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Sustainable development of the city of Sabratha in Libya – strategy and possibilities

Abstract

This paper explores the possibilities of sustainable development of Sabratha in Libya. It starts from the basic views on the sustainable development of the society, and then there are some opinions about the sustainable development of cities. The second part of the paper analyses the situation in the city of Sabratha after civil war in Libya in 2011. The final part of the paper suggests the principles, goals and elements on which the future strategy for the sustainable development of the city of Sabratha will be based.

Key words: sustainable development, sustainable communities, sustainable city, resources, the city of Sabratha.

Introduction

The "sustainable development" implies a much wider approach than ecological and economic dimension of the problem. This is related to the overall social development of a social group, community, society, a system (political, legal and educational) and the whole human civilisation.

When discussing the potential for "sustainable development", it is referred to development without excessive acceleration of growth, or constant acceleration of growth, in order to preserve resources, that is, in order to use resources more rationally. One theoretical approach says: sustainable development can be formed with a small rate of total growth (economic, technological, resource consumption), as resources are preserved for subsequent

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generations². The other theoretical approach says there is no sustainable development without a high growth (production, technology, resource consumption)³, because only a steady growth provides space for the development of society (group, system, company) and its sustainability. The latter approach can also be described as a "corporate" view of sustainable development. Both these theoretical approaches point to some tension, that is, the contradiction between the terms "growth" and "development" and their role in the sustainability of a society or a system. However, we need to talk about the coherence of growth and development and their equal importance for sustainable development⁴. Growth is a quantitative dimension and it includes statistical indicators, mathematical calculations, and mathematical economic models of optimal conditions in which production or some other economic activity is constantly increasing and shifting boundaries. On the other hand, "development" is a socioeconomic category that talks about the harmonisation of economic parameters with the ecological dimension of a social environment (culture, mentality, tradition and worldview)⁵. It is necessary to reconcile demographic, economic, technological and social growth with the natural potentials and opportunities of an environment. The problem is of historical character, that is, it arises from the very essence of human civilisation: all other beings in nature (other than man) adapt their needs to natural circumstances; only man adapts nature to his needs and this is a constant source of conflict between "growth" and "development" to the detriment of sustainability as a human and cultural dimension of human existence⁶.

When it comes to sustainable development, then in contemporary literature, the most topics, materials, attitudes are encountered, and the majority of authors pay attention to the arguments on ecological sustainability. In this paper, we will argue that sustainability and sustainable development present a very complex problem and encompass a multitude of elements concentrated in several social areas, such as ecology, economics, social relations, political

² Nikita N. Moiseiev, Vladimir V. Aleksandrov and Aleksej M. Tarko, *Man and the Biosphere: Systemic Analysis and Experiments with Models.* Moscow: Nauka. 1985

³ Mansell Robin, *Knowledge Societies: Information Technology for Sustainable Development*, Oxford: Oxsford University Press, 1998. Asefa Sisay, *The Economics of Sustainable Development*, Kalamazoo MI: Institute for Employment Research, 2005

⁴ Viktor Danilov and Kim S. losev, *Sustainable Devalopment and the Limitation of Growth*, Springer: Praxis Publishing, 2009; Fabrice Periac, Albert David and Quinetta Roberson, "Clarifying the Interplay between Social Innovation and Sustainable Development: A Conceptual Framework Rooted in Paradox Management", *European Management Review*. 2017. Vol. 15, Issue 1.

⁵ Viktor Danilov and Kim S. losev, Idem, pp. 166-168

⁶ Anastasia Nikolopoulou Taisha Abrahamâ and Farid Mirbagheri, *Education for Sustainable Development*, London, United Kingdom: Sage Publications Inc. 2010

relations and culture.

We have decided that the subject of our research is the sustainable development of Sabratha in Libya for two reasons: first, it is the area where the author of this work was born and raised, and secondly, Libya suffered a major social disaster in the form of a civil war in 2011. We wanted to check how the political change, which led to a one-year civil war, reflected the sustainability of the society, especially the city of Sabratha.

We set the subject of the research as pursue for the answer to the question: What are the prospects, problems and perspectives of the sustainable development of the city of Sabratha in Libya? The aim of the research and the task was to analyse some of the more important theoretical views on the sustainable development of society and in particular cities, then apply these theoretical findings to the case of the of Sabratha in Libya and give a proposal for the framework for the development of a model for the integrated sustainable development of the mentioned city.

An Integrated Approach to Sustainable Development

Although the ecological dimension of sustainable development is the focus of all researches, it should nevertheless be emphasised that the econonomic dimension of sustainability is equally important. In fact, these two forms and two dimensions of sustainability are interconnected and intertwined (one condition is conditioned). As Roberts emphasises⁷ the basic principles of sustainable development for each local and regional policy should strive to integrate economic and environmental issues through three main components: a) an economic component that includes the pursue for new forms of economic activity and types of business organisations that show a high degree of the consideration of the consequences of their business and which try to minimise adverse environmental and social impacts; b) a social component that implies the desirability of moving according to the spatial and social organisation form, which minimises unnecessary or excessive use of resources, maximises environmental protection, increases living standards and social protection; c) the ecological component should give priority to combining business and social elements with spatial problems in order to ensure environmentally responsible and socially balanced planning and development of local and regional spaces and levels of society.

⁷ Roberts, P. 'Environmental sustainability and business: recognising the problem and taking positive action', in: Colin C. Williams and Graham Haughton (eds) *Perspectives Towards Sustainable Environmental Development*, Aldershot: Avebury, 1994. pp. 37-53.

In order to achieve a "sustainable development" strategy on a global scale and raise awareness of its necessity, a "comprehensive approach that would legitimise sustainable development with a continuous number of economic, social and environmental indicators" is needed. The integrated approach to the "sustainable development subject", through unique indicators that follow three key areas of sustainability (economic development, social relations and ecological status), provides a unique scientific and practical view of "sustainable development"9. The integrated approach to "sustainable development" would prevent a situation of the imbalance of indicators from appearing, where it would appear that "capital is constantly increasing, while natural resources disappear"10. From the point of view of the advocates of the approach - "profit at all costs", this would be a sustainable society, while from a standpoint of the representatives of long-term development, social and environmental care, this would be an unsustainable one. An integrated approach to the "sustainable development" would argue that it is an unsustainable society, when one indicator (capital) is constantly growing, while another indicator (resources) constantly falls and leads to unsustainable imbalance.

The question arises, what is the starting point from which the measurement and assessment of what is "sustainable" begins and where does "sustainability" begin? Ruth and Hamilton consider that "the concept of social well-being" is the "starting point" of sustainability measurement, that is, the object of sustainability of every society is "social well-being" and that it is harmonised with ecological and economic principles. The amount of income is an indicator of social well-being, but in order to fully understand the "sustainable development", it is more important how the revenue growth has been achieved and how it has been distributed to members of the group, community and society. We can talk about "sustainable development" only if income and social well-being are aligned with a balanced spending of resources over a longer period of time (several generations). In fact, it is neces-

⁸ Giovani Ruta and Kirk Hamilton, "The capital approach to sustaniability", in: *Handbook of Sustaninable Development*, edited by Gilet Atkinson, Simon Dies and Eric Neumayer, Northampton Massachusetts: Edward Elgar Publishing Limited, 2007. str. 46.; Carroll, Michael C., Stanfield, James Ronald, "Sustainable Regional Economic Development", *Journal of Economic Issues*, June 2001. Vol. 35. Issue 2.

⁹ Pardi Faridah, Nawi Abdol Samad and Salleh Arifin, "Determining Factors toward a Sustainable Development Path in Selected ASEAN Countries and Japan - Evidence from Panel Data Analysis", *International Journal of Management Reviews*, 2016. Vol. 18, Issue 4.

¹⁰ Giovani Ruta and Kirk Hamilton, *Idem*, p. 46.

¹¹ Giovani Ruta and Kirk Hamilton, *Idem*, p. 47.

¹² Santa-Cruz, Sandra; Fernández de Córdova, Graciela et al. "Social Sustainability Dimensions in the Seismic Risk Reduction of Public Schools: A Case Study of Lima, Peru", *Sustainability : Science, Practice, & Policy*, Spring 2016. Vol. 12. No. 1.

sary to equalise the indicators of economic, social, natural and human capital with environmental indicators. Only then will we be able to speak about an integral approach to "sustainable development".

Sustainable cities

Sustainability of cities is the core issue underlying this paper. The concept of sustainable communities has been expanded over the past ten years, encompassing a change in a way that implies that people express their opinion of how they see themselves and their community in relation to the physical and social environment.¹³ A city is a man's urban community, so here we have two dimensions of sustainability observation: a sustainable community and a sustainable urban community¹⁴ as shown in example Beijing.¹⁵ Urbanisation brings with it many transformations of nature, including pollution, change of locations, changes in the functioning of local ecosystems, changes in the natural flows of energy, water, food and other material assets and elements¹⁶. Urban space spreading can create a special problem by endangering a valuable natural habitat and its destruction, as well as intensive pressures on ecological resources in their areas. Some forms of pollution are, in fact, extremely urban according to their origin, influence and consequences¹⁷. It should be added to this that the concentration of pollutants in cities has reduced the chances of developing tolerance between natural and human subjects in the local environment.18

A city is a mixture of natural, technical, urban, social, economic, cultural and ecological elements. It can be said that three components are particularly

¹³ THIRD INTERNATIONAL SUMMER SEMINAR SUSTANABLE DEVELOPMENT—THE FUTURE OF CITIES AND REGIONS. *European Sociological Review*, 1993. Vol. 9. Issue 1.

¹⁴ Mike Jenks and Rod Burgess (Ed.) *Compact Cities: Sustainable Urban Forms for Developing Countries*. London: Spon Press. 2000.; Andrew K. Jorgenson & James Rice, "Slum Prevalence and Health in Developing Countries: Sustainable Development Challenges in the Urban Context", *Sustainable Development*, 2016. Vol. 24. Issue 1.

¹⁵ Shangyi Zhou and Shaobo Zhang, "Contextualism and Sustainability: A Community Renewal in Old City of Beijing", *Sustainability*, 2015, Vol.7. Iss. 1. pp. 747-766; https://www.mdpi.com/2071-1050/7/1/747

¹⁶ Graham Haughton and Colin Hunter, *Sustainable Cities*. London: Routledge, 2003. Kostas P. Bithas, "Environmentally sustainable cities. Critical review and operational conditions", *Sustainable Development*, 2016. Vol. 14. Issue 3.

¹⁷ Linda Krause, Sustaining Cities: Urban Policies, Practices and Perceptions, New Brunswick, NJ: Rutgers University Press, 2013.

¹⁸ Giovanis, Eleftherios. "The Effect of Smog-Ozone Warnings and a Vanpool Program on Traffic Volume in York County of South Carolina". *Environment and Planning B: Urban Analytics and City Science*. 2015. Vol.42. Issue 2.

important in cities: natural content; architectural urban building elements; and social content. The natural environment includes air, water, soil, climate, flora and fauna, while the urban environment includes buildings, infrastructure and urban open spaces (squares, streets). The architectural component includes various aspects of urban areas and architectural styles, while the social component includes heritage and values, human behaviour, laws, and traditions of different groups and communities. The urban environment can also be seen as a distortion of natural ecosystems, or as an ecosystem in its own right, characterised by high artificial energy flows, as a result of the greater reliance of cities on fossil fuels.

Looking at the overall dynamics of cities²⁰, we can notice that there are several of its most important elements. *Economic dynamics* involves more contacts and activities that make a city the place of economic information, entrepreneurial and business ideas and a financial center. *Social dynamics* gathers a wide range of social facilities (schools, nursery schools, hospitals, social work agencies, etc.) whose role is becoming increasingly important, especially for population, marginalised by unemployment and poverty. *Cultural dynamics* represent the cultural role of a city, which includes the "production" and "consumption" of the culture and the historical heritage of the city. *Political dynamics* implies that a city, more than any other entity or place, must respond directly to the demands of its citizens for a "good government". It is a place where direct participation is possible and more and more practiced, and where an individual can develop a sense of free (or impure) personality and represent civic values.

Perhaps the most important element in assessing the seriousness of a city's efforts to achieve sustainability is to develop a sustainability plan²¹. Most sustainability concepts require numerous holistic ecological views. The presence of a sustainability plan indicates the willingness of a city to deal with numerous issues in a systematic way. Often, such plans present the diversity of problems or problems that need to be solved and identify the administrative and organisational resources available to solve the problem. For example, the sustainability plan can focus on clean water, land and forest protection, the atti-

¹⁹ Simon Guy, Steven A. Moore, *Sustainable Architectures: Cultures and Natures in Europe and North America*, New York: Spon Press, 2005.; Potts, Deborah. "Disposable Cities: Garbage, Governance and Sustainable Development in Urban Africa", *Geography*, 2007. Vol. 92. No. 3.

²⁰ Dimitrios Dendrinos, *The Dynamics of Cities:Ecological Determinism, Dualism and Chaos*, New York: Routledge, 1992.

²¹ Moscovici Daniel; Dilworth Richardson; Mead Jerry; Zhao Sheng, "Can Sustainability Plans Make Sustainable Cities? the Ecological Footprint Implications of Renewable Energy within Philadelphia's Greenworks Plan", *Sustainability : Science, Practice, & Policy*, Spring 2015. Vol. 11. No. 1.

tude of the centre and suburbs²² to energy and transport, recycling materials, industrial and economic development, in particular the use of eco-industrial parks²³, but also social problems that exist in a city and cause an urban crisis²⁴. Numerous efforts have been made to develop plans that include specific indicators or advancement measures towards achieving sustainability.

Indicators can be used to measure the success or failure of city authorities to achieve a sustainable concept. Cities that have developed sustainability indicators usually include a wide range of factors to their measures. Urban sustainability indicators include air quality measures, biodiversity, energy, climate change, ozone depletion, food and agriculture, hazardous substances, "green architecture", "green cities"²⁵, human health, parks and open spaces, economic development, justice in the field of life environment, education and more²⁶.

Economic and social disintegration of Libya

In the past 50 years, Libya has been through several stages of ascent and decline, poverty and favourable development, revolutionary and peaceful periods. It has become a solidly rich country from one of the poor countries. With the discovery of large reserves of easily accessible oil, Libya was ranked in the countries of great importance for the energy stability of the world at the beginning of the 1960s. During the 1970s and 1980s, Libya developed rapidly and became a sustainable country. However, in 2011, a civil war broke out in Libya, and after that period it became an unstable, economically, socially

²² Kennedy, Emily Huddart; Krogman, Naomi; Krahn, Harvey, "Sustainable Consumption and the Importance of Neighbourhood: A Central /suburb Comparison", *Canadian Journal of Sociology*, Summer 2013. Vol. 38, No. 3

²³ Sustainable Chattanooga, *The PCSD Briefing Book*. Found at: http://www.chattanooga.net/sustain/pcsd_briefing_book/outline.html>, 1995.

²⁴ Babo, Alfred, "Sociopolitical Crisis and the Reconstruction of Sustainable Periurban Agriculture in Abidjan, Côte d'Ivoire", *African Studies Review*, December 2010. Vol. 53. No. 3

²⁵ What is the "green city"? This is an ideal projection of a modern sustainable urban space. Also, it is a great effort and effort to be made in order to achieve this in any city of the world, but it is certain that this is achievable in the 21st century on this level of overall global technological and economic development. In its most perfect form, the "green city" is pleasant, attractive and completely sustainable (Matthew E. Kahan, *Green Cities, Urban Growth, and the Environment*. Washington, D.C.: Brookings Institution Press, 2006. p. 4.).

²⁶ Sustainability Plan for San Francisco—October 1996. At http://www.ci.sf.ca.us/environment/sustain/Indicators.htm.; Atkins, Marc S. Graczyk, Patricia A. Frazier, Stacy L. Abdul-Adil, Jaleel, "Toward a New Model for Promoting Urban Children's Mental Health: Accessible, Effective, and Sustainable School-Based Mental Health Services", School Psychology Review, 2003. Vol. 32, No. 4.

and politically hardly sustainable country. Like the whole society, the cities of Libya have become uncertain and difficult to sustain. We will continue to monitor the possibilities of the sustainable development of the city of Sabratha, located on the Mediterranean coast, 60 km west of Tripoli, near the Tunisian border.

Energy production in Libya is crucial to understanding the events that took place in Libya after Gaddafi's liquidation. Neither party lags behind in its military campaigns, because they realise that with the gain of political control over the country, they will generate huge revenues that oil brings to Libya. Not only does Libya have the largest amount of reserves in the whole of Africa, estimated at 47.1 billion barrels, but also has significant reserves of natural gas. Oil and gas represent a huge part of Libya's exports and gross domestic product (GDP) output. At least 70 percent of the Libyan GDP and over 95 percent of its export earnings are related to oil. In 2011, when a civil war broke out in Libya, oil production fell to 22,000 barrels per day (b/d), compared to 1.7 million b/d before the outbreak of the conflict²⁷. Financing all activities in the public and state space of Libya is largely linked to the ability to produce oil, regardless of who is in power²⁸.

The economic collapse of Libya had significant global implications on global and regional levels. Prior to the conflict, Libya participated with 2% g in global crude oil production, so the loss of Libyan oil exports reflected a temporary shortfall in the international market. In addition, Libya used to employ about 1.5 million foreign workers, so their sudden departure from that country reduced the remittances of foreign currency to domicile countries and further increased the number of unemployed in the neighbouring countries of Libya. Also, the intensification of the Libyan conflict and the entry of regional extreme groups further contributed to the decline in tourism and foreign investment²⁹.

The war in Libya in 2011 halted the progress and reversed all results generated over generations, impaired economic growth and progress in nutrition, health, housing, education and employment³⁰. Conflict has had major nega-

²⁷ Chivvis, C. & Martini, J. "Libya After Qaddafi: Lessons and Implications for the Future," Rand Corporation 2014. Available at:http://www.rand.org/content/dam/rand/pubs/research_reports/RR500/RR577/RAND_RR577.

Mohamed, Esam "Militias battle in central Libya near oil terminal" The Associated Press, 13 December 2014. dostupno na: http://bigstory. ap.org/article/e6e774da3a3044e0b-72f3679065c1708/militias-battle-central-libya-near-oil-terminal

²⁹ Mukhtar Imam, Sadeeque Abba, Mohamed M. Wader, "Libya In The Post Ghadaffi Era", *The International Journal of Social Sciences and Humanities Invention*, Volume 2 issue 02 2014. Also see: IMF, Middle East and Central Asia Department, *Libya beyond the Revolution: Challenges and Opportunities*, 2012.

³⁰ See. Aljazeera News Media, Libyan News. (April 2011). www.aliazeera.net

tive consequences for education. In order to secure large amounts of energy in Libya, more technical knowledge, skills and expertise are needed³¹. Libya now meets about 95% of its energy needs from oil and gas, so it is necessary to work hard to reduce dependence on this source, relying on local projects involving solar and wind energy as two new pillars of energy policy in Libya.

Historical characteristics of the city of Sabratha

The city and the port of Sabratha was founded around 500 BC, as a Phoenician trading post that served as a coastal exit for the products of the African hinterland. The Phoenicians gave it the Libico-Berber name 'Sbrt'n', indicating that perhaps there had been an autochthonous settlement built before the arrival of the Phoenicians. Sabrata was heavily damaged by earthquakes during the IV century AD, especially the earthquake in 365AD. The Byzantine governors restored it in a more modest way. The city was a place of episcopacy. During the hundred years of the Arab conquest of the Maghreb, trade moved to other ports, so Sabratha descended to the level of the village.

The second century of the new era was a period of great growth of the city towards the east in the direction of the former suburban part and amphitheater. The Temple of Hercules was built in the late 180's AD and it is likely that the Roman Theater was also built at the end of the second century. At that time, there was still expansion to the south and the main decorating of the city center. By the second century, most of the buildings were made of local yellow sandy material that was subject to erosion and decay. It should be further emphasised that the port was the most important moment in the development of Sabratha during its history.

In Sabratha, there is a Roman theatre in the form of a ring with a three-pointed architectural background, the remains of many arches, pillars and sculptures from the Roman and late Byzantine periods, then several temples dedicated to Liber Patera (God of vineyard, fertility and freedom), Serapis and Isis. There is a Christian basilica from the time of Justinian, and also the remains of some floor mosaics decorating the elite flats of Roman rulers in the north of Africa (for example, in Villa Sileen, near Khomsa). However, these are most obviously preserved in the coloured patterns of the sea water bath (or Forum), directly looking at the coast, and on the black and white floors of Theatre baths. Archeological treasure from the local Sabratha can be found in the Sabratha Museum, as well as in the National Museum in Tripoli.

³¹ أمداق ال اي جال او اي بي ال اي المال الكافة (Sustainable energy in Libya for future generations), Journal of Solar Energy and Sustainable Development, February 5, 2016.

Sabratha during the civil war in Libya and in the post-war period

Sabratha was one of the key fighting places for demostrators and rebels against Gaddafi, as his forces occupied a port that was an important site for the counter-insurgency militia. Migrant workers, mostly Egyptians and Tunisians, who were fleeing from Sabratha and other places of northern and western Libya, were constantly approaching the border³².

Sabratha became one of the first places, west of Tripoli, where during February and March 2011, protests were held between Gaddafi's supporters and opponents in the main square. A vague and confused state in Sabratha was described by one of its residents for *The Guardian*, saying that the money began to play an increasingly important role in the conflict in Libya during the first months of the "Arab Spring." It was thus clear that somebody from the outside manages the rebellion that spreaded during the first months of 2011 in Sabratha, as well as in other parts of Libya³³.

Bombing and attacks by various militant groups continued in 2014 in Sabratha and in the surrounding cities. Special targets of attacks were oil sources, as well as the ports in the north of Libya that were getting ready to transport oil to Europe. The General National Congress, as the supreme body, was unable to control various rebellious and militant groups and movements. Security in the city of Sabratha, during 2015 and 2016, was not good, as conflicts between the two warring fractions linked to the government of national reconciliation were often emerging. Informed witnesses say that there are hidden interests related to the smuggling of people and oil behind the activities of these predatory groups.³⁴

The above examples show that the sustainable development of Libya is still far from being able to build and implement a more serious sustainable development strategy, the Libyan state and therefore the city of Sabratha. Security is the basic and underlying problem and the condition of any development strategy. As we have seen from several previous examples, security in Sabratha is very uncertain. The is subject to attacks by various radical, terrorist and criminal groups that lead to the suffering of people and bring disrepair among the citizens and residents of Sabratha. The Coastal Area and Harbour of Sabratha are particularly exposed to the activities of criminal groups that smuggle immigrants, oil, food and cultural goods. Under such conditions, it

³² Mail Online, March 2, 2011

³³ The Guardian, February 28, 2011

³⁴ Hisham Abdel Hamid, أقيبيلال قتاربص يف لااتتقال العارو اذام, source: Al Jazeera net.

is not possible to organise two basic economic elements on which the development of Sabratha depends, such as trade and tourism.

Resources of the city of Sabratha

Here we will focus on two key resources: the transport of oil and gas through the port of Sabratha and the tourist potential that abounds in the city, especially the remains of old civilisations from Phoenician to Roman.

When it comes to resources for the production and export of oil and gas, the production of gas on the processing platform "Sabratha" should first be shown. After final treatment, the gas is delivered to the local market and also exported to Italy via the *Green Stream* gas pipeline which is 540 km long. "Sabratha Platform" has a capacity of 25,000 tons and is equipped with preliminary facilities for rapid separation and dehydration of 800t per hour.

The Sabarata platform is linked to the "Mellitah Complex" onshore, which is equipped with separate facilities for the processing of oil and gas produced in the oil fields Bahr Essalam and Wafa. It is equipped with three gas pipelines and two lines for condensate to facilitate the treatment of gas and condensates from the Sabrata platform. "*Green stream* is the first and only traffic infrastructure that will end after the Italian natural gas market has come to a crisis and that will bring 8 billion cubic meters of natural gas to Italy, which will then be sold to competitor operators"³⁵.

Tourism in Libya is an industry that was hit hard by a civil war in 2011. Sabratha should have the largest share in the overall tourist visit to Libya. For the development of tourism in Sabratha, it is necessary to abolish restrictions on the arrival of foreign tourists, as well as to raise awareness among the local population about the improvement of the offer. Obviously, there is currently a lack of tourism resources, such as hotels, resorts, airports, communication systems, sports facilities, and so on. One of the most attractive places on the UNESCO list is the remains of the old city of Sabratha which guard the civilisations of the Phoenicians, the Greek, the Romans and the Turks. In addition, Sabratha has a very interesting and attractive bay, then beautiful sandy beaches and clear blue water, as well as a favourable Mediterranean climate where tourists can stay throughout the year. Spacious beaches and a clear sea

³⁵ la Repubblica, "Economija &Finanza, October 22, 2004.

³⁶ Roland Daher, *Tourism in the Middle East; continuity, change andtransformation*. Channel View Publications, 2007.

³⁷ WINNE, "Libya: the new gateway to Africa, open for business", available at: http://www.winne.com/mena/libya/report/2004/index.php. 2004.

near the beach provide opportunities for diving, wind surfing, water skiing and sailing.

Sabratha's tourist offer can also be completed by some parts and elements of cultural patterns characteristic of this part of the Arab tradition. Libyan culture is rich and varied, includes diverse architectural forms, fashion, museums, specific Arabic food, Mediterranean fruits, music, Bedouin traditional festivities, local songs, folklore and exotic dance.³⁸

Model of sustainable development of Sabratha

The starting points for the sustainable development of the city of Sabratha include: planning of overall activities for the development of a modern model of sustainability; reconstruction and revitalisation of numerous historical buildings; sanation of the damage caused during the conflict; maintenance and protection of functional facilities; modern management; stable and equal access of citizens to the use of all the city's resources; adapting the city lifestyle and the life in the city to modern urban demands; physical and social protection and safety of citizens; participation of professional, responsible and interested social groups in activities that help improve the functioning of the city; planning economic growth of the city; strategy for promoting investment in the city; analysing and controlling the effective costs for meeting the needs of urban life; new traffic organisation; new concept of infrastructure development; development of public services (local administration, post office, Internet); continuous measurement of the quality of life in the city (housing, health, education, ecology and culture); human resource development; recreational spaces and their use; SWOT analysis (strengths, weaknesses, opportunities and hazards); PEST analysis (polytechnic, economic, social and technological environment) of the city at certain time intervals; building a unique and recognisable identity of the city.

These starting points enable the creation of a unique and integrative strategy for the sustainable development of every modern city, including Sabratha. It should be taken into account that each city has its own, special conditions, which make it unique and specific, such as landscape and other characteristics of the structure of the terrain, then the climate, already built infrastructure, greenery, water surfaces and more. For the sustainable development of the city, some of the general guidelines recommended by *Agenda 21*, mentioned in the previous part of this paper, are important. Considering

³⁸ Somali Press ,"Libya overview; culture of Libya", available at: http://www.somalipress.com/libya-overview/culture-libya-1080.html. 2004.

the previously presented settings and recommendations of *Agenda 21*, here we will list the **basic principles** of sustainable development³⁹ of the Sabratha region.

- 1. The principle of general and prosperous informing the citizens and transparent work and activities of local and city authorities and responsible entities.
- 2. The principle of intragenerational equality and solidarity that relates to the issue of attitudes towards living conditions, available space and the use of Sabratha resources.
- 3. The principle of intergenerational solidarity, which implies activities in the city and the city area that will take care of the older generations, as well as the generations that are younger and the ones to come in the future.⁴⁰
- 4. Principle of general responsibility in the procedures and functioning of each citizen as a key condition in the fight against the degradation of settlements and space.
- 5. The principle of general control of the allocation of resources, in accordance with the common needs and possibilities, work and results of all citizens, their groups and communities.
- 6. The principle of transfrontier responsibility, which means responsibility for environmental protection and the use of the resources that have an impact on the sustainability of the neighbouring, regional, national, and global environment.

From the previously stated starting points and the principles of sustainable development, it is necessary to set the **basic goals** of the strategy of urban renewal and sustainable development of Sabratha.

- 1. Solving the problem of large influx of migrants and their illegal transportation to Europe. This can be achieved through an agreement with Italy, Malta and the EU to send significant military forces that would prevent the construction of illegal shelters for migrants in the Sabratha area, break up armed militias and criminal groups that are smuggling migrants, protect the access roads of the city of Sabratha in order to prevent the influx of migrants and armed groups.
- 2. Ensuring adequate housing for all social structures in Sabratha by offering affordable housing loans subsidised by the state and local funds.

³⁹ Jonathan M. Harris, "Basic Principle of Sustainable Development", *Global Deevelopment and Environment Institute*, WORKING PAPER 00-04, Tufts University, June 2001.

⁴⁰ Darko Nadić, Održivi razvoj i principi održivog razvoja u strateškim dokumentima republike Srbije (Sustainable development and sustainable development principles in the strategic documents of the Republic of Serbia), Belgrade: The Faculty of Political Sciences | Yearbook no. 6, December 2011

- 3. Forming funds for the development, renovation and revitalisation of the city of Sabratha that would be charged from the local tax on the transportation of oil and gas to the "Mellitah" and "Sabratata" complexes?
- 4. Encouraging the development of entrepreneurship and entrepreneurial activities in the field of tourism, trade and other services.
- 5. Development of IT technologies, digitisation and robotisation of production and services, which will increase the interest of young people in the area that represents the future of every sustainable development of groups, communities and society.
- 6. Development of modern, high quality and sustainable education and massive education of citizens of Sabratha, in order to gain new knowledge and information from information technology, management and entrepreneurship.
- 7. Adoption of legal regulations and rules that will determine the directions and principles of urban and spatial planning, economic, social, technological and ecological development.
- 8. Improving the planning and management of land, according to cadastral classification of land, regulation of the land and real estate market, in order to prevent manipulation and corruption in this area, as well as to prevent the development of unhealthy settlements.
- 9. Creating the city's development policy aimed at preventing environmental degradation, controlling the disposal of waste materials, preventing the pollution of water surfaces, disposing of waste in the coastal area and near archeological excavations.
- 10. Improvement and development of transport systems for electric power, use of renewable energy resources and new ecological technologies.

Possibilities of integrative development of the city of Sabratha

Sabratha is one of the largest urban centres in Libya. It is a collection of diverse historical, traditional and modern buildings. Its cultural and economic activities have attracted visitors from all over the country, Libya, other countries in the region, as well as parts of Europe, especially Italy and France, for centuries. That is why the city of Sabratha can become a model for urban development policy, based on the unification of development, restoration and preservation of tradition.

It is necessary to allow historical centers to continue to be an integral part of the centre of the city and areas in the immediate vicinity of Sabratha. When the restoration of the historic part of the city begins, its original core and areas around it should be taken into account in order to protect the historical centre, as well as its surroundings and its social and cultural activities. In accordance with this, any urban renewal policy should also take into account available spaces and activities that exist in the old part of the city, such a policy should recognise the potential of the area, which will play a greater role in the future development process. In addition, politics should plan to integrate historical centres with other parts of the city.

That is why we suggest that the area next to the remains of the old city be treated as an area of special significance. It is necessary to establish a link between economic, social and environmental activities in the old and new parts of the city in order to create an integrated and sustainable whole.

Development policy also needs to protect the social and physical structure of existing populated places in the city of Sabratha's proximity. The inhabitants of these settlements have integrated with their neighbouring populated places and thus created a network of urban contact and communication channels. Accordingly, any urban planning or recovery strategy of Sabratha should take these facts into account. New objects should be planned and embedded in harmony with existing objects, in terms of their style, appearance, aesthetics and usage.

Urban reconstruction policy of Sabratha

We have previously pointed out that there are valuable historical monuments in Sabratha that are still active. They can be attractive to tourists in the coming period despite political, economic and social problems. Each urban development and housing development project should be based on a careful assessment of the available human and technical resources. The essence of urban renewal policy is economic, social and cultural protection and the restoration of all parts of the city of Sabrata, and this applies not only to historical centres, but also to all urban areas and surrounding areas. We will suggest that the policy of integration of urban renewal and the realisation of the urban development of the city of Sabratha be based on the following parameters:

- a) Protection of existing urban structures, especially of historic centres, and their integration into new urban principles and structures;
- b) Reducing pressure on the rapid expansion of settlements and infrastructure, with priority given to upgrading existing facilities that will later be integrated into future tourist and trade services networks;

- c) Analysis and assessment of available resources for the construction of residential, business, tourist and recreational facilities and centres;
- d) Improving the physical appearance of existing and new city structures in order to develop a sense of belonging and to form a local identity.
- e) Analysis of needs for apartments, as well as analysis of the capabilities of the construction industry and analysis of infrastructure such as energy, water supply, and quality of transport, post and Internet;
- f) It will all depend on solving the problems of crime, violence, trafficking in migrants, accounting for armed groups and other remnants of the 2011 war.

Sustainable Development Strategy of Sabratha

At the end of this text, we want to present the possibilities for the sustainable development of the city of Sabratha through three central sustainability factors characteristic of all modern societies. These are economic, social and environmental sustainability. In addition to this, we will add four more sustainability factors in accordance with our previously stated attitudes: urban-architectural; technological; cultural and security-political.

Economic sustainability of Sabratha. Previously, we listed two basic resources of Sabratha, namely, the sale and transport of oil, as well as tourism. Of course, it is possible to add trade as a special form of activity, but here we will consider it as an integral part of these first two mentioned resources.

Tourism can be a major asset to sustainable economic growth of Sabratha, because it is autonomous and does not depend much on other national systems and organisations, but can be realised in the local area. In the upcoming period, it is necessary to build hotels and other accompanying contents required by modern tourists. On the borders of spacious beaches, it is possible to build hundreds of modern hotels of all categories and thus attract a very diverse European tourist clientele.

Local authorities and tourism organisations must make a lot of effort in the coming period to make a recognisable *tourist product* from Sabratha. It is not just about exclusive and functional facilities, but also about a variety of services designed to meet all the needs of tourists. Therefore, the *tourist Sabratha product* should be a combination of *natural resources* (from the sea coast through the greenery in the background, to the desert landscape), *resources of heritage* (Phoenician, Roman and ancient excavations), *cultural resources* (specific Arabic culture: music, costume communication) and the *created resources* (accommodation, transport, infrastructure, convenience,

entertainment and trade). The promotion and development of the tourist offer in Sabratha means opening, developing and increasing the number of small and medium-sized enterprises in all areas of the aforementioned tourist activities. According to Jones⁴¹, the tourism industry consists of a mixture of small and large-sized enterprises, as often multinational companies rely on a large number of local small and medium-sized enterprises. Their advantage is firm and efficient management, quick decision-making, as well as flexibility in responding to changing the situation and market conditions.

Social sustainability of Sabratha. The indicators of social sustainability, through the implications of the aforementioned resources, should be: increased employment; salary increase; the inflow of foreign currency into the budget of the city and the state; presentation of local culture in the world; raising living standards and reducing poverty; revitalisation of poor or non-industrialised regions; revival of local art, crafts and traditional cultural activities; reviving the entire social and cultural life of the local population.

Ecological sustainability. A special area of the sustainable development of Sabratha, represents ecological sustainability, as Sabratha is exposed to numerous environmental risks. First of all, we mean the coastal part of the city and the bay where "Sabratha Platform" is located, which is used for gas processing and transport of oil and gas to Europe. It is necessary to develop various mechanisms of protection based on scientific research and technical predictions of danger. It is necessary to remove dysfunctional technological structures that can lead to catastrophes and damage while working with oil and gas. The city authorities of Sabratha must set up expert teams that would continuously monitor the operation of oil and gas facilities and warn of the possible dangers that exist there. The ecological situation is complicated by numerous migrants coming from various parts of Libya and other countries of Africa, hoping that through the Mediterranean they will be able to get to the terrestrial part of Europe. Local authorities should set up mobile teams that would quickly eliminate the problems, damages and consequences caused by the crowds of migrants who arrive and stay in the Sabratha area on a daily basis.

Urbanistic and architectural sustainability of the city of Sabratha. It should be noted that this dimension of sustainability must move in two directions. One implies the preservation and protection of old archaeological sites, such as the *Roman amphitheatre*, and their connection with the predominant objects that will be in the function of preserving and protecting the civilisational traits, but will not distort and threaten them with their appearance. It

⁴¹ Eleri Jones and Haven-Tang, *Tourism SMEs, Service Quality and Destination Competitive*ness, CABI Publishing, 2005.

concerns the problems of erosion of soil near the archaeological site, as well as the neglected and healed surrounding excavations that threaten to distort the original appearance of ancient and Roman heritage. Support walls, paths, protective pillars, panels, concrete beams and other elements are needed, which will protect the old ambience of ancient buildings. However, these new additional elements must not disturb the appearance and ambience of ancient cultural remains. The second direction of development of urban-architectural sustainability of Sabratha involves the construction of new settlements, both for housing, for business activities and accommodation of tourists.

Technological sustainability implies the application of all recent technological achievements in the functioning and management of the city. Here, we mean information technology and the introduction of the Internet with broadband profiles that enable fast data transfer and the ability to develop new jobs in virtual space. Also, technological sustainability implies the introduction of digital technological solutions and products in operation, production, services and communication, starting from e-Government to controlling and monitoring the movement of people and goods in border and security areas.

Cultural sustainability Sabratha implies the preservation of specific traditional cultural patterns in the field of food, clothing, folklore, customs and beliefs that can be adapted for presentation to tourists and other visitors to the city of Sabratha. Also, the traditional culture should be directed towards a free, open and tolerant encounter with new cultures and cultural patterns that are characteristic of Europe, North and South America, as well as the Far East, such as China, Korea and Japan. The culture of Sabratha should not remain closed and trapped in traditional Islamic forms that will contradict each new activity that will come from other traditions or from a space that can be characterised as contemporary world, global cultural integration and uniqueness. Only those cultures that freely engage in wider areas and outline their results without fear of their loss, as well as those who are not afraid to meet new and different cultural activities, have the chance and opportunity to develop their longevity and sustainability.

Security and political sustainability. The biggest problem of the overall sustainability of Sabratha in this period is the security situation and political turmoil. We previously talked about the security risks and problems that arose in Sabratha after the 2011 civil war in Libya. No form of sustainable development can be achieved if the safety of individuals, citizens, communities, groups and the entire society is threatened. For this reason, our basic thesis in this paper is that sustainable development must be seen as a set of multiple interconnected elements that make up a very complex structure that often acts as a special social power, force, or alienated power. Sabratha must solve

the problem of people's safety in the city and after that the problem of political relations and structures that make it difficult for it to be sustainable.

Conclusion

The central question posed by theoretical discussions on sustainable development is the question of how to maintain a balance between the available resources of an environment (local, regional) and the growing social needs for continuous economic growth and the development of society, especially seen through the prism of accelerated technological and urban development.

In this paper, we are advocating the view that sustainability and sustainable development are very complex problems and that they include a multitude of elements of concentrated and more social areas, such as ecology, economics, social relations, political relations and culture.

Our, starting, general definition of sustainable development is: Sustainable development is the relationship to the development of an environment, which seeks to enhance the ability of present generations to meet their needs, while preserving resources and leaving the possibility for future generations to meet their needs.

Sustainability cannot be achieved without a focused and co-ordinated approach to politics and science, that is, scientifically based policy solutions and sustainability strategies, as well as political support, assistance and appreciation of scientific discoveries and their application. In observing and studying sustainability, there must be a link between the theoretical, conceptual, practical and activist discourse on sustainable development.

In the paper, we have presented the basic principles and objectives of sustainable development of the Sabratha area, among which the most important are: internal generation and intergenerational equality; control and solidarity, equal distribution of resources; sustainable development with awareness of the needs of future generations; trans-border responsibility for sustainable development (especially ecological); managing the whole of Sabratha space; technological, business and entrepreneurial activities that will make Sabratha an attractive tourist, commercial and cultural destination. Of course, the condition for all this is the security and political stability of the local environment, as well as of the entire Libya and the surrounding countries.

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