



MUNICIPALITY OF KAKANJ

DEVELOPMENT STRATEGY OF KAKANJ MUNICIPALITY

2021-2027.

Kakanj, 2021/2022.





DEVELOPMENT STRATEGY OF KAKANJ MUNICIPALITY 2021-2027.



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FOREWORD

Dear people of Kakanj, by implementing the Development Strategy of Kakanj Municipality 2007 2017 and revised Strategy 2017 2020, the Municipality of Kakanj achieved notable results in all areas of life and sustainable development, implementing numerous infrastructure projects and increasing employment and export, while achieving the continuous growth of the development index relative to the average in FBiH.

By the Development Strategy of Kakanj Municipality 2021-2027, we continue the activities commenced previously and plan on using a methodical approach to development planning to ensure the balanced and sustainable development of our local community, continuing infrastructure construction and modernisation, enhancing education, healthcare, culture, sports, and other fields, while particularly focusing on the protection and enhancement of environment, energy efficiency, spatial planning, and the safety of people and property.

By implementing strategic development projects in the fields of economy, social development, environmental protection, and spatial planning, we aim to strategically build production capacities, reconstruct and expand the district heating system, enhance tourism and sports infrastructure, strengthen demographic development, enhance cooperation with the diaspora, enhance the process of digitalisation of services, boost energy efficiency of buildings, modernise road and other infrastructure, intensify agricultural development, etc.

The preparation and implementation of strategic projects is one of the most important activities of the Municipality of Kakanj, representing a significant instrument to foster local development. It is our aim to maximise the utilisation of external financing along with the financing from the Municipal Budget, particularly in the area of entrepreneurship and investment climate development, environmental and rural development, as well human resources development and employment growth.

As a municipality holding a Business Friendly Certificate [BFC] for favourable business environment, we find it highly important to continue the activities aimed at attracting foreign investments to introduce new technologies, strengthen human capacities, create new jobs, and enable the more intensive development of rural areas, especially in the fields of agriculture and tourism.

Kakanj certainly deserves bright and bountiful future, with full utilisation of natural resources, developed economy and, above all, content and happy people.

I would like to emphasise that I am proud of all residents of Kakanj Municipality who stay here despite the adversities to fight for a better tomorrow.

Finally, I would like to thank all those who, directly or indirectly, participated and supported the drafting of the Development Strategy of Kakanj Municipality 2021-2027.

The vision for 2027

Modern and economically prosperous municipality with the efficient and sustainable use of natural and other resources, pleasant to live and work in, providing equal opportunity to all.

MUNICIPAL MAYOR

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INTRODUCTION AND METHODOLOGY

The Development Strategy of Kakanj Municipality 2021-2027 is an underlying document defining objectives and directions of development in the forthcoming seven-year period. In the previous period, the Municipality of Kakanj implemented a series of significant projects and initiated activities in various fields representing a good starting point for further development planning and continuation of development of Kakanj Municipality within the existing legal framework. In the context of integration and keeping up with contemporary European and world trends, the process of strategic planning has been recognised as one of the most important instruments for fostering development and continuously improving business and institutional environment, strengthening local economy, and developing partnership with the civil and private sector, as well as connecting with international organisations, external partners and other local self-government units for the implementation of joint projects.

Accordingly, the Development Strategy of Kakanj Municipality 2021-2027 represents a general development platform and framework for inclusion of all relevant stakeholders, representatives of the public, private and nongovernmental sector in Kakanj Municipality area and their synergic and long-term activities, both in the field of economic and social development and in the direction of environmental protection and enhancement.

The development vision and strategic goals of Kakanj Municipality are defined for the period 2021 2027, which is in accordance with the EU development planning pace and cycle and the EU terminology.

The Development Strategy of Kakanj Municipality 2021-2027 ensures the continuation of the strategic planning activities from the previous period (previous strategies) and it is aligned with strategies and policies of the higher levels of government and also with other sector strategies in Bosnia and Herzegovina.

The document will serve as a source document and a basis for drafting the budgetary framework document, budget, work programme of the Municipal Mayor, triennial work programme of the Municipal and other bodies, as well as the annual work programme of the Municipal Mayor and municipal services. Further on, the Strategy complies with the EU integration process and global Sustainable Development Goals [SDG].

The regulatory framework for the preparation of the Development Strategy of Kakanj Municipality 2021 2027 includes the Law on Law on Development Planning and Management in the Federation of Bosnia and Herzegovina [Official Gazette of FBiH, 32/2017], the Decree on strategic documents drafting in the Federation of Bosnia and Herzegovina [Official Gazette of FBiH, 94/19 and 2/21], the Decree on strategic documents evaluation in the Federation of Bosnia and Herzegovina [Official Gazette of FBiH, 94/2019 and 2/21], the Decree on triennial and annual planning of work, monitoring and reporting in the Federation of Bosnia and Herzegovina [Official Gazette of FBiH, 94/2019 and 2/21] and other upcoming implementing legislation and documents, including the legislation on methodology for the integration of development, finance and investment planning.

The Law regulates the objectives and principles of development planning and management in the Federation of Bosnia and Herzegovina, cantons and local self-government units, types of strategic documents, types of documents required in the process of implementation of strategic documents, bodies responsible for development planning and management, the process of development planning and management in the Federation of Bosnia and Herzegovina, programming, monitoring, evaluation and reporting on strategic documents implementation, financing of strategic documents implementation and supervision of the law enforcement.

In the process of drafting this document, the statutory methodology was used. It is adapted to the EU terminology and planning cycle, in accordance with the Law on Development Planning and Management in the Federation of Bosnia and Herzegovina.

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I STRATEGIC PLATFORM (SITUATION ANALYSIS)

1. GEOGRAPHICAL POSITION AND NATURAL FEATURES OF KAKANJ MUNICIPALITY

1.1. Geographical features of the area [position, terrain, climate and resources]

Kakanj Municipality is located north of Visoko and southeast of Zenica, in the centre of Sarajevo-Zenica basin, economically most significant and most densely populated region of BiH. It is situated in the southern part of Zenica-Doboj Canton (40°00' - 44°22'30" north latitude and 18°00'- 18° 15' east latitude). Kakanj Municipality covers an area of ca 377 km². The elevation of the municipality is from 380 (Dobojsko polje) to 1,458 meters above sea level (Lipničko brdo). The elevation of the town area is 384 meters above sea level. Kakanj Municipality has the population density of 99,33 people per square kilometre, which is average in comparison to other settlements in BiH. There are 42 local communities.



Image 1 – Kakanj Municipality map

Kakanj Municipality has a favourable trading position, well-developed network of trunk, regional, local and uncategorised roads. The route of the Corridor Vc and the trunk road M 17 pass through its territory, providing good potential for developing road communications. The distance from Kakanj Municipality to Sarajevo, the capital of Bosnia and Herzegovina, is 50 km; the distance to Zenica, the seat of Zenica-Doboj Canton is 25 km, while the distance to the international airport in Sarajevo is 51 km.

Railway Ploče-Bosanski Šamac runs parallel to the Corridor Vc and the trunk and regional roads, and its total length within Kakanj Municipality is 21.

Kakanj Municipality has predominantly hilly and mountainous terrain and is rich in numerous water springs, forests, ore deposits and other natural resources.

The climate of Kakanj Municipality is largely temperate continental, with warm summers and cold winters, while the hilly and mountainous area with elevation over 1.000 m has colder climate with average annual temperatures by several degrees lower and precipitation exceeding 800 mm. Average annual precipitation is 861 mm.

Rainfall is highest in November and December and constant over the remaining part of the year, excluding June. Average annual temperature is 10 °C. January is the coldest month, with the average temperature of -2,3 °C, while July and August are the hottest, with the temperatures of 19,7 and 19,5 °C, respectively. Annual average relative humidity is 81%.

An increase in climate variability has been observed in all seasons and in the entire territory of Bosnia and Herzegovina over the previous years: five of the previous 12 years were very dry to extremely dry, while four of those years were marked by extreme flooding.

The sectors most sensitive to climate change in Bosnia and Herzegovina are: human health, agriculture, water resources, forestry, biodiversity and fragile ecosystems. Due to the intensification of rainfall, increased number of accidents and disasters is expected, particularly of those caused by hydrometeorological risks which could trigger geological and other risks.

1.2. Natural resources

Natural resources available in Kakanj Municipality area:

- mineral raw materials (coal, marl, limestone and thermal mineral water),
- forests,
- water resources,
- renewable energy sources and
- agricultural land.

Geological explorations have shown that, besides the above-mentioned resources, there are also limited quantities of quartz sandstone, bituminous and quartz limestone, volcanogenic sediments (spilite, diabase, serpentinite) and clay (kaolinite etc.).

The energy potential of the municipality is largely based on brown coal reserves. The exploitation area in Kakanj municipality area is characterized by separate deposits. Depending on the vertical position of coal seams in relation to the surface, either underground or surface coal mining is used. The following table provides an overview of coal resources in Kakanj Municipality area and the neighbouring municipalities:

Table 1 – Coal resources [tons]

| Site/deposit | Geological resources | Out-of-balance resources | Balance resources | Potential resources |
|----------------|----------------------|--------------------------|--------------------|----------------------|
| Breza [2006.] | 77.105.529 | 36.387.874 | 41.412.655 | 78.000.000 |
| Kakanj [2007.] | 249.140.096 | 56.061.000 | 164.228.103 | 126.847.283 |
| Zenica [2006.] | 282.924.568 | 119.830.669 | 163.063.230 | 1.042.722.518 |
| Total | 609.170.193 | 212.279.543 | 368.703.988 | 1.247.569.801 |

Source: RMU Kakanj and Map of economic potential of Zenica-Doboj Canton (October 2020)

The following table shows coal production in Zenica-Doboj Canton in the period 2015-2020:

Table 2 – Coal production in Zenica-Doboj Canton 2015-2018 and RMU Kakanj 2015-2020.

| Coal mine | 2015. [t] | 2016. [t] | 2017. [t] | 2018. [t] | 2019. [t] | 2020. [t] |
|--------------|---------------------|---------------------|---------------------|---------------------|--------------|--------------|
| Breza | 473.126,00 | 541.639,00 | 676.544,85 | 729.695,00 | - | - |
| Kakanj | 1.008.054,00 | 962.557,00 | 1.301.193,00 | 1.108.566,00 | 1.140.408,00 | 1.102.409,00 |
| Zenica | 266.263,98 | 313.193,68 | 415.989,00 | 571.876,00 | - | - |
| Total | 1.747.443,98 | 1.817.380,68 | 2.393.762,85 | 2.410.137,00 | - | - |

Source: RMU Kakanj and Map of economic potential of Zenica-Doboj Canton (October 2020)

Coal mining in Kakanj Municipality area performed by Rudnik mrkog uglja Kakanj d.o.o. Kakanj (Coal Mine). Electricity in Zenica-Doboj Canton is almost entirely generated by TE Kakanj (Thermal Power Plant). The following table shows information on electricity generation in thermal power plants in Zenica-Doboj Canton for the period of three years (2015-2017):

Table 3 – Electricity generation in thermal power plants in Zenica-Doboj canton 2015-2017

| Thermal power plant | Generation in 2015. [MWh] | Generation in 2016. [MWh] | Generation in 2017. [MWh] |
|--------------------------|------------------------------|------------------------------|------------------------------|
| TE “Kakanj” Kakanj | 1.926.900,00 | 2.093.800,00 | 2.546.467,00 |
| TE “Natron-Hayat” Maglaj | 169.250,70 | 125.620,00 | 162.643,00 |
| Total | 2.096.150,70 | 2.219.420,00 | 2.709.110,00 |

Source: Map of economic potential of Zenica-Doboj Canton (October 2020)

West of Kakanj, there are practically unlimited quantities of Cretaceous limestone that are excavated in small sites and used as raw material for cement industry. According to the data obtained from RMU Kakanj, the limestone reserves amount to 1.995.613,73 m3. The availability of this raw material fostered the development of construction industry. In terms of construction industry, there are several small enterprises and one large enterprise, Heidelberg Cement Group – Tvornica cementa [Cement Factory] Kakanj d.d. Kakanj.

1.3. Thermal springs – Tičići

In the previous period, among other activities, an exploration study was performed with regards to thermal, mineral and thermo-mineral water in Kakanj Municipality area. It established the total borehole yield of Q=57 l/s for boreholes IT-1 and IT-2, borehole temperature of Tv = 53°C for borehole IT-1, and Tv = 39°C for borehole IT-1; water mineralization at borehole IT-1 = 846-1312 mg/l, water mineralization at borehole IT-2 = 902-1262 mg/l.

1.4. Forests

Forestry is under the competence of JP Šumsko-privredno društvo ZDK [Cantonal Forestry Company]. Kakanj Municipality area is largely encompassed by the Forest Management Unit Kakanjsko. The total area managed by JP ŠPD Zavidovići [Public Forestry Company] covers 179.477,67 ha, while Kakanjsko Unit covers 19.386,42 ha. Allowable cut is established by the Integral forest management plan for Forest Management Unit Kakanjsko 2013-2020, and shown in the following Table:

Table 4 – Integral forest management plan JP ŠPD Zavidovići

| No | Forest management unit | Valid for | Area [ha] | Annual yield [m³] | | |
|----|------------------------|------------|------------|-------------------|-----------|---------|
| | | | | Softwoods | Hardwoods | Total |
| 1 | Olovsko | 2012-2021. | 32.371,38 | 114.261 | 45.082 | 159.343 |
| 2 | Gornje bosansko | 2013-2022. | 29.741,79 | 86.298 | 42.772 | 129.070 |
| 3 | Kakanjsko | 2013-2022. | 19.386,42 | 33.616 | 43.565 | 77.181 |
| 4 | Krivajsko | 2017-2026. | 83.134,09 | 89.831 | 111.330 | 201.161 |
| 5 | Natron-Usorsko | 2018-2027. | 14.843,99 | 8.255 | 17.092 | 25.347 |
| | Total: | | 179.477,67 | 332.261 | 259.841 | 592.102 |

Source: Integral forest management plan JP ŠPD Zavidovići for Kakanjsko Unit

1.5. Rivers

Kakanj Municipality area, with its predominantly hilly and mountainous terrain and temperate continental climate, is exceptionally rich in rivers and water springs. The following Table provides an overview of rivers in the territory of Kakanj Municipality.

Table 5 – Rivers passing through Kakanj Municipality

| River | Length [km] | Length in the Municipality area |
|-------------|-------------|---------------------------------|
| Bosna | 274 | 22 |
| Trstionica | 27 | 27 |
| Ribnica | 20,5 | 20,5 |
| Marošićka | 13,5 | 13,5 |
| Mala rijeka | 11,5 | 11,5 |
| Žuća | 6,6 | 6,6 |
| Zgošća | 6,5 | 6,5 |
| Bijele vode | 6,5 | 6,5 |
| Vukanjska | 5,5 | 5,5 |
| Bukovica | 2,9 | 2,9 |
| Total: | 374,5 | 122,5 |

Source: Measurements based on the topographic map of BiH

Besides the rivers, there are also numerous streams in Kakanj Municipality area, 17 of them longer than 1 km. The total length of all streams is 68 km.

1.6. Other natural resources

When it comes to renewable energy sources, the following are available in Kakanj Municipality: solar energy, wind energy, hydropower, geothermal energy and biomass energy. The interest in generation of electricity from renewable sources has recently increased. In the period 2020-2021, several natural and legal persons registered for the activity of the generation of electricity from renewable sources. It is to be expected that, in the following period, this field will significantly influence the economic picture in both BiH and Kakanj Municipality.

2. DEMOGRAPHIC CHARACTERISTICS AND CHANGES

2.1. Population [by age and sex]

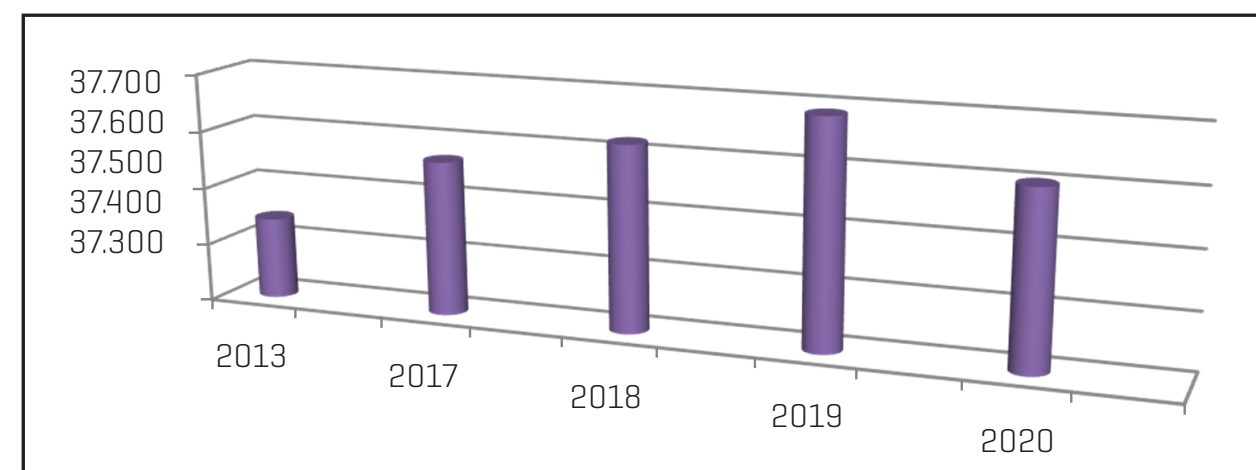
The demographic picture in Zenica-Doboj Canton has changed significantly in the observed period. According to the 1991 Population Census, Kakanj Municipality had the population of 55.950, and the average population density of 148,4 people per square kilometre. According to the final results of the population census conducted in 2013, the total population of Kakanj Municipality is 37.441 and the average population density 99,31 people per km2. In comparison to 1991, the population has decreased by 18.509 people or 33 %. There are 12.240 households in Kakanj Municipality The share of the middle age group [15-64 years old] in relation to total population is approximately 72 %.

Table 6 – Population in Kakanj Municipality area, by age [1991 and 2013 censuses]

| Age | 1991 | | | 2013 | | |
|--------|--------|--------|--------|--------|--------|--------|
| | Male | Female | Σ | Male | Female | Σ |
| 0-14 | 9.700 | 9.450 | 19.150 | 3.319 | 3.128 | 6.447 |
| 15-64 | 17.158 | 16.285 | 33.443 | 13.511 | 13.333 | 26.844 |
| 65+ | 2.057 | 1.300 | 3.357 | 1.821 | 2.329 | 4.150 |
| Total: | 28.915 | 27.035 | 55.950 | 18.651 | 18.790 | 37.441 |

Source: 1991 Population Census in BiH and 2013 Population Census in BiH

Figure 2. Estimate of the population change for the period 2013-2020



Source: The rate of natural increase for years 2017, 2018, 2019, and 2020 was applied to the population of 37,441 from the 2013 Census (an estimate made by the Municipal administration)

The official data on total emigrant population are not available, but the emigration trend has continued, particularly when it comes to young people. Particular attention should be paid to the emigration of the working age population. [According to the Survey of the Agency for Statistics of BiH and the Union for Sustainable Return and EU integration in BiH and according to the estimates for Bosnia and Herzegovina, 530,000 people left Bosnia and Herzegovina in the period from 2013 to 2019].

Besides, the deruralisation of the area is apparent and there has been an increasing trend of people leaving the countryside and settling in nearby urban and suburban areas.

Table 7 shows the population change for the previous period according to the residence records in Kakanj Municipality area.

Table 7 – Migrations in Kakanj Municipality area

| Year | Emigrated from the Municipality [number] | | | Immigrated in the Municipality [number] | | |
|-------|--|--------|-----|---|--------|-----|
| | Male | Female | Σ | Male | Female | Σ |
| 1991. | - | - | - | - | - | - |
| 2013. | 104 | 176 | 280 | 57 | 93 | 150 |
| 2015. | 84 | 169 | 253 | 68 | 108 | 176 |
| 2016. | 71 | 159 | 230 | 67 | 136 | 203 |
| 2017. | 105 | 157 | 262 | 58 | 111 | 169 |
| 2018. | 86 | 157 | 243 | 41 | 123 | 164 |
| 2019. | 96 | 162 | 258 | 40 | 125 | 165 |
| 2020. | 94 | 147 | 241 | 43 | 88 | 131 |

Source: Municipal administration and Ministry of Internal Affairs (CIPS records)

2.2. Rate of natural increase

The rate of natural increase for the period 2017-2020 had a downward trend, especially in 2020 when it was negative with the highest number of deceased in the past several years. This trend is attributable to COVID-19 pandemic which significantly influenced all aspects of life, demographic indicators included.

The table below shows the estimate of population change for the period 2017-2020:

Table 8 – Rate of natural increase

| YEAR | 2017. | | | 2018. | | | 2019. | | | 2020. | | |
|------------------|-------|-----|-----|-------|-----|-----|-------|-----|-----|-------|-----|-----|
| | M | F | T | M | F | T | M | F | T | M | F | T |
| Number of births | 245 | 246 | 491 | 241 | 235 | 476 | 243 | 229 | 472 | 204 | 214 | 418 |
| Number of deaths | 191 | 174 | 365 | 226 | 196 | 422 | 221 | 182 | 403 | 285 | 220 | 505 |
| Natural increase | 54 | 72 | 126 | 15 | 39 | 54 | 22 | 47 | 69 | -81 | -6 | -87 |

Source: Municipal administration

2.3. Ethnic structure and geographical distribution of population according to 1991 and 2013 population censuses.

According to data from the population censuses of 1991 and 2013, the population has decreased by 18,509 people or 33 % and the ethnic structure has changed significantly. This is attributable to the war and migrations.

Table 9 – Population by ethnicity

| Ethnicity | 1991. | 2013. |
|----------------|--------|--------|
| | Σ | Σ |
| Bosniaks | 30.528 | 32.341 |
| Croats | 16.556 | 2.973 |
| Serbs | 4.929 | 281 |
| Others | 1.383 | 1.818 |
| Yugoslovenians | 2.554 | - |
| Unknown | - | 28 |

Source: 1991 Population Census in BiH and 2013 Population Census in BiH.

In terms of geographical distribution, 2/3 of population live in the rural and 1/3 in the urban area.

Table 10 – Urban/rural population

| Geographical distribution | 1991. | 2013. |
|---------------------------|----------|----------|
| Urban | 21% | 33% |
| Rural | 79% | 67% |
| Total | 0 | 0 |

Source: Municipal administration

2.4. Development problems and needs

| Development problems | Development needs |
|--|--|
| Declining birth-rate and aging of the population | Develop pronatalist policies by resolving employment and housing issues, improving education quality etc. |
| Emigration | Design and implement measures to retain people in Kakanj Municipality area, by providing employment, supporting business owners and farmers, as well as others who contribute to employment and improvement of the quality of life in Kakanj Municipality area. Stop the process of deruralisation and enable retaining of rural population through of rural development policy and measures. |

3. ECONOMIC CHANGES

3.1. Level of development

According to the FBiH Development Programming Institute for 2019, Kakanj Municipality is in the 3rd category with the development index of 0,93. In relation to other cities/municipalities in FBiH, it is ranked 25th.

Relative to 2018, the development index decreased by 0,1 and the ranking by two positions, from 23rd to 25th, largely due to decrease in tax revenue in 2019 compared to 2018.

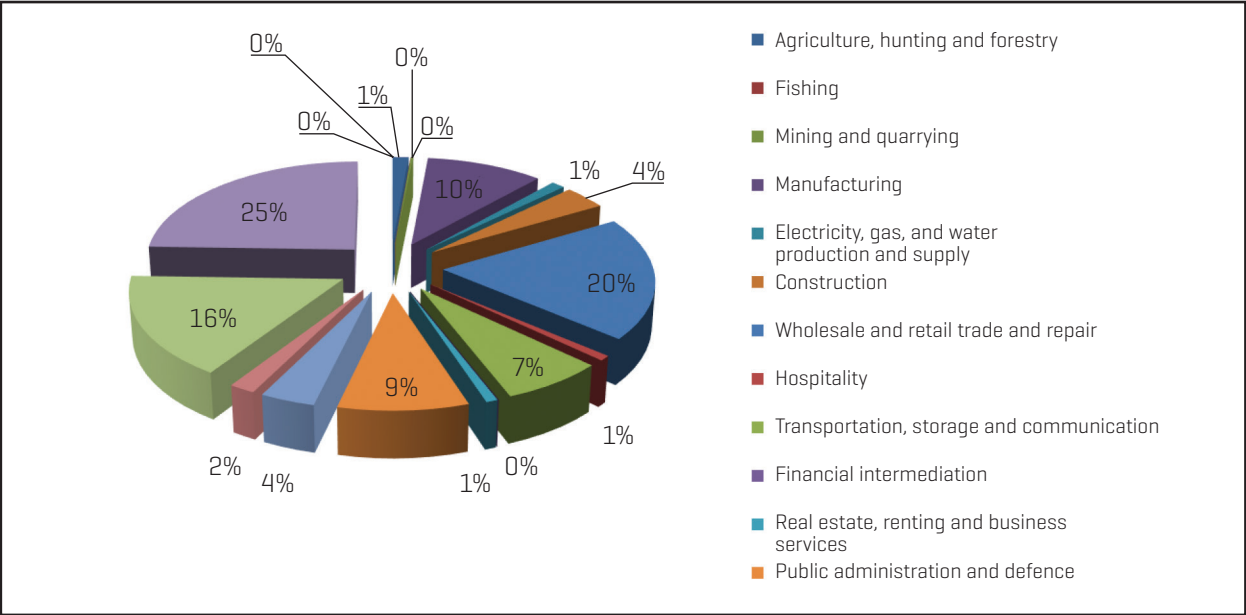
Besides market economy mechanisms, economic development indicators have also been directly or indirectly influenced by natural disasters occurring in 2014, as well as COVID-19 pandemic, current as of 2020.

These events caused huge material damage, causing the slowdown of development in Kakanj Municipality and entire Bosnia and Herzegovina..

3.2. Business entities in Kakanj Municipality area

As of the end of 2020, in Kakanj Municipality area, a total of 1.088 business entities were registered, out of which 53,21 % natural persons [craft businesses and similar activities, trade, hospitality, and independent professional activities] and 46,79 % legal persons. In 2019, there were 1.074 business entities, which is by 1,29 % less relative to 2020. At the end of 2020, the majority of entities were registered for trade [retail and wholesale], processing industry, and other service activities. The following Figure shows business entities by activity:

Figure 3. Business entities by activity [legal persons]



Source: FBiH Statistics Institute – Cantons in numbers, years 2017, 2018, and 2019

The number of registered natural and legal persons in Kakanj Municipality area in the observed period [2017-2020] increased by 11,13 % and has constantly grown. This trend was largely contributed by the operation under BFC standard, recognizing Kakanj Municipality as a municipality with favourable business environment. The following Table shows the changes in the number of business entities by activity.

Table 11 – Business entities by activity [natural persons]

| GODINA | Number of registered entities | | | | | | | | | | | |
|-------------------------|-------------------------------|-----|-----|-------|-----|-----|-------|-----|-----|-------|-----|-----|
| | 2017. | | | 2018. | | | 2019. | | | 2020. | | |
| | M | F | Σ | M | F | Σ | M | F | Σ | M | F | Σ |
| Trade stores | 36 | 52 | 88 | 38 | 54 | 92 | 37 | 55 | 92 | 39 | 52 | 91 |
| Hospitality businesses | 48 | 22 | 70 | 41 | 25 | 66 | 40 | 26 | 66 | 40 | 25 | 65 |
| Craft businesses | 121 | 30 | 151 | 145 | 36 | 181 | 144 | 45 | 189 | 156 | 51 | 207 |
| Farming activity | 66 | 24 | 90 | 66 | 19 | 85 | 67 | 26 | 93 | 61 | 28 | 89 |
| Transport operators | 38 | 0 | 38 | 37 | 0 | 37 | 40 | 0 | 40 | 41 | 0 | 41 |
| Professional activities | 16 | 16 | 32 | 15 | 18 | 33 | 15 | 17 | 32 | 13 | 17 | 30 |
| Taxi operators | 45 | 0 | 45 | 44 | 0 | 44 | 44 | 0 | 44 | 44 | 0 | 44 |
| Trade not in store | 2 | 5 | 7 | 4 | 14 | 18 | 3 | 9 | 12 | 2 | 10 | 12 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 372 | 149 | 521 | 390 | 166 | 556 | 390 | 178 | 568 | 396 | 183 | 579 |

Source: Municipal administration

In Kakanj municipality area, micro and small businesses prevail, while large business entities employ most people.

The number of business entities had an upward trend in the period 2017-2020, which is confirmed by the fact that 66 legal persons registered, while 38 de-registered their activity. This also applies to natural persons, as 363 natural persons registered and 270 de-registered their activity in the same period.

This trend was significantly contributed by incentive programmes for entrepreneurship and agriculture that have been continuously implemented by the Municipality of Kakanj since 2013. The tables below show the commitments for such purposes.

Table 12 Realised incentive programmes for entrepreneurship

| Entrepreneurial incentives (programmes) | | | | |
|---|------------|------------|------------|--------------|
| 2017. | 2018. | 2019. | 2020. | TOTAL [BAM] |
| 340.393,20 | 428.361,89 | 391.505,52 | 520.519,55 | 1.680.780,16 |

| Incentives in the amount of development contribution fee (utilities), land development fee, and land fee | | | | |
|--|------------|------------|-----------|-------------|
| 2017. | 2018. | 2019. | 2020. | TOTAL [BAM] |
| 107.339,52 | 149.429,03 | 182.261,75 | 65.498,13 | 504.528,43 |

| Funds allocated for Business Park Vrtlište | | | | |
|--|----------|-------|-------|-------------|
| 2017. | 2018. | 2019. | 2020. | TOTAL [BAM] |
| 127.339,94 | 2.624,89 | / | / | 129.964,83 |

| Funds allocated for trainees and volunteers | | | | |
|---|------------|------------|------------|-------------|
| 2017. | 2018. | 2019. | 2020. | TOTAL [BAM] |
| 99.959,37 | 149.549,86 | 148.848,77 | 133.073,41 | 531.431,41 |

Source: Municipal administration

3.3. Foreign trade balance and most significant export products and companies

The following table provides an overview of foreign trade balance [in BAM million]. It shows an apparent growth trend in both export and import, especially in 2019. There is trade deficit, same as in most municipalities in Zenica-Doboj Canton and even at the level of BiH:

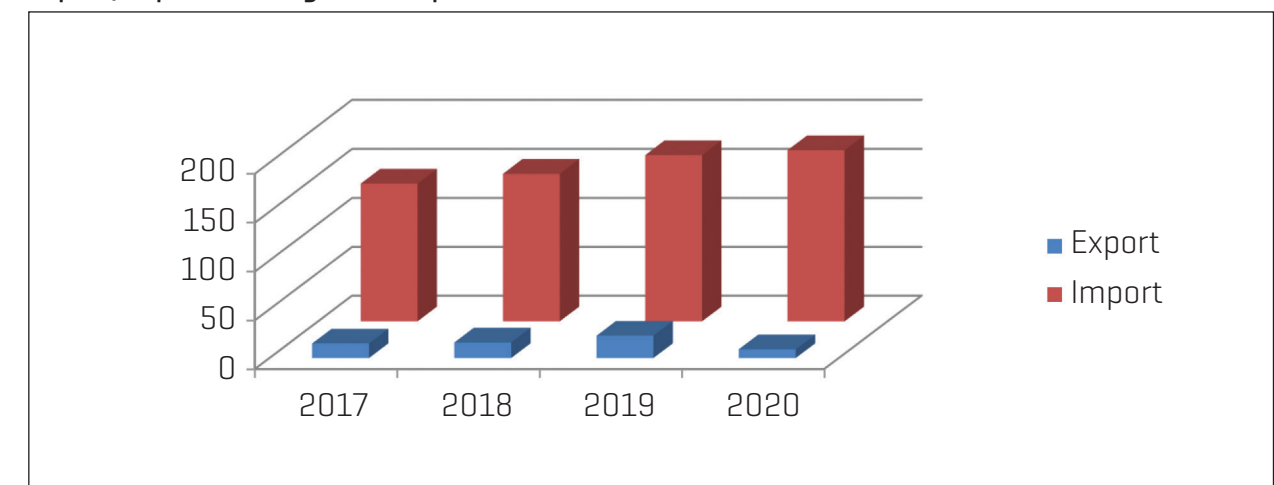
Table 13 – Foreign trade balance for Kakanj Municipality Area

| Description | 2017. | 2018. | 2019. | 2020. |
|---------------------------------|-------|-------|-------|-------|
| Export | 15 | 16 | 23 | 9 |
| Import | 141 | 151 | 170 | 175 |
| Export/import coverage rate [%] | 10,64 | 10,60 | 13,53 | 5,14 |

Source: FBiH Development Programming Institute.

The major share in both import and export is realised by processing industry companies, wholesale stores, and pharmaceutical stores. Figure 4 shows export/import coverage.

Figure 4.
Export/import coverage for the period 2017-2020.

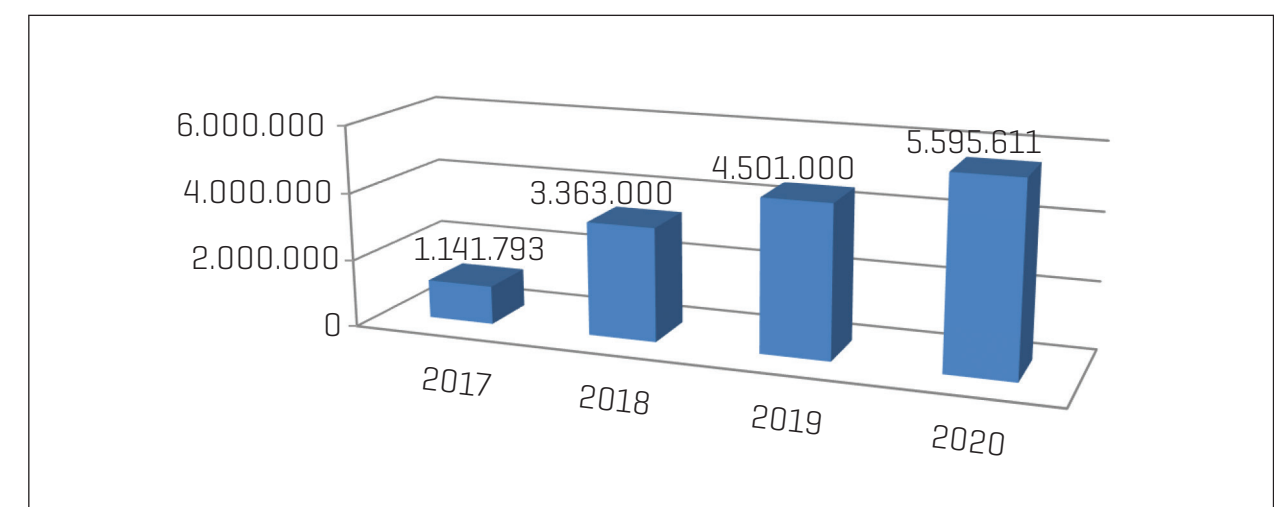


Source: FBiH Development Programming Institute

3.4. Large investments in facilities made in the observed period or ongoing

In the period 2017-2020, in Kakanj Municipality area, a total of BAM 14.600.404,37 was invested in facilities and some of these investments are still ongoing. The Figure below shows investments by year.

Figure 5.
Investments in Kakanj Municipality area by year



Source: Municipal administration

The largest investments in 2017 were realised by DSM TRADE d.o.o. Kakanj, ENIKON d.o.o. Kakanj, and ZU MEDICA d.o.o. Kakanj (now part of MGM Farm d.o.o. Kakanj). The purpose of the investments was enlargement of premises (halls and warehouses).

The following companies invested in business facilities in 2018: Mega travel d.o.o. Kakanj, BEGED d.o.o. Kakanj, TVORNICA CEMENTA d.d. KAKANJ, SIM-KOMERC d.o.o. Kakanj, and TD NOVA TRGOVINA d.o.o. KAKANJ.

The investments from 2019 were made to enlarge premises, construct residential buildings, reconstruct and extend facilities. The most significant investments in 2019 were realised by: DELTA PETROL d.o.o. Kakanj, DELIBAŠIĆ POLIURETANI d.o.o. Kakanj - Moj San, TRGOŠPED d.o.o. Kakanj, MBD export import d.o.o. Kakanj, Kuzma transport d.o.o. Kakanj and OR Pekar Delibašić.

The major share of the investments was realised in 2020, for purchase of land, business and production. facilities, construction and reconstruction of premises and facilities. The investments were realised by: DSM TRADE d.o.o. Kakanj, MBD export import d.o.o. Kakanj, INDUSTRIJA 4B d.o.o. Kakanj, TRGOŠPED d.o.o. Kakanj, MALAK INVEST d.o.o. Sarajevo - Branch MALAK FARMA, CNT d.o.o. Kakanj, NUR BOSNA d.o.o. Visoko, and DELTA PETROL d.o.o. Kakanj.

3.5. Business parks

By decisions of the Municipal Council, two business parks were established in Kakanj Municipality area.

Business Park Vrtlište

Business park Vrtlište is a zone assigned for industry and business and situated at the Surface mine of Rudnik mrkog uglja Kakanj d.o.o. Kakanj [Coal Mine]. According to land records, the Park encompasses the area of 9,9385 ha; the infrastructural projects have been completed. There are no available plots in Business Park Vrtlište. The Park has complete infrastructure and is operational.

Business Park Modrinje

This is a greenfield investment site in close vicinity to road and railway lines. According to land records, it covers the area is 4,9693 ha. It is situated in Modrinje. The Park does not have any infrastructure, but documents required for the implementation of infrastructure projects are being drafted. Business Park Modrinje is privately owned since 2021. Business parks Vrtlište and Modrinje are registered on the web site dedicated to business zones in FBiH.¹

3.6. Types, coverage and up-to-datedness/recentness of spatial planning documents

Kakanj Municipality area is covered by statutory spatial planning documents. The Spatial plan of the Municipality has been adopted for the entire Municipality area for the period of 20 years. The Spatial Plan of the Municipality 2010-2030 is a binding planning document that defines the purposeful organisation, use and allocation of land, as well as measures and guidelines for the protection of Kakanj Municipality space encompassing the area of ca 377 km2. The plan provides for the use, building, structuring and protection of space. The Decision on the amendment of the Spatial plan 2010-2030 has been adopted and would be implemented in 2021 if the Cantonal Urbanism and Spatial Planning Institute adhered to amendments preparation schedule, or possibly in 2022. The Master Plan of the town of Kakanj was adopted for the period of 15 years, 2011-2026. The Master Plan provides for the future organization, use and protection of space to create favourable conditions for residents to live, work and rest in the area encompassing 820,77 ha. The Plan contains general and specific objectives of spatial development, the projection of urban structure and the Implementation decision.

In 2026, activities on the adoption of a new planning document need to be initiated, namely a master plan to be applied as of 2027. For the existing Master Plan, the Decision on the amendments of the Master Plan 2011-2026, encompassing the area of 123 ha, was adopted and should be implemented in 2021 if the Cantonal Urbanism and Spatial Planning Institute adhered to the planned dynamics of amendments preparation, or possibly in 2022.

The Master Plan prescribes mandatory adoption of detailed planning documents for 6 zones [Centar grada, Doboj IV, Kakanj II, Varda, Povezice, and Termoelektrana]. The Land Use plan Kakanj was adopted for the town centre [Centar grada]] and the Land Use Romani settlement Varda for Varda, while land use plans for narrower zones in the planning period until 2026 will be adopted depending on the intensity of construction activities. Besides the purpose of space, land use plans also regulate population density, construction coefficient, number of storeys, infrastructure corridors, urban greenery, public utility equipment, urban amenities, etc.

¹ <https://zonefbih.gov.ba/>

Therefore, land use plans are subject to recurring requests for alterations. The Land Use Plan Kakanj was adopted in 2016 and its amendments in 2020. As it is a short-term planning document in the period covered by the Strategy, a new land use plan for the town centre will need to be adopted in 2027. The Land Use Plan Romani settlement Varda was adopted in 2014 and the construction of residential buildings is expected on available locations; after that, a decision will be made with regards to the whether it should be amended.

3.7. Generators of economic activities

There are three large business entities in Kakanj Municipality area:

- JP Elektroprivreda BiH – Podružnica Termoelektrana Kakanj – Kakanj [Electric Utility Company – Thermal Power Plant]
- RMU Kakanj d.o.o. Kakanj [Coal Mine]
- Tvornica cementa d.d. Kakanj [Cement Factory]

3.7.1. JP Elektroprivreda BiH – Podružnica Termoelektrana Kakanj – Kakanj [Electric Utility Company – Thermal Power Plant

Electricity in Zenica-Doboj Canton is almost entirely generated by TE Kakanj [Thermal Power Plant - TPP]. The following table shows the information on electricity generation in TE Kakanj for the period of five years [2015-2020]:

Table 14 – Electricity generation in TE Kakanj – Kakanj 2015-2020.

| Naziv | Proizvodnja 2015. [MWh] | Proizvodnja 2016. [MWh] | Proizvodnja 2017. [MWh] | Proizvodnja 2018. [MWh] | Proizvodnja 2019. [MWh] | Proizvodnja 2020. [MWh] |
|-----------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| TE “Kakanj” Kakanj | 1.926.900 | 2.093.800 | 2.546.467 | 2.759.539 | 2.011.571 | 2.306.347 |

Source: Map of economic potential of Zenica-Doboj Canton for the period 2015- 2017 and calculation of TE Kakanj output, Finance Service for the period 2018-2020.

The installed power is 450 MW [without units 1, 2, 3, and 4], annual electricity generation approximately 2300 GWh, while annual consumption of coal is approximately 1,8 million tons. Electricity generation started in 1956, by commissioning units 1 and 2. The installed power of TE Kakanj was increased by the construction and commissioning of other generation units. Units 1, 2, 3, and 4 have been decommissioned. TE Kakanj – Kakanj currently generates power in thermal units 5, 6, and 7. In the post-war period, units 5 and 6 [110 MW] were reconstructed and modernised, while unit 7 [230 MW] and the cooling system for units 5 and 6 were partly reconstructed– transition from a semi-open to closed cooling system.

The above investments extended the plant’s production life by 15 years, improved its operational readiness, increased its efficiency ratio and reduced pollutant emission. Besides generating electricity for the Electricity System, TE Kakanj – Kakanj also produces and supplies thermal energy for the district heating of a part of Kakanj Municipality and slag and ash for Tvornica cementa Kakanj [Cement Factory].

3.7.2. RMU Kakanj d.o.o. Kakanj [Coal Mine]

Djelatnost vađenja uglja na području općine Kakanj obavlja Rudnik mrkog uglja „Kakanj” d. o. o. Kakanj. U sadašnjem organizacionom obliku egzistira od 2010. godine. Nakon izvršenog pripajanja preduzeća u koncern JP “Elektroprivreda BiH” registrovan je kao Rudnik mrkog uglja “Kakanj” d. o. o. Kakanj, odnosno kao društvo sa ograničenom odgovornošću. Društvo je registrovano i za vađenje kamena, šljunka i pijeska, proizvodnju različite vrste opreme i alata, trgovinu na veliko i malo različitim vrstama proizvoda i posredništvo, kao i za obavljanje ostalih djelatnosti prema Odluci o standardnoj klasifikaciji djelatnosti u Federaciji BiH, što je regulisano Statutom.

Until 2009, ZD RMU Kakanj d.o.o. Kakanj operated as an independent legal entity and had 2.126 employees. As of 31 July 2020, RMU Kakanj d.o.o. Kakanj has 1.582 employees. Its total revenue in 2019 was BAM 69.607.597,75. RMU Kakanj d.o.o. Kakanj does not export any goods or services.

The main goal of RMU Kakanj d.o.o. Kakanj is to maintain the production and fulfil its main function, i.e. provide sufficient quantities of coal to Thermal Power Plant Kakanj. Considering the situation at the electricity market, it can be said that coal, along with hydropower potential, represents the most significant energy potential, so mining will continue to have a significant role in the total economic development of both Zenica-Doboj Canton and Kakanj Municipality.

3.7.3. Tvornica cementa d.d. Kakanj [Cement Factory]

The construction sector entails several small enterprises and one big company, namely Heidelberg Cement Group – Tvornica cementa Kakanj d.d. Kakanj [Cement Factory]. Its most significant export product is cement, which is exported to Croatia and Montenegro. The value of the company’s export in 2019 was BAM 18 million.

The most important potential of the company is vertical integration encompassing the manufacturing of cement and aggregates for concrete. The company will continue in this direction, exploring possibilities to broaden its network and expand both in BiH and the region. Tvornica cementa Kakanj [TCK] has been one of the most successful companies in Bosnia and Herzegovina and the region. To this day, Tvornica cementa Kakanj has invested around BAM 200 million [ca EUR 100 million] in the modernisation of the plant, environmental protection and business expansion. Dust emissions from the main stack of the plant were reduced by 99 %. It is the first company in BiH to satisfy this criterion and obtain AAA Golden Certificate of Creditworthiness Rating.

3.8. Agriculture and forestry

3.8.1. Agriculture

Agriculture is one of the industries that have intensified in Kakanj Municipality area in recent years, owing to natural and human resources, sectoral associations and Farmers’ Federation KAP Kakanj, collectors and processors of farming products, as well as to significant incentive measures of the Municipality of Kakanj, higher levels of government, and international organisations.

Table 15 – Different land categories by area and ownership

| Land category | Area [ha] | | | | |
|-------------------------|---------------|-------|-------------|------|-----------|
| | Privately ow. | % | State-owned | % | Total |
| Arable land and gardens | 3.764,24 | 9,98 | 106,22 | 0,28 | 3.870,46 |
| Orchards | 1.209,28 | 3,21 | 68,97 | 0,18 | 1.278,25 |
| Vineyards | / | / | / | / | / |
| Meadows | 5.815,29 | 15,42 | 332,02 | 0,08 | 6.147,31 |
| Total cultivable land | 10.788,81 | | 507,21 | | 11.296,02 |
| Pastures | 912,24 | 2,42 | 580,63 | 0,16 | 1.492,87 |
| Fish ponds | / | / | / | / | / |
| Total agricultural land | 11.701,05 | 31,03 | 1.087,84 | 0,69 | 12.788,89 |
| Forest land | | | | | 22.548,49 |
| Barren land | | | | | 2.360,29 |
| Total | 11.701,05 | | 2.682,89 | 100 | 37.697,67 |

Source: Property and Geodetic Affairs and Real Estate Cadastre Service of the Municipality of Kakanj for 2021

According to land records for 2021, Kakanj Municipality has 12.788,89 ha of agricultural land at its disposal, divided up into 40 cadastral municipalities. The agricultural land is private and state owned.

Of a total of 12.788,89 ha of agricultural land in Kakanj municipality area, 1.087,84 ha [8,51%] is state owned, and 11.701,05 ha [91,49 %] is held by natural and legal persons.

The major share of the agricultural area is taken by meadows [6.147,31 ha], arable land [3.870,46 ha], orchards [1.278,25], and pastures [1.492,87 ha]..

Table 16 – Agricultural, cultivable and arable land per capita for Kakanj Municipality area

| | |
|---------------------------------|--------|
| Population | 37.441 |
| Agricultural land ha per capita | 0,34 |
| Cultivable land ha per capita | 0,30 |
| Arable land ha per capita | 0,10 |

Source: FBiH Statistics Institute [2013]

According to the international agricultural standards, a municipality, city or country should have 0,40 ha of agricultural and 0,17 ha of cultivable land per capita, in order to be able to provide sufficient quantities of food for all its residents.

According to the latest data from 2021, Kakanj Municipality has 0,34 ha of agricultural and 0,30 ha of cultivable land per person.

The above Table shows the available land in Kakanj Municipality area. The question remains of how to preserve the agricultural land, i.e. how to balance between requests to change land use and preserving the agricultural and ecological function of the land. One possible measure is the reclamation of the existing large degraded areas in Kakanj Municipality, such as mines, tailings disposal facilities, and various landfills..

Table 17 – Size of land holdings by ownership

| Area [ha] | Ownership | |
|------------|--------------------------------|--------|
| | Private [number of households] | Public |
| 0 - 1 [ha] | 1.267 | 82 |
| 1 - 3 [ha] | 278 | 20 |
| 3 - 5 [ha] | 29 | 8 |
| 5+ [ha] | 5 | 5 |
| Ukupno: | 1.579 | 115 |

Source: Register of Agricultural Holdings and Register of Clients, 2020

The Table shows that out of the total number of agricultural holdings registered in the Register of Agricultural Holdings and Register of Clients, the majority have an area of up to 1 ha [1.349 or 79.63%], or from 1 to 3 ha [298 or 17,60 %], meaning that agricultural land fragmentation is highly pronounced.

Table 18 – Agricultural land by grade

| Grade | Percentage [%] |
|-------|----------------|
| I | 0,00 |
| II | 0,12 |
| III | 0,34 |
| IVa | 0,08 |
| IVb | 4,02 |
| V | 10,16 |
| VI | 12,98 |
| VII | 4,73 |

Source: Municipal administration

Majority of agricultural land in Kakanj Municipality area is grade V and VI, grades II and III account for a low share, while grades III and IVb are the ones most threatened by urbanization/construction.

Table 19. Poljoprivredna proizvodnja

| Types of agricultural production | 2017. | | 2018. | | 2019. | | 2020. | |
|----------------------------------|--------------|--------------------------|--------------|--------------------------|--------------|--------------------------|--------------|--------------------------|
| | Quantity [t] | Total market price [BAM] | Quantity [t] | Total market price [BAM] | Quantity [t] | Total market price [BAM] | Quantity [t] | Total market price [BAM] |
| Cereals | | | | | | | | |
| Wheat | 406 | 125.860,00 | 351 | 87.750,00 | 464 | 143.840,00 | 630 | 277.200,00 |
| Triticale | 7 | 2.800,00 | 9 | 2.250,00 | 7 | 2.170,00 | 32 | 13.440,00 |
| Barley | 134 | 46.900,00 | 126 | 37.800,00 | 168 | 50.400,00 | 225 | 96.750,00 |
| Corn | 355 | 142.000,00 | 929 | 250.830,00 | 936 | 318.240,00 | 1376 | 481.600,00 |
| Rye | 3 | 960 | 2 | 540 | 3 | 900 | 8 | 3.360,00 |
| Oat | 25 | 9.000,00 | 22 | 6.600,00 | 31 | 9.610,00 | 44 | 18.920,00 |
| Fruits | | | | | | | | |
| Apple | 142 | 106.000,00 | 572 | 486.000,00 | 284 | 336.960,00 | 576 | 460.800,00 |
| Pear | 43 | 47.400,00 | 290 | 290.000,00 | 144 | 282.000,00 | 300 | 450.000,00 |
| Quince | 2 | 5.300,00 | 20 | 24.000,00 | 10 | 16.820,00 | 22 | 44.000,00 |
| Plum | 60 | 37.500,00 | 122 | 73.000,00 | 61 | 37.680,00 | 305 | 305.000,00 |
| Walnut | 2 | 10.920,00 | 24 | 120.000,00 | 13 | 72.700,00 | 27 | 108.000,00 |
| Peach | 3 | 5.400,00 | 7 | 14.000,00 | 2 | 4.420,00 | 12 | 26.520,00 |
| Sour cherry | 21 | 21.000,00 | 66 | 66.000,00 | 39 | 85.000,00 | 67 | 201.000,00 |
| Sweet cherry | 21 | 29.400,00 | 66 | 99.000,00 | 48 | 143.000,00 | 81 | 283.000,00 |
| Raspberry | 300 | 540.000,00 | 405 | 567.000,00 | 336 | 825.310,00 | 585 | 2.047.500,00 |
| Blackberry | 18 | 27.000,00 | 18 | 27.000,00 | 18 | 27.000,00 | 26 | 39.000,00 |
| Strawberry | 17 | 34.000,00 | 18 | 36.000,00 | 20 | 52.750,00 | 20 | 90.000,00 |
| Chokeberry | | | 11 | 55.000,00 | 10 | 50.000,00 | 12 | 60.000,00 |
| Huckleberry | 6 | 42.000,00 | 7 | 49.000,00 | 7 | 49.000,00 | 9 | 63.000,00 |
| Grape | 0,25 | 530 | 0,37 | 925 | 0,25 | 625 | 0,5 | 1.250,00 |

| Vegetables | | | | | | | | |
|-------------------------|-----|------------|-----|------------|-----|--------------|------|--------------|
| Potato | 873 | 794.430,00 | 980 | 882.000,00 | 980 | 1.009.400,00 | 1880 | 1.654.400,00 |
| Carrot | 50 | 79.000,00 | 80 | 120.000,00 | 76 | 134.520,00 | 120 | 120.000,00 |
| Paradajz | 46 | 46.000,00 | 69 | 69.000,00 | 69 | 72.450,00 | 112 | 145.600,00 |
| Pepper | 42 | 50.400,00 | 84 | 100.800,00 | 105 | 126.000,00 | 112 | 134.400,00 |
| Cucumber | 46 | 33.120,00 | 92 | 69.000,00 | 80 | 69.600,00 | 112 | 112.000,00 |
| Onion | 128 | 161.280,00 | 160 | 240.000,00 | 152 | 238.640,00 | 216 | 259.200,00 |
| Garlic | 5 | 33.550,00 | 8 | 56.000,00 | 6 | 39.060,00 | 15 | 90.000,00 |
| Bean [pulses] | 54 | 238.680,00 | 65 | 325.000,00 | 54 | 263.520,00 | 97 | 388.000,00 |
| Pea [pulses] | 6 | 19.320,00 | 6 | 21.000,00 | 5 | 16.900,00 | 10 | 30.000,00 |
| Cabbage and cauliflower | 38 | 57.570,00 | 55 | 82.500,00 | 55 | 89.100,00 | 91 | 45.500,00 |
| Lettuce | 28 | 70.000,00 | 28 | 70.000,00 | 28 | 75.880,00 | 50 | 75.000,00 |

| Livestock and poultry farming | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| Head of cattle | 3.600 | 3.300 | 3.000 | 2.900 |
| Head of pig | 320 | 320 | 320 | 320 |
| Chicks | Eggs for hatching 12.000 | Eggs for hatching 12.000 | Eggs for hatching 12.000 | Eggs for hatching 12.000 |
| | Day old chicks 21.600 | Day old chicks 21.600 | Day old chicks 21.600 | Day old chicks 21.600 |
| Eggs | 228.000,00 | 228.000,00 | 228.000,00 | 228.000,00 |
| Dairy cows | 2.250 | 2.300 | 2.000 | 1.950 |
| Milk production [litres] | 7.020.000 | 7.176.000 | 6.240.000 | 6.084.000 |
| Head of sheep | 6.000 | 5.800 | 5.700 | 6.150 |
| Bee colonies | 3.900 | 4.050 | 3.960 | 4.050 |
| Honey production [kilograms] | 19.500 | 48.600 | 31.000 | 8.100 |
| Production of raw cow milk in litres [organised collection] | 773.397 | 827.819 | 682.628 | 756.755 |

Source: Municipal administration

According to the above Table 1.4, the development of farming production in Kakanj Municipality area may be rated as average, as majority of producers produce for own use and minority for the market with variable demand. The exception are a few large producers who produce food for own livestock, producers who contract production and, in the previous several years, producers who opt for the types of agricultural production eligible for incentives from the budgets of the Federation of BiH, Zenica-Doboj Canton and Municipality of Kakanj. Grain production has been stable in recent years and there have been no significant increases for the following reasons: high price of production material, low collection price, lack of or low incentives, unfair competition from imported grains. Corn accounts for the highest share in production. However, yields of arable crops have varied depending on weather conditions and climate changes. Thus, in 2018, arable crop area was larger and yield lower in comparison to 2017.

In Kakanj Municipality area, there are decent conditions for further development of vegetable farming. The majority of this type of farming takes place in holdings with mixed production, where vegetables production represents a supplementary source of income. The vegetables production is largely intended for the local market, especially when it comes to open-field cultivation. Potato accounts for the highest share in production.

It should be pointed out that potato yields have been constantly increasing, owing to the use of high-quality seed and planting materials [873 tons in 2017 and 1880 tons in 2020].

Production of vegetables in protected areas represents one of the most intensive forms of agricultural production that can be profitable even for smaller holdings. The area used for growing vegetables in protected area has expanded and reached 51.000 m2, as a result of the incentive measures of Zenica-Doboj Canton and Municipality of Kakanj, as well as allocation of greenhouses in cooperation with humanitarian and other nongovernmental organisations.

Many producers have committed to his form of production, as it is the most viable in terms of labour invested and profit. The majority of greenhouses have an area from 100 to 300 m2; there are five registered greenhouses with the area of 500-700 m2 and one over 1000 m2. The following vegetable crops predominate in greenhouse production: tomato, cucumber, and pepper in spring and summer, and lettuce, spinach, and green onion in autumn and winter.

Fruit farming, in the existing old orchards, represents an extensive system of cultivation, with low yields and largely neglected land properties. Recently planted intensive cultivation orchards are an exception to this and they are in relatively good condition. Producers have recently shown interest in intensive fruit cultivation for the market. New orchards with leading varieties of apples, pears, and plums have been planted, applying modern cultivation system. However, the production of fruit crops largely depends on prevailing weather and climate conditions. Low temperatures and late frosts occurred in the spring months of the past few years, particularly in 2017 and 2019, so the production of fruit was very low.

Owing to the organised collection and the existing incentive measures of Zenica-Doboj Canton and Municipality of Kakanj, Kakanj Municipality area also has well developed production of berries, particularly raspberries. In Kakanj Municipality area, there is one registered collector of berries and other fruits [Taho-komerc d.o.o. Kakanj], while another six collectors from other municipalities collect fruits from Kakanj Municipality area. Natural juices production has recently started in Kakanj Municipality area and a craft for the processing of fruits and vegetables is currently in the process of registration to collect and process the market surpluses of fruits and vegetables.

Besides raspberries, other varieties of berries also have development potential, particularly plantation strawberries, huckleberries, chokeberries, blackberries, and currants, thanks to favourable agri environmental conditions for their cultivation in the rural areas of the Municipality. Besides cultivating agricultural crops, people from rural areas earn a significant part of their incomes by picking forest fruits and medicinal plants.

Apparently, when weather conditions are favourable, the yields of certain crops increase every year and this is significantly contributed to by theoretical and practical trainings on the use of high-quality seed material and application of proper crop management and agro-meliorative practices organized by the Municipality of Kakanj in cooperation with the Faculty of Agriculture and Food Science Sarajevo, Agro Mediterranean Faculty Sarajevo, FBiH Agropedological Institute Sarajevo, and FBiH Agricultural Institute Sarajevo. During the COVID-19 pandemic, owing to the incentive measures of the FBiH Ministry of Agriculture, Forestry and Water Management of Zenica-Doboj Canton and Municipality of Kakanj for spring and autumn planting in 2020, areas used for the cultivation of arable and vegetable crops increased by ca 16 % in comparison to 2019.

Finally, the Strategy should support the production structure to be formed by commercial holdings, pursuant to their interests, to provide stronger employment, profit and sustainability. The forthcoming establishment of such holdings should be seen an opportunity for small family farms if they demonstrate the willingness to form associations under the Federation of Farmers' Associations or under a cooperative that will hopefully be formed. Those who produce volumes below the line of profitability and who are not willing to organise should be referred to social support and local community/municipality programmes or left to their own devices.

When it comes to livestock and poultry farming, the total livestock population in Kakanj Municipality area has been decreasing as an increasing number of people have left rural and moved to urban areas or have emigrated to more developed countries. The Table titled Production of raw cow milk in litres [organised collection] shows that the production of milk under organised collection has increased, largely owing to incentives for this form of production, both from the municipal level and other levels of government.

The number of pigs has been decreasing, which is also linked to the emigration of people from rural areas, while the number of sheep and poultry has remained the same in the observed period. The Table also shows that there have been between 3.900 and 4.050 bee colonies, largely depending on weather conditions in a given year. Production of honey in kilograms shown in the Table is representative of how much weather conditions influence the production and yield of honey. The Table also indicates which years were successful, without heavy rainfall and frost and with good forage, and which were worse yielding minimum or no honey for sale.

In Kakanj Municipality area, there are two registered collectors of market surpluses of raw milk:

- IN AGRO d. o. o. Kakanj and
- MALAK INVEST d. o. o. Sarajevo – Branch MALAK FARMA KAKANJ.

In addition to own production of raw milk and meat, fruits and vegetables [in open fields and greenhouses], collectors plan to collect market surpluses of agricultural products from agricultural producers from Kakanj Municipality area, which is a significant precondition for the intensive development of agriculture. The domestic cattle breed Buša is highly spread In Kakanj Municipality area, and 90% of Buša heads in FBiH are located in this and the surrounding municipalities. Competent FBiH institutions plan to launch an initiative declaring this area a protected zone for breeding the domestic cattle breed Buša.

An overview of registrations in the Register of Agricultural Holdings and Register of Clients in the period 2017-2020.

Registrations in the Register of Agricultural Holdings and Register of Clients started in 2009. A total of 1.929 agricultural producers have registered since. Most registrations refer to family agricultural holdings [90%] and self-employed farmers and crafts [6,8%], while the remaining 3,2% refer to agricultural cooperatives, commercial brokerages and farmers' associations from Kakanj Municipality area. Being registered in the Register of Agricultural Holdings and Register of Clients is a precondition for obtaining farming incentives at the municipal, cantonal and the level of FBiH.

Table 20 - Farming incentives [municipal level, higher levels of government, and international organisations]

| MUNICIPAL FARMING INCENTIVES [PROGRAMMES] | | | | |
|--|------------|------------|------------|--------------|
| 2017. | 2018. | 2019. | 2020. | TOTAL |
| 345.356,75 | 447.721,48 | 393.292,40 | 348.436,24 | 1.534.806,87 |
| INCENTIVES OF HIGHER LEVEL OF GOVERNMENT AND INTERNATIONAL ORGANISATIONS | | | | |
| 2017. | 2018. | 2019. | 2020. | TOTAL |
| - | 55.700,00 | - | 200.502,55 | 256.202,55 |
| TOTAL: | | | | 1.791.009,42 |

Source: Municipal administration

The Table above shows that a total of BAM 1.791.009,42 was allocated for farming incentives, including BAM 1.534.806,87 from Kakanj Municipality Budget and BAM 256.202,42 from the higher levels of government and international organisations.

Table 21 – Registered farmers by domain

| Year | REGISTERED IN THE REGISTER OF AGRICULTURAL HOLDINGS AND REGISTER OF CLIENTS TOTAL | | | REGISTERED AS SELF-EMPLOYED FARMERS AND CRAFTS [NATURAL PERSONS] | | REGISTERED LEGAL PERSONS [OPZ AND DOO] |
|-------------------------------------|---|-------|--|--|---------|--|
| 2017. | 188 | | | 18 | | 1 |
| 2018. | 121 | | | 15 | | 2 |
| 2019. | 84 | | | 24 | | 2 |
| 2020. | 72 | | | 9 | | 1 |
| SELF-EMPLOYED FARMERS MAIN ACTIVITY | | | | SELF-EMPLOYED FARMERS SIDE ACTIVITY | | |
| PLANTS | ANIMALS | MIXED | | PLANTS | ANIMALS | MIXED |
| 16 | 37 | 8 | | 3 | 7 | 6 |
| 61 | | | | 16 | | |

Source: Register of Agricultural Holdings and Clients Kakanj Municipality

According to the Table above, the majority of registered farmers deal with animal farming, as there is organised collection of raw cow milk in Kakanj Municipality area.

In the following period, we should endeavour to intensify the development of agriculture, increase the amounts of incentives, establish an organisational form to be the generator of agricultural development, develop organised and cooperative production, provide capacities for the collection and processing of market surpluses of farming products and installation of refrigerating and other storage units.

3.8.2. Forestry

Forest vegetation represents the most important and most abundant natural resource in Kakanj Municipality area and significant economic development potential. Forests take up 22.548,48 ha or approximately 60 % of the total territory of Kakanj Municipality.

Table 22 – Ownership and forest land area

| Ownership | Forest land area [ha] |
|-----------------|-----------------------|
| Privately owned | 4.509,70 |
| State-owned | 18.038,78 |
| Total | 22.548,48 |

The Table 22 shows that 18.038,78 ha or 80 % of the forest area in Kakanj Municipality is state-owned, while 4.509,70 ha or 20% is privately owned.

Table 23 – Stocks of softwood and hardwood timber and their increment

| Type | Stocks of timber [m³] | Annual increment of timber in forests [m³] |
|-----------|-----------------------|--|
| Softwoods | 1.316.111,53 | 40.525,70 |
| Hardwoods | 2.147.339,87 | 44.859,00 |
| Total | 3.463.451,40 | 85.384,70 |

Source: Forest management plan for Kakanjska, validity period – 1 January 2013 – 31 December 2022

It is estimated that the Municipality has 3.463.0451,40 m³ of timber at its disposal, 62% of which are stocks of hardwood timber and 38% stocks of softwood timber. Timber stock by resident of the municipality is 92,50 m³, placing the Municipality above the average in BiH [84,9 m³ per capita] – basis of calculation: 37.441 residents. Annual increment of timber in the forests is estimated to 85.384,70 m³, 40.525,70 m³ of softwoods and 44.859,00 m³ of hardwoods.

A harvest plan is the most important plan of a forest management plan. The table below presents roundwood production [yield] in Kakanj Municipality area..

Table 24 –Roundwood production in Kakanj Municipality area for the period 2017-2020 [by year]

| Year | Softwoods [m³] | Hardwoods [m³] | Total [m³] |
|-------|----------------|----------------|------------|
| 2017. | 13.584,41 | 18.777,08 | 32.361,49 |
| 2018. | 14.140,08 | 19.300,86 | 33.440,94 |
| 2019. | 14.253,18 | 19.374,73 | 33.627,91 |
| 2020. | 7.190,67 | 11.328,27 | 18.518,94 |
| Total | 49.168,34 | 68.780,94 | 117.949,28 |

Source: JP ŠPD ZDK d.o.o. Zavidovići [Cantonal Forestry Company] – Šumarija Kakanj [Forestry Branch], year 2021

Table 25 – Sale of hardwood and softwood logs in m³ and BAM

| Year | Softwoods [m³] | Revenue [BAM] | Hardwoods [m³] | Revenue [BAM] | Total S+H [m³] | Total revenue [BAM] |
|-------|----------------|---------------|----------------|---------------|----------------|---------------------|
| 2017. | 13.087,67 | 1.324.534,92 | 18.159,47 | 1.531.263,13 | 31.247,14 | 2.855.798,05 |
| 2018. | 13.574,96 | 1.433.054,81 | 19.125,49 | 1.923.880,63 | 32.700,45 | 3.356.935,44 |
| 2019. | 13.646,53 | 1.533.015,54 | 19.222,67 | 1.710.538,39 | 32.869,20 | 3.243.553,93 |
| 2020. | 6.663,47 | 725.036,07 | 10.795,27 | 845.381,55 | 17.458,74 | 1.570.417,62 |
| Total | 46.972,63 | 5.015.461,34 | 67.302,90 | 6.011.063,70 | 114.275,53 | 11.026.705,04 |

Source: JP ŠPD ZDK d.o.o. Zavidovići [Cantonal Forestry Company] – Šumarija Kakanj [Forestry Branch], year 2021

Table 26 - Afforestation in Kakanj Municipality area for the period 2017 – 2020 [by year] - area, number of seedlings, amount in BAM - AFFORESTATION

| Year | Area [ha] | Plants [pcs] | Price [BAM] |
|-------|-----------|--------------|-------------|
| 2017. | 29,80 | 86.900,00 | 65.212,00 |
| 2018. | 16,10 | 48.300,00 | 44.359,00 |
| 2019. | 19,73 | 49.250,00 | 44.436,00 |
| 2020. | 18,90 | 54.000,00 | 47.420,00 |
| Total | 84,53 | 238.450,00 | 201.427,00 |

Source: JP ŠPD ZDK d.o.o. Zavidovići [Cantonal Forestry Company] – Šumarija Kakanj [Forestry Branch], year 2021

The Forestry Strategy of BiH and its implementation are regulated by the laws of the Entities on forests with supporting legislation as well as by the Law on the Protection and Use of Cultural, Historical and Natural Heritage, Law on Spatial Plan, Law on Plant Protection, Law on Hunting, Law on Fishing etc. The organization of forestry is regulated by the laws on forests at the level of the Entities. The Cantonal Forestry Administration has a department for Kakanj Municipality, operating within the Ministry of Agriculture, Water Management and Forestry of Zenica-Doboj Canton.

3.9. Roads and communications

The favourable geographical position of Kakanj Municipality makes it an important intersection of roads. A section of the motorway of Corridor C [Motorway A1 – 33,2 km from the southern border of Visoko town to the exit Zenica-south] and trunk roads M-17 and M-5 pass through Kakanj Municipality, so it is situated on the main road and railway corridor from Bosnia and Herzegovina to Europe. The construction and maintenance of the road network is one of significant preconditions for the development of local communities as there is a strong connection between transport and economy in this area.

Table 27 – Road network in the Municipality area

| Description | Length [km] | Share in the total network in the Municipality area [%] | Condition [good/bad] |
|---------------|-------------|---|----------------------|
| Uncategorised | 259,00 | 52,42 | good/bad |
| Local | 151,00 | 30,56 | good/bad |
| Regional | 65,6 | 13,27 | good |
| Trunk | 0 | 0 | - |
| Motorway | 18,52 | 3,75 | good |
| Ukupno | 494,12 | 100 | |

Source: Institute for Planning and Construction of Kakanj Municipality

Table 28 – Number of registered vehicles in Kakanj Municipality area

| Year | 2017 | 2018 | 2019 | 2020 |
|---|-------|--------|--------|--------|
| Number of registered vehicles in Kakanj Municipality area | 9.928 | 10.476 | 10.924 | 11.098 |

Source: Ministry of Internal Affairs Kakanj

3.10. Tourism potential

In terms of tourism potential, there are preconditions for the development of cultural, historical, religious and mountain tourism.

3.10.1. Cultural and historical monuments

In Kakanj Municipality area, there are 176 cultural and historical monuments and eight of them have been declared natural monument by the Commission to Preserve National Monuments. The following monuments in Kakanj Municipality area are on the List of national monuments of Bosnia and Herzegovina:

- Franjevački samostan [Franciscan Monastery] and Crkva sv. Ive Krstitelja [St. John the Baptist Church] in Kraljeva Sutjeska – as a single unit.
- The collection of 32 incunabula – cultural property owned by the Franciscan Monastery in Kraljeva Sutjeska.
- Vladarski dvori [Royal Court] in Kraljeva Sutjeska, dating from the 14th and 15th century.
- Mosque in Kraljeva Sutjeska.
- Kuća Ive Duspera [Ivo Dusper’s House], Kraljeva Sutjeska.
- Prahistorijsko neolitsko naselje Obre II [Prehistoric Neolithic Settlement Obre II], Gornje polje site in Obre.
- Kula hadži Muhamed-bega [Hajji Muhamed-bey’s Tower House], also known as Turski sud [Turkish Courthouse].
- Glavica in Bilješevo.

3.10.2. Excursion sites in Kakanj Municipality area

Ponijeri

Ponijeri is an ideal and attractive spot for leisure and relaxation of both domestic and foreign tourists. Its altitude is 1200 m and its distance from the town centre is 20 km. It is a great site for leisure during winter, with its 1000 m long ski slope and a ski lift. Ski school and ski rental are also available.²

Tajan

Tajan was declared a natural monument in 2008. It is situated between the municipalities of Kakanj, Zavidovići and Vareš and its highest point is 1297 meters above sea level. This natural monument offers facilities and infrastructure for the fun and comfortable stay of guests:

- mountain biking [approximately 200 km of marked and GPS recorded track],
- the first mountain biking track – with MTB XC race held every year.

A small part of the Tajan Natural Monument is located in the area of Kakanj Municipality. Its highest peak at the altitude of 1297 m can be accessed from Ponijeri, via a hiking trail that can also be used for mountain biking.

Bočica

Hiking site Bočica is situated 10 km from Kakanj and its altitude is 920 m. There is a mountain hut at Bočica, surrounded by coniferous and deciduous forest and it is an excellent spot for hikers, hunters, scouts, athletes and others who want to stay there for several days and enjoy various activities. There are 46 beds in the hut. There are also sports fields [for football, handball, volleyball, and basketball] and a playground.

Močvara Bistrik [Bistrik Swamp]

Swamp Bistrik is an important ornithological reserve. It is situated in the Trstionica River valley, near Haljinići settlement, in Kakanj Municipality area. The Swamp is a habitat of rare threatened species such as: Eurasian spoonbill, ferruginous duck [on the red list of globally threatened species], white stork, black stork, lesser kestrel [on the red list], corn crane [on the red list], etc.

There is a procedure in place to declare Bistrik Swamp a protected area in the category of protected landscapes. The protected area will encompass 145 hectares, with three zones. The first, strictly protected zone, will encompass the area of 32 ha.²

Vidikovac na Ivničko – zagradskoj gradini [Lookout at Ivnica-Zagrađe hillfort]

It is situated in the area of Zagrađe and Ivnica settlements, at the site of the former fort named Gradina. It is assumed that this fort, as many other such forts in Bosnia and Herzegovina, had been created in the Prehistoric Period and existed until the end of the Middle Age.

Nekropola stećaka na Gradini [Necropolis with stećak tombstones at Gradina]

It the wider area of Ivnica-Zagrađe forthill, there is a necropolis with stećak tombstones. The necropolis consists of seven stećak tombstones. There are also numerous pieces of destroyed stećak tombstones.

Prašuma Gornja Trstionica – Bukovica [Primary forest Gornja Trstionica – Bukovica]

Primary forest Gornja Trstionica-Bukovica as part of the natural heritage of Kakanj Municipality and the cultural and historical heritage in the same area [encompassing a part of Bobovac Old Town, Sultan Mehmed el-Fatih’s Mosque and Franciscan Monastery in Kraljeva Sutjeska] represents a unique and outstanding form of biological, geomorphological and hydrological, ecological and cultural and historical diversity.

The economy of Zenica-Doboj Canton is largely low-growth and based on natural resources. As a rule, such economies highly affect the environment, particularly in terms of space and resources.

² [https://hr.wikipedia.org/wiki/Bistrik_\(mo%C4%8Dvara\)](https://hr.wikipedia.org/wiki/Bistrik_(mo%C4%8Dvara))

3.11. Development problems of the economy

| Development problem | Development needs |
|---|--|
| Establishment of partnerships | Support inter-municipal cooperation through the development of joint projects of interest for two or more cities/municipalities |
| Trade deficit | Introduce programmes to support export-oriented companies |
| Lack of reclamation of abandoned mine sites | Support programmes for remediation and reclamation of abandoned mine sites |
| Risk of allocating budgetary resources to support START-UP programmes | Improve support programmes for the establishment of new start-ups and support the existing start-ups Develop entrepreneurial infrastructure where conditions exist |
| Underuse of new technologies, innovations and computerisation in the economy | Enhance support to entrepreneurs for innovation and introduction of new technologies in industry and for computerisation |
| Lack of resources for the establishment of new business parks [land, property relations, infrastructure etc.] | Find sites appropriate for the development of business parks; use available space Develop infrastructure construction projects for business parks and promote them to attract domestic and foreign investors Solve property issues when it comes to the business zones that have such issues |
| Technological obsolescence of machines | Increase support measures and grant schemes for business parks |
| Lack of crafts and craft appreciation | Enhance support to crafts and foster self-employment of craftsmen |
| Underprotection of domestic production | Increase competitiveness using new technologies in production Construct capacities for the processing of farming products |
| Migration of young people from rural areas | Incentive programmes for rural development |
| Underuse of EU funds | Educate human resources to apply to public calls and draft projects |
| Illegal logging | Apply the legislation |

4. OVERVIEW OF STATUS AND CHANGES OF THE LABOUR MARKET IN KAKANJ MUNICIPALITY

4.1. Employment and net salaries in Kakanj Municipality

In Kakanj Municipality area, most people are employed in and micro and large companies. There is an apparent increasing trend in the number of people employed in micro and small companies, while the number of persons employed in large and medium-sized enterprises significantly reduced in the observed period. Net salaries showed a growth trend in the period 2017- 2020 and increased by 9,57 %.

Table 29 – Total employment and net salaries

| | 2017. | | | 2018. | | | 2019. | | | 2020. | | |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | M | F | T | M | F | T | M | F | T | M | F | T |
| Number of employed persons | 4.835 | 2.153 | 6.988 | 4.947 | 2.232 | 7.179 | 4.944 | 2.339 | 7.283 | 4.794 | 2.304 | 7.089 |
| Average net salary | 992 | | | 1.005 | | | 1.025 | | | 1.087 | | |

Source: FBiH Statistics Institute

4.1.1. Employment by activity/sector

The following Table shows that, in Kakanj Municipality area in the period 2017-2020, most people were employed in the mining and quarrying sector 21,93 %, wholesale and retail trade and vehicle repair 14,58 %, processing industry 12,11 %, and electricity generation 9,18 %. The employment was lowest in the following activities: real estate activities, information and communication, financial activities, administrative and ancillary service activities. In the period 2017-2020, the employment in these activities decreased, while the other industries showed an apparent upward trend.

Due to the consequences of the continuation of COVID-19 pandemic, it is expected that the uncertain trend will continue in the forthcoming period.

Table 30 – Number of registered employees in companies – by activity

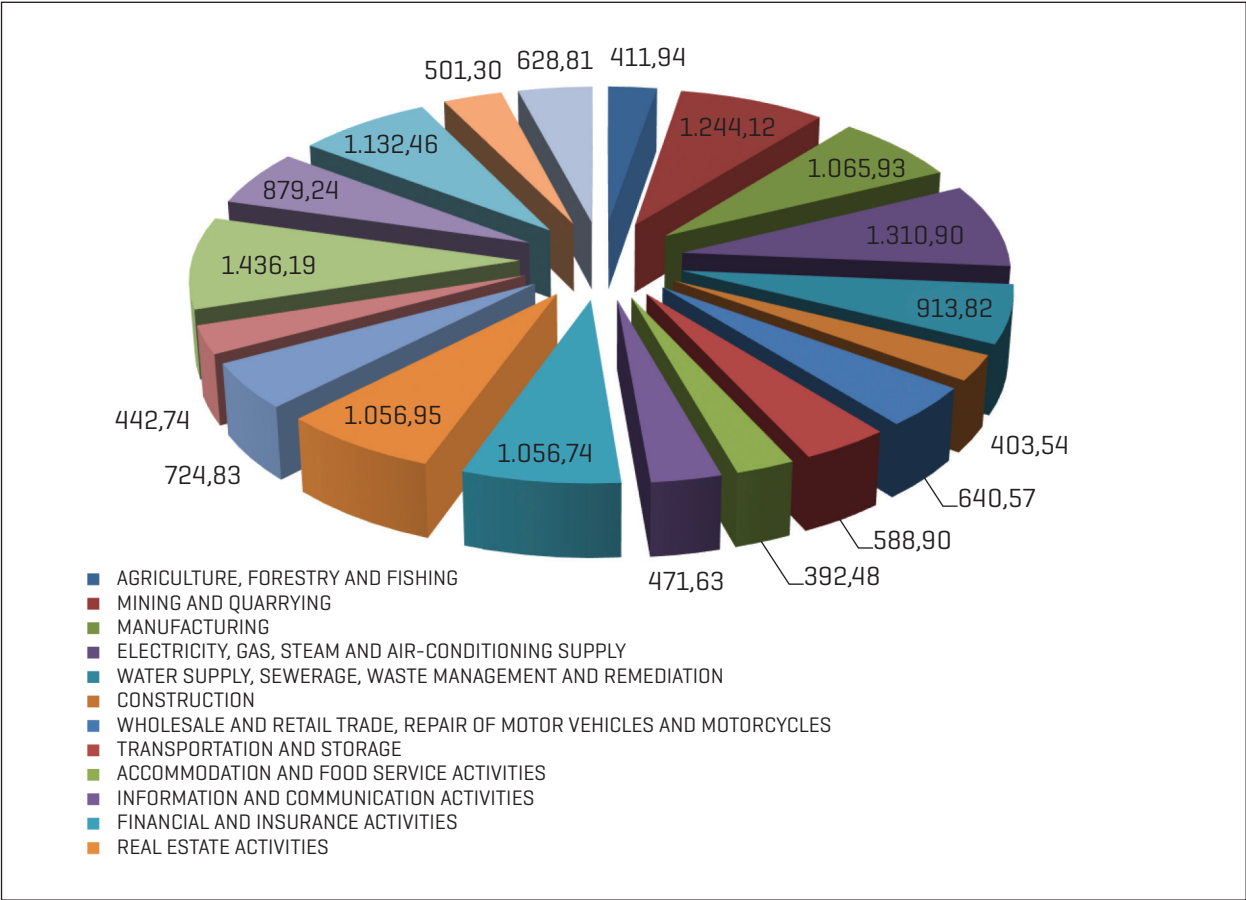
| Activity area | Persons employed as of 31 December 2017 | | | | Persons employed as of 31 December 2018 | | | | Persons employed as of 31 December 2019 | | | | Persons employed as of 31 December 2020 | | | |
|--|---|------|-----|------|---|------|-----|------|---|------|-----|------|---|------|-----|------|
| | F | M | Unk | Σ | F | M | Unk | Σ | F | M | Unk | Σ | F | M | Unk | Σ |
| AGRICULTURE, FORESTRY AND FISHING | 29 | 142 | 0 | 171 | 30 | 137 | 0 | 167 | 31 | 138 | 0 | 169 | 36 | 145 | 1 | 182 |
| MINING AND QUARRYING | 204 | 1510 | 1 | 1715 | 204 | 1516 | 7 | 1727 | 197 | 1459 | 7 | 1663 | 194 | 1355 | 6 | 1555 |
| MANUFACTURING | 169 | 673 | 1 | 843 | 182 | 714 | 1 | 897 | 197 | 670 | 1 | 868 | 208 | 649 | 2 | 859 |
| ELECTRICITY, GAS, STEAM AND AIR-CONDITIONING SUPPLY | 97 | 604 | 0 | 701 | 90 | 588 | 0 | 678 | 102 | 584 | 1 | 687 | 89 | 561 | 1 | 651 |
| WATER SUPPLY, SEWERAGE, WASTE MANAGEMENT AND REMEDIATION | 29 | 110 | 0 | 139 | 28 | 110 | 0 | 138 | 28 | 102 | 0 | 130 | 26 | 109 | 0 | 135 |
| CONSTRUCTION | 18 | 187 | 0 | 205 | 23 | 202 | 0 | 225 | 15 | 185 | 1 | 201 | 20 | 186 | 0 | 206 |
| WHOLESALE AND RETAIL TRADE, REPAIR OF MOTOR VEHICLES AND MOTORCYCLES | 504 | 416 | 0 | 920 | 557 | 476 | 0 | 1033 | 588 | 497 | 0 | 1085 | 540 | 493 | 1 | 1034 |
| TRANSPORTATION AND STORAGE | 33 | 378 | 0 | 411 | 32 | 372 | 0 | 404 | 33 | 390 | 0 | 423 | 35 | 395 | 1 | 431 |
| ACCOMMODATION AND FOOD SERVICE ACTIVITIES | 132 | 119 | 0 | 251 | 144 | 109 | 0 | 253 | 165 | 105 | 0 | 270 | 129 | 96 | 1 | 226 |
| INFORMATION AND COMMUNICATION ACTIVITIES | 13 | 13 | 0 | 26 | 16 | 13 | 0 | 29 | 18 | 13 | 0 | 31 | 20 | 15 | 0 | 35 |
| FINANCIAL AND INSURANCE ACTIVITIES | 40 | 32 | 0 | 72 | 43 | 33 | 0 | 76 | 48 | 29 | 0 | 77 | 45 | 27 | 0 | 72 |
| REAL ESTATE ACTIVITIES | 7 | 4 | 0 | 11 | 6 | 5 | 0 | 11 | 6 | 8 | 0 | 14 | 8 | 4 | 0 | 12 |
| PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES | 47 | 97 | 0 | 144 | 56 | 108 | 0 | 164 | 62 | 111 | 0 | 173 | 63 | 118 | 1 | 182 |
| ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES | 13 | 35 | 0 | 48 | 17 | 33 | 0 | 50 | 15 | 44 | 0 | 59 | 17 | 71 | 0 | 88 |
| PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY | 100 | 178 | 0 | 278 | 101 | 179 | 0 | 280 | 100 | 176 | 0 | 276 | 100 | 171 | 0 | 271 |
| EDUCATION | 423 | 209 | 0 | 632 | 424 | 208 | 0 | 632 | 445 | 204 | 0 | 649 | 452 | 196 | 0 | 648 |
| HEALTHCARE AND SOCIAL PROTECTION ACTIVITIES | 167 | 38 | 0 | 205 | 164 | 39 | 0 | 203 | 170 | 37 | 0 | 207 | 174 | 37 | 1 | 212 |
| ARTS, ENTERTAINMENT AND RECREATION | 83 | 28 | 0 | 111 | 85 | 32 | 0 | 117 | 86 | 32 | 0 | 118 | 83 | 29 | 1 | 113 |
| OTHER SERVICES | 53 | 48 | 0 | 101 | 60 | 63 | 0 | 123 | 58 | 49 | 0 | 107 | 57 | 51 | 0 | 108 |
| ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ACTIVITIES OF EXTRA-TERRITORIAL ORGANISATIONS AND BODIES | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: Tax Administration of FBiH

4.1.2. Net salary by activity in Kakanj Municipality Area

Net salaries are highest in electricity generation, public administration, financial activities, healthcare and social protection, and real estate trade.

Figure 6.
Net salaries in Kakanj Municipality Area, by industry [BAM]



Source: Tax Administration of FBiH [2020]

4.2. Unemployment in Kakanj Municipality area

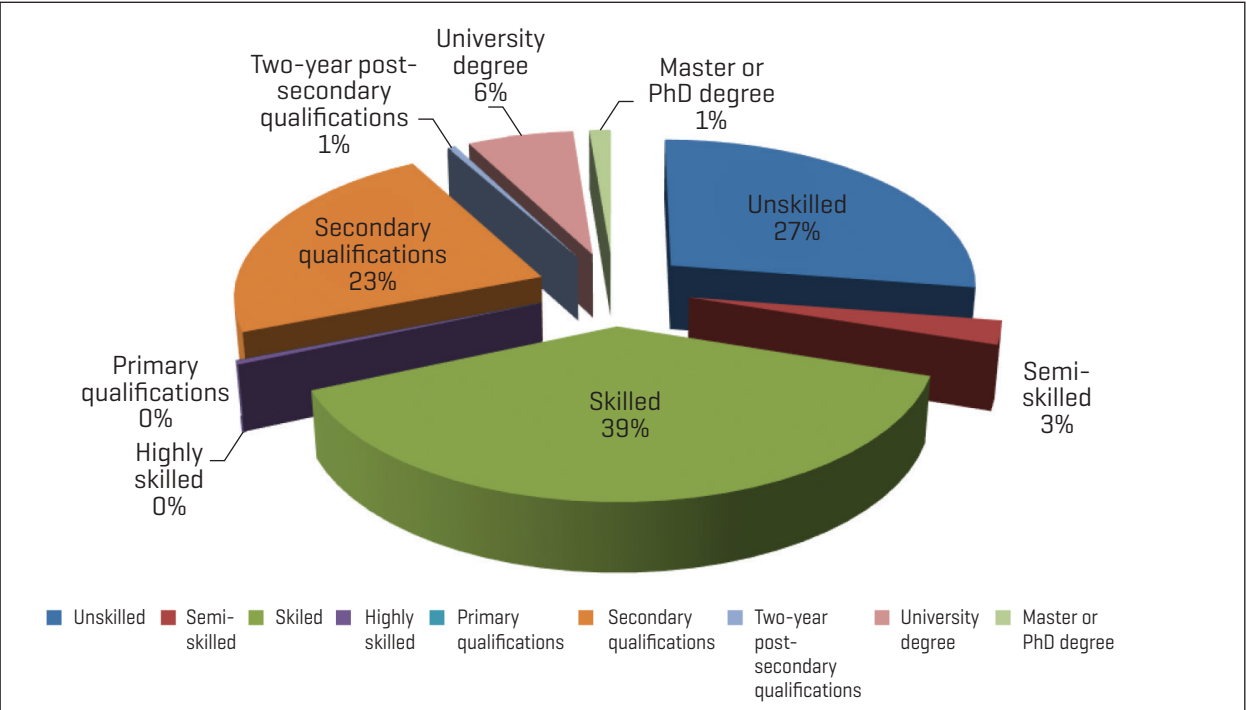
Unemployment in Kakanj Municipality area in the period 2017-2020 has a downward trend. In terms of educational attainment, the unemployment rate is highest for skilled workers, while it is lowest for people with primary and two-year post-secondary qualifications.

Table 31 – Unemployment in Kakanj Municipality Area

| Education level | 2017. | | | 2018. | | | 2019. | | | 2020. | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | M | F | Σ | M | F | Σ | M | F | Σ | M | F | Σ |
| Unskilled | 775 | 974 | 1749 | 728 | 998 | 1726 | 674 | 987 | 1.661 | 633 | 986 | 1.619 |
| Semi-skilled | 102 | 58 | 160 | 86 | 62 | 148 | 84 | 62 | 146 | 78 | 73 | 151 |
| Skilled | 1.608 | 1.223 | 2.831 | 1.378 | 1.209 | 2.587 | 1.236 | 1.178 | 2.414 | 1.083 | 1.191 | 2.274 |
| Highly skilled | 32 | 1 | 33 | 39 | 2 | 41 | 30 | 2 | 32 | 23 | 1 | 24 |
| Primary qualifications | 0 | 10 | 10 | 1 | 10 | 11 | 1 | 10 | 11 | 0 | 0 | 0 |
| Secondary qualifications | 574 | 887 | 1.461 | 505 | 898 | 1.403 | 464 | 913 | 1.377 | 447 | 903 | 1.350 |
| Two-year post-secondary qualifications | 8 | 30 | 38 | 8 | 23 | 31 | 5 | 26 | 31 | 5 | 24 | 29 |
| University degree | 157 | 236 | 393 | 128 | 254 | 382 | 122 | 278 | 400 | 108 | 268 | 376 |
| Master or PhD degree | 42 | 54 | 96 | 35 | 52 | 87 | 31 | 46 | 77 | 34 | 42 | 76 |
| Ukupno | 3.298 | 3.473 | 6.771 | 2.908 | 3.508 | 6.416 | 2.647 | 3.502 | 6.149 | 2.411 | 3.488 | 5.899 |

Source: Employment Office Kakanj

Figure 7.
Unemployment by education attainment



Source: Employment Office Kakanj

Unemployment by age shows that most unemployed people are between the age 21 and 24. In terms of sex, the number of unemployed women is somewhat higher than the number of unemployed men.

Table 32 – Recorded unemployment by age

| Age | 2017. | | | 2018. | | | 2019. | | | 2020. | | |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | M | F | Σ | M | F | Σ | M | F | Σ | M | F | Σ |
| 15-18 | 20 | 33 | 53 | 24 | 36 | 60 | 24 | 33 | 57 | 21 | 33 | 54 |
| 19-20 | 178 | 185 | 363 | 128 | 146 | 274 | 131 | 118 | 249 | 135 | 115 | 250 |
| 21-24 | 518 | 489 | 1007 | 468 | 521 | 989 | 389 | 514 | 903 | 329 | 455 | 784 |
| 24-27 | 363 | 442 | 805 | 233 | 389 | 622 | 194 | 342 | 536 | 203 | 324 | 527 |
| 28-30 | 285 | 444 | 729 | 232 | 429 | 661 | 216 | 424 | 640 | 179 | 391 | 570 |
| 31-35 | 391 | 562 | 953 | 315 | 570 | 885 | 269 | 575 | 844 | 227 | 609 | 836 |
| 36-40 | 350 | 329 | 679 | 319 | 354 | 673 | 288 | 386 | 674 | 252 | 411 | 663 |
| 41-45 | 311 | 304 | 615 | 292 | 311 | 603 | 265 | 292 | 557 | 213 | 300 | 513 |
| 46-50 | 236 | 270 | 506 | 243 | 262 | 505 | 235 | 295 | 530 | 216 | 296 | 512 |
| 51-55 | 252 | 249 | 501 | 236 | 264 | 500 | 228 | 255 | 483 | 221 | 252 | 473 |
| 55-60 | 233 | 145 | 378 | 242 | 170 | 412 | 236 | 191 | 427 | 226 | 212 | 438 |
| 61-65 | 122 | 60 | 182 | 156 | 76 | 232 | 167 | 82 | 249 | 176 | 103 | 279 |
| Ukupno | 3.259 | 3.512 | 6.771 | 2.888 | 3.528 | 6.416 | 2.642 | 3.507 | 6.149 | 2.398 | 3.501 | 5.899 |

Source: Employment Office Kakanj

Most people who are recorded as unemployed spent more than 48 months looking for work.

Table 33 – Recorded unemployment by the time spent in unemployment

| Length of unemployment [months] | 2017. | | | 2018. | | | 2019. | | | 2020. | | |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | M | F | Σ | M | F | Σ | M | F | Σ | M | F | Σ |
| Up to 12 months | 249 | 284 | 533 | 255 | 297 | 552 | 207 | 245 | 452 | 202 | 245 | 447 |
| From 12 to 24 months | 216 | 251 | 467 | 161 | 226 | 387 | 186 | 233 | 419 | 134 | 182 | 316 |
| From 25 to 36 months | 251 | 254 | 505 | 163 | 207 | 370 | 134 | 188 | 322 | 142 | 185 | 327 |
| From 37 to 48 months | 207 | 201 | 408 | 176 | 228 | 404 | 116 | 187 | 303 | 106 | 171 | 277 |
| Longer than 48 months | 2.336 | 2.522 | 4.858 | 2.133 | 2.570 | 4.703 | 1.999 | 2.654 | 4.653 | 1.814 | 2.718 | 4.532 |
| Total | 3.259 | 3.512 | 6.771 | 2.888 | 3.528 | 6.416 | 2.642 | 3.507 | 6.149 | 2.398 | 3.501 | 5.899 |

Source: Employment Office Kakanj

4.3. Number of retired persons and pension amount

In Kakanj Municipality area in the period 2017-2020, there is an apparent upward trend in terms of number of retired persons, which increased by 3,47 %. Most retired persons have old-age pensions [59,24 %] and least disability pensions [7,58 %]. Disability pensions are in a downward trend, while the number of old-age and family pensions has been increasing.

Table 34 – Number of retired persons in Kakanj Municipality area

| Retired persons, by type of pension | | | | |
|-------------------------------------|---------|------------|--------|-------|
| Year | Old-age | Disability | Family | Total |
| 2017. | 3.383 | 543 | 1.971 | 5.897 |
| 2018. | 3.527 | 524 | 1.957 | 6.008 |
| 2019. | 3.551 | 502 | 1.983 | 6.036 |
| 2020. | 3.577 | 495 | 1.998 | 6.070 |
| 2021. | 3.615 | 463 | 2.024 | 6.102 |

Source: FBiH Pension and Disability Insurance Institute

The following Table shows the amounts of average pensions for the period 2017-2020, as well as the number of maximum and minimum pensions.

Table 35 – Pension amount

| Average, minimum and maximum pension | | | |
|--------------------------------------|-----------------------------------|-----------------------------------|-----------------------|
| YEAR | Minimum [number of beneficiaries] | Maximum [number of beneficiaries] | Average pension [BAM] |
| 2017. | 2.349 | 4 | 430 |
| 2018. | 2.100 | 5 | 466,1 |
| 2019. | 2.341 | 5 | 492,8 |
| 2020. | 2.418 | 5 | 496,3 |
| 2021. | 2.336 | 6 | 513,2 |

Source: FBiH Pension and Disability Insurance Institute

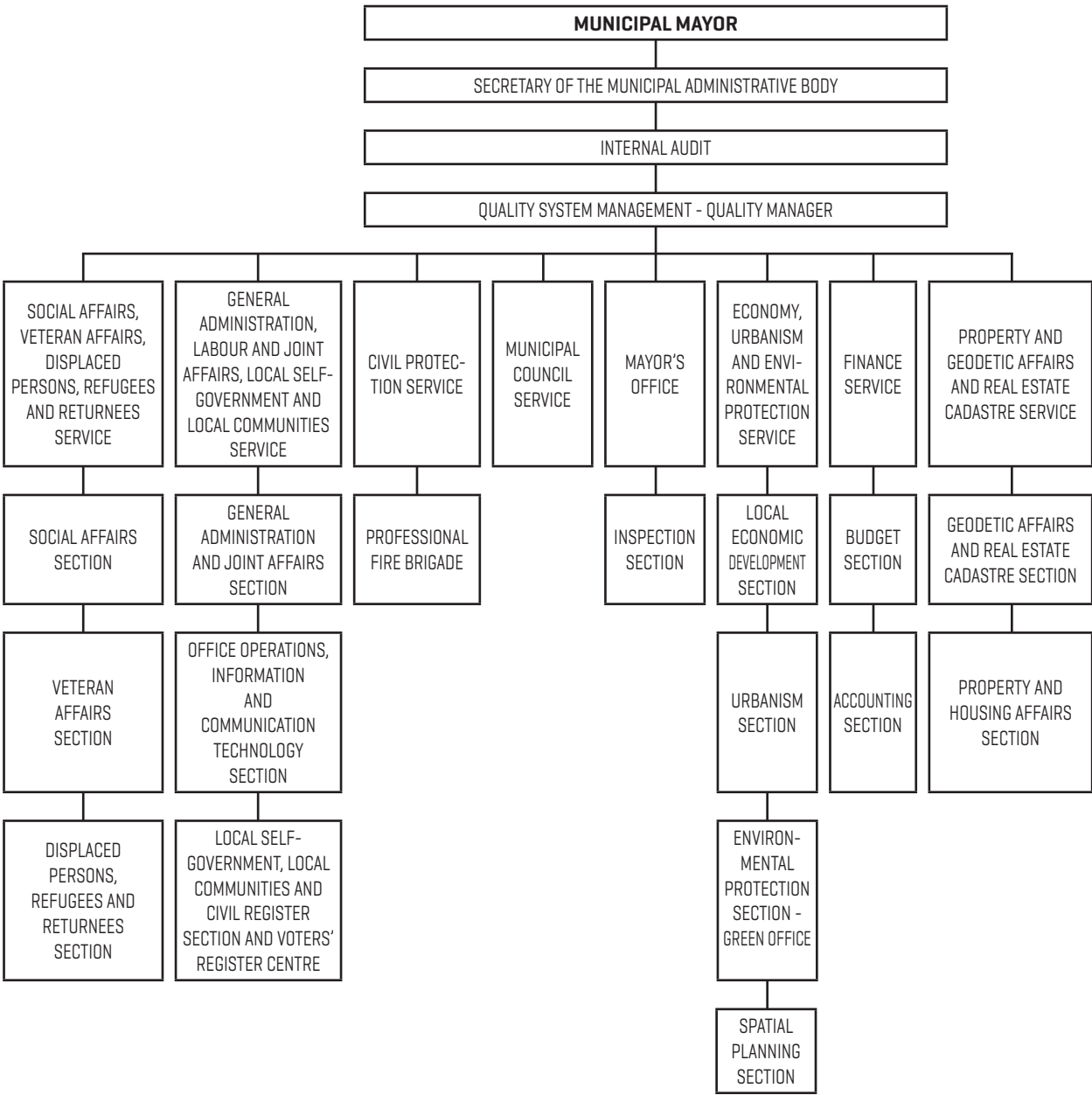
4.4. Development problems and needs of the labour market

| Development problems | Development needs |
|--|--|
| Education programmes not aligned with labour market needs. In demand occupations | Improve the alignment of education programmes with labour market needs, by introducing new education modules/occupations in schools and by reducing admission quotas of educational cycles for occupations in oversupply that the labour market is unable to absorb. |
| Undeclared work and lack of coordination among institutions with regards to keeping records and preventing undeclared work | Introduce retraining and upskilling programmes |
| Unused facilities in the downtown area | Intensify labour inspections and cooperation of institutions to keep records and implement measures for prevention of undeclared work |
| Lack of coordination between employment services and economy sector | Continue stimulating employers to register their employees by subsidizing employees’ contributions |
| Aging of labour force and youth emigration | Strengthen the cooperation among employment services, educational institutions and industries |
| | Intensify activities within the programme of incentives for employment and self-employment of young people |
| | Support programmes for young people starting a family |

5. PUBLIC ADMINISTRATION AND PUBLIC REVENUES OF THE MUNICIPALITY OF KAKANJ

5.1. Municipal administration

The Municipal administration organisation:

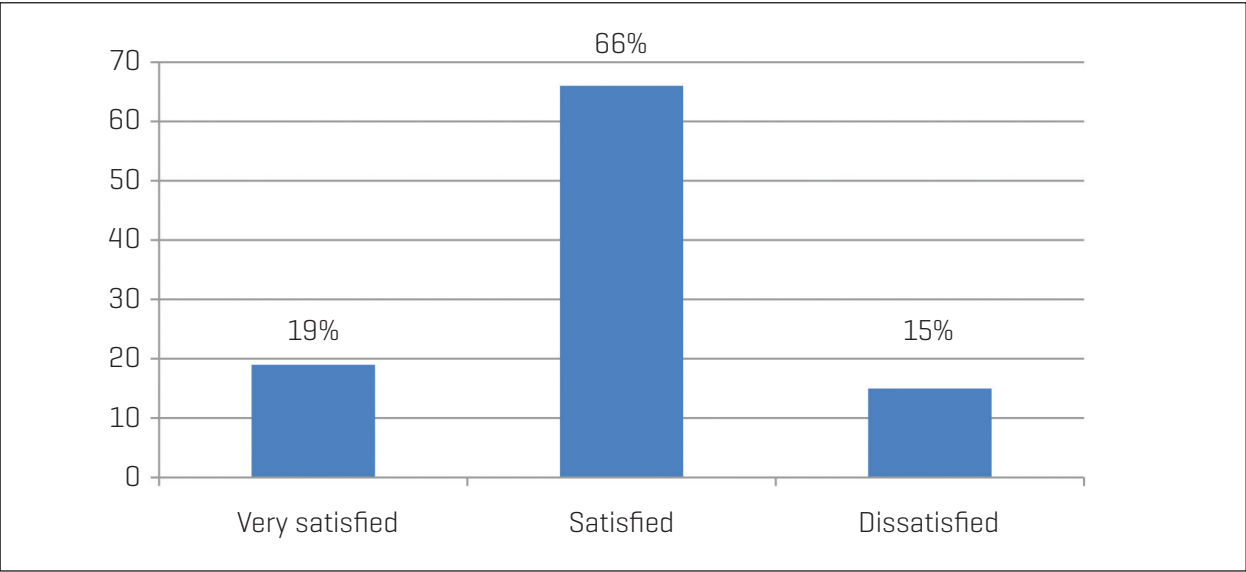


The job classification system in the administrative authority of the Municipality of Kakanj has 172 positions, 84 civil servants and 88 employees. By December 31, 2020, 131 positions were filled [60 civil servants or 68,18% and 71 employees or 80,68%] which is 76,16% of the positions available according to the job classification.

The Municipal authority appropriates annually approximately BAM 30.000,00 for technical equipment and computerisation and BAM 5.000,00 for the education of employees.

The percentage of resolved cases from 2017 to 2020 ranges between 80% and 90%. The quality of the Municipal administration work is measured through user satisfaction surveys based on a hundred-user sample. The level of satisfaction is presented in the following Figure:

Figure 8. Municipality of Kakanj user satisfaction [%]



Source: Municipal administration

According to the user satisfaction survey, 15% of users saw the administration service as “poor” and those users are the base for further advancement and improvement in terms of human resources and material support.

5.2. Public revenues

5.2.1. Tax and non-tax revenue

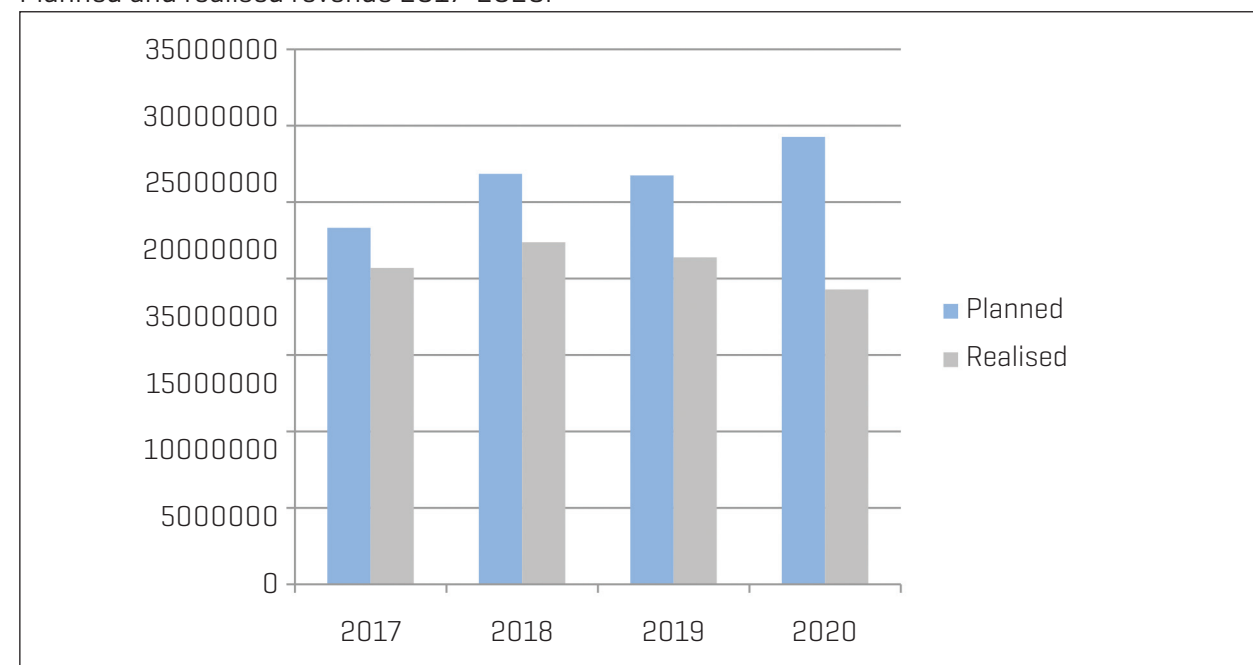
Gross revenue and gross receipts in the Municipality of Kakanj Budget in 2020 amounted to BAM 19.283.337,83 and with a 10% decrease, with a continued downward trend with reference to period prior to 2018. Table 36 shows the decline of gross revenue from 2019 which is quite evident in 2020. It was one of the many negative effects of Covid-19 pandemic. There was also the decrease of revenue from indirect taxes, income taxes [which had a constant increase up to 2010] and non-tax revenue as a consequence of exempting businesses from certain taxes as a support for post Covid-19 economic recovery revenue.

Table 36 - Planned and realised revenue in the Municipality of Kakanj Budget

| REVENUES | 2017. | 2018. | 2019. | 2020. |
|------------------|---------------|---------------|---------------|---------------|
| Planned revenue | 23.319.383,22 | 26.848.233,68 | 26.755.747,19 | 29.263.775,11 |
| Realised revenue | 20.701.462,26 | 22.374.288,74 | 21.381.109,02 | 19.283.337,83 |

Source: Municipal administration

Figure 9.
Planned and realised revenue 2017-2020.



Source: Municipal administration

Tax revenues had a growing trend up to 2019. In 2020, revenue from taxes decreased by 11%. As in most budgets the reason for the decrease was lower economic activity due to COVID-19 pandemic.

Non-tax revenues also had a growing trend up to 2019 but in 2020 there was a 25% decrease. Again, the reason for the decrease was lower economic activity, measures to mitigate the impact of the COVID-19 outbreak, lack of real estate investments, etc.

Transfers and grants were on a downward trend in 20219. In 2020, the revenue went up and reached the amount from 2017.

The share of assigned revenue in the gross revenue in 2020 was 57,67%. This fact has a major impact on the Budget realization, as those revenues are realised strictly according to the decisions and rules of the Municipal Council.

Table 37 - Structure of budget revenue according to purpose

| Type of revenue | 2017. [000 BAM] | [%] | 2018. [000 BAM] | [%] | 2019. [000 BAM] | [%] | 2020. [000 BAM] | [%] |
|--|--------------------|------|--------------------|------|--------------------|------|--------------------|------|
| Indirect tax revenues for financing highways and other roads in FBiH | 0,00 | 0,00 | 124.372,27 | 0,56 | 148.345,22 | 0,69 | 150.737,50 | 0,78 |
| Indirect tax revenues belonging to Directorate of Roads of FBiH [Direkcije cesta FBiH] | 451.105,75 | 2,18 | 344.421,01 | 1,54 | 416.433,10 | 1,95 | 321.192,09 | 1,67 |
| Revenue from the sale of apartments, facilities and equipment | 50.105,74 | 0,24 | 0,00 | 0,00 | 566.117,05 | 2,65 | 19.998,77 | 0,10 |
| Utility charges | 1.367.991,71 | 6,61 | 1.834.717,07 | 8,20 | 1.821.163,29 | 8,52 | 1.715.888,36 | 8,90 |

| | | | | | | | | |
|---|--------------|-------|--------------|-------|--------------|-------|--------------|-------|
| Compensation for land allocation | 621.379,62 | 3,00 | 96.073,31 | 0,43 | 177.861,21 | 0,83 | 208.970,00 | 1,08 |
| Fire insurance compensation | 2.246,65 | 0,01 | 9.000,37 | 0,04 | 38.436,60 | 0,18 | 24.117,35 | 0,13 |
| Construction land use fee | 306.636,29 | 1,48 | 446.067,28 | 1,99 | 139.586,04 | 0,65 | 1.283,92 | 0,01 |
| Income for construction and maintenance of public shelters | 79.715,19 | 0,39 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| Fee based on revenue generated by the operation of the thermal Power Plant | 3.868.824,07 | 18,69 | 4.729.815,84 | 21,14 | 4.084.524,63 | 19,10 | 3.023.173,14 | 15,68 |
| Road-use fees and specific road related charges | 244.109,05 | 1,18 | 261.848,45 | 1,17 | 277.033,60 | 1,30 | 286.427,23 | 1,49 |
| Compensation for natural and other disasters | 206.686,47 | 1,00 | 76.360,85 | 0,34 | 167.120,74 | 0,78 | 199.061,75 | 1,03 |
| Water charge | 351.405,46 | 1,70 | 52.742,72 | 0,24 | 89.909,62 | 0,42 | 103.214,33 | 0,54 |
| Environmental protection fund | 1.943.169,74 | 9,39 | 2.160.086,10 | 9,65 | 1.765.553,83 | 8,26 | 1.179.437,13 | 6,12 |
| Concessions | 516.666,33 | 2,50 | 303.767,99 | 1,36 | 257.866,45 | 1,21 | 348.094,71 | 1,81 |
| Transfers from international organizations | 52.935,22 | 0,26 | 0,00 | 0,00 | 0,00 | 0,00 | 53.726,10 | 0,28 |
| Transfers from other government levels BH, FBiH and ZDC, the Municipality of Kakanj | 1.526.566,56 | 7,37 | 1.624.172,72 | 7,26 | 646.634,11 | 3,02 | 1.404.065,19 | 7,28 |
| Transfers from other government levels BH, FBiH and ZDC - JU KSC | 8.000,00 | 0,04 | 16.000,00 | 0,07 | 8.600,00 | 0,04 | 3.000,00 | 0,02 |
| Transfers from other government levels BH, FBiH and ZDC - JU CSR | 1.212.845,04 | 5,86 | 1.474.431,16 | 6,59 | 1.268.689,18 | 5,93 | 1.383.967,62 | 7,18 |
| Transfers from other government levels BH, FBiH and ZDC - JU Mladost | 30.618,00 | 0,15 | 19.137,00 | 0,09 | 15.995,00 | 0,07 | 12.801,60 | 0,07 |
| Grants | 68.979,98 | 0,33 | 0,00 | 0,00 | 0,00 | 0,00 | 302.343,00 | 1,57 |
| Transfers from other government levels BH, FBiH and ZDC | 0,00 | 0,00 | 708.861,32 | 3,17 | 26.700,00 | 0,12 | 380.648,87 | 1,97 |
| Capital revenue | 31.139,26 | 0,15 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |

5.2.2. Structure of expenditures in the Municipality of Kakanj Budget

The Budget spending comprises salaries, administration and public institution material costs, current and capital transfers, repayment of water supply loan and capital costs. The largest part of the total expenditures is current and capital transfers (ca 60%). The realization of public expenditure is vastly conditioned by revenues and constrains due to the present situation.

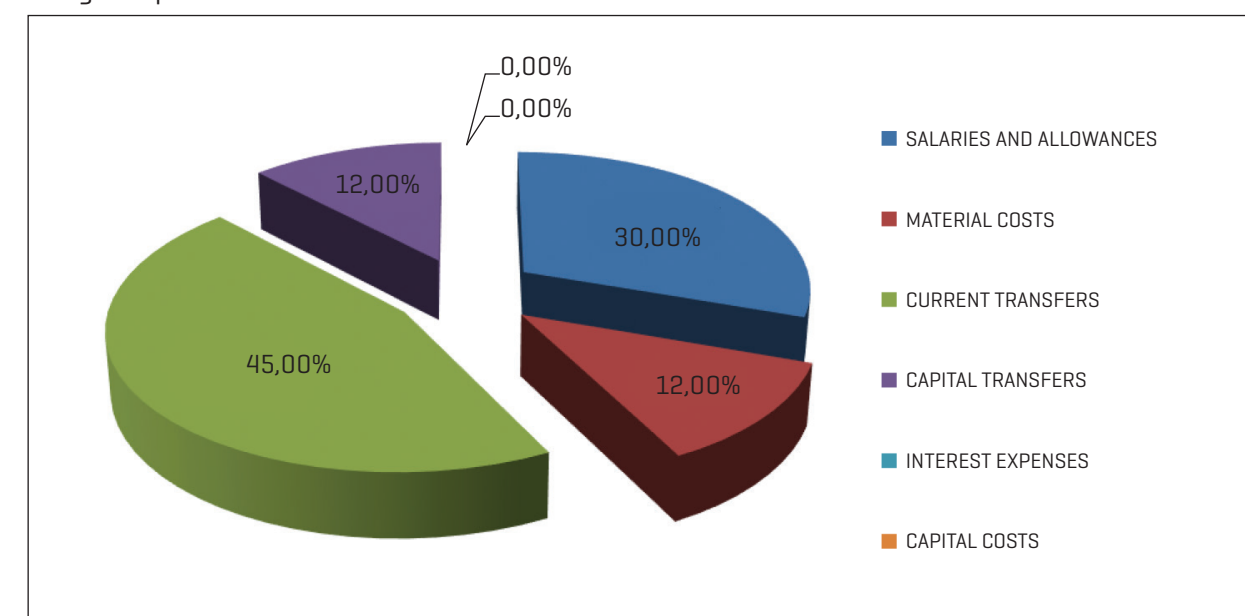
Salaries and allowances for employees show a continuous increase. The share of this type of expenditure in the total expenditures had a steady increase from 24.41% in 2017 to 30.88% in 2020. Material costs have stable absolute amounts and relative share in in the total expenditures. All other expenditures are conditional on the structure of assigned revenues and they vary accordingly.

Table 38 - Structure of the expenditures according to purpose

| Type of expenditure | 2017. [000 BAM] | [%] | 2018. [000 BAM] | [%] | 2019. [000 BAM] | [%] | 2020. [000 BAM] | [%] |
|--|--------------------|-------|--------------------|-------|--------------------|-------|--------------------|-------|
| SALARIES AND ALLOWANCES FOR EMPLOYEES [total] | 5.052.647,12 | 24,41 | 5.389.066,06 | 24,09 | 5.687.527,20 | 26,60 | 5.953.882,70 | 30,88 |
| Gross salaries | 4.021.009,18 | 19,42 | 4.308.139,55 | 19,25 | 4.550.482,01 | 21,28 | 4.756.252,06 | 24,67 |
| Allowances for employees | 587.662,83 | 2,84 | 609.294,46 | 2,72 | 631.506,38 | 2,95 | 672.265,99 | 3,49 |
| Employer's contribution | 443.975,11 | 2,14 | 471.632,05 | 2,11 | 505.538,81 | 2,36 | 525.364,65 | 2,72 |
| MATERIAL COSTS [total] | 2.557.421,04 | 12,35 | 2.223.653,66 | 9,94 | 2.255.898,87 | 10,55 | 2.322.281,43 | 12,04 |
| CURRENT TRANSFERS [total] | 8.447.912,48 | 40,81 | 10.301.701,98 | 46,04 | 9.120.844,79 | 42,66 | 8.862.224,59 | 45,96 |
| Current transfers to other government levels and funds | 17.500,00 | 0,08 | 23.410,35 | 0,10 | 20.146,30 | 0,09 | 18.999,45 | 0,10 |
| Current transfers to individuals | 2.731.460,55 | 13,19 | 3.216.221,85 | 14,37 | 2.869.550,70 | 13,42 | 2.994.345,77 | 15,53 |
| Current transfers to non-profit organizations | 4.903.582,24 | 23,69 | 5.807.242,63 | 25,95 | 5.048.846,01 | 23,61 | 4.788.690,08 | 24,83 |
| Subsidies to private enterprises | 764.807,91 | 3,69 | 978.674,91 | 4,37 | 914.553,44 | 4,28 | 863.786,73 | 4,48 |
| Enforcement of judgements and decisions | 30.561,78 | 0,15 | 276.152,24 | 1,23 | 267.748,34 | 1,25 | 196.402,56 | 1,02 |
| CAPITAL TRANSFERS [total] | 4.124.555,92 | 19,92 | 3.643.290,12 | 16,28 | 2.384.910,50 | 11,15 | 2.440.433,90 | 12,66 |
| Capital transfers | 4.124.555,92 | 19,92 | 3.643.290,12 | 16,28 | 2.384.910,50 | 11,15 | 2.440.433,90 | 12,66 |
| INTEREST EXPENSES [total] | 156.330,21 | 0,76 | 200.000,00 | 0,89 | 1.368.227,54 | 6,40 | 0,00 | 0,00 |
| Interest on domestic loans | 156.330,21 | 0,76 | 200.000,00 | 0,89 | 1.367.227,54 | 6,39 | 0,00 | 0,00 |
| CAPITAL EXPENDITURES [total] | 140.502,17 | 0,68 | 211.206,40 | 0,94 | 204.814,28 | 0,96 | 152.045,14 | 0,79 |
| Procurement of fixed assets and equipment | 39.639,70 | 0,19 | 127.103,60 | 0,57 | 113.202,00 | 0,53 | 52.997,70 | 0,27 |
| procurement of fixed assets and equipment – budget users | 100.862,47 | 0,49 | 80.651,30 | 0,36 | 91.612,28 | 0,43 | 19.047,46 | 0,10 |
| Procurement from the Zenica-Doboj Canton Environmental Protection Fund | 0,00 | 0,00 | 3.451,50 | 0,02 | 0,00 | 0,00 | 79.999,98 | 0,41 |
| FINANCING [total] | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| Amount to solve deficit | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |

Source: Municipal administration

Figure 10.
Budget expenditure structure



Source: Municipal administration

5.2.3. Revenue and expenditure projection of the Municipality of Kakanj for the period 2021-2023.

State-level Macroeconomic Indicators for the Period 2020-2023 from the web page of BiH Directorate for Economic Planning (DEP), Zenica-Doboj Canton Revenue Projections for 2020 and the Period 2021-2023 provided by FBiH Ministry of Finance in May 2020 and data from Information on Perspectives of Bosnia and Herzegovina 2020-2022 were used for the purpose of this document.³ A three year budget plan was done on the basis of economic and fiscal policy guidelines for the period 2021-2023.

5.2.4. Revenues and receipts projection

Table 39 - Revenues and receipts, the Municipality of Kakanj Budget 2019-2022.

| No | DESCRIPTION | Implementation | Projection/Plan | | | | |
|-----|---------------------------------------|----------------|-----------------|----------|----------|----------|--|
| | | 2019. | 2020. | 2021. | 2022. | 2022. | |
| I | TAXES | 7.876,8 | 8.034,6 | 8.436,3 | 8.858,1 | 9.301,1 | |
| 1 | Indirect taxes from cash-pool account | 4.871,1 | 5.012,5 | 5.263,1 | 5.526,2 | 5.802,5 | |
| 2 | Income tax | 2.195,2 | 2.209,8 | 2.320,3 | 2.436,3 | 2.558,1 | |
| 3 | Profit tax | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | |
| 4 | Resident taxes | 810,3 | 812,3 | 852,9 | 895,5 | 940,3 | |
| 5 | Other taxes | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | |
| II | FEES AND CHARGES | 8.653,8 | 9.654,2 | 10.136,9 | 10.643,8 | 11.175,9 | |
| 1 | Fees and charges | 8.653,8 | 9.654,2 | 10.136,9 | 10.643,8 | 11.175,9 | |
| III | FINES | 210,8 | 108,9 | 114,3 | 120,0 | 126,0 | |
| 1 | Fines | 21,8 | 25,0 | 26,3 | 27,6 | 28,9 | |
| 2 | Other revenues | 189,0 | 83,9 | 88,1 | 92,5 | 97,1 | |
| IV | OTHER NON-TAX REVENUE | 581,6 | 1.397,1 | 1.467,0 | 1.540,3 | 1.617,4 | |
| | Other non-tax revenue | 581,6 | 1.397,1 | 1.467,0 | 1.540,3 | 1.617,4 | |

³ <http://www.dep.gov.ba/analize/projekcije/projekcije/perspektive/>

| | | | | | | |
|----|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| V | FINANCING AND TRANSFERS | 4.058,1 | 8.105,7 | 8.447,9 | 8.808,5 | 9.188,1 |
| 1 | TRANSFERS | 4.058,1 | 8.105,7 | 8.447,9 | 8.808,5 | 9.188,1 |
| VI | CAPITAL RECEIPTS FROM FIXED ASSETS SALE | 0,00 | 110,0 | 115,5 | 121,3 | 127,3 |
| | TOTAL [I+II+III+IV+V+VI] | 21.381,1 | 27.410,5 | 28.717,9 | 30.092,0 | 31.535,8 |

Source: Municipal administration

5.2.5. Expenses and expenditures projection

TTable 40 - Expenses and expenditures, the Municipality of Kakanj Budget 2019-2022.

| No | Econ. code | DESCRIPTION | IMPLEMEN- TATION 2019 | PLAN 2020 | PROJECTION | | |
|----|--|---|-----------------------------|------------------|------------------|------------------|------------------|
| | | | | | 2021. | 2022. | 2023. |
| 1 | | TOTAL OF SALARIES AND ALLOWANCES [2+3+4] | 5.687,53 | 6.199,69 | 6.509,64 | 6.835,13 | 7.176,96 |
| 2 | 611100 | Gross salaries | 4.550,48 | 4.793,62 | 5.033,30 | 5.284,97 | 5.549,21 |
| 3 | 611200 | Allowances | 631,51 | 854,99 | 897,7 | 942,6 | 989,80 |
| 4 | 612000 | Contributions | 505,54 | 551,08 | 578,63 | 607,57 | 637,94 |
| 5 | 613000 | MATERIAL COSTS | 2.255,9 | 3.590,64 | 3.770,20 | 3.958,70 | 4.156,60 |
| 6 | 614000 | CURRENT TRANSFERS AND OTHER CURRENT EXPENSES [7+8+9+10] | 9.120,85 | 12.128,98 | 12.735,40 | 13.372,20 | 14.040,80 |
| 7 | 614400 614500 614600 | Subsidies | 914,55 | 944,00 | 991,20 | 1.040,80 | 1.092,80 |
| 8 | 614200 | Transfers to individuals | 2.869,55 | 3.754,22 | 3.941,9 | 4.139,0 | 4.346,00 |
| 9 | 614100 | Transfers to other government levels and funds | 20,15 | 14,00 | 14,70 | 15,40 | 16,20 |
| 10 | 614300 614700 614800 | Other current transfer | 5.316,60 | 7.416,76 | 7.787,60 | 8.177,00 | 8.585,80 |
| 11 | 615100 615200 615300 615400 615500 615600 615700 | Capital transfers | 2.384,91 | 4.298,5 | 4.513,4 | 4.739,1 | 4.976,10 |
| 12 | 616000 | Interest expenses | 1.368,22 | 755,12 | 735,3 | 715,7 | 696,20 |
| 13 | 821000 | Procurement of fixed assets and equipment expenses | 204,81 | 327,6 | 344,0 | 361,2 | 379,20 |
| 14 | 823000 | Loan expenditures | 0,00 | 10,00 | 10,00 | 10,00 | 10,00 |
| 15 | 822000 | Financial assets expenditures | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| 16 | | Other | 98,28 | 100,0 | 100,0 | 100,0 | 100,0 |
| | | TOTAL [1+5+6+11+12+13+14+15+16] | 21.120,5 | 27.410,53 | 28.717,94 | 30.092,03 | 31.535,86 |

5.3. Development problem and budget requirements

| Development problem | Development requirements |
|---|--|
| COVID-19 and public revenues decline | Budget allocation by priorities Harmonization and coordination of budgeting |
| Limited designated budgetary assets | Initiatives to amend current laws |
| Availability of higher government level funds | Applying to higher levels of government |
| Complexity of procedures for access to EU funds | Coordination of fiscal statistics and international standards |
| | Providing budgetary support for meeting the requirements of European partnership and Euro-Atlantic integration |

6. SOCIAL AFFAIRS

6.1. Education

There are three levels of education in Kakanj Municipality: pre-school, primary and secondary education. In Kakanj Municipality, there are two pre-school education institutions and six secondary education institutions (central schools). The number of pre-school children shows a steady increase, while the number of primary education children seems to be in decline. When it comes to pre-school education, the existing capacities are insufficient for current requirements and given that the number of pre-school children is increasing, this issue needs to be addressed. Considering that the primary school facilities are underutilized, especially those farther away from the urban centre, the possibilities of their potential use for pre-school education should be considered. It is also necessary to develop extended and full-day programs in primary schools.

The following Table shows the data about pre-school and primary educational institutions in Kakanj Municipality for the last four years:

Table 41 - Educational institutions (pre-school and primary education)

| Institution | Number of branch schools | Number of functional classrooms | Number of pupils | | | | | | | | Number of teaching staff | | Number of pupils commuting more than 4km | Number of pupils with organized commuter resources | Number of pupils with special needs |
|---------------------|--------------------------|---------------------------------|------------------|-----|----------|-----|----------|-----|----------|-----|--------------------------|----|--|--|-------------------------------------|
| | | | 2017/18. | | 2018/19. | | 2019/20. | | 2020/21. | | 2019/20. | | | | |
| | | | M | F | M | F | M | F | M | F | M | F | | | |
| Kindergarten | | | | | | | | | | | | | | | |
| JU "Mladost" Kakanj | 0 | 10 | 81 | 94 | 78 | 119 | 89 | 107 | 103 | 94 | 0 | 17 | 0 | 0 | 5 |
| PU "Pčelica i med" | 0 | 4 | 23 | 17 | 18 | 33 | 31 | 34 | 36 | 39 | 0 | 10 | 0 | 0 | 0 |
| Total-kindergartens | 0 | 14 | 104 | 111 | 96 | 152 | 120 | 141 | 139 | 133 | 0 | 27 | 0 | 0 | 5 |
| TOTAL | | | 215 | | 248 | | 261 | | 272 | | 27 | | | | |

| | | | | | | | | | | | | | | | |
|--------------------------|----|-----|--------------|-------|--------------|-------|--------------|-------|--------------|-------|------------|-----|-----|-----|----|
| "Hamdija Krešvljaković" | 0 | 22 | 535 | 501 | 560 | 505 | 556 | 497 | 544 | 494 | 21 | 52 | 0 | 0 | 15 |
| "Mula Mustafa Bašeskija" | 3 | 43 | 493 | 472 | 501 | 470 | 493 | 461 | 498 | 455 | 19 | 51 | 45 | 25 | 31 |
| "Omer Mušić" | 4 | 32 | 247 | 238 | 241 | 231 | 225 | 212 | 210 | 208 | 11 | 28 | 139 | 139 | 5 |
| "Ahmed Muradbegović" | 5 | 24 | 210 | 221 | 210 | 230 | 217 | 213 | 236 | 206 | 10 | 26 | 0 | 150 | 4 |
| "15. april" | 4 | 23 | 249 | 271 | 249 | 266 | 264 | 250 | 258 | 245 | 21 | 33 | 22 | 43 | 3 |
| "Rešad Kadić" | 2 | 6 | 125 | 126 | 116 | 106 | 104 | 91 | 90 | 76 | 10 | 15 | 0 | 113 | 0 |
| Total-Primary schools | 18 | 150 | 1.859 | 1.829 | 1.877 | 1.808 | 1.859 | 1.724 | 1.836 | 1.684 | 92 | 205 | 206 | 470 | 58 |
| TOTAL | | | 3.688 | | 3.685 | | 3.583 | | 3.520 | | 297 | | | | |

Source: Annual plans and programs, administrations

Primary and secondary education have major social significance. Primary and secondary schools are founded by the Cantonal Assembly according to principles and standards established by law and a long-term development program for primary and secondary education.

The program defines society's needs, the scope and type of education within a certain period. The founder provides funds according to the Pedagogical Standards and Norms. The purpose of education is to enable learning concepts necessary for life, work and further education.

Secondary education in Kakanj Municipality is organized in three secondary schools. During the school period of 2017/2018 – 2019/20, a drop of 133 enrolled students was recorded. The following Table shows the data about secondary educational institutions:

Table 42 - Secondary education institutions

| The name of institution and the type of education | Number of functional classrooms | Number of students | | | | | | Number of teaching staff | |
|--|---------------------------------|--------------------|-----|----------|-----|----------|-----|--------------------------|----|
| | | 2017/18. | | 2018/19. | | 2019/20. | | 2019/20. | |
| | | M | F | M | F | M | F | M | F |
| Gimnazija Muhsin Rizvić [Secondary School] | 11 | 108 | 232 | 96 | 213 | 91 | 199 | 11 | 20 |
| Mješovita Srednja Škola Kakanj [Secondary Vocational School] | 13 | 335 | 203 | 329 | 192 | 322 | 203 | 38 | 39 |
| a) machinists | | 37 | 0 | 36 | 0 | 47 | 0 | | |
| b) welders | | 72 | 0 | 70 | 0 | 66 | 0 | | |
| c) power electricians | | 63 | 0 | 55 | 0 | 60 | 0 | | |
| d) motor vehicle drivers | | 63 | 0 | 64 | 0 | 61 | 0 | | |
| e) sales clerks | | 8 | 20 | 4 | 15 | 0 | 21 | | |
| f) cooks | | 10 | 24 | 10 | 15 | 8 | 15 | | |
| g) hairdressers | | 4 | 64 | 1 | 67 | 9 | 59 | | |
| h) construction technicians | | 26 | 34 | 25 | 25 | 20 | 19 | | |
| i) mining technicians | | 48 | 52 | 52 | 44 | 37 | 39 | | |
| j) business and legal technicians | | 4 | 9 | 12 | 26 | 14 | 50 | | |

| | | | | | | | | | |
|---|-----------|--------------|------------|--------------|------------|--------------|------------|----|----|
| Srednja tehnička škola Kemal Kapetanović [Secondary Technical School] | 13 | 307 | 204 | 246 | 228 | 217 | 224 | 23 | 23 |
| a) economic technicians | | 32 | 64 | 28 | 98 | 20 | 101 | | |
| b) banking technicians | | 33 | 37 | 23 | 24 | 16 | 24 | | |
| c) electrical technicians | | 100 | 10 | 90 | 12 | 81 | 13 | | |
| d) mechanical technician | | 102 | 32 | 68 | 30 | 67 | 24 | | |
| e) road traffic technicians | | 40 | 61 | 37 | 64 | 33 | 62 | | |
| TOTAL BY GENDER STRUCTURE | 37 | 750 | 639 | 671 | 633 | 630 | 626 | | |
| TOTAL | | 1.389 | | 1.304 | | 1.256 | | | |

Source: Annual plan and programme, school administration

Kakanj Municipality faces economic and social challenges, the lack of basic skills in young people and the need for up-skilling due to labour market changes and new technologies.

Vocational education and training have been recognized as an important factor in the overall economic growth strategy and job creation.

The contribution of vocational education and training is particularly recognized in the context of fighting youth unemployment, better alignment of education and training system with labour market needs. For that reason, the Municipality of Kakanj allocates significant funds for scholarship programs for students studying for insufficient occupations and thus indirectly emphasizes economy needs and labour supply.

The number and amount of scholarships for the period 2017-2020 is given in the following table:

Table 43 - Municipal scholarships for the period 2017-2020.

| | 2017. Σ | 2018. Σ | 2019. Σ | 2020. Σ |
|------------------------------|------------|------------|------------|------------|
| Primary education | | | | |
| Number of scholarships | - | 5 | 7 | 8 |
| Total amount of scholarships | - | 1.500,00 | 2.100,00 | 2.400,00 |
| Secondary education | | | | |
| Number of scholarships | 166 | 195 | 193 | 198 |
| Total amount of scholarships | 49.800,00 | 58.500,00 | 57.900,00 | 87.600,00 |
| Higher education | | | | |
| Number of scholarships | 156 | 327 | 293 | 297 |
| Total amount of scholarships | 124.800,00 | 167.000,00 | 123.000,00 | 181.800,00 |

Source: Municipal administration

6.2. Sports

The Municipality of Kakanj has significant sports facilities for professional and recreational sports. The following Table presents the sports facilities in Kakanj Municipality:

Table 44 - Sports facilities [surface]

| Facility | m² of useful space | | | |
|--------------------------------------|--------------------|--------|--------|--------|
| | 2017. | 2018. | 2019. | 2020. |
| a) Sports Hall "Sala A" | 2.000 | 2.000 | 2.000 | 2.000 |
| b) Sports Hall "Anes Begić B i C" | - | - | 1.900 | 1.900 |
| d) Sports Hall "Real" | 2.037 | 2.037 | 2.037 | 2.037 |
| e) FK Mladost Doboj – Kakanj Stadium | 24.525 | 24.525 | 24.525 | 24.525 |
| f) FK Rudar Kakanj Stadium | 17.200 | 17.200 | 17.200 | 17.200 |
| g) Bowling Alley | 310 | 310 | 310 | 310 |
| h) Ponijeri SKI Centre | 40.000 | 40.000 | 40.000 | 40.000 |
| i) Ponijeri Eco-house | - | - | - | 665 |
| j) IPonijeri Court [near Eco-house] | - | - | - | 1.075 |

Source: Municipal administration and sports associations/clubs

Other sports facilities: Sports hall with grandstands, the gym, locker rooms 1800 m² , EUROPA Cafe 200 m². "Anes Begić B i C" Sports Hall [floors, locker room, the gym] - Sala B 1200 m², Sala C 700 m², FK "Mladost" Stadium – main stadium 8800 m², training area - 7000 m², artificial grass - 2925 m². West grandstand - 2100 m², north grandstand - 1100 m², space under grandstands - 2000 m², facility [locker room, premises - 600 m², FK Rudar Training Area [6000 m²] - closed, investment in infrastructure necessary.

Table 45 - Sports institutions financing

| Institution | Municipal Budget Funds | | | |
|--|------------------------|--------------|--------------|--------------|
| | 2017. | 2018. | 2019. | 2020. |
| JU Kulturno-sportski centar Kakanj [Culture and Sports Centre] | 971.710,00 | 1.135.779,50 | 1.251.660,00 | 1.178.870,00 |
| a) Sports Hall "Sala A" | - | - | - | - |
| b) Sports Hall "Anes Begić B i C" | | | - | - |
| d) Sports Hall "Real" | - | - | - | - |
| e) FK Mladost Doboj – Kakanj Stadium | 220.000,00 | 195.000,00 | 195.000,00 | 157.826,00 |
| f) FK Rudar Kakanj Stadium | 120.000,00 | 120.000,00 | 120.000,00 | 97.127,00 |
| g) Bowling Alley | - | - | - | - |
| h) Ponijeri SKI Centre | 10.000,00 | 10.000,00 | 10.000,00 | - |
| i) Ponijeri Eco-house | - | - | - | - |

Source: Municipal administration

The facilities for indoor sports meet the needs of the local population for sports and recreational activities. The condition of the training grounds and outdoor facilities for recreational activities is at a satisfactory level, and in recent years facilities of this type have been built in rural areas as well. In recent years, there is a need to build an indoor pool. As a part of Kakanj Culture and Sports Centre, the pool would be primarily used for sports and education. When it comes to winter sports, the Municipality of Kakanj manages Ponijeri SKI Centre through Kakanj Sports and Cultural Centre. Capacities and service quality of the Ponijeri Resort need to be enhanced in order to develop sports and recreational offer.

In addition to the above, in Kakanj Municipality there are numerous leisure time facilities managed by a hiking, hunting and fishing society, school sports courts and playgrounds [all in good condition save Hamdija Kreševljaković Primary School sports court].

6.3. Culture

There are two public cultural institutions in Kakanj Municipality: the Kakanj Culture and Sports Centre and the Kakanj Public Library.

Table 46 - Cultural institutions [facilities and human resources]

| Institution | Useful space - m² | | | Number of employees | | | | | | | | | | | |
|----------------------------------|-------------------|----------|----------|---------------------|----|----|------|----|----|------|----|----|------|----|----|
| | 2017 | 2018 | 2019 | 2017 | | | 2018 | | | 2019 | | | 2020 | | |
| | | | | M | F | Σ | M | F | Σ | M | F | Σ | M | F | Σ |
| Kakanj Culture and Sports Centre | 2.286,34 | 2.286,34 | 2.286,34 | 11 | 12 | 23 | 14 | 13 | 27 | 14 | 14 | 28 | 14 | 15 | 29 |
| Kakanj Public Library | 263 | 263 | 263 | 1 | 6 | 7 | 1 | 6 | 7 | 1 | 6 | 7 | 1 | 6 | 7 |

Source: Kakanj Culture and Sports Centre

6.3.1. Kakanj Culture and Sports Centre

This institution is a part of treasury operations system and its work is financed from its own resources [20%] and from the Municipality of Kakanj Budget [80%].

The institution is engaged in the following activities:

- Cultural and artistic activities [cinema, drama studio -acting school, music centre, literal creativity and stage performance]
- Education [courses, occupational safety, fire protection and first aid training]
- Protection of cultural heritage and museum activity
- Sports activities

The number of the Kakanj Culture and Sports Centre service users is somewhere between 10.000 and 15.000 per annum.

6.3.2. Kakanj Public Library

This institution is financed from the Budget of Zenica-Doboj Canton [salaries and material costs] approximately 65%, from the Municipality of Kakanj Budget 20% and from its own resources 15%.

The institution is engaged in the following activities:

- Regional collection and literal creativity support [publishing projects]
- Project and program development
- Implementation of programs and projects
- Implementation of programme activities in cooperation with Kakanj companies, NGO, and international organizations in BiH

The number of subscribers increased in the period 2017-2020 from 1275 to 2236 subscribers. The number of other service users in both institutions varied due to the COVID-19 pandemic.

Expanding and offering new activities in these institutions is conditioned by limited space and other resources and shall have to be addressed in the future, with respect to Kakanj Municipality competences.

6.3.3. Civil society

In Kakanj Municipality there are 59 civil society organizations with 7 to 405 members in the following fields:

- Sports 31,
- Culture 5,
- Ecology 1,
- Education, women support 2,
- Agriculture 8,
- The Association of Entrepreneurs / Taxi Association 2,
- Humanitarian associations 2,
- The Association of Diabetics, the Association of Dialysis Patients 2,
- The Association of Retired Persons 1,
- Other organizations 5.

Even though all the above organizations are not equally engaged in their fields of action, most of them have an active role in creating municipal policies related to civil society.

6.4. Religious Communities (religious sites, investments)

6.4.1. Catholic religious sites in Kakanj Municipality

The Parish of Kraljeva Sutjeska, prior to the 1990s war, was the greatest one in terms of territory and the number of churchgoers, followed by Kakanj, Vukanovići and Haljinići parishes.

The vast Parish of Kraljeva Sutjeska is the home of the oldest Franciscan Monastery, with the parish and monastery church, and filial churches in Čatići, Poljani, Seoce, Pavlovići, Bjelavići, Dobrinje and Grmače. Nowadays, the Mass is held in filial churches in Čatići, Bjelavići, Seoce and Dobrinje which is situated in Visoko. It is worth noting that the Parish, in addition to the mentioned filial churches or chapels, has another 19 chapels.

6.4.2. Orthodox religious sites in Kakanj Municipality

There are 16 Orthodox religious sites in the Kakanj Municipality, 13 functional and 3 ruined. For the last four years, the amount of BAM 115.654,20 was invested in reconstruction, improvement and maintenance of the existing sites. The amount of BAM 104.232,11 was invested in 2020. Problems and difficulties in work relate to a very small number of parishioners (users) who could co-finance the maintenance of the facilities.

6.4.3. Islamic community

There are 30 mosques, 30 mektebs and 13 support facilities in Kakanj Municipality. Numerous mosques and mektebs are not registered as such. Therefore, the Islamic Community of Kakanj needs to handle the property issues by legalizing those places of worship and religious buildings in the forthcoming period. The number of religious sites and their distribution has been determined by migrations and requirements in certain areas. The three religious communities in Kakanj Municipality encounter the same challenges such as the attitude of local people towards graveyards which often results in vandalism and desecrated and damaged gravestones. The main reason for this is the distance of the graveyards and the lack of surveillance or some other protection.

6.5. Social care

Social care as an organized activity in the Federation and Canton as well as in municipalities provides social work, personal care, protection or social support services to children, adults or families in need or at risk. Social care need is defined as a permanent or temporary condition an individual or family is in and which can be caused by war events, natural disasters, general economic crisis, mental and physical state or other issues that cannot be resolved without some assistance. Kakanj Social Care Centre and the Municipality of Kakanj jointly implement different social care programs applying social care substantive laws.

The number of supplementary welfare allowance and exceptional needs payment beneficiaries and carers tends to vary from year to year depending on social needs. The number of the beneficiaries of supported day-to-day living recorded a considerable decrease from 2017 to 2020. The number of children in foster families and persons in social care institutions recorded a slight increase during the period 2017-2020.

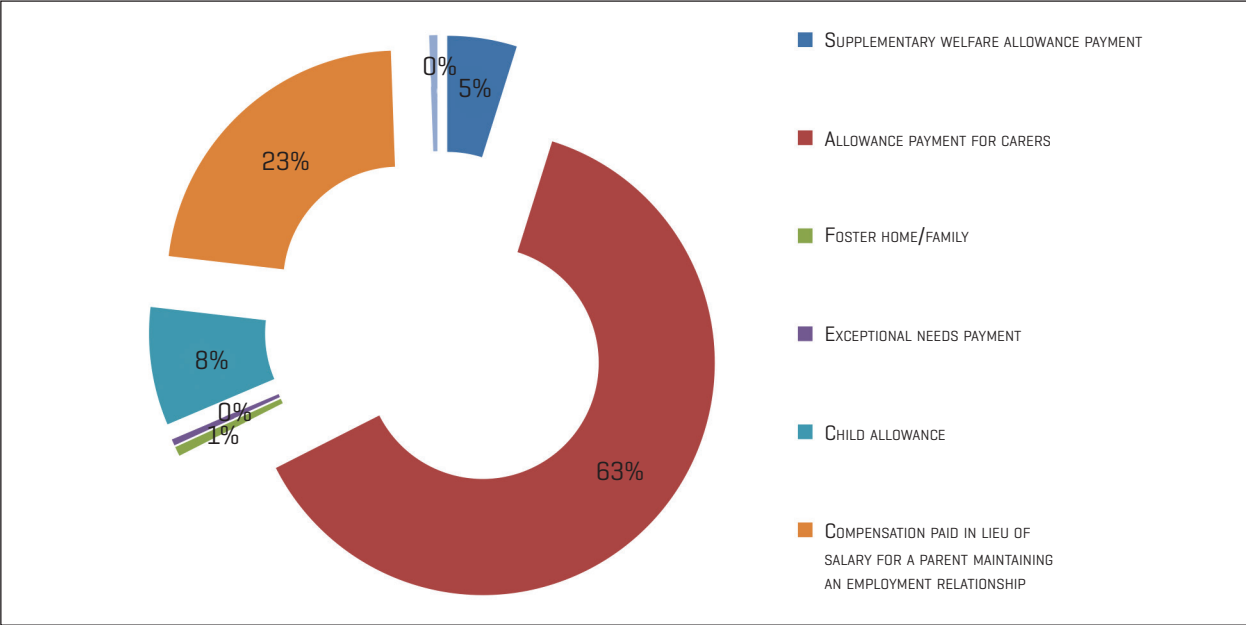
Table 47 - Kakanj Social Care Centre social relief program with the number of beneficiaries

| Social relief | Number of beneficiaries | | | | | | | | | | | |
|---|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 2017. | | | 2018. | | | 2019. | | | 2020. | | |
| | M | F | Σ | M | F | Σ | M | F | Σ | M | F | Σ |
| Supplementary welfare allowance payment | 101 | 138 | 239 | 66 | 177 | 243 | 64 | 164 | 228 | 62 | 162 | 224 |
| Allowance payment for carers | 317 | 436 | 753 | 333 | 459 | 792 | 247 | 340 | 587 | 252 | 346 | 598 |
| Other material assistance | - | - | - | - | - | - | - | - | - | - | - | - |
| Supported day-to-day living | 5 | 3 | 8 | 4 | - | 4 | 2 | 1 | 3 | 2 | 1 | 3 |
| Foster home/ families | 3 | 5 | 8 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 |
| Accommodation in social care institutions | 24 | 23 | 47 | 25 | 22 | 47 | 25 | 23 | 48 | 29 | 23 | 52 |
| Exceptional needs payment | 66 | 55 | 121 | 72 | 73 | 145 | 51 | 65 | 116 | 71 | 87 | 158 |
| Health insurance | 115 | 150 | 265 | 130 | 140 | 270 | 152 | 167 | 319 | 178 | 182 | 360 |
| Social services and other professional work | - | - | - | - | - | - | - | - | - | - | - | - |
| Home care and assistance | - | - | - | - | - | - | - | - | - | - | - | - |
| Child allowance | 397 | 674 | 1.071 | 347 | 589 | 936 | 309 | 526 | 835 | 283 | 480 | 763 |
| Compensation paid in lieu of salary for a parent maintaining an employment relationship | - | 84 | 84 | - | 90 | 90 | - | 70 | 70 | - | 90 | 90 |
| Compensation paid in lieu of salary for a parent without an employment relationship | - | 79 | 79 | - | 62 | 62 | - | 60 | 60 | - | 59 | 59 |
| Total of beneficiaries | 1.028 | 1.647 | 2.675 | 980 | 1.618 | 2.598 | 853 | 1.422 | 2.275 | 880 | 1.436 | 2.316 |

Source: Kakanj Social Care Centre

The number of health insurance beneficiaries increased significantly during the period 2017-2020. During the same period, the number of child allowance beneficiaries was significantly reduced. The number of the beneficiaries of compensation paid in lieu of salary for a parent maintaining an employment relationship and compensation paid in lieu of salary for a parent without an employment relationship tends to vary from year to year. The fundamental causes for this situation are: migration, working abroad, employment, etc.

Figure 11.
Share of social relief paid per type



Source: Kakanj Social Care Centre

When it comes to the records of persons using social care services on different basis or so-called vulnerable categories, it is apparent that the number of children growing up in troubled families is increasing while the number of children without parental care and children with mental and physical difficulties is decreasing. In terms of adults, the trend varies over the years and it depends on factors which the community cannot influence to a greater extent.

Table 48 - Vulnerable groups

| | Children with mental and physical difficulties | | | Children without parental care | | | Neglected children | | | Children whose development is hindered by family problems | | |
|-------|--|----|----|--------------------------------|---|----|--------------------|----|----|---|----|----|
| | M | F | Σ | M | F | Σ | M | F | Σ | M | F | Σ |
| 2017. | 46 | 34 | 80 | 7 | 7 | 14 | 25 | 7 | 32 | 16 | 17 | 33 |
| 2018. | 27 | 22 | 49 | 5 | 5 | 10 | 23 | 9 | 32 | 24 | 15 | 39 |
| 2019. | 40 | 32 | 72 | 4 | 5 | 9 | 23 | 10 | 33 | 27 | 15 | 42 |
| 2020. | 39 | 25 | 64 | 4 | 4 | 8 | 24 | 11 | 35 | 28 | 16 | 44 |

| Adults | | | | | | | | | | | | | | | |
|--------|--|-----|-------|---|-----|-----|-------------------------------------|----|-----|--|---|---|--|----|-----|
| | Persons with mental and physical difficulties and disabled persons | | | Financially insecure and unemployable persons | | | Senior citizens without family care | | | Persons with negative social behaviour | | | Persons and families in need of social care support due to special circumstances | | |
| | M | F | Σ | M | F | Σ | M | F | Σ | M | F | Σ | M | F | Σ |
| 2017. | 762 | 392 | 1.154 | 101 | 138 | 239 | 68 | 42 | 110 | 7 | - | 7 | 66 | 55 | 121 |
| 2018. | 776 | 396 | 1.172 | 66 | 177 | 243 | 25 | 86 | 111 | 6 | - | 6 | 72 | 73 | 145 |
| 2019. | 785 | 407 | 1.192 | 39 | 124 | 163 | 28 | 86 | 114 | 6 | - | 6 | 51 | 65 | 116 |
| 2020. | 787 | 413 | 1.200 | 62 | 162 | 224 | 33 | 92 | 125 | 5 | - | 5 | 71 | 87 | 158 |

Source: Kakanj Social Care Centre

The number and structure of retired persons according to the type and amount of pension are addressed in more detail in the following chapter.

The following Table shows the number, gender and age structure of retired persons.

Table 49 - Number, gender and age structure of retired persons

| | 2017. | | | 2018. | | | 2019. | | | 2020. | | |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | M | Ž | Σ | M | Ž | Σ | M | Ž | Σ | M | Ž | Σ |
| Under 65 | 400 | 100 | 500 | 350 | 50 | 400 | 400 | 50 | 450 | 350 | 50 | 400 |
| 65-75 g. | 2.300 | 1.800 | 4.100 | 2.250 | 1.800 | 4.050 | 2.300 | 1.800 | 4.100 | 2.200 | 1.800 | 4.000 |
| 76-85 g. | 800 | 450 | 1.250 | 800 | 400 | 1.200 | 800 | 450 | 1.250 | 650 | 550 | 1.200 |
| Over 85 | 200 | 130 | 330 | 300 | 200 | 500 | 300 | 150 | 450 | 300 | 200 | 500 |

Source: Kakanj Association of Retired Persons

6.6. Disabled war veterans

There was a drop of 13 in the number of disabled war veterans in Kakanj Municipality during the period 2017-2020 [13 males, the number of females remained the same 6]. There are ten disability compensation benefit rates, rated from the largest to the smallest in terms of disability rating and compensation rate. Over the years there has been a steady downward trend due to the natural cause of death. Disability compensation rates increased proportionally for all disability ratings over the period 2017-2020.

6.7. Civilian victims of war: the number of victims

During the period 2017- 2019 there was an increase of the number of the civil victims of war receiving compensations and reparations. The number was not changed in 2020. The largest category is the special category of the civil victims of war, followed by civil victim family member category and the category of disabled civilians of war with 80%, 70% and 60% disability rating.

The average reparation amount for the special category of the civil victims of war was BAM 4.002,00 for the period 2017-2020.

The average compensation amount for the family members of the civil victims of war was BAM 1.147,92 for the period 2017-2020.

The average disability rate amount paid in 2017, 2018, 2019, and 2020 was BAM 255,33 for disability rated at 80%, BAM 190,38 for disability rated at 70% and BAM 107,09 for disability rated at 60%.

6.8. Health care

JKakanj Health Centre is the only health care institution in Kakanj Municipality providing primary health care, advisory-specialist health care, prevention and promotion of health care. Within the limits of its respective activities, the Centre strives to promote access to effective, fair, available, integrated and affordable health care programs and services to satisfy the needs of the population for primary and advisory-specialist health care based on the principles of comprehensiveness, equality and accessibility.

Table 50 - Number of health care institutions in Kakanj Municipality

| | 2017. | 2018. | 2019. | 2020. |
|--|---|-------|-------|-------|
| Health Centre | 1 | 1 | 1 | 1 |
| Outpatient facility | 18 | 18 | 19 | 19 |
| Family medicine team | 18 | 18 | 19 | 19 |
| Ambulance | 4 | 4 | 5 | 3 |
| Public pharmacy | 0 | 0 | 0 | 0 |
| Private pharmacy | 5 | 5 | 5 | 5 |
| Counselling centre to improve health care through prevention and education | Kakanj Health Centre departments offer counselling services | | | |

Source: Kakanj Health Centre

In the past period, health care in Kakanj Municipality was affected by the COVID-19 pandemic. In an effort to fight the pandemic, in 2020 Kakanj Health Centre opened a COVID-19 outpatient facility with necessary medical staff and equipment for medical examination, x-ray diagnosis, counselling and transportation.

Medical furniture, devices and equipment was purchased for the Krševac Family Medicine Outpatient Facility.

According to the Inspections Division Register, the number of registered people who suffered from coronavirus disease but were not hospitalized is given in the following table while the number of cases by month is given in the Figure 12.

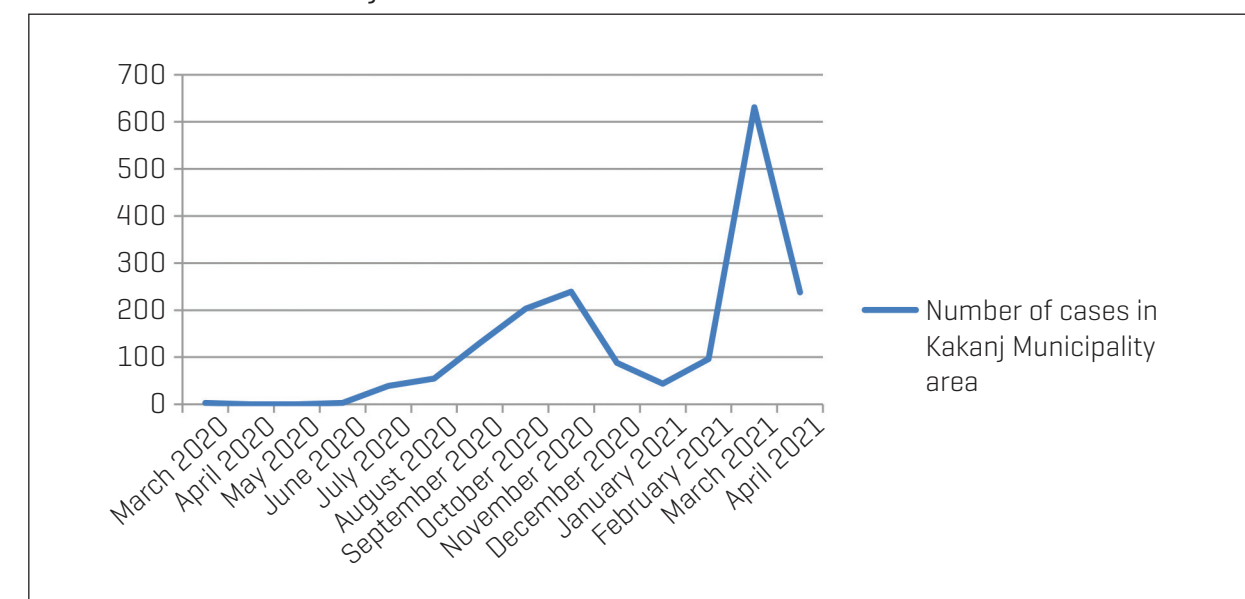
| Mart 2020-2021. | |
|-----------------|------|
| Covid-19 cases | 1850 |
| Covid-19 deaths | 73 |

Table 51 - Number of COVID-19 cases in Kakanj for the period March 2020-April 2021

| | March 2020 | April 2020 | May 2020 | June 2020 | July 2020 | August 2020 | September 2020 | October 2020 | November 2020 | December 2020 | January 2021 | February 2021 | March 2021 | April 2021 |
|-------|------------|------------|----------|-----------|-----------|-------------|----------------|--------------|---------------|---------------|--------------|---------------|------------|------------|
| Cases | 3 | 0 | 0 | 3 | 39 | 55 | 130 | 203 | 239 | 88 | 44 | 96 | 631 | 238 |

Source: the Inspections Division Register

Figure 12.
Number of cases in Kakanj



Source: Inspections Division

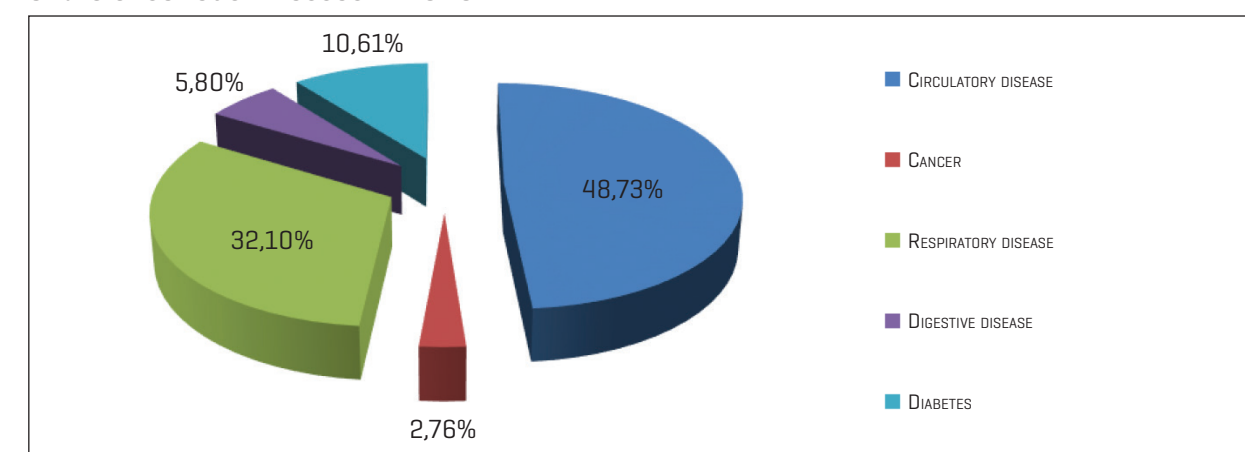
Table 52 - List of serious illnesses

| Type of illness | Illness | | | |
|---------------------|---------------|---------------|--------------|--------------|
| | 2017. | 2018. | 2019. | 2020. |
| Circulatory disease | 4.892 | 4.788 | 4.681 | 4.777 |
| Cancer | 300 | 292 | 292 | 271 |
| Respiratory disease | 4.899 | 5.386 | 2.887 | 3.147 |
| Digestive disease | 1.116 | 813 | 509 | 569 |
| Diabetes | 948 | 1.098 | 1.025 | 1.040 |
| Total | 12.155 | 12.377 | 9.394 | 9.804 |

Source: Kakanj Health Centre

The serious illnesses share in 2020 is given in the following Figure:

Figure 13.
Share of serious illnesses in 2020



Source: Kakanj Health Centre

Table 53 - Number and structure of staff in medical institutions in Kakanj Municipality

| | 2017. | | | 2018. | | | 2019. | | | 2020. | | |
|----------------------|-------|-----|-----|-------|-----|-----|-------|-----|-----|-------|-----|-----|
| | M | F | Σ | M | F | Σ | M | F | Σ | M | F | Σ |
| Medical staff | 19 | 108 | 127 | 25 | 105 | 130 | 23 | 107 | 130 | 20 | 107 | 127 |
| General practitioner | | 10 | 10 | 2 | 11 | 13 | 3 | 13 | 16 | 2 | 12 | 14 |
| Specialist [total] | 7 | 12 | 19 | 6 | 11 | 17 | 6 | 11 | 17 | 5 | 12 | 17 |
| Pediatrician | | 2 | 2 | | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 |
| Obstetrician | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 |
| Dentist | 2 | 4 | 6 | 2 | 5 | 7 | 2 | 4 | 6 | 2 | 3 | 5 |
| Medical technician | 10 | 82 | 92 | 10 | 78 | 88 | 12 | 79 | 91 | 11 | 80 | 91 |
| Other | 10 | 33 | 43 | 9 | 29 | 38 | 8 | 27 | 35 | 8 | 26 | 34 |

Source: the Kakanj Health Centre

Table 54 - Primary health care financing – Health Centre

| Source of income | 2017. | 2018. | 2019. | 2020. |
|--|--------------|--------------|--------------|--------------|
| Earned income | 5.485.245,08 | 6.109.754,04 | 6.282.155,96 | 6.571.916,36 |
| Municipal budget | 64.983,00 | 49.999,96 | 89.624,97 | 85.000,00 |
| % the Institute for Health Insurance | 80,03 | 85,10 | 83,71 | 86,23 |
| % the Canton | - | - | 0,32 | 0,86 |
| % the Municipality | 1,18 | 0,82 | 1,43 | 1,29 |
| % health care users covering partial or total expenses | 0,73 | 0,37 | 0,12 | 0,08 |
| % other sources | 18,06 | 13,71 | 14,42 | 11,54 |

Source: Kakanj Health Centre

Table 55 - Health insurance coverage

| Opis | 2017. | 2018. | 2019. | 2020. |
|---------------------------------------|---------------|---------------|---------------|---------------|
| Nositelji osiguranja | 21.133 | 21.407 | 21.637 | 21.867 |
| Članovi obitelji nositelja osiguranja | 13.946 | 14.420 | 14.094 | 13.632 |
| Ukupno osiguranika | 35.079 | 35.827 | 35.731 | 35.499 |

Source: Institute for Health Insurance of Zenica-Doboj Canton

Prenatal and postnatal care.

The maternity ward in Kakanj recorded a downward trend in the period 2017-2020. Even though it is equipped for childbirth, the proximity of the Zenica Cantonal Hospital played a decisive role in women choosing the Hospital for their childbirth. Over the years, there has been a drop in the number of vaccinated children which may be a potential cause of the occurrence of the afore-mentioned illnesses, even on a pandemic scale. It is therefore necessary to promote compulsory vaccination of children as a protection against contagious diseases.

6.9. Safety situation in Kakanj Municipality

Natural disasters risk came into focus after the floods in 2014. Civil Protection Service does not have all data about the number of landslides, population and buildings at risk. Therefore, only the Civil Protection data collected during the natural disaster in 2014 are presented in the following Table. Namely, many landslides are located on the road infrastructure, forest and agricultural land, therefore Civil Protection does not have data about either landslides or landslide remediation.

Table 56 - Landslides in Kakanj Municipality

| | 2017. | 2018. | 2019. | 2020. |
|--|-------|-------|-------|-------|
| Registered landslides | 186 | 184 | 182 | 182 |
| Population directly at risk | 2.432 | 2.421 | 2.415 | 2.415 |
| Repaired landslides | 2 | 2 | 0 | 0 |
| Residential buildings directly at risk | 1.091 | 1.086 | 1.081 | 1.081 |

Source: Municipal administration

The Risk Assessment identified the following natural disasters as major threats in Kakanj Municipality: earthquakes, landslides, land subsidence, floods, snow, snowdrift, hail, strong wind, drought, epidemic and epizootic. There is also the threat of technical-technological accidents, great fires and accidents caused by man such as big road and railroad accidents including the transport of dangerous, toxic, inflammable and explosive agents. It is realistic to expect some sporadic natural disasters which can endanger most of the population and inflict extensive damage to the economy. Current preventive measures, organization and equipment are insufficient for resisting natural disasters threatening Kakanj.

Fires occur often in Kakanj Municipality. There is a constant risk of fires due to neglected land and carelessness when cleaning it. A few particularly dry years were good for forest fires especially in terms of their size and duration which made fire extinguishing difficult.

In the Risk Assessment of Kakanj Municipality which shows the results of the analysis of flood risks through the Disaster Risk Analysis System – DRAS, provided by UNDP Development Program in BiH, the following locations with recurring floods were singled out: Doboj, Donji Kakanj, Karaulsko Polje, Povezice, Varda and Podvarda, Tičići, Brežani, Kraljeva Sutjeska, Čatići and Hrasno, the mouth of Jošanica Creek, Zgošća, the mouth of the Zgošća River, Desetnik, Pope, Bilješevo, Čatići, Bičer and Slivnice, these locations are often flooded because they are located near the unregulated bed of the Bosna River which is considered to be a flood prone river that can, together with its tributaries, cause material damage.

According to the Risk Assessment of Kakanj Municipality, 1900 persons and 651 residential buildings are at the risk of floods with a 100-year recurrence. Landslides represent a great threat to people lives and material goods, especially in settlements located in mountainous areas. Landslides are usually activated by an increased amount of underground water in spring and illegal and unplanned construction. The occurrence of landslides highlights the difference between good and bad traffic maintenance. Some landslides exist permanently with acceptable consequences and some cause the disruption or obstruction of traffic.

The Disaster Risk Analysis System – DRAS in the Risk Assessment of the Kakanj Municipality predicted the possible occurrence of a landslide in the following places: Laze (Brnjic), Slapna Gora, Tičići, Hausovići, Crnač, Poljani, Tršće, Zagrađe, Sopotnica, Kraljeva Sutjeska. The Assessment also indicates that there are 1147 residential buildings and 2550 residents in the areas vulnerable to landslides.

In those circumstances, it seems to be necessary to invest more in preventive measures for protection against flood, landslides, fire, earthquake, etc. as well as education and training for quality implementation of protection measures when natural disasters strike.

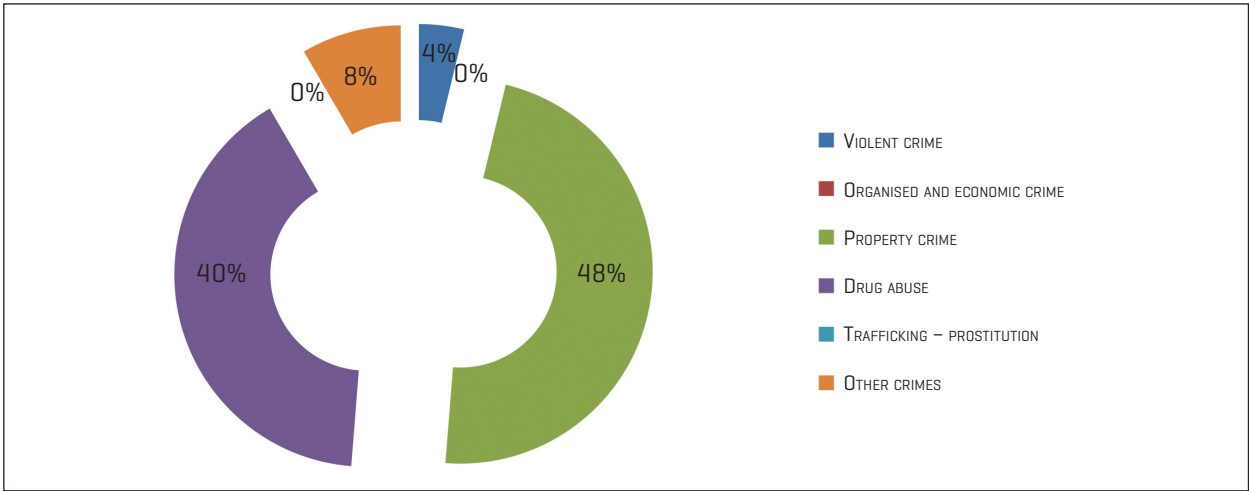
The following measures and priorities have been identified to reduce natural disaster risks in Kakanj Municipality:

- Establish systems for managing, monitoring, warning and communication,
- Develop a municipal seismic hazard map and micro seismic urban area map with marked terrain unfavourable for construction,
- Prepare and review spatial planning documents,
- Make a disaster risk reduction a priority of Kakanj Municipality and put climate change challenges into focus,
- Establish a functional and well-equipped operations coordination centre of the Civil Protection with trained staff connected with operations coordination centres in other municipalities, cantons, Federation and BiH OKC – staff trained for the gathering of data on damages and losses and entering data into DesInventar Sendai database,
- Form general and special purpose teams according to needs and assessment,
- Establish companies and legal entities of significance for protection and rescue, for equipping personnel for protection and rescue,
- Strict implementation of the Law on Spatial Planning principles,
- Make decision on the issues of importance to the protection and maintenance of regulated riverbeds and banks in populated areas,
- Take decisions on the appointment of the members of the commission for landslides with specific competencies and municipal support department,
- Adopt the Rulebook on Internal Organisation and Systematisation of the Municipality of Kakanj to designate a department for the completion of the procedures and landslide rehabilitation works,
- Clean watercourse and aqueducts,
- Construct embankments or dykes for flood protection,
- Strengthen administrative capacity, develop human resources and procure equipment.

The crime rate in Kakanj Municipality, according to Kakanj Police Department, during the period 2017-2020 had an even trend in the total number of offences reported. In 2020, the number of offences increased significantly in comparison to previous years. The percentage of solved cases is between 70% and 80%.

The Figure below shows the criminal offence rate in 2020:

Figure 14.
Criminal offense rate in Kakanj Municipality in 2020



Source: Kakanj Police Department

6.10. Development problems and social service needs

| Development problems | Development needs |
|---|--|
| Reduced number of students | Birth rate support and better living environment |
| Poorly equipped schools | More funding for school infrastructure |
| The condition of religious sites (equipment and non-legalized buildings and facilities) | Funding for infrastructure and legalization |
| The COVID-19 pandemic | Adjust the health care system to epidemic needs and other challenges in the field of health care |
| Insufficient adequate space in cultural institutions | Send the initiatives to the ministries, partnership projects |

7. PUBLIC INFRASTRUCTURE IN KAKANJ MUNICIPALITY

7.1. Energy infrastructure

In Zenica-Doboj Canton, electricity is supplied by JP Elektroprivreda BiH d.d. Sarajevo (Electric Utility Company) – Termoelektrana Kakanj (Thermal Power Plant). The Thermal Power Plant Kakanj, situated in Kakanj Municipality area, is currently the second largest electricity producer in BiH and has the capacity of 2,3 billion kWh in one year, which is ¼ of the total annual electricity consumption in BiH. The successful operation of TE Kakanj enables the optimum coal production in RMU Kakanj (Coal Mine) and other coal mines of the Central Bosnia coalfield. There are separate tariff rates for electricity consumption for residential users, street lighting, commercial facilities and large industrial consumers. Industrial electricity consumption is based on traditional industries: mining, energy, metallurgy and wood industry, metal processing industry, mechanical industry and ancillary processing capacities. The electricity operator needs to establish and maintain a high level of operational readiness in order to supply electricity to all these industries, concentrated in large facilities. Electricity generation in Zenica-Doboj Canton surpasses electricity consumption, meaning that the Canton fully satisfies its electricity demands and send the surplus electricity into the electric power system of BiH.

The following Table shows the projected electricity generation in TPP Kakanj until 2029, for three different scenarios of electricity consumption:

Table 57 – Projected electricity generation in TE Kakanj [TPP]

| | 2015. [GWh] | 2020. [GWh] | 2029. [GWh] |
|-------------|-------------|-------------|-------------|
| | S1, S2, S3 | S1, S2, S3 | S1, S2, S3 |
| TE Kakanj 5 | 660 | 0 | 0 |
| TE Kakanj 6 | 660 | 660 | 660 |
| TE Kakanj 7 | 1.380 | 1.380 | 1.380 |
| TE Kakanj 8 | | | 1.260 |
| Total | 2.700 | 2.040 | 3.300 |

Source: Spatial Plan of Zenica-Doboj Canton, 2009-2029.

7.1.1. Condition of the electricity distribution network in the Municipality area

The length of the electricity distribution network in Kakanj Municipality area is 970.309 m. The length of low voltage network lines is 763.600 m, which is by 1.590 m more than in 2017. The length of high voltage power lines is 206.709 m, which is also by 1.590 m more than in 2017. Investments in the reconstruction and enlargement of the network resulted in 25.700 m reconstructed high voltage and 22.400 m low voltage power lines, as well as construction of 1.700 m of new lines.

7.1.2. Number of electricity customers/consumers

The electricity distribution network coverage in Kakanj Municipality is satisfactory and the number of users in all categories has been increasing.

The following Table shows the number of electricity users:

Table 58 – Number of electricity customers/consumers

| Description | 2017. [m] | 2018. [m] | 2019. [m] | 2020. [m] |
|---|-----------|-----------|-----------|-----------|
| 1. At high voltage | 8 | 8 | 8 | 8 |
| 2. At low voltage | | | | |
| a) Residential | 12.946 | 13.164 | 13.465 | 13.918 |
| b) Street lighting | 72 | 74 | 75 | 79 |
| c) Other consumption | 828 | 884 | 937 | 1.015 |
| Total | 13.854 | 14.130 | 14.485 | 15.020 |
| Number of households without electricity connection | 21 | 7 | 13 | 21 |

Source: Register of electricity customers of Elektro distribucija Kakanj
[Electric Distribution Utility Company]

7.2. Condition of water supply and sewage network

Kakanj Municipality residents are supplied with water through public, local and individual water supply systems. Water is taken from captured springs or from underground water catchments [water wells] and surface water [from open watercourses].

The Table below provides and overview of public water supply systems and their capacities:

Table 59 – Public water supply systems

| Description | Spring | Spring type | Flow rate Qmin [l/s] |
|---------------------|------------|---------------|----------------------|
| Kakanj Municipality | Bukovica | Surface water | 2 |
| | Stog | Catchment | 2 |
| | Ilidža | Well | 30 |
| | Pitka voda | Well | 20 |

Source: Spatial Plan of Zenica-Doboj Canton [Official Gazette of Zenica-Doboj Canton, 4/09], page 28.

The number of households without water supply has not been established, but continuous efforts have been made to improve of the quality of water supply. The level of investments in the water supply network increased continuously in the period 2017-2020. The number of consumers from the public aqueduct has increased by 386 consumers since 2017. The total number of households connected to the public water supply system is 8.923. Out of the total number of households, 69 % or 8.923 households have access to the safe and monitored system, while 31 % use water from local aqueducts. Water supply services are billed in the amount of 0,90 BAM /m³ of water consumed for natural persons and 1,45 BAM/m³ for legal entities. The rate of bill collection is 97,94 %.

When it comes to waste waters, significant investments were made to extend the local sewage systems in the period 2017-2020.

A total of BAM 591.600,00 was invested in the extension of the sewage network in the period 2017-2020. The level of investment for reconstruction is BAM 20.000,00 per year [BAM 80.000,00 for the period 2017-2020], while the amount of BAM 120.000,00 was allocated for the maintenance of the network in four years in the four-year period.

According to JP Vodokom Kakanj d.o.o. Kakanj [Public Water Utility] and the Institute for Planning and Construction of Kakanj Municipality, the sewage network coverage is insufficient and only 35 % of residents have access to the public sewage network, while the rest are connected to private sewage systems or septic tanks. The price of service is 0,45 BAM/ m³ for natural persons and 0,725 BAM/m³ for legal entities.

7.3. Heat energy

JP Grijanje d.o.o. Kakanj [Public Heating Utility] was founded in 1986. The system heats approximately 247.590 m² for around 15.000 residents. The district heating system in Kakanj Municipality area consists of the following components:

Generation: heating station, located within Termoelektrana Kakanj [Thermal Power Plant], which prepares hot water as the primary heating medium using steam from the steam turbines of TPP Kakanj.

Transmission: hot water transmission pipelines from the heating station in TPP Kakanj to heating substations in the town.

Distribution: heating substations that prepare warm water as the secondary heating medium and warm water pipelines [warm water distribution] from heating substations to consumers [residential and commercial/public facilities].

When it comes to the district heating system in Kakanj Municipality, TPP Kakanj owns and is responsible for thermal energy generation and part of the transmissions system [the first 1000 m of hot water transmission pipeline, starting from TPP Kakanj].

JP Grijanje owns and operates the remaining part of the hot water transmission lines and the distribution system. The Company owns the system up to the manhole [valve] and any further individual heating distribution subsystems [installations] are owned by co-owners/consumers. JP Grijanje purchases thermal energy from TPP Kakanj, which generates it; the price is based on heat output measurements. There is an ultrasonic heat energy meter on the coal yard, at the border between the parts of the hot water transmission pipeline owned by TPP Kakanj and JP Grijanje respectively. This means that transmission heat loss is included in the price billed to final users [consumers].

The Decision of the Municipal Council Kakanj [Official Gazette of Kakanj Municipality, 2/15] introduced the consumption-based pricing model for heating (meter billing), while still retaining the existing pricing model based on the floor area of a heated facility. A reasonable three-year deadline was provided for all consumers to transfer to the new consumption-based billing model. However, this has not happened due to the following reasons:

- Most buildings in Kakanj are equipped with a double pipe system where one pipe supplies several radiators in different apartments, making it impossible to measure the consumption for individual apartments;
- Owners of houses without thermal insulation are not motivated to transfer to the new measurement based price system, due to the low price of heating per square meter of floor area.

Approximately 500 users (or 15 %) are using the consumption-based price system. Their heat meters are read via a radio module, using a mobile reading device. As of 2021, meters in all newly built residential buildings will be read using the M-Bus system.

Each heating substation has a heat meter installed. Hot water is transmitted from TPP Kakanj to the town area by surface (approximately 4 km) and underground hot water transmission pipelines (approximately 5,5 km) with pre-insulated pipes. The surface hot water transmission pipeline is insulated by mineral wool with aluminium sheet lining or the combination of mineral wool and polyurethane foam.

The length of the hot water transmission route is 14 km, with 28 km of hot water transmission pipes. The length of the warm water network is 68 km, with 116 km of pipeline. The pipeline of the district heating system in Kakanj is longer than the pipelines of such systems in Sarajevo and Tuzla combined. This results in high heat losses (as they are proportionate to the length of the pipeline) and high maintenance costs, making it more difficult to operate the system.

There are 48 substations in the district heating system in Kakanj; 8 substations are equipped with tubular heat exchangers, while others have plate heat exchangers. The substations situated furthest from the town (5 of them) are regulated fully automatically. These substations are automated and controlled from the control room using SCADA. The automation of the remaining substations is planned, with substations in Dobož suburb being the priority. The heating season starts on 1 October and ends on 30 April. The price of heating is adopted by the Municipal Council Kakanj.

The length of the warm water distribution network, from the heating substations to consumers, is 58 km. The number of consumers has increased by 12 % in comparison to 2010. The system currently operates two substations for approximately 250 buildings in Kakanj and approximately 400 small substations for family houses/private apartment buildings. There is no possibility of heat regulation for individual buildings; manual regulation is possible in substations. The issues faced are warm water network regulation and optimum use. Thermal energy is used exclusively to heat spaces. Officially, there is no heating of sanitary water. However, some consumers installed individual water containers heated from the system, even though it is forbidden. It is hard to control this practice and sanction it. Therefore, such installations have been indirectly legalized and billed as additional 17 m² (notional).

The price of heating for commercial premises under the Tariff system is: 4,00 BAM/m² and 2,50 BAM/m², VAT excluded. Pursuant to the Decision, the price of heating for residential premises is 1,70 BAM/m² VAT excluded, while consumption-based price is BAM 50,00 per megawatt hour of energy consumed. Consumption is calculated only during the heating season. Customers are billed every month. These terms are established on the basis of the Decision of the Municipality and the price is approved by the Municipal Council Kakanj. The rate of bill collection is between 97 % and 99 %. The price for supplied heat invoiced by TPP Kakanj is 23,35 BAM/MWh [VAT excluded]. The total price is calculated on the basis of readings.

Table 60 – Heating

| | 2017. | 2018. | 2019. | 2020. |
|---|--------|---------|--------|--------|
| Households – connections | 3.054 | 3.071 | 3.103 | 3.138 |
| Legal entities – connections | 290 | 298 | 303 | 289 |
| Number of households in the Municipality without a connection to district heating – an estimate | 9.000 | 9.000 | 9.000 | 9.000 |
| Percentage of households in the Municipality with quality heating solution – an estimate | 25% | 25% | 26% | 26% |
| Average price per m² | 2,29 | 2,33 | 2,31 | 2,32 |
| Bill collection rate | 99,30% | 103,69% | 99,05% | 97,83% |

Source: JP Grijanje d.o.o. Kakanj

Note: According to JP Grijanje d.o.o. Kakanj, as of 1 January 2021, the price for supplied heat invoiced by TPP Kakanj is 24,00 BAM/MWh [VAT excluded].

7.4. Road infrastructure and postal, telegraph and telephone communications

One of key preconditions for the development of Kakanj Municipality is the development of transport infrastructure. The aim of the road system is to connect commercial areas of the Municipality, connect the urban area with the regional transit corridors and provide good conditions for efficient and safe transport of people and goods.

| Description | Length [km] | Share in the total network in the Municipality area [%] | Condition (good/bad) |
|---------------|---------------|---|----------------------|
| Uncategorised | 259,00 | 52,42 | good/bad |
| Local | 151,00 | 30,56 | good/bad |
| Regional | 65,6 | 13,27 | good |
| Trunk | 0 | 0 | - |
| Motorway | 18,52 | 3,75 | good |
| Total | 494,12 | 100 | |

Source: Institute for Planning and Construction of Kakanj Municipality

In terms of the road network quality, there are apparent issues with uncategorised and local roads, most of which are in bad condition.

Better and more quality connection of the rural areas with the urban core requires investment in the maintenance and extension of the road network in the Municipality area. Additional issues occurred in 2014 when numerous landslides activated causing further damage to the existing road structure. Kakanj Municipality has a favourable position in terms of transport, as the section of the Corridor Vc Tarčin – Zenica, regional road Kakanj – Zavidovići and regional road Visoko – Kakanj – Zenica all pass through its territory.

Local roads are mostly 4 meters wide, with inappropriate curve radii, inadequate drainage, provisional bridges, etc. All macadam roads are inclined and largely susceptible to heavy rainfall due to lack of drainage tranches, as it washes off and removes spread material from such roads, occasionally making it hard or impossible to use them.

Table 62 Road network: investments and connection

| | 2017. | 2018. | 2019. | 2020. |
|---|--------------|--------------|------------|--------------|
| Allocation of funds from the Municipal budget for rehabilitation and construction of uncategorised roads | 72.070,01 | 188.300,78 | 228.234,53 | 319.744,25 |
| Allocation of funds from the Municipal budget for rehabilitation and construction of local roads | 1.875.799,91 | 2.754.305,42 | 509.320,62 | 522.231,05 |
| Allocation of funds from the Municipal budget for regular road maintenance | 629.000,00 | 784.482,00 | 945.575,00 | 640.239,29 |
| Allocation of funds from the Municipal budget for construction and maintenance of horizontal and vertical traffic signs | 28.533,98 | 28.533,98 | 28.533,98 | 28.533,98 |
| Total allocation of funds from the Municipal budget for construction and rehabilitation of road infrastructure | 1.721.603,72 | 3.026.978,75 | 764.056,55 | 2.469.539,00 |
| Asphalted roads in the Municipality area [km] | 257,59 | 259,27 | 262,79 | 268 |
| Pavements in the Municipality area [km] | 12,61 | 12,61 | 12,61 | 12,61 |
| Local communities not connected to the Municipality centre by an asphalt road | 0 | 0 | 0 | 0 |
| Settlements not connected to the Municipality centre by an asphalt road | 4 | 4 | 4 | 4 |

Source: Institute for Planning and Construction of Kakanj Municipality

Table 63. Telephone

| | 2017. | 2018. | 2019. | 2020. |
|---|--------|--------|--------|--------|
| Landline connections | 5.178 | 4.869 | 4.509 | 4.084 |
| Mobile network users (an estimate) | 19.000 | 19.200 | 19.500 | 20.500 |
| Mobile phone signal coverage | 85% | 90% | 90% | 90% |
| Internet users | 4.591 | 5.216 | 5.638 | 5.773 |
| Local communities with telephone network | 20 | 20 | 20 | 20 |
| Local communities with the possibility of Internet connection | 20 | 20 | 20 | 20 |

Source: BH Telecom d.d., Branch Office Kakanj

7.5. Other utility services

JP Vodokom d.o.o. Kakanj (Public Water Utility) is in charge of waste collection and disposal and the number of their customers increased in the period 2017-2020. In 2017, 69 % of households were covered by waste service, while in 2020 the percentage increased to 90,50%. The quantity of waste collected was 30.555 m³ in 2017 and 30.808 m³ in 2020.

According to the estimates of JP Vodokom d.o.o. Kakanj, only 1% of the waste collected is sorted.

Table 64 – Garbage and waste collection

| Waste collection coverage [%] | 2017. | 2018. | 2019. | 2020. |
|---|---|---|---|---|
| Households | 69 | 71 | 71 | 90,5 |
| Legal entities | - | - | - | - |
| Total | | | | |
| Number of users of waste and garbage collection service | 9.073 | 9.169 | 9.399 | 9.556 |
| Waste collected in one year – m³ | 30.555 | 30.745 | 31.445 | 30.808 |
| Garbage and waste sorted – an estimate | 1% | 1% | 1% | 1% |
| Waste collected and properly disposed in one year [m³] | 30.555 | 30.745 | 31.445 | 30.808 |
| Waste not collected in one year – [m³] – an estimate [disposed at illegal dump sites] | - | - | - | - |
| Illegal dump sites in the Municipality area – an estimate | - | - | - | - |
| Remediated illegal dump sites in the Municipality area | - | - | - | - |
| Investments in construction of sanitary and/or regional landfills [BAM] | - | - | - | - |
| Investments in maintenance of the existing landfills [BAM] | BAM 25.000 | BAM 25.000 | BAM 25.000 | BAM 25.000 |
| Investment in closure of the existing inadequate landfills [BAM] | - | - | - | - |
| Local communities covered by organised waste collection | 29 | 30 | 30 | 38 |
| Containers for organized waste collection in the Municipality area | 302 | 314 | 314 | 320 |
| Average price of waste collection per unit of measurement | Households, consisting of up to two persons BAM 6,04 Households, consisting of more than two persons BAM 10,35 | Households, consisting of up to two persons BAM 6,04 Households, consisting of more than two persons BAM 10,35 | Households, consisting of up to two persons BAM 6,04 Households, consisting of more than two persons BAM 10,35 | Households, consisting of up to two persons BAM 6,04 Households, consisting of more than two persons BAM 10,35 |
| Bill collection rate | 98,29 | 98,85 | 96,95 | 97,94 |

Source: JP Vodokom d.o.o. Kakanj

Table 65 – Street lighting

| | 2017. | 2018. | 2019. | 2020. |
|--|----------------|----------------|----------------|----------------|
| Street lighting coverage – an estimate [% of population] | 42 % | 47 % | 51 % | 67 % |
| Allocation of funds from the Municipal budget for street lighting installation | BAM 85.874,01 | BAM 112.806,91 | BAM 162.649,73 | BAM 363.164,00 |
| Allocation of funds from the Municipal budget for street lighting maintenance | BAM 147.860,13 | BAM 139.036,47 | BAM 164.016,58 | BAM 108.729,30 |
| Electricity cost for street lighting in the Municipality territory | BAM 473.156,39 | BAM 561.214,09 | BAM 615.173,10 | BAM 603.809,14 |
| Lighting fittings used for street lighting in the Municipality territory | 2.806 pcs. | 3.121 pcs. | 3.325 pcs. | 3.720 pcs. |

Source: Institute for Planning and Construction of Kakanj Municipality

The investments in street lighting in Kakanj Municipality area increased in the period of three years, resulting in an increase in the area covered from 42% in 2017 to 67% in 2020. This trend should be continued in order to provide street lighting for the entire Municipality area. This percentage still does not include rural areas, so the quality of life there is significantly lower in comparison to urban and suburban areas.

Table 66 - Cemeteries

| | 2017. | 2018. | 2019. | 2020. |
|--|-----------|---|---|--|
| Available burial plots in Kakanj Municipality area | 9.057 | 8.524 | 7.965 | 7.744 |
| Current occupancy rate | 57,77% | 59,75 | 61,63 % | 63,77 % |
| Average price of a burial plot | 453,00 KM | 453,00 KM | 453,00 KM | 453,00 KM |
| Funds invested in construction and maintenance of cemeteries | | BAM 24.000,00 [rehabilitation of chapels in Kraljeva Sutjeska Parish] +BAM 4.881,00 [Orthodox Church] | BAM 10.000,00 [Zgošća Parish and Funeral Home Zgošća] + BAM 18.320,00 [Orthodox Church] | 5.000,00 [Kraljeva Sutjeska Parish] + BAM 52.559,00 [rehabilitation of the Orthodox Church chapels and cemetery] |

Izvor: Podaci Zavoda za planiranje i izgradnju Općine Kakanj

Vukanovići Parish does not dispose with information regarding the number of burial plots and current occupancy of the cemetery.

Cemeteries in Kakanj Municipality area are under the competence of 7 (seven) religious communities or residents’ associations: Islamska vjerska zajednica [Islamic Religious Community], Pravoslavna crkva sv. Apostola Petra i Pavla Kakanj [Orthodox Church St Apostles Peter and Paul], Zgošća Kakanj Parish, Kraljeva Sutjeska Parish, Haljinići Parish, Vukanovići Parish and UG Pokopno društvo Zgošća [Residents’ Association Funeral Home].

The religious communities operate 186 cemeteries, while the Town Cemetery is operated by Funeral Home Zgošća. Islamic Religious Community operates 124 cemeteries, the Orthodox Church 20 cemeteries, Zgošća Parish 12 cemeteries, Kraljeva Sutjeska Parish 24 cemeteries, Haljinići Parish 2 cemeteries, Vukanovići Parish 4 cemeteries and Funeral Home Zgošća 1 cemetery.

Burial plots are paid only at the Town Cemetery, operated by the Funeral Home. Members of the religious communities do not pay for burial plots. Instead, they pay an annual membership fee for burial and maintenance of cemeteries.

Medžlis islamske zajednice Kakanj [Islamic Community Majlis] does not sell burial plots, as all plots are held by the Islamic Community [waqf]. It is only when someone wants to reserve a burial plot at a particular location that they have to pay a charge defined by the Rules of the Islamic Community.

Likewise, in Kraljeva Sutjeska Parish, one does not have to pay for a burial plot if they pay an annual membership fee regularly. For those who are not members and have not paid the membership fee, a burial plot is charged BAM 700,00.

Cemeteries are largely maintained using the funds collected from membership fees and donations and taken care of by residents, members of religious communities. More substantive works on cemeteries and chapels are funded from the Municipal budget or donations, as shown in the Table above.

7.6. Parking space

The issue of the lack of parking space in Kakanj Municipality area has intensified in recent years.

Table 67 – Parking space

| Type | 2017. | | | 2018. | | | 2019. | | | 2020. | | |
|---|--------|---------|-------|--------|---------|--------|--------|---------|--------|--------|---------|--------|
| | Public | Private | Total | Public | Private | Total | Public | Private | Total | Public | Private | Total |
| Available parking spots in the urban area | 700 | 185 | 885 | 700 | 185 | 885 | 841 | 185 | 1.026 | 863 | 185 | 1.048 |
| Paid parking spots | 0 | 165 | 165 | 0 | 165 | 165 | 0 | 185 | 185 | 0 | 185 | 185 |
| Number of registered vehicles in Kakanj Municipality area | - | - | 9.928 | - | - | 10.476 | - | - | 10.924 | - | - | 11.098 |

Source: Institute for Planning and Construction of Kakanj Municipality

Table 56 shows that the number of available parking spots has increased, but so has the number of registered vehicles. The issue of the lack of parking space in the downtown area should be particularly dealt with in the forthcoming period.

7.7. Development problems and development needs of the public infrastructure

| Development problems | Development needs |
|---|--|
| Low street lighting coverage | Expand the network |
| Lack of parking space | Provide facilities |
| 20 local communities have telephone network | Expand the coverage |
| Obsolete network of the district heating system | Invest in rehabilitation, reconstruction and modernisation |
| Low district heating coverage | Expand the system |
| 1% of waste is sorted | Recycling stations |

8. ENVIRONMENT

Air quality in Kakanj Municipality is compromised by power plants [the Thermal Power Plant with the depots of coal, slag and ash], processing sites and plants [the Coal Mine with open-pit mining, The Kakanj Cement Plant with quarries], road traffic, small boiler rooms and household furnaces.

Kakanj Municipality undertook a series of activities to enable better conditions for harmonious, socially and physically balanced and sustainable development of urban and rural areas. The Air quality monitoring station has been provided, thus fulfilling the requirements for the application of Regulations Amending the Regulations on Air Quality Monitoring which bind everyone involved in air quality monitoring to enable direct data transfer from measuring stations to the server of the FBiH Hydrometeorological Institute.

8.1. Soil

8.1.2. Physical soil degradation and contamination

According to the Environmental Protection Strategy of the FBiH, approximately 0,101 % of agricultural land in the Federation is degraded [rezoned] including the Zenica-Doboj Canton. So far, the attitude towards soil has been one of a neglectful exploitation and management which resulted in significant soil degradation, especially that of a higher quality.

This negative trend exists in the Kakanj Municipality too, reducing already modest agricultural land in our municipality. There are numerous reasons for soil degradation and the most common ones are: surface exploitation of various natural resources and raw materials resources, construction of residential buildings on agricultural land, landfills of technological and communal waste, soil erosion and landslides due to flood and drought. Waste is disposed on numerous agricultural land areas [industrial waste dumps, coal depots, the Bare communal waste dump, etc.]. Consequently, the possibility of agricultural production is excluded.

Comparing the data on areas under crop from 2015 and 2020, it is obvious that agricultural land is lost to roads and different purpose facilities. Particular attention should be paid to the increase of barren land which did not gain other use-value after being degraded from agricultural and forest land.

Soil surface, property of the Kakanj Coal Mina Ltd, according to land registry [Vrtlište SM]:

- 5.606. 275 m² in 2017. godinu
- 5.664.063 m² in 2018. godinu
- 5.837.561 m² in 2019. godinu
- 6.065.538 m² in 2020. godinu

The Turbići ash and slag landfill of the Kakanj Thermal Power Plant [JP Elektroprivreda BiH – Public Enterprise Electric Utility of Bosnia and Herzegovina - PEEU] covers about 18 hectares and is used for the disposal of slag, ash, mixture of concrete and brick, sludge, gravel/rubble, waste fiberglass, etc. A 66 hectares expansion is planned in the future.

During the period 2017-2020, the Kakanj Thermal Power Plant, PEEU, expropriated 5.058 m² and 2.439 m² of land for the use of Turbići ash and slag landfill. Due to the expropriation, 7497 m² of land was permanently lost.

Table 68 - Data on land areas in hectares by use:

| Use | Land areas in 2015 | Land areas in 2020 |
|---|--------------------|--------------------|
| Agricultural land | 12.814 | 12.791 |
| Forest land | 22.549 | 22.548 |
| Roads | 969 | 974 |
| Mixed-purpose facilities | 804 | 807 |
| Barren land | 204 | 226 |
| Water and water facilities | 358 | 350 |
| THE OVERALL SURFACE AREA OF THE KAKANJ MUNICIPALITY | 37.698 | 37.698 |

Source: Municipal administration

The sites that were surveyed in Kakanj Municipality were not contaminated by lead [heavy metal]. The content of nickel was above the limit value probably of lithological origin with no harmful effect on plants, animals and people. The content of cadmium was below the limit value. The content of arsenic was above the limit value [32 samples] and it can be inferred that the surveyed sites are contaminated by this heavy metal [it can be a consequence of the long-term use of pesticides for pest control]. It is extremely toxic to the environment and pesticides containing arsenic are banned for use.

8.1.3. Green areas

The Institute for Physical Planning and Construction of Kakanj Municipality is in charge of green areas and the plans for regular maintenance are made on annual basis. According to the Kakanj Municipality Spatial Plan 2010-2030, the reconstruction of all public areas is in progress. In 2018 the main road was reconstructed and a cycle track was built. It is located in the green belt and some green lawns were lost to it.

8.2. Air

In Kakanj Municipality, air quality has been monitored from the end of 2018 by a mobile air quality monitoring station. JP Elektroprivreda BiH has been monitoring air quality in Kakanj by a fixed monitoring station in Povezice [Transport Ltd. company grounds]. According to the Measurement Plan, there has been a continuous air quality monitoring on more locations and since 2016 on one location - Vatrogasni dom Doboj [Doboj Fire Station].

The air quality monitoring station is connected to the technical centre [server] in the Municipality of Kakanj used for gathering monitoring data.

The air quality monitoring station does the measurement of the following pollutants:

- sulphur dioxide SO2,
- particulate matter PM10,
- carbon monoxide CO,
- ozone O3 i
- nitrogen oxides NO/NO2/NOx.

According to the Rulebook on Air Quality Monitoring [Official Gazette of the FBiH, 12/05] and the Rulebook Amending on Air Quality Monitoring [Official Gazette of the FBiH 0/16]⁶, the Municipality of Kakanj has been submitting the hourly digital results of the measurement of concentrations of all pollutants to the FBiH Hydrometeorological Institute since 2016.

In connection with the foregoing, all the data on air quality in Kakanj is available on the webpage of the FBiH Hydrometeorological Institute in the form of hourly⁷ and daily reports⁸ as well as daily reports on air quality on the webpage of the Municipality of Kakanj.⁹

According to the aforementioned Rulebook, the FBiH Hydrometeorological Institute verifies submitted data and makes an annual report on air quality in the Federation of Bosnia and Herzegovina. The Federation of Bosnia and Herzegovina Air Quality Reports for 2016, 2017, 2018, 2019 and 2020 are available on the official webpage⁴.

Air quality monitoring results measured by the mobile air quality monitoring station in Kakanj Municipality are the part of the air quality results of the Federation of Bosnia and Herzegovina.

The comparison of the measurement results was done in accordance with the Rulebook on the method of performing air quality monitoring and defining the types of pollutants, limit values and other air quality standards [Official Gazette of the FBiH, 01/12].

The determined air quality does not satisfy the limit values established in the Rulebook on the method of performing air quality monitoring and defining the types of pollutants, limit values and other air quality standards [Official Gazette of the FBiH, 01/12]. Consequently, it is logical to realize the need for system mapping and taking measures to improve air quality and health protection of the residents.

Kakanj Municipality is an industrial area where large production capacities are situated. They represent the main industrial polluters in Kakanj: Termoelektrana Kakanj, Tvornica cementa Kakanj [Ribnica Quarry], Rudnik mrkog uglja Kakanj [Haljinići, Separacija and Vrtlište facilities], Delta petrol d.o.o. Kakanj [waste management,- Čatići and Vrtlište facilities], Plama pur d.o.o. Kakanj and Trgošped d.o.o. Kakanj [asphalt base and Borovačka stijena quarry].

In 2017 the Municipality of Kakanj made a register of household with individual heating in 9 local communities near urban area. There are 2280 boiler rooms: 1017 wood boiler rooms, 440 wood-coal boiler rooms, 725 coal boiler rooms and 79 wood pellet boilers. There are 16 households with electrical heating and 6 households with other means of heating. In the same year the number of households in the district heating system was 3.279 [data provided by J.P. Grijanje Kakanj]. It is estimated that approximately 20% of households [including the nine local communities] uses eco fuel for heating.

According to the data of J.P. Grijanje d.o.o. Kakanj which show a moderate upward trend of households which joined the district heating system in the period 2019-2020 and considering the fact that in the following years there were no significant deviation in terms of air quality in Kakanj Municipality, the number of households joining the district heating system [natural persons and legal entities] had a slight increase in the 2016/2017 heating season -3.299 households, in 2017/2018 3.348, in 2018/2019 3.374, in 2019/2020 3.401 and in 2020/2021 3.464 district heating connections

According to the aforementioned indicators, the percentage of households using eco fuel for heating dropped in 2017/202. It is estimated that there was 20% of eco fuel households in 2017, 19,75% in 2018, 19,66% in 2019 and 19,57% in 2020 with regard to the nine registered communities.

8.3. Water

8.3.1. Wastewater

Settlements or their urban and industrial wastewater discharges are the most dominant pollutants in Kakanj Municipality. So, it could be said that the total burden of the pollution generated by the residents [not industry] is expressed in terms of population equivalent [PE] and is equal to 38.937 PE or to Kakanj Municipality population.

By Decision declaring protected areas sensitive to eutrophication and nitrates in the Federation of Bosnia and Herzegovina [Official Gazette of FBiH, 84/18], the area of the Bosna River downstream from the mouth of the Zgošća River is declared as sensitive to eutrophication and nitrates. The protected area covers 2.554,68 m².

In Kakanj Municipality there is one wastewater treatment device [SBR 400 biological device] for local Haljinići sewerage system collects wastewater from some areas of two local communities [Haljinići and Bjelavići]. The projected daily amount of water is 54,60 m³/day. The public sewerage system does not have a wastewater treatment plant, even though it is a mixed sewerage system [urban and industrial wastewater, contaminated rainwater] and specifically the greatest burden of waste materials contamination [phosphorus, nitrogen, et.]. The construction of a wastewater treatment plant should be accounted for in the future.

There is no available data on the number on households connected to local community or local sewerage systems because those systems do not have water permits [with no continuous monitoring].

Data on industrial wastewater and wastewater treatment devices in Kakanj Municipality with a review of the degree of toxicity, sulphate content, oils and greases are available for three big companies and presented in the following table:

Table 69 - Wastewater data

| Type of industry | Operation /OU | Sulphate [t/year] | Oil and grease [t/year] | Toxicity,48 hLC50 [%] | Treatment | | Type of treatment device |
|--------------------------------------|---|-------------------|-------------------------|-----------------------|-----------|-------------|--------------------------|
| | | | | | Existing | Operational | |
| TVORNICA CEMENTA KAKANJ d. d. Kakanj | Production Ulica Selima ef. Merdanovića | 1277 | 23 | 95 | yes | yes | Mechanical |
| JP EP BiH - TE “KAKANJ” Kakanj | Production | / | / | / | yes | yes | Chemical and biological |
| RMU KAKANJ d. o. o. Kakanj | Coal preparation | / | / | / | yes | yes | Mechanical |

Source: Zenica-Doboj Canton Spatial Planning, 2009-2029, Kakanj Municipality Water register, decision on renewed environmental permit for the production of different types of high quality cement additives distributed on domestic and foreign markets with total production capacity of 740.000 t/year [Tvornica cementa Kakanj d. d. Kakanj, May, 2016], Decision on Renewed Environmental Permit [JP Elektroprivreda Bosne i Hercegovine d. d. Sarajevo, TE Kakanj December, 2015

8.3.2. Water supply system and drinking-water quality

The public water supply system supplies water to the largest part of Kakanj Municipality. The Table 1.4. shows the number of the connections of households, small businesses, industry and public companies connected in the period 2017-2020.

4 <http://www.fhmzbih.gov.ba/latinica/ZRAK/izvjestaji.php>

Table 70 - Number of connections to the public water supply system with the number of local, group and individual water supplies

| | 2017. | 2018. | 2019. | 2020. |
|--|-------|-------|-------|-------|
| Industry connections | 29 | 29 | 29 | / |
| Small business connections | 512 | 434 | 430 | / |
| Public institutions connections | 31 | 31 | 31 | / |
| Natural persons connections [households] | 7.941 | 8.156 | 8.296 | / |
| Local pipeline connections [up to 50 households] | 33 | / | / | / |
| Individual pipeline connections [one household] | 63 | / | / | / |
| Group pipeline connections [under 50 households] | 252 | / | / | / |

Source: Pipelines Register, public taps and wells in Kakanj Municipality

The public water supply system performs regular water quality monitoring. Physical-chemical and bacteriological analyses of water show that water characteristics meet the criteria of the Rulebook on Drinking Water Safety [Official Gazette, 40/10, 43/10, 30/12, 62/17]. The local pipelines are not continuously monitored for water safety.

The analysed samples of drinking water from the local pipelines, taken by HES services of the Kakanj Health Centre and analysed by the Zenica Health and Food Safety Institute, show *Escherichia coli* is the main cause of water contamination. Very few analyses of the water from local pipelines are done during the year because of the large number of illegal pipelines or local community pipelines without water permit which is a major concern for health and safety.

Decision on water wells protection as a form of legal obligation has not been adopted due to financial reasons.

8.4. Biodiversity

The Municipality of Kakanj did a risk assessment of flora and vegetation in the study Valorisation of Gornja Trstionica-Bukovica natural rainforest area [Ecology and Natural Resources Centre, Centar za ekologiju i prirodne resurse, the Faculty of Science, University of Sarajevo, 2013] in accordance with IUCN [1994-2000] criteria and methodology. The risk assessment showed that the analysed area had one protected natural habitat with the adopted management plan, six endangered and sixteen vulnerable plant species according to the data from 2017.

In order to understand the importance of the data gathered, it should be kept in mind that in terms of numbers, the number we are talking about is 1.078. The data refers to the types of flora, fauna and natural habitat, Bistrik swamp 145,37 ha and Gornja Trstionica-Bukovica natural rainforest 55.108 ha.

8.5. Forest ecosystems

Forest-based industry in the region is mostly related to the primary stage of wood processing [felling and wood processing in the form of sawn and planed timber]. Instead of developing wood industry to higher stages [final processing], sawn and planes timber is exported to countries producing final products from wood. Other forest products should also be used. Forests provide a wide range of products such as berries, herbs, mushrooms, etc. Kakanj Municipality has mostly healthy forests, without chemical agents, rich in drinking water sources which could be used for the production and sale of drinking water.

In Kakanj Municipality, pursuant to the Law on the Tajan Natural Monument, the Tajan Monument covers the area of 732,70 ha and two management units [MU]:

Žuča-Ribnica MU 356,20 ha and Gornja Trstionica-Bukovica MU 376,50 ha. Forest Management Unit Kakanjsko includes Trstionica rainforest reserve, declared by the SRBiH Government Regulation in 1990. The rainforest reserve covers the source of the Trstionica river, section 52, area 30,40 ha.

The government must certainly properly protect the forests for future generations and considering the fact that Kakanj is among most polluted towns in BiH, more emphasis should be placed upon proper management, restoration, tourism and recreation.

The coal mines manage vast swaths of land which is being exploited and devoid of vegetation, forests especially, and that poses a significant problem for the companies' management responsible for the reclamation of tailing ponds after exploitation. In this regard, the pressure must be brought to bear on all subjects destroying land and vegetation to reclaim the areas in accordance with legal regulations and restore the original natural environment which can be reused.

8.6. Protected natural areas in Kakanj Municipality

Kakanj Municipality has areas characterized as natural monuments, the Tajan Natural Monument of 910,00 ha being one of them. It is partly located in the area Kakanj Municipality and belongs to II protection zone. This zone is determined with the aim of preserving biological and hydrological diversities, educational values and developing tourism according to the principles of sustainable development.

Researching into the state of rainforest and forest communities, water quality of the Trstionica waterway, cultural and historical heritage, it was found out that the Gornja Trstionica-Bukovica natural rainforest and forest area has all natural values by defined law as necessary for being declared as category V protected area in the Trstionica river basin [Protected landscape, subcategory Va Protected terrestrial landscape]. The total terrestrial protected area is 55.108 ha.

The Municipality of Kakanj has approached the Ministry of Spatial Planning, Transport and Communication and Environment Protection with the request of declaring a certain degree of the protection of two areas with completed studies that prove the importance of the protection of the areas in accordance with the laws of the Federation of BiH and signed international conventions. The areas recommended for protection are Bistrik Swamp and Gornja Trstionica-Bukovica natural rainforest area [Protected landscape, subcategory Va Protected terrestrial landscape].

The area of Bistrik Swamp and its surroundings have rare numerous specimens of flora and fauna and it is estimated that this part of biodiversity is also extremely abundant in species. The total area recommended for protection within Bistrik Swamp is 145,37 ha.

8.7. Energy efficiency

The Municipality of Kakanj has invested in numerous energy efficiency projects of buildings owned by the Municipality relating to the reduction of energy consumption for heating, modernization of public lighting, improvement of working conditions for employees, expansion of the district heating system etc. The Municipality of Kakanj co-financed energy efficiency renovations of the following buildings: the Culture and Sports Centre, Krševac Outpatient Facility, Haljinići and Bjelavići Community Centre and Anes Begić Sports Hall.

The Municipality regularly monitors the heating cost of its property: the administrative Municipal building, the Culture and Sports Centre facilities and other residential buildings. the administrative Municipal building has had solar collectors [2,5 m²] for water heating since 2015.

The amount of electricity produced from renewable energy sources held by JLS [solar panels, wind power plants] amounts to 560 kwh.

Table 71 - Energy efficiency investments / energy costs

| | 2017. | 2018. | 2019. | 2020. |
|---|----------------|----------------|----------------|----------------|
| Energy efficiency investments in Municipal property (residential and administrative premises) | BAM 230.851,00 | BAM 250.727,77 | BAM 174.189,17 | - |
| Energy efficiency investments in residential buildings | - | - | - | - |
| Energy costs for heating buildings and facilities owned by the Municipality | BAM 196.529,73 | BAM 197.275,49 | BAM 210.127,88 | BAM 220.218,23 |
| Energy costs in buildings and facilities owned by the Municipality | BAM 129.343,61 | BAM 122.625,62 | BAM 144.113,37 | BAM 121.016,38 |
| Number of lighting fittings in buildings and facilities owned by the Municipality | 1.600 pcs. | 1.540 pcs. | 1.660 pcs. | 1.500 pcs. |
| Surface area of the installed solar collectors for water heating used in JLS facilities | 2,25 m² | - | - | - |
| Amount of electricity produced renewable energy sources installed in JLS facilities (solar panels, wind power plants) | 560 kWh | 560 kWh | 560 kWh | 560 kWh |

Source: Program for the expenditure of funds for environment protection of Kakanj Municipality for 2017, 2018, 2019 and 2020; the Kakanj Culture and Sports Centre; the Inventory Commission Report on Residential Buildings and Facilities Owned by the Municipality

8.8. Waste management

In downtown Kakanj and some suburban areas the collection and transport of waste is carried out by semi-underground, underground and classic containers with 1,1 m³ capacity [6+37+226] which are emptied every day except Sunday. There are 8 containers in two locations in the Ponijeri resort. Container waste collecting and transporting is also organized for most of the business entities, stores, natural persons and other according to the agreement between JP Vodokom d. o. o. and service recipient.

The waste is also transported in big containers with 5 and 7 m³ capacities from the places with most solid waste, debris, ash, branches, twigs and other large materials. The transport in big containers is organized from: TC Kakanj, RMU Kakanj and TE Kakanj.

The solid waste transport includes 30 LC11 out of 37 LC (the number of local communities -LC in 2019), bearing in mind that this is 2019 report and that since 2020 the waste has been transported from the following local communities too: Nažbilj, Mramor and Poljani. Since 2021 the waste from the Bočica Mountain lodge is transported once a month.

The final deposition of solid waste is the Municipal Bare Landfill, which is located east of Kakanj, 1.5 km distance from the downtown occupying an area of approx. 23 ha.

Municipal waste is deposited as a fill, and then it is being spread and compressed by public company mechanization on a daily basis. According to the report for 2019, approx. 31.445 m³ of waste was transported to the Landfill, 1180 m³ by third parties.

8.9. Development problems and the needs of the environment

| Development problems | Development needs |
|--|---|
| Insufficient data available | Develop databases within the competence of JLS |
| Exceeding the limit of annual concentration of pollutants Poor air quality | The need for systematic planning and taking measures to improve and protect air quality Expand the district heating network, encourage the use of renewable energy sources, environmentally friendly fuels and increasing the energy efficiency of buildings |
| Data on the quality of water in watercourse, save the Bosna River, are not adequately valued | Water quality valorisation and monitoring |
| Local pipelines do not provide data on water quality | Ensure systematic surveillance and monitoring |
| Data on biodiversity are not fully available | Through initiatives to the higher levels of government influence the system of public policies to improve this field |

The local communities of Mramor, Poljani and Nažbilj were included in 2020

9. SWOT ANALYSIS

A SWOT analysis is a method designed to a strategy and it includes four key factors: strengths, weakness, opportunities and threats. Strengths and weakness are internal characteristics, while opportunities and threats environment related factors.

This analysis is based on data collected and analysed during research period. A SWOT analysis identifies and takes into account key factors at the moment of developing strategic documents in order to determine and define further activities.

| STRENGTHS | WEAKNESSES |
|--|--|
| Geostrategic location of Kakanj Municipality (proximity to roads, airports and Sarajevo and Zenica urban centres); | Poor infrastructure connection with other bigger urban centres (Banja Luka, Mostar, Tuzla) |
| Rich cultural and historical heritage (medieval fortress, protected buildings, stećak sites, monuments, museums) | Continuous emigration of the population, especially able-bodied, low birth rate |
| Natural resources (big reserves of coal, limestone and other minerals, river and forest potentials, thermal waters, Bistrik Swamp, Tajan Natural Monument, Gornja Trstionica-Bukovica rainforest area) | Insufficient and inadequate care about cultural and historical heritage (most of the buildings have been devastated) by higher levels of government |
| Favourable conditions for the development of agriculture | Lack of innovations and productivity to increase the competitiveness of the economy |
| Interest and commitment of the Municipal management for investments and the use of renewable energy sources | Insufficient digitalization in public and private sector |
| Developed telecommunications network | Negative impact of Covid-19 on employment, company income, investments, municipal budget, etc. |
| Thermal power potentials of the Municipality | High level of air and water pollution in some parts of the Municipality, Bosna River especially, I and II category in the lower stretches of the River |
| Potential of institutions and social care sector for targeted investments in social and economic empowerment of families | Institutional capacities are not sufficiently developed for all fields, especially environment protection |

| | |
|---|--|
| Developed institutional capacities in the fields of agriculture and economy [Municipal administration, associations - KAP, UPOK] | Poor equipment of school facilities |
| A considerable number of active NGOs in certain sectors | Insufficient number and commitment of the existing environmental CSOs to point out the need of paying greater attention to environment protection in all its segments |
| A considerable number of functional cultural institutions | Exposure to natural disasters, vulnerability of the population, especially the most vulnerable categories to negative consequences of natural and other disasters. Insufficient education of healthcare workers on handling sexual and reproductive health and gender-based violence, including crisis management. |
| Regular publishing of publications for future entrepreneurs | Limited budget resources for financing development projects |
| Satisfactory infrastructure of primary and secondary education | The problem of spatial and technical capacities in the field of education |
| Regulated waste disposal with a high percentage of coverage | Existing support programs are not revised annually |
| Continuous adoption of municipal measures to mitigate the consequences of the Covid-19 pandemic | The sports potentials of resorts and Ponijeri ski centre are dilapidated and underutilized [devastated training ground, unkempt forest paths] The lack of a city swimming pool and sports ground |
| Business parks [Vrtlišće and Modrinje] | Limited budget resources for financing development projects |
| Experienced, accessible and available workforce | Insufficient investments in hydrotechnical facilities, roads and the reconstruction of district heating system |
| <p>Sufficient network of sports and recreation facilities:</p> <ul style="list-style-type: none"> • Active religious communities • Renovated religious buildings • Regular payments of incentives in the field of entrepreneurship, agriculture and professional training <p>Regular investments in hydrotechnical facilities, roads and hot water and steam pipe network; Cooperation with international organizations on the project implementation.</p> | Inconsistency of the health system with the challenges in the field of health care |

| OPPORTUNITIES | THREATS |
|--|--|
| Availability of EU and other external development funds [agriculture, energy, environment, enterprise, etc.] | Overlapping responsibilities and inadequate coordination of different administrative levels |
| New technologies for production companies | There is not a sufficient number of adequately trained professional staff to apply for EU Funds and other external development funds |
| The European Corridor V-c close to the town | Political instability in the country |
| Higher demand for agricultural crops with export potential [raspberries, et.] | Uncertain business environment for foreign investments |
| Growing interest and programs to support energy efficiency | Greater social needs of the population due to deteriorating socio-economic conditions |
| Greater efforts and system support for the development of entrepreneurship and MSP | Falling behind in the EU accession process, delay in obtaining the status of a candidate country [inability to use EU funds] |
| Public-private partnership in the financing and implementing development projects, public services, etc. | Falling behind in attracting investors compared to neighbouring countries and locations |
| Growing interest in inter-municipal cooperation and regional projects | Legal uncertainty in the country [billing system, tax system, corruption] |
| Introduction and development of mechanisms and instruments for environmental management, which gives the local self-government the possibility to decide on all components of environmental protection in its area | The pressure of social problems on development investments |
| Introduction of new technologies to reduce the degree of environmental pollution defined in the environmental permit | The growth of prospects for young people in Western countries and the acceleration of the outflow of young people and professionals |
| Growing interest and investment in renewable energy sources and modern energy infrastructure [gas-fired thermal power plant, wind power plants, solar power | EU legislation on decarbonisation |
| Studies and analyses done | Public facilities at risk |
| Integration of DRR in education, social and health care into the local Development Strategy of Kakanj Municipality | Inability to follow global trends in terms of fulfilling international obligations in the field of environmental protection |
| | Exposure to gas prices on the open market and dependence on imports |
| | Global deviations in energy prices [oil, gas, etc.] |
| Findings and conclusions of the Social Care Centre on threat and vulnerability assessment with a focus on population risks and disasters vulnerability | Strengthening competition in the neighbouring countries and the EU |
| | Genetically modified food: there is no control and regulation in import and production |
| | Legislation in EU countries facilitates and encourages the employment of foreign workers |
| | The security aspect of migration [organised crime, robberies, breaching public peace and order, trafficking, etc.] |
| | The impact of global pandemics on human health and the decline of global economies [COVID-19, SARS etc.] |
| | The effects of climate change on human health |

| | |
|--|--|
| | The blocking of EU funds due to non-fulfilment of conditions in the EU integration process |
| | Illegal exploitation of coal |
| | Exposure to natural disasters (flood, drought, landslide, fire, etc.) |

The strengths of Kakanj Municipality are the factors that indicate positive situations in the Municipality, such as favourable geostrategic position, rich cultural and historical heritage, natural resources (ores, minerals, water, soil, forests), energy potentials and favourable conditions for the use of renewable energy sources, diversity of agricultural production, enterprise support programs, institutional capacities of public administration, industry and craft tradition, available workforce, good education infrastructure.

There is also a great potential for the development of different types of tourism. Infrastructure, sports organizations, cultural institutions and programs have been developed. Strong non-governmental organizations are active.

The weaknesses are those factors of economy, environment and society that prevent development or weaken development chances and that should be significantly reduced or limited completely. The main weaknesses that slow down and limit the development of Kakanj Municipality are: unbalanced development, insufficient technological efficiency and innovation, economic decline, negative foreign trade balance and reduction of foreign trade activities during the COVID-19 pandemic, limited funds for economic development projects, non-competitiveness of the labour market and non-compliance of education system with labour market needs, growth in the number of newly registered persons on the unemployment register as a consequence of the COVID-19 pandemic, fragmented agriculture, dominantly extensive agriculture with low application of modern agrotechnical measures and insufficient infrastructure for agriculture support, unresolved property issues in business zones, insufficient support to crafts valorisation, the lack of reclamation of ore fields after exploitation, illegal logging, unfavourable age structure of the population and depopulation, shortage of space for preschool education, low funding for modernizing curricula and inclusive teaching programs, difficult access to public services due to the COVID-19 pandemic, insufficient intersectoral cooperation in solving security and corruption challenges, insufficient measures of strategic approach to activity planning in the fields of sports and culture, the issues of integrating environmental protection into other sectoral policies, high level of air and water pollution, inadequate management of waste from specific sources, especially health care institutions (medical infective and radioactive waste), road, residential and public infrastructure destroyed by floods and landslides, unsatisfactory financial stability and public spending due to the reduction of budget revenues and redirection of funds to mitigate the consequences of the COVID-19 pandemic, low funding for public investments, efficiency, quality and the health care system.

External factors that influence development of Kakanj Municipality can be either a driving force or an obstacle to development, such as activities for obtaining candidate status for membership in the European Union (EU), harmonization of domestic regulations with EU legislation, increased application and adoption of international standards, interest in creating a positive and stable environment for new investments with political stability for all investments, potentials for diaspora investments, initiatives and projects for public-private partnerships, growing interest in establishing full rule of law and good governance. In addition to these there are also significant economic, technological, legal and environmental circumstances. The threats to the development of Kakanj Municipality are internal crisis, effects of the COVID-19 pandemic to the EU economy, political instability in Bosnia and Herzegovina with negative effects on market development, bad reputation of the country, legal uncertainty and crisis in the rule of law, global crisis, economic instability, grey market, high rate of taxes and contributions according to the laws of higher levels of government, educated staff drain, inadequate distribution of income at all levels of government, complex state structure and system functioning.

10. STRATEGIC FOCUSING

The socio-economic and SWOT analyses enabled the definition of the strategic development directions of Kakanj Municipality, based on the unique strengths of Kakanj Municipality and key issues that need to be resolved in the forthcoming period.

The key strengths of economy in Kakanj Municipality are associated with available natural resources for industry and mining, primarily substantial reserves of coal and other minerals, water resource, energy potential and favourable conditions for utilisation of renewable energy sources, as well as industrial tradition and available labour force.

There are also significant weaknesses which prevent us from taking advantage of strengths, namely low technological efficiency and innovation, high level of imports, lack of promotion of domestic products, lack of value-added products, outmigration of staff, burdened economy, underground economy, etc. These cause the relatively low competitiveness of the economy of Kakanj Municipality, limiting the growth based on the strengths, as well as the growth of entrepreneurship.

On the other hand, there is significant external potential for economic growth, associated with attracting investments to BiH, international funding opportunities, growing interest in inter-municipal and regional cooperation, activities in relation to the Corridor Vc, support programmes for small and medium enterprises and entrepreneurship provided by higher levels of government which generally prioritise measures to address the issues of the economy and growth of entrepreneurship.

The economic growth was affected by COVID-19 pandemic and this will reflect in the decrease of economic activities, GDP, foreign trade, employment, etc.

There are apparent strengths in the field of environment as continuous efforts have been made to improve the environment in recent years. The potential of agriculture and tourism are among the unused strengths of Kakanj Municipality. Agriculture has a significant role in rural development and there has been growth in this field, owing to natural potential, significant share of agricultural land and diverse primary farming production.

However, this growth is not sufficient due to the influence of limiting weaknesses associated with the fragmentation of agricultural land, predominantly extensive or semi-intensive farming production, insufficient application of crop management practices and standards in food production and underdeveloped agricultural infrastructure. Hence, the level of modernisation and standardisation of agricultural production should be improved.

On the other hand, the strengths of Kakanj Municipality in tourism reflect in the rich cultural and historical heritage and development potential for different types of tourism, with infrastructure made for the development of tourism, sports and recreational activities.

In terms of tourist potential, for the purpose of sustainable economic development, hospitality services and sport and recreational infrastructure at Ski Centre Ponijeri should be expanded and developed.

However, the development of tourism is impeded by weaknesses such as insufficient innovation and promotion of tourism facilities, lack of connection with the regional facilities, lack of professionals, and by threats associated with environmental impairment and deficiencies of the legal system when it comes to the protection of the natural and cultural heritage. Therefore, the issue of undervalued tourist potential of Kakanj Municipality needs to be addressed. Besides, agriculture and tourism were affected by the COVID-19 pandemic, particularly in view of the decline in exports of farming products and the decline in tourist arrivals.

In terms of problems and needs in the education sector, pre-school education is unable to encompass all pre-school children due to lack of space, while primary and secondary education lacks funding for the innovation of the curriculum and teaching assistants for inclusive classrooms.

In the healthcare sector, there is an apparent issue with provision of effective services for all residents of Kakanj Municipality. In social welfare, the focus in recent years has been on the improvement of targeted allocation of social benefits to all vulnerable categories, and particularly to families and individuals at risk and foster families. However, the social funds are limited and providing proper, long term and stable support to all groups in social need is a challenge.

In sports and culture, despite decent infrastructure, institutions and nongovernmental organisations, there are problems associated with underintegrated strategic approach to the drafting of planes and programmes. In order to improve the quality of services and the quality of life for all residents, the issue of underdeveloped social infrastructure and institutional capacities in education, healthcare, social welfare, sports and culture requires a strategic approach.

There are three focus areas of strategic focusing:

Use natural, cultural and historical, tourist and other underused facilities for sustainable economic development.

Bring public services closer to local people and develop social infrastructure and institutional capacities within the competence of the Municipality in the fields of healthcare, education, social care, culture and sports.

Improve environmental protection, as well as the condition of the utility and road infrastructure and take action to reduce risks from natural disasters.

The definition of the development vision of Kakanj Municipality reflects the strategic intention and strategic changes that the residents want in the period 2021-2027. The favourable position of Kakanj Municipality, available resources and the state of economic development enable Kakanj to become a modern town, pleasant to live and work in.

In this regard, the development is seen as the process of economic, social, environmental, spatial and institutional transformation aimed to improve the residents’ quality and standard of life, where the developmental processes include all the development actors: governmental sector, private sector, civil society and local community. In its development, Kakanj Municipality relies on its economic and human resources, on available natural and tourist potential, as well as on rich cultural and historical heritage and clean environment. Individual sectors retain their own development objectives and jointly implement them to achieve integrated and balanced development.

Vizija 2027.
Moderna i privredno prosperitetna općina sa efikasnim i održivim korištenjem prirodnih i drugih resursa, ugodna za život i rad, koja pruža jednake mogućnosti za svakoga.

II STRATEGIC MEASURES, PRIORITIES AND MEASURES WITH INDICATIVE FINANCIAL FRAMEWORK

11. STRATEGIC GOALS

Based on the strategic focus areas and the vision of the Municipality of Kakanj, three strategic goals have been defined to ensure synergic effects among economy, environment and society, with due regard for local governance interests. The goals deal with individual sectors, while also being integral and intertwined.

- SG 1 – Enhance competitiveness and sustainability of the local economy**
- SG 2 – Improve the quality of social life of Kakanj Municipality population**
- SG 3 – Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks.**

Usklađenost strateških fokusa i strateških ciljeva

| FOCUS AREAS | GOALS |
|--|---|
| Use natural, cultural, historical and other potential for sustainable economic development | Enhance competitiveness and sustainability of the local economy |
| Bring public services closer to local people and develop social infrastructure and institutional capacities within the competence of the Municipality in the fields of healthcare, education, social welfare, culture and sports | Improve the quality of social life of Kakanj Municipality population |
| Improve environmental protection, as well as the condition of the utility and road infrastructure and take action to reduce risks from natural disasters | Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks |

11.1. Strategic goals - description

SG 1 – Enhance competitiveness and sustainability of the local economy

A stable growth of domestic companies is an indicator of quality economic growth and competitiveness in foreign markets.

The continuity and sustainability of economic development is a precondition for the overall development of Kakanj Municipality. The future development of the Municipality will be based on the further strengthening of the existing industry and development of small and medium-sized enterprises and crafts, as well as on the implementation of new business initiatives and investments.

The sustainable economic growth of Kakanj Municipality requires support to strategic sectors, particularly to those creating added value, as well as the rational utilisation of resources. To develop industry, competitiveness should be strengthened, focusing on export led-growth and creation of added value and establishing conditions for domestic production of export commodities in all sectors.

In terms of rural development, the key to achieving higher revenues in rural economy is to provide stable incentives and programmes to enable the transformation and modernisation of agricultural production, with capacities for processing, collection and placement of products. In the context of economic development, rural development included, the improvement of the quality of tourism facilities should be particularly supported, focusing on the types of tourism that rely on the available resources and achieving a higher degree of tourism promotion and inclusion in regional tourism products.

The expected impact of the Development Strategy of Kakanj Municipality on economic activity should be measured by development indicators, such as GDP percentage rate, export/import coverage ratio, and employment rate. The development will be monitored in more detail using indicators for the priorities and measures under this strategic goal. The principles of sustainable development should be particularly regarded, along with economic challenges characteristic for this period of crises, pandemics, and political instability. The primary focus on industry as the decisive factor in the local development should be approached responsibly to enable economic growth while taking full account of the environmental impact of economic activities and adjusting plans and activities to the environmental principles.

Table 72 – Strategic goal 1 with indicators

| SG 1 Enhance competitiveness and sustainability of the local economy | [Impact] indicator | Source | Baseline values [2020] | Target values [2027] |
|---|--------------------------------------|--|------------------------|----------------------|
| | Level of development - ranking | FBiH Development Programming Institute | 24 | 20 |
| | Employment-to-population ratio [%] | FBiH Development Programming Institute | 19% | 25% |
| | Unemployment-to-population ratio [%] | FBiH Development Programming Institute | 16% | 13% |
| | Average net salary [BAM] | FBiH Development Programming Institute | 1.087 | 1.240 |
| | Export/import coverage ratio [%] | Indirect Taxation Authority BiH | 5,14% ** | 12% |

SG 2 – Improve the quality of social life of Kakanj Municipality population

The strategic commitment of the Municipality of Kakanj in the forthcoming period is based on the utilisation of the existing strengths and potential in education, sports, culture, healthcare and social welfare, with continuous further enhancement of services and infrastructure in all areas of social life. This strategic goal will be achieved through the quality work of public administration and further improvement of institutional capacities for development planning and management, as well as of capacities for safety of people. Particular attention will be paid to the improvement of the resilience of institutions, systems and infrastructure required in case of crises, such as the currently ongoing COVID-19 pandemic. Efforts will also be made to consistently promote gender equality principles, inclusion and other fundamental rights in accordance with the global sustainable development goals. This strategic goal encompasses six priorities and its implementation will be measured by indicators for education, healthcare, safety and social welfare.

Table 73 - Strategic goal 2 with indicators

| SG 2 Improve the quality of social life of Kakanj Municipality population | [Impact] indicator | Source | Baseline values [2020] | Target values [2027] |
|--|---|--|------------------------|----------------------|
| | Per capita income /PC | FBiH Development Programming Institute | 177 | 182 |
| | Prevalence of serious illnesses relative to population size | JU Dom zdravlja Kakanj (Health Centre) | 26% | 26% |
| | Number of beneficiaries of social welfare relative to population size | JU CSR Kakanj (Social Care Centre) | 6% | 4% |
| | User satisfaction with services of the Municipality of Kakanj [%] | Survey | 66% | 80% |

SG 3 – Responsibly manage the environment, enhance utility and road infrastructure and reduce risks from natural disasters

This strategic goal aims for the implementation of measures to improve environmental performance, primarily by reduction of emissions to air, but also to water and soil, by fostering modifications, adaptation of the existing and introduction of new and innovative technologies in industry operations in Kakanj Municipality area (energy transition and optimisation).

Within the frame of the GREEN CITY concept, by means of the application of certain models and practices, the following is to be expected: higher level of natural disasters risk management, increase of protected area coverage, energy saving and conservation of other natural resources. The environmental protection programme also foresees more sustainable utilisation of resources, including water, soil and biodiversity in the Town and its wider surrounding. The aim of these activities is to create more pleasant environment for everyone, help build a positive town image and improve the quality of environment.

The improvement of the quality of environment will be delivered by increasing energy efficiency, advancing and optimising public infrastructure management (water supply and sanitation, spatial planning), introducing circular economy to integral waste management and improving control of pollution and polluters. This strategic goal encompasses four priorities. The changes in terms of this strategic goal can be monitored using investment indicators at the level of the Municipality, FBiH Environment Protection Fund, Sara River Basin Agency and FBiH Hydrometeorological Institute of BiH (FHI).

Table 74 – Strategic goal 3 with indicators

| SG 3 Responsibly manage the environment, enhance utility and road infrastructure and reduce risks from natural disasters | [Impact] indicator | Source | | Baseline values [2020] | Target values [2027] |
|---|---|---|--|------------------------|----------------------|
| | Pollutant emission | FHI | S02 [GV 50 ug/m³] | 87 ug/m³[1] | 50 ug/m³ |
| | | FHI | NO2 [GV 40 ug/m³] | 20 ug/m³[2] | 15 ug/m³ |
| | | FHI | PM10 [GV 40 ug/m³] | 29 ug/m³[3] | 25 ug/m³ |
| | Energy efficiency of facilities | Kakanj Municipality Budget, Economy, Urbanism and Environmental Protection Service [Public and collective facilities] | | 0[4] | 11.024.792,65 KM |
| | | Kakanj Municipality Budget, Economy, Urbanism and Environmental Protection Service | | 0[5] | 350.000,00 KM |
| | Population covered by road network | Economy, Urbanism and Environmental Protection Service and Institute for Planning and Construction of Kakanj Municipality | | 494,12 km | 550 km |
| | Population covered by water, sewage and heating utility | Public utility companies [Vodokom d.o.o. Kakanj and JP Grijanje d.o.o. Kakanj] Economy, Urbanism and Environmental Protection Service | Number of connections to water utility network | 8.923 | 9.550 |
| | | | Sewage network coverage | 35% | 50% |
| | | | Number of connections to district heating network [natural and legal persons] | 3.427 | 5.000 |
| | | | Number of household using pellet, biomass and other environmentally friendly fuels | 100 | 450 |

11.2. Priorities and measures

STRATEGIC GOAL 1.

1.1. Increase production, number of business entities, and export

Lines of action should be directed to strengthening competitiveness of the industry sector and other high growth activities with a focus on technological development and informational and technical modernisation. This creates preconditions for the development of small and medium-sized enterprises keeping the pace with the trend of three large business entities that are the generators of economic development in Kakanj Municipality area.

Table 75 - Priority 1.1. with indicators

| PRIORITY | INDICATOR [OUTCOMES OF THE PRIORITY] | Baseline values 2020 | Target values 2027 |
|--|--|--|--|
| 1.1. Increase of production, number of business entities, and export | Revenue generated by companies per capita | 3 rd category [BAM 10.000-19.999] | 2 nd category [BAM 20.000-49.999] |
| | Number of registered business entities [natural and legal persons] | 1.088 | 1.200 |
| | Export value [BAM million] | 9 | 20 |

The effect of this priority will be measured by revenue generated by companies per capita, expected increase in number of business entities and export growth. The measures under this priority are as follows:

1.1.1. Support growth, development and competitiveness of small and medium-sized entrepreneurship
This measure will further enhance the existing economic situation and provide more favourable conditions and financing sources for the existing business entities and new business ideas. The development effect and contribution of this measure reflect in the strengthening of competitiveness of small and medium sized enterprises, their development and reinvestment, initiation of new businesses and new employment owing to an increase in number of new companies and start-ups.

1.1.2. Support business entities in innovation, technological improvement and digitalisation
The aim of this measure is to support the enhancement of processing industry capacities, to achieve higher added value based on modern technological solutions and innovations and to connect processing industry to accredited certifying institutions and educational institutions. The measure will contribute to an increase in the volume of production, an increase in product quality, cost reduction by introduction and application of more modern technological solutions to positively affect the environmental condition and implement the sustainable economy concept.

1.1.3. Provide incentives to export-oriented companies
The aim of this measure is to increase investments in new technologies and equipment of export-oriented companies. It is expected to increase the total export value, number of employees in export-oriented companies and their profit, as well as the number of companies registered for foreign trade in Kakanj Municipality area.

1.2. Enhance business environment and entrepreneurial infrastructure for smart growth and employment
A developed and well organised local community is attractive to investors, young educated people and families, so it is expected that the results achieved under this and other strategic goals will also produce visible effects in other fields.

Table 76 – Priority 1.2. with indicators

| PRIORITY | INDICATORS [OUTCOMES OF THE PRIORITY] | Baseline values 2020 | Target values 2027 |
|--|--|----------------------|--------------------|
| 1.2. Enhance business environment and entrepreneurial infrastructure for smart growth and employment | Investment in entrepreneurial infrastructure (BAM million) | 5,60 | 7,00 |
| | Investment in digitalisation, IT sector and business (an estimate) | 100.000 | 300.000 |
| | Investment in professional training and retraining programmes responding to market needs | 109.847,60 | 150.000,00 |

The outcomes of this priority and its effects on the achievement of the strategic goal will be measured by the value of investments in entrepreneurial infrastructure, IT sector and professional training and retraining programmes. This priority will be implemented through the following three measures:

1.2.1. Improve business environment and business support services, promote public private partnership

This measure aims to provide conditions needed for the development of entrepreneurship through a methodical approach to the development of entrepreneurial infrastructure and strengthening of public private partnership. The expected development effects are: improved space infrastructure, locations with quality utility solutions for entrepreneurship, and attraction of new investments. The establishment of public private partnership will result in an increase in the number of job positions, improved infrastructure, and more cost-effective and successful business operations to meet the wider public interest.

1.2.2. Strengthen institutional capacities of the Municipal administration to improve and modernise public services

The speeding up of the economy digitalisation process and the development of IT sector are the imperatives of economic development. To speed up digitalisation and computerisation processes, this measure encompasses the strengthening of the domestic IT sector, utilisation of the significant potentials for the growth of investments, revenues and export, with new employment in IT sector in Kakanj Municipality area.

1.2.3. Support the enhancement of labour market opportunities and employment programmes

This measure aims to mitigate the problem of unemployment and to increase labour market efficiency. Programmes supporting employment will encompass upskilling, retraining and professional training, delivering higher competitiveness at the labour market and wider range of employment opportunities. Cooperation with competent institutions (schools, competent ministries, institutes) is important for the successful implementation of this measure.

1.3. Develop tourism offer and infrastructure for sustainable tourism

The strengthening of tourism infrastructure, particularly in terms of developing new tourist services will contribute the overall economic development and enable business environment to expand outside the urban area.

Table 77 – Priority 1.3. with indicators

| PRIORITY | INDICATOR [OUTCOMES OF THE PRIORITY] | Baseline values 2020 | Target values 2027 |
|---|--|----------------------|--------------------|
| 1.3. Develop tourism offer and infrastructure for sustainable tourism | Investments in tourism infrastructure reconstruction (BAM) | 156.654,20 | 300.000,00 |
| | Tourist arrivals | 4.162 | 6.000 |
| | Tourist overnight stays | 2.468 | 4.000 |

This priority is measured by investments in the reconstruction of tourism infrastructure and by the number of tourist visits in the area of the Municipality.

1.3.1. Develop and promote tourism offer based on local resources

The geographical location, cultural and historical richness and the existing resources of Ponijeri Ski Centre represent a quality pillar for the development of tourist potential to attract primarily mid-budget travellers. Ponijeri Ski Centre is the only winter tourism facility in Zenica-Doboj Canton and the aim should be to make it a priority in winter tourism offer in the Canton. The enhancement and construction of tourist infrastructure and improvement of tourism offer will increase the revenues and budget generated by tourism.

1.3.2. Promote and attract investments in targeted tourism areas

To increase revenues from tourism and to attract new and increase the existing investments in this industry, the following is required: promotion of tourism resources, establishment of a tourist service, adding of tourist attractions to maps in applications and web sites to promote tourist facilities in accordance with the recommendations of the World Tourism Organisation (UNWTO), providing utility infrastructure and gastronomic offer, etc.

The implementation of this measure would help increase revenues from tourism, increase employment and investments in tourism and connect tourist attractions and facilities in Kakanj Municipality area.

1.4. Develop rural areas, increase the volume of agricultural production and forestry

The intensification of agricultural production, enhancement of the management system and utilisation of forest resources create conditions for the development of rural areas and implementation of demographic policies in such areas.

The following are prerequisites to achieving this goal: creation of quality business environment and construction of road, utility and business infrastructure, along with strengthening local administration capacities as a service to business owners.

Table 78 – Priority 1.4. with indicators

| PRIORITY | INDICATOR [OUTCOMES OF THE PRIORITY] | Baseline values 2020 | Target values 2027 |
|---|---|----------------------|--------------------|
| 1.4. Develop rural areas and increase the volume of agricultural production | Agricultural production incentives | 370.000,00 | 600.000,00 |
| | Revenue from agricultural production | 16.525.913 | 17.800.000 |

The enhancement of agricultural production capacities is planned to be achieved by investing in collection and processing capacities and boosting the total level of production and yield.

This measure encompasses three areas:

1.4.1. Strengthen the development and competitiveness of agricultural producers

Continuing the practice of investment in agricultural production through incentives can significantly contribute to the strengthening and development of agricultural producers. This includes organising practical and theoretical educations, promoting results achieved at various fairs and increasing production and market surplus collection. Incentives should be directed towards the improvement of agricultural production competitiveness in terms of the quality and quantity of agricultural products and certification of agricultural production.

1.4.2. Intensify agricultural production

The agricultural production in Kakanj Municipality area is still characterised by high level of production for own use [only], due to the limited production capacity of numerous small family holdings producing only the quantities for own use, but also due to the lack of opportunities for the sale of market surpluses of products. The intensification of agricultural production can be achieved by increasing cultivable areas, developing organic farming, promoting new investments to increase the production capacities of agricultural holdings, modernising production and processing by introducing new technologies, to achieve better quality and specialised production.

1.4.3. Enhance rural infrastructure and availability of services for sustainable agricultural production

To reduce the trend of outmigration from rural areas, efforts should be made to develop rural infrastructure and make certain public services available in rural areas. This can be achieved by targeted small investments in infrastructure, connection with and access to urban areas for quality transport of goods, availability of products, and services on the market.

STRATEGIC GOAL 2

2.1. Improve education, sports and culture

Within the limits of its competence, the Municipality of Kakanj will focus on further improvement of institutional capacities in the fields of preschool, primary and secondary education, investment in cultural and sports aspects of life. The results of these activities will be more sports and cultural activities with more users, better, higher quality and modern conditions for the implementation of the teaching process in schools and kindergartens.

Table 79 - Priority 2.1. with indicators

| PRIORITY | INDICATORS [OUTCOMES OF THE PRIORITY] | Baseline values 2020 | Target values 2027 |
|--|--|----------------------|--------------------|
| 2.1. Improve education, sports and culture | Allocated funds for the reimbursement of school commuting costs | 38.811,10 | 60.000,00 |
| | Allocated funds for preschool education | 720.000,00 | 850.000,00 |
| | Available and functional space in cultural institutions m² | 2.549,34 | 2.800,00 |
| | Number of members/ service users in cultural institutions [number of members/visits] | 12.000-17.000 | 15.000-20.000 |
| | Number of sports facilities | 8 | 11 |
| | Number of sports associations /federations | 927 | 1100 |

The outcomes of this priority will be measured through budget allocations in the fields of preschool education, sports and infrastructure for the stated fields including cultural institutions.
Measures under this priority are:

2.1.1. Prepare preschool children for educational process

This measure shall aim to improve and increase the number of educational programmes for children and preschool teachers. In this way, preschool children of both employed and unemployed parents shall be provided with nursery and kindergarten accommodation for care and education. The implementation of measures shall be ensured through the constructing and equipping of nurseries and kindergartens, especially in places far from the urban centre.

2.1.2. Strengthen the technological capacities of educational system

This measure shall aim to strengthen technological capacities according to modern standards, improve infrastructure and equipment of schools for distance learning, education of teaching staff for active monitoring of trends in the labour market and the offer of educational programs.

2.1.3. Support further development of sports

KSupport for sports associations and infrastructure will be provided through budget funds. The development effect of the measure is reflected in the openness and availability of sports content. The improvement and construction of sports infrastructure shall advance working conditions for sports clubs and associations and strengthen the role of sports in Kakanj Municipality which is a prerequisite for a continuous promotion of sports for the entire population in the Municipality. By establishing the registry of sports clubs/associations better conditions for the development of sports will be provided. The implementation of the measure will create better conditions for sports clubs which increase the base of young athletes [children and youth] through quality support programmes.

2.2. Provide professional, quality and accessible healthcare services

Special account shall be given to the improvement of the resilience of institutions, system and infrastructure for acting in crisis conditions, such as the COVID-19 pandemic which is ongoing at the time of the creation of the Strategic Document. The health care system in local frameworks has a narrow scope of action. However, analysing the needs of the population, some areas can be earmarked, such as the need for immunization [children and adults], available specialist examinations, education activities aimed at prevention, etc.

Table 80 - Priority 2.2. with indicators

| PRIORITY | INDICATORS [OUTCOMES OF THE PRIORITY] | Baseline values 2020 | Target values 2027 |
|---|---|----------------------|--------------------|
| 2.2. Provide professional, quality and accessible healthcare services | Number of health insured persons in relation to the total number of inhabitants [%] | 94,81 | 100 |
| | Number of specialist examinations | 25.677 | 27.000 |
| | Vaccination [the number of vaccines] | 1.417 | 5.000 |
| | Number of educations for the purpose of serious diseases prevention | 10 | 18 |

This priority includes the following measures:

2.2.1. Improve medical diagnostics with the use of modern devices, equipment and vehicles

The improvement and acquisition of new and modern diagnostic devices and equipment generally leads to improved healthcare, shortened waiting lists for patients in need and faster and better access to healthcare services.
This measure includes the procurement of a CT scan, digital mammogram upgrade, the procurement of defibrillator and cardiomobile.
The improvement of diagnostic procedures, shortening of waiting lists, avoiding diagnostic errors, easier access to health services shall significantly improve health conditions of Kakanj Municipality population.

2.2.2. Higher degree of vaccinated preschool and school children

Immunization process is one of the safest ways to prevent the emergence and spread of infectious diseases and it should be carried out according to the established immunization calendar.

In order to implement the mentioned activities, JU “Dom zdravlja” Kakanj should be doing a continuous campaign through HES [Hygiene and Epidemiological Service], Family Medicine Service, Paediatric Service, media and direct contacts of medical staff and patients. By increasing the number of immunized preschool and school children and the rest of the population, the risk of infectious diseases is reduced.

2.2.3. Promote and raise immunization awareness

Apart from the importance of compulsory immunization of children, other types of immunization should be presented in a professional manner to the rest of population [COVID-19, influenza, etc.].

In terms of mandatory immunization against infectious diseases, primary focus are preschool and school children, but if there is a fear of an infectious disease, then the immunization process refers to the entire population. Such an example is COVID-19. Immunization is the best and safest way to prevent morbidity, which can cause disability and death of the population.

2.2.4. Accredit family medicine teams

Accreditation and certification of family medicine teams should be carried out as part of the activities of the entire Health Centre in order to avoid doing twice the work. The process of accreditation and certification of health institutions is a prescribed legal form for all health institutions and it is necessary to complete this process as soon as possible for the safety and quality of health services provided to patients.

2.3. Provide professional, quality and accessible services in the field of social care

Within the framework of legal regulations, it is necessary to improve social care mechanisms available to the population through the introduction of additional programs for children and adults for the purpose of integration of marginal groups and prevention of addiction and juvenile delinquency. The activities aim to improve the quality of life, reduce the effects and consequences of socially negative behaviour and provide adequate care and assistance to vulnerable groups.

Table 81 - Priority 2.3. with indicators

| PRIORITY | INDICATORS [OUTCOMES OF THE PRIORITY] | Baseline values 2020 | Target values 2027 |
|--|--|----------------------|--------------------|
| 2.3. Providing professional, high-quality and accessible services in the field of social care and war veterans' protection | Number of users of SCC services and program - children | 151 | 221 |
| | Number of users of SCC services - adults | 1712 | 1817 |
| | Number of SCC programs | 13 | 16 |
| | The amount of financial assistance for the veteran population / year [BAM] | 100,00 | 150,00 |

Measuring the effects in this area includes monitoring the number of users, programs and financial aid for vulnerable groups.

The improvement of social care services implies the following measures:

2.3.1. Strengthen non-institutional care services

[counselling centres, safe houses, social care projects and NGO]

The measure shall target vulnerable families and groups through social care programs. The planned activities shall be focused on the integration of vulnerable and marginalized groups that cannot meet their needs with their own income and within the framework of standard public institutions programs. The results of the implemented measure will significantly improve the socio-economic status of vulnerable groups. The life quality of all targeted categories will be improved.

2.3.2. Improve the socio-economic status of vulnerable groups

The activities inside this measure aim to improve life quality, to reduce the consequences of socially unacceptable behaviour and to provide adequate help and care for vulnerable groups.

The results of the implemented measure will significantly improve the socio-economic status of people falling into these categories.

2.4. Demographic policies through the improvement of education sector services tailored to labour market requirements

The programs shall offer professional training, first professional qualification and further professional development of adults. In this way, the programs shall match labour market requirements with skilled and qualified workforce. Under this measure, the planned activities shall aim to create favourable conditions for individual development with an emphasis on work-based learning and to provide necessary conditions for the full family growth through the development of programs to address the housing needs of young people .

Table 82 - Priority 2.4. with indicators

| PRIORITY | INDICATOR [OUTCOME AT PRIORITY LEVEL] | Baseline values 2020 | Target values 2027 |
|---|---|----------------------|--------------------|
| 2.4. Demographic policies through the improvement of education sector services tailored to labour market requirements | Number of educational programs for disabled persons | 3 | 5 |
| | Allocation for the modernization and development of information technologies to support education | 18.999,45 | 50.000,00 |
| | Allocations for boosting the birth rate | 118.650,00 | 150.000,00 |

The contribution to the implementation of demographic policies will be monitored through the increase of educational programs adapted to people with disabilities, allocations for the development of education and the boost of birth rate. Measures under this priority are:

2.4.1. Develop housing programs for young couples

By implementing this measure, the necessary conditions for the full family growth through the development of programs to address the housing needs of young people will be provided.

The measure shall aim to lower the migration of the young population and to create a safer socio-economic environment for establishing the family as the fundamental unit of society.

2.4.2. Develop a dual education system

The aim of this measure is to stimulate interest in vocational education and to create conditions for the improvement of educational process with an emphasis on work-based learning. The effectiveness of the measure is assessed through an established dual education system which emphasizes particularly on the skilled trainings of students in companies since the very beginning of their education. Dual education allows for better harmonisation between educational offer and requirements of labour market, and indirectly ensures employment growth and lower risk of the young professionals' outflow.

2.4.3. Develop a lifelong learning system

PThe implementation of this measure corresponds to the need of implementing several goals currently threatening the safety and security of persons and property in Kakanj Municipality: closing illegal coal mines, preventing illegal logging and transport, confiscation of illegally exploited materials, creation and extension of video surveillance system, education of road users and increasing the degree of road users control.

2.5. Improve public safety and security

The implementation of this measure corresponds to the need of implementing several goals currently threatening the safety and security of persons and property in Kakanj Municipality: closing illegal coal mines, preventing illegal logging and transport, confiscation of illegally exploited materials, creation and extension of video surveillance system, education of road users and increasing the degree of road users control.

Table 83 - Priority 2.5. with indicators

| PRIORITY | INDICATORS [OUTCOMES OF THE PRIORITY] | Baseline values 2020 | Target values 2027 |
|---|--|----------------------|--------------------|
| 2.5. Improve public safety and security | Crime rates | 263 | <220 |
| | Solved cases % | 84% | 90% |
| | Number of felons | 252 | <210 |

This priority outcome is to be measured through monitoring the number of felonies, percentage of solved cases and register of felons in Kakanj Municipality. Implementation areas include:

2.5.1. Prevent illegal exploitation of natural resources

The measure will be implemented through the cooperation with Kakanj Police Department, Kakanj Coal Mine and FBiH Administration for Inspection Affairs with the aim of preventing the creation of new illegal coal mines. The problem of illegal logging requires an action plan and stronger cooperation with Cantonal Forestry Administration, JP ŠPD Kakanj and FBiH Administration for Inspection Affairs. The action aim to close and prevent illegal coal mines and the transport of illegally obtained coal and to seize illegally exploited materials.

2.5.2. Create and extend of video surveillance system

The full functioning of a surveillance system extends the coverage of various areas in order to gather necessary data and evidence in relation to the execution of criminal acts. In this way, a timely action shall be provided in terms of perpetrators, identification, case solving and thus, considering previous indicators, the number of felonies and crime rate shall be reduced.

2.5.3. Improve the safety of road-users

The measure shall aim to provide more intensive control of all roads categories and achieve more control of some categories of road-users through Kakanj Police Department. It shall be done based on the number of car accidents and their consequences in accordance with analytical expert assessment of the situation . The radar systems continue to operate, related to fast driving and overtaking in place prohibited by law. Also, as part of field-work activities and campaigns and local community cooperation, preventive actions shall be taken in order to improve safety.

2.6. Efficient and transparent operation of public institutions

Increasing the degree of modernization, digitization of services offered by the Municipality of Kakanj and strengthening cooperation between the public and non-governmental sectors through various types of partnerships and programs are actions planned under this measure.

Table 84 - Priority 2.6. with indicators

| PRIORITY | INDICATOR [OUTCOME AT PRIORITY LEVEL] | Baseline values 2020 | Target values 2027 |
|---|--|----------------------|--------------------|
| 2.6. Efficient and transparent operation of public institutions | Number of participants in professional education | 39 | 130 |
| | Value of IT equipment acquisition | 21.711,29 | 100.000,00 |

2.6.1. Capacity strengthening through education and training

Planned action through the processes of education of civil servants shall enable the acquisition of new knowledge and skills that are applicable in everyday work. The development of human resources, special quality and number of educational programs and improvement of inter-institutional exchange significantly accelerate the development and operation of the public sector and improve the quality and availability of public services. Increasing the quality of public services, better preparedness for EU integration processes of BiH in the coming period and the accelerated development of the public sector shall result in higher quality in terms of meeting the needs of all residents.

2.6.2. Acquire IT equipment

This measure shall work in several development directions and aim to modernize software, continuously replace and restore of hardware parts, continue digitalization process, develop information technology units as one of the imperatives for efficient and transparent work of public sector.

STRATEGIC GOAL 3.

3.1. Sustainable risk management

These activities include the establishment of mechanisms for prevention and control of potential natural disasters risks and threats to people and their property (landslide, fire, torrential flow, flood, earthquake, etc.). Higher level of control and management asks for better equipment of Civil Protection structures and other relevant institutions as well as reports and studies on the abovementioned issue.

Table 85. Prioritet 3.1. sa indikatorima

| PRIORITY | INDICATOR [OUTCOME AT PRIORITY LEVEL] | Baseline values 2020 | Target values 2027 |
|----------------------------------|--|----------------------|--------------------|
| 3.1. Sustainable risk management | Number of landslides in Kakanj Municipality | 180 | 92 |
| | Funds invested in remediating the consequences of natural disasters | 120.000,00 | 1.100.000,00 |
| | Number of buildings and areas at risk of being endangered by natural disasters | 614 | 270 |

Implementation at this priority level shall be measured by the number of repaired landslides, reduced number of endangered buildings in Kakanj Municipality and funds invested in remediating the consequences of natural disasters. The abovementioned activities will be implemented through the following measures:

3.1.1. . Strengthen the structures and infrastructure of the Civil Protection

Strengthening the capacities and resources of Civil Protection implies the provision of the necessary equipment, buildings, facilities and systems for system for warning and operational management of protection and rescue operations, or key infrastructure for efficient operation during and after a natural disaster. This means necessary basic equipment, funds and reserves, equipped outpost centres in local communities, a logistics centre, etc.

3.1.2. Remediate existing and prevent of new landslides

A large number of landslides in the Municipality represent a constant threat to the lives and property of residents. Considering the high costs of landslide remediation, the Municipality of Kakanj, within the scope of its capabilities, has been remediating the high priority landslides. However, this is insufficient to meet costs for designing and carrying out remediation works, so it is necessary to work on providing additional funds and continue activities on landslide prevention and remediation.

3.1.3. Prevent fires in Kakanj Municipality

Fires occur often in the Kakanj municipality. The densely populated town area carries constant risks of fire and its sudden spreading. A few particularly dry years were good for forest fires especially in terms of their size and duration which made the extinguishing of the fire difficult. The following activities have been identified to reduce natural disaster risks: establish operations coordination centres necessary for managing, monitoring and warning, establish companies and legal entities of significance for protection and rescue.

3.2. Improve sustainable and environmentally acceptable spatial planning and of utilities infrastructure

Measure implementation at this priority level shall allow: the improvement of the municipal waste management system and adaptation to the regional concept - remediation of the landfill and establishment of recycling. This would significantly improve the state of the ecosystem in Kakanj Municipality. In addition, the overall ecological picture will be significantly improved by the improvement of the water supply and wastewater treatment system.

Table 86 - Priority 3.2. with indicators

| PRIORITY | INDICATOR [OUTCOME AT PRIORITY LEVEL] | Baseline values 2020 | Target value 2027 |
|---|---|----------------------|-------------------|
| 3.2. Promotion of sustainable and environmentally acceptable spatial planning through the improvement of utilities infrastructure | Share of treated municipal waste out of total waste generated [%] | 0 | 50 |
| | Share of treated municipal wastewater [m³/day] | 16.790,94 | 19.800 |
| | Density of modernized roads [km/100km²] | 1,31 | 1,46 |

The measuring of this priority effects is possible to monitor through the share of treated municipal waste and wastewater according to set parameters and a network of modernized roads. The priority includes the following measures:

3.2.1. Improve municipal waste management system and adapt to the regional disposal concept

In Kakanj Municipality, there are no locations where separate collection of individual types of waste that can be used for recycling is carried out. At the municipal Landfill, all types of hazardous and non-hazardous household waste are disposed of, including solid waste which makes it an uncontrolled landfill where basic elements of environmental and human protection do not exist.

As such, the landfill does not conform to domestic legislation. Bearing in mind the condition of this landfill, as well as the legal obligations of municipalities, it is necessary to take measures to improve the situation and bring it within the limits of the legal framework.

So far, the necessary documentation for obtaining urban planning approval has been prepared. The rehabilitation of the existing municipal waste landfill should start with the preparation of investment, technical and environmental documentation. In addition to the above, the main project was completed and environmental permit obtained. In the next period, the goal is to manage the entire area of the landfill in such a way that it does not present a danger to the environment, adapt the landfill capacity to the regional disposal concept, ensure safe work for workers at the landfill without health risks and to ensure the application of BiH and EU norms and standards. The activities that have been planned would have significant effects on improving utility hygiene and reducing CO2 emissions or reducing the effects that ultimately lead to climate change .

3.2.2. Improve water supply

The measure includes projects for the construction of water systems and supporting facilities in urban and local community areas in order to establish utility infrastructure for the basic needs of residents to be met. The activities will contribute to the improvement of the supply of wholesome and clean water, connection of new settlements to the water supply system, turning over the management of a local water supply to the public water utility, continuous reconstruction of the water supply network in order to reduce drinking water losses. In this way, the improvement of the environment is achieved, that is, the life quality of the population in the entire Municipality is improved.

3.2.3. Improve wastewater treatment system

The measure includes projects for the construction of sewerage systems, sewerage networks and waste water treatment facilities in the Municipality in order to establish utilities infrastructure to meet the basic needs of residents and reduce pressure on the environment. The project is in accordance with the FBiH Water Management Strategy. Achieving and maintaining a good condition of surface and underground waters is done for the protection of aquatic flora and fauna and the needs of water users or operational goals: reducing the pollution load from urban/sanitary wastewater and building a collection system, drainage and waste water treatment for settlements with less than 2,000 residents, defined as the most important source of water pollution. They are also defined as settlements that directly endanger the quality of surface and underground water due to undeveloped sewerage systems and wastewater treatment devices. The construction and reconstruction of sewerage systems and sewerage networks ensure the basic needs of the population in urban and rural areas of the Municipality, create prerequisites for sustainable development, reduce the pollution of underground and surface water, and thus reduce the pressure on the environment.

3.2.4. Construct and modernise road infrastructure

In order to reduce population migration from our Municipality, and especially from rural to urban areas, measures to improve and modernize the road infrastructure shall be implemented. Thus, in the next period, even more intensive work shall be done on the modernization of roads. Also, the activities on the categorization of Kakanj-Tršće-Ponijeri local road into regional road will be intensified. In this way, opportunities would be opened for better development of tourism in the Municipality, better regional connection, asphaltting of unclassified roads in rural areas and construction of road facilities [bridges, underpasses, roundabout intersections, etc.].

3.3. Ensure a sustainable natural resources management system and improve environment quality

The establishment of a wider protected area will open up the possibility of protecting cultural, historical and natural heritage. The development of the tourist offer of this area will create conditions for the preservation of culture and ecosystems and increase the number of jobs. Energy savings, remediation of landfills and the introduction of a recycling system shall increase the quality of the environment. The aforementioned activities should be supported by continuous education of the population in the Municipality.

Table 87. Prioritet 3.3. sa indikatorima

| PRIORITY | INDICATOR [OUTCOME AT PRIORITY LEVEL] | Baseline value 2020 | Target value 2027 |
|---|---|---------------------|-------------------|
| 3.3. Ensure a sustainable natural resources management system and improve environment quality | Share of renewable energy sources in relation to total energy consumption [MWh] | 330 | 1.500 |
| | Share of renewable energy sources in relation to total heat consumption outside the district heating system [%] | 53 | 85 |

| | | | |
|--|--|------|---|
| | Share of energy generated from alternative sources in relation to total energy generated [%] | 0,25 | 1 |
| | Protection and valorisation of the natural heritage (number of natural areas protected by law and number of natural areas protected in the Kakanj Municipality Spatial Plan) | 1[2] | 2 |

The results of this priority can be measured through the share of renewable energy in relation to the parameters listed in the Table. The protection and valorisation of natural heritage can be carried out within the framework of legal regulations and according to the Kakanj Municipality Spatial Plan. The priority includes the following measures:

3.3.1. Enhance protected areas

The Municipality of Kakanj carried out the assessment of the flora and vegetation threat in the Valorisation of the Natural Rainforest Area Study. The assessment of the threat of vascular plants flora was carried out on the basis of criteria and methodology, and it resulted in further scientific findings that the proposal for the level of protection of the mentioned area in order to preserve biological diversity is of importance for both BiH and the region. By establishing a wider protected area of the Trstionica river basin, the possibility of protecting the cultural-historical and natural heritage shall be opened, and conditions for the preservation of culture and ecosystems shall be ensured. The development of tourist potential of this area would lead to the opening of new jobs and the active involvement of the local community. This method of protection would enable the self-sustainability of this area over time.

3.3.2. Build environmental awareness of residents (reduction of air pollution, energy efficiency, water supply and wastewater drainage, environment protection, etc.)

The measure includes activities aimed at informing residents about the importance of environmental protection in order to influence their awareness (how individuals or groups can contribute to air pollution reduction, energy savings, water protection and prevention of water pollution, nature protection etc.).

3.3.3. Build envelope performance of public and private buildings

This measure shall be implemented through several activities: the implementation of public procurement procedures and performance of works to improve energy efficiency through energy efficient building envelopes for buildings owned by the Municipality, announcing public calls for co-financing to improve building envelope performance of residential buildings, increasing energy efficiency of buildings, reducing building energy consumption, with the aim of financial savings, which shall result in an improved visual appearance of the buildings.

3.3.4. Build energy efficiency of the district heating system

Building energy efficiency of the district heating system entails the reconstruction of the old hot water and steam pipes network. The reconstruction comprises of the replacement of existing pipes with pre-insulated pipes with a higher degree of thermal protection and larger diameter, and thus creating preconditions for the further expansion of the district heating system and achieving additional heat loss reductions. For complete reconstruction and expansion of district heating (hot water pipes and steam pipes) to all suburban areas the amount of BAM 54.763.240,00 [SEAP] is required.

Building energy efficiency of the district heating system, reducing heat losses are the preconditions for the expansion of the district heating system.

3.3.5. Reduce air pollution

This measure comprises of a series of activities to be implemented through five [5] sub-measures, as follows:

3.3.5.1. Construct infrastructure in the town centre to reduce air pollution (bike trail extension, electric scooters charging stations, introducing public bike-sharing system)

The results of the implementation of this measure shall be the improvement and reduction of air pollution in the town centre will be achieved through the intensive construction and reconstruction of road facilities and supporting infrastructure in the town centre and beyond (bike trail extension, electric scooters charging stations, introducing public bike-sharing system). Ultimately, the measure will result in the improvement of air quality in the town centre and beyond, reduction of traffic, reduction of the number of cars, construction of bike trails and free and safe parking spaces for electric and other bicycles.

3.3.5.2. Improve the maintenance of roads and other public areas (using modern sweepers, etc.) – prevent secondary dust emissions

Kakanj is an industrial environment where the big operators’ production processes emit large amounts of dust that is spread by wind, transport and similar means and settled. Traffic causes dust emissions affecting air quality, especially in the town centre where traffic frequency is higher. Better cleaning of roads with modern sweepers throughout the year shall improve air quality and thus the life quality of Kakanj Municipality residents.

3.3.5.3. Improve air quality by financing the purchase, planting and maintaining trees to reduce the concentration of airborne particles

This measure shall aim to achieve planned outcomes through intensive and planned tree planting and remediation and reclamation of degraded areas in accordance with the legal procedure. Planting, seedlings, maintaining and reclaiming degraded areas result in cleaner air, mitigating the consequences of climate change.

3.3.5.4. Support the construction of solar power plants

Recently, there has been a great interest in the construction of small solar power plants by private investors in Kakanj Municipality. Including them in the JP Elektroprivreda BiH system would result in less CO₂ emissions into the atmosphere (increasing electricity production by renewable energy sources).

3.3.5.5. Co-finance the procurement of boilers powered by a renewable fuel source and heat pumps

The improvement of air quality will be achieved through the replacement of the existing boilers with fossil-fuel based district heating (coal, fuel oil, etc.) pellet and biomass boilers and heat pumps in residential and commercial buildings in Kakanj Municipality. The measure is reflected in the principle of co-financing and supporting interest groups and individuals.

3.3.6.Expand the district heating system

Improving energy efficiency through the expansion of the district heating system implies the expansion of the district heating system to suburban settlements: Varda, Povezice, Pope, Plandište, Zgošća and a part of Kakanj II local community. A project for the expansion of the system has been prepared, and in the next period it is necessary to secure funds for works to be carried out. The result of this measure shall be improved air quality and reduced number of solid fuel boilers in Kakanj Municipality.

12. INDICATIVE FINANCIAL FRAMEWORK

The indicative financial framework represents an overview of necessary financial resources for the implementation of the measures, with an overview of potential funding sources.

The total value of funds planned for the implementation of investment or strategic projects amounts to BAM 111.030.262. Out of the total amount of planned funds, 11,04 % goes for the implementation of the first strategic goal, 24,84 % for the second strategic goal and 64,13 % for the third strategic goal. The funds for the abovementioned investments are planned as follows: 44,74 % from the Municipality of Kakanj Budget and 55,26 % from other sources of financing (35 % higher levels of government and 20,26 % donations and funds of international financial institutions and organizations).

Table 88 - Sources of financing

| Explanatory Notes | |
|---|---|
| Municipality of Kakanj Budget | The Municipality of Kakanj Budget has had a stable growth in the past years, with the exception of the COVID-19 pandemic period. Also, there has been a steady growth of revenues from income tax and indirect taxes, which make the largest part of budget revenues. |
| Other government sources | The Municipality of Kakanj continuously applies to higher levels of government (departmental ministries and funds) with the aim of securing funds for current and planned projects. The share of such revenues in the total budget is ca. 5%. The financing of the Strategy by higher levels of government is planned according to the inflow of funds in the past period. |
| Financial resources of international financial institutions and organizations, other source | Funding through donor sources will be available depending on the speed of the Accession Process of BiH for European Integration. In the period 2021–2027, IPA III funds will be available for Bosnia and Herzegovina. Other sources will be provided through projects of international organisations and development agencies. Projects of interest to the private sector are dominant part of financing that will be provided from private investments and is conditioned by the expressed interest of the private sector. |
| Borrowing | Considering that the Municipality of Kakanj can borrow according to the Law on Debt, Borrowing, and Guarantees in the Federation of Bosnia and Herzegovina, the use of debt financing for the implementation of strategic projects is possible |

| INDICATIVE FINANCIAL FRAMEWORK OF THE DEVELOPMENT STRATEGY OF KAKANJ MUNICIPALITY 2021-2027 | | | | | | | |
|--|--|----------------------------|-------------------------|---------------|--|---------------|---|
| Strategic goal, priority and measure | | Financing structure [%] | | Total BAM | Budget of the institution BAM | Other sources | |
| | | Municipal budget [%] | Other sources [%] | | | BAM | Potential sources |
| SG.1. | Enhance competitiveness and sustainability of the local economy | | | 12.251.000,00 | 10.045.900,00 | 2.205.100,00 | |
| 1.1. | Increase production, number of business entities, and export | | | 1.751.000,00 | 1.575.900,00 | 175.100,00 | |
| 1.1.1. | Support growth, development and competitiveness of small and medium-sized entrepreneurship | 90 | 10 | 551.000,00 | 495.900,00 | 55.100,00 | Competent ministries of higher levels of government, EU funds, international organisations and NGOs |
| 1.1.2. | Support business entities in innovation, technological improvement and digitalisation | 90 | 10 | 500.000,00 | 450.000,00 | 50.000,00 | Competent ministries of higher levels of government, EU funds, international organisations and NGOs |
| 1.1.3. | Provide incentives for business oriented companies | 90 | 10 | 700.000,00 | 630.000,00 | 70.000,00 | Competent ministries of higher levels of government, EU funds, international organisations, |
| 1.2. | Enhance business environment and entrepreneurial infrastructure for smart growth and employment | | | 4.100.000,00 | 3.440.000,00 | 660.000,00 | |
| 1.2.1. | Improve business environment and business support services, promote public private partnership | 80 | 20 | 2.500.000,00 | 2.000.000,00 | 500.000,00 | Competent ministries of higher levels of government, business entities |
| 1.2.2. | Strengthen institutional capacities of the Municipal administration to improve and modernise public services | 90 | 10 | 500.000,00 | 450.000,00 | 50.000,00 | Competent ministries of higher levels of government, EU funds, international and civil society organisations |
| 1.2.3. | Support the enhancement of labour market opportunities and employment programmes | 90 | 10 | 1.100.000,00 | 990.000,00 | 110.000,00 | Competent ministries of higher levels of government, EU funds, international and civil society organisations. |

| | | | | | | | |
|--------|---|-------|-------|---------------|---------------|---------------|--|
| 1.3. | Develop tourism offer and infrastructure for sustainable tourism | | | 3.500.000,00 | 2.450.000,00 | 1.050.000,00 | |
| 1.3.1. | Develop and promote tourism offer based on local resources | 70 | 30 | 2.500.000,00 | 1.750.000,00 | 750.000,00 | Higher levels of government; Tourist Board; international organisations |
| 1.3.2. | Promote and attract investments in targeted tourism areas | 70 | 30 | 1.000.000,00 | 700.000,00 | 300.000,00 | Higher levels of government; Tourist Board; international organisations |
| 1.4. | Develop rural areas, increase the volume of agricultural production and forestry | | | 2.900.000,00 | 2.580.000,00 | 320.000,00 | |
| 1.4.1. | Strengthen the development and competitiveness of agricultural producers | 85,71 | 14,29 | 700.000,00 | 600.000,00 | 100.000,00 | Competent ministries of higher levels of government, EU funds, international and civil society organisations |
| 1.4.2. | Intensify agricultural production | 90 | 10 | 1.100.000,00 | 990.000,00 | 110.000,00 | Competent ministries of higher levels of government, EU funds, international and civil society organisations |
| 1.4.3. | Enhance rural infrastructure and availability of services for sustainable agricultural production | 90 | 10 | 1.100.000,00 | 990.000,00 | 110.000,00 | Competent ministries of higher levels of government, EU funds, international and civil society organisations |
| SG.2. | Improve the quality of social life of Kakanj Municipality population | | | 27.580.000,00 | 10.450.000,00 | 17.130.000,00 | |
| 2.1. | Improve education, sports and culture | | | 12.400.000,00 | 6.250.000,00 | 6.150.000,00 | |
| 2.1.1. | Prepare preschool children for educational process | 100 | | 50.000,00 | 50.000,00 | 0 | |
| 2.1.2. | Improve technological capacities of educational system | 100 | | 50.000,00 | 50.000,00 | 0 | |

| | | | | | | | |
|--------|--|-----|----|---------------|--------------|--------------|--|
| 2.1.3. | Support further development of sports | 50 | 50 | 12.300.000,00 | 6.150.000,00 | 6.150.000,00 | Budgets of higher government levels, grants, loans, EU funds |
| 2.2. | Provide professional, high-quality and accessible healthcare services | | | 1.100.000,00 | 250.000,00 | 850.000,00 | |
| 2.2.1. | Improve medical diagnostics with the use of modern devices, equipment and vehicles | 20 | 80 | 1.000.000,00 | 200.000,00 | 800.000,00 | Budgets of higher government levels, IPH of ZDC, own resources, Kakanj Health Centre |
| 2.2.2. | Higher degree of vaccinated preschool and school children | 50 | 50 | 50.000,00 | 25.000,00 | 25.000,00 | Budgets of higher government levels, IPH of ZDC, own resources, Kakanj Health Centre |
| 2.2.3. | Promote and raise immunization awareness | 50 | 50 | 30.000,00 | 15.000,00 | 15.000,00 | Budgets of higher government levels, IPH of ZDC, own resources, Kakanj Health Centre |
| 2.2.4. | Accredit of family medicine teams | 50 | 50 | 20.000,00 | 10.000,00 | 10.000,00 | Budgets of higher government levels, IPH of ZDC, own resources, Kakanj Health Centre |
| 2.3. | Provide professional, quality and accessible services in the field of social care | | | 12.150.000,00 | 2.450.000,00 | 9.700.000,00 | |
| 2.3.1. | Strengthen non-institutional care services [counselling centres, safe houses, social care projects and NGO] | 33 | 67 | 150.000,00 | 50.000,00 | 100.000,00 | International organisations, JU CSR |
| 2.3.2. | Improve socio-economic status of vulnerable groups | 20 | 80 | 12.000.000,00 | 2.400.000,00 | 9.600.000,00 | ZDC Budget |
| 2.4. | Demographic policies through the improvement of education sector services tailored to labour market requirements | | | 1.410.000,00 | 1.190.000,00 | 220.000,00 | |
| 2.4.1. | Develop housing programs for young couples | 100 | | 350.000,00 | 350.000,00 | | |
| 2.4.2. | Develop a dual education system | 80 | 20 | 1.000.000,00 | 800.000,00 | 200.000,00 | MESCS of ZDC, companies |
| 2.4.3. | Develop a lifelong learning system | 67 | 33 | 60.000,00 | 40.000,00 | 20.000,00 | MESCS of ZDC, companies |

| | | | | | | | |
|--------|---|----|----|---------------|---------------|---------------|---|
| 2.5. | Improve public safety and security | | | 270.000,00 | 110.000,00 | 160.000,00 | |
| 2.5.1. | Prevent illegal exploitation of natural resources | 50 | 50 | 50.000,00 | 25.000,00 | 25.000,00 | Higher government levels |
| 2.5.2. | Extend video surveillance system | 33 | 66 | 150.000,00 | 50.000,00 | 100.000,00 | Higher government levels |
| 2.5.3. | Improve the safety of road-users | 50 | 50 | 70.000,00 | 35.000,00 | 35.000,00 | MIA of ZDC |
| 2.6. | Efficient and transparent operation of public institutions | | | 250.000,00 | 200.000,00 | 50.000,00 | |
| 2.6.1. | Capacity strengthening through education and training | 80 | 20 | 50.000,00 | 40.000,00 | 10.000,00 | CSA of FBiH |
| 2.6.2. | Acquire IT equipment | 80 | 20 | 200.000,00 | 160.000,00 | 40.000,00 | International organisations, donors |
| SG.3. | Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | | 71.199.262,46 | 29.174.817,89 | 42.024.444,57 | |
| 3.1. | Sustainable risk management | | | 1.400.000,00 | 1.050.000,00 | 350.000,00 | |
| 3.1.1. | Strengthen the structures and infrastructure of the Civil Protection | 60 | 40 | 250.000,00 | 150.000,00 | 100.000,00 | Higher government levels (FBiH and ZDC) |
| 3.1.2. | Remediate existing and prevention of new landslides | 80 | 20 | 1.000.000,00 | 800.000,00 | 200.000,00 | Higher government levels |
| 3.1.3. | Prevent fires in Kakanj Municipality | 67 | 33 | 150.000,00 | 100.000,00 | 50.000,00 | CCPA |
| 3.2. | Improve sustainable, environmentally acceptable spatial planning and utilities infrastructure | | | 24.612.469,81 | 8.971.580,09 | 15.640.889,72 | |
| 3.2.1. | Improve municipal waste management system and adapt to the regional disposal concept [close the existing landfill and build a recycling yard at a new location] | 10 | 90 | 6.593.200,00 | 659.320,00 | 5.933.880,00 | Higher government levels, funds |
| 3.2.2. | Improve water supply system | 6 | 94 | 2.389.400,00 | 143.364,00 | 2.246.036,00 | FBiH Budget, ZDC Budget, other |
| 3.2.3. | Improve wastewater treatment system | 3 | 97 | 5.629.869,81 | 168.896,09 | 5.460.973,72 | FBiH Budget, ZDC Budget, loans, other |
| 3.2.4. | Construct and modernise road infrastructure | 80 | 20 | 10.000.000,00 | 8.000.000,00 | 2.000.000,00 | ZDC Budget MSP, other |

| | | | | | | | |
|------------------------------------|---|----|----|-----------------------|----------------------|----------------------|---|
| 3.3. | Ensure a sustainable natural resources management system and improve environment quality | | | 45.186.792,65 | 19.153.237,80 | 26.033.554,85 | |
| 3.3.1. | Enhance protected areas | 90 | 10 | 50.000,00 | 45.000,00 | 5.000,00 | Competent ministries of higher levels of government FBiH, ZDC |
| 3.3.2. | Build environmental awareness of residents (reduced air pollution, energy efficiency, water supply and wastewater drainage, environment protection, etc.) | 90 | 10 | 385.000,00 | 346.500,00 | 38.500,00 | Competent ministries of higher levels of government FBiH, ZDC |
| 3.3.3. | Build envelope performance of public and private buildings | 30 | 70 | 11.374.792,65 | 3.412.437,80 | 7.962.354,85 | Competent ministries of higher levels of government, building owners (natural and legal persons), EU funds) |
| 3.3.4. | Build energy efficiency of the district heating system | 40 | 60 | 6.000.000,00 | 2.400.000,00 | 3.600.000,00 | Higher levels of government, Kakanj Municipality Budget Kakanj, EU funds, JP Grijanje d.o.o. Kakanj |
| 3.3.5. | Reduce air pollution | | | | | | |
| 3.3.5.1. | Build infrastructure in the town centre to reduce air pollution (bike trail extension, electric scooters charging stations, introducing public bike-sharing system) | 90 | 10 | 500.000,00 | 450.000,00 | 50.000,00 | Higher levels of government |
| 3.3.5.2. | Improve the maintenance of roads and other public areas (using modern sweepers, etc.) – prevent secondary dust emissions | 90 | 10 | 3.157.000,00 | 2.841.300,00 | 315.700,00 | Kakanj Municipality Budget, higher levels of government |
| 3.3.5.3. | Improve air quality by financing the procurement, planting and maintaining of trees to reduce the concentration of airborne particles | 90 | 10 | 770.000,00 | 693.000,00 | 77.000,00 | Higher levels of government |
| 3.3.5.4. | Support the construction of solar power plants | 10 | 90 | 600.000,00 | 60.000,00 | 540.000,00 | Private investors |
| 3.3.5.5. | Co-finance the procurement of boilers powered by a renewable fuel source and heat pumps | 30 | 70 | 350.000,00 | 105.000,00 | 245.000,00 | Higher levels of government, EU funds, individuals |
| 3.3.6. | Expand the district heating system | 40 | 60 | 22.000.000,00 | 8.800.000,00 | 13.200.000,00 | Higher levels of government, loans, JP Grijanje |
| TOTAL (SG 1 + SG 2 + SG 3): | | | | 111.030.262,46 | 49.670.717,89 | 61.359.544,57 | |

The financial forecasting of the development strategy was prepared taking into account: the trend of allocated funds in the previous period, Municipality of Kakanj Budget, DOB projections and funds expected from other available external sources. The structure of planned resources aims at 44.74 % financing out of the Municipality of Kakanj Budget and 55,26 % out of external sources. Since the COVID-19 pandemic significantly disrupted the trend of budget revenues and brought a certain amount of uncertainty in the field of macroeconomic planning in the last two years, the risks should be taken into consideration when planning funds.

The public-private partnership (PPP) model is emphasized as a special form of financing development projects from external sources and as one of the possible financial instruments that can significantly improve public spending and attract new investments that can be established to achieve a wide range of goals, such as transport, infrastructure, agriculture, social care, health, culture, sports, etc.

For the time being, it is not possible to give a realistic financial projection of the application and effects of the PPP model, but the fact emphasises the necessity of intensive public communication about the possibility of this model being applied by potential domestic and foreign investors, as well as the possibility of efficient annual and triennial planning according to the Law on Public-Private Partnership of Zenica-Doboj Canton.

13. LIST OF STRATEGIC PROJECTS

Under the Decree on strategic documents drafting in the Federation of Bosnia and Herzegovina, strategic projects, as interventions of highest relevance in achievement of strategic objectives, are to be defined for the strategic documents implementation. Strategic projects have multiple effects on development and their implementation may serve as a basis for launching other projects.

Results of strategic projects should produce a positive impact on improving the quality of life of larger groups of residents, especially socially vulnerable population and enable sustainable growth and development.

The Development Strategy of Kakanj Municipality 2021 - 2027 defines 13 strategic projects. The implementation of the entire Strategic document encompasses: 3 goals, 13 priorities and 38 measures.

13.1. ESTABLISHMENT OF A BUSINESS INCUBATOR FOR THE DEVELOPMENT OF ENTREPRENEURIAL CAPACITIES IN KAKANJ MUNICIPALITY AREA

The project aims at multiple effects such as increasing the number of entrepreneurs, increasing export volume and value, reducing unemployment; it encompasses training, retraining, digitalisation, etc. To achieve these effects, we plan to implement activities with regards to promotion of incentives, mentored support to start-ups, training and retraining of labour force, implementing dual education concept, etc. The effects of this project are multisectoral and it will be implemented within the measures 1.1.1, 1.1.2, 1.1.3., and 1.2.2.

13.2. DEVELOPMENT OF MOUNTAIN TOURISM COMPLEX PONIJERI AND ITS SURROUNDING AND CREATION OF THE UNIQUE TOURISM OFFER OF KAKANJ MUNICIPALITY AREA

This project encompasses the construction of infrastructure: roads, utility network, parking space, eco house, walking tracks, fitness tracks, ski lift, snowmaking system, as well as an initiative to connect Kakanj and Zavidovići by constructing a road through Ponijeri, preparation of a tourism platform to promote tourism potential and offer, establishment of cooperation with tourist boards, agencies, competent ministries and international organizations to include the tourism offer of this site into current tourist packages (HUB model and so on), and utilisation of thermal water potential in Tičići. This project will be implemented within the measures 1.3.1. and 1.3.2.

13.3. ACTIVE SUPPORT TO PRODUCERS AND PROCESSORS OF AGRICULTURAL PRODUCTS IN CONSTRUCTING AND EQUIPPING COLLECTION AND PROCESSING CAPACITIES TO DEVELOP AGRICULTURE

Finding a location [site planning and adaptation, design and construction]; goals: intensify the development of agriculture in the fields of crop, animal, and fruit farming with organised collection, processing and placement of products. This project will contribute to the implementation of the measures 1.4.1, 1.4.2., and 1.4.3.

13.4. RECLAMATION OF DEGRADED LAND AND ITS CONVERSION TO AGRICULTURAL LAND AND OTHER USES

Identification of possible locations, resolving property issues, establishing the intended use, conversion [economic, environmental, sports and recreation, etc.]. The project will be implemented within the measure 1.2.1.

13.5. ESTABLISHMENT OF THE KAKANJ- SMART CITY CONCEPT

Energy framework: introduction of a LED lighting system through the reconstruction of the existing system and replacement of the lightbulbs. Institutional framework: introduction of an integral software platform for the implementation of projects in the areas of public interest, such as infrastructure and video surveillance. Digital framework: application of new technological solutions in the field of public services, economy, cultural offering, communication by means of various platforms, apps, services, etc. The effects of this project are multisectoral and it will contribute to the implementation of the measures 1.2.2, 2.6.1. and 2.6.2.

13.6. CONTINUATION OF THE RECONSTRUCTION OF THE EXISTING DISTRICT HEATING SYSTEM AND EXTENSION OF THE NETWORK

The project encompasses the activities of drafting studies, design documents and other preliminary actions for the rehabilitation of the existing condition of the district heating network and extension of its coverage in Kakanj Municipality area. This project would have environmental, social and economic effects through the reduction of air pollution and improvement of the quality of life for residents and conditions for the operation of business entities in this area. The project will be implemented through the measure 3.3.6.

13.7. INFRASTRUCTURE MODERNISATION 2027.

13.7.1. UTILITY INFRASTRUCTURE MODERNISATION

13.7.2. ROAD INFRASTRUCTURE MODERNISATION

13.7.3. MODERNISATION OF OTHER INFRASTRUCTURE

This project refers to the improvement of the condition of the existing infrastructure in terms of rehabilitation, repair, adaptation and modernisation, as well as establishment of new solutions in line with the requirements of the community and economic development. This encompasses: construction and rehabilitation of roads, pavements, bridges, walking paths, parking spaces, auxiliary traffic equipment, underpasses, water engineering facilities, water and sewage utility networks, sewages, courts, playgrounds, sportsgrounds, extension and furnishing of school and hospital facilities, etc. The effects of these projects are multisectoral and they will contribute to the implementation of measures 3.2.2, 3.2.3, 3.2.4., and 3.3.3.

13.8. CONSTRUCTION OF AN INDOOR SWIMMING POOL

This project includes the following activities: finding an appropriate location, site planning and adaptation, provision of utility infrastructure, construction of a sports complex with accompanying facilities. This project will be implemented within the measure 2.1.3.

13.9. CONSTRUCTION OF SPORT AND RECREATION CENTRE BARE

The vicinity of the town area and appropriate road connection make this location suitable for sport and recreation programmes of individuals, sports clubs and others. The first phase would encompass site planning, improvements to the infrastructure, preparation of the terrain for construction, planning of a walking path, and installation of mobile equipment. The project will be implemented within the measure 2.1.3.

13.10. CONSTRUCTION OF BRIDGES OVER THE RIVER BOSNA: in MODRINJE settlement and near AUTOBUSKA STANICA [BUS STATION] Kakanj

The pedestrian bridge over the River Bosna in Modrinje is not operational and, since there are forthcoming business activities in the area, there is a plan to build a bridge at this site, for both pedestrians and vehicles.

Construction of a new traffic solution near the Bus Station would significantly alleviate the traffic on the existing roads leading to the town centre and establish a better connection of the Business Park Vrtlište with A1 motorway. The project will contribute to the implementation of the measure 3.2.4.

13.11. ESTABLISHMENT OF THE KAKANJ - GREEN CITY CONCEPT

Energy efficiency projects aiming for energy savings and higher efficiency of infrastructure, river regulation by building revetments, waterbeds, cascades, controlling torrents, displacement of the existing landfill and construction of a recycling system, organised waste treatment, introducing measures to prevent ecosystem degradation, maintaining biotope biodiversity, extension of green and planted spaces in the town to reduce air pollution and improve noise protection, etc. The effects of this project are multisectoral and it will contribute to the implementation of measures 3.3.5.4, 3.3.5.5, and 3.3.5.3.

13.12. SUPPORT TO CONSTRUCTION AND EQUIPPING OF A NEW MODERN CIVIC AMENITY SITE AT A NEW LOCATION AND CLOSURE OF THE EXISTING LANDFILL

In terms of waste management activities in Kakanj Municipality area, a civic amenity site is planned to be built, as a surveilled fenced area intended for separate collection and temporary storage of smaller quantities of special waste.

Solid waste is currently transported to Gradska deponija Bare [Landfill], which is situated east of Kakanj, 1,5 km from the town and covers an area of ca 23 ha.

Solid waste disposed at the existing landfill is spread out and compacted daily, using mechanisation. The space is limited and there is a need to find another location for waste disposal. The project will be implemented within the measure 3.2.1.

13.13. REDUCING THE RISK FROM DISASTERS THROUGH ACTIVE IMPLEMENTABLE MEASURES

Sustainable risk management, DRAS system, spatial planning, drafting of studies/surveys, rehabilitation and prevention [landslide, flood, fire, earthquake] through the improvement of local coordination mechanisms in the field of reducing the risk from disasters and recognition of strategic planning process which integrates the concept of reducing the risk from disasters. The project will contribute to the implementation of the measure 3.1.1.

14. ALIGNMENT WITH KEY STRATEGIC DOCUMENTS

Article 3, paragraph [1], item aa) and Article 16, paragraph [4] of the Law on Development Planning and Management in FBiH prescribes the obligation of vertical coordination and alignment of strategic documents at different levels of government in the Federation with the common development goals, meaning that the Development Strategy of the Federation of BiH and the Development Strategy of Zenica-Doboj Canton represent a base for the alignment and drafting of municipal development strategies. The Decree on strategic documents drafting in BiH, Article 16, prescribes the obligation of the verification of mutual harmonisation of strategic documents and regulates that the verification of alignment of development directions and strategic goals at the level of local self-government units is to be performed by cantonal authorities competent for development planning and management. In defining its courses of action in the local strategic document, the Municipality of Kakanj used the framework established by the Development Strategy of FBiH 2021-2027, which was adopted on 27 April 2021, at the 21st session of the House of Representatives of FBiH.

Table 89 – Alignment with the strategic goals of FBiH

| Strategic goals of the Development Strategy of FBiH 2021-2027 | Strategic goals of the Development Strategy of Kakanj Municipality 2021-2027 |
|---|--|
| ACCELERATED ECONOMIC GROWTH | SG 1 – Enhance competitiveness and sustainability of the local economy |
| PROSPEROUS AND INCLUSIVE SOCIAL DEVELOPMENT | SG 2 – Improve the quality of social life of Kakanj Municipality population |
| RESOURCE EFFICIENT AND SUSTAINABLE DEVELOPMENT | SG 3 – Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks |

In drafting its strategic goals, priorities and measures under provisions of the above-mentioned documents, the Municipality of Kakanj has followed the guidelines set by the Development Strategy of Zenica-Doboj Canton 2021-2027, adopted by the Assembly of Zenica-Doboj Canton on 9 February 2021 and determined its development projects and courses of action accordingly.

Table 90 – Alignment with the strategic goals of Zenica-Doboj Canton

| Strategic goals of the Development Strategy of Zenica-Doboj Canton 2021-2027 | Strategic goals of the Development Strategy of Kakanj Municipality 2021-2027 |
|--|--|
| 1. Ensure resource efficient and sustainable economic development with strengthening competitiveness and development of entrepreneurship | SG 1 – Enhance competitiveness and sustainability of the local economy |
| 2. Enhance the quality of life and promote equal opportunities to all residents by creating sustainable and just social environment | SG 2 – Improve the quality of social life of Kakanj Municipality population |
| 3. Improve the current condition of environment, increase energy efficiency and enhance public infrastructure | SG 3 – Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks |

The priorities and measured defined at the level of FBiH and Zenica-Doboj Canton reflect in the Strategic document of the Municipality of Kakanj, which follows the main courses of development in the economic [promoting export, creating favourable business environment, digitalisation, smart growth...], social [enhancement of demographic policies, education, sports infrastructure, social welfare and health care, higher level of safety of people...] and environmental sense [green economy, responsible resources management, support to renewable energy sources...]

When it comes to the UN Sustainable Development Goals and principles referring to the future international development by 2030, they will encompass the period of the implementation of the local strategic document. The vision defined by the strategic document of the Municipality of Kakanj: Modern and economically prosperous municipality with the efficient and sustainable use of natural and other resources, pleasant to live and work in, providing equal opportunity to all contains three major courses of action within the framework for the implementation of SDGs.



FRAMEWORK FOR SUSTAINABLE DEVELOPMENT GOALS IN BIH - Alignment with SDG framework

| Framework for the implementation of SDG framework | Strategic goals of the Development Strategy of Kakanj Municipality 2021-2027 | Horizontal course [themes] | |
|--|--|------------------------------|-------------------------------------|
| Smart growth [Ensure the transformation of innovative and productive ideas into products and services that may lead to opening of highly qualified and highly paid job positions, leading to higher productivity, accelerated growth, maintaining the natural capital and reducing inequality in the society. The development of entrepreneurship, industrial policy and transformation in key sectors, proactive promotion of innovative capacities and productivity and fostering campaigns that generate fast growth] | SG 1 – Enhance competitiveness and sustainability of the local economy and SG 3 – Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | Human capital for the future | The principle “Leave no one behind” |
| Societies with equal opportunities for all. [improve social care system at all levels in BiH, improve access to education, training and labour market to protect vulnerable groups at risk of poverty [elderly persons, children and adults with disabilities, residents in remote rural areas, ethnic minorities and certain groups of women and children], improve social cohesion. At the same time, a rights-based approach to health care implies that health policies and programs must prioritize the needs of those who are most excluded in order to ensure a greater degree of equality] | SG 2 – Improve the quality of social life of Kakanj Municipality population SG 3 – Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Good governance and public administration [Responsible, transparent, efficient and effective public sector, which can ensure the implementation of the rule of law. Provide better services to residents and business community, improve the management of financial resources, reforms public enterprises, reduce corruption and ensure a functional judicial system] | SG 1 – Enhance competitiveness and sustainability of the local economy and SG 2 – Improve the quality of social life of Kakanj Municipality population | | |

15. PLAN FOR THE IMPLEMENTATION, MONITORING, REPORTING, AND EVALUATION OF THE STRATEGIC DOCUMENT

| Main activities and responsibilities for the implementation, monitoring, reporting and evaluation of the Development Strategy | |
|--|---|
| Activities | Responsibility |
| Drafting/updating the Activities Calendar [Municipal Council Work Programme with the plan of activities for the Municipal services] | Activity holder: Municipal Council Service; Secretary of the Municipal Administrative Body |
| | Activity participants: Managerial civil servants under their competencies |
| Preparation, drafting, and adoption of the triennial and annual work plans of the services, including projects from the Development Strategy of Kakanj Municipality for the period 2021-2027 and related regular activities. | Activity holder: Municipal Mayor, Secretary of the Municipal Administrative Body |
| | Activity participants: Managerial and other civil servants under their competencies, Institute for Planning and Construction of Kakanj Municipality |
| Inclusion of key strategic projects and activities in annual budget planning | Activity holder: Municipal Mayor / Deputy municipal Mayor for Finance |
| | Activity participants: Economy, Urbanism and Environmental Protection Service, Institute for Planning and Construction of Kakanj Municipality and Finance Service |
| Aligning annual work plans of the services/sections and implementation of annual and triennial plans with the adopted Budget. [annually] | Activity holder: Municipal Mayor Secretary of the Municipal Administrative Body, Managerial civil servants under their competencies |
| | Activity participants: Managerial civil servants under their competencies |
| Monitoring and attracting external sources for project financing | Activity holder: Mayor’s Office |
| | Activity participants: Finance Service; Economy, Urbanism and Environmental Protection Service |
| Monitoring the implementation of triennial and annual work plans of the services, including projects from the Development Strategy and related regular activities | Activity holder: Mayor’s Office |
| | Activity participants: Managerial civil servants under their competencies |
| Reporting and evaluation | Activity holder: Mayor’s Office, external evaluator |
| | Activity participants: Managerial civil servants under their competencies |

OVERVIEW OF THE STRATEGIC DOCUMENT

| DEVELOPMENT STRATEGY OF KAKANJ MUNICIPALITY 2021-2027 | | | |
|---|---|---|---|
| No. | Goals | Priorities | Measures |
| 1 | 1. Enhance competitiveness and sustainability of the local economy | 1.1. Increase production, number of business entities, and export | 1.1.1. Support growth, development and competitiveness of small and medium-sized entrepreneurship |
| | | | 1.1.2. Support business entities in innovation, technological improvement and digitalisation |
| | | | 1.1.3. Provide incentives for export-oriented companies |
| | | 1.2. Enhance business environment and entrepreneurial infrastructure for smart growth and employment | 1.2.1. Improve business environment and business support services, promote public private partnership |
| | | | 1.2.2. Strengthen institutional capacities of the Municipal administration to improve and modernise public services |
| | | | 1.2.3. Support the enhancement of labour market opportunities and employment programmes |
| | | 1.3. Develop tourism offer and infrastructure for sustainable tourism | 1.3.1. Develop and promote tourism offer based on local resources |
| | | | 1.3.2. Promote and attract investments in targeted tourism areas |
| | | 1.4. Develop rural areas, increase the volume of agricultural production and forestry | 1.4.1.Strengthen the development and competitiveness of agricultural producers |
| | | | 1.4.2. Intensify agricultural production |
| | | | 1.4.3. Enhance rural infrastructure and availability of services for sustainable agricultural production |
| 2 | 2. Improve the quality of social life of Kakanj Municipality population | 2.1. Improve education, sports and culture | 2.1.1. Prepare preschool children for educational process |
| | | | 2.1.2. Improve technological capacities of educational system |
| | | | 2.1.3. Support further development of sports |
| | | 2.2. Provide professional, high-quality and accessible healthcare services | 2.2.1. Improve medical diagnostics with the use of modern devices, equipment and vehicles |
| | | | 2.2.2. Higher degree of vaccinated preschool and school children |
| | | | 2.2.3. Promote and raise immunization awareness |
| | | | 2.2.4. Accredite of family medicine teams |
| | | 2.3. Provide professional, quality and accessible services in the field of social care | 2.3.1. Strengthen non-institutional care services [counselling centres, safe houses, social care projects and NGO] |
| | | | 2.3.2. Improve socio-economic status of vulnerable groups |
| | | 2.4. Demographic policies through the improvement of education sector services tailored to labour market requirements | 2.4.1. Develop housing programs for young couples |
| | | | 2.4.2. Develop a dual education system |
| | | | 2.4.3. Develop lifelong learning |

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| | | 2.5. Improve public safety and security | 2.5.1. Prevent illegal exploitation of natural resources |
| | | | 2.5.2. Extend video surveillance system |
| | | | 2.5.3. Improve the safety of road-users |
| 3 | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | 2.6. Efficient and transparent operation of public institutions | 2.6.1. Capacity strengthening through education and training |
| | | | 2.6.2. Acquire IT equipment |
| | | 3.1. Sustainable risk management | 3.1.1. Strengthen the structures and infrastructure of the Civil Protection |
| | | | 3.1.2. Remediate existing and prevention of new landslides |
| | | | 3.1.3. Prevent fires in Kakanj Municipality |
| | | 3.2. Improve sustainable, environmentally acceptable spatial planning and utilities infrastructure | 3.2.1. Improve municipal waste management system and adapt to the regional disposal concept [close the existing landfill and build a recycling yard at a new location] |
| | | | 3.2.2. Improve water supply system |
| | | | 3.2.3. Improve wastewater treatment system |
| | | | 3.2.4. Construct and modernise road infrastructure |
| | | 3.3. Ensure a sustainable natural resources management system and improve environment quality | 3.3.1. Enhance protected areas |
| | | | 3.3.2. Build environmental awareness of residents [reduced air pollution, energy efficiency, water supply and wastewater drainage, environment protection, etc.] |
| | | | 3.3.3. Build envelope performance of public and private buildings |
| | | | 3.3.4. Build energy efficiency of the district heating system |
| | | | 3.3.5.1. Reduce air pollution - Build infrastructure in the town centre to reduce air pollution [bike trail extension, electric scooters charging stations, introducing public bike-sharing system] |
| | | | 3.3.5.2. Reduce air pollution - Improve the maintenance of roads and other public areas [using modern sweepers, etc.] – prevent secondary dust emissions. |
| | | | 3.3.5.3. Reduce air pollution - Improve air quality by financing the procurement, planting and maintaining of trees to reduce the concentration of airborne particles |
| | | | 3.3.5.4. Reduce air pollution - Support the construction of solar power plants |
| | | | 3.3.5.5. Reduce air pollution - Co-finance the procurement of boilers powered by a renewable fuel source and heat pumps |
| | | | 3.3.6. Reduce air pollution - Expand the district heating system |

STRATEGIC GOAL 1

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|--|---|----------------------|--------------------|
| Connection with strategic goal | 1. Enhance competitiveness and sustainability of the local economy | | |
| Priority | 1.1. Increase production, number of business entities, and export | | |
| Title of measure | 1.1.1. Support growth, development and competitiveness of small and medium sized entrepreneurship | | |
| Description of the measure with indicative areas of activity | <p>Industry is the predominant industrial branch in Kakanj Municipality area, making other activities non-competitive, low-productive and largely dependent of the leading industrial entities.</p> <p>This measure will additionally enhance the existing economic situation and ensure more favourable conditions and financing sources both to the existing business entities and new ideas.</p> <p>Indicative areas of activities:</p> <ul style="list-style-type: none">• increase resources available for incentives to entrepreneurship and craft and increase the efficiency of the existing support mechanisms;• develop support programmes, including specially designed programmes and projects in partnership with organisations and funds;• continuously analyse and introduce objectively possible exemptions and relieve the economy through cooperation with the business sector;• endeavour to improve the availability of services to business persons;• promote and present business entities by organising business forums and fairs to enable the establishment of business cooperation, market expansion and enhancement of business opportunities. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Total allocation from the Budget for starting businesses, annually | 60.000,00 | 180.000,00 |
| | Implemented domestic and international partnership projects to support the entrepreneurial sector [annually] | 1 | 3 |
| | Number of economic forums and events [annually] | 0 | 2 |
| Development effects and the contribution of the measure to priority implementation | This measure will contribute to the strengthening of SMEs in their development and reinvestment by establishment of new businesses, and new employment as a result of higher number of new enterprises and start-ups. | | |
| Indicative financial construction with financing sources | Amount: BAM 551.000,00 Source: Municipal Budget; higher levels of government (competent ministries of the Canton and FBiH), international organisations, business entities | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | MUNICIPALITY OF KAKANJ; ECONOMY, URBANISM AND ENVIRONMENTAL PROTECTION SERVICE | | |
| Measure holders | Local Economic Development Section, Association of Entrepreneurs of Kakanj Municipality | | |
| Target groups | Micro, small and medium-sized enterprises and crafts | | |

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|--|--|--------------------------|--------------------|
| Connection with strategic goal | 1. Enhance competitiveness and sustainability of the local economy | | |
| Priority | 1.1. Increase production, number of business entities, and export | | |
| Title of measure | 1.1.2. Support business entities in innovation, technological improvement and digitalisation | | |
| Description of the measure with indicative areas of activity | <p>Due to the overall business environment, small and medium-sized enterprises in Kakanj Municipality area largely focus on processing and service industries, but the level of their market competitiveness is relatively low. This is the result of the low application of modern technologies and low level of innovations.</p> <p>Indicative areas of activity:</p> <ul style="list-style-type: none"> • support the enhancement of the processing industry capacities to achieve higher added value based on modern technological solutions and innovations; • educate and connect the processing industry with certified and accredited institutions and educational institutions. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Total increase of profit of enterprises – incentive beneficiaries (%) | 0 | 5 |
| | Investments made in new assets for the modernisation and enhancement of operation (annual amount invested in BAM) | 5.595.611,00 (buildings) | 7.000.000,00 |
| | Total investment (or percentage) in technological solutions reducing greenhouse gas emissions (annual amount in BAM) | 0 | 80.000,00 |
| Development effects and the contribution of the measure to priority implementation | The measure will contribute by increasing production volume and product quality, and reducing costs through the introduction and application of more modern technological solutions to positively affect the environment. | | |
| Indicative financial construction with financing sources | Amount: BAM 500.000,00 Source: Municipal Budget, investment funds of business entities | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | MUNICIPALITY OF KAKANJ; ECONOMY, URBANISM AND ENVIRONMENTAL PROTECTION SERVICE | | |
| Measure holders | Local Economic Development Section, Association of Entrepreneurs of Kakanj Municipality | | |
| Target groups | Enterprises and crafts | | |

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|--|---|----------------------|--------------------|
| Connection with strategic goal | 1. Enhance competitiveness and sustainability of the local economy | | |
| Priority | 1.1. Increase production, number of business entities, and export | | |
| Title of measure | 1.1.3. Provide incentives to export-oriented companies | | |
| Description of the measure with indicative areas of activity | <p>The aim of this measure is to increase investments in new technologies and equipment of export-oriented enterprises.</p> <p>Indicative areas of activities:</p> <ul style="list-style-type: none"> • introduction of international standards, • monitoring product quality and finalisation of export with creation of added value. <p>Particular attention will be paid to enterprises in the processing industry, with the aim of increasing networked economy and specialisation of business, leading to the increase of production intended for export and a series of positive effects on economic growth. In terms of the negative influence of the pandemic on industry, urgent measures required to maintain the liquidity and employment are planned in the form of general isolated measures to support business (incentives, subsidies, exemptions, etc.), while special activities aimed at the maintenance of the volume of industrial production and export are integrated in the measures within this priority to increase competitiveness of industry and export</p> | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Registered exporting enterprises | 66 | 100 |
| | Export import coverage ratio % | 10 | 15 |
| | Number of employees of enterprises registered for foreign trade | 1.390 | 1.800 |
| Development effects and the contribution of the measure to priority implementation | It is expected that this measure will result in an increase in total export values and number of employees in export-oriented enterprises from Kakanj Municipality area registered for foreign trade. | | |
| Indicative financial construction with financing sources | Amount: BAM 700.000,00 Source: Municipal Budget, other institutions (chambers of commerce etc.) | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | MUNICIPALITY OF KAKANJ; ECONOMY, URBANISM AND ENVIRONMENTAL PROTECTION SERVICE | | |
| Measure holders | Local Economic Development Section, Association of Entrepreneurs of Kakanj Municipality | | |
| Target groups | Enterprises in Kakanj Municipality area | | |

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|--|---|----------------------|--------------------|
| Connection with strategic goal | 1. Enhance competitiveness and sustainability of the local economy | | |
| Prioritet | 1.2. Enhance entrepreneurial infrastructure for smart growth and employment | | |
| Naziv mjere | 1.2.1. Improve business environment and business support services, promote public private partnership | | |
| Description of the measure with indicative areas of activity | <p>This measure aims to provide conditions needed for the development of entrepreneurship by a systemic approach to the development of entrepreneurial infrastructure and strengthening of public private partnership.</p> <p>Indicative areas of activity should encompass:</p> <ul style="list-style-type: none"> • need for additional space capacities, • need for the adaptation of locations suitable for investments, • intensification of the cooperation with the business sector, • identification of key development projects to be implemented through the public private partnership model | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Reclamation (conversion) - adaptation of suitable industrial locations for new investments (number of locations) | 0 | 5 |
| | Number of activities promoting the potentials of Kakanj Municipality as an attractive entrepreneurial environment | 1 | 5 |
| | Number of projects proposed/ implemented for the Project Catalogue of PPP projects of Zenica Dobož Canton | 5/0 | 5/4 |
| Development effects and the contribution of the measure to priority implementation | Improved space infrastructure and location with quality utility solutions for entrepreneurs; Attraction of new investments and establishment of partnerships with the private sector will result in increased number of job positions. | | |
| Indicative financial construction with financing sources | Amount: BAM 2.500.000 Source: Municipal Budget, private investors funds, other sources | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | MUNICIPALITY OF KAKANJ; ECONOMY, URBANISM AND ENVIRONMENTAL PROTECTION SERVICE | | |
| Measure holders | Local Economic Development Section, Association of Entrepreneurs of Kakanj Municipality | | |
| Target groups | Enterprises in Kakanj Municipality area | | |

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|--|---|----------------------|--------------------|
| Connection with strategic goal | 1. Enhance competitiveness and sustainability of the local economy | | |
| Priority | 1.2. Enhance entrepreneurial infrastructure for smart growth and employment | | |
| Title of measure | 1.2.2. Strengthen institutional capacities of the Municipal administration to improve and modernise public services | | |
| Description of the measure with indicative areas of activity | <p>The speeding up of the economy digitalisation process and the development of IT sector are the imperatives of economic development. To speed up digitalisation and computerisation processes, this measure will provide:</p> <ul style="list-style-type: none"> • proper support to enterprises through programmes for the development of IT knowledge and skills, • expert-consultant support in re-organisation for the processes of computerisation and facilitated access to financing, • support to introduce e-trade and e-business, including services (shipping, engineering, marketing, design, accounting, administration, etc.), • strengthen the domestic IT sector and provide the utilisation of significant potential for the growth of investments, revenues and export, with new employment in IT sector in Kakanj Municipality area. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Establishment of an on-line business incubator (number of activities per month) | 0 | 10 |
| | Digital platform: Showcase of Kakanj business persons (number of visits to the platform, per year) | 0 | 60.000 |
| | Level of improvement of administrative procedures for the business sector [%] | 30 | 60 |
| Development effects and the contribution of the measure to priority implementation | Speeding up the process of starting a business (shortening the procedure), improvement of the quality of the Municipal administration services, availability of services online. | | |
| Indicative financial construction with financing sources | Amount: BAM 500.000,00 Source: Municipal Budget and other sources | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | MUNICIPALITY OF KAKANJ; ECONOMY, URBANISM AND ENVIRONMENTAL PROTECTION SERVICE | | |
| Measure holders | Local Economic Development Section, Association of Entrepreneurs of Kakanj Municipality | | |
| Target groups | Enterprises in Kakanj Municipality area | | |

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|--|--|----------------------|--------------------|
| Connection with strategic goal | 1. Enhance competitiveness and sustainability of the local economy | | |
| Priority | 1.2. Enhance entrepreneurial infrastructure for smart growth and employment | | |
| Title of measure | 1.2.3. Support the enhancement of labour market opportunities and employment programmes | | |
| Description of the measure with indicative areas of activity | <p>This measure aims to mitigate the problem of unemployment and to increase the labour market efficiency.</p> <p>The following activities are planned as part of this measure:</p> <ul style="list-style-type: none">• education and practical training for the purpose employment at the labour market,• obtaining work experience by persons with university degree, to expand their employment opportunities• improving female entrepreneurship competitiveness. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Investment in projects aimed at economic empowerment of less employable groups | 0 | 200.00 |
| | Number of persons who obtained a vocation through vocational retraining programme | 0 | 200 |
| | Financial support for professional training programmes for persons with university degree | 133.073,41 | 180.000,00 |
| Development effects and the contribution of the measure to priority implementation | Employment support programmes will provide conditions for higher competitiveness on the labour market and wider range of employment opportunities. | | |
| Indicative financial construction with financing sources | Amount: BAM 1.100.000,00 Source: Municipal Budget; funds; other sources | | |
| Period for measure implementation | 2021- 2027 | | |
| Institution responsible for coordination of measure implementation | MUNICIPALITY OF KAKANJ; ECONOMY, URBANISM AND ENVIRONMENTAL PROTECTION SERVICE | | |
| Measure holders | Local Economic Development Section, Association of Entrepreneurs of Kakanj Municipality | | |
| Target groups | Enterprises in Kakanj Municipality area | | |

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|--|--|----------------------|--------------------|
| Connection with strategic goal | 1. Enhance competitiveness and sustainability of the local economy | | |
| Priority | 1.3. Develop tourism offer and infrastructure for sustainable tourism | | |
| Title of measure | 1.3.1. Develop and promote tourism offer based on local resources | | |
| Description of the measure with indicative areas of activity | <p>The tourism industry in Kakanj Municipality area requires significant investments in the existing potentials, which need to be rehabilitated, improved and modernised. The geographical location, cultural and historical richness and the existing resources of Ponijeri Ski Centre represent a quality pillar for the development of tourism potential to attract primarily mid-budget travellers, mainly those from Bosnia and Herzegovina. Ponijeri Ski Centre is the only winter tourism facility in Zenica-Doboj Canton and lobbying is required for it to become the no. 1 priority and be financed partly from the budgets of Zenica-Doboj Canton and Kakanj Municipality, as well as by foreign organisations or donors. In terms of cultural and historical tourism, the best solution is to create packages which would include the existing offers of Sarajevo, Visoko, Vareš, and Travnik and attract tourists to this yet undiscovered story of BiH, connected to Kakanj and its surrounding. This is where to look for a solution. Accordingly, the priorities are as follows: construction or reconstruction of the ski lift [replacement of the existing mechanisms], development of utility services, construction of parking facilities, construction, reconstruction and improvement of accommodation capacities, incentives for the development of private accommodation capacities and other accompanying services, enhancement of the cultural and recreational activities and events.</p> | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Number of tourism events [annually] | 1 | 3 |
| | Number of rehabilitated and restored facilities attractive to tourists | 3 | 7 |
| | Number of beds | 96 | 200 > |
| Development effects and the contribution of the measure to priority implementation | Improvement and construction of tourism infrastructure. Enhancement of tourism offer. Increase in revenue and budget from tourism services. | | |
| Indicative financial construction with financing sources | Amount: BAM 2.500,000,00 Source: Municipal Budget, ZDC Budget, FBiH Budget, EU and other donors | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | ZDC Government: Ministry of Economy; Municipality of Kakanj: Economy, Urbanism and Environmental Protection Service; Finance Service; Social Affairs, Veteran Affairs, Displaced Persons, Refugees and Returnees Service | | |
| Measure holders | Planning and Construction Institute of Kakanj Municipality; private hospitality companies and newly-formed local tour operator | | |
| Target groups | Natural and legal persons registered for performing tourism activities, associations in the field of tourism, Municipality of Kakanj and tourist board | | |

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|--|--|----------------------|--------------------|
| Connection with strategic goal | 1. Enhance competitiveness and sustainability of the local economy | | |
| Priority | 1.3. Develop tourism offer and infrastructure for sustainable tourism | | |
| Title of measure | 1.3.2. Promote and attract investments in targeted tourism areas | | |
| Description of the measure with indicative areas of activity | <p>To increase revenues from tourism and to attract new and increase the existing investments in this industry, following activities are required:</p> <ul style="list-style-type: none"> • Promotion of tourism resources, • Establishment of a tourist service, • Adding tourist locations to maps in applications and web sites (TripAdvisor, Booking.com, Airbnb) to promote the tourism offer in accordance with the recommendations of the World Tourism Organisation (UNWTO), • Providing utility infrastructure and gastronomic offer, • Integrating tourism attractions and offers (tour operators, mountain huts, hunting sections, resident associations preserving cultural and historical heritage, "free time" facilities), • Equipping tourism locations and facilities, • Adopting documents on protected areas and areas of particular interest. <p>It should be pointed out that the development of the offer and tourism infrastructure must be aligned with a tourism development strategy under the competence of FBiH and the competent ministry, which does not exist yet.</p> | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Investments in tourism | 76.654,21 | 200.000,00 |
| | Number of employees in tourism | 1 | 3 |
| | Allocation for the promotion of cultural and historical attractions | 16.386,80 | 50.000,00 |
| Development effects and the contribution of the measure to priority implementation | Increase in revenues from tourism, increase in employment and level of investment in tourism | | |
| Indicative financial construction with financing sources | Amount: BAM 1.000.000,00 Source: Municipal Budget, ZDC Budget, FBiH Budget, EU and other donors | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | ZDC Government: Ministry of Economy; Municipality of Kakanj; Economy, Urbanism and Environmental Protection Service; Finance Service; Social Affairs, Veteran Affairs, Displaced Persons, Refugees and Returnees Service | | |
| Measure holders | Planning and Construction Institute of Kakanj Municipality; private hospitality companies and newly-formed local tour operator | | |
| Target groups | Natural and legal persons registered for performing tourism activities, associations in the field of tourism, Municipality of Kakanj and tourist board | | |

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|--|---|----------------------|--------------------|
| Connection with strategic goal | 1. Enhance competitiveness and sustainability of the local economy | | |
| Priority | 1.4 Develop rural areas, increase the volume of agricultural production | | |
| Title of measure | 1.4.1. Strengthen the development and competitiveness of agricultural producers | | |
| Description of the measure with indicative areas of activity | Continuing the practice of investment in agricultural production through incentives can significantly contribute to the strengthening and development of agricultural producers. This includes organising practical and theoretical educations, promoting results achieved at various fairs and increasing production and market surplus collection. Incentives should be directed towards the improvement of agricultural production competitiveness in terms of the quality and quantity of agricultural products and certification of agricultural production. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Number of subsidised beneficiaries (registered agricultural producers) | 65 | 200 |
| | Number of events (fairs) aiming for promotion and placement of domestic agricultural products | 5 | 10 |
| Development effects and the contribution of the measure to priority implementation | Intensified utilisation of potentials and development of agriculture leading to an increase of yield in agricultural production. | | |
| Indicative financial construction with financing sources | Amount : BAM 700.000,00 Source: Municipality of Kakanj - BAM 600.000,00; international organisations and other external sources – BAM 100.000,00 | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj | | |
| Measure holders | Municipality of Kakanj | | |
| Target groups | Associations, agricultural producers and collectors | | |

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|--|--|----------------------|--------------------|
| Connection with strategic goal | 1. Enhance competitiveness and sustainability of the local economy | | |
| Priority | 1.4. Develop rural areas, increase the volume of agricultural production | | |
| Title of measure | 1.4.2. Intensify agricultural production | | |
| Description of the measure with indicative areas of activity | <p>The agricultural production in Kakanj Municipality area is still characterised by high level of production for own use [only], due to the limited production capacity of numerous small family holdings producing only the quantities for own use, but also due to the lack of opportunities for the sale of market surpluses of products.</p> <p>The intensification of agricultural production can be achieved by increasing cultivable areas, developing organic farming, promoting new investments to increase the production capacities of agricultural holdings, modernising production and processing by introducing new technologies, to boost the quality and safety of agricultural products and increase the specialisation of production.</p> | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Increasing the area of cultivable land [ha] | 11.296,02 ha | 12.789.00 ha |
| | Number of employees in agriculture [main activity] | 88 | 200 |
| | Number of certified organic producers | 3 | 10 |
| Development effects and the contribution of the measure to priority implementation | Increase in sustainability and the number of registered holdings; increase in employment | | |
| Indicative financial construction with financing sources | Amount: BAM 1.100.000,00 Source: Municipality of Kakanj, external sources | | |
| Period for measure implementation | 2021- 2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj | | |
| Measure holders | Municipality of Kakanj, Farmers' Federation KAP Kakanj and its member associations, cooperatives and other business entities in the field of agriculture | | |
| Target groups | Agricultural producers, Collectors, Processors | | |

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| Connection with strategic goal | 1. Enhance competitiveness and sustainability of the local economy | | |
| Priority | 1.4. Develop rural areas, increase the volume of agricultural production | | |
| Title of measure | 1.4.3. Enhance rural infrastructure and availability of services for sustainable agricultural production | | |
| Description of the measure with indicative areas of activity | To reduce the trend of outmigration from rural areas, efforts should be made to develop rural infrastructure and make certain public services available in rural areas. This can be achieved by targeted investments in rural communities' infrastructure to improve their connection with and access to urban areas by investment in road infrastructure, electricity, water and sewage utilities, etc. Such improvement of the rural infrastructure would contribute to people staying in rural areas and enhance agricultural production. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Number of facilities for collection, processing and placement of agricultural products | 5 | 10 |
| | Investment in agricultural machinery and equipment | 20.000,00 | 150.000,00 |
| | Number of trainings in the field of agriculture | 4 | 10 |
| Development effects and the contribution of the measure to priority implementation | To enable people to stay in rural areas by developing farm tourism and improving and modernising agricultural production | | |
| Indicative financial construction with financing sources | Amount: BAM 1.100.000,00 Source: Municipality of Kakanj, external financing sources | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj | | |
| Measure holders | Municipality of Kakanj | | |
| Target groups | Population in rural areas, agricultural producers, associations and Farmers' Federation | | |

STRATEGIC GOAL 2

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|--|--|----------------------|--------------------|
| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.1. Improve education, sports and culture | | |
| Title of measure | 2.1.1. Prepare preschool children for educational process | | |
| Description of the measure with indicative areas of activity | <ul style="list-style-type: none">• Improve and increase the number of educational programs for nursery teachers, preschool children and teachers,• Provide nursery and kindergarten placement for children of both employed and unemployed parents,• Implementation of the measure shall be ensured through nursery and kindergarten constructing and equipping, especially in areas far from the urban centre. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Percentage of preschool children [age 3-6] | 40% | 80% |
| | Number of educational programs for children | 3 | 6 |
| | Number of educational programs for nursery and preschool teachers | 1 | 4 |
| | Investments in preschool education infrastructure [total investment fund in BAM] | 0,00 | 50.000,00 |
| Development effects and the contribution of measure to priority implementation | Development effect of the measure is reflected in enabling preconditions for starting a family, increasing the number of preschool children, improving the quality of services and programs in preschool education institutions, better preparation of children and teaching staff for contemporary trends in future educational processes | | |
| Indicative financial construction with financing sources | Amount: BAM 50.000,00 Source: Municipality of Kakanj Budget and other sources | | |
| Period of measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj | | |
| Measure holders | Social Affairs, War-Veterans, Displaced Persons, Refugees, and Returnees Service, JU Mladost and other preschool institutions in Kakanj | | |
| Target groups | Institutions for preschool education, preschool children, nursery teachers, teachers, professional staff [speech therapists, audiologists, educators], community | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.1. Improve education, sports and culture | | |
| Title of measure | 2.1.2. Improve technological capacities of educational system | | |
| Description of the measure with indicative areas of activity | This measure shall aim to strengthen technological capacities according to modern standards, improve infrastructure and equipment of schools for distance learning, educate teaching staff for active monitoring of trends in the labour market and the offer of educational programs. This will allow better alignment of education and training system with labour market needs and competitiveness. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Number of primary and secondary schools equipped for distance learning | 0 | 9 |
| | Number of teaching system development programs for teaching staff | 1 | 3 |
| | Number of computers in primary and secondary schools, per 100 students | 3 | 10 |
| Development effects and the contribution of measure to priority implementation | Development effect of the measure is reflected in enabling conditions for an improved teaching process, technological capacities of educational institutions, willingness to implement high-quality distance learning, teaching staff educated to accept contemporary trends and create changes, increased interest in continuing education | | |
| Indicative financial construction with financing sources | Amount: BAM 50.000,00 Source: Municipality of Kakanj Budget and other sources | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj | | |
| Measure holders | Social Affairs, War-Veterans, Displaced Persons, Refugees, and Returnees Service, primary and secondary schools | | |
| Target groups | Institutions for primary and secondary education, students, teaching staff, community | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.1. Improve education, sports and culture | | |
| Title of measure | 2.1.3. Support further development of sports | | |
| Description of the measure with indicative areas of activity | The measure shall aim to carry out activities for the further development of sports. Support shall be provided or the promotion of sports, sports associations and improvement of sports infrastructure. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Reconstructed sports fields and courts [number of fields and courts] | 1 | 2 |
| | Number of outdoor sports and recreation facilities | 0 | 2 |
| | Constructed sports and recreation pool | 0 | 1 |
| | Register of sports clubs/associations and athletes | 0 | 1 |
| | Developed system for monitoring sports indicators | 0 | 1 |
| | Value of support programs for sports clubs /associations and athletes [investment fund in BAM] | 630.000,00 | 800.000,00 |
| Development effect and the contribution of measure to priority implementation | Development effect of the measure is reflected in the openness and accessibility of sports content. Improved sports infrastructure shall advance working conditions for sports clubs and associations and strengthen the role of sports in Kakanj Municipality, which is a prerequisite for a continuous promotion of sports and recreation for the entire population. A registry of sports clubs/associations shall provide better conditions for sports development. The implementation of the measure shall create better conditions for sports clubs which increase the base of young athletes through quality support programs [children and youth]. | | |
| Indicative financial construction with financing sources | Amount: BAM 12.300.000,00 Source: Municipality of Kakanj Budget and other sources | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj | | |
| Measure holders | Social Affairs, War-Veterans, Displaced Persons, Refugees, and Returnees Service, sports staff | | |
| Target groups | Sports clubs/associations, athletes, visitors and sport-activity participants | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.2. Provide professional, high-quality and accessible healthcare services | | |
| Title of measure | 2.2.1. Improve medical diagnostics with the use of modern devices, equipment and vehicles | | |
| Description of the measure with indicative areas of activity | The improvement and acquisition of new and modern diagnostic instruments, devices and equipment generally leads to improved healthcare, shortened waiting lists for patients in need and faster and better access to healthcare services. Persons with health insurance do not need other health institutions for diagnostic procedures. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Investment funds for equipment procurement [total investment fund in BAM] | 152.284,30 | 180.000,00 |
| Development effects and the contribution of measure to priority implementation | Improvement of diagnostic procedures, shortened waiting lists, avoiding diagnostic errors, easier access to health services for persons with health insurance. | | |
| Indicative financial construction with financing sources | Amount: BAM 1.000.000,00 Source: Municipal budget and the budgets of higher levels of government and own resources | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj, Kakanj Health Centre | | |
| Measure holders | FBiH/ZDC Public Health Institute, Municipality of Kakanj, Kakanj Health Centre, partner associations, institutions... | | |
| Target groups | Patients and users of Kakanj Health Centre services | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.2. Provide professional, high-quality and accessible healthcare services | | |
| Title of measure | 2.2.2. Higher degree of vaccinated preschool and school children | | |
| Description of the measure with indicative areas of activity | In the last few years, the level of compulsory immunization of preschool and school children in Kakanj Municipality has been at an extremely low level. To improve this, JU "Dom zdravlja" Kakanj should be doing a continuous campaign through HES, Family Medicine, Pediatrics, media and direct contacts of medical staff and patients. The importance of compulsory immunization, as well as other types of immunization (against COVID-19, influenza, etc.), should be presented to the public in a professional manner. One of the safest ways to prevent the occurrence and spread of infectious diseases is immunization process, which should be carried out according to the established immunization calendar. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Percentage of vaccinated in relation to the total number of children | 35% | 90% |
| Development effects and the contribution of measure to priority implementation | The risk of infectious diseases is reduced by increasing the number of immunized preschool and school children and the number of hospitalizations and more severe clinical manifestations of disease is reduced by increasing the number of immunized persons in general. | | |
| Indicative financial construction with financing sources | Amount: BAM 50.000,00 Source: Municipal budget and the budgets of higher levels of government and own resources | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj, Kakanj Health Centre | | |
| Measure holders | FBiH/ZDC Public Health Institute, Municipality of Kakanj, Kakanj Health Centre, partner associations, institutions... | | |
| Target groups | Patients and users of Kakanj Health Centre services | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.2. Provide professional, high-quality and accessible healthcare services | | |
| Title of measure | 2.2.3. Promote and raise immunization awareness | | |
| Description of the measure with indicative areas of activity | In terms of compulsory immunization against infectious diseases, it primarily focuses on children of preschool and school children, but if there is a fear of an infectious disease, then the immunization process applies to the entire population. COVID-19 serves as a good example. Immunization is the best and safest way to prevent morbidity, which can cause disability and death. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Funds allocated for promotion and advertising (Total amount in BAM) | 9.141,63 | 20.000,00 |
| Development effects and the contribution of measure to priority implementation | Preventing the occurrence and spread of infectious diseases, educating the disability and preventing infectious disease mortality | | |
| Indicative financial construction with financing sources | Amount: BAM 30.000,00 Source: Municipal budget and the budgets of higher levels of government and own resources | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj, Kakanj Health Centre | | |
| Measure holders | FBiH/ZDC Public Health Institute, Municipality of Kakanj, Kakanj Health Centre, partner associations, institutions... | | |
| Target groups | Patients and users of Kakanj Health Centre services | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.2. Provide professional, high-quality and accessible healthcare services | | |
| Title of measure | 2.2.4. Accredite family medicine teams | | |
| Description of the measure with indicative areas of activity | Accreditation and certification of family medicine teams should be carried out as a part of the activities of the entire Health Centre in order to avoid doing twice the work. The process of accreditation and certification of health institutions is a prescribed legal form for all health institutions and it is necessary to complete this process as soon as possible for the safety and quality of health services provided to patients. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Number of accredited medical teams in Kakanj Health Centre | 1 | 20 |
| Development effects and the contribution of measure to priority implementation | Accreditation and certification improve the quality of health services, patients are provided with safer and better quality health services, the work of healthcare workers is facilitated through the application of work procedure, etc. | | |
| Indicative financial construction with financing sources | Amount: BAM 20.000,00 Source: Municipal budget and the budgets of higher levels of government and own resources | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj, Kakanj Health Centre | | |
| Measure holders | FBIH/ZDC Public Health Institute, Municipality of Kakanj, Kakanj Health Centre, partner associations, institutions... | | |
| Target groups | Patients and users of Kakanj Health Centre services | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.3. Provide professional, quality and accessible services in the field of social care | | |
| Title of measure | 2.3.1. Strengthen non-institutional care services [counselling centres, safe houses, social care projects and NGO] | | |
| Description of the measure with indicative areas of activity | The measure shall target vulnerable families and groups through social care programs. The planned activities shall be focused on the integration of vulnerable and marginalized groups that cannot meet their needs with their own income and within the framework of standard public institutions programs. The results of the implemented measure will significantly improve the socio-economic status of vulnerable groups. The life quality of all targeted categories will be improved. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Number of partner social-care projects | 4 | 8 |
| | Number of SCC programs | 3 | 5 |
| Development effects and the contribution of measure to priority implementation | The implemented measure shall result in better socio-economic status of vulnerable groups. Life quality of target groups will be improved. | | |
| Indicative financial construction with financing sources | Amount: BAM 150.000,00 Source: foreign NGOs, Municipality of Kakanj, Social Care Centre | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj, Kakanj Social Care Centre | | |
| Measure holders | Municipality of Kakanj, Kakanj Social Care Centre, partner associations, institutions | | |
| Target groups | Users of Kakanj Social Care Centre services | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.3. Provide professional, quality and accessible services in the field of social care | | |
| Title of measure | 2.3.2. Improve socio-economic status of vulnerable groups | | |
| Description of the measure with indicative areas of activity | <p>The measure relates to the following categories of users:</p> <p>a) children without parental care;</p> <p>b) neglected children;</p> <p>c) deprived children;</p> <p>d) children whose development is hindered by family problems;</p> <p>e) children with mental and physical difficulties;</p> <p>f) financially insecure and unemployable persons;</p> <p>g) senior citizens without family care;</p> <p>h) persons with negative social behaviour;</p> <p>i) persons addicted to psychoactive substances.</p> <p>The activities aim to improve the quality of life, reduce the effects and consequences of socially negative behaviour and provide adequate care and assistance to persons in need.</p> | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Socio-economic Kakanj municipality population (number) | 0 | 1 (revidirana) |
| | Number of new social care program users (new legislation) | 2.500 | 3.000 |
| Development effects and the contribution of measure to priority implementation | The implemented measure shall result in better socio-economic status of vulnerable groups. Life quality of target groups will be improved. | | |
| Indicative financial construction with financing sources | Amount: BAM 12.000.000,00 Source: ZDC Budget and Municipality of Kakanj Budget | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj, Kakanj Social Care Centre | | |
| Measure holders | Municipality of Kakanj, Kakanj Social Care Centre, partner associations, institutions, etc. | | |
| Target groups | Beneficiaries of JU Centar za socijalni rad Kakanj (Social Care Centre) | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.4. Demographic policies through the improvement of education sector services tailored to labour market requirements | | |
| Title of measure | 2.4.1. Develop housing programs for young couples | | |
| Description of the measure with indicative areas of activity | The measure shall aim to enable necessary conditions for the full family growth through the development of programs to address the housing needs of young people | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Allocations from the Municipal budget | 50.000,00 | 80.000,00 |
| | Number of residence cancellation in Kakanj Municipality, population ages 20-35 | 110 | <50 |
| | Number of beneficiaries of young family subsidy | 59 | 80 |
| Development effects and the contribution of measure to priority implementation | The measure shall aim to lower the migration of the young population and to create a safer socio-economic environment for establishing the family as the fundamental unit of society. | | |
| Indicative financial construction with financing sources | Amount: BAM 350.000,00 Source: Municipality of Kakanj Budget | | |
| Period for measure implementation | 2021- 2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj, Social Affairs, War-Veterans, Displaced Persons Service, Refugees, and Returnees | | |
| Measure holders | Municipality of Kakanj, Social Affairs, War-Veterans, Displaced Persons, Refugees, and Returnees Service | | |
| Target groups | Population ages 20-35 | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.4. Demographic policies through the improvement of education sector services tailored to labour market requirements | | |
| Title of measure | 2.4.2. Develop a dual education system | | |
| Description of the measure with indicative areas of activity | The measure shall aim to stimulate interest in vocational education and to create conditions for the improvement of educational process with an emphasis on work-based learning | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | The number of students enrolled in vocational programs | 540 | >550 |
| | Number of companies interested in cooperation with vocational schools and mentorship programs | / | 10 |
| | Number of students interested in continuing education | / | 150 |
| Development effects and the contribution of measure to priority implementation | The effectiveness of the measure is assessed through an established dual education system which emphasizes particularly on the skilled trainings of students in companies since the very beginning of their education. Dual education allows for better harmonization between educational offer and requirements of labour market, and indirectly ensures employment growth and lower risk of the young professionals' outflow | | |
| Indicative financial construction with financing sources | Amount: BAM 1.000.000,00 Source: Municipality of Kakanj Budget Ministry of Education, Science, Culture and Sport of ZDC, business persons | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj, Social Affairs, War-Veterans, Displaced Persons, Refugees, and Returnees Service | | |
| Measure holders | Municipality of Kakanj, Ministry of Education, Science, Culture and Sport of ZDC [MOKS ZDK], companies | | |
| Target groups | Secondary education institutions, students, teachers, community | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.4. Demographic policies through the improvement of education sector services tailored to labour market requirements | | |
| Title of measure | 2.4.3. Develop a lifelong learning system | | |
| Description of the measure with indicative areas of activity | The measure shall aim to develop knowledge and experience of teachers employing andragogy in their teaching, monitoring labour market requirements and developing adult education programs. These programs shall develop a functional educational system for adults in terms of professional training, first professional qualification and further skills development. Educational institutions shall ensure that their programs are matched with labour market requirements. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Number of educational programs for adults | 0 | 2 |
| | The number of adults in educational programs | 0 | 10 |
| Development effects and the contribution of measure to priority implementation | The effectiveness of the measure is assessed through the increased number of persons qualified and trained for labour market through lifelong learning | | |
| Indicative financial construction with financing sources | Amount: BAM 60.000,00 Source: Municipality of Kakanj Budget, Ministry of Education, Science, Culture and Sport of ZDC [MOKS ZDK] | | |
| Period for measure implementation | 2021 – 2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj, Social Affairs, War-Veterans, Displaced Persons, Refugees, and Returnees Service | | |
| Measure holders | Municipality of Kakanj, Social Affairs, War-Veterans, Displaced Persons, Refugees, and Returnees Service, Ministry of Education, Science, Culture and Sport of ZDC [MOKS ZDK], educational institutions for adults | | |
| Target groups | Adults participating in lifelong learning, Kakanj residents | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.5. Improve public safety and security | | |
| Title of measure | 2.5.1. Prevent illegal exploitation of natural resources | | |
| Description of the measure with indicative areas of activity | Illegal exploitation of natural resources shall be prevented by analysing crime issues, other interesting events and documents. Also, 20 illegal coal mines in two areas (Ričica and Brnj) shall be closed. The measure will be implemented through the cooperation with Kakanj Police Department, Kakanj Coal Mine and FBiH Administration for Inspection Affairs with the aim of preventing the creation of new illegal coal mines. Illegal logging action plan should be created in cooperation with Cantonal Forestry Administration, JP ŠPD Kakanj and Cantonal Administration for Inspection Affairs. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Number of illegal coal mines | 20 | <10 |
| | The number of successfully implemented interventions following illegal logging reports, in accordance with "Save Forests" application | 0 | >20 |
| | Number of penalty charge notices (PCN) | 191 | <150 |
| Development effects and the contribution of measure to priority implementation | Kakanj Police Station, FBiH Administration for Inspection Affairs and Kakanj Coal Mine (RMU d.o.o. Kakanj) shall aim to close and prevent illegal coal mines and the transport of illegally obtained coal and to seize illegally exploited materials | | |
| Indicative financial construction with financing sources | Amount: BAM 50.000,00 Source: Municipality of Kakanj; Zenica-Doboj Canton Ministry of Internal Affairs (MUP ZDK) | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Ministry of Internal Affairs (MUP ZDK), Municipality of Kakanj, Kakanj Police Station, RMU d.o.o. Kakanj, FBiH Administration for Inspection Affairs, JP ŠPD Kakanj, Cantonal Administration for Inspection Affairs | | |
| Measure holders | Municipality of Kakanj, Kakanj Police Station | | |
| Target groups | Kakanj residents | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.5. Improve public safety and security | | |
| Title of measure | 2.5.2. Extend the video surveillance system | | |
| Description of the measure with indicative areas of activity | The full functioning of a surveillance system extends the coverage of various areas in order to gather necessary data and evidence in relation to criminal actions. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Number of security cameras | 30/7 | 40 |
| | Scope of video surveillance [%] | 10% | 40% |
| | Crime rate in in the coverage area | 163 | <100 |
| Development effects and the contribution of measure to priority implementation | The measure shall aim to create and extend a smooth functioning video surveillance system, bring criminals to justice, investigate and solve case, identify or verify the identity of a person using their face (facial recognition system), etc. crime rate shall be reduced. | | |
| Indicative financial construction with financing sources | Amount: BAM 150.000,00 Source: Municipal budget and the budgets of higher levels of government | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj, Kakanj Police Station | | |
| Measure holders | Municipality of Kakanj, Kakanj Police Station | | |
| Target groups | Kakanj residents | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.5. Improve public safety and security | | |
| Title of measure | 2.5.3. Improve the safety of road-users | | |
| Description of the measure with indicative areas of activity | The measure is aimed at improving the safety of road-users through the cooperation between the police and residents with focus on young adults, pupils and students. Activities within this measure refer to projects focused on education, increased controls, modernization and development of traffic culture. Other issues related to the safety of residents, pupils and students as road-users shall be taken into consideration. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Allocation of funds for traffic signals, modern information technologies and road equipment (BAM) | 36.000,00 | 45.000,00 |
| | Number of training courses for road-users | 2 | 5 |
| | Number of traffic controls | 6.468 | >7.000 |
| Development effects and the contribution of measure to priority implementation | The results of this measure are aimed at strengthening the awareness of road users about the importance of complying with traffic regulations, strengthening the establishment of control mechanisms over their enforcement, which would significantly contribute to the creation of safer conditions for the lives of Kakanj Municipality population. Government of Zenica-Doboj Canton and Ministry of Internal Affairs of Zenica-Doboj Canton shall take active steps to fill job vacancies, improve material and technical equipment of Kakanj Police Station, develop the system of video surveillance of urban and suburban areas. Consequently, public safety and security in Kakanj Municipality shall be improved. | | |
| Indicative financial construction with financing sources | Amount: BAM 70.000,00 Source: Ministry of Internal Affairs of Zenica-Doboj Canton, Municipality of Kakanj, funds and international organizations. | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Ministry of Internal Affairs of Zenica-Doboj Canton, Municipality of Kakanj, Kakanj Police Station, schools and other interested institutions. | | |
| Measure holders | Ministry of Internal Affairs of Zenica-Doboj Canton, Municipality of Kakanj, Kakanj Police Station. | | |
| Target groups | Kakanj residents. | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.6. Efficient and transparent operation of public institutions | | |
| Title of measure | 2.6.1. Capacity strengthening through education and training | | |
| Description of the measure with indicative areas of activity | The education of civil servants is a platform for strengthening the public sector. Public administration employees need to be trained to adequately respond to the needs of residents and serve as a place for adequate development and work of the employees themselves. Planned actions in this area will enable the acquisition of new knowledge and skills that are applicable in everyday work. The development of human resources, special quality and number of educational programs improve inter-institutional exchanges that significantly accelerate the development of public sector activities. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Allocation of Municipal funds for professional training (BAM) | 4.992,00 | 10.000,00 |
| | Number of employees who received training (Municipality of Kakanj employees) | 20 | 60 |
| | Number of trainings (assessment of the Municipal administration) | 15 | >7.000 |
| Development effects and the contribution of measure to priority implementation | Increasing the quality of public services, better preparedness for EU integration processes of BiH in the coming period and the accelerated development of public sector activities to meet the needs of residents. | | |
| Indicative financial construction with financing sources | Amount: BAM 50.000,00 Source: Municipality of Kakanj and Civil Service Agency of FBiH (ADS). | | |
| Period for measure implementation | 2021-2027 | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj. | | |
| Measure holders | Municipality of Kakanj. | | |
| Target groups | Kakanj residents, employees, other. | | |

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| Connection with strategic goal | 2. Improve the quality of social life of Kakanj Municipality population | | |
| Priority | 2.6. Efficient and transparent operation of public institutions | | |
| Title of measure | 2.6.2. Acquire IT equipment | | |
| Description of the measure with indicative areas of activity | 1. Software modernization [100 % switching to modern WIN instead of the existing OS], for more effective and efficient work and compatibility with higher level systems; 2. Continuous replacement and restoration of hardware parts; 3. Continuous digitalization process; 4. Development of information technology units which is one of the imperatives for efficient and transparent work of public sector. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Acquired equipment value [BAM] | 21.711,29 | 60.000,00 |
| | Number of e-applications in public services | 4 | 6 |
| Development effects and the contribution of measure to priority implementation | The measure aims at strengthening the internal IT support unit and interaction with residents that will ensure simpler and shorter procedures for providing public services, as well as responsibility, efficiency, effectiveness and transparency of public administration. | | |
| Indicative financial construction with financing sources | Amount: BAM 200.000,00 Source: Municipality of Kakanj Budget, higher government levels, other | | |
| Period for measure implementation | 2021-2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj. | | |
| Measure holders | Municipality of Kakanj. | | |
| Target groups | Kakanj residents, other. | | |

STRATEGIC GOAL 3

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.1. Sustainable risk management | | |
| Title of measure | 3.1.1. Strengthen the structures and infrastructure of the Civil Protection | | |
| Description of the measure with indicative areas of activity | <p>Strengthening the capacities and resources of Civil Protection implies the provision of the necessary equipment, buildings, facilities and systems for system for warning and operational management of protection and rescue operations, or key infrastructure for efficient operation during and after a natural disaster. This means necessary basic equipment, funds and reserves, equipped outpost centres in local communities, a logistics centre, etc. the importance of this measure and past experience suggest that Civil Protection should be equipped with high-quality and necessary equipment.</p> <p>It should also be continuously innovated, audited and improved. In addition, Municipality of Kakanj, in cooperation with UNDP, proposed a project for the allocation of funds through small measures that will be implemented through the DRR platform. For a better implementation of the above, it is necessary to fully equip a functionally organized and well-equipped operational centre of Civil Protection with trained staff, connected with the operational centres of neighbouring municipalities, cantons, Federation and BiH OKC – staff trained to collect damage and loss data and enter it into the DesInventar Sendai database. To form a general and specialized unit according to needs and assessment, to train companies and legal entities, important for protection and rescue, to equip their employees for protection and rescue actions.</p> | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Number persons professionally trained to act in case of natural disasters [according to CP structure] | 248 | 350 |
| | Number of facilities for housing structures of special importance for protection and rescue | 0 | 1 |
| | Equipment investment funds [in BAM] | 13.727,70 | 50.000,00 |
| Development effects and the contribution of measure to priority implementation | Increasing the safety of residents and their property, as a quality of life category, and the implementation of all other measures and priorities. | | |
| Indicative financial construction with financing sources | Amount: BAM 250.000,00 Source: BAM 150.000,00 [Municipality; BAM 50.000,00 – ZDC; BAM 50.000,00 – FBiH] | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj / Civil Protection. | | |
| Measure holders | FBiH Civil Protection Administration; Cantonal Civil Protection Administration; Civil Protection of Municipality of Kakanj. | | |
| Target groups | Kakanj residents. | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.1. Sustainable risk management | | |
| Title of measure | 3.1.2. Remediate existing and prevention of new landslides | | |
| Description of the measure with indicative areas of activity | Landslides and landslides represent a particularly significant danger in Kakanj Municipality. A large number of landslides in the Municipality represent a constant threat to the lives and property of residents. Landslides are often the result of various human activities, and in some localities they also occur as a result of changes caused by the Coal Mine operation. Considering the high costs of landslide remediation, the Municipality of Kakanj, within the scope of its capabilities, has been remediating the high priority landslides. However, this is insufficient to meet the actual costs of designing and carrying out remediation works, so it is necessary to work on providing additional funds and continue activities on landslide prevention and remediation. Municipality of Kakanj has done a Study on the geomechanical characteristics of soils in landslides in order to remediate landslides and solve the resulting problems. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Investments in existing landslides remediation [BAM] | 0,00 | 140.000,00 |
| | Investments in new landslides prevention [BAM] | 22.300,00 | 30.000,00 |
| Development effects and the contribution of measure to priority implementation | Improving life safety and property of residents, reducing risks and protecting environment, preserving soil, infrastructure and environment. | | |
| Indicative financial construction with financing sources | Amount: BAM 1.000.000,00 Source: Municipality of Kakanj | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj / Civil Protection. | | |
| Measure holders | FBiH Civil Protection Administration; Cantonal Civil Protection Administration; Civil Protection of Kakanj Municipality; Institute for Planning and Construction of Kakanj Municipality; Directorate for Roads of FBiH; JP ŠPD ZDK [Cantonal Forestry Company]. | | |
| Target groups | Kakanj residents. | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.1. Sustainable risk management | | |
| Title of measure | 3.1.3. Prevent fires in Kakanj Municipality | | |
| Description of the measure with indicative areas of activity | Fires occur often in the Kakanj municipality and the densely populated town area carries a constant risk of fire and its sudden spreading. There is constant risk of fires due to neglected land and carelessness when cleaning it. A few particularly dry years were good for forest fires especially in terms of their size and duration which made the extinguishing of the fire difficult. Measures for improving this field include the following: establish operations coordination centres necessary for managing, monitoring and warning; establish companies and legal entities important for protection and rescue. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Investment funds for fire prevention and protection [BAM] | 24.117,35 | 50.000,00 |
| | Number of fires in Kakanj Municipality [annually] | 200,00 | <50 |
| | Number of trainings in occupational safety and fire protection [DVD] | 7 companies [154 employees] | 10 companies [200 employees] |
| Development effects and the contribution of measure to priority implementation | Activities within this measure coupled with education and training for quality implementation of protection measures when natural disasters strike shall significantly reduce natural disaster risks for people, property and resources. | | |
| Indicative financial construction with financing sources | Amount: BAM 150.000,00 Source: Municipality of Kakanj, Cantonal Civil Protection Administration | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj / Civil Protection. | | |
| Measure holders | FBiH Civil Protection Administration; Cantonal Civil Protection Administration; Civil Protection of Kakanj Municipality; DVD; business entities from Kakanj Municipality. | | |
| Target groups | Kakanj residents. | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.2. Improve sustainable, environmentally acceptable spatial planning and utilities infrastructure | | |
| Title of measure | 3.2.1. Improve municipal waste management system and adapt to the regional disposal concept | | |
| Description of the measure with indicative areas of activity | <p>In Kakanj Municipality, there are no locations for separate collection of individual types of waste that can be used for recycling such as: glass, paper, PET, metal, etc. At the municipal Landfill, all types of hazardous and non-hazardous household waste are disposed of, including solid waste which makes it an uncontrolled landfill where basic elements of environmental and human protection do not exist; as such, it does not correspond to either domestic [Law on Environmental Protection, Law on Waste Management, etc.] or EU legislation [Waste Directive, 2006/12/EC, Waste Framework Directive, 2008/98/EC, Landfill Directive, 1999/31/EC, Directive on Landfills Amended by Regulation [EC] 1882/2003]. So far, the necessary documentation for obtaining urban planning approval has been prepared and the remediation of the existing municipal waste landfill should start with the preparation of investment, technical and environmental documentation. The main project has been completed and environmental permit obtained.</p> <p>The goals are:</p> <ul style="list-style-type: none"> • manage the entire area of the landfill in such a way that it does not present a danger to the environment (fire, explosion, dissemination of infectious diseases, etc.), • adapt the landfill capacity to the regional disposal concept, • reduce the impact of landfills on the environment, • ensure safe work for workers at the landfill without health risks, • ensure the application of BiH and EU norms and standards. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Share of treated municipal waste out of total waste generated % | 0 | 100 |
| Development effects and the contribution of measure to priority implementation | Measure implementation at this priority level shall allow: the improvement of the municipal waste management system and adaptation to the regional concept -remediation of the landfill. Extraction of useful components or waste management in RGH or SRF would contribute to Millennium Development Goals of decarbonisation, reducing CO2 emissions or effects that lead to climate change. | | |
| Indicative financial construction with financing sources | Amount: TOTAL 6.593.200,00 Source: International grants, FBiH Ministry of Environment and Tourism and 10% from Municipality of Kakanj Budget | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj; JP Vodokom d.o.o. Kakanj [Public Water Utility]. | | |
| Measure holders | Municipality of Kakanj, JP Vodokom d.o.o. Kakanj. | | |
| Target groups | Kakanj residents, ZDC, FBiH and BiH. | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.2. Improve sustainable, environmentally acceptable spatial planning and utilities infrastructure | | |
| Title of measure | 3.2.2. Improve water supply system | | |
| Description of the measure with indicative areas of activity | The measure includes: <ul style="list-style-type: none">• construction of water systems and supporting facilities in urban and local community areas in order to establish utility infrastructure for the basic needs of residents to be met, the supply of wholesome and clean water;• connection of new settlements to the water supply system;• turning over the management of a local water supply to the public water utility, continuous reconstruction of the water supply network in order to reduce drinking water losses. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Number of connections to the water supply system | 8.923 | 9.550 |
| Development effects and the contribution of measure to priority implementation | With activities to be implemented results to be achieved are: <ul style="list-style-type: none">• enough drinking water for a part of the population in the Municipality;• fulfilled conditions for industrial zone water supply;• improved environment and life quality the population. | | |
| Indicative financial construction with financing sources | Amount: | Source: | |
| | • BAM 140.000,00 | Municipality of Kakanj Budget | |
| | • BAM 1.899.400,00 | Zenica-Doboj Canton Budget | |
| | • BAM 350.000,00 | FBiH Budget, other | |
| | TOTAL: BAM 2.389.400,00 | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj/ Economy, Urbanism and Environmental Protection Service. | | |
| Measure holders | Economy, Urbanism and Environmental Protection Service; Ministry of Agriculture, Forestry and Water Management of Zenica-Doboj Canton; JP “Vodokom” d.o.o. Kakanj (Public Water Utility); Institute for Planning and Construction of Kakanj Municipality; local communities, residents. | | |
| Target groups | JP “Vodokom” d.o.o. Kakanj; local communities; residents in urban and rural areas of Kakanj Municipality. | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.2. Improve sustainable, environmentally acceptable spatial planning and utilities infrastructure | | |
| Title of measure | 3.2.3. Improve wastewater treatment system | | |
| Description of the measure with indicative areas of activity | The measure includes: <ul style="list-style-type: none">• construction of sewerage systems, sewerage networks and waste water treatment facilities in the Municipality in order to establish utilities infrastructure to meet the basic needs of residents and reduce pressure on the environment. The project is in accordance with the FBiH Water Management Strategy, Strategic goal: [5.1.];• Achieving and maintaining a good condition of surface and underground waters is done for the protection of aquatic flora and fauna and the needs of water users or operational goals;• reducing the pollution load from urban/sanitary wastewater and building a collection system, drainage and waste water treatment for settlements with less than 2,000 residents, defined as the most important source of water pollution. They are also defined as settlements that directly endanger the quality of surface and underground water due to undeveloped sewerage systems and wastewater treatment devices. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Number of connections to the sewerage system | 4.890 | 5.900 |
| | The first phase of the project “Construction of primary sewage collectors on the left and right bank of the Bosna river in Kakanj” was finished | 0 | 4.538.369.81 KM |
| Development effects and the contribution of measure to priority implementation | The construction and reconstruction of sewerage systems and sewerage networks shall ensure the basic needs of the population in urban and rural areas of the Municipality, create conditions for sustainable development, reduce the pollution of underground and surface water, and thus reduce the pressure on the environment. | | |
| Indicative financial construction with financing sources | Amount: | Source: | |
| | • BAM 140.000,00 | Municipality of Kakanj Budget | |
| | • BAM 601.500,00 | Zenica-Doboj Canton Budget | |
| | • BAM 350.000,00 | FBiH Budget | |
| | • BAM 4.538.369,81 | Loans and other sources | |
| | TOTAL: BAM 5.629.869,81 | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj/ Economy, Urbanism and Environmental Protection Service. | | |
| Nosioci mjere Measure holders | Economy, Urbanism and Environmental Protection Service, Ministry of Agriculture, Forestry and Water Management of Zenica-Doboj Canton, JP “Vodokom” d.o.o. Kakanj [Public Water Utility]; Institute for Planning and Construction of Kakanj Municipality, local communities, residents | | |
| Target groups | JP “Vodokom” d.o.o. Kakanj, local communities, Kakanj residents | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.2. Improve sustainable, environmentally acceptable spatial planning and utilities infrastructure | | |
| Title of measure | 3.2.4. Construct and modernise road infrastructure | | |
| Description of the measure with indicative areas of activity | In order to reduce population migration from our Municipality, and especially from rural to urban areas, measures to improve and modernize the road infrastructure shall be implemented. Thus, in the next period, even more intensive work shall be done on the modernization of roads. Also, the activities on the categorization of Kakanj-Tršće-Ponijeri local road into regional road will be intensified | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Density of modernized roads [km/100km ²] | 1,31 | 1,46 |
| | Length of regional roads [km] | 65,6 | 86,95 |
| | Length of asphalted unclassified roads in rural areas [km] | 239 | 249 |
| | The number of built road facilities according to needs in the analysed period [bridges, underpasses, roundabout intersections, etc.] | 0 | 3 |
| Development effects and the contribution of measure to priority implementation | In this way, opportunities would be opened for better development of tourism in the Municipality, better regional connection, asphaltting of unclassified roads in rural areas and construction of road facilities [bridges, underpasses, roundabout intersections, etc.] | | |
| Indicative financial construction with financing sources | Amount: BAM 10.000.000,00. Source: Municipality of Kakanj Budget, higher levels of government, other | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj, Institute for Planning and Construction of Kakanj Municipality. | | |
| Measure holders | Municipality of Kakanj, Institute for Planning and Construction of Kakanj Municipality and Ministry of Spatial Planning, Transport and Communications and Environmental Protection of Zenica-Doboj Canton. | | |
| Target groups | Kakanj residents, other | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.3. Ensure a sustainable natural resources management system and improve environment quality | | |
| Title of measure | 3.3.1. Enhance protected areas | | |
| Description of the measure with indicative areas of activity | The Municipality of Kakanj carried out the assessment of the flora and vegetation threat in the Study on the Valorisation of the Gornja Trstionica-Bukovica Natural Rainforest Area [Centre for Ecology and Natural Resources at the Faculty of Science of the University of Sarajevo, 2013] in accordance with IUCN [1994-2000] criteria and methodology. The assessment of the threat of vascular plants flora was carried out on the basis of criteria and methodology, relying on the preliminary assessment given in the Red List plant proposal [Šilić, 1992-1994]. It resulted in further scientific findings that the proposal for the level of protection of the mentioned area in order to preserve biological diversity is of importance for both BiH and the region. So it is a very significant area in which a smaller area is proposed for zone I [Nucleus I 56 ha and Nucleus I 24 ha], a part as a buffer zone [2.039 ha] or a transition zone [2.345 ha] for housing and economic activities related to the natural heritage in their vicinity. The Bistrik swamp also has a special significance for the biodiversity of the Municipality and beyond, given that it is an area protected by the Ramsar Convention signed by BiH. Also, this area is protected by the BIRD Directive [EU HABITAT]. The study proposed the zone I area of 31.57 ha [Strict protection without a possibility of impact on ecosystems; zona II area of 43, 20 ha [full protection of ecosystems important for the conservation of areas with controlled use of ecosystems important for sustainable development] and zona III area of 70.60 ha [controlled protection of ecosystems important for conservation with a greater degree of use of ecosystems important for sustainable development]. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Area designated as protected [ha] | 910 | 2.536,21 |
| Development effects and the contribution of measure to priority implementation | <ul style="list-style-type: none">• By establishing a wider protected area of the Trstionica river basin, there will be a possibility of protecting the cultural-historical and natural heritage.• Development of tourist potential of this area would ensure conditions for the preservation of culture, ecosystems and environment.• Development of tourist potential of this area would lead to the opening of new jobs and an active involvement of the local community.• This method of protection would enable the self-sustainability of this area over time. | | |
| Indicative financial construction with financing sources | Amount: | | Source: |
| | • BAM 5.000,00 | | Municipality of Kakanj Budget |
| | • BAM 45.000,00 | | higher levels of government |
| | TOTAL: BAM 50.000,00 | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj, ŠPD Kakanjsko [Forestry Company]. | | |
| Measure holders | Municipality of Kakanj, ŠPD Kakanjsko. | | |
| Target groups | Kakanj residents, nature lovers, recreationists, scientific research organizations, faculties, etc. | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.3. Ensure a sustainable natural resources management system and improve environment quality | | |
| Title of measure | 3.3.2. Build environmental awareness of residents [reduction of air pollution, energy efficiency, water supply and wastewater drainage, environment protection, etc.] | | |
| Description of the measure with indicative areas of activity | Activities aimed at informing residents about the importance of environmental protection in order to influence their awareness, through workshops and meetings for educational purposes [how individuals or groups can contribute to air pollution reduction, energy savings, water protection and prevention of water pollution, nature protection etc.]. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Total funds investment [BAM] | 55.000,00 | 56.650,00 |
| Development effects and the contribution of measure to priority implementation | Improvement in terms of the state of the environment by influencing the environmental awareness of residents. | | |
| Indicative financial construction with financing sources | Amount: BAM 385.000,00 Source: higher government levels, Municipality of Kakanj Budget | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj. | | |
| Measure holders | Economy, Urbanism and Environmental Protection Service. | | |
| Target groups | Kakanj residents | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.3. Ensure a sustainable natural resources management system and improve environment quality | | |
| Title of measure | 3.3.3. Build envelope performance of public and private buildings | | |
| Description of the measure with indicative areas of activity | Implementation of public procurement procedures and performance of works to improve energy efficiency through energy efficient building envelopes for buildings owned by the Municipality. Announcing public calls for co-financing to improve building envelope performance of residential buildings. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Total funds investment [BAM] | 32.526,47 | 11.374.792,65 |
| Development effects and the contribution of measure to priority implementation | Increase the energy efficiency of buildings, reduce building energy consumption, with the aim of financial savings, which shall also enhance the visual aspect of buildings. | | |
| Indicative financial construction with financing sources | Amount: BAM 11.374.792,65 Source: higher government levels, Municipality of Kakanj Budget, EU funds, buildings owners | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj. | | |
| Measure holders | Economy, Urbanism and Environmental Protection Service | | |
| Target groups | Public institutions employees and service users, individual and collective housing residents. | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.3. Ensure a sustainable natural resources management system and improve environment quality | | |
| Title of measure | 3.3.4. Build energy efficiency of the district heating system | | |
| Description of the measure with indicative areas of activity | Building energy efficiency of the district heating system entails the reconstruction of the old hot water and steam pipes network. The reconstruction comprises of the replacement of existing pipes with pre-insulated pipes with a higher degree of thermal protection and larger diameter, and thus creating preconditions for the further expansion of the district heating system and achieving additional heat loss reductions. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Funds investment [BAM] | 400.000,00 | 412.000,00 |
| Development effects and the contribution of measure to priority implementation | Building energy efficiency of the district heating system, reducing heat losses and setting the preconditions for the expansion of the district heating system. | | |
| Indicative financial construction with financing sources | Amount: BAM 6.000.000,00 Source: higher government levels, Municipality of Kakanj Budget, EU funds, JP Grijanje d.o.o. Kakanj [Public Heating Utility] | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj. | | |
| Measure holders | Economy, Urbanism and Environmental Protection Service. | | |
| Target groups | Residents of the inner town and suburbs. | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.3. Ensure a sustainable natural resources management system and improve environment quality | | |
| Title of measure | 3.3.5. Reduce air pollution 3.3.5.1. Build infrastructure in the town centre to reduce air pollution [bike trail extension, electric scooters charging stations, introducing public bike-sharing system] | | |
| Description of the measure with indicative areas of activity | Improvement and reduction of air pollution in the town centre shall be achieved through the intensive construction and reconstruction of road facilities and supporting infrastructure in the town centre and beyond (bike trail extension, bike parking space, electric bikes, etc.). | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Funds investment [BAM] | 150.000,00 | 154.500,00 |
| Development effects and the contribution of measure to priority implementation | Improvement of air quality in the town centre and beyond, reduction of traffic, reduction of the number of cars, construction of bike trails and free and safe parking spaces for electric and other bicycles. | | |
| Indicative financial construction with financing sources | Amount: BAM 500.000,00 Source: higher government levels, Municipality of Kakanj Budget | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj. | | |
| Measure holders | Economy, Urbanism and Environmental Protection Service. | | |
| Target groups | Kakanj residents, other. | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.3. Ensure a sustainable natural resources management system and improve environment quality | | |
| Title of measure | 3.3.5. Reduce air pollution 3.3.5.2. Improve the maintenance of roads and other public areas [using modern sweepers, etc.] – prevention of secondary dust emissions | | |
| Description of the measure with indicative areas of activity | Kakanj is an industrial environment where the big operator production processes emit large amounts of dust which is spread by wind, transport and similar means and deposited on the soil. Traffic causes dust emissions affecting air quality, especially in the town centre where traffic frequency is higher. Better cleaning of roads with modern sweepers throughout the year shall improve air quality and thus the life quality of Kakanj Municipality residents. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Total funds investment [BAM] | 564.739,41 | 581.681,60 |
| Development effects and the contribution of measure to priority implementation | Improving air quality by reducing deposited dust emission [preventing secondary dust emission] and dust emission during traffic in the inner town area and beyond, set preconditions for the procurement of modern sweepers. | | |
| Indicative financial construction with financing sources | Amount: BAM 3.157.000,00 Source: higher government levels, Municipality of Kakanj, JP Vodokom d.o.o. Kakanj [Public Water Utility] | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj. | | |
| Measure holders | Economy, Urbanism and Environmental Protection Service. | | |
| Target groups | Residents of the inner town and suburbs. | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.3. Ensure a sustainable natural resources management system and improve environment quality | | |
| Title of measure | 3.3.5. Reduce air pollution 3.3.5.3. Improve air quality by financing the procurement, planting and maintaining of trees to reduce the concentration of airborne particles | | |
| Description of the measure with indicative areas of activity | Improvement of air quality shall be achieved through intensive and planned tree planting and remediation and reclamation of degraded areas in accordance with the legal procedure. Planting, seedlings, maintaining and reclaiming degraded areas result in cleaner air, mitigating the consequences of climate change. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Total funds investment [BAM] | 110.000,00 | 113.300,00 |
| Development effects and the contribution of measure to priority implementation | Improving air quality to reduce the concentration of airborne particles. | | |
| Indicative financial construction with financing sources | Amount: BAM 770.000,00 Source: higher government levels, Municipality of Kakanj Budget | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj. | | |
| Measure holders | Economy, Urbanism and Environmental Protection Service. | | |
| Target groups | Kakanj residents. | | |

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| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.3. Ensure a sustainable natural resources management system and improve environment quality | | |
| Title of measure | 3.3.5. Reduce air pollution 3.3.5.4. Support the construction of solar power plants | | |
| Description of the measure with indicative areas of activity | Recently, there has been a great interest in the construction of small solar power plants by private investors in Kakanj Municipality. Including them in the JP Elektroprivreda BiH system would result in less CO2 emissions into the atmosphere (increasing electricity production by renewable energy sources). | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Funds investment [BAM] | 0,00 | 85.715,00 |
| Development effects and the contribution of measure to priority implementation | Increasing electricity production by renewable energy sources in the total energy balance, reduction of CO ₂ emission. | | |
| Indicative financial construction with financing sources | Amount: BAM 600.000,00 Source: Private investors | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj. | | |
| Measure holders | Private investors, Municipality of Kakanj | | |
| Target groups | Private investors | | |

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|--|---|----------------------|--------------------|
| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.3. Ensure a sustainable natural resources management system and improve environment quality | | |
| Title of measure | 3.3.5. Reduce air pollution 3.3.5.5. Co-finance the procurement of boilers powered by a renewable fuel source and heat pumps | | |
| Description of the measure with indicative areas of activity | Improvement of air quality shall be achieved through the replacement of existing boilers with fossil-fuel based district heating (coal, fuel oil, etc.) pellet and biomass boilers and heat pumps in residential and commercial buildings in Kakanj Municipality. The measure is reflected in the principle of co-financing and supporting interest groups and individuals. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Investment funds [BAM] | 0,00 | 50.000,00 |
| Development effects and the contribution of measure to priority implementation | Reduced number of individual fossil-fuel boilers, improved air quality in Kakanj Municipality. | | |
| Indicative financial construction with financing sources | Amount: BAM 350.000,00 Source: higher government levels, Municipality of Kakanj Budget, EU funds, private entities | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj. | | |
| Measure holders | Economy, Urbanism and Environmental Protection Service. | | |
| Target groups | Municipal residents with no possibility to connect to the district heating system. | | |

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|--|--|----------------------|--------------------|
| Connection with strategic goal | 3. Sustainably manage environment, improve utility and road infrastructure and reduce natural disaster risks | | |
| Priority | 3.3. Ensure a sustainable natural resources management system and improve environment quality | | |
| Title of measure | 3.3.6. Expand the district heating system | | |
| Description of the measure with indicative areas of activity | Improving energy efficiency through the expansion of the district heating system implies the expansion of the district heating system to suburban settlements: Varda, Povezice, Pope, Plandište, Zgošća and a part of Kakanj II local community. A project for the expansion of the system has been prepared, and in the next period it is necessary to provide funds for works to be carried out. | | |
| Strategic projects | | | |
| Indicators for monitoring measure results | Indicators | Baseline values 2020 | Target values 2027 |
| | Investment funds [BAM] | 400.000,00 | 412.000,00 |
| Development effects and the contribution of measure to priority implementation | Improved air quality and reduced number of solid fuel boilers in Kakanj Municipality. | | |
| Indicative financial construction with financing sources | Amount: BAM 22.000.000,00 Source: Higher government levels, Municipality of Kakanj Budget, EU funds, loans, JP Grijanje d.o.o. Kakanj [Public Heating Utility] | | |
| Period for measure implementation | 2021 - 2027. | | |
| Institution responsible for coordination of measure implementation | Municipality of Kakanj; JP Grijanje Kakanj. | | |
| Measure holders | Economy, Urbanism and Environmental Protection Service. | | |
| Target groups | Residents of the inner town and suburbs. | | |

BOSNA I HERCEGOVINA
FEDERACIJA BOSNE I HERCEGOVINE
ZENIČKO-DOBOJSKI KANTON
OPĆINA KAKANJ
Općinsko vijeće

Broj: 01/1-18-174/22
Kakanj, 31.05.2022. godine

Na osnovu člana 8. i 13. Zakona o principima lokalne samouprave u Federaciji Bosne i Hercegovine („Službene novine Federacije BiH“, broj: 49/06 i 51/09), člana 24. Statuta Općine Kakanj („Službene novine Općine Kakanj“, broj: 4/08) i člana 94. Poslovnika o radu Općinskog vijeća („Službene novine Općine Kakanj“, broj: 6/11, 4/16 i 6/16), Općinsko vijeće na 18. sjednici, održanoj dana 31.05.2022. godine, **donijelo je**

ODLUKU

o usvajanju Strategije razvoja općine Kakanj 2021 – 2027. godina

Član 1.

Ovom Odlukom usvaja se Strategije razvoja općine Kakanj za period 2021 – 2027. godina.

Član 2.

Sastavno dio ove Odluke je Strategije razvoja općine Kakanj 2021 – 2027. godina.

Član 3.

Ova Odluka stupa na snagu danom donošenja, a bit će objavljena u „Službenim novinama Općine Kakanj“.



BOSNIA AND HERZEGOVINA
FEDERATION OF BOSNIA AND HERZEGOVINA
ZENICA-DOBOJ CANTON
MUNICIPALITY OF KAKANJ
Municipal Council

No. 01/1-18-174/22
Kakanj, 31 May 2022

Pursuant to Articles 8 and 13 of the Law on Principles of Local Self-Government in the Federation of Bosnia and Herzegovina (Official Gazette of the Federation of BiH, 49/06, and 51/09) and Article 24 of the Statute of the Municipality of Kakanj (Official Gazette of the Municipality of Kakanj, 4/08), and Article 94 of the Rules of Procedure of the Municipal Council (Official Gazette of the Municipality of Kakanj, 6/11, 4/16, and 6/16), the Municipal Council, at its 18th session held on 31 May 2022, **issued the following:**

DECISION

adopting the Development Strategy of Kakanj Municipality 2021-2027

Article 1

By this Decision, the Development Strategy of Kakanj Municipality 2021-2027 is adopted.

Article 2

The Development Strategy of Kakanj Municipality 2021-2027 is an integral part of this Decision.

Article 3

This Decision enters into force on the day of its adoption and will be published in the Official Gazette of the Municipality of Kakanj.

CHAIRMAN OF THE MUNICIPAL COUNCIL

Slaven Katičić
(signed: S. Katičić)

(Stamp: Municipal Council Kakanj, Municipality of Kakanj, Zenica-Doboj Canton, Federation of Bosnia and Herzegovina, Bosnia and Herzegovina)



MUNICIPALITY OF KAKANJ



Development
Strategy



Promotional video
Općina Kakanj



Ulica branilaca br. 1 |



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