SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF REMOTE SOUTH-EASTERN ADRIATIC ISLANDS
SOCIO-EKONOMSKA I DEMOGRAFSKA OBILJEŽJA UDALJENIH OTOKA JUGOISTOČNOG JADRANA

Summary
This paper deals with the problems of the south-east section of the Adriatic islands which consists of two larger islands (the islands of Lastovo and Mljet) and of an archipelago (the archipelago of Elafiti). These are the islands of the Dubrovnik region, remote from the continental coast and with the similar demographic and socio-economic characteristics.

Key words: islands, population, economy, development

Sažetak
Tema ovog rada su problemi jugoistočnog sektora jadranskih otoka koji se sastoji od dva veća otoka (otoci Lastovo i Mljet) i od jednog arhipelaga (Elafiti). Radi se o otocima dubrovačkog područja, koji su udaljeniji od obale i imaju slična demografska i socio-ekonomska obilježja.

Ključne riječi: otoci, stanovništvo, gospodarstvo, razvitak

Apstrakt
Otočci Lastovo i Mljet sa svojim otočnim skupinama tvore jugoistočni sektor jadranskih otoka. Karbonantna građa otoka s velikim površinama pod mediteranskim šumama oblikuju specifičan pejzaž. Dugotrajnim razdobljem zanemarivanja od strane vlasti, otoci su nakon Drugog svjetskog rata počeli s ekonomskom stagnacijom. Gospodarska nerazvijenost potiče mlade stanovništvo na preseljavanje u veće obalne gradove, pa je u zadnjih 50 godina došlo do opadanja broja stanovnika. Demografska stagnacija povezana je sa slabom ekonomском bazom budući je poljoprivreda (vinogradarstvo i maslinarstvo) uglavnom bazirana na tradicionalnom načinu obrade zemlje. Turizam je grana gospodarstva koja ima preduvjet za jači razvitak i koja bi trebala biti oslonac za budući gospodarski i populacijski napredak.

Introduction
Uvod

The remote south-eastern Adriatic islands consist of Lastovo, Mljet and the Elafiti archipelago and they form the islands of the southern part of Croatia. They have many things in common, such as historical-geographic development, the populational development, the economic (under)development and others. Much of the contemporary problems were caused during the second half of the 20th century. While economy of others parts of Croatia was developing significantly, these islands were almost totally neglected by the government. Although the problems of these islands are recognized and there are also various propositions how to solve them, still there is no visible movement towards the economic and demographic improvement. The remoteness from the mainland generate economic underdevelopment and many problems, such as depopulation and the problems in communication between the islanders and the population of the mainland.

The - basic facts
Osnovne činjenice

Under the name of the remote south-eastern islands are considered two islands together with the little islands close to them (the island of Mljet and the island of Lastovo) and the archipelago of Elafiti.

The island of Mljet is situated at 4.5 nautical miles from the closest part of the mainland and 15 NM from Dubrovnik. It stretches for 37 km in the northwest-southeast direction with the width of approximately 3 km and the superficies of 100,4 km².
The island is constructed mainly of the carbonates – limestone and dolomites. Among the rolling hills (the highest peak reaches only 514 m) are situated small parcels of arable land. The climate is mild Mediterranean with many hours of insolation, and the rainfalls during autumns and winters. Mljet doesn’t have a constant flow of neither the bigger water sources (there are periodical sources that during winter give significant amount of water) (Cvetković, Lj., 1986).

The island of Lastovo is situated 32 km west of Mljet and has a superfluous half of Mljet – 50 km². It is constructed mainly of limestone and, like Mljet, its relief demonstrates an interchange of the rolling hills and gorges that contain arable land. The highest points of the island goes slightly across 400 m with the highest one reaching 417 m. The climate of Lastovo is identical to the climate of Mljet with no constant surface waterfalls and without enough sources of water (Friganović, M., 1974).

The Elafiti archipelago consists of 13 islands with 30 km² of superfluous that are situated few nautical miles northwest of Dubrovnik. Only three islands are settled (Koločep, Lopud, Šipan). The archipelago has the similar geologic structure and the same climate and hydrologic characteristics as Mljet and Lastovo (Glamuzina, M. – Glamuzina, N., 1999).

### Decrease of population
*Pad broja stanovnika*

The remote south-eastern Adriatic island were inhabited during the Iliric times and its population continued to develop under the Roman rule and at the very beginning of the Middle Ages when the Slavs (Croats) have inhabited these islands. During the Middle Ages the islands were under constant attacks of pirates who were robbing local population. That’s the main reason why all of the old settlements of Lastovo and Mljet are situated in the its inner parts and cannot be seen from the sea. The archipelago of Elafiti was incorporated in the Republic of Dubrovnik and the same happened with Lastovo in the 13th century with Mljet to follow in the 14th century. Although the Republic of Dubrovnik was a powerful maritime state, the local population still was under the occasional attacks of pirates. The first modern census dates back to 1857 during the rule of Austro-Hungarian Imperey and from this year it is possible to follow the number of inhabitants. The table 1 shows the number of inhabitants of Lastovo, the archipelago of Elafiti and Mljet for the selected census years (census data of the last 2001 census still are not finalized).

<table>
<thead>
<tr>
<th>YEAR</th>
<th>LASTOVO</th>
<th>ELAFITI</th>
<th>MLJET</th>
</tr>
</thead>
<tbody>
<tr>
<td>1857</td>
<td>1 148</td>
<td>2 184</td>
<td>1 330</td>
</tr>
<tr>
<td>1900</td>
<td>1 384</td>
<td>1 616</td>
<td>1 617</td>
</tr>
<tr>
<td>1931</td>
<td>1 700</td>
<td>1 492</td>
<td>2 050</td>
</tr>
<tr>
<td>1948</td>
<td>1 738</td>
<td>1 582</td>
<td>2 086</td>
</tr>
<tr>
<td>1961</td>
<td>1 449</td>
<td>1 497</td>
<td>1 963</td>
</tr>
<tr>
<td>1971</td>
<td>1 210</td>
<td>1 289</td>
<td>1 638</td>
</tr>
<tr>
<td>1991</td>
<td>1 228</td>
<td>996</td>
<td>1 237</td>
</tr>
</tbody>
</table>

Source: 1

The emigration caused ageing of population. After the World War II, Croatia (in those days a part of the socialist Yugoslavia) started with the economic (especially industrial) development. However, this initial phase of development did not happen on the islands. Starting from the 1960s tourism became a very important part of Croatian economy and in the 1970s the real «tourist boom» was happening on the Croatian coast and bigger islands. Instead of opening the new working places, the result of this development was leaving the islands and looking for a job in the coastal cities and towns – especially the bigger ones such as Split and Dubrovnik. That’s why, starting from the 1960s, the population of the islands started to decrease rapidly.

One of the novelties of the 1960s is the emigration of Croats out of the country towards the developed countries of the Western, Northern and Central Europe. According to the last (1991) census almost 1/5 (19,1 %) of population of Lastovo was living abroad. The same census shows a very low share of the population living abroad for Mljet (4,8 %) and the Elafiti archipelago (4,1 %). So, the external emigration is a way of losing the islands population.

A better look at the numbers in the table shows that there is no significant difference between the first census, that of 1857 and the last one of 1991. For example, in 1991 Lastovo had more inhabitants than in 1857 (increase of 7 %) while the population of Mljet decreased for 7 %. So, these are not alarming numbers especially for the remote underdeveloped islands such are Lastovo and Mljet. Only the Elafiti archipelago differed with the population decrease from 1857 till 1991 of 54 %. What is of great concern is the declining population trend after the World War II. Since the first census (1857) further to the 1948 the population was increasing steadily and in 1948 Lastovo and Mljet reached its population peak. Starting with the 1948 census the population began to fall until the 1991 census. Between 1948 and 1991 the population of Lastovo fell for 29 %, the population of Elafiti for 37 % and the population of Mljet even more - 41 %. And this happened in approximately 40 years. It is interesting that Lastovo – even though more remote
from the mainland than Mljet and the Elafiti – has lesser decrease and the explanation should be looked in the status of the island during the period of socialist Yugoslavia. The thing is that Lastovo was a very important military (naval) base of the Yugoslav army in the days of the Cold War and because of that a part of its population were the military families that came from the mainland.

The overall decrease of population is result of moving of the mostly younger islanders in search for jobs but also of ageing of the remaining local population that has no ability to reproduce and maintain the same number of inhabitants. A study of contemporary geographic problems of the islands of Lopud and Koločep of the Elafiti archipelago showed that the very ageing of population still isn’t such a big problem of these islands (Glamuzina, M. – Glamuzina, N., 1999). More important is that ageing of population has certain economic repercussions because younger generations much easier embrace and implement various innovations and novelties in the realms of economy.

This problem of depopulation is shared among the majority of Croatian islands and it is recognized among the scientists and politicians. Therefore, various solutions were proposed by the both sides but neither one was implemented. The latest solution was proposed during the first half of the 1990s by the Croatian government after the proclamation of independence of Republic of Croatia. The government’s proposition was based on an idea of few demographers who wanted to stop the downfall population trend through the immigration from the Croatian mainland. This solution also was based on the giving of the non-cultivated island land to the newcomers. The islanders, just as a part of scientists and press, opposed strongly to this «solution» and it was never implemented.

Economy

Gospodarstvo

It is clear that the population decrease isn’t a problem in itself – it is generated by the economic situation on the islands. During the centuries the islands were neglected by the mainland authorities and through the current state of local economy this neglect can be seen very easy.

The axis of the local economy is the agriculture. Cultivation of grape-vine and olives still is the most important, much more than other plants, while cattle-raising is of little importance. Although Lastovo and Mljet have vast superficies under forests, they are not significantly commercially exploited. Fishing is a traditional branch of economy of Lastovo and the Elafiti while on Mljet it developed very late (during the 19th century) although the sea water around the island was very rich with fish during the centuries.

Industry never developed on the islands, even though there was a try to establish a fishing industry on Lastovo. One factory of fish processing and packing was opened between two World Wars but it was closed during the last years of the 1960s due to oscillations of the fish quantities in the island sea water. The islanders produce wine and olive-oil by themselves and part of this products serve in commercial purposes.

Tourism is a great chance and a great hope for the locals. Lastovo and Mljet, together with the small islands nearby, are of great natural beauties and the same may be said of the Elafiti archipelago. Clear and transparent sea, preserved nature with plenty of Mediterraneen vegetation, tranquility and the life-style of the Mediterranean islands – these are some of the most important resources of the local tourist economy. The island of Mljet is a well-known tourist destination because of the National Park that stretches on its western part. The Park contains preserved Mediterranean forests with the mediaeval monastery (now a hotel) and other attractions. The Elafiti archipelago, especially the island of Lopud, also are a tourist destination. The tourist development of Lastovo was stopped during the period of socialist Yugoslavia because the island served as a important naval base (the best-known example is a nearby island of Vis, in those days the most important naval base, where the entrance to foreign tourists was prohibited).

Table 2. The active population distribution by the economic sectors (in percentages)

<table>
<thead>
<tr>
<th>ISLANDS</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mljet</td>
<td>13,7</td>
<td>2,8</td>
<td>83,5</td>
</tr>
<tr>
<td>Lastovo</td>
<td>8,4</td>
<td>3,3</td>
<td>88,3</td>
</tr>
<tr>
<td>Elafiti</td>
<td>14,3</td>
<td>2,4</td>
<td>83,3</td>
</tr>
</tbody>
</table>

Source: 2

Table 2 shows that the vast majority of the active population is based inside the service (III) economic sector. However, this development of the service sector doesn’t have an economic excuse. The most important branches of this sector are commerce, tourism and catering, crafts and professional services. The development itself of this branches of economy is not in accord with the tight local market. The table also shows that there is more active population inside the primary sector than in the secondary sector (up to six times more). Such distribution speaks of insignificance of the secondary economic sector on the islands.

Contemporary socio-economic problems

Suvremene socio-ekonomiske poteškoće

The major part of the social and demographic problems of the islands are of economic origin. Unsufficient economic development causes leaving of the islands by younger population and forming of the petrified social structure. It is important to note
that social problems are primarily the economic and demographic ones.

The agriculture still doesn't show the signs of modernization. The farming is still based on traditional cultures such as grape-vine and olive, but generally isn't turned towards the market and commercializing. There are small amounts of the arable land on the islands and these small amounts are divided into little parcels that often do not allow implementation of modern techniques of farming. Deagrarization, decrease of the agrarian population, wasn't complete. The percentage of the agrarian population decreased significantly in the 30 years period (from 1961 till 1991): this percentage fell from 46.4 % to 5.6 % in case of Lastovo, on Mljet even more (from 89.6 % to 6.8 %), while on the Elafiti archipelago this share also decreased - from 48.3 % to 9.0 %. Although the figures speak of a great and significant decrease, it should be noted that it wasn't complete in sense of that many of the inhabitants still posses a part of the land that they use as a additional source of income.

Water-shortages during the summer and insufficient amounts of drinking water is the next problem. Water-shortages also influence the agriculture during the summer droughts. On the field of water-supply many things have been done: the building of the regional waterworks from the Neretva delta to the peninsula of Pelješac and the island of Korčula has been almost completely finished. The pipe-lines towards Lastovo and Mljet are constructed but still aren't put in work. However, the progress towards resolving of this problem of water-supply is obvious and depending of the monetary resources of the government, should be resolved in the years to follow. The water-supply of the Elafiti islands is also near the resolving with the waterworks under construction starting from Dubrovnik.

Non-existence of the industrial sector on the islands also has its influence on the socio-economic situation. It is clear to see that the locals have to transport industrial products from the mainland because the islands have very small local market (due to only couple of thousand of inhabitants in total) and that isn't a predisposition for the opening of factories. Therefore, the eventual industrial development should be connected with the local resources such as agriculture. One or couple of small wineries or the factories for the olives processing could secure its market on the mainland but also among the tourists during the summer. Of course, stronger development of tourism is a predisposition for that.

It is clear that the most important branch of economy is tourism because the islands have natural predispositions for tourism. The very tourist development needs the investment in infrastructure. Tourism also leads to the seasonal expansion of the local market, something from which all other economic sectors could benefit more.

Maintaining of the population number would be much easier in case of economic development. Various experiences of other parts of Croatia speak of unresolved problems and of misunderstanding between locals and the newcomers. That shows that simple mechanical immigration does not lead to the solution. The islanders, after the long period of neglect, are extremely sensitive to the solutions that come from the mainland without their participation in finding them. Because of that, the solution of both the economic and demographic problems should be looked for in cooperation with the locals and respecting their final say.

Conclusion

Zaključak

The remote south-eastern Adriatic islands of Lastovo and Mljet and the Elafiti archipelago are characterized by negative population development in the last 50 years due to economic underdevelopment. Economic structure of these islands is still based on the traditional branches of economy such as agriculture (grape-vine, olives) and fishing. A result of the economic underdevelopment is the population loss that started after the World War II. The reasons of such economic and demographic situation should be looked for in the official politics of that period that didn't care about the islands. These islands have splendid natural characteristics for the tourist development and through investment in the tourist sector the local economy could be improved.

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