

QUESTION: MEASURING THE QUALITY OF LIFE IN THE URBAN AXIS BISTRITA-BECLEAN - NĂSĂUD-SÂNGEORZ-BĂI , COMPARATIVE ANALYSIS WITH THE URBAN AXIS TG MUREŞ-SUCEAVA-BAIA MARE-CLUJ-NAPOCA

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Abstract: *This questionnaire provides a profile of the quality of life in the community of Urban Axis 1 Bistrita-Beclean -Năsăud-Sângeorz-Băi and Urban Axis 2 Tg Mureş -Suceava -Baia Mare -Cluj-Napoca based on survey data collected in the period 2021-2023. The survey captures five major community quality-of-life constructs, plus demographic data. These are (1) resident satisfaction with selected local businesses, plus resident satisfaction with local businesses in general (the survey item capturing residents' overall assessment of local businesses); (2) resident satisfaction with selected local government services, plus resident satisfaction with local government services in general (the survey item capturing residents' overall assessment of local government services); (3) resident satisfaction with selected local nonprofit services accompanied by resident satisfaction with local nonprofit services in general (survey item capturing residents' overall assessment of local nonprofit services); (4) resident satisfaction with local conditions; and (5) resident satisfaction with quality of life in the community in general, other areas of life, and satisfaction with life in general. In addition, demographic items were included in the survey.*

Keywords: Measuring the quality of life, urban axis, resident satisfaction, five major sets of community-quality-of-life constructs, inhabitants of the urban axis.

1. Introduction

This survey provides a detailed picture of the community quality of life among City residents in the geographic axis based on survey data collected from 2021-2023. The survey includes five major sets of community quality of life constructs plus demographics these are:

A. Resident satisfaction with local conditions (survey items capturing satisfaction with the physical environment, neighbourhood, housing, public safety, street lighting, cost of utilities, real estate taxes, etc.);

B. Residents' satisfaction of specific local businesses (survey items capturing satisfaction with banking, insurance services, transportation services, restaurants and clubs, supermarkets, speciality stores, private healthcare, telecommunications, and electricity services .), accompanied by residents' satisfaction of overall local businesses (survey item capturing residents' global evaluation of local business);

C. Resident satisfaction with specific government local services (Survey items capturing satisfaction with the fire department, rescue squad, water services, postal services, police, voter registration, and public health services.), accompanied by resident satisfaction with overall local government services (Survey item capturing residents' overall assessment of local government services);

D. Resident satisfaction with selected local non-profit services (survey items recording satisfaction with alcohol and drug abuse programs, crisis intervention programs, adoption and adult care services, support groups, chamber of commerce, legal assistance, mental health services, senior citizen programs, adult education, homeless food and shelter.), accompanied by residents' satisfaction with local nonprofit services in general (Survey item comprising residents' overall assessment of local nonprofit services);

E. Residents' satisfaction with the quality of life of the community in general, with other areas of life (work life, financial situation, health, education, leisure life, spiritual life, cultural life) and satisfaction with life in general;

For each segment, the demographic characteristics of the respondents are analysed and an impact analysis by segment is also carried out.

Period of application of the questionnaire 2021-2023, for each segment in the researched article the following response period is allocated:

- Segment A - January 2021 - June 2021;
- Segment B - July 2021 - December 2021;
- Segment C January 2022 - June 2022;
- Segment D July 2022-December 2022;
- Segment E January 2023-June 2023.

2. Theoretical Model

2.1 Conceptual Background

The conceptual model underlying the Community Quality of Life (CQOL) (Sirgy et al., 2000; Sirgy and Cornwell, 2001). The CQOL measure is essentially based on the bottom-up theory of life satisfaction, a theory widely accepted in quality-of-life studies (e.g., Andrews and Withey, 1976; Campbell, Converse, and Rodgers, 1976). The basic premise of the bottom-up theory is that the life satisfaction of community residents is influenced by the satisfaction they experience about their life domains and sub-domains. Specifically, life satisfaction is construed to be on top of a satisfaction hierarchy and is mostly determined by satisfaction with life domains (e.g., satisfaction with community, family, work, social life, health, and so on).

Satisfaction with a particular life domain (e.g., satisfaction with community life), in turn, is influenced by lower levels of life concerns within that domain (e.g., satisfaction with services provided in the local community). Hence, residents who feel highly satisfied with their various life domains (i.e., high satisfaction with community life, health life, work life, family life, neighbourhood life, and leisure life) are likely to generally express high levels of life satisfaction. The effect within those life domains spills over vertically to the most super-ordinate domain (life in general), thus determining life satisfaction. Similarly, satisfaction with community life is mostly determined by satisfaction with the life conditions/concerns associated with the community life domain such as services and conditions in the community.

As shown in the figure, residents' satisfaction with specific local businesses (e.g., banking services, insurance services, taxi services, restaurants and nightclubs, supermarkets, healthcare services, telecommunications, and electricity services) influences their overall satisfaction with local businesses. Similarly, residents' satisfaction with specific local government services (e.g., fire department, rescue squad, library, sanitation/refuse services, water services, postal services, police, voter registration, motor registration, and public health services) influences their overall satisfaction with local government. Furthermore, residents' satisfaction with specific local non-profit services (e.g., alcohol/drug abuse services, crisis intervention, religious services, support groups, chamber of commerce, legal aid, mental health services, senior citizen services, adult education, food and shelter for the homeless, youth services) influences their overall satisfaction with local non-profit services.

Residents' overall satisfaction with local business, local government, and local nonprofit services, in turn, influence their overall satisfaction with community quality of life. Their overall satisfaction with community quality of life is additionally influenced by residents' satisfaction with other local conditions (e.g., quality of the physical environment, neighbourhood, and housing).

Residents' overall satisfaction with community quality of life influences their overall life satisfaction conjoined with the influence of their overall satisfaction with other life

domains (e.g., work life, financial situation, health, education, friends, leisure life, spiritual life, cultural life, and social status).

The core of the Community-Quality-of-Life survey comprises satisfaction with specific local businesses, government services, and nonprofit services as well as satisfaction with local conditions. These constructs and measures have been administered in a variety of communities in the United States and other countries to capture the well-being of community residents in towns, cities, and other geopolitical units (e.g., Forjaz et al., 2011; Gullion et al., 2015; Potapov, Shafranskaya, and Bozhya-Volya, 2016; Rezvani and Mansourian, 2013; Rezvani, Mansourian, and Sattari, 2013; Sirgy et al. 2000; Sirgy and Cornwell, 2001; Stephenson and Yerger, 2013; 2014) and validated in terms of its prediction of constructs such as overall satisfaction with community quality of life, and overall life satisfaction.

2.2 Structure of the questionnaire

Eight hundred (N = 800) residents were randomly selected from the mailing list—100 residents for each component city of the axis.

The situation of the answers : Bistrita: 100, Beclean: 100, Năsăud 100, Sângeorz -Băi 100, Tg Mureş 100, Suceava 100, Baia Mare 100, Cluj-Napoca 100. thus 800 answers out of the 800 proposed were obtained as follows: 70 % in the field, 30 % online. All sampled residents in the urban axis completed the survey by its closing date, an acceptable response rate given previous studies of community resident surveys.

3. Results and Discussions

A. Resident satisfaction with local conditions

A. Resident satisfaction with local conditions

How do you feel about the following local conditions?

- The quality of green spaces

Fig.1 Opinion about Quality of Green Spaces in Bistrița-Beclean-Năsăud-Sângeorz-Băi Urban Axis

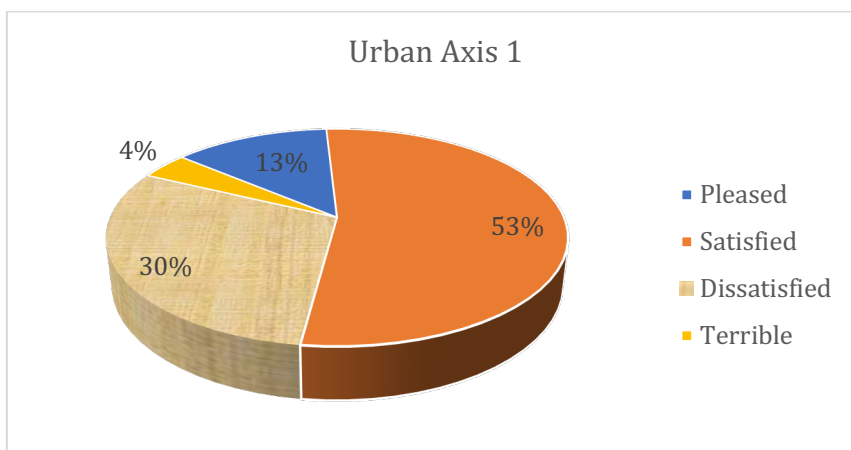
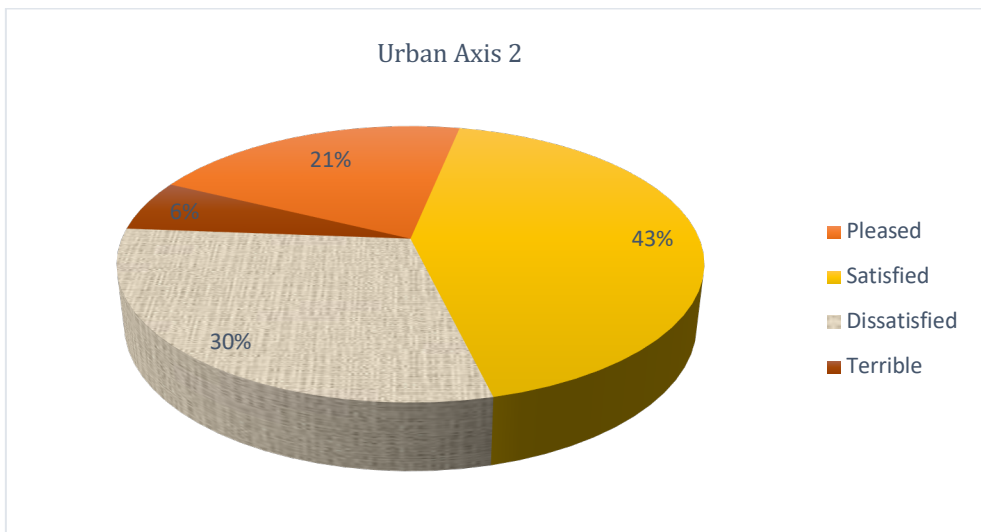


Fig.2 Opinion about Quality of Green Spaces in Tg.Mureş-Suceava-Baia Mare-Cluj-Napoca urban axis



- Neighbours

Fig.3 Opinion about Neighbours in Bistrița-Beclean-Năsăud-Sângeorz-Băi urban axis

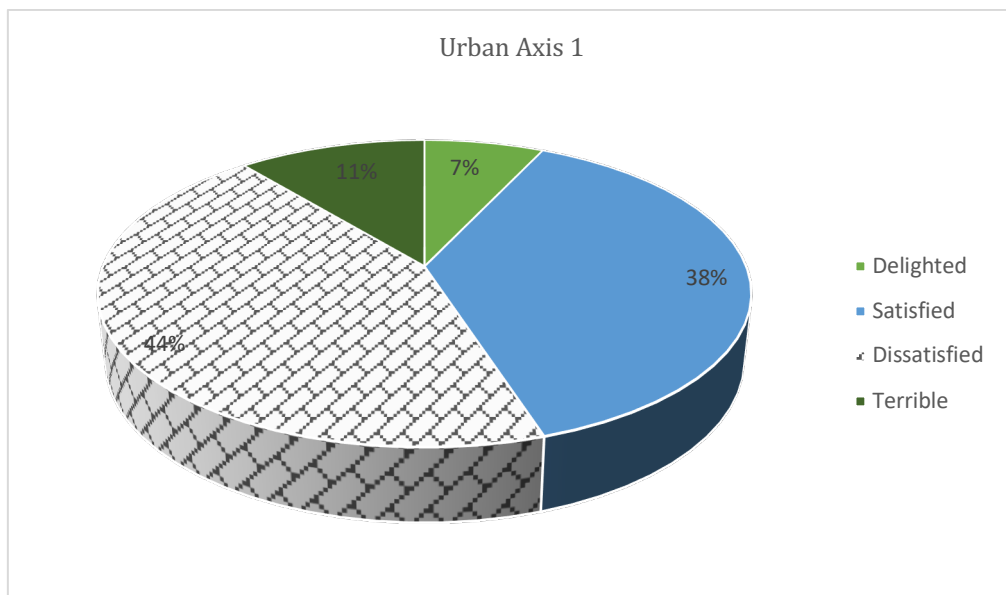
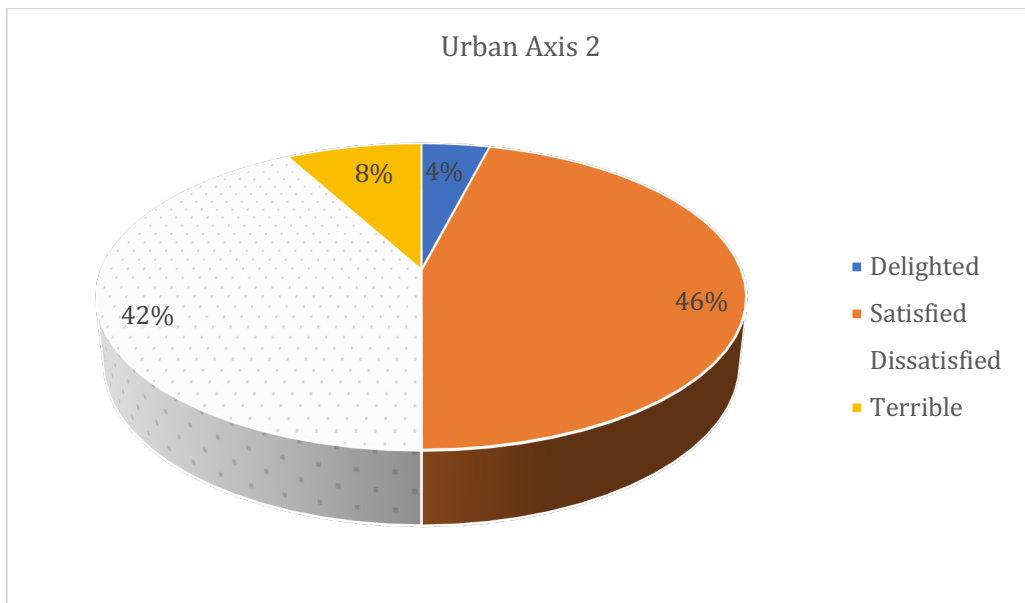


Fig.3 Opinion about Neighbours in Tg. Mureş-Suceava-Bais Mare -Cluj-Napoca urban axis



- Available accommodation (apartment)

Fig.4 Opinion about Available Accommodation (apartment) in Bistrița-Beclean-Năsăud-Sângeorz-Băi urban axis

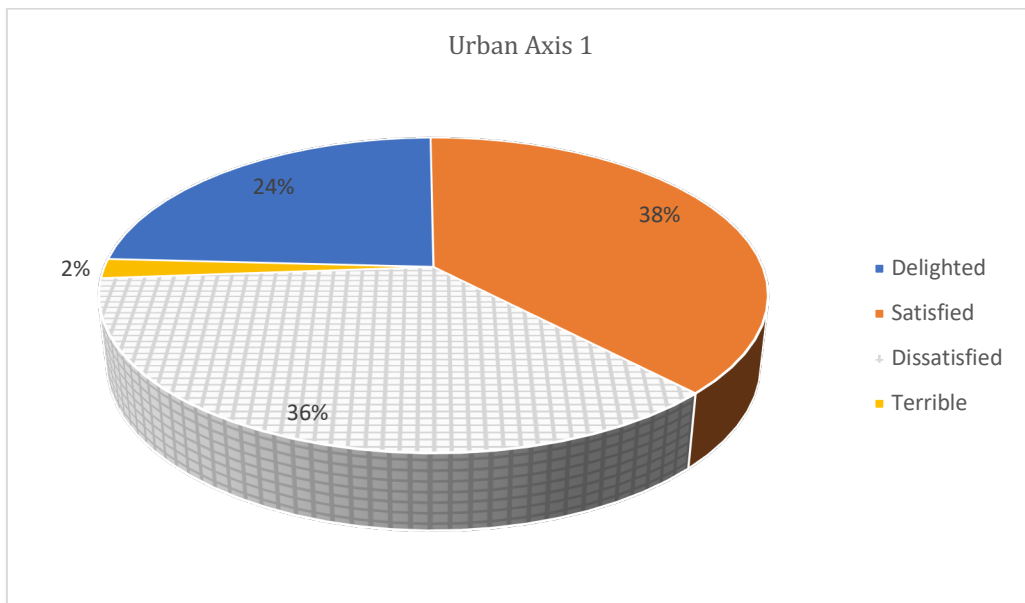
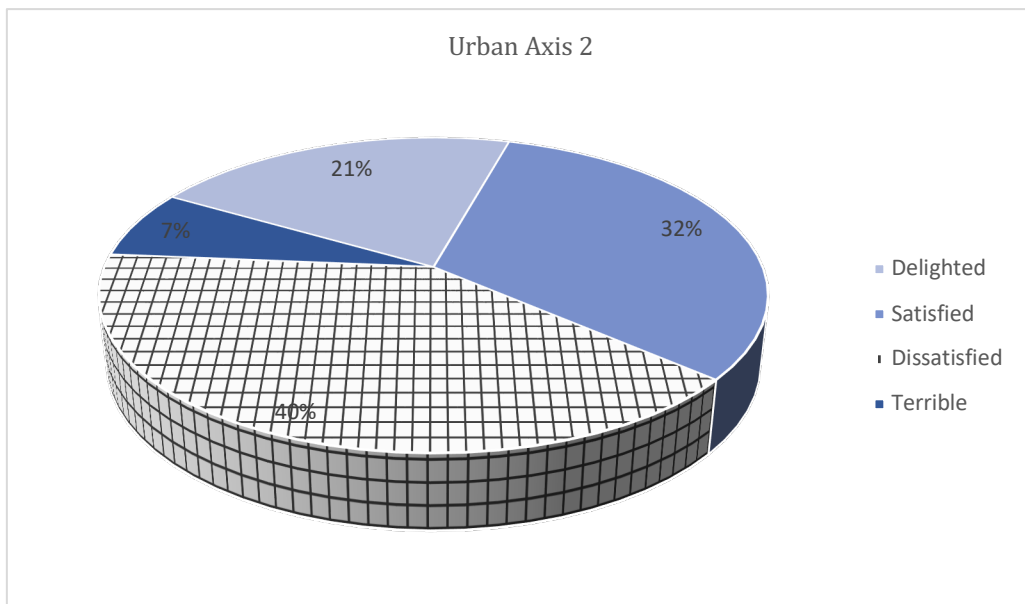


Fig.5 Opinion about Available Accommodation (apartment) in Tg. Mureş-Suceava-Baia Mare – Cluj-Napoca urban axis



- Public Safety

Fig.6 Opinion about Public Safety in Bistrița-Beclean-Năsăud-Sângeorz-Băi urban axis

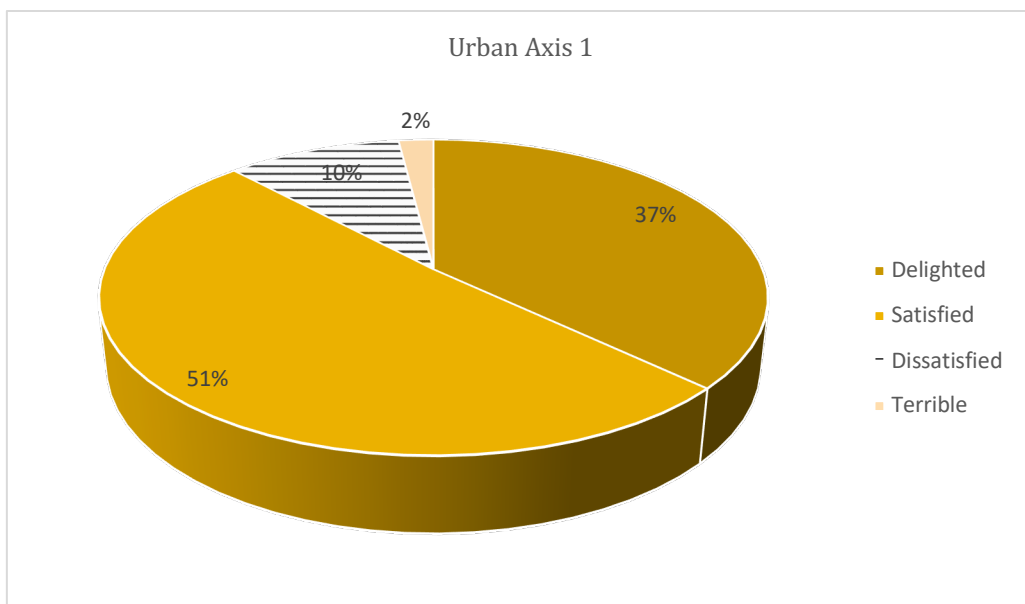
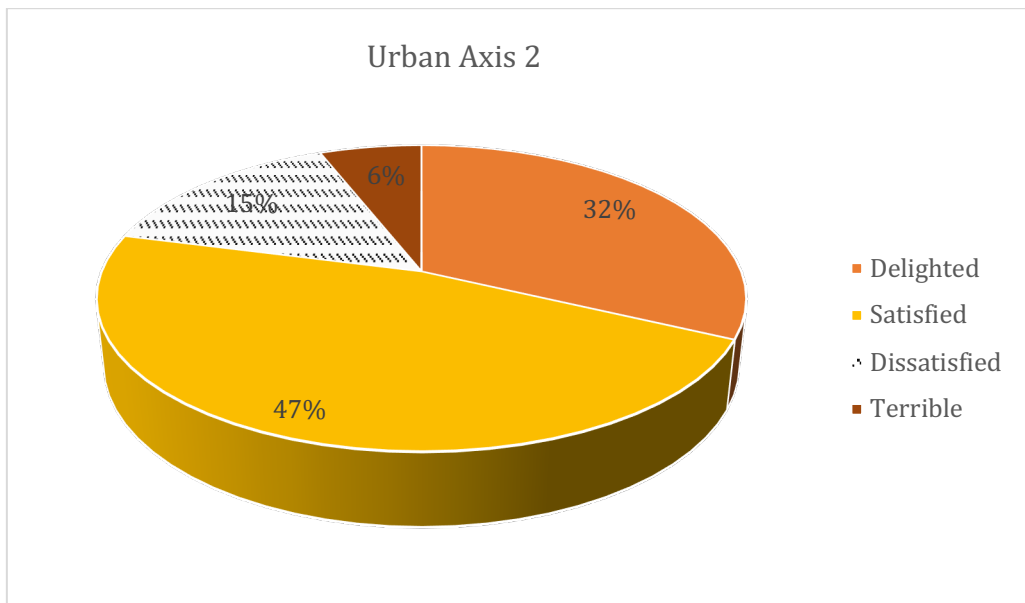


Fig.7 Opinion about Public Safety in Tg.Mureş-Suceava -Baia Mare -Cluj-Napoca urban axis



- Street lighting

Fig.8 Opinion about street lighting in Bistrița-Beclean-Năsăud-Sângeorz-Băi urban axis

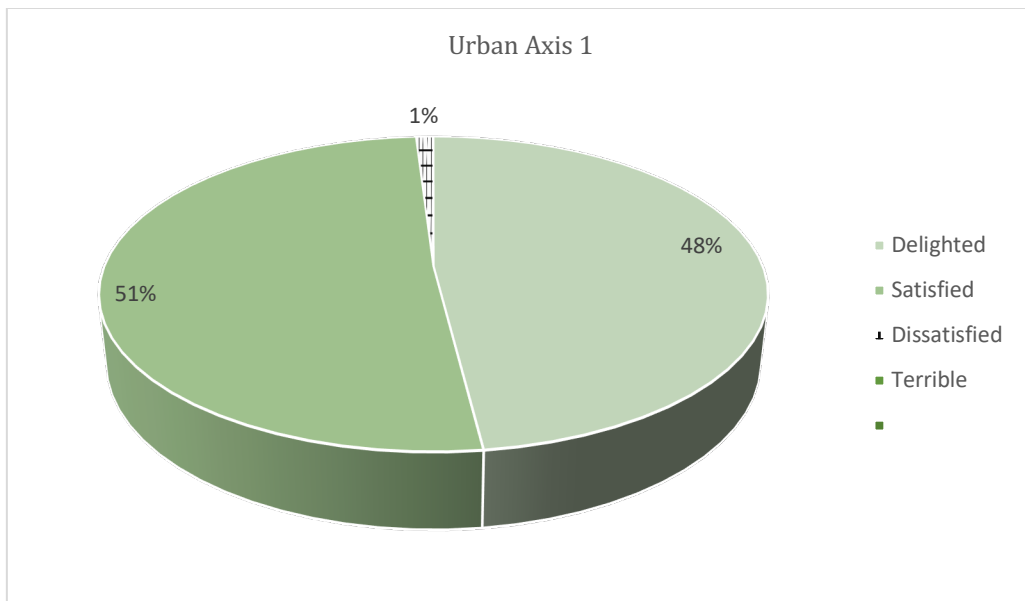
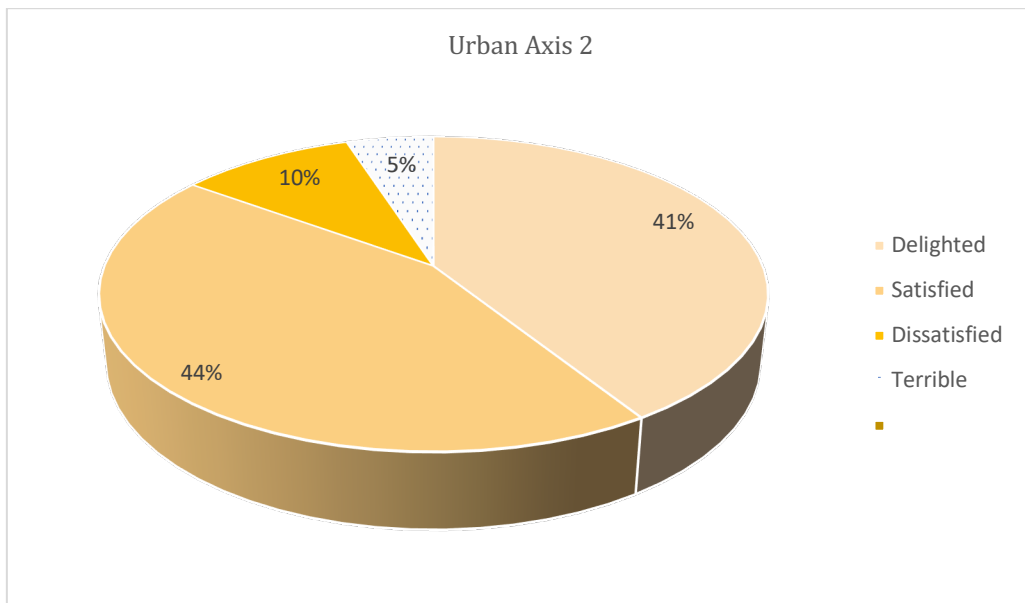


Fig.9 Opinion about street lighting in Tg.Mureş-Suceava -Baia Mare -Cluj-Napoca urban axis



- Utility costs

Fig.10 Opinion about utility costs in Bistrița-Beclean-Năsăud-Sângeorz-Băi urban axis

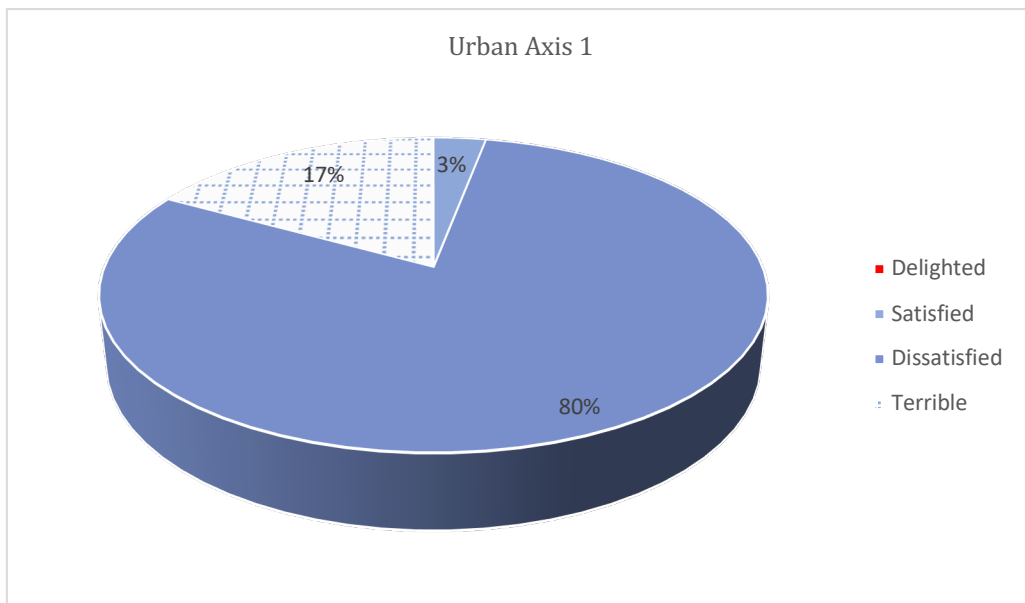
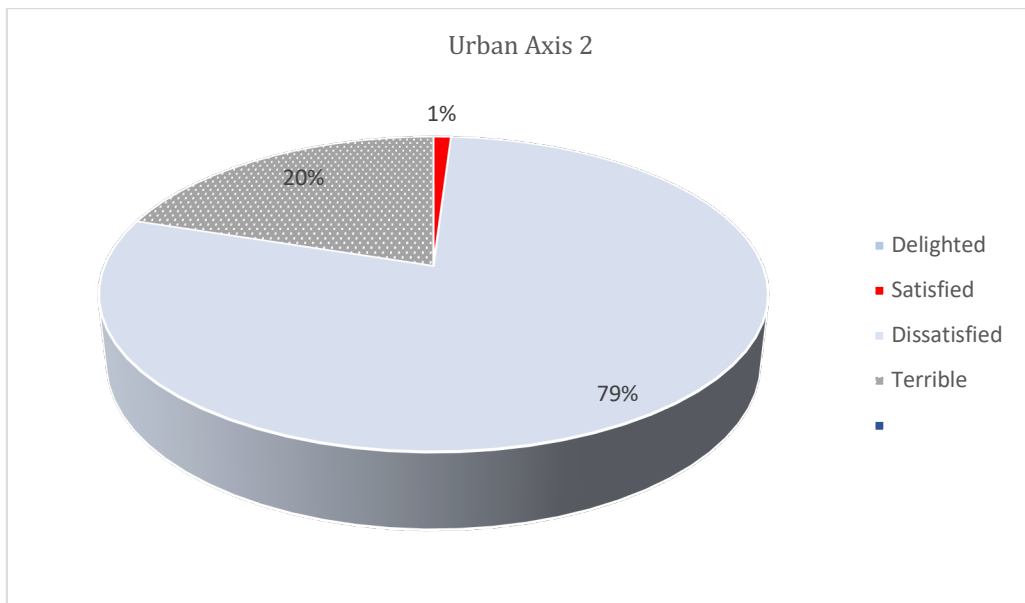


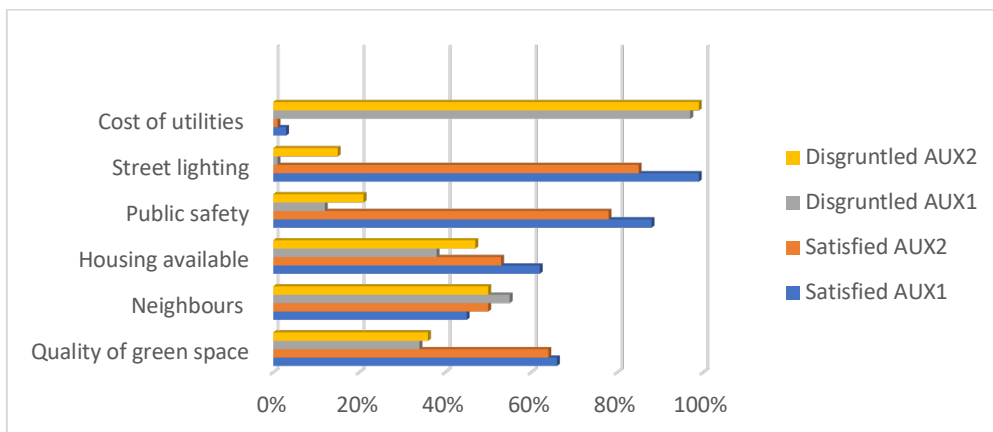
Fig.10 Opinion about utility costs in Tg.Mureş-Suceava -Baia Mare -Cluj-Napoca urban axis



➤ Impact

Analysis of the degree of satisfaction/dissatisfaction of the inhabitants of urban axis 1 Bistrița-Beclean -Năsăud-Sângeorz-Băi compared to urban axis 2 Tg Mureş-Suceava-Baia Mare -Cluj-Napoca. The aim is to determine the degree of satisfaction of the citizens of the urban axis in terms of quality of life for the topic A Satisfaction of Inhabitants with Local Conditions;

Fig.11 Analyse the degree of satisfaction/dissatisfaction in Urban Axis 1 and Urban Axis 2 and compare the two axis



The study begins by looking at residents' satisfaction with local conditions. Resident satisfaction was above average for the physical environment, housing, public safety, and street lighting, and below average for the neighbourhood, utility costs and property taxes.

As such, we recommend that the city government pay particular attention to developing new programs and policies (or strengthening existing ones) to increase resident satisfaction with the neighbourhood, utility costs, and property taxes.

➤ Demographic characteristics of the respondents

The demographic composition of the respondents applied for topic A of the questionnaire is as follows: out of 800 answers 400 for each axis.

Fig.12 Demographic characteristics of the respondents in urban axis 1

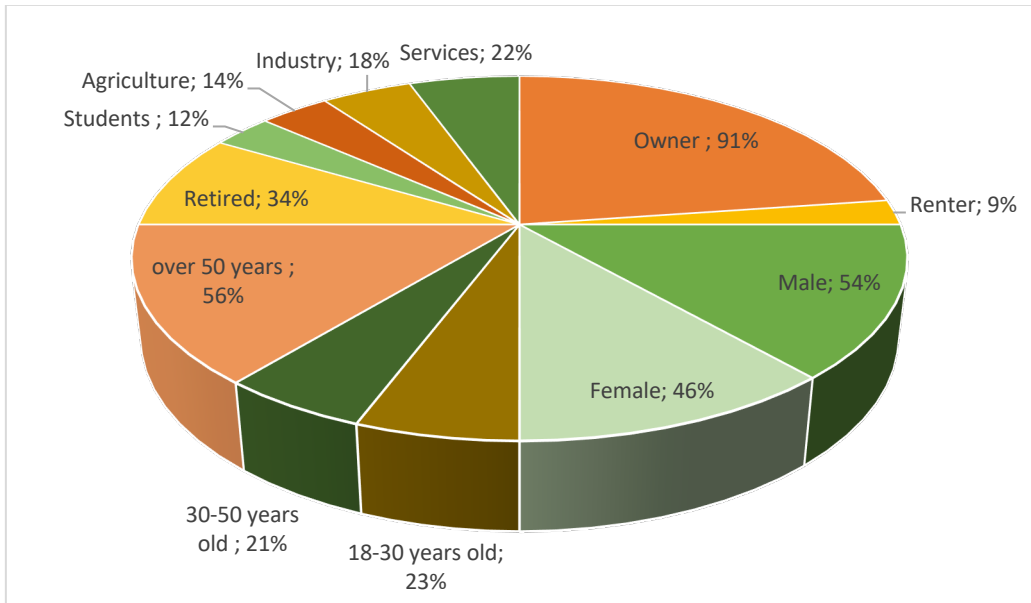
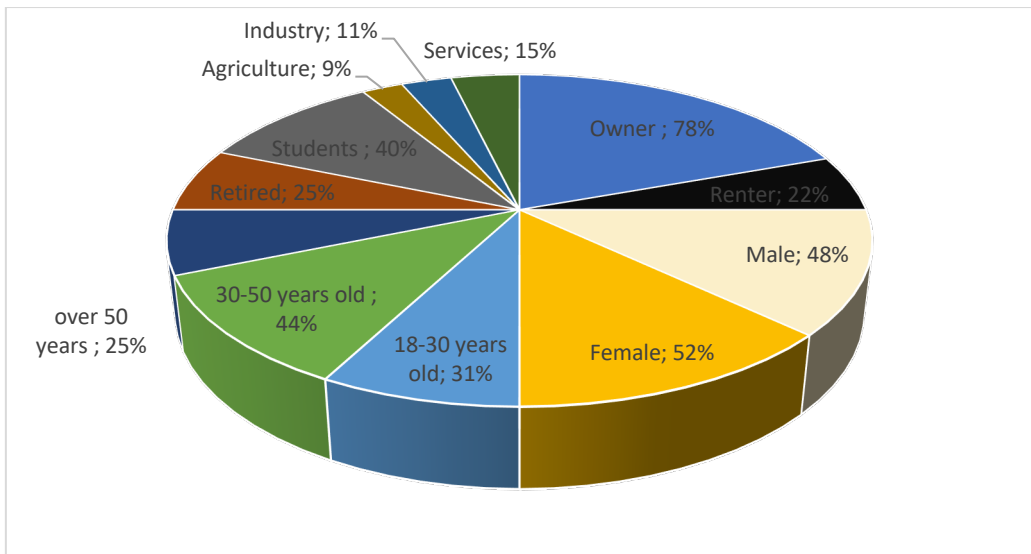


Fig.13 Demographic characteristics of the respondents in urban axis 2



B.Residents' satisfaction with specific local businesses

How do you feel about the local businesses' activity?

- Banking - insurance services

Fig.14 Opinion about Banking insurance services in Bistrița-Beclean-Năsăud-Sângeorz-Băi urban axis

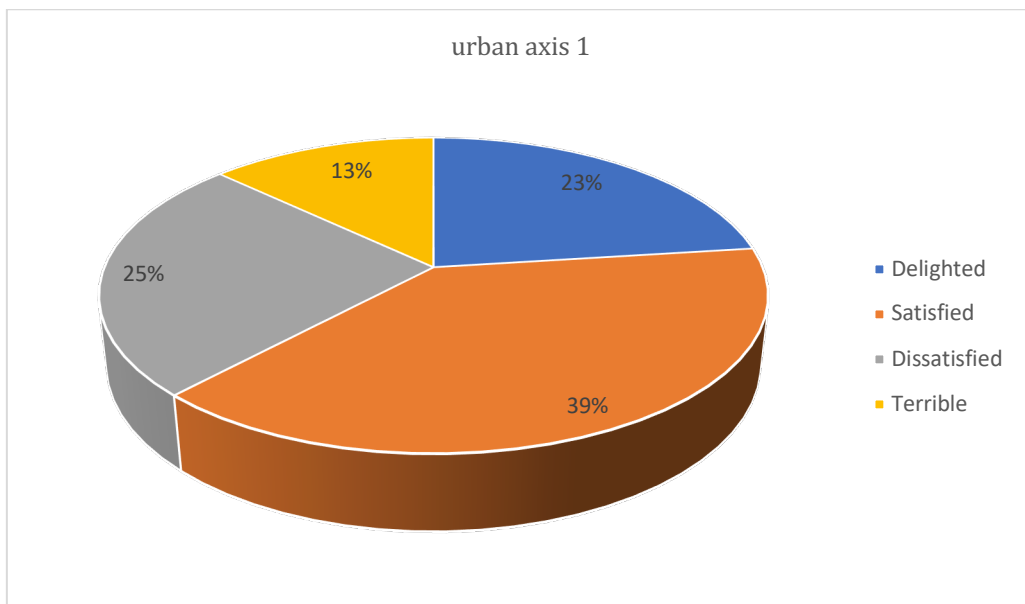
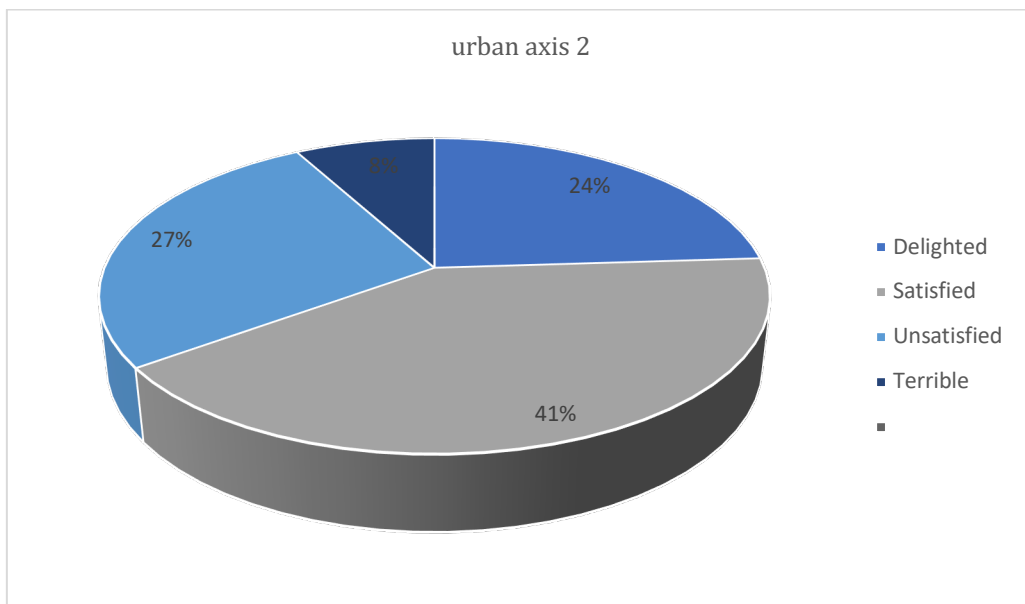


Fig . 15 Opinion about Banking insurance services in Tg.Mureș-Suceava -Baia Mare -Cluj-Napoca urban axis



- transportation services

Fig.16 Opinion about transportation services in Bistrița-Beclean-Năsăud-Sângeorz-Băi urban axis

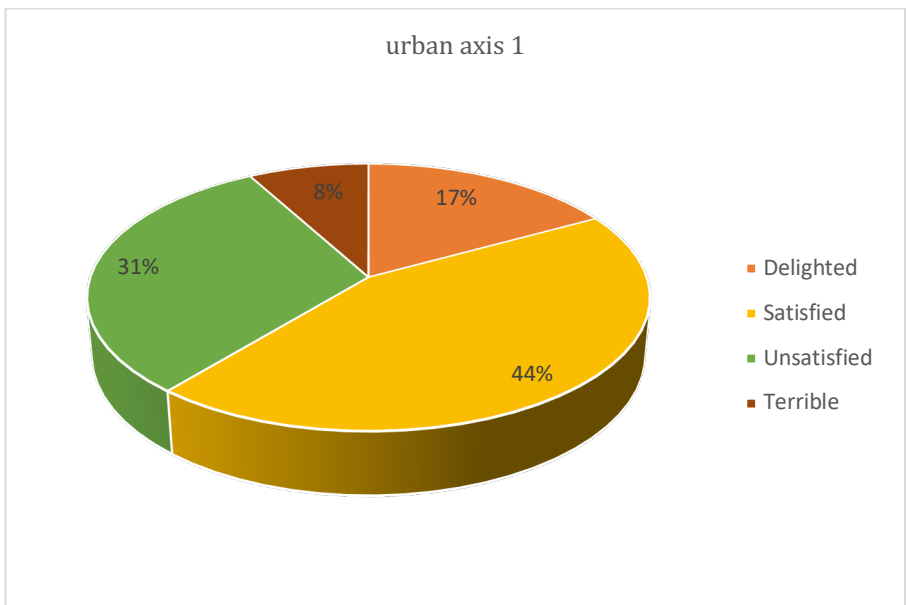


Fig.17 Opinion about transportation services in Tg.Mureș-Suceava -Baia Mare -Cluj-Napoca urban axis

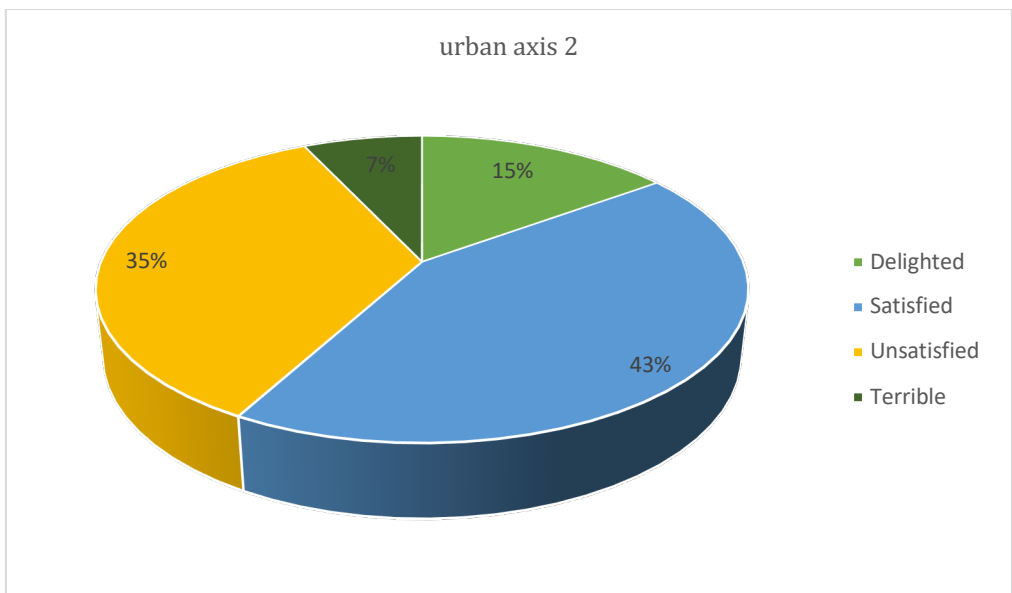


Fig.18 Opinion about restaurants and clubs in Bistrița-Beclean-Năsăud-Sângeorz-Băi urban axis

• restaurants and clubs

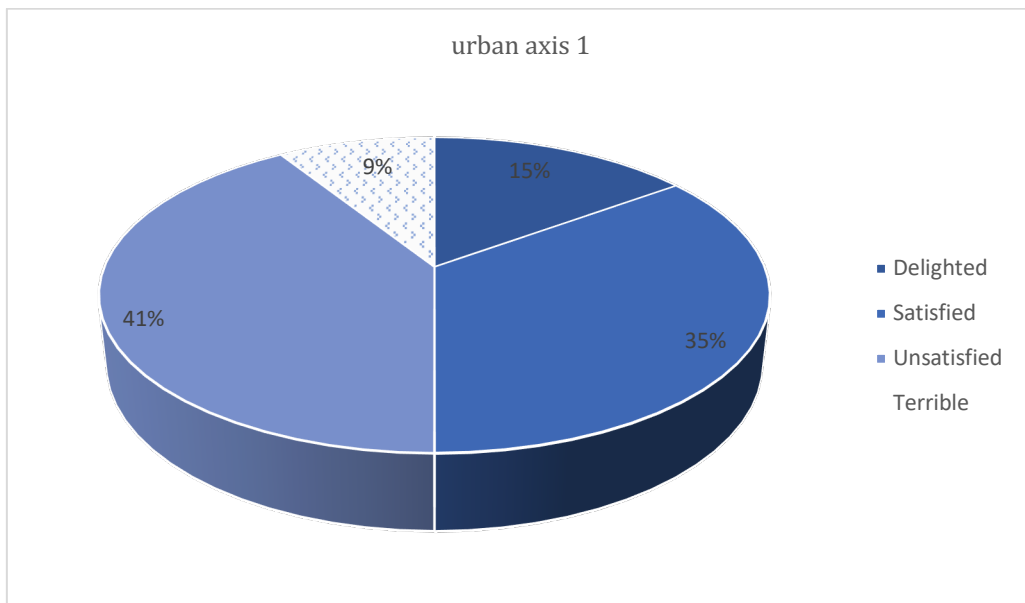
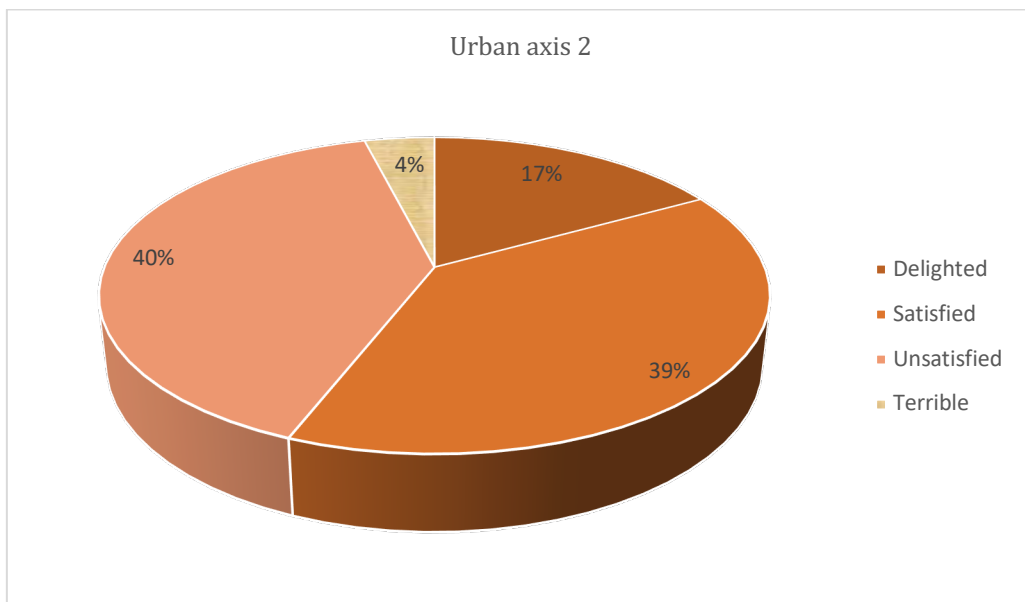


Fig. 19 Opinion about restaurants and clubs in Tg.Mureș-Suceava -Baia Mare -Cluj-Napoca urban axis



• **supermarkets - speciality stores**
Fig.20 Opinion about supermarkets - speciality stores in Bistrița-Beclean-Năsăud-Sângeorz-Băi urban axis

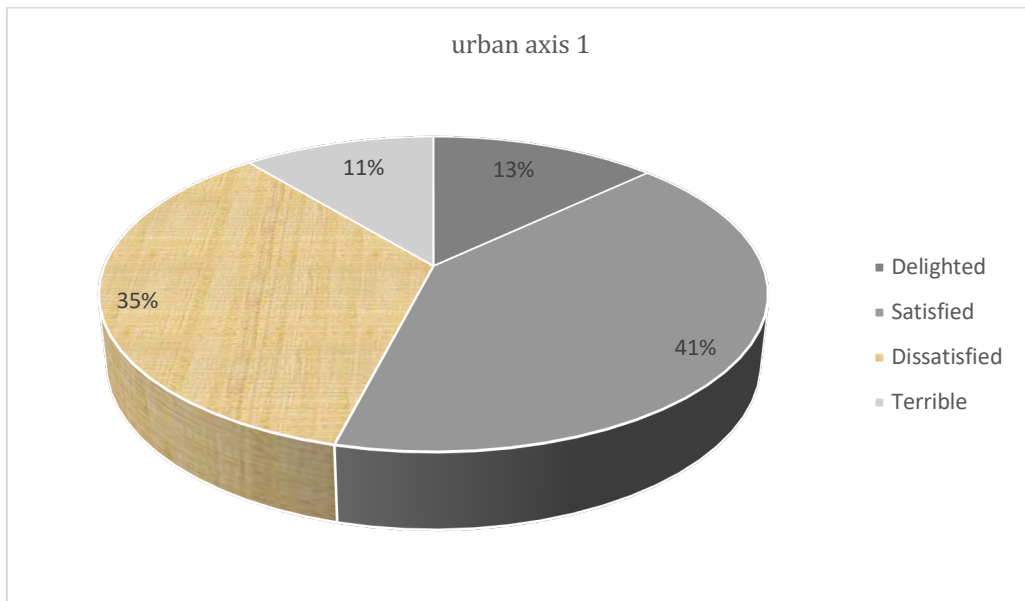
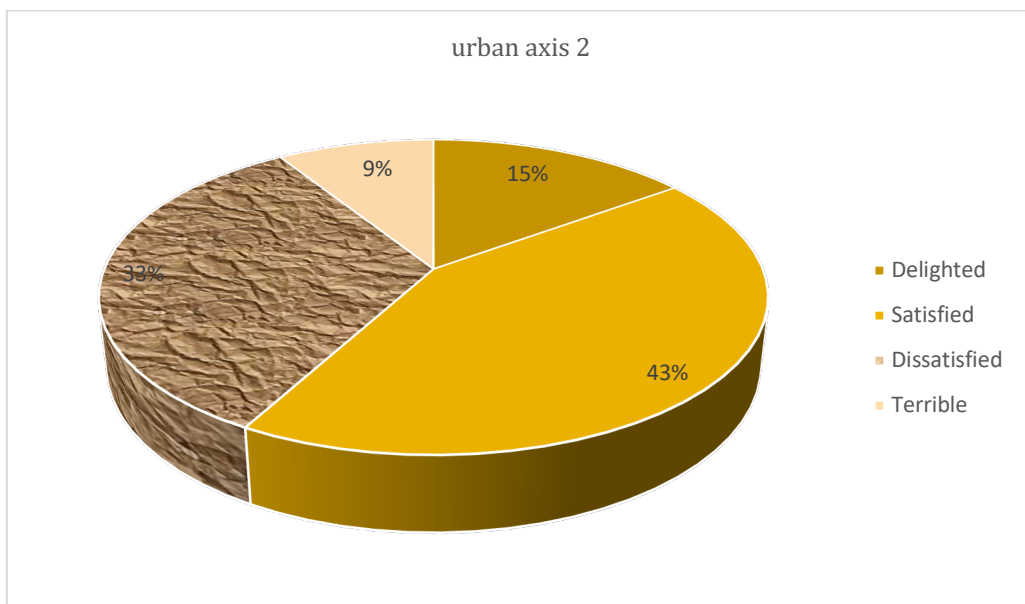


Fig.21 Opinion about supermarkets - speciality stores in Tg.Mureș-Suceava -Baia Mare -Cluj-Napoca urban axis



• private healthcare

Fig.22 Opinion about private healthcare in Bistrița-Beclean-Năsăud-Sângeorz-Băi urban axis

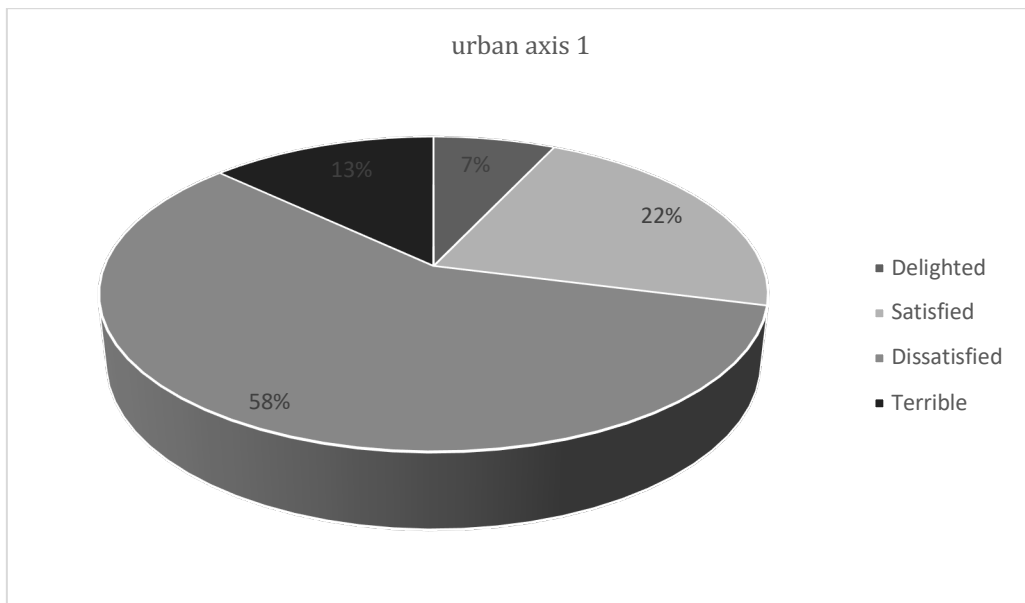
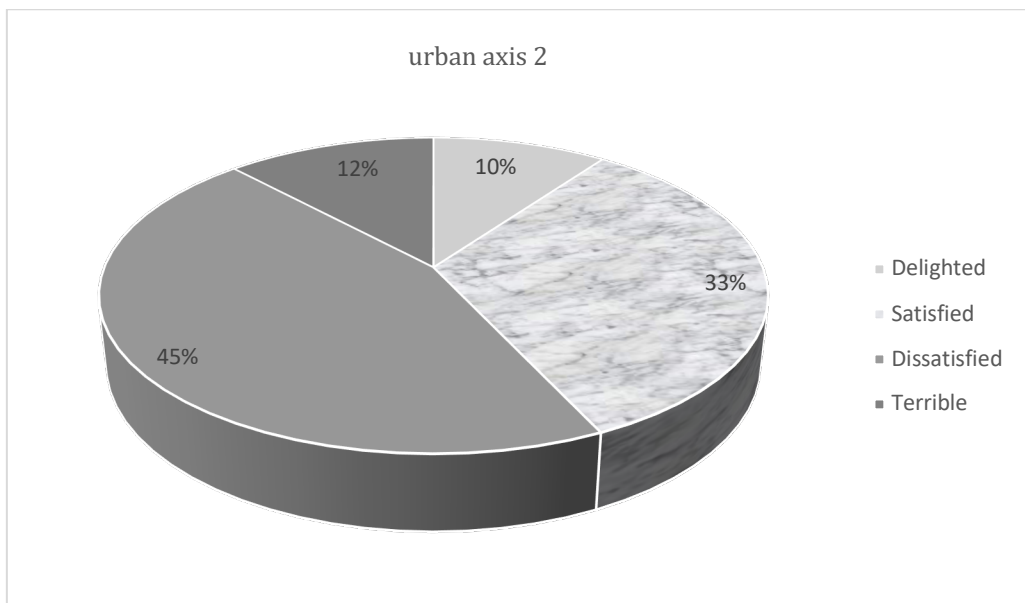


Fig.23 Opinion about private healthcare in Tg.Mureș-Suceava -Baia Mare -Cluj-Napoca urban axis



- telecommunications and electricity services

Fig.24 Opinion about telecommunications and electricity services in Bistrița-Beclean-Năsăud-Sângeorz-Băi urban axis

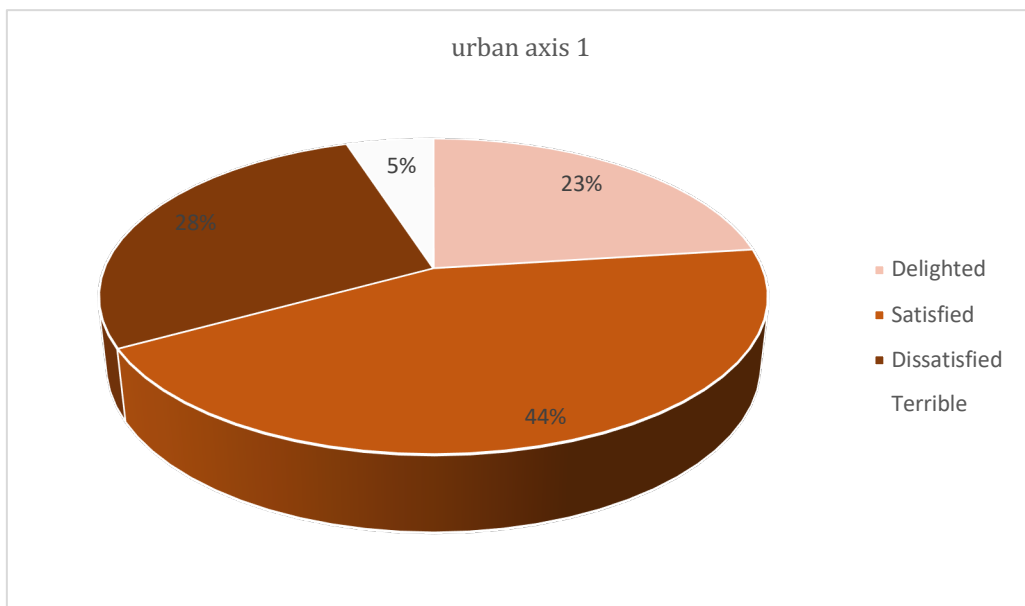
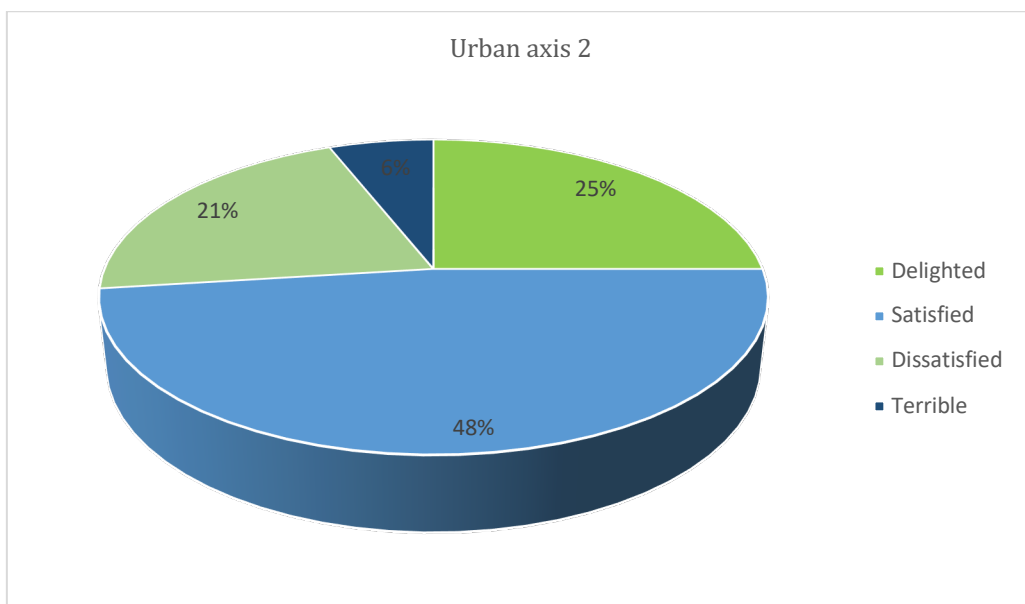


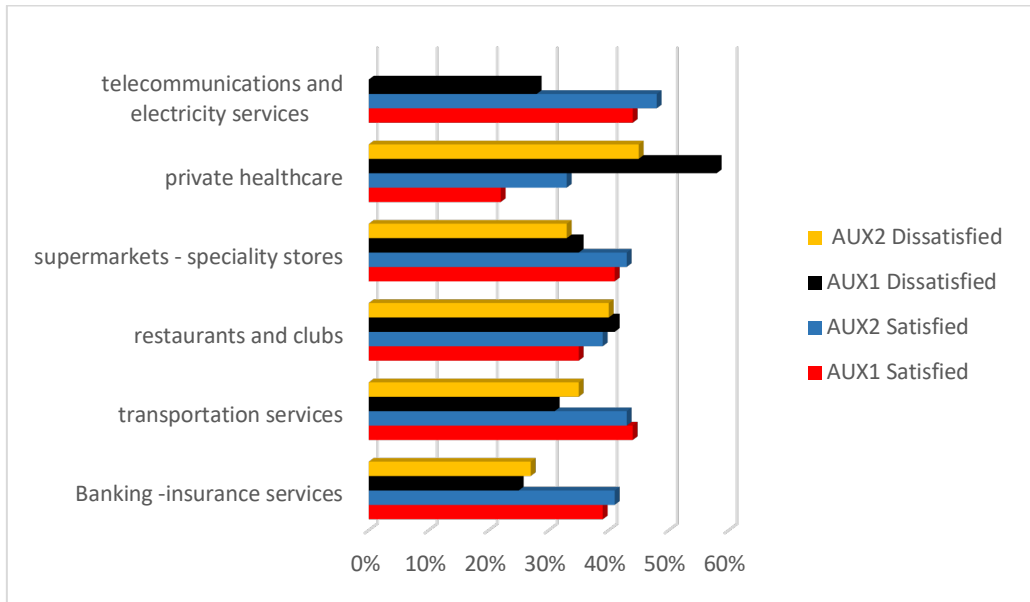
Fig.25 Opinion about telecommunications and electricity services in Tg.Mureș-Suceava -Baia Mare -Cluj-Napoca urban axis



➤ Impact

Assessment of the degree of satisfaction/dissatisfaction of the inhabitants of urban axis 1 Bistrița-Beclean -Năsăud-Sângeorz-Băi compared to urban axis 2 Tg Mureș-Suceava-Baia Mare -Cluj-Napoca. The aim is to determine the degree of satisfaction of the citizens of the urban axis in terms of quality of life for theme B Residents' satisfaction with specific local businesses.

Fig.26 Review the satisfaction/dissatisfaction in Urban Axis 1 and Urban Axis 2 and compare the two axis



Concerning residents' satisfaction with local businesses, the survey results revealed that residents' satisfaction was above average concerning banking and financial services, transportation, healthcare, utilities, real estate and home repairs, news and communication, and legal services; and conversely below average about food and restaurants, stores and shopping, education and childcare, and events and entertainment. as such, we recommend that city administration pay particular attention to develop new programs and policies (or strengthen existing ones) to increase residents' satisfaction with food and restaurants, stores and shopping, education and childcare, and events and entertainment.

➤ Demographic characteristics of the respondents

The demographic composition of the respondents applied for topic B of the questionnaire is as follows: out of 800 answers 400 for each axis

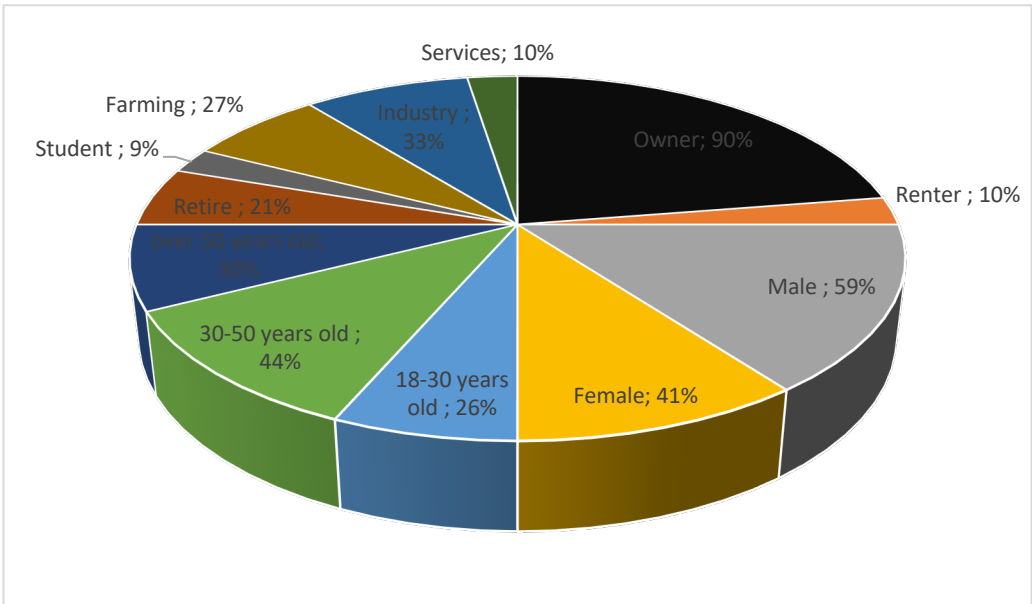


Fig.27 Demographic characteristics of the respondents in urban axis 1

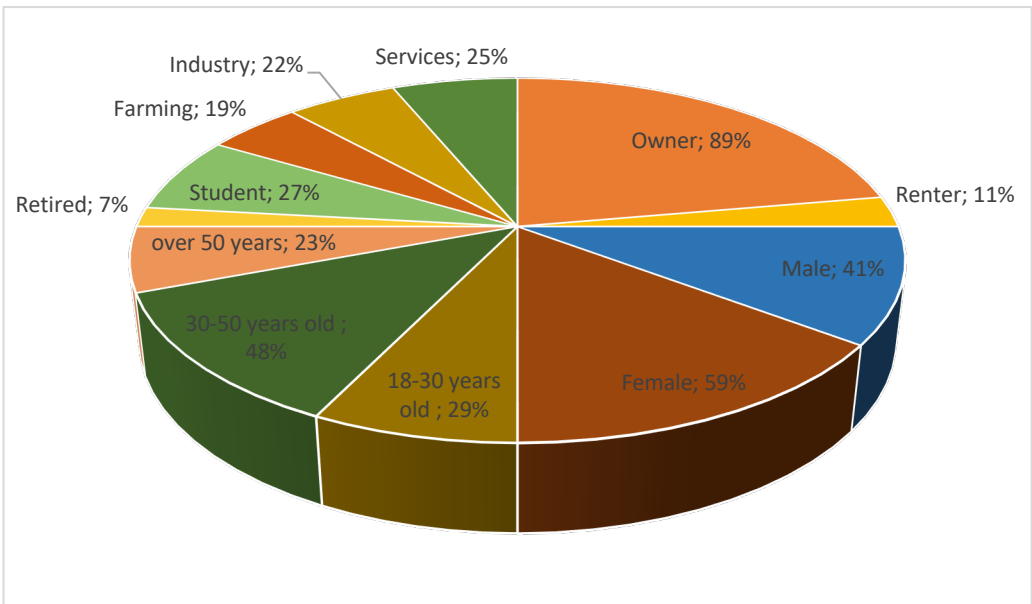


Fig.28 Demographic characteristics of the respondents in urban axis 2

C. Resident satisfaction with specific government local services

What do you think about government local services?

- fire department, rescue squad, police, and public health services.

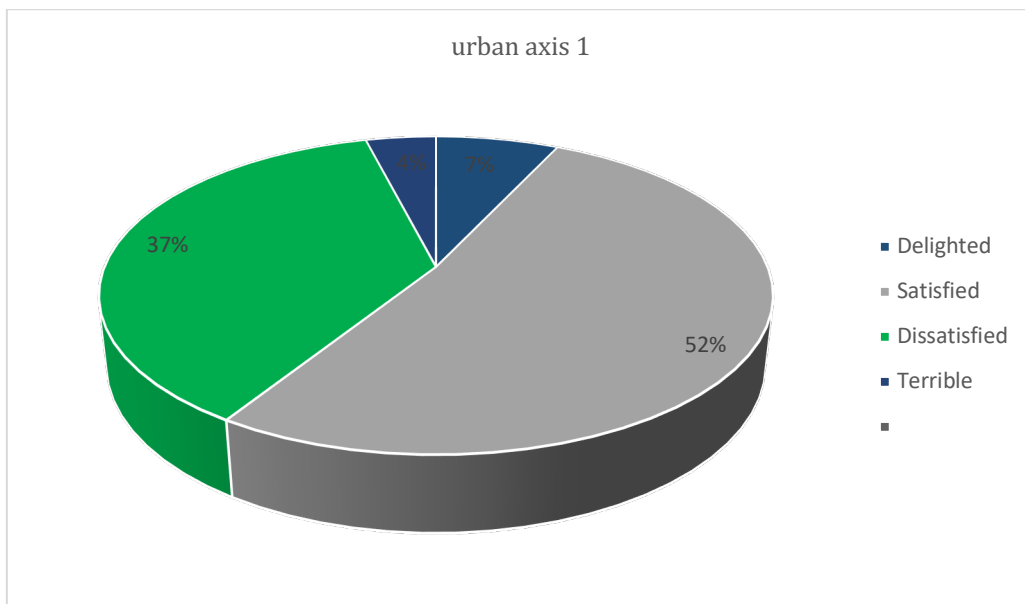


Fig.29 Opinion about government local services in Bistrița-Beclean-Năsăud-Sângeorz-Băi urban axis

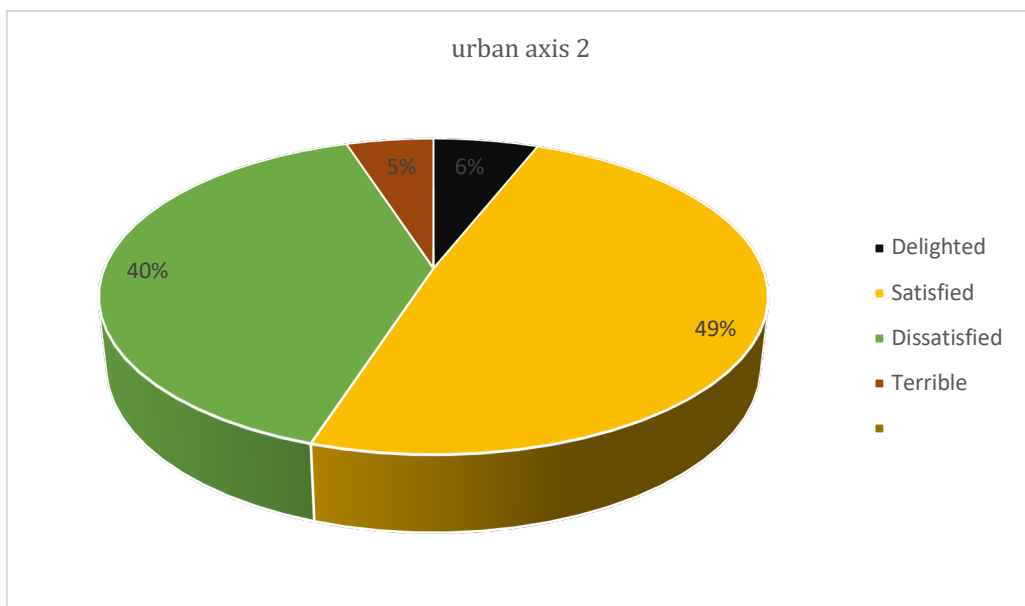


Fig. 30 Opinion about government local services in urban axis 2

- water services, postal services, and voter registration

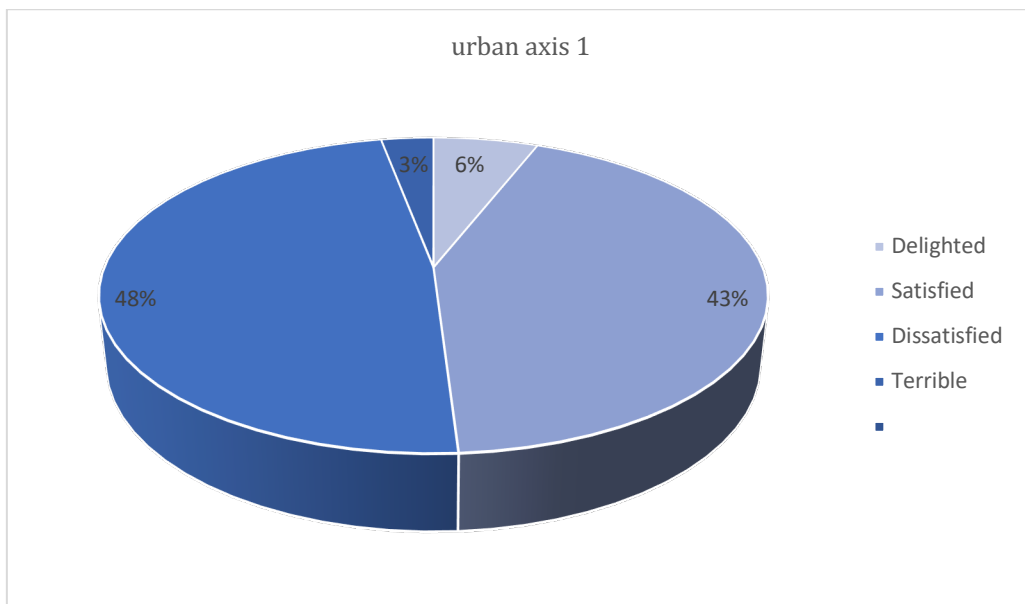


Fig.31 Opinion about water services, postal services, and voter registration in Urban Axis 1

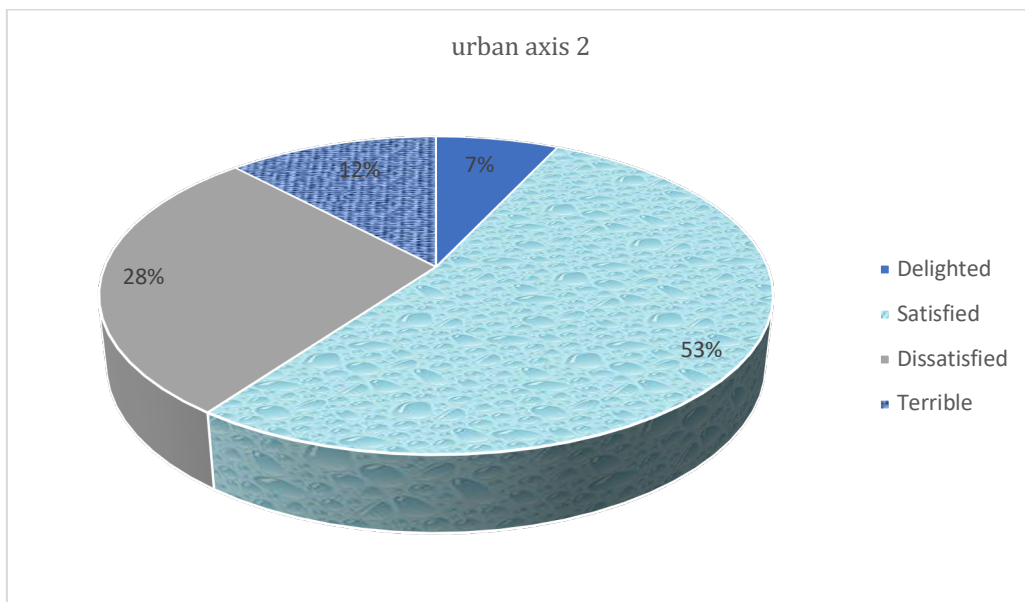


Fig.32 Opinion about water services, postal services, and voter registration in Urban Axis 2

➤ Impact

Evaluation of the degree of satisfaction/dissatisfaction of the people living in urban axis 1 Bistrița-Beclean -Năsăud-Sângeorz-Băi compared to urban axis 2 Tg Mureș-Suceava-Baia Mare -Cluj-Napoca. The aim is to determine the degree of satisfaction of citizens in the urban axis in terms of quality of life for topic C Resident satisfaction with specific government local services.

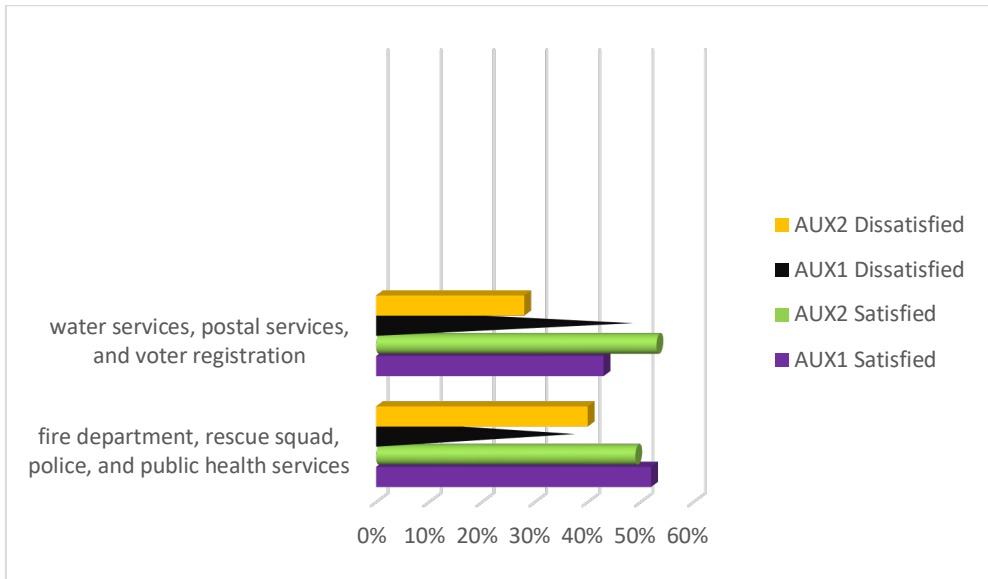


Fig.33 Investigate satisfaction/dissatisfaction in Urban Axis 1 and Urban Axis 2 and compare the two axis

In terms of residents' satisfaction with local government services, survey results show that residents' satisfaction was above average for health and sanitation, utilities and postal services, registration services and employment assistance, and below average for police and emergency services, recreation, administration and planning, and development. Based on these results, I recommend that the city government develop innovative programs and policies (or strengthen existing ones) to increase resident satisfaction with police and emergency services, recreation, administration, and planning and development.

➤ Demographic characteristics of the respondents

The demographic composition of the respondents applied for topic C of the questionnaire is as follows: out of 800 answers 400 for each axis

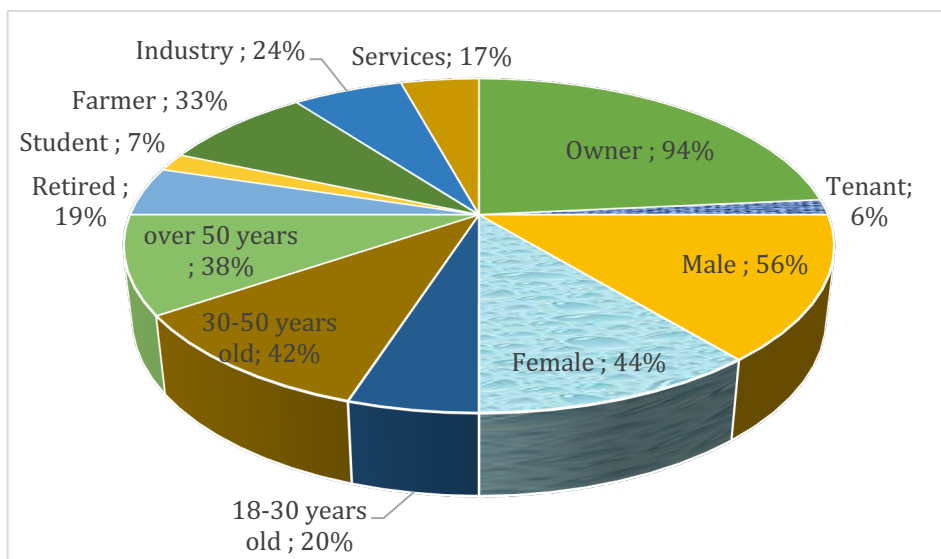


Fig.34 Demographic characteristics of the respondents in urban axis 1

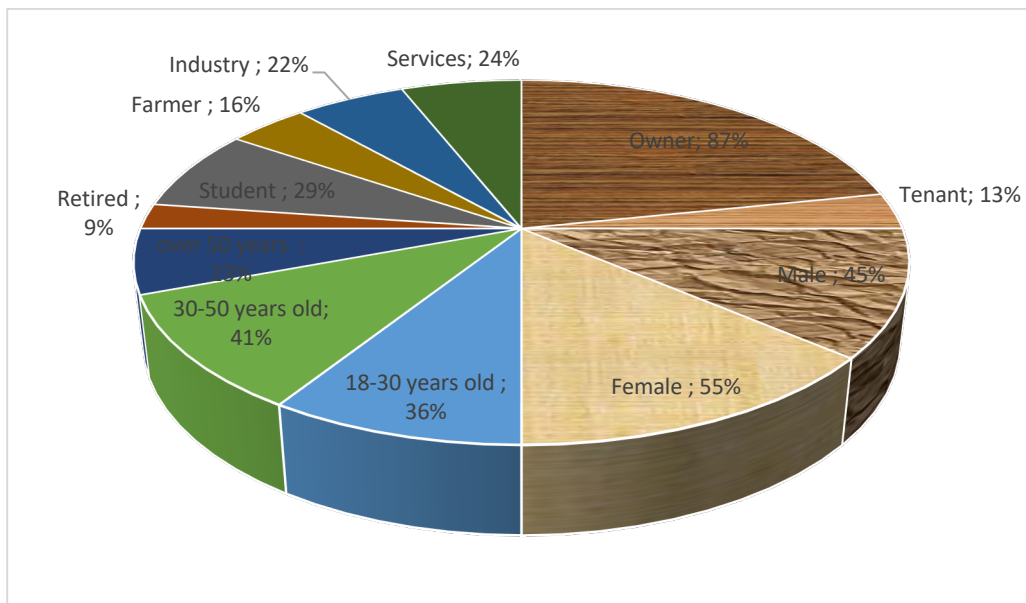


Fig.35 Demographic characteristics of the respondents in urban axis 2

D. Resident satisfaction with selected local non-profit services

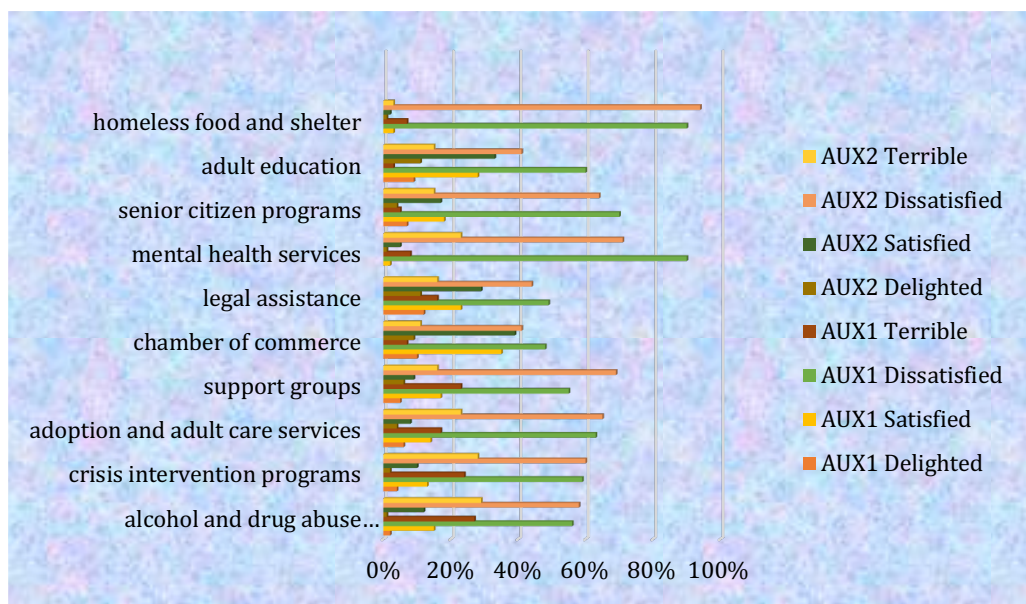


Fig.36 Satisfaction results in Urban Axis 1 and Urban Axis 2

➤ Impact

Regarding resident satisfaction with local nonprofit services, survey results indicate that resident satisfaction was above average for substance abuse and crisis intervention, family services, religious services, chamber of commerce, disabled, senior and health care services, and shelters; and below average for legal services, education, volunteers, and cultural and recreational services. Based on these findings, it is highly recommended that the city government develop innovative programs and policies (or strengthen existing ones) to increase residents' satisfaction with legal services, education, volunteers, and cultural and recreational services.

➤ Demographic characteristics of the respondents

The demographic composition of the respondents applied for topic C of the questionnaire is as follows: out of 800 answers 400 for each axis

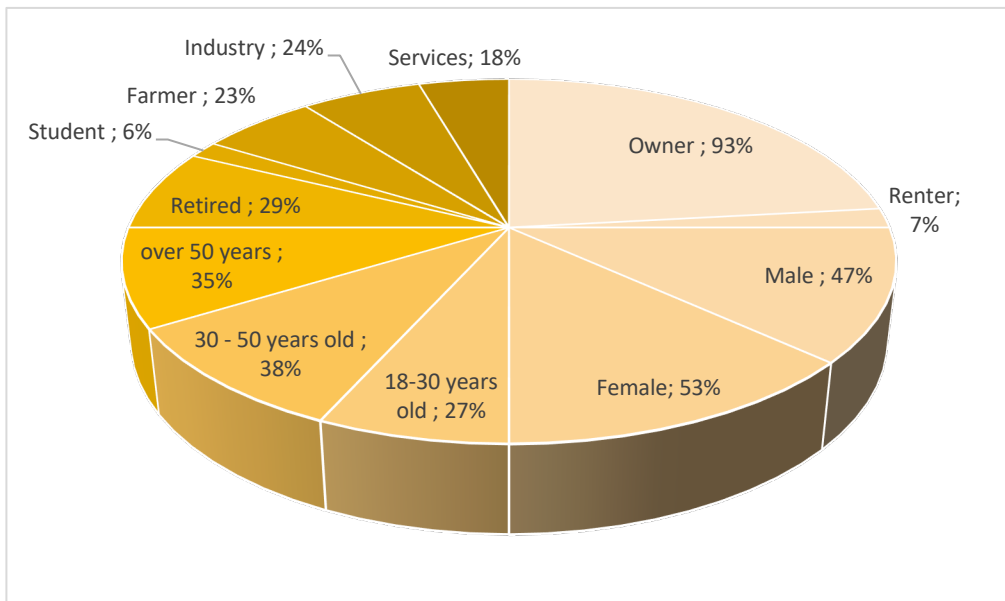


Fig.37 Demographic characteristics of the respondents in urban axis 1

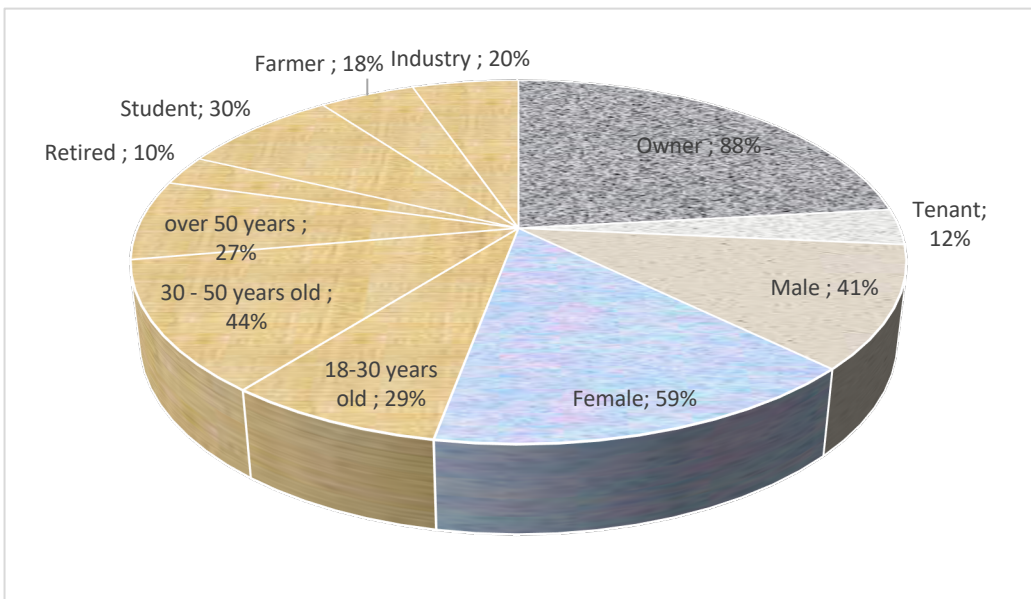


Fig.38 Demographic characteristics of the respondents in urban axis 2

E. Residents' satisfaction with the quality of life of the community in general

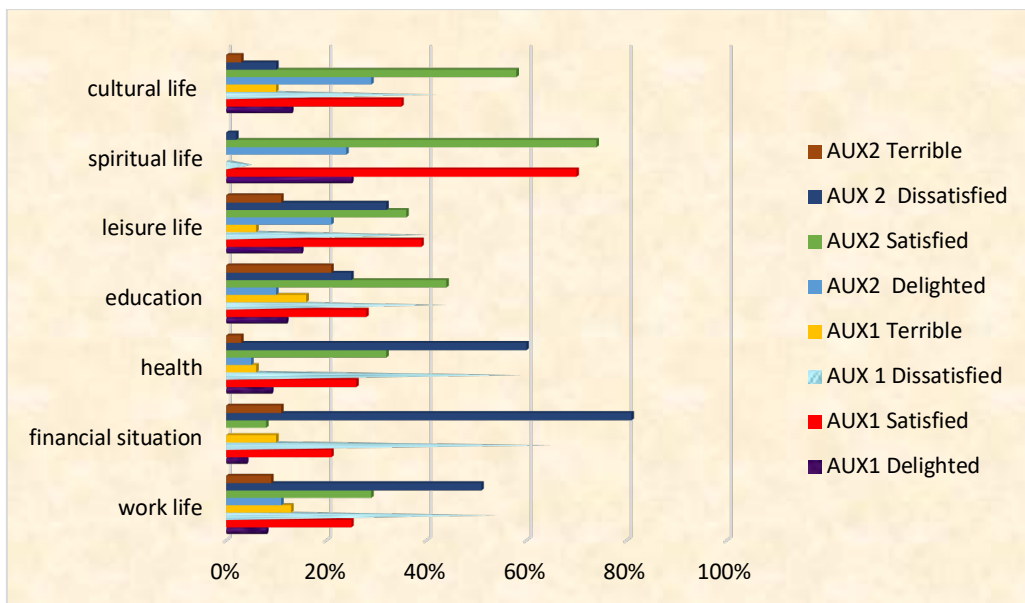


Fig.39 Satisfaction results in Urban Axis 1 and Urban Axis 2

➤ Impact

The survey results also show that residents’ satisfaction with other life domains (other than community life) is above average in work life, financial life, social life, spiritual life, and cultural life.

However, residents’ satisfaction with health, education, and leisure life is below average. Again, city administration in cooperation with other city leaders could work hand in hand to develop new programs and policies (or strengthen existing ones) for the specific purpose of increasing residents’ satisfaction in health, education, and leisure life.

Doing so is likely to increase residents’ satisfaction with life overall.

➤ Demographic characteristics of the respondents

The demographic composition of the respondents applied for topic C of the questionnaire is as follows: out of 800 answers 400 for each axis

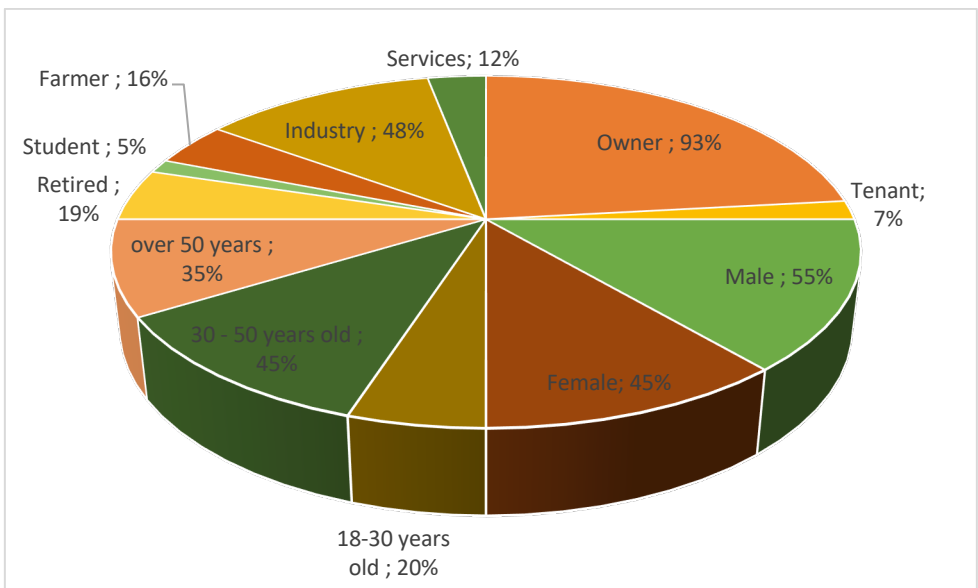


Fig.40 Demographic characteristics of the respondents in urban axis 1

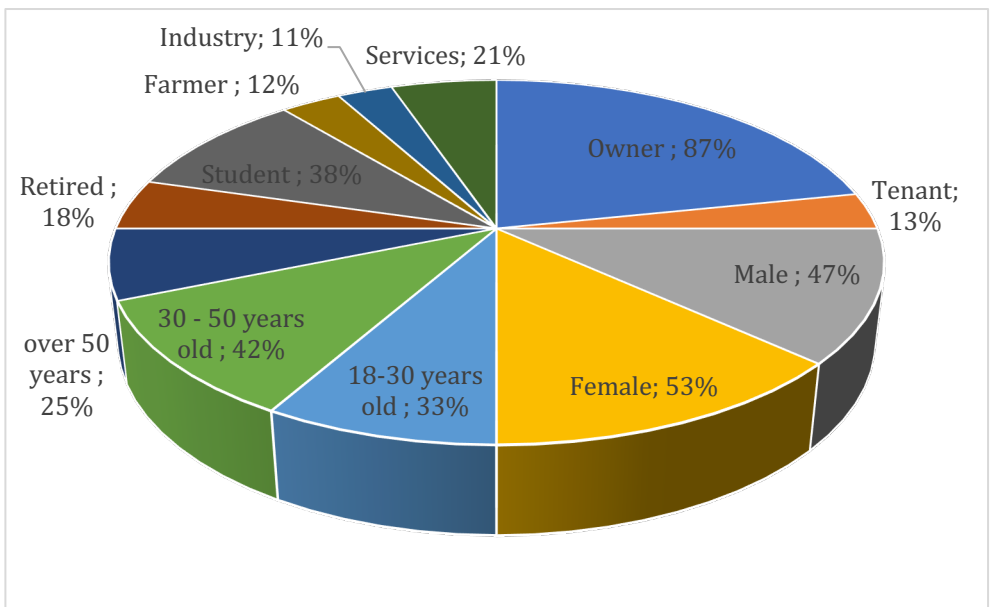


Fig.41 Demographic characteristics of the respondents in urban axis 2

4. Integrated analysis on measuring the quality of life in the investigated urban area

Literature shows that QOL has subjective as well as objective attributes and thus it should be observed and measured using both objective and subjective perspectives (Shumaker SA, Berzon R 1995), (Rapley, Mark 2003). The objective measures perspective focuses on external factors (the surrounding objective environment) while the subjective measure centres on internal factors (personal perception of the objective environment).

The objective measures use quantifiable social, economic and health indicators to reveal the extent to which human needs are met regardless of personal experience or perceptions of the environment. For instance, objective measures such as economic production, literacy rates, and life expectancy can be assessed based on objective data/statistics without collecting opinions from individuals. Objective, quantifiable data are usually provided by official governmental agencies, including the census.

However, since the objective indicators are weak in reflecting people's experience of QOL and well-being, some scholars hold that there is a need to use subjective indicators to measure QOL (Andrews FM, Withey SB 1976).

Subjective indicators are designed to collect primary data at the individual level using questionnaire surveys. Although subjective measures are criticized for biases and difficulty in comparing across regions, many subjective measures have been developed to measure QOL (Camfield, Laura 2005), (Diener 1995). Subjective measures of QOL are advantaged for their ability to capture experiences which are important to individuals.

The subjective approach relies on the individual's judgment and can provide a natural way to aggregate various experiences which reflect people's preferences, culture, values, education, temperament, etc. A subjective approach is indispensable also because spirituality addresses issues of meaning, inner harmony, peacefulness, faith, and a sense of comfort which are ignored in the objective approach. The subjective approach not only measures personal aspects such as happiness, pleasure, and fulfilment but also measures social indicators, including the sense of community, material possessions, social cohesion, job satisfaction, sense of safety, relationship with family, perception of distributional justice, class identification, etc.

Literature shows that objective and subjective indicators are often poorly correlated (Al-Qawasmi J 2019), (Hagerty et. all 2001) and thus it is customary practice to include both in research (McCrea et. all, 2006). The weak correlation between subjective and objective indicators implies that the objective real conditions may differ from the perceived ones, as indicated in the questionnaire. Assessing QOL in a local context should also be clear about the level of aggregation, whether at the individual or collective (family, community or national) level. Thus, to adequately conceptualize and investigate QOL in the Urban Axis 1 and Urban Axis 2 context, there is a need to adopt an integrative framework that integrates several types of indicators –subjective or objective to capture information at proper levels; the aggregate and disaggregate levels.

Conclusion

The paper reports on an ongoing research project that aims to contextualize the QOL concept and set up criteria to measure QOL in urban axis cities. Applying the QOL concept to urban settings in a developing country such as Saudi Arabia is a challenging task, as it requires extra attention to local interpretations of QOL and to the particularities and needs of the region including its sociocultural aspects that belong to distinct culture compared to majority of studies in the QOL field.

The study showed that there is no universally accepted definition of QOL. The diversity of definitions of QOL and research approaches is not a sign of conceptual weaknesses. On the contrary, it highlights the fact that QOL is a value-laden, complex, and multi-dimensional

concept, and underscores the importance of the intrinsic characteristics of the place and local context.

Thus, defining and operationalizing the QOL construct should be at the core of any project that aims to measure the QOL urban context. To operationalize the measurement of QOL and to obtain relevant data that capture the local aspects and interpretations of QOL, the study pointed out the need to adopt a multi-dimensional integrated approach that uses both a top-down and a bottom-up approach and incorporates secondary/objective data and primary data obtained through a survey questionnaire.

An integrated framework to contextualize, operationalize and measure QOL in the urban axis 1 and urban axis 2 contexts has been proposed based on a critical analysis of the literature. The study also showed the importance of selecting appropriate domains and indicators to measure and assess QOL.

The proposed framework indicates that while selecting QOL domains and indicators in the questionnaire, it is critical to operationalize each indicator by adopting a set of variables or parameters as well as developing proper measurement methods and delimiting the unit of analysis. Such a structured approach will enable us to obtain real measurements that capture local aspects of QOL without losing the potential to compare data between different cities or regions.

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