The Silesian University of Technology

### REVITALISATION OF PUBLIC SPACE TO ENHANCE SPA ATTRACTIVENESS FOR TOURISTS AND RESIDENTS

Anna PAWLIKOWSKA-PIECHOTKA a, Maciej PIECHOTKA b

<sup>a</sup> Prof. Arch.; Faculty of Tourism and Recreation Joseph Pilsudski University of Physical Education Warsaw; 34 Marymoncka Street; 00 968 Warsaw

Faculty of Architecture Warsaw Technical University; 55 Koszykowa Street; 00 689 Warsaw; Poland;

E-mail address: anna.piechotka@gmail.com

<sup>b</sup>MSc Eng. Arch.; ECO Group Design Office; 24 A Bukowińska Street; 02 703 Warsaw; Poland E-mail address: maciej.piechotka@gmail.com

Received: 14.11.2013; Revised: 18.12.2013; Accepted: 8.09.1014

#### Abstract

Natural environment provides several excellent opportunities for recovery from stress, fatigue and enabling both physical activities and peaceful reflection. Therefore an easy access to public greens of high quality is especially important in health resorts, being part of healing and recovery process. Health resorts are places used for medical services, relaxation, and recreation as well as rebuilding physical and mental abilities. In Poland there are more than 40 formally registered health resorts, having state, communal or private ownership status, located along sea coast, in lowlands or in mountain regions. Health resorts located by sea or in mountain regions could offer much more attractions connected with sport and recreation activities. Health resorts at lowlands (as Ciechocinek, Konstancin-Jeziorna and Nałeczów) should mainly base on built infrastructure. Therefore so important is quality of public greens, sport and recreation grounds located in these sites.

### Streszczenie

Tereny zieleni otwartej, odpowiednio urządzone i zadbane, mają ogromne znaczenie dla podnoszenia jakości życia wszystkich obszarów zurbanizowanych, dając ich mieszkańcom możliwość wypoczynku i aktywności fizycznej w sprzyjających warunkach. Jest to element programu funkcjonalnego szczególnie ważny w uzdrowiskach, ponieważ procesy lecznicze, prewencyjne i rehabilitacyjne wymagają wysokiej jakości środowiska. W Polsce jest oficjalnie zarejestrowanych ponad 40 miejscowości o statusie uzdrowiska, mających różną osobowość prawną, tradycję i specyfikę usług medycznych. Uzdrowiska położone na morzem lub w górach mogą oferować kuracjuszom i mieszkańcom znacznie bardziej urozmaicone formy wypoczynku. Uzdrowiska nizinne (Ciechocinek, Konstancin-Jeziorna, Nałęczów) muszą bazować na terenach wypoczynku założonych w wyniku świadomego planowania i odpowiednio wyposażonych. Dlatego tak istotna jest ich jakość i odpowiednie przygotowanie.

Keywords: Public greens; Health resorts; Quality of life.

### 1. INTRODUCTION

### 1.1. The tradition and contemporary meaning of spa parks

Most of the public greens in the Polish health resorts are the result of "golden centuries" of spas and their boom in the 19th and the 20th centuries. The public green areas in health resorts, such as parks, pocket gardens and lawns, were often designed by prominent

landscape architects (Francis Szanior, Charles Schwartz, Francis Maria Lanci, Henryk Marconi), seen as an integral part of the spa urban layout [3], [5]. Carefully planned and later meticulously maintained spa parks served well in the past and are currently used to multiple purposes: recreation, culture, entertainment, rehabilitation and physical activity. The purpose of vast green areas in health resorts is also to alleviate the microclimate conditions, the weather change

mitigation (reduction in force of the wind, lowering the temperature, adjusting the humidity in the air to the state corresponding to the human body), to improve the quality of the environment (reduction of dust, noise, facilitating the exchange of air). The concern and care for the spa parks have been always an expression of the belief that high quality environment and a beautiful landscape favours the healing process, helps the sick to get well in harmony of body and spirit. Since the public greens in spas serve not only as popular recreation sites for their visitors, but also as a sport and recreation grounds for local population – their functional program must consider also this factor [1], [11], [12]. In the past and nowadays an important part of the spa parks have been sport and recreation programme. For example in the 19th century in the spa park in Nałęczów there were vast areas reserved for different sports games: playgrounds for cricket, tennis courts, bowling allevs and lake for boats rowing or kayaking [5]. The wonderful scenery of vegetation, outstanding monuments of architecture, add the very special meaning to spa parks and due to their extraordinary beauty are often treated as "a showcase" of a town. Moreover, as the spa parks have a long history, often being founded at the same time as health resort, they are often encompassed by the state register of monuments (Ciechocinek, Nałęczów, Busko-Zdrój). It means that they serve not only to the recreation needs of spa guests and its residents, but also are formally recognised cultural heritage, becoming a significant tourist attraction. Today the spa parks are appreciated not only by their outstanding design, meticulous foundation, but also by much disciplined management. In most of the Polish health resorts particular efforts are being made in order to keep in good condition park vegetation, walking paths, lawns and flower beds arrangements, ornamented ponds and fountains, numerous sculptures and spa facilities. Spa parks are often associated with medical services and cultural activities: mineral springs and pump rooms, inhalatoriums and bath facilities, park kiosks and pavilions, amphitheatres, theatres and concert halls, vast sports and recreation grounds - creating the true "heart of spa". Located at the centre of the town, being prestigious and important, bringing together medical services, cultural and social life of health – spa public greens require a very careful and thoughtful planning. This applies to all spas, but especially in lowlands resorts, suffering lack of natural attractions (like sea or mountains); public greens should be particularly attractive [4], [5], [7], [22].

### 1.2. Lowland spa towns: Ciechocinek, Konstancin-Jeziorna and Nałęczów

Ciechocinek, Konstancin-Jeziorna and Nałęczów combine similar geographical features, typical for lowlands: located less than 200 meters above sea level, with a mild, low - stimulogenic climate, with many days of sunshine and relatively low rainfall per annum. Differences between these spas could be noticed in time of foundation, in size and in numbers of visitors, also in natural spa resources, medical services and facilities. Historical traditions are similar in Ciechocinek and Naleczów - resorts having roots in the 19th century, but Konstancin-Jeziorna spa was founded only in the second half of the 20th century. In 2010 the number of visitors registered in Ciechocinek was 61 228 persons, Naleczów had 17 591 visitors, while Konstancin-Jeziorna 4 167 visitors [2] [Fig. 1]. In Ciechocinek, the first Park Zdrojowy (Spa Park) was created in 1875, together with the pump room, a reading room, a concert amphitheatre – all facilities designed by famous architect Francis Szanior. The next were Park Teżniowy (Graduation Towers Park) [Fig. 7] and Park Sosnowy (Pine Park), founded in the late 19th and early 20th centuries. The third park in Ciechocinek - Nowy Park Zdrojowy (New Spa Park with swimming pools and grounds dedicated to different sports games) was opened in 1932. The Spa Park in Nałęczów is almost 200 years old, established in the 18th century, on the basis of the historic baroque park surrounding the Malachowski palace. In the 19th century Spa Park was enlarged (currently occupies 20 hectares), walking paths around the pond were designed and "Greenhouse" (with mineral water pump rooms) and other spa facilities (pavilion of water treatments - "Old Baths") were erected. The Spa Park in Konstancin-Jeziorna was developed in the late 19th century and the early 20th century on the 12 acres of grounds near Jeziorka River, as a Village Park to enhance the landscape of elegant residential area located near Warsaw. This time Konstancin-Jeziorna was not the health resort; it got this status only after the Second World War. Planned in the style of landscape English park, it has been several times transformed. For example the graduation towers were built of twigs in 1978, ten years after the discovery of deposits of brine treatment [5] [Fig. 6]. In view of the important spatial role of spa parks and their specific functions in health resorts, spa municipalities in Ciechocinek, Konstancin-Jeziorna and Nałęczów make a constant efforts to achieve a particularly elegant look of the public greens, what means a careful maintenance of alleys, the right appearance

of the new and historic buildings, care for sculptures, ornamented ponds, fountains, bridges, sundials, exotic plants and the compositions of flower beds (famous "flower calendars" in Ciechocinek). The well kept vegetation and carefully composed landscaping elements – significantly enhance the aesthetics of health resorts space. Even the spa park basic infrastructure (as fences and gates, sittings and lightings, bins and information boards) are very elegant, not only carefully designed, but made of durable, high quality materials (marble, granite) - emphasizing luxury and uniqueness of space. Together with spa historic buildings (kurhauses, bath facilities, pumpwater rooms, inhalatoriums) public greens create a unique landscape and outstanding image of the health resort. Today the historic spa parks in Ciechocinek and Nałęczów are not only places for sport and recreation activities, but also are a strong magnet for sightseeing tourism. Numerous events organised in spa towns, such as concerts and festivals (for example Festival of Gypsy Culture in Ciechocinek), popular mass - sports events (for example marathons in Ciechocinek), usually take place in spa parks. Each health resort and each spa park means different attractions and values for visitors. Ciechocinek is famous of its historic graduation towers, famous fountain with sculptures of "Jas and Małgosia" and characteristic broad promenade with floral compositions; Nałeczow spa park has a picturesque pond with interesting modern sculptures standing along the footpaths and ultra modern aqua - park facilities; while in Konstancin-Jeziorna the greatest attractions are numerous romantic viewing platforms and bridges over Jeziorka River and Small River together with the new amphitheatre.

Spa parks in Ciechocinek, Konstancin-Jeziorna and Nałęczów have been under revitalization process since the past decade. As a result the spa parks in Ciechocinek are rich of new spa facilities (footpaths, sports fields, tennis courts, swimming pools, children's playgrounds, and water pump rooms), Nałęczów Spa Park has a new aqua park complex, children playgrounds and a special route designed for Nordic Walking. A comprehensive revitalization of the spa park in Konstancin-Jeziorna included a renaturalisation of Jeziorka River and Small River banks and valleys; construction of numerous bridges and viewing platforms, the layout of new footpaths, construction of an amphitheatre and children playgrounds.

## 1.3. Danger of environmental deterioration in spa parks

Most of the spa parks, as located in the centre of the resorts, are the most popular local public greens, frequently visited by spa guests and the local community members. In consequence, all spa parks are visited daily by so many people, that it might become a factor in the deterioration of the natural environment [6], [7], [14], [22]. It is difficult to find the rational balance as the real danger may be either a complete lack of management (no toilets, parking lots, recreation facilities - as it was in Konstancin Jeziorna before revitalization process), or too rich choice of restaurants and commercial recreational facilities - as it is now in the spa parks in Ciechocinek. The valuable vegetation is endangered due to pollution or weather conditions (unfavourable too rainy or too dry microclimate, too high or low temperatures), diseases, insects, microorganisms, soil conditions, improper care. Moreover with too many visitors and antisocial behaviour of spa park users, vegetation is exposed to a number of mechanical damages: picking flowers, breaking branches, tearing the bark of tree trunks, anti social behaviour against small animals (birds, squirrels) [9], [21]. Researches carried out by conservation office inspectors (nature conservation and heritage conservation) in the historic parks, allow us to predict what exact risks may arise from the too many visitors and how to balance a number of visitors [6] [Table 1], [Table 2].

In Poland, according to the law regulations, the spa parks located in health resorts are protected against environment endangerment, chaotic development and poorly planned investments: The Building Act, 1994 [16], The Environmental Protection Act, 2001 [17], The Law on Protection and Conservation of Monuments, 2003 [18], The Nature Conservation Act, 2004 [19], The Act on Spas and Health Resorts, 2008[20].



Figure 1.
The spa towns in Poland: spatial distribution and ownership status. Underlined the resorts in which public greens were surveyed. Source: drawn by arch. M. Piechotka, 2012

Table 1.

The outdoor sport and recreation activities in spa parks potential impact on natural and cultural environment

Outdoor sport or recreation activities	Possible environment effect
Team games	Noise, vocal noise, disturbance of birds, possible damage to park vegetation
Water sports and water recreation	Vocal noise, disturbance of water birds, possible damage to water banks
Horse riding	Damage to vegetation, horse duns
Cycling	Damage to vegetation, vocal noise
Observing wildlife	Disturbing natural relationships, damage made by artificial feeding
Walking, fast walking, Nordic walking	Disturbance to ground – nesting birds, vocal noise
Cross – country ski- ing	Damage to undergrowth
Sight – seeing	Damage to vegetation and soils, environmental changes at histori- cal sites, air pollution, vocal noise
Fishing	Disruption of natural habitat
	recreation activities  Team games  Water sports and water recreation  Horse riding  Cycling  Observing wildlife  Walking, fast walking, Nordic walking  Cross – country sking  Sight – seeing

Source: The field works in the surveyed health resorts: 2011-2013, Ds-144 AWF JP Warsaw

Table 2. Principal determinants for the sport and recreation facilities in spa parks

	Principal determinants	Comments on reasons for development limits	
1	Physical capacity	The maximum numbers of visi- tors the sport and recreation area can accommodate without physi- cal deterioration	
2	Ecological capacity	The level of use the sport and recreation ground can endure without experiencing irreversible ecological damage (natural and cultural values)	
3	Perceptual capacity	The maximum level of use sport and recreation area that can be permitted without impairing recreation benefits	
4	Economic capacity	The minimum level of use sport and recreation grounds necessary to generate an acceptable finan- cial return	

Source: The field works in the surveyed health resorts: 2011-2013, Ds-144 AWF JP Warsaw

# 2. PUBLIC GEENS REVITALISATION IN SPA TOWNS

### 2.1. Projects developed in Ciechocinek

In Ciechocinek spa municipality seriously consider the need of complex and constant modernization of resort parks, importance of improvements, and significance of rational spatial management policies. Some of the projects are under construction (Graduation Tower Park, New Spa Park), while the next projects are being prepared (Pine Spa Park). The municipality office admits that despite its efforts, not always it is possible to meet all expectations and wishes of spa park users, due to different objective reasons, mainly involving financial and legal constraints. The comprehensive restoration project of the historic spa parks requires a particularly complex and interdisciplinary approach. The design must be prepared by government licensed landscape architects working together with dendrologists and gardening specialists, historians of art and medics. The high professional quality of multidisciplinary team is important as the elaborated proposal must answer to the very specific function [6], [Table 1], [Table 2]. For example spa parks in Ciechocinek are very popular, visited by different age groups, so their functional program has to meet needs of young and fitted as well as elderly or disabled citizens (as wheelchair users). It means a demanding approach to planning process and a specific knowledge of subject. Sadly several of improvements are not possible to be intro-



Figure 2.

The Graduation Tower Spa Park in Nałęczów (one of three still existing wooden structures), designed by Jakob Graff and erected in 1824-1859. Source: photo by arch M. Piechotka, 2013

duced, mainly due to the conservatory office restrictions, what makes especially young generation of Ciechocinek guests very much disappointed. The answer for their needs might be found in future, when the still undeveloped sites by Vistula River Valley can be used for more advanced sport and recreation grounds. As local authorities hope the rich programme (footpaths, cycle and horse riding routs, sports and recreation grounds, marinas to allow sailing, kayaking and rowing) might significantly enhance the attractiveness of the resort in future.

### 2.2. Revitalization projects of Spa Park in Konstancin-Jeziorna

In 2007 the renovation process of Spa Park in Konstancin-Jeziorna was commenced, on the ground of EU funds, based on the Regional Operational Programme 2007-2013 designated for the Mazowiecki Region (RPO-WM 6.1) [10]. Recently the revitalization project of Spa Park in Konstancin-Jeziorna has been completed, including the erection of an amphitheatre with more than 300 seats (opened in 2009). The comprehensive project included the revitalization of the Spa Park and the park neigh-

bourhoods (pastures and meadows along Jeziorka River Valley and Small River Valley). Important initiatives were introduced such as improvement of public safety, spa park aesthetics, revitalization of its vegetation, provision of new lighting and new landscaping elements (bridges, benches, view spots and platforms on the backwaters, children playgrounds and kiosks with refreshments). The project encompassed building the new lanes, bike paths. Re-naturalization of the rivers included the restoration of coastal vegetation and enrichment of the biodiversity of the existing vegetation. In the next stage, some more works are planned, especially to establish new, more demanding sport and recreation facilities as swimming pools, tennis courts and grounds for different team games [10].

The potential for this ambitious programme is seen on the areas located in the vicinity of the Jeziorka River Valley, where there are possibilities of developing the pastures and meadows on the both sides of the river into sport and recreation grounds. The future project might include several facilities: football pitch, grounds for team games and place to practice archery, outdoor chess, marked routes for fast walking, cycling, Nordic walking, cross – country ski-



Figure 3.

Spa Park in Konstancin-Jeziorna: the renovation process of the park has been initiated on the ground of EU funds and based on the Regional Operational Programme for the Mazowiecki Region (RPO-WM 6.1). Source: photo by M. Piechotka, 2013



Figure 4.

Spa Park in Konstancin-Jeziorna: park is located in the centre of the town and is the most popular local greenery, frequently visited by local community, spa guests and tourists. Source: photo by arch. M. Piechotka, 2013



Figure 5.

Spa park in Konstancin-Jeziorna: today park is used by town permanent residents for leisure or as shortcut paths of daily communication (mainly work – home or school – home). Source: photo by: arch M. Piechotka, 2013



Figure 6. Spa Park in Konstancin-Jeziorna. The graduation towers were built in 1978, after the discovery of deposits of brine treatment. Source: photo by arch M. Piechotka, 2013

ing, footpath with simple devices to exercises, also "open air gyms" attractive to people of different physical condition, location for dance groups, installed swings for adults, lawns prepared to practice tai chi, yoga and pilates, children playgrounds and "senior's green gyms" together with "wild bushes" to walk a dog. [Fig. 3], [Fig. 4], [Fig. 5], [Fig. 6]

### 2.3. Revitalization projects of Spa Park in Nałęczów

In Nałęczów Spa Park a restoration project was carried out in 2010 on the base of "Dendrological Inventory and Regeneration Project for the Historic Spa Park in Nałęczów" [8], elaborated by the "Laboratory Project Gardens and Interiors", architectural design office from Lublin. This document encompassed the revitalisation project of the historic spa park, occupying more than 20 hectares and consisting of 2,470 representatives of 33 species of trees and bushes (some very rare and exotic) [Fig. 7]. The revitalisation works included: exchange of soil, its fertilization and irrigation, restoration of main park alleys, maintenance of existing greens and aeration of the roots of old but valuable trees. The important assumption was that Naleczów spa had objectively rather limited chances for development of public greens in the resort centre. As the possibility of future expansion and location of new facilities (team

games grounds, tennis courts, cinema) the undeveloped agricultural and forest lands bordering the south of the spa park were considered. This project was a segment of a larger spatial design "Regeneration Plan of Nałęczów Spa", initiated by the Nałęczow City and Spa Municipality (project elaborated in 2010) [13].

### 3. SPA PARKS AND THEIR USERS

### 3.1. Character of spa parks visitors

Accordingly to our research outcomes, the users of the spa parks in Ciechocinek and Naleczów were mainly resort guests, the local community was represented only by about 10% of visitors, while the spa park in Konstancin-Jeziorna was used mainly by town permanent residents. Most the spa parks visitors in Ciechocinek, Konstancin-Jeziorna and Naleczów were living nearby (distance of maximum 10 minutes' walk in Ciechocinek and Konstancin, and five minutes' walk in Nałęczów). Those who were walking for pleasure (mainly resort guests), usually came to the spa park every day and their motivation was primarily a quiet walk and stroll to the health resort facilities in which they had medical treatments or expected social/cultural events. Some of the parks visitors were there to visit the playground with a child or for



Figure 7. Spa Park in Nałęczów, founded in the 18th century and developed in the 19<sup>th</sup> century. Source: photo by arch M. Piechotka, 2013

Table 3.

Characteristic of spa parks visitors, their preferences, needs and suggested improvements

Spa parks visitors/ per year	Ciechocinek / 62 228	Nałęczów / 17 591	Konstancin-Jeziorna / 4 176
Women / Men	59% / 41%	67% / 33%	60% / 40 %
Children: 10-15 year old	12%	9%	25%
Young people: 16-35 year old	24%	10%	40%
Adults: 36-59 year old	22%	19%	15%
Adults: over 60 year old	56%	60%	25%
Solitary visitors	31%	55%	40%
Visitors walking to the spa park	88%	98%	99%
Visitors living in the vicinity (less than 10 minutes walk )	80%	91%	97%
Spa patients	72%	79%	1%
Tourists	18%	12%	2%
Local community members	10%	9%	97%
People visiting park every day	88%	89%	70%
Visitors staying in the park at least 30 minutes	82%	88%	80%
	and footpaths, walking a dog, meeting friends, social and cultural events, fast walking, Nordic walking, sightseeing (spa tourists), communication short cut, going to graduation towers, baths or pump room with mineral waters (spa patients), participation in organized physical activities, cycling, going to playground with children	with a child, communication	child, communication short cu cycling, jogging, going to/fro sport facilities, cross count skiing (winter field studies
People who practice outdoor recreation or sports every day	8%	11%	19%
People satisfied with spa park amenities	45%	69%	21%
Suggested improvements		Tennis courts and playing grounds for team games, better equipped playgrounds for elder children (7-12 years old), free of charge parking site, dog's waste bins and education programme, higher level of security to exclude anti social behaviour of some park visitors, extension of spa park to south – west (farm lands and forests)	

Source: a) Central Statistical Office (2011), "Health Resorts in Poland in the years 2000 – 2010", Central Statistical Office in Krakow b) The field works in the selected spas (2011 – 2013) Ds – 144 AWF JP Warsaw

a quiet stroll along the paths with a pram. In Ciechocinek and Nałęczów a relatively few people were practicing sports or other forms of active recreation that require more physical activity. In this regard, users of Spa Park in Konstancin-Jeziorna stand out and a relatively large number of people were fast walking, running or cycling using the newly set out paths and cycling routes. It could be explained by the age factor. The differences in the age characteristics of the spa parks visitors were significant: young people (aged 16-35) were dominant in Konstancin-Jeziorna, slightly less in this age range we met in Ciechocinek, and the least group of that age were in Nałęczów. [Table 3]

## 3.2. Comments, needs and expectations of the spa parks visitors

Satisfaction with the existing facilities in the spa park (expressed by its visitors) was the highest in Nałęczów and Ciechocinek, while the reservations about the state of sports and recreation infrastructure was clear in Konstancin-Jeziorna. Visitors of Konstancin-Jeziorna spa park expected better sport facilities (adequate for team games, tennis courts, and modern swimming pool complex), better selection of dining places, cultural events in the new amphitheatre (concerts, cinema), and organised sport events (as popular marathons). Many people, although appreciating the newly revitalised park facilities - have complained about the lack of other than walking or cycling possibilities. The need of elegant, clean public toilets, shelters for breastfeeding mothers together with inadequate solution of the dog waste problem were mentioned. Visitors of parks in Ciechocinek, Konstancin-Jeziorna and Naleczów stressed equally strongly that dog's guardians do not clean up after their dogs, pointing out that in the spa parks there were neither sufficient information on the dog's waste policy nor the special waste containers or "dog zones". This issue was particularly emphasized in Konstancin-Jeziorna, because in recent years the spa park underwent the complex revitalization process and people expect some more satisfactory solutions as to these matters. In Ciechocinek, although the majority of respondents were satisfied with the existing sport and recreation equipment, many expected much more cultural events, concerts (classical music, jazz, pop), cheerful theatrical performances, merry musicals in order to better use the existing building of the theatre and the open air amphitheatre. Some young people in Ciechocinek complained about lack of more advanced sport and recreation grounds available free of charge. Although many admitted that objectively the quality of public greens in Ciechocinek was outstanding in comparison with other spa towns in Poland, many underlined that further improvements could always be welcomed. Most of the opinions and comments could be considered as very realistic, as many park visitors understood, financial shortages, technical and legal issues as a major constraint on future spa park development [Table 3].

It should be also noted that many people in Nałęczów, when asked about some improvements in spa management – often responded that they simply wanted the spa park to be unchanged.

### 4. CONCLUSIONS

Considering the unique character and specific function of spa towns, public greens are very important for sustainable resort development, playing crucial part in improving climatic conditions, aesthetic quality of environment and helping to recuperate physically and mentally through healthy lifestyle. The rational spa park program (footpaths, tennis courts, "green gyms", playgrounds, and senior's gyms) can significantly improve not only the conditions of spa treatment, but also the quality of life of permanent residents. Many spa parks are the achievements of the 19th century landscaping architecture and the high art of gardening. It was the historical tradition (developed during "golden age" of European spas) to treat health resort parks as a "heart of the spa", with all important buildings and facilities located there: sanatoriums, hospitals and spa hotels, pump-rooms, baths and graduation towers, reading rooms, cafes and restaurants, theatres, concert halls and amphitheatres, sport and recreation grounds. Many of those historic buildings or spa facilities have survived to the present day, being an interesting example of historical health resorts architecture styles. It is not surprising that today among visitors in spas one could spot not only sanatorium patients but also sightseeing tourists interested in cultural heritage of spa. All over Europe in historic health resorts there are many tourists interested in spa tradition and visiting spa parks: in Bath (UK), Wiesbaden and Baden-Baden (Germany), Vichy (France), Eger (Hungary), Karlovy Vary (Czech Republic), Ciechocinek, Krynica, Naleczów and many others in Poland [5], [15].

Today, as it was in the past, in the spa parks the whole social and cultural life of the elegant health resort is

concentrated. Visitors to the park can enjoy sport and recreation activities, take part in cultural and social events, and dine in the restaurants or cafes. Visitors of spa parks are not the only health resort patients and sightseeing tourists, these public green areas serve also as sport and recreation grounds for local community.

Opinions and suggestions of park users are well known to the health resort management and city authorities, but to meet so various expectations and needs it is necessary not only to have much better financial resources. Several constrains to improve public greens in spas are connected with law regulations (in particular referring to the protection of cultural and natural values), land use functions and investment opportunities [Table 2], [Table 3], [Table 4]. Nevertheless, wherever it is possible, introduction of even small improvements into the spa parks will be enthusiastically welcomed by local community and health resort visitors.

The most important determinants on public green revitalisation program, intended in spa parks, one may group into three basic segments:

- a) public space character: natural and cultural resources, protection needs and conservatory recommendations, quality of area, character of greens, park location, quantity and capacity of sport and recreation facilities, area management, public safety,
- b) potential users character: number of users, level of education, income, age, sex, occupation, motivation and preferences; health state and physical condition; preferences of pastime and lifestyle
- c) other factors: distance of spa park from residential estates, from spa hotels and sanatoriums, cost of using outdoor sport and recreation facilities, the promotion of spa park, cultural and sport events organized there, character of spa and its visitors.

What should be underlined is that the need of constant improvement of public greens, in the context of holistic urban planning approach, is understood by our society. In Ciechocinek, Konstancin-Jeziorna and Naleczów the visitors of spa parks were well aware of the role of rational planning and maintenance of the spa park in order to shape healthy environment and better living conditions.

Although questions mentioned in this paper could not cover all the issues related to the sustainable spatial planning of public greens in the spa towns, authors hope that some of the main findings (conclusions of general character) could be useful for shaping the future spatial policy directions in Polish health resorts.

Table 4. Public green space in health resorts: goals and objectives of planning approach

	Planning public green space in health resorts	Goals and objectives			
1	Resources: natural and built environ- ment, financial pos- sibilities; history and tradition of health resort, its future develop- ment policy	Meeting building standards and other law regulations (including spatial planning decisions), uti- lize natural and built resources, considering tradition and history values of the site, future health resort development policy direc- tions, keeping budget controlled			
2	Programme	Meeting all society groups needs: a) Children (adventure play-grounds, conventional play-grounds) b) Youth (more advanced adventure playgrounds, grounds for team games) c) Adults (outdoor pitches, outdoor courts, bowling, green gyms, outdoor/ indoor swimming pools, ice rinks, cycle tracks, jogging tracks, Nordic walking tracks, cross-country skiing tracks) d) Disabled (barrier – free grounds, facilities appropriate for "senior's corner", children playgrounds with accessible and safe facilities)			
3	Community participation	Meeting local community, spa guests, tourists, needs and expec- tations			
4	Policy making participants	Meeting concerns of local community, professionals (spatial planners, physical education specialists, medical staff of health resort), local government, board of health resort and conservatory offices (natural and cultural values protection recommendations)			

Source: The field works in the surveyed health resorts: 2011-2013. Ds-144 AWF JP Warsaw

### ACKNOWLEDGEMENT

This paper is based on Ds -144 grant (project carried out in 2010 – 2013 and supported by Ministry of Science and Higher Education in Poland).

#### REFERENCES

- [1] Bull Chris et al.; An Introduction to Leisure Studies, FT Prentice Hall Publishing, Harlow 2003
- [2] Central Statistical Office GUS; Health Resort in Poland in the years 2000 – 2010, Central Statistical Office in Krakow, Krakow 2011
- [3] Hobhouse Penelope: The Story of Gardening, DC Publishing, London, 2002
- [4] Lis A.; Struktura relacji miedzy człowiekiem a parkiem miejskim w procesie rekreacji. Motywacje zachowań (Relation Structure Between Visitors and Urban Parks during Recreation Activities), Wroclaw Technical University, Wroclaw 2005 (in Polish)
- [5] Majdecki L.; Historia ogrodów, (History of gardens), WN PWN Warsaw, 2008 (in Polish)
- [6] Matachowicz E.; Konserwacja i renowacja środowisku kulturowego (Conservation and Restoration of the Cultural Environment), Wrocław Technical University Wrocław 2007 (in Polish)
- [7] *Pawlikowska-Piechotka A.*; Recreation and leisure areas without barriers [at] Problems of Ecology; Year XII, No.1 (79) / 2009, Katowice 2009; p.84-92
- [8] Projekt rozwoju i prac rewitalizacyjnych parku zdrojowego w Nałęczowie (Project of Development and Revitalization Works in the Spa Park of Nałęczów) [at] The Revitalization of the Centre of Nałęczow (Rewitalizacja uzdrowiska Nałęczów), Nałęczów Municipal Office, 2010 (in Polish)
- [9] Ravenscroft N.; Recreation Planning and Development, Macmillan, Hampshire, 2007
- [10] Regional Operational Programme for Mazowiecki Region 2007 – 2013 (RPO – WM 6.1), Mazovia Board for Implementation the EU Programmes, Warsaw 2013
- [11] Spink J.; Leisure and Environment, Butterworth Publishing, Oxford 1999
- [12] Stoneham J. et al.; Lanscape Design for Elderly and Disabled People, PB Publishing, Chichester, 1994
- [13] Studium warunków i kierunków rozwoju przestrzennego uzdrowiska Nałeczów (Study of Conditions and Directions of Spatial Development of Naleczów Health Resort), Resolution of Nałeczów Spa Municipality No. 36/296/2002, issued and approved by City Council of Nałęczów, Nałeczów 2002 (in Polish)
- [14] Simonides E.; Ochrona Przyrody (Nature Protection), Warsaw University Press, Warsaw 2008 (in Polish)

- [15] Thomas R. P. et al.; Garden Tourism, Lincoln University Press, 1994 Cantenbury
- [16] The Act of Construction Law on Building Law from the 7<sup>th</sup> of July 1994, as amended
- [17] The Act of Constitutional Law on Environmental Protection from 14<sup>th</sup> of April 27 2001, as amended
- [18] The Act of Constitutional Law on Protection and Conservation of Monuments from 23<sup>rd</sup> of July 2003, as amended
- [19] The Act of Constitutional Law on the Nature Conservation from 16<sup>th</sup> of April 2004, as amended
- [20] The Act of Constitutional Law on Health Resorts, Spa Districts and Spa Municipalities from 28<sup>th</sup> of July 2008, as amended
- [21] Veal A. J.; Leisure and Tourism Policy and Planning, CABI Publishing, London 2009
- [22] Welch D.; The Management of Urban Parks, Longman Group Limited UK, London 1991