic indicators of the CS area and at national level

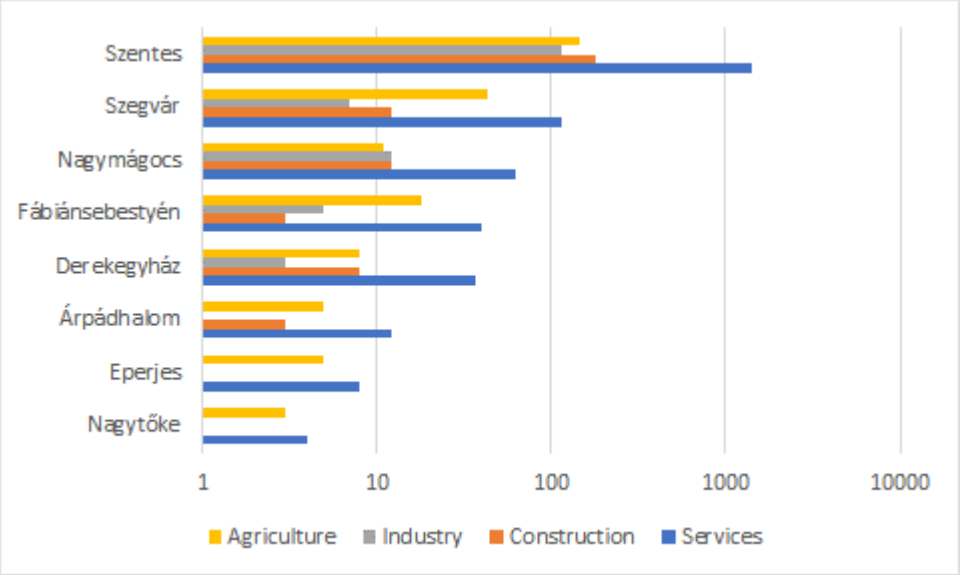
Indicators		2001	2011	2017
Number of enterprises per 1,000 persons	*CS area*	65.26	55.21	58.39
	National level	82.58	69.51	73.36
Number of small-sized enterprises per 1,000 persons	*CS area*	20.18	54.73	57.95
	National level	28.88	68.96	72.74
Number of medium-sized enterprises per 1,000 persons	*CS area*	0.55	0.41	0.38
	National level	0.49	0.47	0.52
Ratio of SME in the total number of enterprises (%)	*CS area*	31.76	99.87	99.91
	National level	35.56	99.87	99.86
Ratio of NACE.rev2 A (agriculture) enterprises in the total number of enterprises (%)	*CS area*	11.32	8.93	10.50
	National level	4.48	3.36	4.24
Ratio of NACE.rev2 B-F (industry, construction) enterprises in the total number of enterprises (%)	*CS area*	14.45	15.38	15.85
	National level	18.60	17.00	16.51
Ratio of NACE.rev2 G-U (services) enterprises in the total number of enterprises (%)	*CS area*	74.23	75.69	73.65
	National level	76.92	79.63	79.25
Ratio of working age (15-64 y.o.) population (%)	*CS area*	67.54	67.18	65.47
	National level	68.21	68.56	66.82
Ratio of jobseekers/unemployed persons in working age population (%)	*CS area*	4.11	7.92	2.07
	National level	4.93	8.07	3.89
Gross value added per inhabitant (% of national average)	*CS area*	46.57	46.45	39.41
	National level	100.00	100.00	100.00
Gross taxable income per inhabitant (% of national average)	*CS area*	80.00	83.23	88.08
	National level	100.00	100.00	100.00

Source: National Regional Development and Spatial Planning Information System, T-STAR; HCSO, Dissemination database

The entrepreneurial profile of larger villages and the town of Szentes is more diverse, however agriculture plays a significant role here, too (Figure 2). Successors of former large-scale agricultural co-operatives like ÁRPÁD-AGRÁR Zrt. (Szentes), KINIZSI 2000 Zrt. (Fábiánsebestyén) still employ a decent number of agricultural workers (60–180 persons) in a

form of permanent employment. They represent exceptions from the rule, most co-operatives have been breaking up into small companies; many of them have been winded up, others survived with capacities to employ no more than 5-10 employees. Nevertheless, importance of the sector is indicated by the fact that among medium-sized towns of the Hungarian Great Plain, agricultural employment is the highest in Szentes.

Figure 2: Enterprises by activity profile in municipalities of Szentes district, 2017



Source: National Regional Development and Spatial Planning Information System, T-STAR

Contrary to current national tendencies, the share of enterprises *engaged in industry and construction* has increased in the case study area during the 2000s–2010s. Besides the decrease of the absolute number of these entities, in the 2000s, the overall number of enterprises with industrial profile became slightly higher by 2017 in Szentes district. Similar tendencies might be observed at the national level too, but at this level, the absolute growth of the number of industrial enterprises was accompanied by a decrease regarding their share.

Industrial entrepreneurship in Szentes district is only represented in bigger municipalities (Szentes, Szegvár, Fábiánsebestyén, Nagymágoscs). Construction (and related branches) and processing industry are the most important branches: fodder production and most of all, food industry (e.g. milk – PUSKIN-TEJ Kft., Szegvár; poultry – HUNGERIT Zrt., Szentes). Manufacturing is even less represented in the case study area. The only bigger employer is LEGRAND Zrt. in Szentes, which is engaged in electro-industry. In comparison with other, similar-sized towns in the Hungarian Great Plain, industrial employment in Szentes (and its vicinity) is quite low. Usually, towns with touristic potential (Gyula, Hajdúszoboszló or Baja) have lower numbers of industrial workers than Szentes.

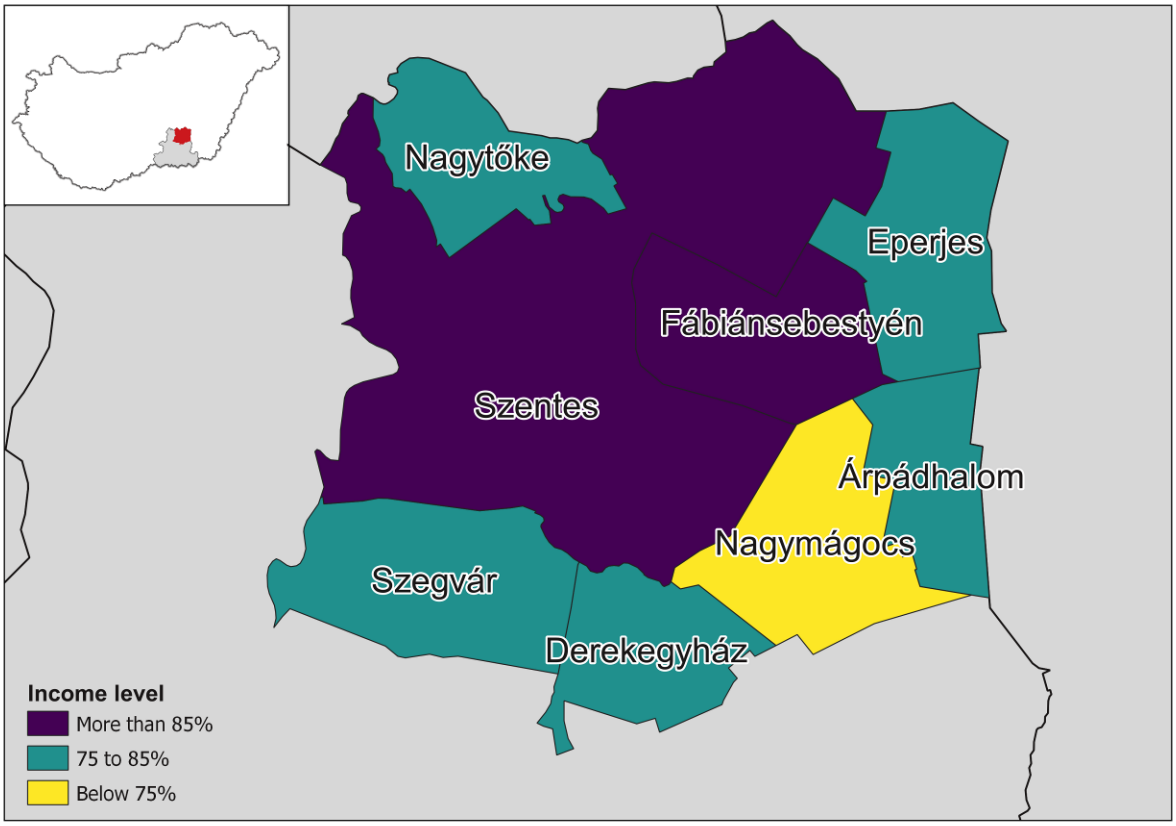
Regarding *services*, the share of enterprises from this economic domain has continuously increased at the national level in the 2000s and 2010s due mostly to the *tourism industry*. During this period, in the case study area an inverse trend could be observed. The overall number of service-oriented enterprises decreased by 25% from 2001 to 2017, and their relative share among the other economic sectors also reduced between 2011 and 2017. Beyond processes related to global economic processes (financial crisis) and weak tourism sector, this might be also related to demographic tendencies, if services are vulnerable to a shrinking local market (in terms of population decline).

The biggest share of service-oriented enterprises in Szentes district is engaged in retail trade. These usually have limited employment capacities, but several ones might play significant role in employing a decent number of workers from municipalities of the case study area, like HUNOR COOP Zrt., and PANKOTA FLEX Kft. in Szentes or TENAI Kft. in Szegvár or Hungary's largest producer organisation co-ordinating vegetable production of about 120 semi-entrepreneurial farms (See Chapter. 2.2.2). Other typical tertiary activities in the area are health and social care, administration, education and logistics. The employment share of service branches is less notable compared to other parts of the country. This is valid for the town of Szentes, too; other medium-sized towns of the Hungarian Great Plain usually show a lower rate of service employment only if the industrial employment capacity is high.

Productivity related to entrepreneurial activity might be estimated by figures of gross value added (GVA) in the case study area. Regarding this measure, Szentes district falls far behind the national level. In 2001 and 2011 it reached 46% of the national average, but by 2017 position of the CS area became worse, since this productivity measure dropped below 40%. GVA is both related to the size, the sectoral structure and the (lack) of global embeddedness of active enterprises registered in Szentes district. (*T-STAR and Tax Office data)* Thus, the disadvantaged and further weakening position and position loss of the area might be regarded as a sign of economic decline as a component of complex shrinkage.

Nevertheless, economic backwardness cannot be confirmed by other direct measures of economic positioning. Although *the level of gross taxable income per inhabitant in Szentes district* does not reach the Hungarian average, it has continuously and significantly increased between 2001 and 2017 (from 80% to 88%). This process of catching up can be observed in every municipality of the district, and smaller villages produced a higher catching up rate to the national average during this period. Currently, the most 'wealthiest' municipalities are Szentes and Fábiánsebestyén mainly due to the wide employment opportunities in agriculture and agro-industry (Map 4). Regarding taxable income, it is only the village of Nagymágocs which lags behind other municipalities of the area. The position of Szentes is average in comparison with other medium-sized towns in the Hungarian Great Plain, only towns with significant industrial or touristic profile provide a higher level of income than is achieved in Szentes.

Map 4: Level of taxable income per capita compared to the national average in municipalities of Szentes district, 2017



Source: National Regional Development and Spatial Planning Information System, T-STAR

Municipal revenues, coming from local taxes are very selective within the district. Besides Szentes, there is no other settlement with registered touristic activity and related taxes. The revenue coming from this tax is still very low in Szentes, too, it only reaches 14.5% of the Hungarian average and lags far behind this type of revenue of other medium-sized towns of the Hungarian Great Plain with much greater touristic potential (Hajdúszoboszló, Gyula or even Orosháza – which are all spa resorts). Municipal taxes on industrial activity are in line with industrial entrepreneurship of local communities. In this sense, within the case study area only Szentes with the most productive economy stands out of other settlements, industrial tax-based revenues of the rest of municipalities are moderate. In comparison with other similar-sized towns from the wider region, Szentes industrial production potential has reached 80–90% of the national average, similarly to other towns lacking strong manufacturing profile.

Besides personal income, *the ratio of unemployed persons within the working age population* also seems to show a favourable trend in the case study area. Unemployment ratio was already lower than the national average in 2001, and it has remained below that level in the past one-two decades. After a significant growth during the late 2000s and early 2010s (7,9% in 2011), the ratio of unemployed persons has decreased again, and in 2017 it was only 2%, which is the half of the national average. The ratio of working age population (15–64 years old

– an indicator of the extension of potential workforce) and its dynamics in the case study area is similar to national tendencies. Tendencies as of 2017 only show a little variety within the district. Unemployment rate based on the number of registered jobseekers tends to the average in almost every municipality except for the smallest villages (Eperjes and Nagytőke), which can be characterised by higher levels of unemployment. The share of jobseekers according to different socio-economic features shows much greater variety (Table 6). Female unemployment is less common in the area (apart from small villages), than male unemployment. Most of the jobseekers hold secondary qualification, and the share of unemployed persons with low educational attainment (ISCED0-2) is usually low in Szentes district. These two characteristics might be related to the economic and employment profile of the case study area, where economic activities (horticulture, agro-industry, basic production etc.) absorb a greater share of female workforce and also those active persons who do not hold higher qualifications. With its low unemployment rate Szentes is in the most favourable position among medium-sized towns of the Hungarian Great Plain (together with Baja and Hódmezővásárhely). Here, the rate of jobseekers is two-three times lower than in similar-sized towns with much less labour market participation (e.g. Hajdúböszörmény, Karcag or Törökszentmiklós)

Table 6: Share of registered jobseekers in the municipalities of Szentes district according to sex, age and educational attainment, 2017

Municipality	**Share of registered jobseekers (%)**							
	Female	*Male*	*-25 y.o.*	*25-50 y.o.*	*50+ y.o.*	*Low*	*Secondary*	*High*
						qualification		
Árpádhalom	0.0	100.0	14.3	71.4	14.3	28.6	71.4	0.0
Derekegyház	66.7	33.3	26.7	53.3	20.0	33.3	60.0	6.7
Eperjes	60.0	40.0	10.0	40.0	50.0	20.0	70.0	10.0
Fábiánsebestyén	22.7	77.3	9.1	54.5	36.4	13.6	86.4	0.0
Nagymágocs	38.2	61.8	17.6	44.1	38.2	14.7	82.4	2.9
Nagytőke	66.7	33.3	6.7	53.3	40.0	53.3	46.7	0.0
Szegvár	38.1	61.9	22.2	55.6	22.2	20.6	74.6	3.2
Szentes	44.8	55.2	19.9	50.3	29.8	19.7	69.1	9.6

Source: National Regional Development and Spatial Planning Information System, T-STAR

1.4.3 Broader socio-economic contexts of Shrinkage which may drive population decline

Beyond direct economic influences, demographic tendencies of the case study area might also be affected by various socio-economic factors. One of them is the geographical (or the wider central–peripheral) position of the area and its central town, Szentes. As it was mentioned in Chapter 1.2, while Szentes is a locally important junction of the Hungarian road and railway network, the area itself has a peripheral position within the country. Main lines of

roads and railways (connecting county seats of Southern Great Plain with Budapest) are located west and north of Szentes district, and their appointment contributed to the peripheralization of the area already in the 19th century (by building the a main railway line towards Szeged – current seat of Csongrád NUTS 3 region). The new expressway M44 (still under construction) between Békéscsaba and Kecskemét also avoids Szentes from the north, too.

Beyond these drawbacks related to physical, geographical facilities of connections, the virtual connectivity of the case study area might be regarded fair, average within Hungary. The number of broadband internet subscriptions has dynamically increased during the past decade (Table 7). While in 2011 only 56 subscriptions were available per 1000 persons, which was less than third of the national average that time, by 2017 in general every fourth person 'has' broadband internet subscription, which is just slightly less than the average value in Hungary (27,5%). Broadband internet is accessible in every municipality of Szentes district.

Table 7: Contextual indicators of shrinkage in the CS area and at national level

Indicators		2001	2011	2017
Number of broadband internet subscriptions per 1,000 persons	*CS area*	53.96	56.31	244.53
	National level	65.84	176.52	275.53
Number of newly-built dwellings per 1000 persons	*CS area*	0.83	0.41	0.23
	National level	2.75	1.27	1.47
Ratio of newly-built dwellings in the housing stock (%)	*CS area*	0.21	0.09	0.05
	National level	0.69	0.29	0.32
Number of general practitioners per 1,000 persons	*CS area*	0.46	0.53	0.48
	National level	0.50	0.49	0.48
Number of hospital beds per 1,000 persons	*CS area*	10.71	10.04	10.38
	National level	7.89	7.13	6.97
Number of kindergartens per 1,000 persons	*CS area*	0.50	0.43	0.41
	National level	0.45	0.43	0.47
Number of schools (primary+secondary) per 1,000 persons	*CS area*	0.57	0.53	0.53
	National level	0.59	0.59	0.61
Ratio of population with low qualification (%)	*CS area*	50.40	37.00	30.60
	National level	45.00	31.70	26.50
Ratio of population with high qualification (%)	*CS area*	8.20	12.90	15.30
	National level	12.60	19.00	22.80
Number of NGOs per 1,000 persons	*CS area*	4.62	6.02	6.08
	National level	6.58	6.57	6.24

Source: National Regional Development and Spatial Planning Information System, T-STAR; HCSO, Dissemination database

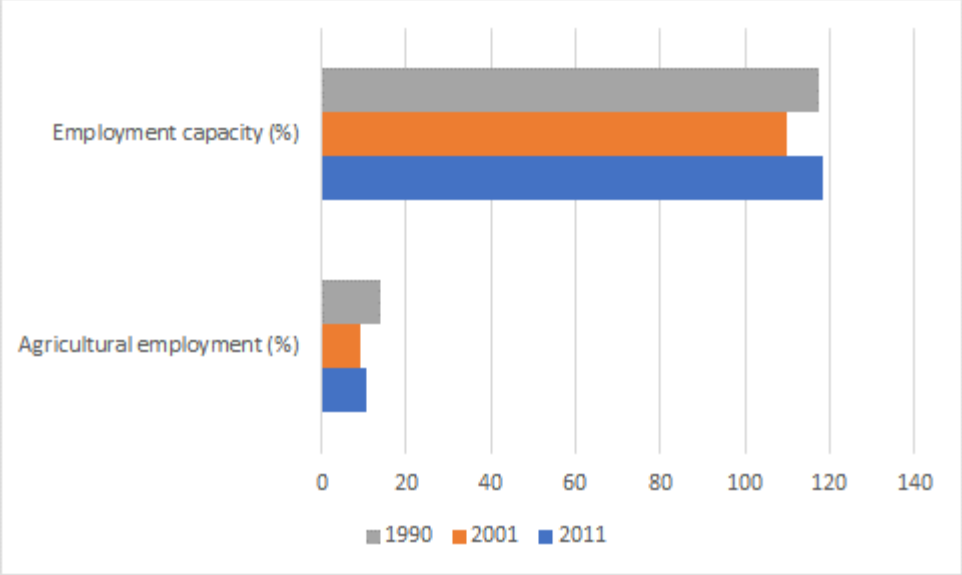
The issue of centrality–peripherality is also related to the changed administrative role of the town Szentes. Szentes has been a long-term administrative and economic centre for its surroundings. Until 1950, it was also the seat of the former Csongrád county (including bigger towns such as Szeged or Hódmezővásárhely). The loss of this title contributed to the decline of central-administrative functions of the town.

Beyond its current administrative role, the town of Szentes is a service hub and one of the main commuting target areas for municipalities in its surroundings. Similarly to the average national tendency, Szentes case study area also showed a significant drop of work places in the 1990s, which have been stabilised in the 2000s–2010s. Unlike the overall national trend, the number of workplaces stagnated in the early 2010s. Nevertheless, because of the significantly negative population dynamics of the area, this stabilisation of workplaces might also be regarded as a positive trend. Divergent tendencies between the central town and the surrounding municipalities, however further shade this image, since these settlements faced a higher share of loss of workplaces, which might contribute to the accelerated shrinkage of the area.

Behind the more or less steady number of workplaces in the district, *commuting tendencies* show significant variation over time. *The share of employed persons working in their place of resident* has continuously decreased since the early 1990s in all over the country, and this tendency has been more enhanced in Szentes district. According to the last population census in 2011, this rate was 78,5% – higher in Szentes, lower in villages of the district –, while the national average was 69.4% (in 1990 these values were 86.9% – Szentes and 74.7% – national average). Besides this drop of number of persons working in their place of residents and the increase of the share of commuters, finding employment in other municipalities, the case study area (quasi exclusively due to the position of the town of Szentes) became a significant target area of commuting. Between 1990 and 2011 the rate of ‘in-commuters’ increased from 17.8% to 23.4% in Szentes district, while at the national level this share changed from 25.4% to 30.0%.

Employment capacities of Szentes town (number of in-commuters + local workers employees) are favourable compared to other similar-sized towns of the Hungarian Great Plain. From this pool of urban settlements those are standing out, which has a certain, labour-intensive economic profile, e.g. Jászberény (manufacturing), Orosháza (manufacturing, primary production and food industry) and Baja (food industry). In the case of Szentes it is mainly related to agricultural production (gardening). Employment capacity of the case study centre faced a recession in the 1990s, but has risen again up to 2011. This is in line with trends related to agricultural employment (Figure 3)

Figure 3: Agricultural employment and employment capacity [4] of Szentes town, 1990–2011



Source: National Regional Development and Spatial Planning Information System, Census database

For smaller municipalities of the district the town of Szentes is the main target settlement of commuting. From Szentes, employees commute to nearby surrounding medium-sized towns like Csongrád and Hódmezővásárhely (Kunszentmárton and Orosháza as well to a smaller degree). These are target centres of commuters from villages of the case study area, too. County seats, above all Szeged (Csongrád county) and Kecskemét (Bács-Kiskun county) also attract a significant number of the active population from Szentes district, while there are also residents from the area who earn their living by commuting to Budapest.

Regarding service provision, the level of supply of Szentes district case study area with *services of general interest (SGI)* seem to be average compared to the national level, but considering depopulation tendencies affecting the region, this image is not so clear-cut. Regarding health care provision, the number of general practitioners (GPs) per 1,000 person reach the average national level (0.48 in 2017). While the trend of the decreasing number of general practitioners (which is higher than the overall rate of population shrinkage) is continuous in Hungary, in the case study area this number fluctuates, which show how little changes (in the number of GPs) affect the overall availability in a smaller territory like Szentes district.

Among municipalities of the case study area, Szentes has the most general practitioners' district (13). Besides, only Szegvár and Nagymágocs have more than one practicing GPs in the settlement. In three villages (Árpádhalom, Derekegyház and Eperjes) no general

[4] Employment capacity = number of local workplaces (number of local workers + in-commuters) / number of employed population of the municipality * 100

practitioner service is provided. With a vacant GP district in Szegvár, four of the eleven vacant general practitioners' district of Csongrád county are located in Szentes district.

The decrease in the number of hospital beds has been a general trend in Hungary over the past two decades, which tendency showed a faster rate than the rate of population decrease was both in the CS area and at country level. The only hospital can be found in the town of Szentes. Other hospitals in nearby towns (Hódmezővásárhely and the county seat, Szeged) might also have a role in the healthcare provision of inhabitants of the case study area.

The *number of educational institutions* (from early childhood to secondary) in the case study area also show a certain decline. The number of kindergartens has dropped from 23 to 16, and the number of schools (primary+secondary) has decreased from 26 to 21 between 2001 and 2017 (following the decline of the population share of the child age group). During this period, the overall number of these educational institutions has also decreased in Hungary, but after a significant decline until the early 2010s, their number has started to rise again [5]. The close of kindergartens and schools in the district followed the fall of the number of children enrolled in these institutions with a delay. While educational services in kindergartens and schools in smaller municipalities were still provided even with a smaller decreasing number of children, most of the institutions have been closed down in Szentes town, where for instance the number of children in elementary school dropped by 1/3 between 2001 and 2017 (Table 8). Currently, six of the municipalities of Szentes district provides elementary education (in Árpádhalom and Derekegyház there are only junior section), while in Eperjes and Nagytőke schools have been closed down since the 1990s.

Table 8: The change of the number of educational institutions in the municipalities of Szentes district, 2001–2017

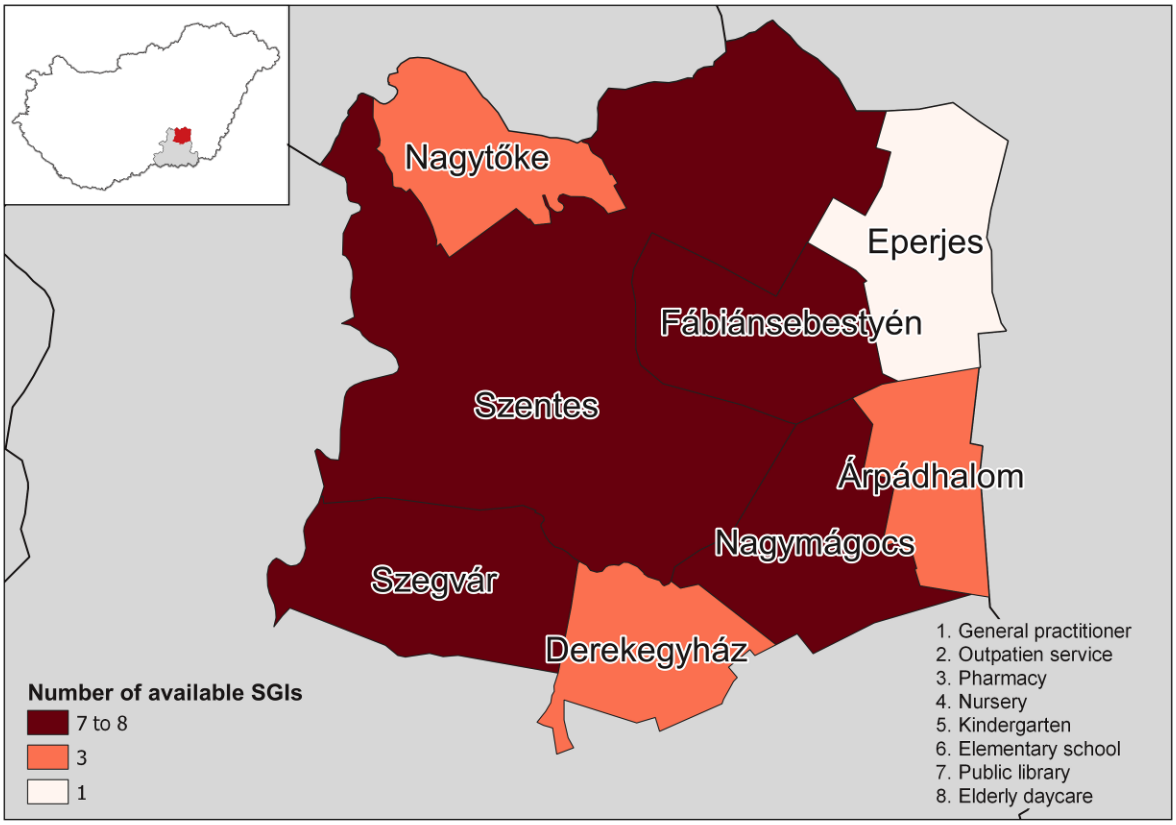
	Number of kindergartens		**Number of children in kindergartens**		**Number of elementary schools**		**Number of children in elementary schools**	
	2001	*2017*	*2001*	*2017*	*2001*	*2017*	*2001*	*2017*
Árpádhalom	1	1	15	13	1	1	58	14
Derekegyház	1	1	51	39	1	1	114	33
Eperjes	1	0	12	0	1	0	47	0
Fábiánsebestyén	1	1	83	56	1	1	206	225
Nagymágocs	1	1	100	52	1	1	234	139
Nagytőke	1	1	20	12	0	0	0	0
Szegvár	2	1	149	101	1	2	443	221
Szentes	15	10	1136	920	9	6	3151	2039

Source: National Regional Development and Spatial Planning Information System, T-STAR

[5] Schools have been renationalised from 1st if January 2013, kindergartens and nurseries are run so far by municipalities.

The level of availability of different SGI is various among municipalities of Szentes district. Szentes town covers a wide spectrum, while the larger municipalities in its vicinity also provide a fair amount of services of general interest. Szentes town is similarly supplied with key SGIs (healthcare, education and social care services) compared to other medium-sized towns in the Hungarian Great Plain. In smaller villages, there were significant drop regarding the number of available services since the 1990s, when all of the municipalities in the district provided a wider pool of SGI. Nowadays, smaller settlements only provide a very limited number of services (typically kindergarten, primary school and public library), in Eperjes only access to public library is available in place (Map 5).

Map 5: Number of available SGIs (of a total number of 8) in 2017

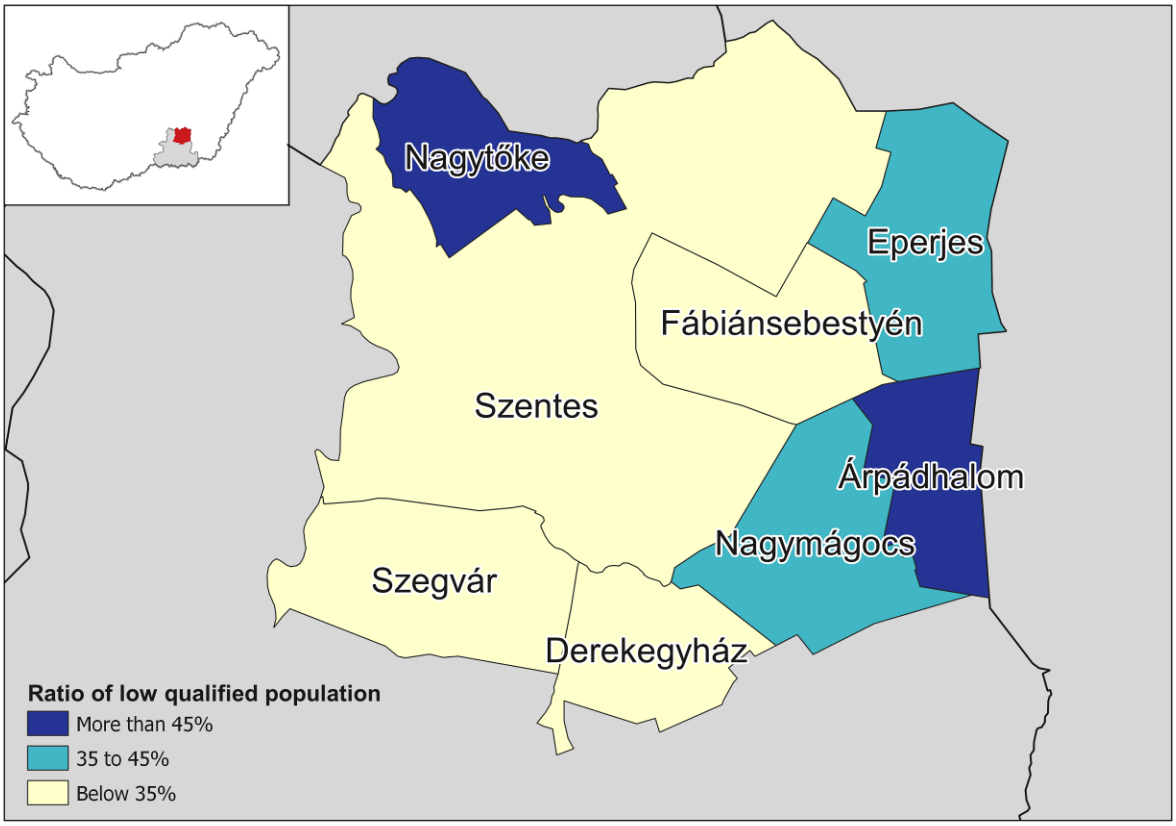


Source: National Regional Development and Spatial Planning Information System, T-STAR

Characteristics *of human and social capital* in the area are results of complex influences and are not exempt from the impact of demographic tendencies. The ratio of population with low qualification in Szentes district was/is tendentiously higher than the national average. From 2001 to 2017 these ratios have significantly decreased all over Hungary, and Szentes and its wider surroundings has also followed this trend. Contrary to that, the ratio of population with

high qualification was always lower in the case study area as compared to the national average, and while this rate increased during the past 15–20 years, the gap between the value of the case study area and the Hungarian average has become wider. An important point of the relationship between human capital and demographic problems is that the area faces challenges in keeping its (younger) population with high qualification. According to census data, most of emigrants (between 2001 and 2011) from the area had secondary or higher qualifications, while members of population with low qualification seem to be less mobile.

Map 6: Ratio of low-qualified 15+ years old population (ISCED 0-2) in the municipalities of Szentes district, 2011



Source: National Regional Development and Spatial Planning Information System, Census database 2011

There are also significant differences among municipalities regarding human capital measured by educational attainment. This might also be related to selective outmigration, settlement size and the age structure of municipalities. This might explain why the smallest villages suffered long-term outmigration (Nagytőke, Árpádhalom, Eperjes) and Nagymágos (local elderly home) have a more significant proportion of less-qualified population (Map 6). While Szentes is a local educational centre for the district, its position regarding high

educational attainment is slightly unfavourable compared to other towns of the Hungarian Great Plain. For instance, among this kind of urban settlements, only Hadúböszörmény and Karcag show a higher proportion of less-qualified (ISCED0-2) population.

The ratio of *civic engagement* is difficult to illustrate by statistical data, but the number of NGOs might be a representative measure for this. In this sense, the position of Szentes district seems to be average in Hungary (6 NGO per 1,000 persons). At the national level, from 2001 to 2017, a trend of decrease of the number of NGOs (both in absolute and relative terms) was observable. Conversely, in the case study area, the number of NGOs per 1,000 persons has increased, but between 2011 and 2017 only as a side effect of population loss of Szentes district, since the absolute number of NGOs started to fall here, too.

In municipalities of the district the distribution of NGOs is close to distribution of the population. Even the smallest villages have at least 2–3 non-profit organisations (usually neighbourhood watch and fireguard associations, childcare foundations, pensioner, folk and sport clubs etc.). Only Szentes town has a more diverse NGO structure. In comparison with other similar-sized towns from the Hungarian Great Plain, civic activity in Szentes can be considered average.

1.5 Governance framework

This chapter is dedicated to present and explain the Hungarian governance framework with an emphasis on policy fields of rural and regional development.

1.5.1 Some Characteristics of Local Administration in Rural Hungary

In 1971, a general local government reform came into force in Hungary, which created a strict hierarchy of settlements and abolished self-governing bodies in small villages so creating rural districts governed from rural centres. Soon after, or even parallel to this, schools were closed down in most of the small villages dependent on these centres; agricultural co-operatives were also merged and tended to locate their seats in these centres. In consequence, there was a considerable acceleration of outmigration from small villages deprived of their local authorities, economic and spiritual foundations resulting in a dramatic loss of human capital that has yet so be restored.

After the fall of State Socialism, the local government system became fragmented to an extreme degree in Hungary, due to the disintegration of the earlier forcibly amalgamated rural municipalities. In consequence, the number of local authorities increased, to such an extent that even the smallest villages could, and did, re-establish their own local governments. To illustrate the challenge deriving from fragmentation, according to the last census of 2011, 55% of municipalities in rural Hungary have fewer than one thousand inhabitants where as few as eight percent of the population lived. The spatial structure is only part of the problem. In the years following the Millennium, limitations in relation to sustainability occurred and deepened

for two main reasons: the overly broad definition of the scope of municipalities' tasks, on the one hand, and the reluctance of the self-governing bodies to co-operate, on the other.

During the first half of the 1990s, co-operation aimed at the joint maintenance of education and health services between municipalities was only sporadic. When the first relevant legal framework on municipal associations, Act CXXXV of 1997, on the Associations and Co-operation of Local Self-Governments (hereinafter: the "Act on Associations") came into force, the number of formal co-operation agreements increased significantly. However, under the pressure of growing public expenditure and an increasing budgetary deficit in the wake of Hungary's accession to the European Union, the government decided to rationalise financing of local governments and delivery of public services in 2004. Act CVII of 2004 on the Multi-Functional Micro-Regional Associations (hereinafter: the "Multifunctional LG Associations") built upon the 1997 regulation (Act on Associations).

The 2004 Act on Multifunctional LG Associations was much less liberal than the Act of Associations that was passed seven years earlier. Its oppressive nature can be identified from the following provisions. (i) It stipulated mandatory spatial and organisational structures (exclusive membership of mayors of the LAU-1 area) as well as mandatory tasks (co-ordinating territorial development goals and activities, organising certain aspects of education, social services and health care). (ii) It partially rescaled the provision of state incentives (targeted subsidies): some incentives, including additional state subsidies supporting schools, were passed to the beneficiaries (municipalities) via the Multifunctional LG Associations from 2005, only if strict eligibility criteria were met

The 2010 elections brought a landslide shift from neoliberal to conservative political thinking in governance with immediate impact on local governments. The constitutional reforms of the government (2011) started with an amendment of the Act on Local Governments, which made a strong push towards a centralised model of governance (Pálné Kovács et al., 2016) with radically shrinking mandates of municipalities at local and county (NUTS 3) levels. Middle-scale health-care and social-care provision was taken out of the portfolio of counties, whilst primary and secondary education was renationalised in two steps by 2017 depriving local and county self-governments of one of their most important responsibilities. What has remained at municipality level beyond taking care of basic public goods such as water and electricity supplies, are as follows: maintaining kindergartens, nurseries, and certain segments of social protection, public transport (in cities) have been retained among municipal responsibilities. LAU 1 level municipal associations fell immediate apart as soon as their incentives were cancelled cancelling sub-regional level co-operations in the field of territorial development. Since 2013, each and every municipality tries to cover financial means for its development individually, which obviously prioritise large projects and large (urban) municipalities. At the same time, districts (175 in number) and so called government offices were established in district centres, after completing some rearrangements of the former LAU-1 level administration in 2012. The primary purpose of government at district level is providing

services and control by the central state over at the lowest possible territorial level. No self-governing body is to be found at this level, and responsibilities related to territorial development disappeared parallel with breaking up of semi-voluntary municipal associations from 2013 onwards.

As it has been mentioned several times, the chosen case study area is a LAU 1 level territory, a 'district' according to the hierarchy of the administrative units. The town of Szentes as centre and seven municipalities, villages of different size ranging from 370 (Nagytőke) to 4200 (Szegvár) inhabitants belong to the district.

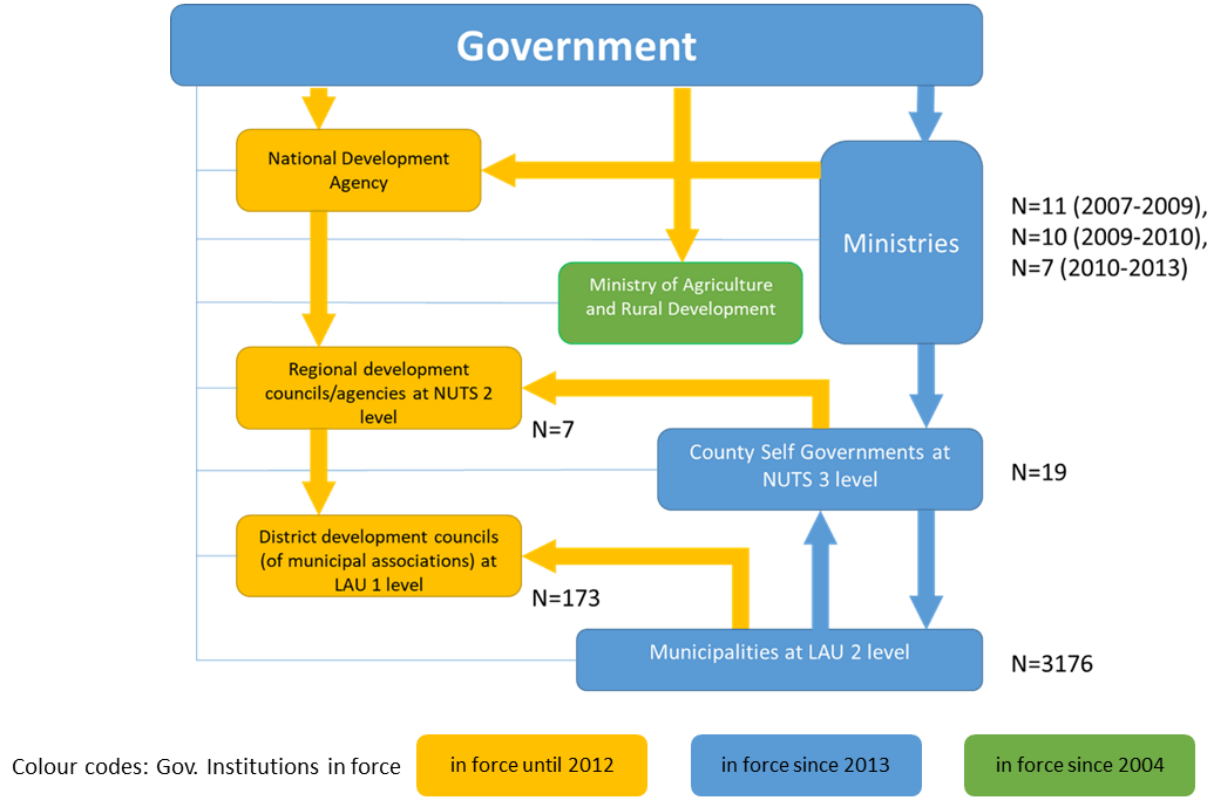
1.5.2 Governance and development at regional scales in Hungary

In the transition period Hungary had already decided to step on a path towards regionalization. This is well reflected in the Regional Development Act that came into force as a forerunner in the wider region (Act XXI of 1996). Then, in the pre-accession years, a multi-level institutional system for governing the arriving EU transfers was developed (Europeanization) with a full scope of functions from planning, implementing, monitoring and the evaluation of Operational Programmes to be financed from the Structural and Rural Development Funds (Pillar-2 of the CAP). Transfers from agricultural funds were to be managed from the beginning by a distinct managing authority located in the Ministry of Agriculture and Rural Development.

The Europeanized institution system was more or less parallel with the structure of 'ordinary' public administration in Hungary (Figure 4). The two hierarchies were connected though members of the decision-making bodies so called councils of the above mentioned semi-voluntary municipal associations at LAU 1 level who were delegated from below as mayors of the localities (LAU 2 units). In case of Regional Development Councils at NUTS 2 level, members arrived both from below (NUTS 3 level) and from above (state administration) with an 50% + 1 majority of delegates from the ministries, thus ensuring central government control over regional development affairs.

The above institutional setting was not exactly as originally planned. Administrative and territorial reforms were originally intended to be more radical with broader functions and more independence to be granted to NUTS 2 regions. Therefore, paradoxically enough, re-centralisation started in Hungary right after the accession to the EU reflecting the Commission's request for setting up one single central managing authority in each accession country rather than setting up MA-s in each of the seven NUTS 2 regions (European Commission 2003 quoted by Loewen, 2018). This decision set significant constraints to the function of NUTS 2 regions (Loewen, 2018).

Figure 4: Governance of Territorial and Rural Development in Hungary 2004-2010



As part of the conservative turn, the above-mentioned institutional framework for EU transfers was abolished in 2013, leaving behind institutional deficiencies, missing vertical linkages and weaker horizontal coordination (Loewen, 2018). From this time on, LEADER LAGs have remained the only sub-regional (below NUTS 3 regions) development agents. No wonder that the Seventh Cohesion Report mentions Hungary as an example for extreme centralisation "where the share of expenditure managed at the local level was reduced by half between 2001 and 2016." (My Region … 2017: 168)

In the new political era since 2010, *territorial/regional development policy and responsibility over the absorption of EU transfers* have been managed under various departments of the Government. Currently the *Ministry of Finance and its Chief Department for Regional Development and Spatial Planning* hold this portfolio. This department is responsible for developing and updating territorial development concepts (the current is called the National Development and Territorial Development Concept, 2013) and operates the consultative body of *National Territorial Reconciliation Forum*. If it worked, the Forum would provide a platform for self-governing bodies in charge of territorial development – county councils and the council of Budapest – to discuss and confront different interests; unfortunately, it has never been assembled since 2013. EU operational programmes targeting regional development have been managed under the same roof: the *Territorial and Settlement Development OP (hereinafter Territorial OP)* for the six convergence regions of Hungary and the Competitive

Central Hungary OP of Central Hungary NUTS 2 Region. Moreover, this is the government department, where another important OP, the *Economic Development and Innovation OP* is managed with sound measures aiming to promote labour-market development and catching up of less developed regions.

The second most important policy field from the point of view of the ESCAPE project is *CAP Pillar II* that belongs to the portfolio of the *Agricultural Ministry*. This is where the rural policies have been conceptualised: Rural Development Strategy 2012 followed by the *Rural Development Programme* (hereinafter RDP) for 2014–2020. Planning/programming of rural development has remained disconnected from regional development in Hungary since the very beginning despite constant criticism of rural developers; no improvement has been experienced between the current and previous programming periods from this point of view.

Multi-funded CLLD under the Territorial OP has become part of urban and town planning as a single-issue tool of pilot character, meaning that local CLLD Programmes in Hungary address exclusively the development of local culture. Cities and towns having more than ten thousand inhabitants were eligible and were awarded funding; there was no selection among the applicants. Local action groups (consortia of public, private and civic actors) applied with their strategies for a safe but small-scale form of support. (In case of Szentes, the town's CLLD was funded by 1.2 Million Euro).

ITI has not been introduced in Hungary.

During the course of current programming period, paying agencies for both policy fields have been concentrated under the Treasury's different departments.

The role of *county level self-governments* (and their administrative units at NUTS 3 level) in territorial development policy has been restored since 2013: they have become the most important bodies in charge of development of their own territories. To meet this function, each county brought about its territorial development concept and an action plan with the purpose of connecting local development desires to national-level funding concepts of the Territorial OP 2014–2020. However, as one of our interviewees pointed out, county-level development agencies are not truly decentralised bodies since what they are in charge of (that is regional development) is determined by a centralised body, the one single Managing Authority of the Territorial OP and co-financed from EU transfers. (Interview no. 16)

As has been mentioned, following the institutional re-arrangements of Governance between 2011 and 2013, no platform of territorial development has been available for horizontal co-operation between local actors below NUTS 3 level, either civic or municipal. (For more information see Annex Table 3.1). The LEADER Programme provides the only sub-regional capacity for development; however, it has been also weakened to a great extent in the current programming cycle (a huge gap of almost five years between the two cycles occurred, resources were dramatically decreasing therefore huge human (management) capacities were lost.)

The weight of the operational programmes targeting different fields of development expressed in the magnitude of EU transfers is indicated in the below table (Table 9). Figures also inform about changes between the previous and current programming periods illustrating rearranged preferences. The absolute and relative winner of rearrangements has been the Economic Development and Innovation OP at the expense of all the rest. An almost triple amount of funding granted to the Economic Development and Innovation OP derives mainly from the fact that the OP was drafted during 2012–2014 when economic performance and labour market processes were still highly impacted in Hungary by the Global Financial Crisis.

Table 9: EU transfers supporting operational programs in Hungary 2007–2013 and 2014–2020

Operational Programs	**2007–2013**		**2014–2020**	
	Billion Euro	**Share (%)**	**Billion Euro**	**Share (%)**
Economic Development OP	2.9	12%	7.7	36%
Transport Development OP	5.7	23%	3.3	15%
Environment Protection OP	4.5	18%	3.2	15%
Human Resource Development OP	3.5	14%	2.6	12%
Regional Development OP (Convergence)	4.3	17%	3.4	16%
Central Hungary/Competitive Central Hungary OP	1.5	6%	0.5	2%
Other Ops	2.5	10%	0.9	4%
Total allocated funding from ERDF+ESF+CF	24.9	100%	21.6	100%
CAP Pillar 1 [1,2] (Billion Euro)	6.07		7.6	
CAP Pillar 2 [1,2] (Billion Euro)	3.09		3.4	

Sources: 1= Boldizsár et al., 2016
2=https://ec.europa.eu/agriculture/sites/agriculture/files/cap-funding/budget/mff-2014-2020/mff-figures-and-cap_en.pdf

Shifting towards domestic policy fields, the *Ministry of Human Resources* has to be highlighted first which is in a position of managing the related *Human Resource Development OP* with obvious indirect impacts on rural shrinkage. Furthermore, this ministry is responsible for the most important national *family protection policy* directly addressing population decline through conditional housing incentives. The condition is birth of 2–3 or more children; the amount and kind of incentives depend on the number of children. 2019 was the first year, when couples living in villages became eligible for such incentives if further conditions are met (the unemployed and public workers are excluded, the couple must be married, etc.); earlier, support from the Action Plan was available only for urban households.

The *Ministry of Interior* should come next because this government department is in charge of maintaining municipalities and support, at least to some extent, their small-scale development needs. Therefore targeted calls for implementing small-scale projects like refurbishing mayors' offices, enlarging or building kindergartens, have been annually opened in the

Ministry (also covered by national resources) but the chance of successful application is little given that the concerned envelop is very thin (approx. 5 Billion HUF, 16.1 million € [6] annually).

Finally, the *Prime Minister's Office* has to be mentioned, because this chief authority is responsible for running the '*Hungarian Village Programme*' aimed at providing additional development resources for small- and medium-scales investments of villages and small towns below 5 thousand inhabitants (For more details see Chapter 3.1.2.).

[6] Exchange rate: 310 HUF/Euro

2 Patterns and causalities of rural shrinkage

2.1 Broad introduction of global and national factors impacting shrinkage in the CS country

The general pattern that causes shrinkage in Hungary is the so-called *demographic transition* implying low birth rates and low death rates prevailing in advanced countries (Thompson, 1929; Dányi, 1991; Hablicsek, 1995). Hungary was the first country in Europe after the Second World War where the level of fertility declined below the level of simple replacement of the population, which is less than 2.1 births per a woman (Szántó, 2014). As a matter of fact, birth rates are among the lowest and death rate is the fourth highest in the European Union (Kapitány, Spéder, 2012). The latter – especially among middle-aged men – is related to poor health status which results in much lower life expectancy than the European average [7]. However, within the country there are significant differences in health status, in core-periphery and urban-rural relations (Uzzoli, 2019).

In retrospect, *the last 70 years of rural Hungary was characterised by radical political turns with profound social and economic consequences*. The 1950s were characterised by a Stalinist dictatorship which changed face after the shock of the 1956 revolt, and developed, from the mid-1960s, into a more relaxed form of State Socialism. The rural population was affected by the events dramatically especially in the first two decades when collectivisation of peasant property took place. Migration waves from rural to urban areas started in the 1950s (ca. 260,000 people), continued in the 1960s when extensive industrialisation attracted large numbers of manual workers from the villages (ca. 520,000 people) (see Annex Table 1.1). The new collective, large-scale farm sector and "de-peasantisation" of rural space were followed by an administrative reform and forced concentration of municipalities, schools and agricultural co-operatives through mergers or closures in the 1970s, which induced further waves of rural outflow lasting up until the collapse of State Socialism in 1989. Consequently, the share of the population living in villages dropped from 63% in 1949 to 37% by 1980. (Valuch, 2005: 66) and the share of population living in settlements of less than 10 thousand inhabitants dropped from 55.9% to 41.5 % during the same period.

Ironically, the fall of State Socialism reversed the *direction of migration flows* between urban and rural areas. Villages especially profited from urban outflow of which suburbanisation was the strongest trend around the capital city and regional centres. Suburbanisation was a rapid and robust spatial process during the last decade of the 20th century and the first decade of the 21st century, it then weakened but has re-strengthened recently. However, statistics indicate that in the past years newcomers to the suburban zone around Budapest tend to arrive from the less developed regions of the country, mainly from Eastern parts rather than from Budapest. It has also been mentioned that migration from Eastern countries to Budapest

[7] Hungary, 2018: life expectancy of males at birth: 72.56 years, of females: 79.19 years, average: 75.94 years Source: CSO STADAT – EU27 averages are 78.1 (m), 83.6 (f), 80.9 (t) Source: Eurostat, demo_r_mlifexp

and to the Metropolitan area has reached since the Millennium a scale of rearranged spatial population distribution unprecedented since the 1960s. (A belföldi vándorlás, 2017, Bálint, Gödri, 2015: 179) The robustness of suburbanisation tends to mask migration flows from more remote rural areas where outmigration of young people continued mainly because of the huge drop in employment opportunities during the years of transition which was further exacerbated by the Global Financial Crisis. More than one million jobs were lost between 1990 and 2001 in Hungary. Job losses were distributed relatively evenly across settlement categories (23% in the Capital city, 23% in villages, 20% in regional centres and 35% in towns). [8]

Natural change between 1990 and 2011 was negative in each settlement category, was most extreme in Budapest and in villages with -10.4% and -9% respectively (regional centres -4%, towns -5.6%), whilst the net migration rate during these two decades was -4% in the capital city and peaked in villages at 8% (regional centres 0%, towns 5%) [9]. The negative natural change figure in Budapest was impacted by suburbanisation, migration of the young and educated abroad for study or work, the stemming of ageing and legacy effects as well as by the spread of *new models for life* like singlism or habits of young couples related to marriage (or the lack of) and childbearing. (Valuch, 2014) Data that would underpin distinctions between urban and rural spaces concerning the penetration of new models for life are not available therefore we can just guess that these models are less widely spread outside cities. Negative natural change in villages is likely impacted more by ageing, strong legacy effects and dramatic restructuring of such fundamental factors as property relations (landed and non-landed), the stemming turmoil and uncertainties.

Hungary was one of the countries hit hardest by the Global Financial Crisis in Europe, therefore the trend of *emigration* started to rise steeply in 2008-2011 parallel with opening labour-market gates in the West. People were attracted mainly by the labour markets of the United Kingdom, Germany and Austria (Bodnár, Szabó, 2014). Comprehensive data on scale of the Hungarian out-migration are not available in official statistics, therefore we are restricted to estimations. These, however, vary significantly ranging from 173,000 persons [10] through 265,000 [11] and 350,000 [12] to 600,000 [13]. (See also Bodnár, Szabó, 2014; Gödri et al., 2014; Microcensus, 2016; Kincses, 2015; Szilágyi et al., 2017).

2.2 Evolution of shrinkage in the case study area

Three interrelated factors can be identified as drivers of the shrinking process in the past in the Szentes district.

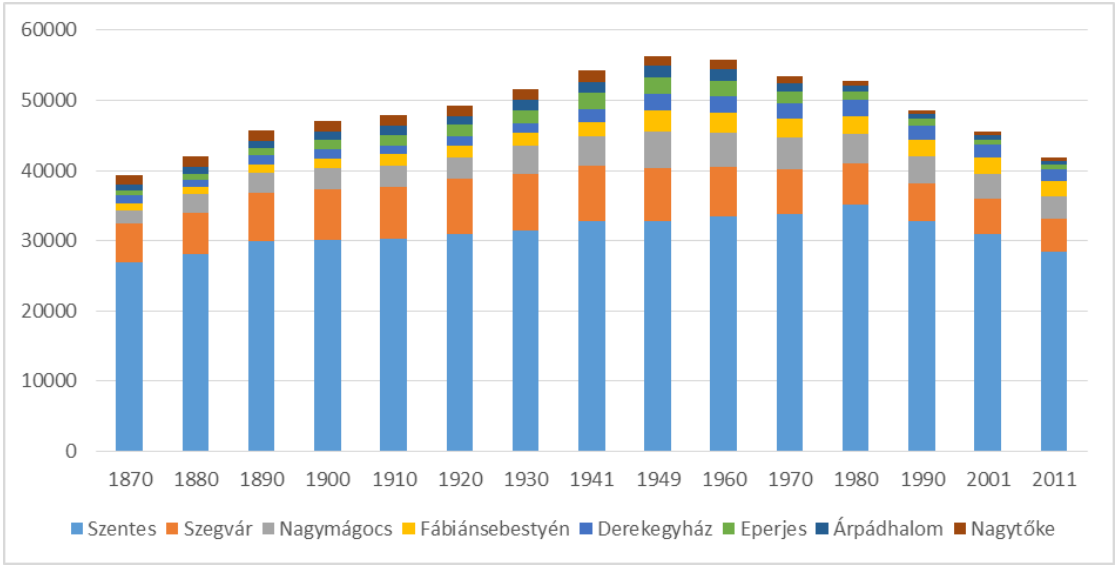
[8] Own calculations from census figures.
[9] Own calculations from Census figures.
[10] Number of labour leaving since 2010 (SEEMIG, 2014; Portfolio, 2018)
[11] An estimation from 2015 based on self-declarations in a household survey
[12] Number of Hungarians who stayed abroad for some months since 2000 (Microcensus 2016)
[13] Number of migrant labour of Hungarian nationality across Europe in 2017 (Portfolio, 2018)

The relatively small population of Szentes couldn't attract large scale road infrastructure and main railway lines in the 19th century. Between 1850 and 1870 the population of Szentes stagnated at around 27 thousand, whilst it increased from 50 to 70 thousand in Szeged, which grew to reginal centre by the end of the 19th century. The stagnating or slowly increasing population hindered industrialization and stimulated outmigration thus restricting population growth. The hindered industrialization led to a late occupational transition of thecase study area: 43% of the economically active population still worked in agriculture in 1970. In other words, accumulation of critical mass for local development was hindered to a large extent by the comparative advantage of agricultural production.

2.2.1 Long-term demographic trends

The population of the Szentes district has been declining since 1949 (Figure 5). The town of Szentes reached its peak population in 1980, whilst villages in its rural hinterland had their population maximum between 1930 (Szegvár) and 1960 (Derekegyház).

Figure 5: Total population in the CS area (1870–2011)



Source: HCSO, Census 2011 database

The smallest settlements (Eperjes, Nagytőke, Árpádhalom) of the concerned LAU 1 area are the fastest shrinking: they have already lost two thirds of their peak population (Table 10). Szentes itself and the nearby, larger villages (Szegvár, Fábiánsebestyén, Derekegyház) show relatively moderate population decline.

The case study area followed the national demographic trends, until 1980 it was characterized by positive natural reproduction, it was outmigration from the villages (Szegvár, Nagytőke, Árpádhalom, Eperjes, and Fábiánsebestyén) that led to population decline. In that

period only Szentes and Derekegyház (seat of a large-scale, state-owned farm) had a positive migration balance. Those who left usually moved to the rapidly urbanizing county seat (Szeged). 1980 represents the demographic turning point, when population of the town of Szentes started to shrink, as natural reproduction became negative.

Table 10: Evolution of population shrinkage in Szentes district (1870–2011)

Settlement	As percentage of peak population (%)											Peak Pop.
	1870	1900	1930	1941	1949	1960	1970	1980	1990	2001	2011	
Szentes	76	85	90	93	93	95	96	100	93	88	81	35,127
Fábiánsebestyén	32	45	60	71	100	95	86	87	84	78	72	2,996
Derekegyház	45	56	54	71	96	100	96	94	83	77	70	2,409
Nagymágocs	37	58	78	79	100	94	88	81	73	68	62	5,180
Szegvár	70	91	100	100	95	87	81	74	67	63	59	7,979
Árpádhalom	46	71	89	90	100	97	69	50	42	36	32	1,709
Nagytőke	82	93	88	100	77	85	65	45	38	33	27	1,634
Eperjes	32	58	80	99	100	89	63	49	36	29	25	2,397

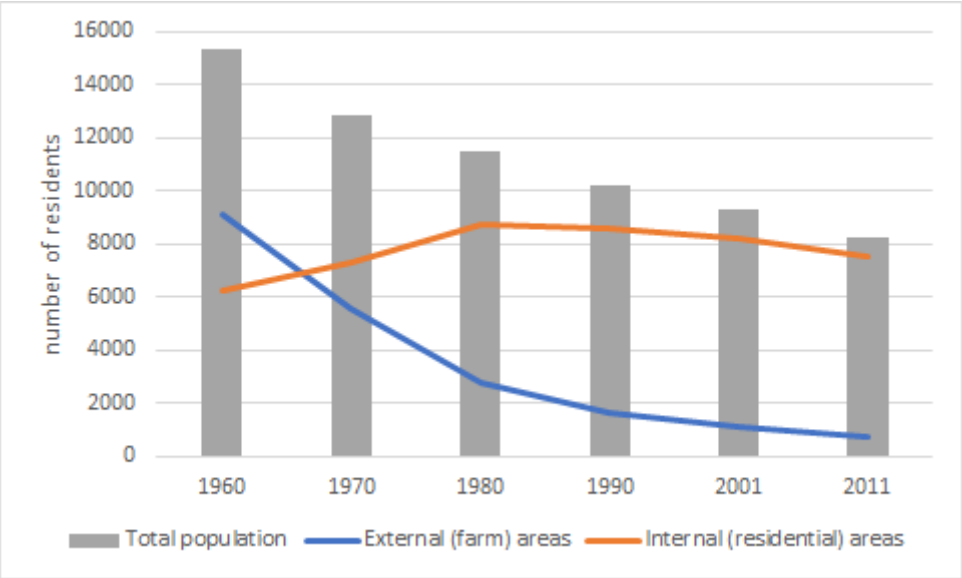
Source: HCSO, Census 2011 database

As the table shows, Stalinist phase of the Communist regime (1949–1956) represented a turning point in demographic dynamics of villages. Forced collectivisation of peasant property mobilised the population in two steps. To make it clearer, the specific settlement pattern spread in the Hungarian Great Plain where our case study area lies needs to be introduced.

> *The so-called scattered farm* settlement *pattern ('tanyarendszer')* is considered a specific form of the Great Plain. Its specificity lies in the strong linkages of the farm, which is in the outskirts (external, agricultural zones of either a village or a town) and the internal territories (meaning housing, industrial, commercial, leisure zones and of course the village/town centres) of the settlement. Historically, the farmhouse served as a shelter or place of residence for a young couple of a larger family during the high season. The family house was located in the inner territory of the town or a village where the old couple retired and/or the family lived during wintertime. The model emerged in the 16th–17th century and was dominant till the first half of the 20th century. Moreover, duality of residence developed a characteristic identity of people who claimed themselves to be residents of the town rather than the farm or the agricultural area even after such a duality of housing had been weakened significantly since less and less families could afford running two dwelling units. Half of the village population on average and one quarter of the population of Szentes lived as permanent residents in the scattered farm area in 1960. These relatively high rates dropped to 8% and 5% respectively by 2011 (Census data).

Strong ties between external and internal parts of a settlement motivated those small-holders who had been expelled from their farms without any compensation to move to the dwelling area of a town or a village generating a population increase there for some years (first step), and then, they often moved further towards urban centres jointly with fellow villagers (second step) as the graph below indicates (Figure 6).

Figure 6: Residents of external and internal areas of the six smaller villages of the Szentes district, 1960–2011



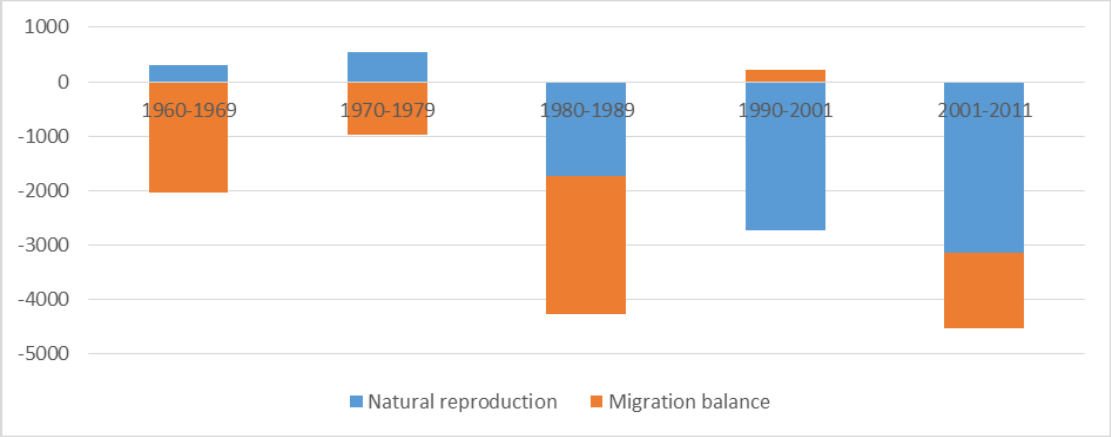
Source: National Regional Development and Spatial Planning Information System, Census database

Szentes, the centre of the area was profiting to some extent up until late seventies, this explains why shrinkage started in the town with delay in the 1980s.

As earlier sharp systematic changes, the fall of State Socialism led in Hungary to a dramatic economic transition crises with collapsing manufacturing and fundamentally transformed agriculture accompanied by a high unemployment rate (raising from zero to 12%), and resulting in a 18% drop of the GDP between 1989 and 1993 (source: HCSO, STADAT). Cities as economic centres were hit the most that contributed to an unprecedented reverse migration (from urban centres to rural areas). The process, however, was triggered heavily by suburbanisation, too.

Counter-urbanization affected positively the case study area in the 1990s, but only for a short while. The new round of outmigration was triggered by the loss of jobs due in this agricultural area mainly to the mandatory transformation of large-scale collective farms. If we summarise the long-term dynamics of population change from the 1950s till 2011, the leading component of shrinkage was outmigration during the State Socialist era impacting demographic processes in the next two decades as well through legacy effects, as the figure below illustrates (Figure 7).

Figure 7: Natural change and migration balance in the CS area between 1960 and 2011



Source: National Regional Development and Spatial Planning Information System, Census database

To close this chapter with migration statistics: according to the latest figures, two thirds of active-age emigrants preferred Budapest and the county seats (Szeged, Kecskemét, Győr), and only one third chose villages or small and medium sized towns between 2001 and 2011. A particularly high negative migration balance (-376) can be observed among the educated/skilled people in this decade. EU accession (2004) opened new opportunities: by 2011 the labour-markets of each member state had become accessible for Hungarian citizens and many took the opportunity to leave, especially after the years of the Global Financial and Economic Crisis (2008 onwards). According to anecdotal evidence from the interviews, approx. 1% of the population (270 individuals) emigrated from Szentes (Interview no. 16).

2.2.2 Long-term economic trends

Agricultural production in the first half of the 20th century and related social structures were sharply split between small-scale peasant farming and large-scale production on estates of two branches of an aristocrat family (manors in Derekegyház and Nagymágocs). Other employment possibilities were rather weak in service industry and manufacturing (hemp factory in Szegvár, brick factory in Szentes, mills), so the excess (landless) workforce worked as labourers (navvies 'kubikos') in large scale infrastructural building sites (road building, regulating rivers, construction of railroads) (Figure 8).

Figure 8: Pictures from the past - navvies at work (left) and buildings of the Károlyi manor in Árpádhalom (right)


Source: https://mek.oszk.hu/02700/02790/html/img/28.jpg (Balassa, Iván – Ortutay, Gyula: Hungarian Ethnography and folklore, Budapest, 1979)

In 1950, Szentes lost its prestigious administrative position: Szeged, the regional centre, became the county seat. This loss resulted in a decline of administrative jobs in the town. As it was already mentioned above, another historical milestone was the *collectivisation* of peasant property (1949–1956 and 1959–1961) leading to significant changes in spatial distribution of the local population between the farm area and inner parts of settlements due to land consolidation (re-parcelling of landed property), which was carried out in a way that a great number of scattered farms (‘tanya’) were demolished across the outskirts (agricultural zone) of the settlements. Landed property of the two estates was nationalised and turned to state farms, whilst collectivised peasant property was used by large scale collective farms.

Nationalisation of all industries (1948) led to the *functional impoverishment of rural areas* in general and a significant decline in the number of white-collar jobs in such market-towns as Szentes. The locally based poultry processing company (Élelmiszer Kiviteli Rt.) for example became branch of a large-scale firm seated in Budapest (Baromfiértékesítő Nemzeti Vállalat). In 1948 even artisans (tailors, shoemakers, coopers) were forced to enter into industrial cooperatives managed from headquarters located either in the county seat (Szeged) or in the capital city. Consequently, with few exceptions, rural areas had become economically dependent in the fields of manufacturing and services.

In 1960, a Programme for Industrialization of the Great Plain was launched. In the framework of this program, two branch factories opened in Szentes: the Clothes Factory of Szeged providing 1,000 jobs mainly for women, and the Kontakta Spare Parts Factory that offered 1300 industrial jobs mainly for men.

Agricultural cooperatives employed a large number of people in the area. The largest vegetable-growing co-operative of Hungary operated in Szentes (Árpád Co-operative) based from the 1970s on geothermal energy and horticultural skills people prevalent in the case study area especially in Szentes and Szegvár, the two largest settlements. In addition to employment opportunities, auxiliary plots provided enterprising opportunities for

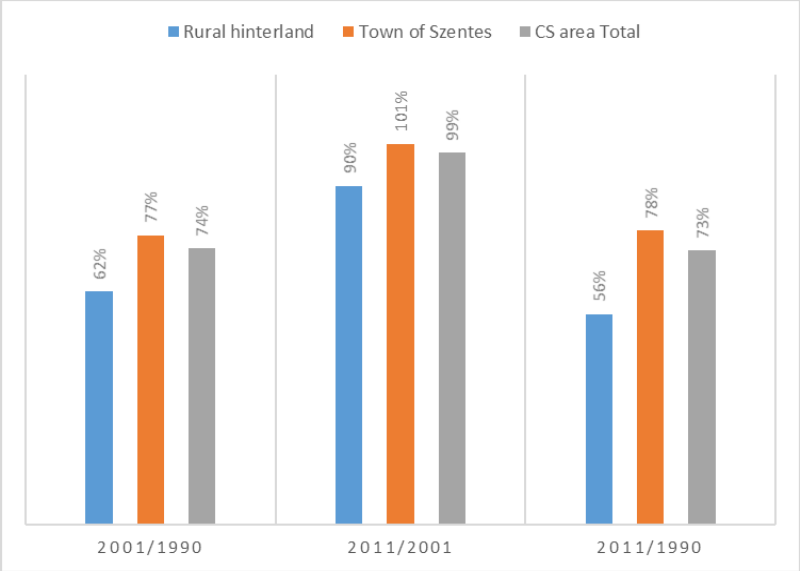
horticulturists, too. Such an intensive farming in the area created steady demand for seasonal labour who were ranging in the 1970 and 80s from unskilled labourers to teachers and other low-income members of the local lower middle-class and lower classes. According to one of our interviewee (Interview no 16) lucrative “enterprising” opportunities in agriculture, especially in the field of vegetable production mitigated outmigration from the CS area significantly from the late 1970s to the fall of State Socialism that could have been more intensive.

The transition to a market economy affected the district under consideration negatively: the cloth factory and the hemp factory closed down, the agricultural cooperatives were obliged to transform. Demand for labour on the transformed large-scale farms (new types of co-operatives or companies) drastically decreased. In the end, one transformed co-operative survived in Szentes (Árpád Limited), as did two others in the vicinity. Árpád Limited managed to maintain its leading position in large-scale vegetable growing in Hungary and it remained one of the biggest employers in Szentes (173 employees in 2018). The company is a majority owner of Hungary’s biggest producer organisation (PO) located also in Szentes. The PO was established in 2002, prior to Hungary’s entering the EU. It soon achieved official recognition enabling it to attract annual EU support that has always been complemented by national funding of various sorts. The PO employed around 160 permanent workers in 2018 and co-ordinated vegetable growing of about 120 vegetable farms operating in Szentes and its catchment area.

The largest industrial employers survived the transition through foreign direct investments. These companies (Hungerit, Legrand) played significant role in reducing unemployment rates in the town, but their demand has been limited to the non-skilled labour; educated/skilled young people in pursuit of a better life mostly migrated from the area.

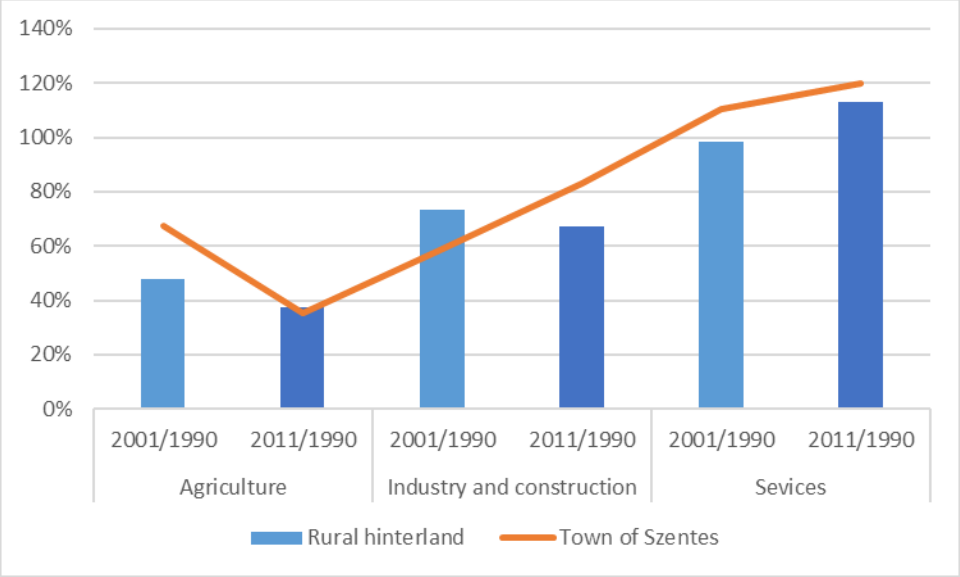
The local scale of transition crisis is indicated by the below figures. Figure 9 illustrates the changes in the number of jobs between 1990 and 2011 based on census data, whilst Figure 10 shows the number of employees in different occupations in the case study area.

Figure 9: The scale of transition crisis in the case study area: drop of jobs 1990-2011



Source: National Regional Development and Spatial Planning Information System, Census database

Figure 10: Losing and gaining economic branches in the case study area during and after the transition: the number of employees in agriculture, industry and construction and services (1990-2011)



Source: National Regional Development and Spatial Planning Information System, Census database

Figure 9 illustrates that the scale of the transition crisis was so dramatic in the case study area, especially in villages, that, even two decades later in 2011, the number of jobs was well below the level of 1990 : it practically halved in the villages and reached only 78% in the town of Szentes. Figure 10 shows that agriculture suffered the biggest losses in terms of

employment capacity, more than 60%, industry and construction lost almost 40% whilst services suffered the least from 1990 to 2001 and gained in the next decade 13% and 20% respectively both in villages and in Szentes.

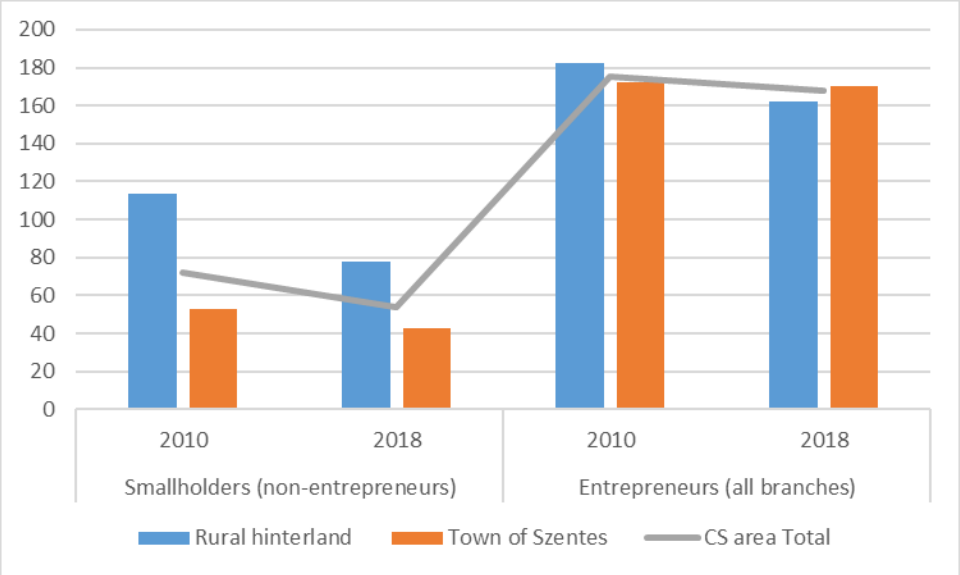
Figure 11: Production site of smallholders (őstermelők) engaged in vegetable growing

Source: Photograph by Katalin Kovács, 2019

Two further facts have to be mentioned here. The first is that the fall in the importance of agricultural production is less than the above figure suggests because the significant number of smallholders (őstermelők) (Figure 11) who are engaged in agricultural production without being registered as entrepreneurs since the turnover from their marketed products remains below a certain threshold. They are therefore taxed differently (much more lightly). Unfortunately, the number of agricultural entrepreneurs is not available in the statistics, but if we compare the relative number (per 1000 inhabitants) of smallholders and entrepreneurs of all economic branches, the significance of this semi-entrepreneurial sector is clear. (Figure 12). Members and clients of the above mentioned producer organisation illustrate the locally emblematic kind and scale of semi-entrepreneurs, who pursue horticulture under poly-tunnels ranging from 500 to 5000 sqm; most of them produce paprika and tomatoes. With the support of the PO, those who were able and willing to develop large horticulture farms (15-20 farmers) have grown to become established member of the middle class of the town during the course of the last 16-17 years. Despite the large scale of their business, with very few exceptions,

they have, for tax purposes, maintained their status of a smallholder (őstermelő). They have managed to retain their eligibility for this status through shady deals like distributing their property and related farm income among family members [14]. The above photo (**Hiba! A hivatkozási forrás nem található.**) illustrates the largest production site of about 20 hectares where approx. 200 vegetable growers operate their farms of different size.

Figure 12: The number of smallholders and entrepreneurs per 1000 inhabitants in the CS area

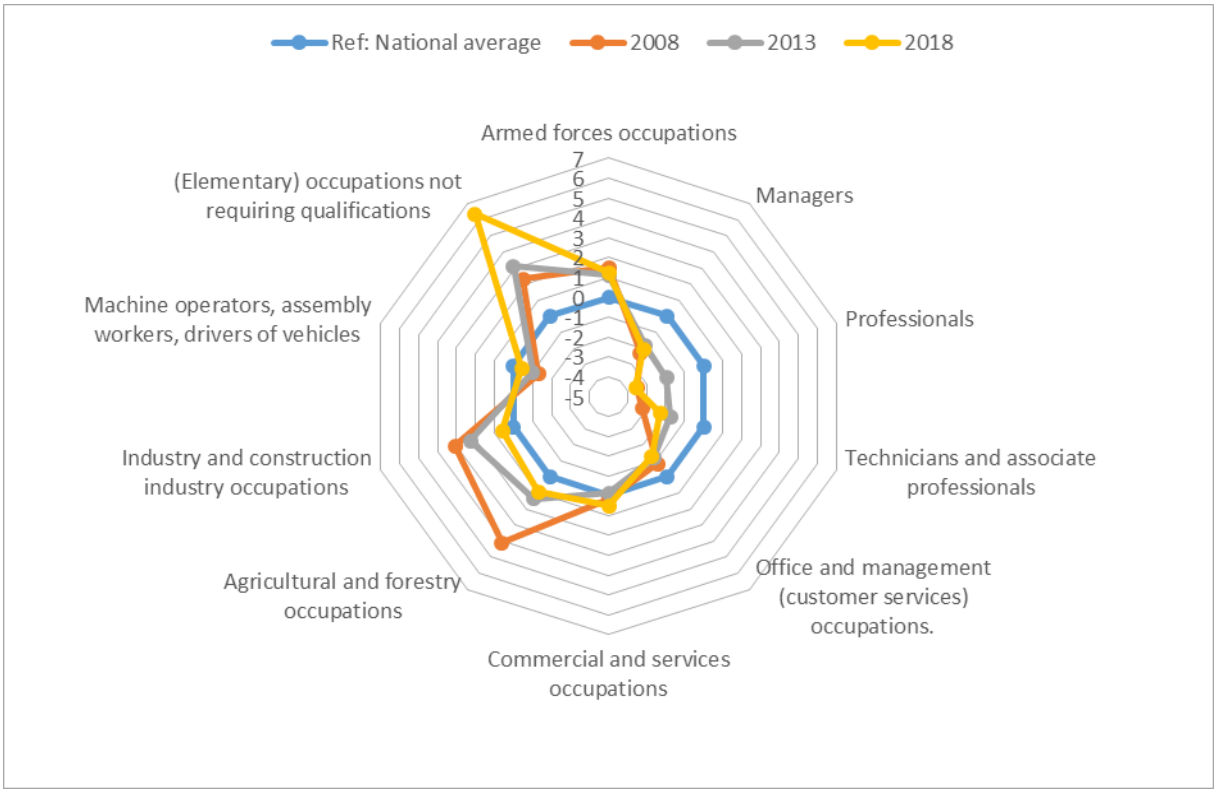


Source: National Regional Development and Spatial Planning Information System, T-STAR

The second fact that needs to be emphasized is that industries in the case study area have failed to restructure towards 'knowledge-economy' therefore rate of qualified economic personnel remained underrepresented. Data reveal that compared to the national average, agriculture and forestry, industry and construction as well as elementary occupations were still overrepresented in 2008 (Figure 13). The share of managers, professionals and technicians was 3–5 percentage points lower than the corresponding figures at national level. Ten years later the occupational distribution became even more unbalanced. In Szentes district the share of occupations requiring elementary education (30.1%) was 6.4 percentage points higher than the national average (23.7%), while occupations requiring qualifications remained underrepresented. The share of professionals (-3.6%), managers (-2.1%), technicians and associate professionals (-2.3%) remained well below the national average.

[14] Taxation of smallholders (őstermelők) has changed from January 2020 that will start a gradual whitening of this sphere.

Figure 13: Differences (in percentage points) between the occupational distribution of Hungary and Szentes district (2008, 2013, and 2018)



Source: own calculation based on data of Hungarian State Treasury (2008, 2013, 2018)

The steady outflow of educated young people from the CS area has not remained without consequences. The continuous outmigration of intellectuals and professionals has not permitted the accumulation of a critical mass of human capital in Szentes that would have been necessary to enter a new phase of urbanization and overall modernization. Despite huge efforts of large numbers of families to educate their children, most young people must leave because of the weak absorption capacity of the local economy, which is still overwhelmed by primary and secondary sector companies and an underdeveloped service sector restricting the position of Szentes to that of a moderately developed market-town.

2.3 Local (regional) perceptions and interpretations of shrinkage: discourses, explanations

Generally, there is a consensus among local stakeholders on interrelated causes of population decline: low fertility rate, ageing of the local societies and outmigration of young, qualified people. Most informants also emphasized that shrinkage is not only a local but a nationwide phenomenon. However, at the local level, shrinkage is perceived as a serious problem because of its acceleration in recent decades. Low fertility rate is interpreted as a consequence of previous outmigration rounds triggered by fundamental historical shocks (collectivization in the 60's, administrative reforms in the 70's which affected small villages,

transition, the collapse of socialist industry and agriculture) and on-going structural changes. International migration, that is, the increasing number of local inhabitants who leave to work or live in Western European countries (especially the UK, Germany and Austria) was triggered by the Global Financial Crisis 2008. Some informants mentioned the positive effects of opening borders and labour markets within the EU as a pull factor for recent migration processes, they also addressed the problem that individually positive effects may and, in fact, do have negative impacts on the community, which is left behind. The overwhelming majority of the young people who left to study and/or work in Hungarian urban centres or in Western countries are not expected to return. As the former mayor of Szentes put it: "*The local council always tried to slow down the process* [of outmigration] *by creating the feeling that Szentes is a liveable place; it is worth living and having a family here. (…) This strategy proved to be effective as long as people basically moved within Hungary, but when they started to migrate abroad it failed. We cannot compete with Western European countries.*" (Interview no. 9). Further anecdotal evidence confirms the words of the mayor: the research team once booked a house which was advertised for short-term rent. As it turned out, the father with two children had been in the UK where the head of the family worked as an IT expert and his two daughters went to school. The mother, a woman in her early forties, was mobile between the two homes and took care of their beautiful family house on the bank of Kurca river which was rented out for occasional guests during the school year (it is used by the family during longer holidays). She said: "*Szentes is an excellent location to raise small children but that is it. My husband earns enough in the UK to educate out daughters there which is better from the point of view of their further education; they would not settle in Szentes anyway.*" (Discussion as part of on-the-spot observation)

The narratives below were selected to illustrate specific causes and contexts of local shrinkage mentioned by the interviewees.

(1) The interpretation of shrinkage in *economic* terms emphasizes that young and qualified people have no or only limited perspectives for getting a proper job and income locally. The local labour market is imbalanced: there are employment opportunities for unqualified workers rather than educated people; wages are lower than the national average; the service sector, especially tourism, has been very weak in the CS area. "*We have not powerful industry here in the town, we would need more industrial workplaces. It is possible – though I cannot prove it – that the food processing company, the largest one here, could prevent new industrial investments because it would have lost their cheap labour.*" (Interview no. 17.) In line with this, others also argued that the biggest "exploitative"companies monopolized the local labour market and thus blocked career prospects for qualified people. (Interview no 18.)

During the interviews we often heard the following argument: "*We have thermal water here, and we have this beautiful old but empty hotel in the centre of the town, and we cannot provide our guests with appropriate services which would generate tourism and income.*" (Interview no. 4) Some of our respondents claimed that the town's council failed to utilize their

natural endowments (thermal water, the rivers Kurca and Tisza) for tourism (wellness, water sports) and to promote investments (infrastructure, hotels). They emphasised that Szentes, compared to other (nearby) small towns with similar natural conditions, missed opportunities to invest into tourism on time (Interviews no. 4., 17.) Some of our respondents were convinced that tourism would not be sufficient for the adequate developmental of the CS area. "*Some local stakeholders say the key is to develop tourism. But it is not a universal means for addressing problems, especially population decline*." (Interview no. 3.)

2) Economic disadvantage is strongly linked to the (inner) *peripheral geographical location*, the *unfavourable road infrastructure:* the main roads lie relatively far from the CS area, a fact with two important consequences regarding rural shrinkage. On the one hand, daily commuting into urban centres takes too long time, thus, instead of commuting, some families decide to move into (or into the suburban zone of) urban centres. On the other hand, the inadequate quality of road infrastructure in the CS area means that it cannot compete with other areas in attracting job-creating investments. 3) Another factor identified by some of our informants relates to the *real estate market,* namely the high price of apartments/family houses and even rents in Szentes, which prompts further youth outmigration. "*They can rent a flat in Szeged* (seat of Csongrád County) *for the same price as in Szentes. In addition, they can find there a more vivid, colourful cultural life than in their hometown. Young people seek a modern and free life in urban centres*" (like Szeged) (Interview no 8.).

In this context we should draw attention to a recent mobility-dynamic generated by the new national family protection policy. (On former family policies see Annex 6.) Some mayors in the CS area reported a recent moderate population increase. As a consequence of the conditional housing incentives of the Family Protection Action Plan (FAP), some young families with children were able to buy and renovate houses in the surrounding villages. These young families migrated from urban centres (Szeged) or nearby towns (also from Szentes) to villages where they could find cheap properties. "*In Hungary, villages are great winners of this national programme*." (Interview no. 7) The lesson we can learn from this recent tendency is that FAP interventions may trigger counter-urbanisation, which, simultaneously may impact rural towns negatively through stimulating outmigration, thus, furthering population decline.

4) Some of our interviewees identified not only economic but also *cultural* and *social factors* triggering population decline. According to one of our informants (Interview no. 8), there were a lot of development projects in Szentes in the past two decades, but most of them equated with "*stone and mortar*", not enough funds were invested in projects or initiatives which strengthened people's attachment to their town. Another interviewee stated (Interview no. 11) in line with this that the council failed to reach and involve local youth in decision-making on the town's future. All of our respondents portrayed their home-town or the village where they lived as a liveable place, however, they also mentioned that they would welcome small

investments aimed at enhancing community spirit through cultural events in – for example – the re-opening theatre of Szentes or in a new open air place for community gathering.

Our informants' perception and interpretation of rural shrinkage parallels their views on adequate and/or desirable policies to address population decline. Since local stakeholders consider rural shrinkage (population decline, migration) to be a nationwide (or global) problem, they think it must effectively be addressed at the national level; central government should launch programmes which would encourage population growth in rural areas. The FAP has generally been appreciated by our informants as a national programme with expected positive long-term effects. Female interviewees (Interviews no. 8 and 11) argued that they would find it disgusting to have children solely because they got money for it, and that money itself was not enough when other circumstances and general life perspectives did not encourage women/families to have children.

Some of our respondents also pointed out that local governments have a very small room for manoeuvre; they have neither financial means nor sufficient autonomy to effectively address rural shrinkage. Recent centralization was identified by our informants behind the very limited opportunities of local governments, on the one hand, and, on the other, lack of visions, ability to innovate and courage on the part of local politicians. *"Local politicians often lament about shrinkage but they have no ideas, thoughts of how to deal with it." (*Interview no. 8*)*

Despite constraints that local stakeholders must face, nobody questions that local actors should respond to the challenges of shrinkage. Regarding desirable future steps, some of our informants emphasized the importance of economic development, especially in Szentes: local government is responsible for creating an attractive environment for investments that would create new workplaces. "*This is the first. When we have workplaces we have everything, we can attract people.*" (Interview no. 4) Also small entrepreneurs could orient career choices of young people to learn a trade and start their professional life in their hometown. (Interview no 18.) Others argue for more "soft" development projects by claiming that *strengthening local identity and place-attachment* on the part of local youth would be an effective retaining factor. (Interviews no. 8, 10, 11, 17)

The stakeholders interviewed do not perceive and interpret local shrinkage as a process that resulted in irreversible demographic and social change in their communities. In other words, they see or at least hope that they can *slow down* the population decline, the outmigration of youth by *maintaining and developing their villages or the town of Szentes as liveable spaces and communities*. "Liveable" means for the people interviewed the availability of public and private services, of good quality, a vivid cultural and civic life, a safe and attractive natural and built environment. In other words, what they would welcome as a policy for handling the issue of shrinkage is a mix of policies of adaptation and mitigation, rather than either adaptation or mitigation.

3 Responses to the challenge of shrinkage: visions, strategies, policies

3.1 High level (EU and national) and regional policies addressing demographic decline

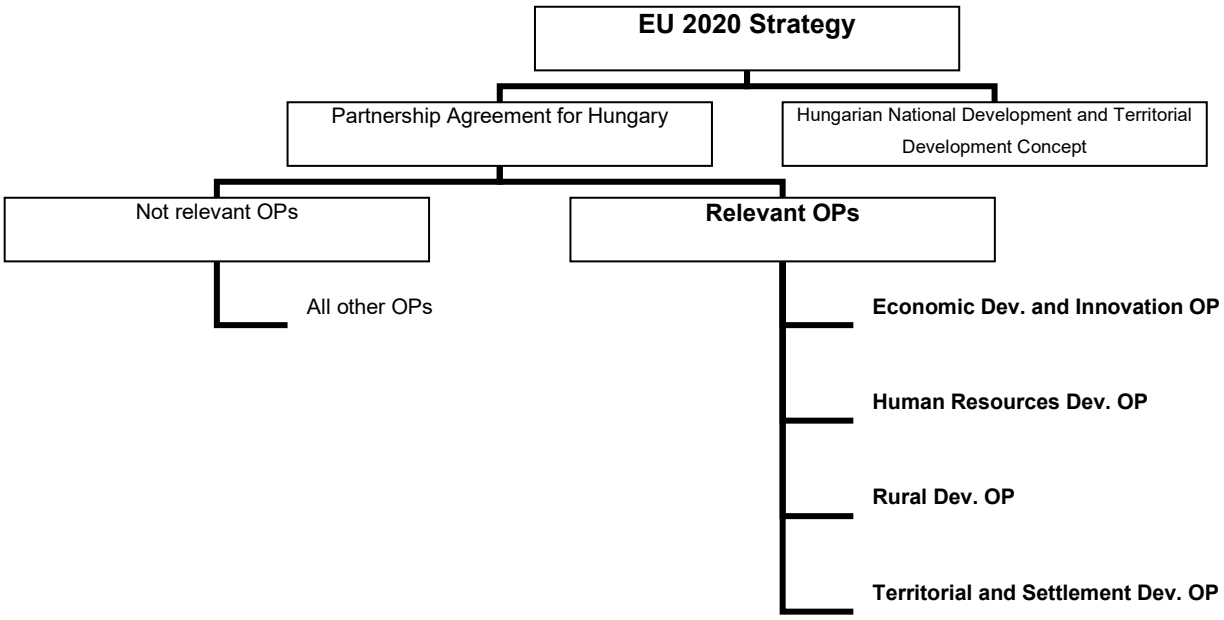
3.1.1 EU and national policies indirectly impacting rural shrinkage

Besides these two newly announced programmes, almost every public policy (healthcare, social affairs, education) impact directly or indirectly the issue of demographic decline in Hungary. Of these policies, the regional and rural development policy has doubtlessly the greatest impact on rural population shrinkage, having regard to financial resources of the EU.

Regional (territorial) development policy

The Hungarian National Development and Territorial Development Concept identified five national development priorities, one of them is directly addressing demographic shrinkage under the title "4. Tackling social inclusion and demographic challenges" (Figure 14). This priority became part of Partnership Agreement although addressing demographic challenges is not listed among the 11 investment priorities of the European Structural and Investment Funds.

Figure 14: EU funded strategic documents – vertical and horizontal connections



As a result, financial resources of the European Community cannot be assigned to activities aimed at tackling demographic shrinkage in the most fundamental/narrowest sense of the

term. However, achievement of two thematic objectives of the EU – creating jobs (Thematic objective 8) and promoting social inclusion (Thematic objective 9) – may impact rural shrinkage in Hungary. Three Hungarian operational programmes promote these thematic objectives in rural areas:

Economic Development and Innovation Operational Programme aims at stimulating economic development of the less developed regions in Hungary. Its most important priorities are employment; ICT; competitive labour force; technological development and innovation; the competitiveness of small- and medium sized enterprises. The Programme has a total budget of 8,813 million € for the 2014–2020 period. Less developed regions are targeted by this OP, therefore a great majority of shrinking rural areas are eligible for funding. The intervention logic of this OP is that economic development (creating jobs) increase capability of rural areas to retain population and resist attraction of urban centres. It should be noted that the uneven take up of the programme's financial resources may lead to growing economic inequalities between urban and shrinking rural areas.

Table 11: Relevant measures/activities of Territorial and Settlement Development OP addressing rural shrinkage

Priority	**Relevant measures/activities**	**Total funding (million €) (~310 HUF/€)**	**As percentage of total (%)**
1. Creating a favourable regional business environment to promote employment	Local business infrastructure development; sustainable tourism development; enhancing workforce mobility; enhancing access to employment by public service and family friendly institution development	962.7	24.2
2. Business friendly and population retaining settlement development	Development of public spaces, industrial brownfield redevelopment, creation of sustainable settlement structure	476.8	12.0
4. Development of local community services and strengthening of social cooperation	Improving public service (health, social) and rehabilitation of deprived urban areas	199.2	5.0
5. Human resource development at county and local level, social cooperation and employment development	Local and regional pacts for employment; Complex programs for strengthening local social cooperation; local community programs	289.3	7.3
7. Community led local development (CLLD)	Development of community and cultural spaces	147	3.7
Total relevant priorities		2,075.2	52.2
Other, not relevant (3. and 6.) priorities		1,896.6	47.8

Source: Territorial and Settlement Development OP

Human Resources Development Operational Programme has a total budget of 3,069 million € is designed for tackling social and demographic challenges. The main interventions of the programme cover social inclusion of deprived social groups, strengthening social cohesion and the role of the family, health prevention, and improving the quality of public education. The intervention logic is that stronger local community and better public services (health, education) reduce motivation of rural inhabitants to leave. The most important OP from the point of view of territorial development is **Territorial and Settlement Development OP**, which aims to promote economic development and public service improvement. More than half (52.2%) of the 3,970 million € programme may indirectly impact rural shrinkage by creating a favourable regional business environment; strengthening local communities; enhance expansion of public services; development of public spaces and green infrastructure; rehabilitation of deprived/brownfield urban areas (Table 11). The intervention logic of the OP is that improvement in quality of life and employment possibilities help reduce outmigration in shrinking areas.

Table 12: Development programs addressing territorial development (and rural shrinkage indirectly): number of grant decisions and total financial support in Szentes district (2014-2020)

Relevance	**Operative Programs (Thematic Objectives)**	**Number of grant decisions**	**Total financial support in HUF**	**Total financial support in € (~310 HUF/€)**
Relevant from the point of view of shrinkage (TO8-9)	Human Resources Development Operational Programme (TO9)	4	259,659,636	865,532
	Territorial and settlement development OP (TO8, TO9)	32	5,021,459,299	16,738,198
	Economic Development and Innovation Operational Programme (TO8)	46	2026,394,055	6,754,647
	Hungarian Fisheries Operative Program (TO8)	5	226,984,313	756,614
Relevant total		*87*	*7,534,497,303*	*25,114,991*
Not relevant	Human Resources Development Operational Programme (TO10)	13	1,931,642,296	6,438,808
	Public Administration and Civil Service Development OP (TO11)	4	28,887,977	96,293
	Environmental and Energy Efficiency OP (TO4, 5, 6)	6	14,606,846,449	48,689,488
Not relevant total		*23*	*16,567,376,722*	*55,224,589*

Source: own calculation based on official data (https://www.palyazat.gov.hu/tamogatott_projektkereso) accessed on 2.10.2019

Concerning the CS area, in the current programming period (until 2nd of October 2019) a total of 110 project proposals have been granted to applicants in Szentes district (Table 12), out of which 87 projects could potentially influence rural shrinkage to some extent. Great majority of these projects are connected to economic development (employment), and some of them address local social cohesion, urban rehabilitation, or residential segregation. The first CLLD project of Szentes (Creating a multifunctional community space) is also listed here. Another group of projects (23), the larger ones, are not relevant from the point of view of demographic shrinkage (the cover development of flood protection infrastructure and photovoltaic systems).

CLLD LAG of Szentes was organised in 2016. As in the LEADER Programme, there was no competition for CLLD funding; each application of eligible towns (with more than 10 thousand inhabitants) had got funded. The Szentes LAG received 400 Million HUF (1,212,121 €) funding to be used for community-building through refurbishing existing sites as well as promoting activation of cultural activities of young people (http://www.szentesihacs.hu/). A refurbished old hotel, which was mentioned in some interviews as a building of great touristic potential is the biggest project covered by CLLD funding.

CAP Pillar II – rural development policy

EU rural development policy established three main objectives (Regulation EU No 1305/2013), these objectives are to be achieved through six priorities for rural development. Out of the six priorities of the Regulation, five intend to support agriculture, forestry, ecosystems and only one addresses social inclusion, poverty reduction and economic development in rural areas. The Programme has a total budget of 4,168 million €. The intervention logic is that job creation and stronger local communities help reduce outmigration pressure in rural areas. The focus areas of the above-mentioned 6th priority are:

- job creation and facilitating diversification and development of small enterprises;
- fostering local development;
- enhancing the accessibility, use and quality of information and communication technologies (ICT) in rural areas.

It should be noted, that one focus area (use and quality of ICT) is not part of Hungarian Rural Development Programme, because ICT is covered by the Economic Development and Innovation Operational Programme.

The achievement of the six priorities for rural development is promoted by 19 measures, four of these measures have the potential to impact rural shrinkage (Table 13). Beyond the LEADER Programme, the relevant measures are job creation (young farmers, development of non-farm activities, tourism and cooperation), small-scale infrastructural improvements and development of basic services.

Table 13: Relevant measures/activities of Rural Development Programme indirectly addressing rural shrinkage

Measures	**Relevant activities**	**Total funding (million €) (~310 HUF/€)**	**As percentage of total (%)**
M06 Farm and business development	Support for young farmers; development of non-agricultural activities, development of small farms;	121.7	2.9%
M07 Basic services and village renewal in rural areas	Improvement of small scale infrastructure; development of basic services	278.0	6.7%
M16 Cooperation	cooperation among smalls operators (developing tourism); cooperation among social enterprises;	9.6 + 4.2	0.3%
M19 LEADER	Local development strategy, cooperation	191.8	4.6%
Relevant total		606.1	14.5%
Not relevant total		3,561.9	85.5%
Total		4,168	100.0%

The EU's rural development policy focuses on issues linked to agricultural and forestry sectors (farm competitiveness, animal welfare, renewable energy, etc.). The emphasis on primary producers is reflected in the distribution of grant decisions as well (Table 14). In the Szentes district, only 1.8 percent of the supported projects (14) can be connected to the 6th priority, further 9 projects deal with developing small farms (6) and supporting young farmers (3). The relevant local projects contribute to job creation; small-scale infrastructural projects; development of farmers' markets; projects of municipalities and basic services. In financial terms, the situation is somehow better, as 7.6% of the total support is granted to projects promoting social inclusion and poverty reduction.

Table 14: Projects granted by Rural Development Programme in Szentes district (2014-2020)

EU priorities for rural development programs	**Number of grant decisions**	**Total financial support in HUF**	**Total financial support in € (~310 HUF/€)**
Promoting social inclusion, poverty reduction and economic development in rural areas (6.)	14	365,362,697	1,178,589
Relevant measures of the other five priorities (young farmers, development of non-agricultural activities, development of small farms)	9	65,169,300	210,224
Not relevant measures of the other five EU priorities (1–5.)	721	5,218,586,530	16,834,150

Source: own calculation based on official data (https://www.palyazat.gov.hu/tamogatott_projektkereso) accessed on 2.10.2019

The supported rural development projects show high spatial and thematic concentration, as 90% of the funds are granted to agricultural entities seated in Szentes (72.9%), Szegvár (10.6%), and Fábiánsebestyén (7.2%) (Table 15). This spatial distribution is somehow misleading, as the Szentes based companies often develop their sites in other settlements (Nagymágocs, Szegvár). From another perspective the labour-intensive agricultural enterprises (pig breeding, horticulture and dairy sectors) awarded biggest grants for their projects. These large-scale agricultural developments contribute to the creation of new and/or /maintaining existing jobs in the district notwithstanding their positive environmental impact.

European Rural Development Programme, in principle, may have significant impact on rural shrinkage (Regulation EU No 1305/2013, Article 7). The relevant subprograms relate to young farmers and woman in rural areas, but only three young farmers have been granted until now in Szentes district. (Two young farmers in Szentes and one in Szegvár were supported by 40,000 Euro each.)

Table 15: Spatial distribution of the granted rural development projects, million euro (~310 HUF/€)

	Development of the agricultural water management sector (VP-4.1.4-16)	**Animal welfare support - restructuring of the dairy sector (VP-14.1.1-16)**	**Agri-environmental payment (VP-10.1.1-16)**	**Modernization of horticulture (VP-4.1.3-1-16)**	**Improving the energy efficiency of agr. and proc. plants (VP-4.1.6-17)**	**Modernization of pig holdings (VP-4.1.1-5-16)**	**All other measures**
Árpádhalom							0.91
Derekegyház							0.17
Eperjes							0.31
Fábiánsebestyén	0.66				0.07	0.16	0.43
Nagymágocs							0.25
Nagytőke							0.06
Szegvár		0.49	0.09	1.10			0.26
Szentes	0.49	1.12	1.65	2.73	1.31	2.98	3.00
Total	1.15	1.61	1.74	3.83	1.38	3.14	5.37

Source: own calculation based on official data (https://www.palyazat.gov.hu/tamogatott_projektkereso) accessed on 2.10.2019

The LEADER Programme is supposed to be particularly appropriate for fighting rural shrinkage since it should permit the development and implementation of grassroots, place-tailored rural development programmes. The potential of the Programme, however, has not

been realised in Hungary in the current programming period, for two main reasons: first, it has been poorly funded: the minimum mandatory allocation (5% of the total of the RDP) was provided by the authorities for the Programme (actually even a bit less, see the table above); second, it was extremely badly governed, which generated huge delays in starting dates. Delayed implementation paralysed supporting organisations too, such as the Hungarian Rural Network (HRN) or a grassroots organisation, the Hungarian Association of LEADER LAGs (LEADER Egyesületek Szövetsége - LESZ). The Council of the HRN has not assembled for the last two years, there was invitation in December 2019 right before Christmas but it was postponed and never issued again. In brief, rural actors and areas have had the misfortune of experiencing an overall negligence on the part of the authorities in Hungary in the current cycle, which has generated uncertainties and mistrust at the local level.

For local LEADER Programme see Chapter 3.1.2

3.1.1.2 Direct national policies addressing demographic decline

The most important policy tools fighting demographic decline make up a kind of package; some of its items have been identified already in the preceding chapters of this report. The policy package concerned focuses on housing issues (first home, mortgage loans), tax policies and daily childcare services. All these measures are aimed at encouraging young couples to raise (more) children. At the top of these measures, a new amendment of the *Family Protection Action Plan* (FAP [15]) was announced in 2019 [16] which included some new elements highly relevant from the point of view of rural areas. The main points of this action plan are as follows:

Tax policy:

- Personal income tax exemption for women with at least four children (from 2020);
- A system of family tax benefits was introduced in 2011: family tax benefit of HUF 66,670 for one child, HUF 266,000 for two children, and HUF 660,000 for three children;

Housing and car

- 'First home programme' (families raising or agreeing to raise two children can apply for a HUF 10 million interest-subsidised loan, while families raising or agreeing to raise three or more children can apply for an interest-subsidised loan of HUF 15 million for the purchase or construction of new flats or family houses.)
- reduction in mortgage loans (Since 2018 the government has taken over HUF 1 million from the mortgage loans of large families upon the birth of a third and every further child.)

[15] FAP was issued in 2016 by the 17/2016. (II.10.) Government Decree

[16] 109/2019 (V.13) Government Decree amended the 17/2016. (II.10.) Government Decree and 46/2019. (III.12.) Government Decree "For the sake of the implementation of the Hungarian Village Programme"

- family car purchase program (subsidies available for the purchase of new cars with a minimum seven seats for families raising a minimum three children – max HUF 2.5 million)

Other

- baby loan (an interest-free, any-purpose loan of maximum HUF 10 million for young married couples with the intention of encouraging them to have children,

Daily childcare services

- establishing new crèche-facilities (ca. 20 thousand extra places by 2020)
- childcare allowance for grandparents to assist mothers' access to employment where no childcare service exists

To date, there are no data available regarding the outputs/impacts of the Family Protection Action Plan, however newly renovated houses, financed by the preferential loan can be observed in Szentes district (Figure 15).

Figure 15: Old house renovation financed by the preferential loan in Derekegyház

Source: Photograph by Bálint Koós, fieldwork, 2019 winter

3.1.1.3 Direct national policies addressing rural shrinkage

Prior to the amendment of the Family Protection Action Plan, the *Hungarian Village Programme* had been announced in 2018 (Gov. Decree no. 1669/2018. (XII.10.). The objective of the Programme is to tackle population decline in rural areas. The intervention logic of Hungarian Village Programme is that negative demographic trends can be slowed down through better service-provision, enhanced connectivity and significant financial support for access to housing. Rural settlements with less than 5,000 inhabitants (2,786 villages and 101 small rural towns covering roughly the 90% of municipalities and 30% of the population) are eligible for the Programme funded by 150 Billion HUF (483.8 Million € [17]) from national

[17] Exchange rate: 1 Euro=310 FUF

resources (Table 16). These are distributed between three broad “envelops”: (i) developing public service provision (75 Billion HUF), (ii) road networks (50 Billion HUF), and (iii) supporting applicants to the Family Protection Action Plan in eligible rural locations (25 Billion HUF). Implementation started in 2019 and is continuing in 2020 with exactly the same amount of financial support. Municipalities and churches were eligible for funding. The Programme is a great success so far for the following reasons:

- The Programme was tailored to needs of rural areas where these needs had not been met in the last decades from either EU or national resources;
- The implementation of the first round in 2019 was swift: it took only 12 months from setting the Programme goals to grant-decisions, which reflects its simplicity and also (mainly) the fact that the Programme was designed by a highly competent NGO, one of the municipal associations (Alliance of Local Governments);
- Among other things, the programme addresses shortages of human capital and public service provision in rural areas through projects aimed at providing free housing for providers of SGI.

Table 16: Distribution of supported applications of the 2019 round of the Hungarian Village Programme

Area	**Activities**	**Total funding (million €) (~310 HUF/€)**
Health care services	House building programme to provide free housing for GP’s.	16.1
	Doctor’s office development and medical equipment purchase	19.3
Child-care services	Nursery development	32.3
	Kindergarten development	16.1
	Kindergarten playground and equipment dev.	16.1
Public space	Municipal and ecclesiastical multifunctional public space development and support for community programmes	41.9
	Pavement and municipal road development programme, and purchase of road maintenance equipment;	41.9
	Sportpark developments	6.5
Service Accessibility	Smart points	3.2
	House building programme to provide free housing for kindergarten teachers etc	6.1
	Homestead and village care taker service (=”village bus”)	25.8
Other	Municipal and ecclesiastical cemetery development	9.7
	Mayor’s office development	6.5
	Development of road networks	161.3
	Access to support from Family Action Plan	80.6

In 2019, of the seven eligible villages in Szentes district, four were supported by a total amount of approx. 82,247 € from the Programme. (The highest amount granted to a village in 2019 was approx. 69,079 €)

Despite the celebrity of the Programme it has to be emphasised that in the context of low own-source resources on the part of rural municipalities for maintenance and development, such small-scale financial assistance cannot really generate major changes either to reverse, mitigate or compensate for unfavourable demographic processes. Rather, basic funding of municipalities needs to be more generous than it is nowadays.

Three conditions should be implemented for there to be a noticeable impact on shrinking rural areas:

- Basic funding for municipalities needs to be increased,
- The Hungarian Village Program needs to be continued for at least 4-5 years, and the Hungarian Town Programme, too, whose design is currently taking place in collaboration of NGOs, needs to be started with adequate funding and duration. (Interview no. 15).

3.1.2 Regional and local policies directly impacting rural shrinkage

The policies discussed in this chapter are those that have been shaped at regional and local levels by the development strategies and decisions of the two bodies responsible for the content and implementation of territorial and local development programs, the County Council at the regional (NUTS 3) level and the board of LEADER LAG at the local level. However, the actions of these bodies aimed at development are supported by EU funds co-financed by the Hungarian government to varying degrees. Therefore this chapter could be regarded as a continuation of Chapter 3.1.1.

Territorial development at the regional level

As mentioned earlier (Chapter 1.5.2), NUTS 3 level self-governments, county councils, played secondary roles in territorial development in Hungary as delegates in NUTS 2 level Regional Development Councils from 2004, the year of Hungary's accession to the EU, until 2013, when NUTS 2 regional development councils and agencies were dissolved. (Seven regional development programmes were run in the 2007-2013 cycle; they were centrally managed and monitored.) Counties were in charge of operating middle-tier public services, hospitals, social care centres and, increasingly, secondary schools (the latter task was taken over from municipalities that could not afford to maintain secondary schools). Since 2013 county councils have been deprived of providing public services but have returned as the most important (actually the only) actor in charge of territorial development at the sub-national

level. The question is whether they can counterbalance recent centralisation tendencies and the extreme concentration of power at the centre which is judged differently by stakeholders.

The planning tasks of the counties encompass the mandatory creation of territorial development concepts and related territorial development programmes. To these have been added in the current cycle a third type of planning document, the so-called Integrated Territorial Programme (hereinafter ITP) which is intended to secure suitable reception of national-level funding of the Territorial OP of 2014–2020 through "mediating" between the two levels. The order matters: the Territorial OP was born first, territorial development programmes at county level were drafted more or less parallel with the Territorial OP, and then ITP-s came next. The task of counties when drafting ITPs was to associate priorities of their own territorial programmes with the priorities of the national level OP, identify selection criteria for would-be projects and distribute allocated financial resources of the OP among the chosen measures. (Allocation of financial resources was differentiated and inversely proportional to the degree of development of the county, set by Government Decree 1702/2014. (XII. 3.)) 18 measures of five priority axes were accessible by counties (the sixth priority axis was dedicated to county seats and cities with county rights, and axis 7 was reserved for CLLD). Thus ITP-s have served as an efficient technical tool for the "regionalisation" of the one single national level OP of Hungary, by adjusting its measures to regional development goals and specific territorial targets. They could influence the selection of projects to be granted, too, by fixing selection criteria. Moreover, they have been entitled by law to veto the outcome of project selection of the Managing Authority if necessary.

The chosen tool seems to provide a good compromise, though it is judged differently by stakeholders; the positive role played by ITPs in the regionalisation of the Territorial OP was acknowledged by an independent evaluation in 2018. (HBH 2018) As mentioned in Chapter 1.5.2, one of our informants claimed that the centrally implemented management and monitoring prevented county councils (and their agencies) from fulfilling decentralised tasks (he himself is one of the NGO delegates of the Monitoring Committee - Interview no 14), whilst the interviewee who held the position of chairman of Csongrád County Council and led the preparation process personally was convinced of its success, although he also emphasised that further steps should be taken towards giving more autonomy to counties -- (Interview no 15).

> In Csongrád County, district level meetings were organised for the mayors, in order to create consensus regarding development projects to be awarded. Agreements at consensus-seeking meetings enabled municipalities to prepare only for tenders where they had good chance of winning, well before the calls for tendering were issued (Interview no. 15). These tenders focused on population-retaining settlement development, the strengthening of social cooperation and the development of local community services (see Annex Table 2.1).

One of the interviewed mayors who managed to attract quite a lot of funding from the Territorial OP praised the preparatory work (forums/meetings at district levels) and co-ordination of ITP by the county (Interview no 5), whilst others were anxious and saw an easy opportunity in such agreements for gifting political friends (Interview no 11).

Local-level rural development: implementation of the LEADER Programme

The local LAG (Alsó-Tisza Vidék Fejlesztéséért Egyesület) was organised in the 2007–13 programming cycle with the participation of villages of two neighbouring districts, Szentes and Csongrád. The internal territories of the towns were not eligible to participate in LEADER because both of them far exceeded the threshold of 10,000 inhabitants, but their outskirts, scattered farm areas, were.. The LAG continued in the current programming cycle with unchanged membership: 39 members (12 municipalities, 13 representatives of local businesses and 14 civic organisations) (Table 17). The general pattern of the 2014–2020 period is that the LAG's resources have been much reduced, roughly one third of that of the budget of the previous cycle, 308.5 million HUF (995,161 € [18]). The reason is that in the previous programming period each LEADER LAG was entitled to manage measures of two axes of the Hungarian Rural Development Programme, axis no III, which was generously funded (entrepreneurship, diversification, rural heritage, services, small-scale infrastructural investments) and axis no IV (LEADER), whilst in the current programming period LAGs competencies cover the LEADER measure only. In consequence, the prestige and influence of poorly funded LAGs dropped automatically and proportionately, and this was exacerbated by the delay in implementation already mentioned.

The above table clearly reveals small project size as a general feature of LEADER-like funding. However, the maximum threshold equals a good yearly wage in the local context, which is considerable if small-scale investments are thought of. Eligible applicants have ranged from municipalities to ordinary rural citizens, though with different aid intensity rates. (For take-up rates see Chapter 3.3.2)

One of the measures under the current LAG development strategy addresses shrinkage directly; this measure is supported by 7% of the overall LAG budget (Retaining and attracting young people through promoting housing and employment. Abbreviation: Let's keep our young people home!) The other eight measures also affect shrinkage indirectly, these measures are aimed at strengthening various branches of the local economy (SME-s in different sectors, tourism), local culture and community life, preservation of local cultural heritage. Of the 53 project proposals, six were submitted under the measure 'Let's keep our young people home! (11%) (This information was retrieved from the website of the Paying

[18] Exchange rate: 1 Euro=310 FUF

Agency in September 2019. Unfortunately, it was no longer available at the same website at the time of writing in April 2020.

(https://e-kerelem.mvh.allamkincstar.gov.hu/enter/leaderbongeszo/leaderBongeszo.xhtml).

Table 17: Measures of Local Development Strategy of LAG

Nr	Title of measure	Allocation (HUF)	Expected project size	
			Minimum	Maximum
1	Community based development of local economy	30,000,000	300,000	3,000,000
2	Supporting small-scale local production	70,000,000	200,000	3,000,000
3	Integration of household production	9,000,000	300,000	3,000,000
4	Supporting small-scale local food-production	15,000,000	200,000	2,900,000
5	Creation and development of community sites	32,000,000	100,000	2,900,000
6	Preserving traditional rural outlook	32,000,000	100,000	2,900,000
7	Developing local tourism	32,000,000	100,000	2,900,000
8	Spiritual and community development	30,000,000	100,000	2,900,000
9	Let's keep our young people home!	20,000,000	500,000	3,000,000
	Total	**270,000,000**	**870,968 Euro**	

Source: https://www.also-tiszavidek.hu/site.php?id=70 Retrieved April 14, 2020

3.2 Discourses and explanations at national/regional levels concerning policy measures and tools addressing rural shrinkage

Policy measures addressing rural shrinkage can be grouped into two more or less separate categories. The first category focuses on fertility aspects and elements of the FAP. These measures are universal, financed in part from national resources, and from ERDF (in case of kindergarten developments), equally available for urban and rural settlements. The second group of policies cover territorial development and employment-related measures; some of them focus on rural areas. Such measures are typically co-financed by EU funds (Territorial OP, CAP Pillar II), and since 2019, by the Government (Hungarian Village Programme).

Regional stakeholders and experts (Interviews no. 1, 2, 13, 14) acknowledged the necessity of both groups of policy approaches. But counter arguments also exist. Allegedly, even the Deputy State Secretary for Rural Development formulated a strong opinion in one of his

public speeches*: 'Why should we develop the countryside? It will perish anyway' (*cited by Interviewee no 1*) [19].*

However, there is a consensus among interviewed stakeholders/experts that recent policy tools represent a step toward the right direction, but they are insufficient to reverse the negative demographic trends. They can only slow down shrinkage at best.

Interviewed experts at national level emphasized the importance of the mobilisation of rural population (participation in the centrum's economic life) through:

- improved daily commuting opportunities to regional centres (Interview no. 2);
- digitalisation (Interview no. 1);
- development of human services (Interview no. 1).

On the other hand, the mayors of villages tend to favour easily implementable constructions such as the Hungarian Village Programme. Two stakeholders blamed them for preferring projects visible for the voters (playground and cemetery development) (Interviews no. 1, 13)

The issue of population decline is explained similarly by local, regional and national level stakeholders. They all agreed that low fertility rate and outmigration are root causes of rural shrinkage. These factors may lead to depopulation of smaller villages sporadically (Interviews no. 2, 13, 14). *"Settlement structures are always changing, maybe some small settlements will be abandoned in the future." (*Interview no. *2) "Some small villages will be abandoned inevitably. Mergers will be probably initiated grassroots by councils of small villages in the future, not by the Government. They are simply not sustainable" (*Interview no. 14*)*

3.3 Local responses to shrinkage

3.3.1 Coping strategies

As already mentioned in chapter 2.3, and 3.2, local actors (municipalities, institutions, and civic organisations) have very limited room for manoeuvre to directly address rural shrinkage. They do not have means at all to stop or change dominant patterns and dynamics of rural-urban and cross-border migration fuelled by economic, social and spatial inequalities. As it has been mentioned in the previous chapter, local stakeholders consider shrinkage as a nationwide problem, which should be addressed by the national governments primarily. Therefore they do appreciate the recent governmental intervention of Family Protection Action Plan, which made housing-related grants available for rural residents as well.

Local stakeholders typically *do not expect that population decline could be mitigated through attracting newcomers from abroad or other parts of Hungary*. In Szentes, there are quite a lot

[19] The debate behind this statement is likely related to the dilemma whether CAP resources should support farmers exclusively or CAP money should be shared with other rural actors.

of migrant workers employed by the largest (food processing) factory of the town. Because of language and cultural barriers and also the Hungarian immigration policy, they are not expected to settle in Szentes. A few of the migrant workers, however, settled in the town anyway; no help was given to them either for the municipality or the company. In addition, the labour demand will be reduced in the near future because of the expected automation of the production by the new owner of the company. (Interview no 15.) There are a few urban newcomers in villages or in the outskirts of Szentes, seeking for a better quality of life (healthy natural environment, organic farming) but the number of these families is not enough to indicate a new direction of population (in)flow. It is important to emphasize that municipalities in the case study area have not developed means (e.g. marketing activity) to attract urban people to their settlements. The *recent patterns of urban-rural, rural-rural mobility* are essentially determined by *imbalances/inequalities of the property market, rather than* by local policies to attract newcomers. This is also true in case of the recent measures linked to the FAP targeting villages with declining population: urban young people purchase and renovate houses in villages and outskirts because of low property prices. Mayors of villages benefitting from family/housing policy of the government welcome the arrival of families with children because of the better sustainability prospects of local kindergartens and schools.

Some plans and ideas on how to *retain local youth* by supporting them at the start of their independent life with *favourable housing condition*s were reported by the interviewed mayors. One solution could be establishing of so called “Swallow houses” (Fecskeház) with some flats in a house owned and rented by the local municipality (Szegvár). In Szentes, some local stakeholders mentioned the high number of empty, abandoned flats/houses (a striking consequence of population decline). They emphasised the need for a *social housing programme* in order to retain young families in the town. According to one of the respondents, as a first step, the municipality should purchase and renovate some abandoned properties. At this moment, we can speak rather about ideas and not elaborated plans of local housing policy. (Interview no. 11) Generally, the support of young adults and especially the qualified professionals with favourable housing conditions has been seen as a high priority in the CS area.

Besides addressing housing shortages, there have been other ideas on the ways of retaining and attracting young people. In Szentes, the former mayor entered into negotiation with the agricultural university of Gödöllő on the establishment of an external faculty in the town, so far without results. Others think that local scholarship programmes and projects targeting the youth are needed to strengthen the localism and place attachment of young people. “*The longer they stay in the town, the more they feel attached to it.*” (Interview no 10.)

Most of the stakeholders interviewed emphasized that *creating jobs* would be the best solution to retain young people and stop population decline. Unfortunately, it seems to be inevitable that labour shortage (partly a result of population decline) will rather force automation of production, which will generate job losses in the future. In addition, local

governments have limited opportunities and means to promote economic development. There are some stakeholders in Szentes, however, who would expect more proactivity from the local Town Hall in attracting investments in the town (through marketing, lobbying). They also think that development of tourism would generate an obvious path to economic development and job creation, because of the natural and cultural resources of Szentes (e.g. through making use for touristic purposes of two rivers, thermal water, and the beautiful but abandoned old hotel to be refurbished from CLLD funding). Some mayors of the surroundings of Szentes plan to create new workplaces through utilizing local buildings (such as an old castle in Árpádhalom with new public functions, for example as home for disabled persons or retirement homes. These thoughts could address shrinkage through establishing so called silver economy locally. The micro-regional association of craftsmen plans to overcome labour shortage by encouraging young people to start own enterprises. (Interview no.18.)

Notwithstanding sporadic thoughts meant to fight local population decline, none of them address shrinkage in its complexity. In fact, the ultimate goal of local strategies is (and can only be) to provide a *better quality of life* for (current and future) local population through developing local services, public spaces and cohesion of local communities. On local level, LEADER and CLLD programmes provide important but not enough resources to generate changes, which could mitigate the consequences of rural shrinkage not to mention to stop or reverse population decline.

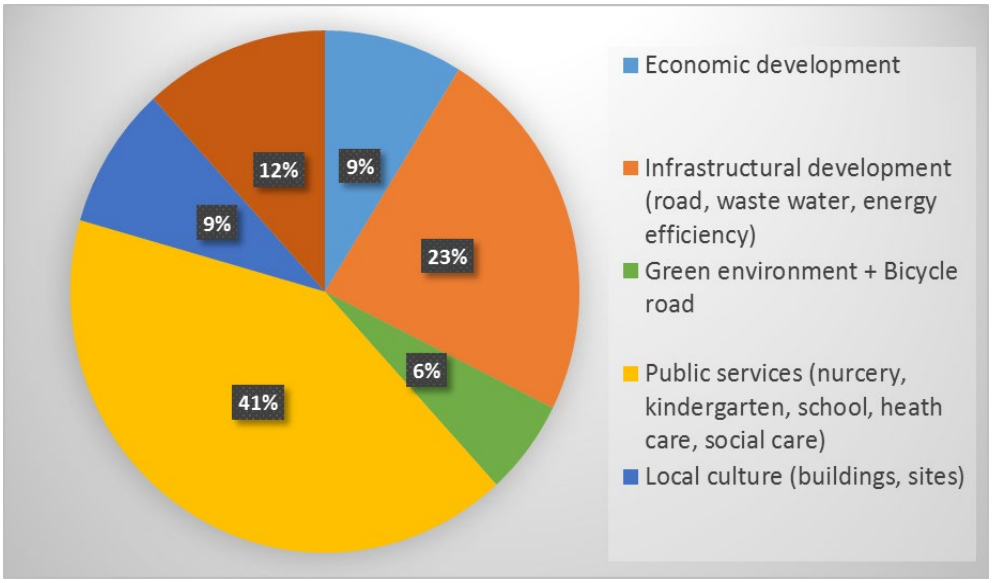
3.3.2 Available policy tools: take-up rates, opportunities and hindrances

Take-up rates: projects awarded grants in the case study area 2017-2020

The first half of this chapter introduces in detail the take-up rates by applicants in the case study area for support from two funding resources: the Territorial OP and local LEADER Programme.

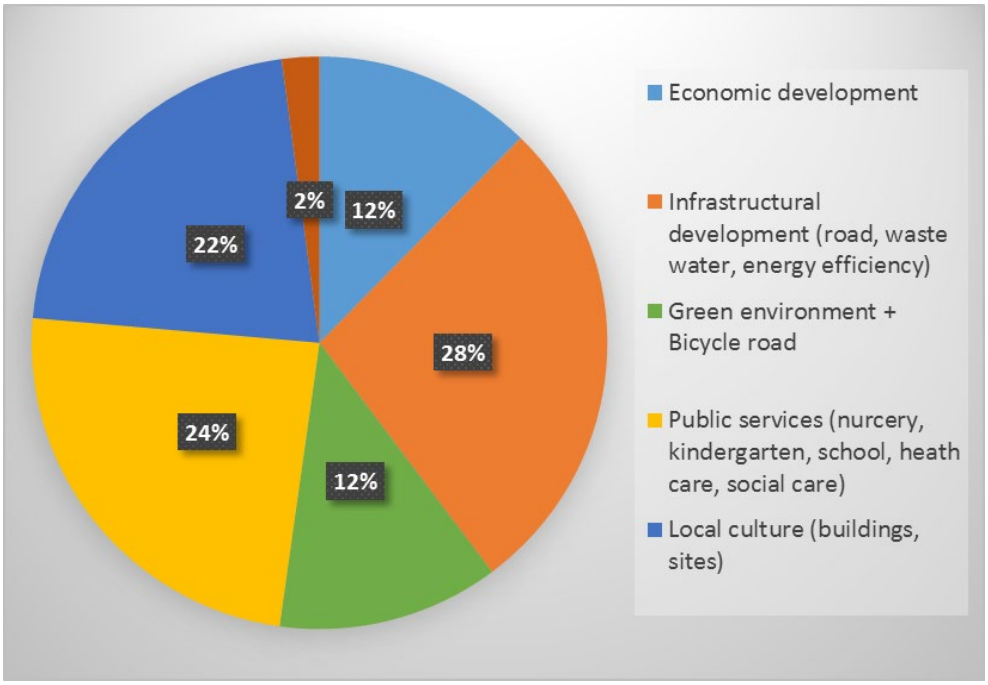
By March 2020, 34 projects from the Territorial OP had been granted in the Szentes district with a total value of 19,436,436 Euro (Annex Table 2.1), the average project size was 561,829 Euro/project and 489 Euro/citizen. One small village, Eperjes, failed to win a grant, but the scale of funding ranged considerably among the winners too, from Nagytőke (another small village with 117 Euro/citizen) to Árpádhalom, the third small village with a population under 500 where five projects were awarded to a total value of 975,266 Euro from the Territorial OP, resulting in a 1966 Euro per capita support rate. (The respective figures for the town of Szentes were 9 projects granted of 11,406,369 Euro, 410 Euro per Capita.) The distribution of awarded projects and awarded resources by project measures are indicated by the two figures below (Figure 16, Figure 17).

Figure 16: Distribution of granted projects in the CS area by measures of the Territorial OP



Source: https://www.palyazat.gov.hu/tamogatott_projektkereso

Figure 17: Distribution of the awarded grants in the CS area by measures of the Territorial OP



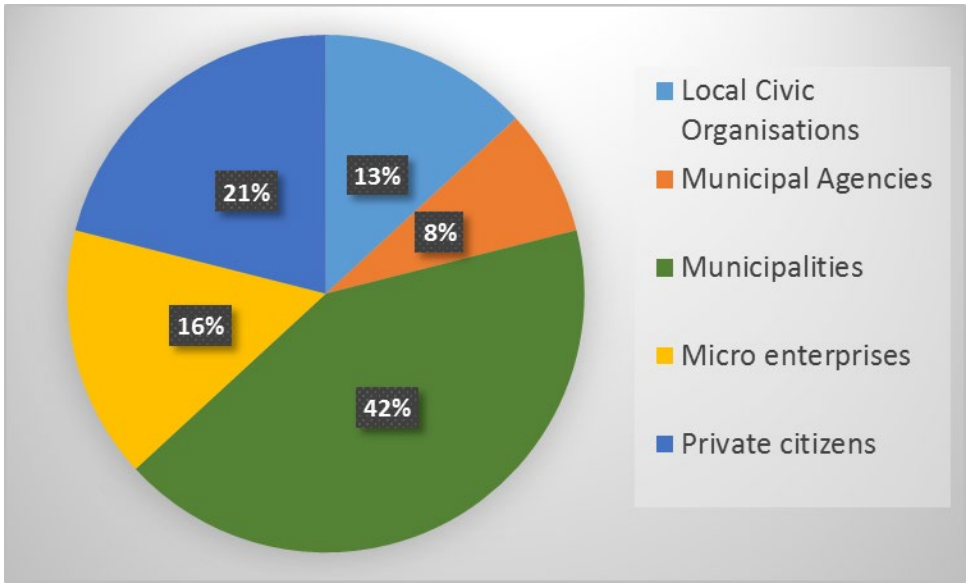
Source: https://www.palyazat.gov.hu/tamogatott_projektkereso

Both figures convincingly show the importance of projects aimed at the better provision of child care and education, health and social care on the one hand, and projects related to infrastructural development, on the other (road, energy efficiency, waste water, the latter two are environmentally relevant as well). The first group of projects which were awarded grants (41% of projects, 24% of funding resources) in particular might have positive impacts on

retaining population since they target an enhanced quality of life in the villages and women's better chances of opting for employment rather than child rearing at home. Twelve projects submitted by municipalities and local NGO-s aim to enhance people's attachment to localities and strengthen community cohesion; the goal of retaining population is manifest in these projects, too.

It has to be added that quite a number of projects awarded by the Human Resource Operational Programme might impact population shrinkage, such as an anti-segregation action to refurbish 24 rental apartments in the town of Szentes, or the four projects that aim to provide better quality food for children at schools. Another programme addresses retired sportsmen. An outlier project is supported by the Human Resource Development OP but financed from ERDF, since it covers the costs of renewing the roof of the gymnasium in Szentes. (See Annex Table 2.4) Even the Cohesion Fund has supported projects that might be relevant for the liveability of the area, such as the two "soft projects" from Szegvár aiming at enhancing environmental awareness and setting up a climate strategy and a "hard project" aiming the provision of clear and healthy drinking water. (See Annex Table 2.3)

Figure 18: Distribution of granted LEADER projects by applicants



Source: https://www.palyazat.gov.hu/tamogatott_projektkereso

If we consider LEADER funds, there are three villages (Fábiánsebestyén, Eperjes, Nagytőke) which submitted no application for LEADER support or withdrew their application (Figure 18). Municipalities seem to rely most on LEADER funding: 42% of applications came from this sector. Only half of the scarce resource available had been spent by October 2019, reflecting low levels of interest, which is rather concerning; uncertainties and mistrust can impede necessary corrections, such as rechannelling funding between measures or increasing the

minimum and maximum thresholds of available grants (although the latter was obviously done by LAG managers, see Annex Table 2.2)

There are a number of important discrepancies between the two programmes, in addition to differences in the project funding available (on the basis of projects funded in Szentes, the average project size figures for Territorial OP and LEADER projects differed by a factor of more than 50!):

- The intensity rate of aid is 100% in case of the Territorial OP and ranges from 50% to 85% in case of LEADER; in other words, own contribution is not needed at all in case of the first, and can reach half of the expected expenditure of a project in the latter; if we add that tenders of the Hungarian Village Programme also have no own contribution element, LEADER is the less attractive funding resource; (Of course this applies to municipalities only because neither business entities nor natural persons can apply for the other two Programmes)
- Whilst the national-level management of LEADER is very problematic, despite being solely funded by EAFRD, it operates smoothly in case of the Territorial OP, where one of the priorities is funded by ESF (the four others by ERDF).

Some pieces of evidence from the interviews

Facts and opinions seem to suggest equally that available development funds are only capable of slowing down rural population shrinkage through closing the gap, to some extent, between urban and rural quality of life. Without offers of recent funding opportunities, the situation would be even worse.

In the previous section the comparison between LEADER and the Territorial OP was based on quantitative sources of evidence. Hereby, the below interview quotations are meant to illustrate opportunities and hindrances of development actions have been taken from interviews:

- There is still a missing link between regional development and rural development (CAP Pillar II) policy. They work as they were separated by walls, limiting the chance to arise significant synergies.
- 'Much hassle about nothing' – the LEADER programme and the CLLD could be a well-tailored, relevant policy approach, but minuscule funding erodes possible gaining notwithstanding huge delays in the LEADER Programme. LAG in both cases can be considered as a framework/platform among LAG members aimed at planning and discussing issues, but the value-added of the joint work has been still missing/invisible.
- Public policies addressing rural shrinkage are still dominated by a "brick and mortal" approach. Exceptions are represented by some community building projects granted

from the Territorial Development OP and the Hungarian Village Programme. They are so risk-avoiding by nature, so the members of the high-risk vulnerable groups and localities (minority groups, unemployed, segregated neighbourhoods) are often not reached at all. The selective outmigration in the long run may lead to a definite socio-spatial segregation in rural areas; it is not so evident in the CS area but present in the fragmented landscapes of North-East and South-West Hungary. A shortage of professionals (GPs, teachers, caretakers) is increasingly hindering the ability of rural settlements to provide services like education, health care or provision these services in appropriate quality. Numerous job vacancies at healthcare in rural areas are related to low profitability of the position of a general practitioner due to low population density of the catchment area. Low salaries of teachers are directly or indirectly determined by the Government, therefore could at least partially treated by national-level decisions. It is not only income of doctors or teachers that matters: the job is often more difficult in rural areas than in cities. In case of primary education, principals are nominated by head of the district office since 2013 without any co-ordination with local representatives. The mess around re-nationalisation of schools, the curricula, the strengthening state control over teaching, restricted autonomy of principals, scarcity of resources are all factors triggering high fluctuation and declining quality of education.

- Programming and implementing regional and rural development programmes need active engagement of subnational and local actors. Currently, the relevant agencies, county councils (NUTS 3 level) and LEADER LAGs are capable, but vulnerable to political decisions of the Government and centrally managed agencies (managing authorities of EU funds). Technical details: tendered projects of the Operational Programmes are often too large for the rural municipalities. To be eligible at tenders, large consortiums would have to be organised which is not a viable alternative. Without sub-measures tailored to the needs of rural areas and dedicated allocations of funding, urban and metropolitan settlements will always win the race over scarce resources.

3.3.3. Local visions concerning future pathways and available policy support

According to the stakeholders, there is a small room for innovative solutions addressing shrinkage because local actors have very limited opportunities and means to influence the processes that shape population decline. However, some of our respondents (Interview no 3, 4, 8, 11) criticised local leaders because they failed to rely on innovative human capacities and ideas, and were not capable of or willing to develop coherent strategies in response to shrinkage. They identified some important factors behind this “reluctance” of municipalities to give innovative responses to shrinkage. 1) The lack of consensus regarding development concepts among local leaders, influenced by their political divisions. 2) The strong political

impact of the ruling party on local levels, especially in rural areas, and in line with this, 3) the attempts of the ruling party to establish local and regional clientele through the allocation of development funds. 4) They also mentioned recent centralisation processes which resulted in the constrained autonomy of municipalities and other local actors. (Local leaders in the town of Szentes and also majority of the staff of the Town Hall belong to the political opposition, this explains their views.)

Existing EU policies so far have not been exploited effectively by the town of Szentes and its rural hinterland in response to shrinkage. Local stakeholders hope long-term halting of population decline from the recently launched FAP, for which, after a three-year lag, settlements of less than 5 thousand inhabitants became eligible in 2019. Generally, municipalities apply for EU-funding to maintain and develop local infrastructure, renovate old buildings, renew public spaces etc. Programmes which attempt to directly address shrinkage (e.g. a local LEADER measure: Let's keep our young people home! in the CS area) are welcome but – as mentioned already – they provide insufficient resources to really mitigate the outmigration of young, educated people. Municipalities focus on creating and maintaining liveable environment for local residents hoping that this would help develop attachment to the locality and slow down outmigration.

Stakeholders in the CS area formulated some ideas, thoughts on a desirable future in which young people would stay or return.

- Digitalization would establish the possibility of teleworking also for highly qualified people if high-quality public services are available.
- The promotion of distance learning and support for online curses may provide a cost-effective solution for the limited educational and training opportunities of the local 'mortar-and-brick' educational institutions.
- The utilizing of old, abandoned buildings would create new workplaces, especially in the field of social services and elderly care (e.g. senior houses, houses for disabled persons).
- Housing programmes would retain more young couples in the localities by supporting them in the start of their independent life. In addition, housing programmes could retain and attract qualified professionals in the CS area.
- More emphasis must be put on projects and programmes, which address local youth in many ways: e.g. scholarship programmes, information on skills gap in the local labour market, involving young in decision-making processes, programmes that strengthen community cohesion and local identity and creating short-term job opportunities (summer job).
- Generally, there is a considerable demand for projects that reflect local needs, wishes and capabilities. Instead of top-down logic and approach, place-based approach and

participation of local stakeholders and the targeted community members need to be ensured in the planning phase as well as in the implementation phase.

- In fact, municipalities often submit applications according to the availability of funding resources because funding resources are not shaped according to the needs of rural settlements. Since most rural municipalities, especially villages lack own source revenues they would need broadly specified programmes or a more universal and strengthened application of CLLD (LEADER) approach enabling more autonomy on shaping the use of funding according to local needs.
    - Some stakeholders expressed how useful it would be to regularly discuss and coordinate the needs of the municipalities at the (micro-) regional or county level. This would facilitate local planning and the timing of development projects, and, no less important, would strengthen mutual confidence between stakeholders. Such wishes emerged after the dissolution of the micro-regional (LAU-1 level) municipality associations, the weakening of LAGs and inadequate activity on the part of county-level local authorities.
    - Others would have welcomed an increased level of competency and power at the county level in terms of planning and distributing funding sources, and monitoring local development projects, in effect, they suggest devolving policy making and implementation from the central level to the level of the counties (19 in number).

4 Matching local visions on future pathways of change with potential policy support

4.1 Towards future pathways: enhanced intervention logic based on innovative experience

Concerning future pathways and coping strategies, the picture unfolding from the interviews is rather balanced. The goal of attracting industries, preferable with high value added and demand for qualified labour is still on the top of priority list at least in the town. Desired interventions addressing the quality of life and improved public services are equally present in the thoughts of local actors. The two approaches to shrinkage – mitigation and adaptation – are not set as distinctive and mutually exclusive future pathways. Characteristic opinions have been collected from the interviews and are listed below:

1. "*Encourage people to have children, reduce the death-rate – improve health-care situation, life-style programmes, create possibilities for enjoyable sporting activities*" (Interview no 13, Interview no 10)
2. "*Make it easier to live here, create the possibility for the young to live independently here*" (Interview no 12), meaning that accessing first homes for young people has to be promoted (this is part of the programme of the LEADER LAG)
3. "*We need digital competency, possibilities for distance-working, the infrastructure necessary for this, and of course competitive language and professional knowledge. Retraining, further education, but most of all encouraging young people to have a voice*." (Interview no 9, Interview no 8)
4. "*The longer they stay in the town, the more they feel attached to it*." (Interview no 9.)
5. "*Improve the quality of life - develop local resources (community services, communal spaces), and improve access to non-local services (electronic access to service providers, better transport, longer opening hours*)" -(Everyone said this)
6. *"If we have workplaces we can attract people." (Interview no 4)*

From the above-expressed strong opinions, direct interventions targeting young people (giving them voice, improve housing opportunities to start independent life) speak for themselves, agreeing upon that young people need to be targeted directly by local policies, toward which the first step is calling them to participate and express their interests "*Nothing for them, without them*" was emphasised by one of our informants (Interview no 10), a middle-aged women in her early forties who is a founding member of a civic organisation (Women's Saloon) tasked with making women's voices heard in local decision-making processes and developmental issues. The ultimate ambition of members of Women's Saloon is to run a female candidate for mayor in the next election. Another female respondent (Interview no 11) has been managing a project (2018-2022) on enhancing local cohesion and identity, financed by the Territorial OP. The project is implemented in three remote parts of the town of Szentes (Magyartés, Lapistó, and Kanyárújfalu) and could be a model for future projects because it

focuses on strengthening the attachment of people to their neighbourhood and locality. Those who are active in local civic organisations and themselves miss a more vibrant community life sympathise with young people and try to "*empower them*".

The vision, rather a dream, of *Szentes as a school* town has been deeply rooted in local leaders' minds for decades; the idea is that the highly developed and uniquely dense presence of horticultural businesses of various sorts and scales, as well as the high level of expertise and intellectual property of gardeners, might be attractive to one of the agricultural universities that could establish a college faculty in the town. Quotation no 4 reflects on expected students who might settle in the place of their studies.

Switching *to indirect approaches*, quite a number of past and ongoing projects have aimed to increase the place-attachment of locals, enhance the convenience of everyday life, and exploit such advantages of rural life as short distances, close-by public services and leisure activities (sports, bathing, cultural events). In the previous programming period, the town centre was almost completely renovated, with the exception of two old buildings: one of them served as a hotel, the other as a theatre fifteen years ago. These precious buildings were refurbished recently from Territorial OP grants (one of them is a stand-alone project, the other is part of the CLLD). Both projects seek to satisfy desires of the local middleclass for a *livelier cultural and community life*; they are those members of the local society whose children are educated in Szeged or in Budapest and do not return mainly for three reasons: lack of (i) jobs correspondent with their education and (ii) a vibrant cultural life, and (iii) high real estate prices. The above-listed wishes to *attract new investments* with high value-added offering appropriate *jobs* for educated young and middle aged professionals are on the same track as "*quality of life*" issues, they both address population decline indirectly.

Since the location of the town and its surroundings, accessibility problems, and poor road networks in particular were listed among main causes of shrinkage, intentions to improve road networks (Interview no 19) should be mentioned among *conditions* that might contribute indirectly to retaining population in the future (through achieving a better spatial position for the area, better commuting, transporting, etc. possibilities.)

No alternative track of adaptation-approach emerged in either the interviews, or the minds of the co-authors of this report during fieldwork, despite its high relevance: a "back to our roots for the sake of future" scenario would suggest an agriculture-based development path based on the sector, which is still very successful, especially its intensive gardening component, which relies on local human and physical resources (skills, enthusiasm, land, geothermal energy) and is tied to the locality. This scenario could be built upon innovative investments targeting safer production in the context of climate change, since the area is already very much exposed to heat waves and other consequences of rising temperatures. The 80–100 large intensive horticultural farms and the same number of smaller agricultural enterprises represent high value in the CS area, not only in economic terms, and have played an important role already in mitigating outmigration form the case study area. Unfortunately, the

Coronavirus swept away the Focus Group scheduled for the 18th of March, rendering it impossible to check this alternative pathway with stakeholders.

4.2 Broadened and more suitable policy support

It is probably not so much a question of broadened or more suitable policy-support, as one of much better-performed policy-support that would help the case study area *to live with (and adapt to) shrinkage* in such a way that the retained population did not feel like losers in comparison with those who left, but rather could exploit opportunities and enjoy what is provided by this particular rural environment. Mismanagement of EU funds has been mentioned several times in this report and will be discussed in detail in the next chapter, along with other issues closer to the topic of governance. In this chapter, we restrict ourselves to missing policy tools that might, in the future, be suitable for the case study area, *ITI* is the first, the *Smart Village Programme* is the second, and the *Hungarian Town Programme*, which has the status of a 'work in progress' at the time of writing, is the third.

1. *Integrated Territorial Investment* (ITI) has been missing so far in Hungary from the palette of delivery mechanisms of EU policies, but the Integrated Territorial Programme (ITP), used as a technical tool for "regionalising" the centralised Territorial OP, can help getting closer to ITI, even a pilot phase can be initiated in the next programming cycle. This suggestion emerged in the already mentioned independent evaluation of ITP. These planning artefacts were elaborated at county level to optimise absorption of regional development funding and harmonise with development goals. ITP already permits 'focused funding against different headings, such as (i) development objectives, (ii) types of beneficiaries, (iii) geographical positions, (iv) settlement types. Since this type of funding is not mandatory in the present cycle, the take-up rate across counties is between zero and 65%. (HBH 2018: 13) Following this path, setting minimum usage thresholds and developing it further might lead to a truly integrated way of planning/programming. There are, for example, two strategic goals of the ITP for Csongrád county relevant from the point of view of the case study area, but they were implemented at best partially:

   T2. Complex land management and the formation of integrated (functional) urban areas

   T3. Social renewal and diversified economic development in the Tiszántúl based upon the co-ordinated development of areas of market-towns

   Both priority goals suggest a territorialised development-concept based on organic relationships between towns and their surroundings. From this position, ITI is just some steps ahead. If, in the absence of ITI, a territorially integrated approach to planning of this kind is nevertheless implemented in the coming years, it would represent a big step forward in the context of fragmented spatial structures and uneven settlement-chances to

enter a path guaranteeing decent progress and the capability of population-retention. Such a chance could restore to some extent sub-regional municipality collaboration at the district level.

2. Very little is known about *the Smart Village Programme,* which is still in a pilot phase both in Hungary and in the EU. In Hungary, the first steps were taken by starting a pilot programme in 2018 designed to facilitate the nationwide implementation of the Smart Village programme in the 2021-2027 EU cycle. The pilot called Smart Hegyhát was initiated by the mayor of a small village and involves five settlements of the Micro-regional Union Észak-Hegyhát (located in South Transdanubia). The ultimate goal of the Programme is to restore the demographic balance of local communities, and counter ageing and shrinkage (Varga 2019, Gáspár 2019).It is worth mentioning that the Micro-regional Union Észak-Hegyhát was selected because of its innovative leader (a mayor of one of the villages who organized and chairs the Union), and its professional staff. The concept targeted a sustainable micro-regional economic model and an attractive environment for potential newcomers.

   According to legislative proposals for the next programming period (2021-2027), the Smart Village concept will not be directly supported by the EU. However, member states can implement the concept by supporting it from EAFRD measures and existing tools (CLLD, LEADER) if their funding can be increased proportionately. Meanwhile, a more complex community level strategy was formulated, when the 'Shaping Europe's digital future' was announced in February 2020. This strategy has a broader spatial and thematic focus: to tap into Europe’s digital growth potential by achieving the EU 2025 connectivity objectives. The new EU Multiannual Financial Framework will contribute to these objectives by means of the structural and rural development funds.

3. Even less is known about the *Hungarian Town Programme* which is prepared by the same NGO (Alliance of Local Governments), which elaborated the Hungarian Village Programme. It is most likely that the new programme will provide similar funding opportunities for middle-sized towns with simplified tendering procedures, 100% aid rate and relatively small grants for targets not supported by EU resources.

4.3 Enhanced governance approaches

Discussions about the simplification of administrative rules in the implementation of both cohesion and rural development policies of the EU are currently taking place (“shorter, fewer, clearer rules”). Every single step in this direction has a great significance for rural areas because most of them struggle with the complexity of accessing EU resources since they typically lack adequate information, knowledge and administrative capacity. As compared to

the current programming cycle, the emphasis on local development will be increased in the next programming period (Objective No 5), but to reach a significant impact, at least some specific goals need to be promoted in the coming Hungarian Territorial Development OP, in order to secure a more balanced set of measures and tools in favour of improved rural-urban connectivity. Moreover, some of the measures should be "dedicated" to rural applicants, permitting competition exclusively between rural applicants from towns and villages with similar needs and competing capabilities, otherwise cities will quickly and efficiently absorb most resources.

> Illustration: The mayor of Székesfehérvár (county seat) said in a discussion of the Monitoring Committee of the Territorial OP recently: "*there is a legitimate competition between cities and other settlements, whether we consider the national or the European level. All city leaders and settlement leaders wherever in the world want to give everything possible for their citizens at the given level of development*" (Minutes of the Monitoring Committee, 28,11,2019, p4) This was part of his response to the President of the TÖOSZ, the largest municipal alliance, who raised the issue of the gap in level of preparedness for tendering between the largest cities and rural areas, and suggested shifting the focus of territorial development policy from the largest 23 cities to the 173 district centres, and also ensuring investment that integrated the rural hinterland of these small or middle-sized towns. He strongly criticized the huge amount of funding spent on the "Modern City Programme" and blamed big cities for neglecting their rural surroundings, thus inevitably speeding up urbanisation appearing as outmigration in rural areas. "*It is time*, he said, *to change from development based on isolated investments to territorial development based on "town-regions*" (Functional Urban Areas). (Minutes of the Monitoring Committee, 28,11,2019, p4)

Building the delivery of territorial development policy *on functional urban areas* (FUAS) is of course an old corner-stone of European cohesion policy since the European Spatial Development Perspective (1999), but it has not been systematically applied in Hungary, despite the concept being ready to put in practice. Right before the outbreak of the Global Financial Crisis in 2008, a concept of spatial development based on FUAS was in fact developed. 110 FUAS were delineated and clustered into four main groups according to the size of town centres and their hinterlands. (Faragó, 2008) Sadly, the concept was swept by the crisis and then by the fundamental reorganisation of spatial structures in Hungary that tore existing linkages apart (See Chapter 1.5.2), atomised the settlement system and weakened municipalities by reducing their mandates/competencies over local issues through the re-nationalisation of basic public services (education, health care, social care, refuse disposal, energy-supply).

There is some hope, however, since, according to the 25th article of the EC Regulation of the European Parliament and of the Council on the ERDF and on Cohesion Funds, a minimum

target of 6% of ERDF resources should be spent under the “Investment for jobs and growth” goal for integrated territorial development „in order to more effectively tackle the economic, environmental, climate, demographic and social challenges affecting urban areas, including functional urban areas while taking into account the need to promote rural-urban linkages”. (Article 25, p15, COM (2018) 372 final; 2018/0197 Cod) On the other hand, the emphasis here is obviously on urban development (no article is dedicated to rural development; rural areas are mentioned only four times in the document, etc.) Objective number 5 – Europe closer to citizens by fostering the sustainable and integrated development of urban, rural and coastal areas – is, however, worth highlighting, especially its Section II which mentions not only rural areas as target areas of integrated territorial development (beyond urban and costal areas) but CLLD is also named as an approach through which integrated development can be achieved.

As far as CLLD as a delivery mechanism is concerned, it is still in a pilot phase in Hungary under the co-financing of ESF and ERDF. Of the 106 towns and cities with more than 10,000 inhabitants, 97 towns run 99 CLLD Programmes (Szeged and Miskolc run two programmes). Funding for the CLLD programmes is modest, only one single theme is addressed in each (local culture), which complies with the strategy of “adaptation” of shrinking rural towns. Complaints of the locals relate to the small amount of funding (approx. 500 million HUF, = 1,6 Million EUR), and their reasons are the same as in case of the LEADER Programme: it is a fragmentation of an already relatively small amount of allocated funding resource due the lack of project selection. According to the original intentions, only half of the eligible towns and cities would have been selected, but, in the end, each application was supported, thus the budget per project was halved. This explains a suggestion of one of the Commission’s delegates at the Monitoring Committee discussion. „*We must return to the original idea behind the CLLD, which formulated the conception that it should not be a programme which had national extent, but a programme referring to 30-40 groups situated in different locations within the country. On the part of the European Commission, he was of the opinion that the CLLD could lose its credibility in Hungary and the actors on the ground would not consider it as a possible measure to be implemented*.” (Monitoring Committee, 28,11,2019 p7). Avoiding the selection of applicants was a feature of clientele-building, which was already the case in 2007 when the same decision was made in relation to the LEADER Programme (when a left-wing-liberal coalition was in power).

Since both LEADER and CLLD play key roles in EC regulations for the next programming cycle, it needs to be emphasised that without a critical mass of financial support, potentials and positive impact of these policy tools will not be realised, rather, even the small amount of funding gets wasted.

Delivery of the LEADER Programme should be improved fundamentally in the next programming period; implementation has to be adjusted to the size of funding resources. If 100% of rural territory is covered (this means approximately 100 action groups), additional

financial must be given to LAGs in a similar way as during the 2007-2013 period when LAG agencies could earn their maintenance costs via managing Axis III measures of the Rural development Programme. Similarly, in the current cycle, LAGs could manage at least the measures of basic services and tourism. This would be more than nothing. There are other viable solutions, too, such as merging agencies or diversifying their activities in other ways through moving to the “market” and thus increasing financial autonomy.

So far each political shift and/or each programming period brought with it fundamental reorganisations, a shrinking of institutional and human capacities, and a troublesome as well as long transition from one iteration of the Programme to the other. The current (2014–2020) period was the worst ever, when the Paying Agency lost its institutional autonomy and was subsumed under the Treasury; its regional branches (NUTS 2 tier units) were closed down in 2012, and its IT system was completely renewed causing an intolerably lengthy delay of four years before awarding grants to the selected projects could be started. So far there is no evidence of change in the attitudes of policy makers; LEADER continues to be part of the EAFRD funding in 2021-27, this is acknowledged by authorities but nothing has started yet, and least of all has any intention to change the current practice been revealed.

What has emerged from discussions with local stakeholders and perhaps deserves mentioning here was the gap between rural (CAP Pillar II) policies and territorial development policies. The resulting inadequate synergies are the consequence of EU-level rigidity both concerning co-financing rules between the CAP and the Structural Funds (expected to be even more rigid in the next programming cycle) and the consequent institution system, namely its rather strict separation of managing authorities, paying agencies, etc.

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The Hungarian case study does not provide either positive or innovative responses in respect of collaborative structures and innovative approaches. There is perhaps one exception from the rule the Hungarian Village Programme, a badly needed nationally finances programme, launched in 2018, addressing rural areas and specifically rural shrinkage through the albeit indirect measures of developing road networks, public services, and a direct measure of Family Protection Action Plan, which was made accessible for villages and small towns of less than five thousand inhabitants with a three year gap (See Chapter 3.1.1). Innovation was achieved through the bottom-up design of the Program by the largest municipal alliance, which explains its extremely fast realisation. The same NGO is currently designing the Hungarian Town Program for middle-sized towns as mentioned in the previous chapter.

5 Policy recommendations

Due to sound centralisation and extreme concentration of power at the centre, little reminders have remained from collaboration-based planning and programming at all levels of government. This tradition should be 'reloaded' so that policy tools aimed at reducing population decline could be elaborated on a collaborative basis. The output of the action would not be a complete development concept or strategy, rather, a set of crystallized thoughts discussed through at several meetings and drafted in a short document. An equally important outcome would be the group of revitalised and organised local actors ready to participate in programming once it starts related to the territorial OP, LEADER, CLLD.

In other words, policy recommendations should be forged in the frame of a preliminary collaborative planning.

5.1 A collaborative framework for developing local policy recommendations

The below details are suggestions, local stakeholders must be agreed upon them.

I. Territorial scope: the area of Szentes district

II. Thematic scope (co-operating partners by working groups):

1. Internal stakeholders
    - Municipalities: mayors and competent development agencies / NGO-s / employees of municipalities (WG of 7 members)
    - Representatives of public services (health care, education, social care – WG of 5 members)
    - Local businesses (association of craftsmen, representatives of chambers, invited representatives of firms – agriculture, representatives of emblematic SMEs, local service-providers WG of 10 members)
    - Civic organisations including LEADER and CLLD LAGs (WG of 10 members)
    - MP of the area, member in the County Council, other elected representatives and "notabilities"
2. External partners
    - Influential municipality leaders and other stakeholders in the neighbourhood
    - Chairperson of the County Council and experts

III. Topics to be raised and discussed in WG-s and "General Assemblies"

a. Visions and overarching goals to be achieved

i. Demographic goals: stopping, slowing down or live with population decline

b. Direct policy goals and measures (if apply)

i. Means and actions aimed at retaining local population and attracting external population

ii. Ways of decreasing competition between the town of Szentes and surrounding villages for new settlers; is there any chance for a win-win option?

c. Fields indirectly influencing population decline through quality of life

i. infrastructure,

ii. public spaces,

iii. public services,

iv. sports, community life

v. community and social work

IV. Assessment of local resources (to be based upon) and external resources (to be achievable through tenders)

V. Policy tools and measures aimed at enhancing quality of life (useful anyway)

a. How LEADER could be reloaded; assessing the demand for skilled developers in the LAG'S territory (two districts)

b. Lessons learned from CLLD; framing next steps

c. How to participate actively in county level planning (concept, programme, ITP)

VI. Drafting the output of the action (preliminary collaborative planning) on the basis of

a. WG discussions

b. Meetings of WG representatives (Internal stakeholders)

c. Targeted discussions with external partners

d. Meetings of internal and external partners

The plan was that we would go through III-IV-V chapters of the above draft with stakeholders at the FG but unfortunately, the FG scheduled for March 18, 2020 in Szentes, was cancelled because of the Coronavirus.

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5.2 Policy recommendations

Thoughts of our interview partners concerning desired ways and directions local policies should take aiming to mitigate shrinkage or being able to live with population decline have been drafted in the previous chapters. Lacking the opportunity of discussing realistic policy options with local stakeholders, authors of this case study collected some possible policy actions relevant from the point of view of rural shrinkage. The items if the below list do not target either of the most characteristic strategies, that is mitigation of or adaptation to shrinkage. The collection aims simply a better local governance, enhanced and better-working planning capacities in a way that mobilises local people and resources for the benefit of the area and its inhabitants.

Potential policy tools addressing shrinkage in the Szentes district.

A collection of external suggestions

The local policy arena should be revitalised and professionalised!

- Those layers of the population, which are key from the point of view of population decline must be approached and called for open discussions. A platform for dialog with young people, parents and young adults should be launched where their needs and constrains of meeting revealed needs are to be discussed.
- Internal and external networks, policy (even politics)-related and neutral ones must be broadened, strengthened and activated for acquiring more resources aiming at maintenance and development of the area.
    - Broadened internal networks should cover those local actors who are in a position of controlling / operating endogenous resources and are able to offer opportunities for a better use of these resources foe common interests;
    - Extended and strengthened external (horizontal and vertical) networks linking agents engaged in development could ensure better access to information (and at the end, to external resources); they also might contribute to better-working governance through collaborative work and publicity; in the Hungarian contexts, sub-regional co-operation of municipalities needs to be revitalised and connections with county (NUTS-3) level agents (county council, development agencies) have to be enhanced.

- Human capacities working with planning and development should also be strengthened at strategic areas, like local and regional development, tourism, housing, child-care, etc.

- Most important policy fields to be addressed in the Szentes districts are as follows:
  - ***Housing:*** the stock of dwellings should be extended and renewed through
    - new housing developments by private investors targeting the middle-class;
    - refurbished old (or abandoned) housing stock by public investment aiming to
      - ensure rentals as means of affordable housing for the local youth;
      - provide intermediate housing opportunities to newcomers (immigrants, migrant workers);
  - **Entrepreneurship**: opportunities for self-employment should be broadened through promoting micro-scale enterprising in various fields of activities ranging from trade to tourism and provisioning of different services;
  - ***Public spaces, local culture***; parks, sports opportunities, cultural centres/houses should be maintained and developed further in order to secure lively local community life;
  - ***Public services*** – an overall strategy of affordable and high quality public services should be developed on a collaborative basis with maintainers, managers and representatives of the clientele;
  - Demand of a ***better exploitation of thermal energy*** (for a thermal bath? economic purposes?) was raised by many interviewees; a careful assessment of development opportunities needs to be launched.

- **(Self-)evaluation of development programs/projects**, especially the larger ones and those in a pilot phase is necessary to increase learning, designing and co-operating capacities related to local development. For example, lessons could be mutually learnt from sharing experiences with regard designing and implementing development activity of Local Action Groups (LEADER and CLLD programmes of two neighbouring towns) of the area.

Conclusions

Szentes and its rural hinterland has been shrinking significantly as an outcome of outmigration and low fertility rates. Over the past 15 years, the number of permanent residents of Szentes has decreased by 12%. The accelerating pace of outmigration has an important role in the decline, affecting primarily the more educated, motivated and younger population. This selective outmigration contributes to a vicious circle: the proportion of women of childbearing age has been constantly decreasing, resulting in decreasing fertility rates, and contributing to the aging of the population. The ageing index increased from 127% in 2001 to 190% in 2011, and to 213% in 2017. At the same time, the proportion of active-age people (15-64 years old) in the total population is declining at an accelerating rate, after 69% in 2001 it was still 68% in 2011, but it dropped to 63% by 2017. Data indicate that in the rural hinterland of Szentes an even faster speed of shrinkage is present.

Shrinkage in Szentes and its surroundings is caused by (1) *the geographical location* of the area (inner-periphery) and economic and accessibility weaknesses that stem from it, (2) *legacies of earlier rounds of population loss* (catalysed mainly by collectivisation and urbanisation from the 1950s to the 1970s), (3) recent *urbanisation effects* (outmigration to cities) as well as (4) *globalisation effects* such as circular migration and/or emigration to the West. The increasing drain of the qualified and young population is heavily contributing to constrained development capacities (shortage of human capital) and labour shortages in general, seriously threatening production in all economic sectors in the town and in the villages. According to expectations, however, the labour shortage, at least in the largest food industrial plant, will be reduced soon due to the automation of production lines. If this grows into a trend in the medum term, the shortage of unskilled and semi-skilled labour will soon turn into excess labour and increased unemployment rates fuelling further outmigration.

Mitigation and adaptation equally have been considered by leaders of Szentes as coping strategies for the present day and for the future. Three priorities for local development have been formulated in Szentes by the municipality leaders: (1) attracting investments bringing higher value-added industries to the town that could generate higher wage levels and higher-prestige jobs, thus mitigating outmigration of young and qualified people. This is obviously a mitigation strategy (2) The town-hall also prioritises further strengthening high-quality and wide-ranging public services, which seems to stand between mitigation and adaptation goals. This priority can hardly come true in the current context when control over such major public services as education, health care has shifted from the local government to the state from 2013. January. (3) The third priority of the local development strategy seems to stand closer to adaptation, by enhancing natural values and the close-to- nature environment, offering liveable residential areas for the remaining middle-class and healthy and suitable opportunities for recreation for the locals and tourists. One alternative to adapting to shrinkage has not emerged either in the interviews, or in the thought of the co-authors of this report despite its high relevance: a “back to our roots for the sake of future” scenario

suggesting an agriculture-based development path based on the sector which is still very successful, especially intensive gardening, which relies on local human and physical resources (skills, enthusiasm, land, geothermal energy) and is tied to the localities. This alternative scenario has to be discussed with local stakeholders in the focus group.

At the time of writing, the capability of the town and villages in the rural hinterland to attract significant funding resources either from EU (ERDF, CAP Pillar II) or national resources is highly uncertain. EU funding will be diminished (Structural Funds by -24%, CAP Pillar II decrease is estimated between 16-25%) and more specified than before, which does not seem to be promising. Delivery mechanisms, mainstream (of the territorial operational programme) and specific, like CLLD and LEADER, will probably will not bring much more funding and vibrancy to the area as is currently the case because they are and will probably be poorly funded. On the other hand, national resources will probably be increasing, at least in the short run through the Hungarian Village Programme currently in force and the Hungarian Town Programme the design of which is in progress. Therefore the capability of harmonising / combining funding resources will also be of high importance. It has to be emphasised that the most influential national program directly impacting shrinkage, the Family Protection Action Programme, has been available in Szentes since 2016 and has been made available for the village inhabitants in 2019 through the Hungarian Village Programme. Its accessibility therefore seems safe.

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Appendix Figure 6.10 Spectacular riverbank in Szentes (Kurca)

Appendix Figure 6.11 Szentes town centre

Appendix 1 – Population change and migration trends in Hungary

Appendix Table 1.1 Population change and migration trends in Hungarian municipalities according to legal status, 1949–2011

Population							
	1949	*1960*	*1970*	*1980*	*1990*	*2001*	*2011*
Capital	1,590,316	1,783,167	2,001,083	2,059,226	2,016,681	1,777,921	1,729,040
County seats	987,179	1,203,946	1,511,591	1,813,085	1,859,228	1,827,203	1,770,174
Cities with county rights	139,184	180,810	221,778	263,837	262,681	269,550	267,736
Towns	2,631,427	2,912,456	3,067,590	3,318,017	3,253,899	3,295,913	3,241,215
Large villages	494,210	510,679	481,248	466,970	440,806	465,093	461,745
Villages	3,294,808	3,283,314	2,959,934	2,706,310	2,460,921	2,478,340	2,378,543
Migration balance							
		1949-1960	*1960-1970*	*1970-1980*	*1980-1990*	*1990-2001*	*2001-2011*
Capital		129,450	235,643	58,637	55,701	-111,652	25,942
County seats		115,946	243,656	178,877	12,080	-6,208	-12,210
Cities with county rights		36,073	33,766	25,447	-4,357	11,620	5,881
Towns		-19,231	3,512	74,492	-75,541	116,929	55,951
Large villages		-48,306	-57,452	-32,910	-17,554	40,552	15,389
Villages		-372,387	-458,145	-316,207	-161,285	140,096	29,065
Net migration rate (percent)							
		1949-1960	*1960-1970*	*1970-1980*	*1980-1990*	*1990-2001*	*2001-2011*
Capital		8.1	13.2	2.9	2.7	-5.5	1.5
County seats		11.7	20.2	11.8	0.7	-0.3	-0.7
Cities with county rights		25.9	18.7	11.5	-1.7	4.4	2.2
Towns		-0.7	0.1	2.4	-2.3	3.6	1.7
Large villages		-9.8	-11.3	-6.8	-3.8	9.2	3.3
Villages		-11.3	-14.0	-10.7	-6.0	5.7	1.2

Appendix Table 1.2 Population change and migration trends in municipalities of Szentes district, 1949–2011

Population							
	1949	*1960*	*1970*	*1980*	*1990*	*2001*	*2011*
Árpádhalom	1,709	1,472	1,116	815	676	609	526
Derekegyház	2,322	2,435	2,245	2,221	1,949	1,791	1,621
Eperjes	2,397	2,128	1,480	1,104	840	665	539
Fábiánsebestyén	2,996	2,944	2,526	2,517	2,422	2,278	2,039
Nagymágocs	5,180	5,032	4,443	4,090	3,719	3,435	3,103
Nagytőke	1,259	1,334	1,016	716	587	521	412
Szegvár	7,580	7,046	6,307	5,838	5,260	4,913	4,579
Szentes	32,769	33,552	33,910	35,317	32,891	31,638	28,509
Migration balance							
		1949-1960	*1960-1970*	*1970-1980*	*1980-1990*	*1990-2001*	*2001-2011*
Árpádhalom		-233	-479	-368	-144	-44	-42
Derekegyház		124	76	254	-142	59	10
Eperjes		-596	-813	-457	-274	-127	-27
Fábiánsebestyén		-565	-641	-194	-95	-57	-117
Nagymágocs*		-721	-319	105	460	629	498
Nagytőke		-76	-378	-353	-130	-50	-71
Szegvár		-1,003	-773	-430	-303	20	-51
Szentes		-1,235	-32	472	-1,923	-204	-1,583
Net migration rate (percent)							
		1949-1960	*1960-1970*	*1970-1980*	*1980-1990*	*1990-2001*	*2001-2011*
Árpádhalom		-13.6	-32.5	-33.0	-17.7	-6.5	-6.9
Derekegyház		5.3	3.1	11.3	-6.4	3.0	0.6
Eperjes		-24.9	-38.2	-30.9	-24.8	-15.1	-4.1
Fábiánsebestyén		-18.9	-21.8	-7.7	-3.8	-2.4	-5.1
Nagymágocs*		-13.9	-6.3	2.4	11.2	16.9	14.5
Nagytőke		-6.0	-28.3	-34.7	-18.2	-8.5	-13.6
Szegvár		-13.2	-11.0	-6.8	-5.2	0.4	-1.0
Szentes		-3.8	-0.1	1.4	-5.4	-0.6	-5.0

* The positive migration balance and net migration rate of Nagymágocs is mainly associated with the operation of a local nursing home

Appendix 2 – Key projects (programmes) impacting shrinkage in the CS area

Appendix Table 2.1 Projects granted from the Territorial OP in the CS area

Awarded grants, Territorial OP, 2017–2020 March							
Content of development	**Location**	**Applicant**	**Amount of grant (€ – 310 HUF/Euro)**	**Fund**	**EU co-financing rate**	**Aid Intensity**	**Timeline**
Industrial parks	Árpádhalom	Municipality	410,750	ERDF	89%	100%	2017-2019
	Szentes	Municipality	1,177,419	ERDF	89%	100%	2017-2019
Developing local economy	Szentes	Municipality	806,452	ERDF	85%	100%	2017-2019
Green town creation	Szentes	Municipality	1,056,505	ERDF	89%	100%	2016-2020
Infrastructural development aiming environmental protection	Nagymágocs	Municipality	64,516	ERDF	89%	100%	2017-2017
	Nagytőke	Municipality	50,395	ERDF	89%	100%	2017-2017
Sustainable development of tourism	Szentes	Municipality	3,548,387	ERDF	85%	100%	2017-2019
Public transport development addressing mobility of labour	Szegvár	Magyar Közút (State agency)	3,303,226	ERDF	89%	100%	2018-2019
Sustainable transport development	Szentes	Municipality	1,362,903	ERDF	85%	100%	2017-2020
Enhancing energy efficiency of municipal buildings	Derekegyház	Municipality	317,323	ERDF	85%	100%	2017-2017
	Fábiánsebestyén	Municipality	387,097	ERDF	85%	100%	2017-2017
	Nagymágocs	Municipality	296,402	ERDF	85%	100%	2017-2017
	Szegvár	Municipality	658,491	ERDF	85%	100%	2017-2017
	Árpádhalom	Municipality	258,065	ERDF	85%	100%	2017-2017
Improving quality of life, employment	Árpádhalom	Municipality	161,290	ERDF	89%	100%	2017-2018

rate through developing public services (establishing and refurbishing nurseries, kindergartens, multifunctional institutions, school kitchen)	Derekegyház	Municipality	193,548	ERDF	89%	100%	2017-2018
	Fábiánsebestyén	Municipality	96,774	ERDF	89%	100%	2017-2018
	Nagymágocs	Municipality	322,581	ERDF	89%	100%	2017-2018
	Szegvár		354,839	ERDF	89%	100%	2017-2018
	Szentes	Cath. Church	177,284	ERDF	89%	100%	2018-2019
Basic health care provision	Derekegyház	Municipality	177,351	ERDF	85%	100%	2017-2017
	Fábiánsebestyén	Municipality	161,290	ERDF	85%	100%	2017-2018
	Nagymágocs	Municipality	83,871	ERDF	85%	100%	2018-2019
Establishing and enlarging nurceries	Szentes	Katholic kindergarten	1,290,322	ERDF	89%	100%	2019-2022
	Szentes	Calvinist Church	1,290,323	ERDF	89%	100%	2019-2022
Basic social care provision	Árpádhalom	Municipality	32,258	ERDF	85%	100%	2017-2017
	Derekegyház	Municipality	193,548	ERDF	85%	100%	2017-2017
	Nagymágocs	Municipality	161,290	ERDF	85%	100%	2017-2017
Enhancing local identity and community cohesion	Árpádhalom	Municipality	112,903	ESF	85%	100%	2017-2022
	Nagymágocs	Municipality	70,968	ESF	85%	100%	2017-2022
	Szegvár	Municipality	161,290	ESF	85%	100%	2017-2022
	Szentes	Municipality	64,516	ESF	85%	100%	2017-2022
CLLD	Szentes	Municipality	193,548	ERDF	95%	100%	2018-2020
	Szentes	Municipality	438,710	ERDF	85%	100%	2019-2020
Total			**19,436,436**				

Appendix Table 2.2 Projects granted from the Local LEADER Programme

Awarded grants, Local LEADER Programme, 2019 October, 2020 March						
Location	**District**	**Applicant**	**Grant awarded (€ – 310 Ft/Euro rate)**	**EU co-financing rate**	**Aid intensity**	**Date of Grant agreement**
Csanytelek	Csongrád	Micro enterprise	11,182	90%	60%	2020
Csanytelek	Csongrád	Municipality	12,903	90%	85%	2019
Csanytelek	Csongrád	Municipality	12,903	90%	85%	2019
Csanytelek	Csongrád	Municipality	6,564	90%	85%	2019
Csanytelek	Csongrád	Local civic org.	3,496	90%	85%	2019
Csongrád	Csongrád	Municipality	12,890	90%	85%	2019
Csongrád	Csongrád	Municipality	12,903	90%	85%	2019
Felgyő	Csongrád	Micro enterprise	10,709	90%	60%	2019
Csanytelek	Csongrád	Micro enterprise	2,037	90%	60%	2020
Felgyő	Csongrád	Municipality	12,784	90%	85%	2019
Felgyő	Csongrád	Dev. Agency	12,799	90%	60%	2019
Felgyő	Csongrád	Private person	3,801	90%	50%	2019
Csongrád	Csongrád	Local civic org.	9,291	90%	85%	2019
Csongrád	Csongrád	Private person	5,473	90%	50%	2019
Csongrád	Csongrád	Private person	25,740	90%	50%	2019
Csongrád	Csongrád	Micro enterprise	4,851	90%	60%	2019
Felgyő	Csongrád	Private person	19,757	90%	50%	2019
Tömörkény	Csongrád	Municipality	10,702	90%	85%	2019
Tömörkény	Csongrád	Local civic org.	7,491	90%	85%	2019
Árpádhalom	Szentes	Municipality	15,660	90%	85%	2019
Árpádhalom	Szentes	Municipality	9,609	90%	85%	2019
Árpádhalom	Szentes	Municipality	9,924	90%	85%	2019
Szentes	Szentes	Micro enterprise	25,806	90%	60%	2020
Derekegyház	Szentes	Municipality	12,043	90%	85%	2019
Derekegyház	Szentes	Dev. Agency	9,632	90%	60%	2019
Derekegyház	Szentes	Local civic org.	3,055	90%	85%	2019
Nagymágocs	Szentes	Private person	3,160	90%	50%	2019
Derekegyház	Szentes	Private person	10,423	90%	50%	2019
Szegvár	Szentes	Local civic org.	12,901	90%	85%	2019
Nagymágocs	Szentes	Private person	16,250	90%	50%	2020
Nagymágocs	Szentes	Municipality	9,784	90%	85%	2019
Nagymágocs	Szentes	Municipality	16,129	90%	85%	2019
Szentes	Szentes	Private person	3,534	90%	50%	2019
Nagymágocs	Szentes	Micro enterprise	21,871	90%	60%	2019
Szegvár	Szentes	Municipality	16,129	90%	85%	2019
Szegvár	Szentes	Municipality	15,968	90%	85%	2019
Szegvár	Szentes	Municipal agency	4,686	90%	60%	2019
Szentes	Szentes	Municipality	9,677	90%	85%	2019
Total			**424,520**			

Appendix Table 2.3 Projects granted from the Cohesion Fund in the CS area

Awarded grants from the Cohesion Fund, 2017-2017						
Content of development	**Applicant**	**Location**	**Fund**	**Amount of grant (€ – 310 HUF/Euro)**	**EU co-financing rate**	**Aid Intensity**
Energy modernisation-1	Hospital (Szentes)	Szentes	Cohesion Fund	342,378	89%	100%
Energy modernisation-2	Hospital (Szentes)	Szentes	Cohesion Fund	335,178	89%	100%
Water supply	State Agency	Fábiánsebestyén	Cohesion Fund	7,652,576	89%	100%
Flood protection	State Agency (Vízügyi Főigazgatóság)	Szentes	Cohesion Fund	38,700,050	89%	100%
Setting up Climate Strategy	Municipality	Szegvár	Cohesion Fund	64,211	89%	100%
Environmental awareness raising action	Local NGO	Szegvár	Cohesion Fund	16,129	89%	100%
Total				**47,110,522**		

Appendix Table 2.4 Projects granted from the Human Resource Operational Programme in the CS area

Content of development	Applicant	Location	Fund	Grant awarded (€ - 310 Ft/Euro rate)	EU co-financing rate	Aid intensity
Recreational sports as preventive health care	NGO	Szentes	ESA	806,452	85%	100%
Infection Control	Hospital (Szentes)	Szentes	ESA	192,360	85%	100%
Further education of doctors	Hospital (Szentes)	Szentes	ESA	173,016	85%	100%
Human resource development (hiring more doctors)	Hospital (Szentes)	Szentes	ESA	350,874	85%	100%
Refurbishing municipal rental apartments	Municipality	Szentes	ERDF	96,736	85%	100%
Mentoring Young Roma Students	NGO	Szentes	ESA	95,726	85%	100%
Changing the roof over the Gymnasium	State agency (KLIK)	Szentes	ERDF	483,868	85%	100%
Feeding scool children	NGO	Szentes	ESA	64,516	85%	100%
Feeding scool children	NGO	Szentes	ESA	64,516	85%	100%
Feeding scool children	Calvinist church	Szentes	ESA	63,461	85%	100%
Feeding scool children	NGO	Szegvár	ESA	64,374	85%	100%
Refurbishing the local castle for making suitabe for community events	Municipality	Árpádhalom	ERDF	64,278	72%	100%
Enhancing toolkits of non-formal education	Calvinist Church	Szentes	ESA	241,837	85%	100%
Increasing social work at schools and kindergartens in the district	Family Care Centre	Szentes	ESA	129,032	85%	100%
Digitalisation at schools	Calvinist Church	Szentes	ESA	354,376	85%	100%
Replacement of Home Care Institution of children with disabilities	State agenvy	Nagymágocs	ERDF	3,387,097	85%	100%
Total				**6,632,520**		

Appendix 3 – Institutional mapping

Appendix Table 3.1 Table for Institutional/Actor Mapping exercise

Name of actor/ organisation	Type of stakeholder (public, private, civil society)	Territorial scale the actor / organisation mostly operates at	Short description of organization	Responsibilities regarding regional/rural development	Specific tasks and actions regarding to mitigation of /adaptation to population shrinkage in particular	Any specific impact/result of this organization's activities with regard to mitigation of/ adaptation to shrinking	Formal or Informal	High, Low	High, Low	Main cooperation partners? Names?
Ministry of Finance (Pénzügyminisztérium)	public	National	Chief government authority responsible for regional development; through the Chief Department for Regional Development and Spatial Planning it is responsible for generating, evaluating and updating national territorial development concepts and other frameworks that help diminish territorial disparities.	One of the state secretariats of the Ministry is responsible for the absorption of EU transfers. Chief works under this secretariat.	The Managing Authority for the Territorial OP is located under this state secretariat; CLLD management within the Territorial OP works here as well. Economic Development and Innovation OP is also managed in the Ministry.	Only indirect impact can be identified. The Ministry is the key government institution that keeps regional development running in Hungary.	F	H	H	Ministries, government departments
Ministry of Agriculture (Agrárminisztérium)	public	National	Main responsibilities for agriculture, rural development, sustainable fisheries, food security, forestry, environmental protection etc.	Coordination and managing operational programmes for rural development as well as agriculture. This is an authority management organization for Hungarian operational programs.	Interventions for implementing operational programmes for rural development and agriculture which integrates facilities for community-based local development.	Its interventions can directly and indirectly improve population retention in rural areas.	F	H	H	Ministries, government departments
Ministry of Human Resources (Emberi Erőforrások Minisztériuma)	public	National	Main responsibilities for family protection, health care, health insurance, child and youth policy, public education, culture, social policy, social equality etc.	The managing authority of Human Resource Development OP works here.	Interventions for implementing operational programmes based on improvement human resources/capacities.	Its interventions can directly as well as indirectly influence population decline (Family Protection), improve local quality of life and strengthen community-based development.	F	H	H	Ministries, government departments

Name of actor/ organisation	Type of stakeholder (public, private, civil society)	Territorial scale the actor / organisation mostly operates at	Short description of organization	Responsibilities regarding regional/rural development	Specific tasks and actions regarding to mitigation of /adaptation to population shrinkage in particular	Any specific impact/result of this organization's activities with regard to mitigation of/ adaptation to shrinking	Formal or Informal	High, Low	High, Low	Main cooperation partners? Names?
Ministry of Interior (Belügyminisztérium)	public	National	Main tasks are: making interventions and legislation for internal law enforcement, maintaining and developing local municipalities and a limited number of public services.	It has got a coordination office for local municipalities. It is also managing operational programmes regarding public service development.	Direct and indirect interventions for support improving efficiency of local municipalities in managing public service which can improve population retention in rural areas.	Its interventions can directly as well as indirectly improve local quality of life with more efficient local municipalities.	**F**	**H**	**H**	Ministries, government departments
Government/Prime Minister's Office	public	National	This is a government department of Ministry level responsible for serving some specific policy areas such as churches, cross-border and minority issues.	Responsible for running the *Hungarian Village Programme.*	Providing support for small-scale development of rural churches and municipalities of small villages.	The Hungarian Village Programme directly addresses population decline; its primary goal to help villages to keep their population.	**F**	**H**	**H**	Ministries, government departments
Ministry for Innovation and Technology (Innovációs és Technológiai Minisztérium)	public	National	Main responsibilities for interventions regarding the following main sectors: innovation and technology, research and development activities, managing high education and professional training etc.	It has got a secretary for managing EU development programs. This is a coordination management organization for Hungarian operational programmes.	Direct and indirect interventions for support making new jobs in rural areas based on cooperation between local public and private stakeholders.	Yet to be revealed	**F**	**H**	**H**	Ministries, government departments
County Self Government of Csongrád county (and its office) (Megyei önkormányzat)	public	County (NUTS 3)	For the 2014-20 EU programming period, counties are the most important decentralised actors of territorial development.	The self-governing body is responsible for promoting territorial and local development in Csongrád county.	Generates territorial development concepts and action plans indirectly impacting population shrinkage.	Yet to be revealed	**F**	**H**	**H**	Ministries, local governments, public organizations, civil organizations, private stakeholders
Agrya - Association of Young Hungarian Farmers (Agrya - Fiatal Gazdák Magyarországi Szövetsége)	civil society	National	Civil organization of young farmers.	Lobbying capacities	To help young farmers installing themselves in farm business	Yet to be revealed	**F**	**H**	**L**	Local civil organizations, private stakeholders, local governments

Name of actor/ organisation	Type of stakeholder (public, private, civil society)	Territorial scale the actor / organisation mostly operates at	Short description of organization	Responsibilities regarding regional/rural development	Specific tasks and actions regarding to mitigation of /adaptation to population shrinkage in particular	Any specific impact/result of this organization's activities with regard to mitigation of/ adaptation to shrinking	Formal or Informal	High, Low	High, Low	Main cooperation partners? Names?
National Chamber of Agriculture (Nemzeti Agrárgazdasági Kamara)	civil society	National	Professional chamber for stakeholders in agriculture with the following services: reconciliation, interest advocacy, consultation, policy recommendations, etc.	Lobbying capacities, professional underpinning of agricultural policies, defending the interest of farmers	Strengthening rural economy, its sustainable development, Indirect impact through enhanced job opportunities	Slowing down outmigration from rural areas	**F**	**L**	**L**	civil organizations, public organizations, ministries, private stakeholders, Agricultural Ministry
Local Leader LAG (Alsó-Tisza Vidék Fejlesztéséért Egyesület)	civil society	Sub-regional	An association of public, private and civic organisations (LAG) The LEADER LAG is covering two districts, that of Szentes and the neighbouring Csongrád district.	Addresses directly the development of rural economy; provides good governance examples, strengthens co-operation capacities	Indirect impact through enhanced job opportunities; mediating and defending local values	The Strategy of the local LAG directly addresses population decline with a measure aiming to attract young people to the area. A call is still open for collecting applications	**F**	**H**	**H**	Municipalities, civic organisations, Association of LAGs,entrepreneurs of villages and the scattered farm area of the two districts
Local Government for Szentes Town (Szentes Város Önkormányzata)	public	Local (Municipal - LAU 2)	It is the local government/municipality of case study area.	Elaborating local concepts and strategies for regional/rural development. It is responsible for development projects of the town.	Making sure availability of nurseries, kindergartens, create liveable, attractive environment, promoting the economic development of the town, help housing opportunities	Yet to be explored	**F**	**H**	**H**	Public organizations, government departments, civil organizations, private stakeholders, fellow local governments
Local Action Group - CLLD	civil society	Local (Municipal - LAU 2)	An association of public, private and civic organisations of the town (LAG)	Developing cultural institutions and piloting CLLD in market-town context	Revitalise cultural activities of young people and strengthen local community	Yet to be assessed	**F**	**H**	**H**	Local governments, civil organizations in consortium

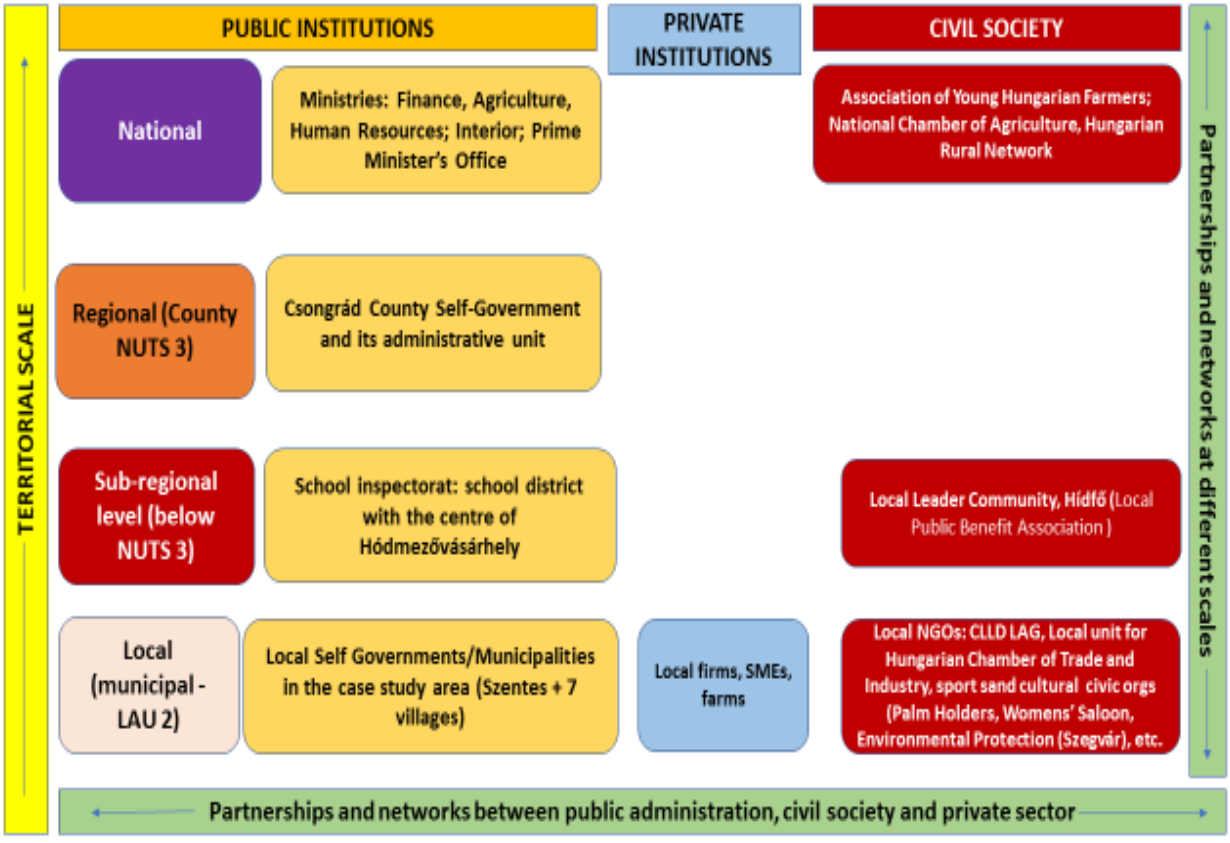
Name of actor/ organisation	Type of stakeholder (public, private, civil society)	Territorial scale the actor / organisation mostly operates at	Short description of organization	Responsibilities regarding regional/rural development	Specific tasks and actions regarding to mitigation of /adaptation to population shrinkage in particular	Any specific impact/result of this organization's activities with regard to mitigation of/ adaptation to shrinking	Formal or Informal	High, Low	High, Low	Main cooperation partners? Names?
Hungerit Zrt.	private	Micro-regional (LAU 1)	One of the largest local agricultural enterprises and food industry in Szentesi district which is the sample area of the Hungarian case study. The activity of this private stakeholder is based on poultry processing.	Provisioning employment and skills	Economic activity	Strengthened local economy, higher employment rate	**F**	**L**	**H**	Local private stakeholders, local government, inhabitants
Legrand Zrt.	private	Micro-regional (LAU 1)	One of the largest local agricultural enterprises in Szentesi district which is the sample area of the Hungarian case study. The activity of this private stakeholder is based on power distribution device manufacture.	provisioning employment and skills	Economic activity	Strengthened local economy, higher employment rate	**F**	**L**	**H**	Local private stakeholders, local government, inhabitants
Hunor Coop Zrt.	private	Micro-regional (LAU 1)	One of the largest local agricultural enterprises in Szentesi district. The activity of this private stakeholder is based on food retail.	provisioning employment and skills	Economic activity	Strengthened local economy, higher employment rate	**F**	**L**	**H**	Local private stakeholders, local government, inhabitants
Árpád-Agrár Zrt.	private	Micro-regional (LAU 1)	One of the largest local agricultural enterprises in Szentesi district. The activity of this private stakeholder is based on mixed farming.	provisioning employment and skills	Economic activity	Strengthened local economy, higher employment rate	**L**	**L**	**H**	Local private stakeholders, local government, inhabitants
Local Public Benefit Association (Hídfő Közhasznú Egyesület)	civil society	Micro-regional (LAU 1)	One of the most important local civil organizations with activities in social inclusion and integrations.	The aim is to take a part in education of youth and Roma youth, strengthening local community with cultural activities.	Social protection	Yet to be revealed	**F**	**H**	**H**	Civil organizations, private stakeholders, local government, inhabitants

Name of actor/ organisation	Type of stakeholder (public, private, civil society)	Territorial scale the actor / organisation mostly operates at	Short description of organization	Responsibilities regarding regional/rural development	Specific tasks and actions regarding to mitigation of /adaptation to population shrinkage in particular	Any specific impact/result of this organization's activities with regard to mitigation of/ adaptation to shrinking	Formal or Informal	High, Low	High, Low	Main cooperation partners? Names?
Local Cultural and Sport Association (Életjel Közhasznú Kulturális és Sportegyesület)	civil society	Local (Municipal - LAU 2)	This local association can be found in Szentes which is part of the Hungarian case study area.	Direct and indirect ways according to its activities as organizing local cultural and sport programs.	Direct and indirect ways with its cultural and sport activities to realize population retention with better local living conditions.	Yet to be revealed	**F**	**H**	**H**	Local government, civil organizations
Local association for village development and traditional protection (Gr. Károlyi Ferdinanda Falufejlesztő és Hagyományőrző Egyesület)	civil society	Local (Municipal - LAU 2)	This local association can be found in Árpádhalom which is part of the Hungarian case study area.	Village development	Strengthening the community	Yet to be revealed	**F**	**H**	**H**	Local government, civil organizations
Local public benefit association for Derekegyháza (Derekegyházért Közhasznú Egyesület)	civil society	Local (Municipal - LAU 2)	This local association can be found in Derekegyháza which is part of the Hungarian case study area.	Village development	Strengthening the community	Yet to be revealed	**F**	**H**	**H**	Local government, civil organizations
Local association for guesting (Szentesi Vendégszeretet Egyesület)	civil society	Local (Municipal - LAU 2)	This local association can be found in Szentes which is part of the Hungarian case study area.	Village development	Strengthening the community	Yet to be revealed	**F**	**H**	**H**	Local government, civil organizations
Local unit for Hungarian Chamber of Commerce and Industry (Kereskedelmi és Iparkamara helyi területi szervezete)	civil society	Local (Municipal - LAU 2)	Professional chamber for stakeholders in agriculture with the following services: reconciliation, interest advocacy, consultation, policy recommendations, etc.	Lobbying capacities, professional underpinning of agricultural policies, defending the interest of farmers	Strengthening rural economy, its sustainable development, Indirect impact through enhanced job opportunities;	Slowing down outmigration from rural areas	**F**	**L**	**H**	Civil organizations, public organizations, ministries, private stakeholders

Appendix Figure 3.1 Template for the power/interest matrix

POWER				
	HIGH	Ministry of Finance Ministry of Interior Prime Ministry's Office		Ministry of Human Resources Ministry of Agriculture Agrarian Chamber (National level) County Self Government
	Middle		Large-scale local firms (Hungerit, Legrand)	Municipality of the town (Szentes) Árpád LTD DÉLKER-TÉSZ
	LOW			Village self-governments LEADER LAG CLLD Local sports and cultural associations
		LOW	Middle	HIGH
		INTEREST		

Appendix Figure 3.2 Institutional mapping: Szentes district, Hungary



Appendix 4 – Interviews

Appendix Table 4.1 List of interviews

Number	Position / competence of the interviewee	Type of the organisation represented by the interviewee			Location	Date (yyyymmdd)	Conductor	Note
		Sector*	Territorial scale**	Relation to the CS area ***	of the interview			
Conducted interviews								
1	Expert, former member of planner team responsible for Rural Development Operative Program	1,4	1	2	anonymised	20191014	Monika Mária Váradi, Bálint Koós	
2	Head of department in the Ministry of Finance	1	1	2	anonymised	20191022	Monika Mária Váradi, Bálint Koós	
3	Responsible for town development projects, former district development manager	3	4,5	1	anonymised	20191024	Monika Mária Váradi, Bálint Koós	
4	Head of local unit of a Hungarian professional administrative organisation	5	4,5	1	anonymised	20191024	Monika Mária Váradi, Bálint Koós	
5	Former mayor of a municipality, also a leader of a local civil organization.	3	5	1	anonymised	20191204	Monika Mária Váradi, Bálint Koós	
6	Newly elected mayor and deputy major of a municipality	3	5	1	anonymised	20191205	Bálint Koós	
7	Major of a municipality	3	5	1	anonymised	20191205	Bálint Koós	
8	Communication and marketing officer in a municipality (former editor at a local media)	3	5	1	anonymised	20191205	Monika Mária Váradi,	
9	Former mayor of a municipality	3	5	1	anonymised	20191204	Monika Mária Váradi, Bálint Koós	

10	Leader of a local civil organization	5	5	1	anonymised	20191205	Monika Mária Váradi,	
11	Community development, cultural, civil, youth and equality of opportunity referent in a municipality	3	5	1	anonymised	20191205	Monika Mária Váradi,	
12	Major of a municipality	3	5	1	anonymised	20191205	Bálint Koós	
13	Key politician in the field of regional development at NUTS 3 level	3	3	2	anonymised	20200206	Bálint Koós	
14	Key politician, president of an NGO of national-level importance	1	1	2		20200214	Katalin Kovács	Phone interview – no written Consent Form
15	Deputy CEO of a major local employer	4	4,5	1		20200319	Bálint Koós	Phone interview – no written Consent Form
16	Retired director of a local company, (former) member of the LEADER Board	4,6	4,5	1		20200318	Katalin Kovács	Phone interview – no written Consent Form
17	Headmaster of a high school	2	5	1		20200325	Monika Mária Váradi	Phone interview – no written Consent Form
18	Entrepreneur in household service sector, president of the local organisation of a Hungarian professional association	4,5	5	1		20200326	Monika Mária Váradi	Phone interview – no written Consent Form

* 1=public administration, 2=public services, 3=other public, 4=private, 5=civic, 6=partnership of sectors, 7=other

** 1=national, 2=NUTS-2, 3=NUTS-3, 4=LAU-1, 5=LAU-2

*** 1=within, 2=outside

Appendix Table 4.2 Interviews planned to conduct with stakeholders / experts

Number	Position / competence of the interviewee	Type of the organisation represented by the interviewee			Location	Date (yyyymmdd)	Conductor	Note
		Sector*	Territorial scale**	Relation to the CS area ***	of the interview			
Interviews planned to conduct with stakeholders / experts								
1	Current / or former mayor of a bigger municipality	3	5	1				
2	mayor of village-1	3	5	1				
3	mayor of village-2	3	5	1				
4	mayor of village-3	3	5	1				
5	Expert of Family Protection Action Plan Ministry of Human Resources	1	1	2				
6	Expert Local development Ministry of Interior	1	1	2				
7	Expert County Self Government / territorial Development	1	3	2				

8-9	2 Local intellectuals in Szentes	2	5	1				
10	Local Cultural and Sport Association	5	5	1				
11	Local association for village development	5	5	1				
12	Local association for village development	5	5	1				
13	Member of Local Action Group - LEADER	6	4	1				
14	Member of Local Action Group - CLLD	6	5	1				
15	Major employers in the area	4	5	1				

16	Local cultural association	5	5	1				
17	Local online /printed media	4	5	1				
	Invited ateendees by position/competence, sector and territorial scale: Interviewed experts, local and regional stakeholders							

Appendix 5 – Past national family policies

It is worth mentioning that the Hungarian population policy has always focused since the second half of the 20th century. Three broad programs of 1953, 1967, 1973 and 1984 have to be highlighted (Monigl, 1988; Vukovich, 1991):

- *The early Communist phase* when childlessness was taxed and a strict prohibition of abortion was introduced (1953) resulting in a spectacular increase of birth rates (approx. 100,000 so-called Ratkó children were born between 1953 and 1956 named after the Minister in office). In 1956, after the anti-Stalinist revolution was defeated, the abortion ban and the childlessness tax were abolished.
- *The consolidated era of State Socialism.*
    - An important piece of legislation related to *the length of child-rearing leave* of a mother was issued in 1967 (Government Decree no 3/1967 of 29th January) permitting a 2,5 year-long period off maternity leave. The purpose of the decree was manifold. On the one hand it addressed the sharply decreasing birth rates during the decade between 1957-1967, on the one hand, it intended to provide opportunity for children for being cared by their mothers which was considered the best for both for the mother and child, finally, a motivation of withdrawing a significant rate of women form the labour market counted as well. (Korfa 2017: p1).
    - Another decree with diverse measures was issued in 1973 (Decree 11/1973. (XII. 23.) MüM) aiming to prevent demographic decline through increased family support, an introduced child care support available until the 1st anniversary of the child [20], housing allowances. The abortion law was again tightened, and contraceptives were promoted. These measures and a secondary impact of the 1956-57 baby boom resulted in growing fertility rates from 1974 lasting till around 1980.

Hungary's population peaked in 1980, at 10,709,000 people. The reason for population decline since 1981 was mainly due to the decreasing number of births have been unable to compensate for the increasing number of deaths. Between 1989 and 2010 different forms of family allowance, maternity and childcare benefits have been maintained with significant changes considering support rates. After 2010, new measures were introduced in response to the anticipated consequences of long-term low fertility rate and population decline. For details of the *Family Protection Action Plan* see Chapter 3.1.

[20] The support rate rose from 30% of an average wage level to 60-65%. In the late 1980s, childcare benefit was eligible until the 2nd anniversary of the child.

Appendix 6 – Additional photos

Appendix Figure 6.1 Abandoned farm buildings near Árpádhalom

Appendix Figure 6.2 Planting a tree when a baby is born in Derekegyház

Appendix Figure 6.3 Abandoned farm buildings in Árpádhalom

Appendix Figure 6.4 A street view in Derekegyház

Appendix Figure 6.5 Abandoned house in Derekegyház

Appendix Figure 6.6 Road in need of repair in Derekegyház

Appendix Figure 6.7 A newly renovated house in Derekegyház (financed by the Family Action Plan)

Appendix Figure 6.8 A mill renovated into apartment in Derekegyház

Appendix Figure 6.9 New services: barbershop in Szentes

Appendix Figure 6.10 Spectacular riverbank in Szentes (Kurca)

Appendix Figure 6.11 Szentes town centre

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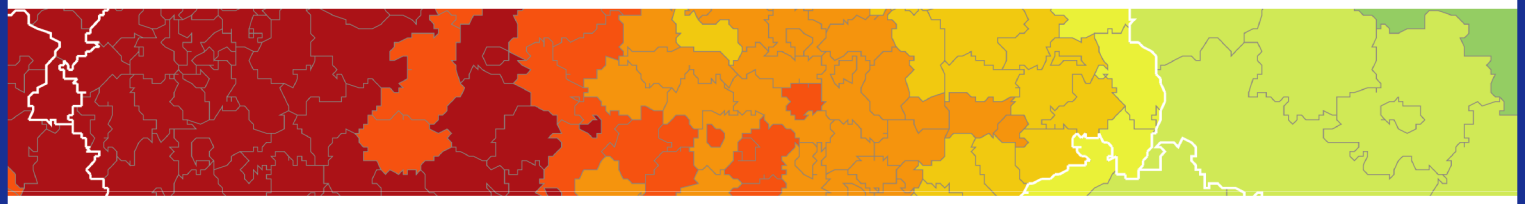

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