

CASE STUDY

"MANAGING RECREATION IN URBAN FORESTS" (SLOVENIA)

D4.1 | Final Version | 09/08/2016

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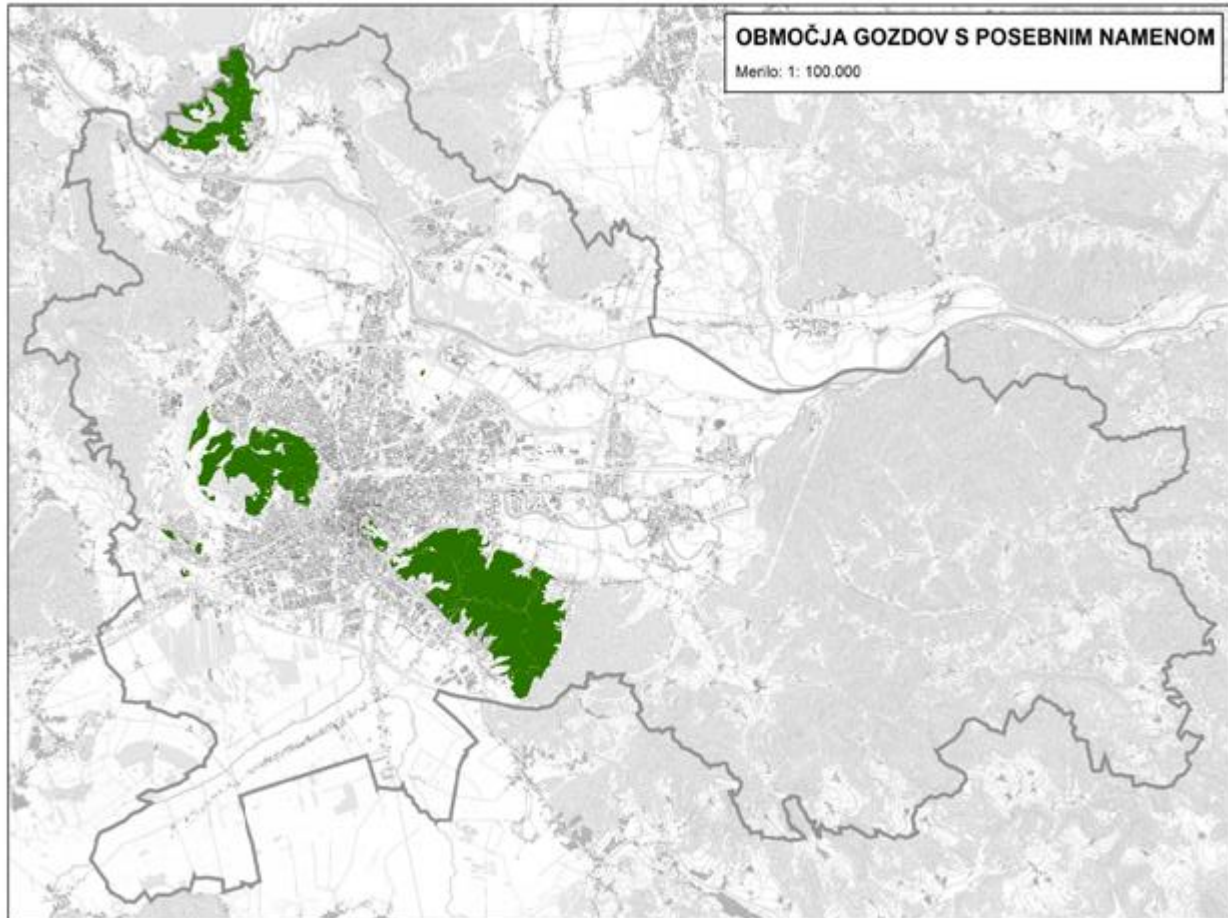
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1 Introduction: What is the case study about?

This case study is focused on Slovenian urban forests, more specifically in two different cities: Ljubljana (Slovenia's largest and capital city) and Celje (third largest Slovenian city, capital of the Savinja NUTS-3 region, SI014). The urban forests in Ljubljana cover two separate areas – Rožnik (Landscape park Tivoli, Rožnik in Šišenski hrib – 509 ha) and Golovec (660 ha), while the Celje study is focused on the Celje Town forest (sl. Mestni gozd Celje) (94 ha), a part of the forest area with the status of a Forest with special purpose – 702 ha (Hostnik, 2013).²

Figure 1: Forests with a special purpose in Ljubljana



² A detailed list of locations covering the forests with a special purpose in Ljubljana and Celje has been published in the Official Gazette of the Republic of Slovenia, see References section.

Figure 2: Celje Town Forest



Source: http://green4grey.eu/?page_id=9453

The key ESBO relevant for the case study is public health and leisure derived from recreation, relaxation and the forests' spiritual value, positively affecting the wellbeing of locals and visitors. Since these forests are designated as forests with a special purpose, they are (mostly) not exploited commercially, so their production function is not as relevant as in other multi-purpose forests. However, in addition to the benefits perceived directly by forest visitors, they offer substantial benefits by performing regulating functions (water retention, air purification, microclimate regulation, carbon sequestration, erosion prevention etc.) and providing habitats. These benefits are perhaps not perceived directly, and therefore not appreciated by all inhabitants, but they are certainly not negligible and add importantly to the quality of life of urban populations (Workshop 1).

As all forest areas in Slovenia, urban forests fall within a common management framework (Euro Forest Portal, 2016). The guiding principles of forest management in Slovenia are sustainability, co-natural management, and the multi-functional nature of forests. Forest management is the right and duty of forest owners, while guidelines for forest management fall under the competences of the Slovenian Forest Service, which in cooperation with forest owners also performs tree selection for felling on the basis of the National Forest Programme, Act on Forests, and forest management and silvicultural plans.



According to representatives from the Slovenian Forest Service (Workshop 1), another important ESBO that the Town forest offers is education. In a good practice case of the Urban Forest of Celje, the municipality as the owner of the area has been actively engaged (investing time, energy and funds) into educating schoolchildren and providing infrastructure (thematic trails, waymarks, information boards ...) in an attempt to raise their awareness and appreciation of the benefits that people derive from forests. At first, this was a wish of certain primary schools, but has now become a regular organised activity of the Forest service.

It is precisely the Forest Service that seems to have been central to the success of the Celje Town Forest. They have cooperated closely with the municipality, schools and media to raise public awareness of the forest's significance, and the Town forest has had its own brand and graphic design since 2005, helping to increase its functional range and visibility to the general public. The municipality of Celje, together with the regional branch of the Forest Service, has been active in applying for different project grants and successful in acquiring funds from different sources (e.g. European structural and investment funds, Cross-border cooperation). The result – an attractive public forest area with the corresponding infrastructure and interpretation – is the result of the coordinated action of the two institutions (municipality of Celje, Forest Service), but also of the consistent and long-term personal engagement of the staff of the Forest Service.

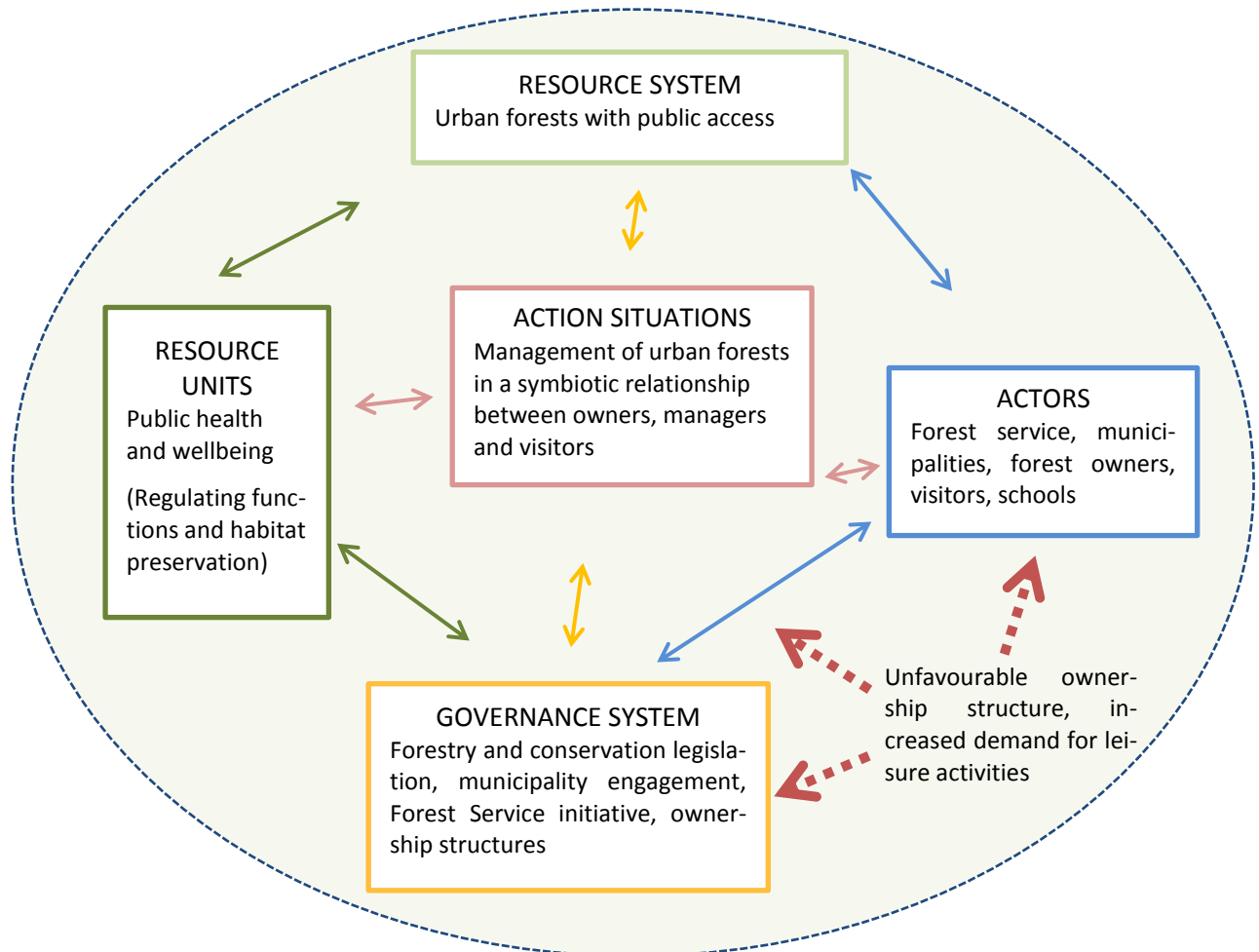
While the municipality of Celje is more pro-active and organised, gradually acquiring forests³, the urban forests in Ljubljana remain mostly privately owned. The owners of the forest are less interested in management due to legal restrictions to management, and the low market orientation of urban forests. The municipality of Ljubljana invests in forest infrastructure and maintenance, but, in contrast to the municipality of Celje, shows no specific interest in active participation on the land market. Partly, it is also the human factor (lack of personal engagement and creativity) that makes the difference between the two cases.

³ Since the establishment of the forests with a special purpose in the municipality of Celje, the town Council has committed itself to gradually acquiring areas located in the Celje Town Park of today. A special budgetary item was created in the town budget, enabling the purchase of forest areas.



2 Definition of the social-ecological system (SES) studied

2.1 Figure of the SES, using the SES Framework



2.2 Short characterisation of key drivers/motivations

Public drivers

According to Article 5 of the Forest Act (UL RS 30/93), all forest areas, irrespective of their ownership status, are freely accessible to the general public for recreational purposes (non-injurious passage, gathering wild-growing non-wood products). Protective forests (declared by a decree at the State level) and forests with special purposes (declared by local governance) put additional restrictions to forest owners in terms of exploitation of forest areas.

Municipalities can play a key role in the acquisition of forest land and in ensuring the recreational functions of urban forests. In our case, the municipality of Ljubljana is responsible for the urban forests Rožnik and Golovec, and the municipality of Celje for the Celje Town Forest. As already indicated, there are notable differences in the role of the two municipalities in driving the provision of the investigated ESBO.

The urban forests in Ljubljana are mostly privately owned, with owners who are not very interested in management (Workshop 1). The range of economic benefits to be derived from



forest ownership (commercial exploitation) is strictly limited and everybody has free access to these forests, while the responsibility to manage them, and indeed the liability in case of accidents, falls on the owners. This results in a fairly negative attitude of many forest owners towards forest visitors. Moreover, in certain parts of the forest, owners are not even aware of their ownership. The municipality of Ljubljana does not prioritise owning and actively managing these forests and communication with owners has been weak (Workshop 1).

However, the municipality of Ljubljana does invest in forest infrastructure and maintenance and is co-financing some projects dealing with sustainable forest management; this is also in connection with the Green Capital Award, which was granted Ljubljana for the year 2016 (Ljubljana – European Green Capital; <http://www.ljubljana.si/en/living-in-ljubljana/fo-cus/101358/detail.html>).

On the other hand, the municipality of Celje is more pro-active, organised, and relatively innovative in this respect. The city has had a consistent strategy since 1996, when the decision to establish the Town forest was made (Workshop 1); the next year, the forest was granted the status of 'Forest with special purpose' (Odlok o razglasitvi gozdov s posebnim namenom v Mestni občini Celje [Ordinance declaring forests with a special purpose in the Municipality of Celje], UL RS 37/1997).

The Celje Town Forest area is part of a larger forest that was gradually acquired by the municipality; the city has been investing into and promoting the public health and enjoyment that urban forests provide to locals and visitors for the past 20 years (Hostnik, 2013). There is a plan to solve possible conflicts with private owners that may arise when a public trail crosses their private property through compensation payments by the municipality. The Celje Town Forest has thus become an example of sound practice for other cities (project Sylvamed, <http://www.sylvamed.eu/>).

The key to the successful establishment and management of the town's urban forest seems to be municipality's openness to such projects and the establishment of good cooperation between the municipality and Celje's local branch of the Slovenia Forest Service, which has managed the project in terms of content and organization. But what really appears to make the difference of urban forest management of Celje compared to Ljubljana (and other urban forest locations in the country) is a combination of a consistent support of the local authorities, careful planning of actions, and a strong personal commitment of key individuals. In the case of Celje, the local Forest Service officers mag. Robert Hostnik and Boštjan Hren are the individuals whose commitment to the project goes well beyond their official obligations (Workshop 1)

The long-term strategy outlined in the Ordinance declaring forests with a special purpose in the Municipality of Celje (1997) and concretised with the subsequent Forest management plans (under the responsibility of the Forest Service) is yielding results after two decades of consistent action. In addition to municipal budgetary funds earmarked for the purchase of forests, this action is funded through various projects.

It is usually these projects that bring a qualitative leap in the overall performance of the area. An illustrative example of this is the fact that the Municipality of Celje has recently become a supporting partner of the international project "Forests for the city – GREEN4GREY." (http://green4grey.eu/en/?page_id=6865). This Interreg SI-HR pilot project, whose value was



estimated at around € 375,000.00, was co-financed from the EU regional development fund and geared towards the sustainable management of Celje's (Slovenia) and Rovinj's (Croatia) urban forests through revitalization, installation of equipment, and promotion of forests' natural and cultural value. Using these funds, they have built the largest treehouse in Slovenia from locally acquired wood.

Figure 3: Treehouse in Celje Town Forest



Source: http://img.rtvsllo.si/up/upload/2015/10/12/65252252_5.jpg

Market drivers

There seem to be no direct market drivers for the provision of public health and enjoyment in the urban forests investigated, though increasing demand for outdoor recreational activities (both organised and individual) is causing a surge in the popularity of such areas, indirectly pressuring local authorities to improve their provision through landscaping and by investing in recreation infrastructure (Workshop 1).

In Celje, the Forest Service and Municipality have worked towards creating a favourable media image of the forest and have even created a brand to increase its recognisability.



Figure 4: Celje Town Forest's Logo



Source: http://www.crtast.si/wp-content/uploads/2009/04/logotip_celjski_gozdovi.gif

Similarly, the municipality of Ljubljana has worked in recent years towards promoting the city's public image as a 'green' city, and these efforts have resulted in Ljubljana receiving the Green Capital award. However, this effort has mainly focused on creating and maintaining parks (according to municipality data, Ljubljana has 542 m² of public green space per inhabitant), reducing emissions from traffic, improving public transportation, waste management, energy efficiency and other elements⁴ that fall outside the scope of this case study.

Private initiative

Recently, an association of mountain bikers (BrezBremz⁵) cooperated with the Forest service and municipality in Celje to establish two forest trails suitable for mountain bikers under a Leader-funded project (RuBike - <http://moc.celje.si/novice-in-obvestila/4292-rubike-nove-gorsko-kolesarske-poti>).

Another interesting fact pointed out in Celje (Workshop 1) was that before the Forest Service became involved in equipping trails with markings, forest owners and visitors in the northern part of the forest, where ownership is still largely private, did so themselves using a wide variety of symbols in an attempt to prevent getting lost (Figure 5).

⁴ <http://www.ljubljana.si/en/green-capital/>

⁵ Colloquialism, a free translation would be 'NoBrakes'



Figure 5: Tree markings in the northern part of Celje forest



Source: Hostnik, 2013

As a side result of the RuBike project, a generic designation of a mountain bike trail was devised (Figure 6). A network of mountain bike trails was designated, recreationists are encouraged to use them by using smartphone applications⁶ (maps and other practical information), making conflict situations between different recreation users of the area less likely. In this respect, the case can be seen as a successful practice of managing urban forest recreation.

Figure 6: New tree marking



Source: Hostnik, 2013

In Ljubljana, despite the fact that the legal foundations and institutional framework for management of urban forests are comparable to Celje, the level of active management of urban forests in Ljubljana is considerably lower. The Ordinance declaring forests with a special purpose in the Municipality of Ljubljana stipulates the purchase of private forest area, but there

⁶ <http://www.celjska-koca.si/demo/aktivnosti/letne-aktivnosti/kolesarjenje/#>



are no funds allocated for this purpose (Workshop 1). Especially the central location of urban forest in Ljubljana (Šišenski hrib, Rožnik) attracts a high number of visitors (1.75 million yearly), which inevitably leads to conflicting situations between the owners and the visitors⁷.

2.3 Description of other important variables chosen

None.

2.4 Discussion of the SES

Slovenian forests falls under the jurisdiction of the Ministry of Agriculture, Forestry and Food and the Forest Service. The regulatory policy that has a long tradition in Slovenian forestry provides an important baseline for forest management, which has traditionally been oriented towards the sustainability of Slovenian forests, and more specifically towards protecting their ecological, economic and social functions – multi-functionality (Pezdevšek Malovrh et al., 2012). Free access as everyman’s right in all forests, public or private, that is obligatory by law, has a strong positive influence on the provision of the ESBO investigated. Under the Forests Act, owners must grant free access to their forest to allow for its recreational function. Moreover, measures that improve the aesthetic appeal of forests and maintain trails in good condition have also been proven to contribute to the appreciation of forests’ recreational functions (Verlič et al., 2015).

The preparation of Forest management plans, in which much emphasis needs to be placed on forests’ recreational functions, falls under the jurisdiction of the Forest Service (Hostnik, 2013). Forest management and silvicultural plans for such areas incorporate special regulatory regimes regarding felling, as well as plans for establishing educational and information trails in the forest. The regulatory measures driving the provision of the ESBO “public health and enjoyment” (recreational function of forests) are defined in the “Handbook for the preparation of forest management unit plans” (Priročnik..., 2013) and Rules on forest management plans and game management plans (Pravilnik..., 1998, ... 2010; <http://www.pisrs.si/Pis.web/pregledPredpisa?id=PRAV10005>).

The most relevant examples include measures such as

- a) planning of forest educational trails;
- b) setting up information/education boards also near major sanitary fellings;
- c) maintaining aesthetically interesting trees;
- d) planning lookout points and cutting trees to improve scenic view and
- e) the implementation of forest policy – stacking loads of logging residues and their disposal⁸.

All of the investigated urban forests in the case study have a formal status of forests with special purpose. The management regime for such a forest is laid down in each municipality

⁷ <http://www.delo.si/novice/ljubljana/mestni-lastniki-zemljisc-niso-sovrazniki.html>

⁸ The main objective of this measure is indeed to maintain healthy forests and to prevent the over-spread of bark beetles, but may also be partially adapted for other forest functions; e.g. an appealing image of forests clear of piles of logging residues.



decree proclaiming this status. Intensive timber production is prohibited in both cities. In that sense, there is no conflict between policies that may stimulate the economic function of forests and policies that target safety and a visitor-friendly appearance/condition of urban forests. In privately owned parts of urban forest, however, where free access must also be allowed, owners do express their concerns and disagreements regarding their responsibility for injuries that visitors may experience in cases of often unpredictable events (e.g. falling branches).

Despite this common regulatory framework and fairly similar strategic orientations, there is a clear difference in the actual management in the two municipalities, mainly from the point of view of satisfying all concerned parties. The most striking is the dissatisfaction of Ljubljana's forest owners due to the fact that anybody can access their forests without even realising that they are in fact entering somebody's private property. Despite the fact that the Forest Act and Decree declaring the forest's special status state that the municipality proclaiming this status must either compensate owners or buy off their property, the municipality and owners cannot seem to find common ground regarding this matter. On the other hand, matters are running more smoothly in Celje, and we believe that this is a result of cooperation between motivated individuals within the municipality and the Forest Service (Workshop 1). According to focus group interviews, it was the Forest Service that was the main motor of change; more recently, however, the municipality has in a way become forced to continue on this path of success, and the Forest Service has assumed a support role.

In addition, especially for the case of Celje Town Forest, we believe that there are complementarities between regulatory forestry policy and projects that further support investments in infrastructure and revitalisation of urban forests. Our interlocutors in Celje have, however, pointed out the difficulty of finding a stable financial source.

2.5 Common aims, conflicting interests and goals

In both cases, the main aim of the Forest Service is to preserve forests through increasing their appreciation; this coincides with the increasing demand of visitors for outdoor recreational activities, including education of schoolchildren. For most visitors, this also means improved infrastructure, though this is not always the case; research results in Ljubljana (Japelj, 2016), for example, show that visitors of Golovec prefer its slightly wilder appearance and do not wish it to be equipped with more trails, information boards etc. A similar survey result for Celje (Skale, 2006) was pointed out at the focus group meeting. The main difference is that here it is not as simple to accommodate the two different populations as it is in Ljubljana, where visitors simply decide whether to go to Rožnik or Golovec, of which the first is more of a park-like forest, while the second offers a somewhat more peaceful environment.

It could be argued that the different attitude of the two municipalities towards urban forests indicates that their inclination to maintain a healthy urban population is also different, but this assertion would probably be too simplistic, especially given the efforts in Ljubljana towards greening the city.

Undoubtedly, there is a conflict of interest between forest visitors and owners. The right of anybody to freely access any forest can in itself be seen as a limitation to private property, but the special regulatory regime in forests with a special purpose puts additional constraints on owners' right to manage and derive benefits from their own property. The municipality of



Celje currently seems to be easing this burden more successfully, as it has been buying property, communicating with owners more and considering a compensatory payment.

2.6 Other issues arising from SES analysis and context/case study specific aspects/issues

The role of the human factor is crystallising as the main success factor in the case of a well performing location (Town Forest Celje). This is evident from the synergistic action of a long-term professional and committed operation of the Forestry Service staff, followed by a committed support of the local community.

3 Status of the SES and potentials

3.1 Description of the SES

The Slovenian Constitution stipulates (Art. 67): “The manner in which property is acquired and enjoyed shall be established by law so as to ensure its economic, social, and environmental function.” As we have seen in the preceding sections, urban forests are certainly a case where the conflict between these three functions is made evident.

As far as potentials for the improvement of ESBO provision are concerned, we deem that the work in Celje is well underway towards further improvements that would not go against anybody’s perceived interests: schoolchildren are receiving education regarding the importance of forest ecosystems (free of charge for primary schools, payable for further levels), the municipality-Forest Service tandem is quite successful in receiving financing and appeasing potential disgruntled private forest owners, and the Town forest has a good media image. The snowball is rolling, successfully enough on its own.

Ljubljana, on the other hand, has only started managing its forest recently and is forced to resolve tensions with owners – most likely by starting to buy property (though municipality interest in this method seems low; negotiations have started regarding the price of these estates and at the moment opinions on both sides are quite far apart; some say that the price demanded by owners is unreasonably high) or by remunerating owners and relieving them of the duty of maintaining their forests in a state that accommodates the wishes and needs of visitors. Given the city’s new green public image, this question is likely to be addressed in the foreseeable future, as public demand for leisure outdoor activities will most probably rise further, putting additional pressure on owners.

3.2 Relationships between farming and forestry, and the quantity and quality of ESBOs

The areas studied in this case study are exclusively forest areas, so farming is not a very important element (other than the fact that it is farmers that own some of the land under consideration).

Forest management is crucial, on the other hand. Slovenia has a fairly strict (and sometimes rigid) forestry regime, enforced by the Forest Act and implemented by Forest Service in accordance with the principles of sustainability and multi-functionality. For example, clear-cutting has been forbidden in Slovenia since 1949. The long-term management strategy has resulted in healthy forests, though they were damaged in recent years by natural disasters (sleet in February 2014, followed by a bark beetle outbreak, which is still ongoing, snow in late April



2016). Forest visitors in Slovenia are able to enjoy the preserved nature, clean air and fruits of the forest without having to pay for access.

3.3 Key motivational, institutional and socio-economic factors

Celje does not really need transformative practices. The Forest Service and municipality are actively engaged in further improving the people's attitudes towards forest ecosystem by educating children, other visitors, forest owners etc. There is a potential for an increase of financial capital to carry out the planned future activities/projects of Celje Town Forest from commercial donors / sponsors (e.g. grants from major beneficiaries of forest recreation, i.e. the sports/leisure industry). However, as was also pointed out at the PEGASUS workshop in Celje (Workshop 1), there is a thin line between enabling public enjoyment in the town forest (leisure/interpretation/recreation) with knock-on benefits (public health and environmental consciousness) on one side, and satisfying the interests of commercial donors on the other.

In Ljubljana, a consensus must be reached regarding fair remuneration. In addition, experiential education could also be used to enhance the appreciation and awareness of the population of Ljubljana's forests.

Both municipalities are investing in infrastructure to improve the satisfaction of visitors.

3.4 Levels of provision, trends and determinants

The simplest way to assess quantity would be to count/estimate the number of visitors of both forests. Their satisfaction as an indicator of quality can be evaluated using surveys and/or interviews. Another indicator of quality might be the number of infrastructural elements, though, as mentioned earlier, this is not necessarily reflected in the improved satisfaction of all visitors; in fact, adding such elements might deter certain visitors from coming to the forest (Japelj, 2016).

Both cities already have many forest visits per year. Problems that might occur in this respect are inadequately managed forests (potentially dangerous falling branches), competing uses of forest amenities and infrastructure with consequent conflicts (among users themselves, between users and dissatisfied forest owners).

In addition to an increased general appreciation of outdoor recreational activities, it is worth noting that Slovenia has a strong 'gatherer' culture that drives forest visits. In recent years, this element was reinforced by the economic crisis, as people have tried to improve their incomes by selling non-wood forest products, such as mushrooms, chestnuts and berries. This has been met by resistance of forest owners, as such gatherers tend to exceed the legally allowed daily limit 2 kg/person.

3.5 Relevant governance arrangements and institutional frameworks

We have already described the main tensions in the preceding sections. To summarise, forest owners tend to feel that their property rights are being disproportionately restricted without proper remuneration, though they do not necessarily mind public access to their forests. This is a matter of both national legislation, local (municipality) management and participative forest management planning, which sometimes fails to find an appropriate balance between public and private interests.



3.6 Other context/case study specific aspects/issues

Nothing in addition to the already described issues.

4 Conclusions derived from analysis in Steps 1 and 2

4.1 Key findings on the particular SES and its potentials

Appreciation and demand are increasing in both locations. Awareness of forest ecosystem benefits can be improved through education, as is being done particularly well in Celje. Promotional activities (e.g. thematic events) targeting various groups of visitors can add to this objective. Provision could be increased in terms of quality by improving infrastructure and making inadequately managed forests safer for visitors and perhaps by removing litter left behind by careless visitors and waste in open dumps.

4.2 Governance arrangements and institutional frameworks

Slovenia has a long-standing tradition in public forest management. All forests, regardless of ownership, are subject to some degree of public intervention, from management planning to on-site interventions by the Forest Service. Slovenia has 236 forest management units and the Service prepares individual 10-year plans for each unit (ZGS, 2010). This institutional arrangement, together with the fact that agricultural land in some marginal areas is uncultivated and is slowly overgrowing – has contributed to the fact that Slovenia has 60% forest cover.

On the other hand, national legislation provides access to all forests as an everyman right, resulting in a situation where public and private interest are at odds and this conflict is not always well resolved. The situation depends largely on the concrete setting in each municipality, where it is the municipality that decides on granting forests different forms of special status, determining the specific management regime and the way that owners are to be compensated for potential restrictions.

EU policy does not play a strong direct role in these specific situations, other than providing options of project funding through different (structural, regional development) funds.

4.3 Other enabling or limiting factors

This case study underlines that the management system (and available funds thereof) make ESBO accessibility/enjoyment possible. The case also shows that increasing public interest (demand?) for ESBO plays a catalytic role in the process of improving its appreciation/availability to the general public. But personal engagement of key actors makes the main difference.

4.4 Reflections on the case study methodology used and potential improvements

In the context of this case study, we would like to highlight one thing that emerged from the case study workshop; reporting unsuccessful practices by civil servants may bring some discomfort to them in the reporting stage, especially if decisions on such practices have been taken in the higher circles. Understandably, this brings some reluctance from their side to the interaction. For this reason, we limited inquiries on these issues in our interviews/workshops to a level that allows everybody to (still) openly discuss.



5 Research and action mandate for Steps 3 and 4

5.1 Agreed objectives of activities to be undertaken with initiative/stakeholders

The case of Town Forest in Celje is well advanced and our assessment is that the resources that can be committed to this work within PEGASUS project would not bring any notable progress. Potentially, more progress could be achieved in the case of urban forests of Ljubljana.

5.2 Innovations, impact, transferability, potential risks and research bias

Forests in the vicinity of cities have an increasingly important ecological role in regulating urban climate, improving air quality and preserving biodiversity. An important role is also attributed to the benefits that the urban population has from regular recreation in urban forests and contact with nature. The case of the Celje Town forest is inspirational and innovative in various respects: active management of urban forests, regulation of ownership issues, innovative development of recreational infrastructure and especially successful cooperation of the public Forest Service and local community. It is for these reasons that, following the occasion of the European year of forests in 2011, the European Commission awarded the municipality of Celje the status of a good practice case in management of forests in smaller European cities⁹.

The case of the Celje Town Forest is therefore innovative and has a clear impact on public wellbeing. Its transferability is limited however, as the combination of the key factors of success, i.e. human capital and cooperation between professional associations and local self-governance, is rather unique.

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⁹ See: <http://www.celje.info/splosno/mestni-gozd-celje-med-petimi-evropskimi-primeri-dobre-prakse/>



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7 ANNEX

7.1 Documentation of research and action progress

Workshop 1 (Focus group with stakeholders on institutional drivers of ESBO provision) was carried out on the 19th of May in the Celje Town forest (location: treehouse). Participants:

- Anže Japelj (Forestry institute)
- Jurij Kobe (Municipality of Ljubljana)
- Dragan Matijašič (Slovenian Forest Service)
- Robert Hostnik (Slovenian Forest Service)
- Luka Juvančič (Biotechnical faculty)
- Ilona Rac (Biotechnical faculty)
- Vesna Turšič (Biotechnical faculty, student)
- Borut Benko (Biotechnical faculty, student)
- Boštjan Hren (Slovenian Forest Service)
- Vasja Leban (Biotechnical faculty)



Figure 7: snapshots from the PEGASUS Workshop on recreation use of urban forests, Celje, 19.5.2016



7.2 Supporting data and statistics

1. Odlok o razglasitvi gozdov s posebnim namenom v Mestni občini Celje [Ordinance declaring forests with a special purpose in the Municipality of Celje], 1997. Ur.l. RS 37/1997.
2. Odlok o razglasitvi gozdov s posebnim namenom v Mestni občini Ljubljana [Ordinance declaring forests with a special purpose in the Municipality of Ljubljana]. 2010. Ur. l. RS 60/2010.
3. Pravilnik o načrtih za gospodarjenje z gozdovi in upravljanje z divjadjo [Rules on forest management plans and game management plans] (Ur. l. RS 91/2010).
4. Zakon o gozdovih [Forests Act], 1993. Uradni list RS, 30/93. <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO270#>



5. Ustava Republike Slovenije [Constitution of the Republic of Slovenia] (Uradni list RS, št. 33/91-I, 42/97 – UZS68, 66/00 – UZ80, 24/03 – UZ3a, 47, 68, 69/04 – UZ14, 69/04 – UZ43, 69/04 – UZ50, 68/06 – UZ121,140,143, 47/13 – UZ148 in 47/13 – UZ90,97,99).
6. Statistical Office of the Republic of Slovenia
7. <http://www.stat.si>

