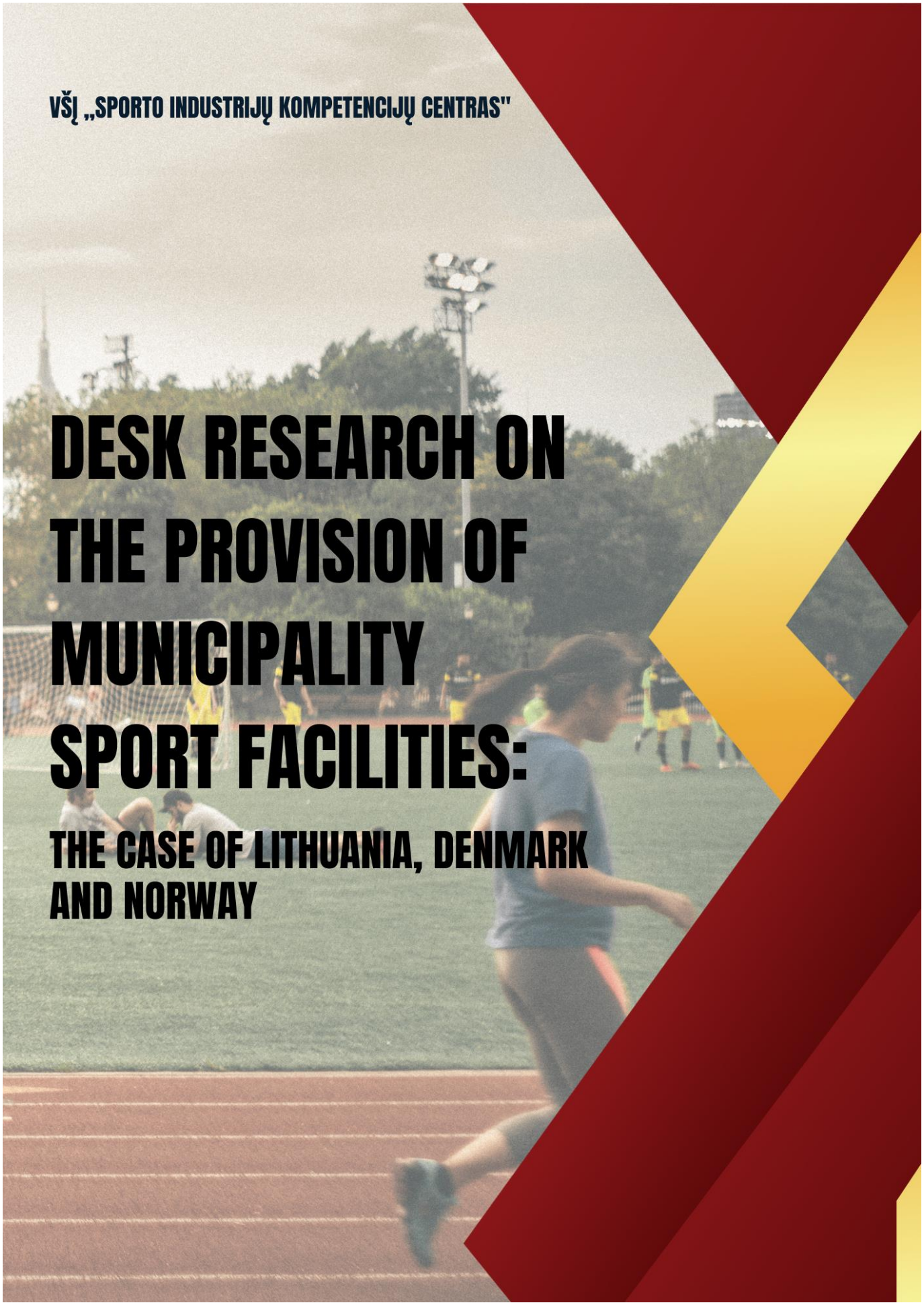


VŠĮ „SPORTO INDUSTRIJŲ KOMPETENCIJŲ CENTRAS"

DESK RESEARCH ON THE PROVISION OF MUNICIPALITY SPORT FACILITIES:

THE CASE OF LITHUANIA, DENMARK AND NORWAY

Contents

INTRODUCTION

Good health and well-being are fundamental to people's ability to reach their full potential and contribute to the development of society. Taking into account structural and strategic changes in the sports and physical activity sector, various participation models and society's needs to include new target groups in active communities. It is necessary to implement the existing indoor and outdoor sports infrastructure. Also ir is important to discuss and find consensus with various stakeholders regarding the future investments in sports facilities both at local and national levels. It is necessary to discover suitable models of infrastructure management and use, to develop the skills of existing and future managers of structures, necessary for more efficient management of sports infrastructure.

The role of civil society is important in actively participating and realizing the social significance of sport and strengthening the function of sports infrastructure as a catalyst for local communities.

Consolidated cooperation between Lithuania, Denmark and Norway helps to better understand and promote more effective dialogue between various stakeholders. Local, regional and national sports and physical activity policies focus on effective active participation measures for different target groups. A better understanding of the similarities and differences between countries' policies and practices is needed to develop effective measures and respond in a timely manner to current challenges. The desk research on the provision of municipality sport facilities is supported by the Nordic Council of Ministers.

The structure and role of sports facilities in Lithuania

dr. Vilma Cingiene

Introduction

Taking into consideration structural and strategic changes in the sports participation patterns and the societal needs to engage new target groups in active communities, the project examines the correspondence between the present sports infrastructure and possible models of its better governance, the current skills and future skills of managers necessary for more effective governance of sports infrastructure. The different models of the administration of public or semipublic sports infrastructure need to be analyzed in order to play an increased societal role.

The present sports delivery models in Nordic States are primarily based on club structures delivering sports programmes for the population. However, these models in many ways are challenged by the fact that traditional clubs' sports activities experience a drop out in large number of teenagers who are finding new ways to organize sports and leisure activities. Similarly, the club based models are to a large extend based on a volunteering and/or progression in sporting skills and the lack of motivation or culture among coaches and clubs to address the less active, less motivated.

The Baltic States (especially Lithuania) still provide sport programmes for the youth in so call municipal sport schools, which are needed to be reorganized. The management of facilities in all countries demands new approaches, innovative and flexible models in order to correspond to the needs of the local communities.

Inspired by delivery models from e.g. community leisure centres in UK and a wide range of very successful sports facilities with a social enterprise approach to attract new target groups in Denmark, Faroe Islands, Norway and Lithuania this project will explore a future potential of sports facilities for more proactively taking part in the development of better accessibility of sports and improved well-being services for children, young people, and adults in vulnerable positions in local communities.

The purpose of this report is to give a brief overview of the quantitative and qualitative situation of sports facilities in Lithuania based on available data, surveys, and various information sources.

Status of sports facilities in Lithuania

Lithuanian Sports Information centre provides the information about the availability of sports facilities in Lithuania. There are around 40 types of different sport facilities across country. The highest number is basketball courts (1316), volleyball courts (776) and football pitches (667).

It should be noted that there are only 15 football stadiums with the capacity more than 3000 seats. One of the most threatened issues is about the swimming pools. There are only 5 swimming pools (50 m.) per 559140 inhabitant (table 1).

Table 1. Types of sport facilities in Lithuania according to the number of inhabitants per facility in 2021

Sporto statiniai	Sports facilities type	No. of facilities	Inhabitants per facility
Universalios sporto arenos	Universal sports arenas	18	155316,7
Sporto kompleksai	Sports centres	32	87365,6
Stadionai	Stadiums with <3000 available seats	15	186380,0
Kiti stadionai	Other stadiums	550	5083,1
Manieţai	Pitches	7	399385,7
Futbolo manieţai	Football pitches	15	186380,0
50 m baseinai	50 m swimming pools	5	559140,0
25 m baseinai	25 m swimming pools	48	58243,8
12,5-25 m baseinai	12,5-25 m swimming pools	5	559140,0
Didelės sporto salės (>450 m2)	Large sports halls (>450 m2)	325	8602,2
Vidutinės sporto salės (288-450 m2)	Medium sports halls (288-450 m2)	593	4714,5
Kitos sporto salės	Other types of sports halls	683	4093,3
Irklavimo sporto bazės	Rowing facilities	19	147142,1
Buriavimo sporto bazės	Sailing facilities	8	349462,5
Žirgų sporto manieţai	Equestrian halls and pitches	26	107526,9
Dviračių trekai	Track cycling arenas	1	2795700,0
Aerodromai	Aerodromes	13	215053,8
Ledo arenos	Ice rinks	10	279570,0
Atviros šaudyklos	Outdoor shooting ranges	11	254154,5
Uždaros šaudyklos	Indoor shooting ranges	28	99846,4
Krepšinio aikštelės	Basketball courts	1316	2124,4
Tinklinio aikštelės	Volleyball courts	776	3602,7
Futbolo aikštės	Football pitches	661	4229,5
Rankinio aikštelės	Handball courts	35	79877,1
Teniso aikštelės	Tennis pitches	300	9319,0
Automobilių kroso trasos	Autocross tracks	16	174731,3
Motokroso trasos	Motocross tracks	18	155316,7
Slidţių ir riedučių trasos	Roller skis and roller skates tracks	12	232975,0
BMX dviračių trasos	BMX tracks	17	164452,9
Beisbolo aikštės	Baseball pitches	3	931900,0
Golfo aikštynai	Golf courses	7	399385,7
Hipodromai	Racecourses	8	349462,5
Kartodromai	Kart tracks	14	199692,9
Universalios dirbtinės dangos sporto aikštelės	Universal artificial surface sports fields	349	8010,6
Kalnų slidinėjimo trasos	Mountain ski slopes	8	349462,5
Sniego arena	Indoor snow arena	1	2795700,0
Dviračių takai	Bicycle roads' length	1576 km	NA
Sporto klubai	Sports clubs	1142	2448,1

Source: Lietuvos sporto centras (2021)

The distribution of sport facilities among 5 biggest cities in Lithuanian shows that Vilnius and Kaunas have a little more than 500 facilities in spite of the fact that populations is much bigger in the capital. Also interesting fact is that approximate number of the facilities are located in Klaipeda and Siauliai city (Table 2).

Table 2. the distribution of sport facilities in Lithuania among 5 biggest cities in 2021

No.	Facility	Vilnius	Kaunas	Klaipėda	Šiauliai	Panevėžys	Total in 2021
1	Universal sports arenas	2	1	1	0	0	4
2	Sports centres	0	9	0	2	3	14
3	Stadiums with >3000 available seats	2	1	1	1	1	6
4	Other stadiums	11	23	22	27	27	110
5	Pitches	1	1	1	1	1	5
6	Football pitches	4	2	0	0	1	7
7	50 m swimming pools	0	1	1	0	0	2
8	25 m swimming pools	8	7	1	4	2	22
9	12,5-25 m swimming pools	0	0	0	0	0	0
10	Large sports halls (>450 m2)	43	52	19	24	8	146
11	Medium sports halls (288-450 m2)	53	49	45	14	6	167
12	Other types of sports halls	110	78	34	57	12	291
13	Rowing facilities	1	2	1	1	1	6
14	Sailing facilities	0	2	0	1	0	3
15	Equestrian halls and pitches	0	0	0	0	0	0
16	Track cycling arenas	0	0	1	0	0	1
17	Aerodromes	0	1	0	0	0	1
18	Ice rinks	0	4	1	1	1	7
19	Outdoor shooting ranges	0	0	0	0	0	0
20	Indoor shooting ranges	5	4	0	4	0	13
21	Basketball courts	77	111	33	28	31	280
22	Volleyball courts	54	39	24	7	20	144
23	Football pitches	56	35	26	29	21	167
24	Handball courts	0	11	0	2	0	13
25	Tennis pitches	43	30	11	13	5	102
26	Autocross tracks	0	0	0	1	0	1
27	Motocross tracks	0	0	0	1	1	2
28	Roller skis and roller skates tracks	5	0	0	1	0	6
29	BMX tracks	0	4	3	1	0	8
30	Baseball pitches	1	1	0	0	0	2
31	Golf courses	1	0	0	0	0	1

32	Racecourses	0	0	0	0	0	0
33	Kart tracks	1	3	0	2	0	6
34	Universal artificial surface sports fields	30	31	7	6	5	79
35	Mountain ski slopes	1	0	0	0	0	1
36	Indoor snow arena	0	0	0	0	0	0
37	Bicycle roads' length	20	130	98,8	134	0	382,8
		507	502	232	228	146	

Source: Lietuvos sporto centras (2021)

Use of sport facilities

Two target groups the high-performance athlete's and amateur athlete's are the main users of the facilities. However it should be noted that only statistics about the users of the age up to 24 are available. The high-performance athlete's mainly are trained in public athletes' centres funded by municipalities. Amateur athlete's are taking part in sport in voluntary sports clubs.

Therefore, it is appropriate to combine certain sport facilities in spite of their capacities (table 3, green colour). Based on the available statistics it should be stated that velodromes, swimming pools and ice rinks are the most occupied by athletes.

Table 3. Usage of sport facilities according to the high-performance athlete's and amateur athlete's groups in 2021

Eil. Nr.	Sporto statiniai	Sports facilities type	No. Of facilities	Aukšto meistriškumo sportininkai/ High performance athletes	Mėgėjai sportininkai/ Amateur athletes	No. Of athletes per facility
1	Baseinai	Swimming pools	58	6307	3026	160,9
2	Irklavimo sporto bazės	Rowing facilities	19	1147	930	109,3
3	Buriavimo sporto bazės	Sailing facilities	8	347	229	72,0
4	Žirgų sporto maniežai	Equestrian halls and pitches	26	107	214	12,3
5	Dviračių trekai	Velodromes	1	35	132	167,0
6	Aerodromai	Aerodromes	13	0	243	18,7
7	Ledo arenos	Ice rinks	10	468	1093	156,1
8	Šaudyklos (atviros ir uždaros)	Shooting ranges (indoor and outdoor)	39	382	332	18,3
9	Krepšinio aikštelės	Basketball courts	1316	10483	13092	17,9
10	Tinklinio aikštelės	Volleyball courts	776	2020	2310	5,6
11	Futbolo aikštės	Football pitches	661	5359	15681	31,8
12	Rankinio aikštelės	Handball courts	35	2322	1249	102,0

13	Teniso aikštelės	Tennis pitches	300	593	2443	10,1
14	Motokroso trasos	Motocross tracks	18	0	363	20,2
15	BMX dviračių trasos	BMX tracks	17	88	40	7,5
16	Beisbolo aikštės	Baseball pitches	3	85	242	109,0
17	Golfo aikštynai	Golf courses	7	0	286	40,9
18	Kalnų slidinėjimo trasos	Mountain ski slopes	8	44	68	14,0

Source: Lietuvos sporto centras (2021)

Participation in sport in Lithuania

The participation level in sport and physical activity usually is based on Eurobarometer data and national survey. Five questions are presents and anlysed form the latest Eurobarometer study (2021).

First question: How often do you exercise or play sport? By "exercise" we mean any form of physical activity which you do in a sport context or sport-related setting, such as swimming, training in a fitness centre or a sport club, running in the park. The results show that young people aged 15-24 are the most active exercising 5 times a week or more, 3 to 4 and 1-2 times and more per week. Never exercise 50 % of males and 55 % of females.

Table 4. Frequency of the exercise or play sport in Lithuania

		Gender		Age				Education (End of)			
	Total	Man	Woman	15-24	25-39	40-54	55 +	15-	16-19	20+	Still studying
5 times a week or more	9%	8%	9%	15%	6%	8%	9%	11%	8%	8%	16%
3 to 4 times a week	9%	10%	8%	27%	12%	7%	3%	-	4%	10%	30%
1 to 2 times a week	15%	17%	12%	34%	25%	13%	5%	4%	10%	17%	33%
1 to 3 times a month	5%	5%	6%	7%	10%	7%	2%	-	2%	8%	6%
Less often	10%	10%	10%	5%	16%	8%	9%	5%	8%	13%	5%
Never	52%	50%	55%	12%	31%	57%	72%	78%	68%	44%	10%
Don't know	-	-	-	-	-	-	-	2%	-	-	-

Source: Eurobarometer 525 (2022)

Second question: And how often do you engage in other physical activity such as cycling from one place to another, dancing, gardening, etc.? By "other physical activity" we mean physical activity for recreational or non-sport-related reasons. The results show that 5 times a week or more are active more males (28 %) than females (22 %), but both are active in age group 40-54 and +55. 1 to 2 times per week are active 15-24 age group (39 %) and a little less 25-29 (26 %) (table 5).

Table 5. Frequency of cycling from one place to another, dancing, gardening, etc. in Lithuania in 2021

		Gender		Age				Education (End of)			
	Total	Man	Woman	15-24	25-39	40-54	55 +	15-	16-19	20+	Still studying
5 times a week or more	25%	28%	22%	15%	18%	29%	29%	21%	30%	23%	18%
3 to 4 times a week	14%	13%	15%	8%	15%	16%	15%	13%	17%	13%	12%
1 to 2 times a week	21%	24%	19%	39%	26%	23%	13%	14%	20%	23%	29%
1 to 3 times a month	9%	8%	9%	13%	17%	9%	3%	2%	3%	12%	17%
Less often	11%	11%	12%	22%	17%	9%	6%	13%	9%	10%	24%
Never	20%	16%	23%	3%	7%	13%	34%	37%	21%	19%	-
Don't know	-	-	-	-	-	1%	-	-	-	-	-

Source: Eurobarometer 525 (2022)

Third question: Where do you do this? A sport club is an organised setting (for example karate club, football club). A sport centre is more generally a place where people can do different sports (e.g. playing tennis, running). It is important to mentioned that almost 2/3 lithuanians do sport at home. Only young people at age 15-24 go to sport club (34 %) or at university or school (table 6).

Table 6. The place of the exercise or play sport in Lithuania

		Gender		Age				Education (End of)			
	Total	Man	Woman	15-24	25-39	40-54	55 +	15-	16-19	20+	Still studying
At a health or fitness centre	1%	1%	1%	-	2%	-	-	-	1%	1%	-
At a sport club	11%	11%	11%	34%	18%	6%	2%	-	4%	12%	40%
At a sport centre	3%	3%	3%	9%	4%	3%	1%	-	-	4%	10%
At school or university	4%	5%	3%	29%	1%	-	-	-	-	1%	37%
At work	21%	29%	13%	4%	25%	37%	13%	9%	27%	19%	7%
At home	68%	67%	70%	54%	63%	71%	76%	84%	76%	66%	48%
On the way between home and school, work or shops	15%	12%	17%	15%	17%	10%	16%	9%	14%	15%	18%
In a park, outdoors, etc.	43%	41%	45%	46%	49%	41%	40%	22%	32%	55%	50%
Elsewhere	2%	2%	1%	3%	2%	1%	2%	-	2%	1%	-
Don't know	2%	2%	1%	-	1%	1%	3%	5%	1%	2%	-

Source: Eurobarometer 525 (2022)

Fourth question: Why do you engage in sport or physical activity?
The health benefits seems to be the most important for the respondents. to improve physical performance, it is important to 15-24 years age persons (34 %), to relax (44 %) and to have fun (64 %). Almost half of the respondents in two age groups 15-24 and 25-39 indicated the improvement of fitness (table 7).

Table 7. Reasons for the exercise or play sport in Lithuania

		Gender		Age				Education (End of)			
	Total	Man	Woman	15-24	25-39	40-54	55 +	15-	16-19	20+	Still studying
To improve your health	43%	39%	46%	45%	45%	39%	43%	49%	38%	47%	49%
To improve your physical appearance	20%	20%	19%	34%	28%	16%	11%	2%	16%	20%	41%
To counteract the effects of ageing	8%	7%	9%	-	6%	6%	15%	8%	8%	11%	-
To have fun	46%	43%	48%	64%	44%	41%	43%	32%	39%	50%	60%
To relax	30%	30%	29%	44%	38%	26%	22%	17%	21%	36%	44%
To be with friends	10%	14%	8%	26%	12%	8%	5%	5%	6%	12%	25%
To make new acquaintances	2%	3%	1%	8%	3%	-	-	-	2%	1%	6%
To meet people from other cultures	-	1%	-	-	1%	1%	-	-	-	1%	-
To improve physical performance	22%	27%	18%	39%	27%	16%	16%	4%	16%	25%	41%
To improve fitness	38%	38%	38%	49%	48%	32%	30%	22%	31%	41%	54%
To control your weight	16%	10%	21%	17%	23%	14%	11%	6%	10%	20%	21%
To improve your self-esteem	6%	9%	4%	7%	9%	6%	5%	2%	6%	7%	6%
To develop new skills	4%	7%	2%	17%	4%	2%	2%	-	2%	4%	18%
For the spirit of competition	2%	3%	2%	4%	3%	2%	-	-	2%	2%	5%
To better integrate into society	1%	1%	1%	1%	3%	1%	-	2%	1%	1%	2%
Other	9%	13%	6%	3%	7%	14%	10%	11%	15%	6%	2%
Don't know	5%	5%	4%	3%	3%	4%	7%	10%	4%	6%	2%

Source: Eurobarometer 525 (2022)

Fifth question: What are the main reasons currently preventing you from practising sport more regularly?
The main reason currently preventing you from practising sport more regularly is lack of time, especially for the age 25-39 (65 %). Also lack of motivation or interest is named as a reason among persons of the age of 40-54. Disability or illness is the main reasons of not doing sport for the third of the persons of the age of 55+(table 8).

Table 8. The main reasons preventing from practising sport more regularly Lithuania

		Gender		Age				Education (End of)			
	Total	Man	Woman	15-24	25-39	40-54	55 +	15-	16-19	20+	Still studying
You do not have the time	44%	48%	41%	45%	65%	61%	24%	9%	41%	53%	37%
It is too expensive	13%	13%	13%	12%	18%	18%	9%	9%	14%	13%	12%
You do not like competitive activities	7%	7%	8%	4%	5%	10%	8%	6%	9%	6%	4%
There is no suitable or accessible sport infrastructure close to where you live	10%	10%	9%	7%	10%	9%	11%	11%	13%	7%	7%
You have a disability or illness	15%	12%	18%	-	3%	7%	30%	43%	20%	11%	-
You do not have friends to do sports with	6%	7%	6%	4%	4%	8%	8%	14%	7%	6%	1%
You feel discriminated against by other participants	-	-	-	2%	-	-	-	-	-	-	3%
You feel there is a lack of opportunities to practice sport with people of your gender	1%	1%	1%	1%	-	2%	1%	-	1%	1%	-
You lack motivation or are not interested	24%	24%	23%	22%	23%	29%	22%	13%	23%	27%	24%
You are afraid of the risk of injuries	4%	4%	5%	-	2%	2%	8%	9%	4%	4%	1%
You are already doing sports regularly	7%	8%	6%	24%	8%	3%	4%	-	3%	7%	33%
Other	5%	5%	6%	5%	4%	2%	8%	16%	5%	5%	4%
Don't know	1%	1%	1%	-	1%	-	2%	5%	1%	-	-

Source: Eurobarometer 525 (2022)

Recent national survey on sport and physical activity trends showed that among reasons for not exercising 7% respondents mentioned a lack of places for sports and lack of suitable sports infrastructure living environment (12%). The main reasons are lack of energy and will (43%), time lack (35%) and not feeling the need or not seeing the point of doing sports (27%). Less often reasons mentioned: expensive sports services (13%), lack of suitable sports infrastructure living environment (12%), poor health, disability (12%), interest

in other leisure activities forms (12%), lack of friends or relatives with whom one could exercise together (8%), fear getting hurt or suffering an injury (8%), etc. (Šalies gyventojų sportavimo ir fizinio aktyvumo tyrimas, 2021).

Situation in fitness industry

The approaching cold season poses challenges for sports clubs, how to control income and expenses, those specialists predict that the rising prices of services will rise next year as well. However, representatives of sports clubs point out that the Government's decision to apply a preferential 9% value added tax (VAT) rate increases the accessibility of sports and wellness activities (Sabaliauskaite, Budreikiene, 2022). From 2020 19 sports clubs went bankrupt in Lithuania: 5 - in 2020, 10 – in 2021 and 4 – in 2022.

October 7, the Government agreed to apply a preferential 9% value added tax (VAT) rate to sports clubs until 2023. July. Greta Radzevičienė, manager of the health club "Impuls", says that such a decision will help keep sports and health activities more accessible to the public. After the pandemic, the number of sports organizations fell from 1,128 to 1,115 in 2020 but rose again to 1,142 last year. Although the number of organizations has increased, the number of employees in the sector is lower: 4,626 in 2022, compared to 4,995 employees last year. The average amount of monthly income also decreased by almost a quarter: from EUR 107,800 in 2020 to EUR 82,000 last year (Sabaliauskaite, Budreikiene, 2022).

The changing role of sports facilities

The successful management of sport facilities depends on many factors. One of the most important is the qualification, experience and competence of the manager. The relations with the ownership and the secure funding sources are also important prerequisites.
In fact, there is no data on a staff members working in different sport facilities.

Also, there is no statistics on investments to sports facilities by local authorities. At national level the government funding was operated through Sport promotion fund (2019-2022). The main responsibility in building and maintaining national sport facilities is given to the National Sport Agency under the Ministry of Education, Science and Sport (Špokas, 2022).

The biggest number of sport facilities are owned by comprehensive schools (3579), municipality athletes training centres belonging to sport division (347) and vocational training schools (286) (table 9).

Table 9. Sport facilities in Lithuania according to the ownership 2021

No.	Facility	Sports clubs	Sport public institutions	Sports federations, unions, associations	Sports companies (Ltd, public llc)	Municipality sports division	Municipality athletes training centre belonging to sport	Municipality athletes training centre belonging to	Private sport athletes training centre	Comprehensive schools	Vocational training schools	Higher schools	Universities	Ministries and departments	Individuals	Other subordination	Total in 2021
1	Universal sports arenas	0	2	0	2	1		6	0	1	0	0	0	0	1	0	18
2	Sports centres	1	1	0	0	0	13	9	0	4	1	0	0	1	0	2	32
3	Stadiums with >3000 available seats	0	4	1	1	1	5	3	0	0	0	0	0	0	0	0	15
4	Other stadiums	2	4	1	1	1	18	17	0	460	24	3	3	2	0	14	550
5	Pitches	0	0	0	0	0	4	1	0	0	0	1	0	1	0	0	7
6	Football pitches	0	2	1	0	2	1	0	0	5	0	4	0	0	0	0	15
7	50 m swimming pools	0	1	0	1	0	2	0	0	0	0	0	0	0	0	1	5
8	25 m swimming pools	0	5	0	5	3	14	10	0	6	1	0	1	0	1	2	48
9	12,5-25 m swimming pools	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	5
10	Large sports halls (>450 m2)	5	10	3	8	9	34	24	0	157	48	8	9	1	0	9	325
11	Medium sports halls (288-450 m2)	14	12	0	4	0	32	10	0	466	37	6	6	0	3	3	593
12	Other types of sports halls	26	20	5	34	12	77	35	0	350	48	8	19	0	3	46	683
13	Rowing facilities	2	3	1	0	1	7	3	0	0	0	1	0	1	0	0	19
14	Sailing facilities	3	0	0	0	1	3	0	0	0	0	0	0	0	0	1	8
15	Equestrian halls and pitches	10	1	0	0	0	0	0	0	0	1	0	0	0	7	7	26
16	Track cycling arenas	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
17	Aerodromes	6	1	0	0	0	0	0	0	0	0	0	0	0	0	6	13
18	Ice rinks	0	3	0	2	0	4	0	0	0	0	0	0	0	0	1	10
19	Outdoor shooting ranges	1	1	0	0	0	1	1	0	2	0	0	0	0	2	3	11
20	Indoor shooting ranges	0	2	0	3	0	10	1	0	7	2	0	0	1	0	2	28
21	Basketball courts	32	10	4	0	24	16	23	0	816	60	6	12	0	8	305	1316
22	Volleyball courts	4	1	4	7	11	29	19	1	488	33	1	4	0	20	154	776
23	Football pitches	10	8	1	1	11	16	23	0	504	23	2	5	0	2	55	661
24	Handball courts	0	0	0	0	0	2	5	0	23	3	0	2	0	0	0	35
25	Tennis pitches	12	27	0	51	7	31	25	2	56	2	0	6	0	31	50	300
26	Autocross tracks	7	3	0	0	0	0	0	0	0	0	0	0	0	2	4	16
27	Motocross tracks	9	4	0	0	0	1	0	0	0	0	0	0	0	0	4	18
28	Roller skis and roller skates tracks	0	1	0	0	1	0	1	0	5	0	0	0	0	2	2	12

29	BMX tracks	1	2	0	0	7	3	0	0	1	0	0	0	0	0	3	17
30	Baseball pitches	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	3
31	Golf courses	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3	7
32	Racecourses	1	1	0	0	0	2	0	0	0	1	0	0	0	0	3	8
33	Kart tracks	2	2	0	1	0	2	0	0	5	0	0	0	0	1	1	14
34	Universal artificial surface sports fields	3	4	2	0	20	12	11	0	222	2	0	2	1	2	68	349
35	Mountain ski slopes	0	0	0	1	2	1	0	0	0	0	0	0	0	2	2	8
36	Indoor snow arena															1	1
37	Bicycle roads' length	51	0	6	0	116	130	0	0	0	0	0	0	29	0	1244	1576 km
		154	136	24	124	115	347	229	3	3579	286	40	69	8	87	752	**5953**

Source: Lietuvos sporto centras (2021)

In 2020/2021, the State invested in 60 sports facilities from different sources: VIP (Government Investment Fund), Covid-19 measures, SRF (Sports Promotion Fund) funds.

There are some considerations regarding the role of the State (Zibolis, 2021):
• There is no general flow of investments on the map;
• Most of the sports facilities are funded by the municipalities. We are building a lot, but not quite what the country's sports expect and what would allow us to strive for the same demand results.
• A small number of sports facilities that we could use for the highest-level competitions, projects are unsystematically combined with sports federations and therefore do not necessarily reflect the real needs of sports.
• Although the VIP criteria are quite detailed and various priorities are defined, but finally the construction of the highest-level facilities competes with wellness facilities and lasts indefinitely.
• Few systematic formats for the development of long-term multilateral sports facilities: e.g., state, municipality, sport federation, universities, others
• Often, the developed sports facilities at the level of ministries or other decision-makers is artificially cut off related to "professionalism" formats, which makes the investment ineffective in the long term.
• We cannot find ways, for example, to increase the volume of the renovated school stadium, thereby significantly expanding the spectrum of its users. We can't to look "out of the box" because we do not know the real needs of the organizations involved.

There are some considerations regarding the situation with sport facilities at national and municipal level. It has to be allocated and focused human resources to constantly analyze all investments in the field of sports taking place in the state, especially based on the needs of sports, to identify opportunities for synergy with other entities.
• It is necessary to purchase elementary GIS monitoring tools, because the reorganization and analysis of the network of sports facilities or schools is impossible without them.
• For projects of higher than estimated value, it must be mandatory to obtain comments and proposals from the relevant sports federation and document this in the project documentation indicating whether it has been considered.
• There should be a differentiation of the facilities based on different priorities:

- the highest-level facilities for developing excellence and organizing international events;
- physical activity and health centers;
- for regional development, reduction of exclusion and closure of white spots on the map;

• A typical set of sports facilities in municipalities of a specific size must be determined, and typical projects proposed, thus reducing costs.
• Applications for the state investment program could be submitted by more entity formats: e.g., sports federations, universities, then it would not be the municipality that would choose what to build, but the state and the sport would choose the municipality, after assessing mass, demographics, etc.
• There is a need to increase the scope of school playground renovations, make the program more flexible, clarify the use of these playgrounds by communities for purposes.
• A map of the location, condition and sports services of sports facilities is necessary, obliging municipal sports departments to fully to participate in the project even before the start of the work of the sports register.

Future trends of the development of sport infrastructure in Lithuania

The main challenges of the development of the sport infrastructure were presented and discussed during Sport Forum in Klaipėda in November 2022 (Špokas, 2022):

- Prepare and approve criteria for state investment in the field of sports, so that sports infrastructure in the regions would be distributed evenly, taking into account the specifics of each region's sport.
- To promote more active public and private partnership in the development of sports infrastructure.
- Prepare a long-term sports infrastructure development plan and set clear criteria, after assessing the needs of sports federations and regions.

The construction of a new sport facilities raises a discussion about the necessity to include at least 6 sports federations in the preparation of sports infrastructure projects. The decision to reconstruct sports infrastructure should be based on future functionality, operation efficiency and better accessibility toa different target groups.

The structure and role of sports facilities in Denmark

Henrik H. Brandt

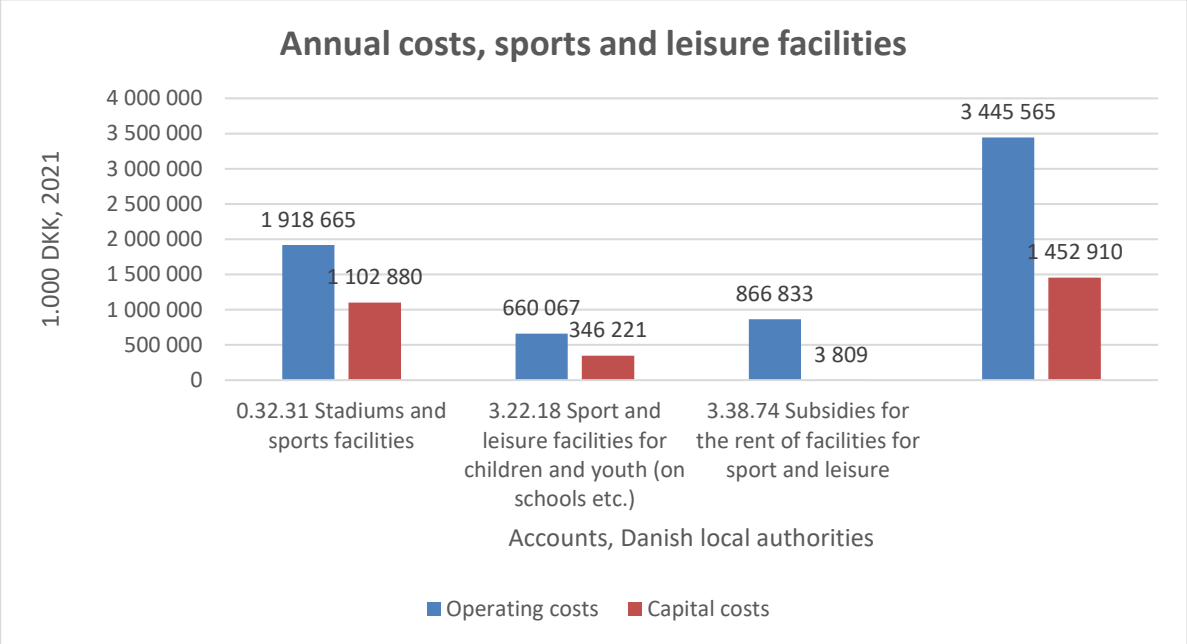
Introduction

Every year local authorities in Denmark invest approximately 5 million DKK in operating costs, rent subsidies, or capital costs for facilities for sports and leisure.

This amount accounts for more than 90 % of the total investment of the 98 Danish local authorities (municipalities) in promoting sport and leisure.

Even if we include approximately 900 million DKK from the Danish state channeled into financial support of national sports organisations and other central purposes every year state through the proceeds from lotteries and gambling, it is clear that investments of local authorities in operating, building, and/or subsidising facilities for sport and leisure are by far the biggest public investment in supporting sports and leisure activities in Denmark.

The figure below gives an insight into the main accounts of the Danish municipalities comprising the total costs of the 98 Danish municipalities for operation, subsidies and capital costs for sports and leisure facilities (1.000 DKK, 2021, statistikbanken.dk):



Source: Data from Statistikbanken.dk, all amounts are in 1.000 DKK, 2022

In Denmark the tradition and culture of sport is very much connected to sport as part of a democratic and grassroots organised popular movement with roots in the general popular movement of the 19th century

for democracy and freedom of association. The existence of voluntary sports associations is part of the overall formation of Danish democracy dating back to the decades after the first Danish democratic constitution from 1849. Building on this legacy, sports organisations and sports clubs with a democratic and membership-based structure and a large share of voluntary work from thousands of largely unpaid instructors, committee members and officials enjoy a wide range of legislative and financial privileges.

Over the years this decentralised and democratic structure of local sports clubs and national sports organisations have developed hand in hand with a tradition or even expectation from society that local authorities provide or subsidise the necessary infrastructure for the sports and leisure activities organised by voluntary sports clubs.

Over the years the Danish model has had many advantages in terms of creating strong local networks and communities, high participation in sports and leisure, and a tradition for active citizenship in rural as well as urban areas of the countries. Many sports facilities run at relatively low costs since they often have a certain degree of voluntary work or charitable contributions involved in their establishment, operation, or management.

However, during the last two-three decades in particular, a growing evidence base of statistical surveys of trends and tendencies in sports participation patterns of the population has highlighted the fact that the decentralised Danish sports model has its limitations as well.

The wide access to and high supply of sports facilities available to voluntary sports clubs do not automatically translate into high participation in specific sports or high sports participation in general. Voluntary sports associations and the traditional facilities are not always able to or willing to cater for new forms of organisation or new trends or needs in sports participation.

Sports facilities and their relevance for the local communities they are meant to serve, are very much in the centre of the contemporary sport political debate on a national as well as local level in the 98 Danish municipalities.

The aim of this paper is to give a status of the relation between sports participation and sports infrastructure in the Danish sports model and to highlight a range of structural issues and future potentials of increasing importance for the future development, role, and organisation of the Danish sports sector.

One could even argue that sports facilities are in the middle of a paradigm shift.

This paper will explore the cultural and legislative basis for the present provision of infrastructure for sport and leisure in Denmark and investigate the main structural challenges and opportunities facing the sports facilities and public investment in infrastructure for sports and leisure.

Sports facilities – a brief cultural history

In 1968 the Danish parliament adapted a new law on non-formal education and leisure (Fritidsloven[1]), which included sport and leisure activities for children and youth.

The law stated the principle that local authorities are obliged to refer groups undertaking formalised leisure activities after school or in the early evening hours to 'suitable facilities with the necessary equipment'. Thus, this law formalised a principle that had already been in use in practice for decades where local authorities subsidised or even built sports and leisure facilities and put them at the disposal of sports and leisure associations.

The cultural perception behind the legislation was in short that local authorities oversaw building, operating, or subsidising the facilities, while the sports associations and the affiliated local clubs oversaw developing and providing the activities such as sport for children and youth.

Already in the 19th century as part of the foundation of Danish democracy and civil society, many local communities had built 'community houses' for meetings, celebrations, culture and in many other cases also sports such as gymnastics. The community houses (called assembly houses/forsamlingshuse) were not specifically built for sport, but they were often used for various sports activities such as gymnastics.[2]

In the early 20th century when the British influenced concept of competitive sport spread across the country, many towns and cities established sports parks and stadiums, often made possible through considerable local initiative and charitable contributions from business, trade, local associations or wealthy individuals.

In 1937 a revised law on basic schools stated that school complexes were to comprise suitable facilities for physical education. The school gym halls, some of them dating back to the 19th century, were often built after a standardised model, typically measuring 20 x 10 meters. These gym halls are still in use today in many schools. From the law of 1937 emerged the common principle that school buildings and other useful public premises must be at free disposal for voluntary sports and leisure associations for non-formal activities after the formal school days.

The implementation of the 'Fritidsloven' legislation emerged in parallel with the general development of the Danish welfare society. The state took responsibility for ever more aspects of people's lives through the municipalities or local counties. Part of this slide towards increasing responsibilities of public authorities were the need to create better opportunities for meaningful leisure activities such as sport and leisure after work/school hours. During these years many municipalities the larger towns, cities and their suburbs built or developed modern sports parks with stadiums, large sports halls, swimming pools, football pitches etc.

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[1] Folketinget (1968): Lov om fritidsundervisning, *Folketingstidende.dk*. https://www.folketingstidende.dk/samling/19672/lovforslag/L97/19672_L97_som_vedtaget.pdf

[2] Find a brief history of sports facilities here: Kulturministeriet (2009): Idræt for alle. Breddeidrætsudvalgets rapport – baggrund og analyse. Kulturministeriet. https://kum.dk/ministeriet/udgivelser/idraet-for-alle-baggrund-og-analyse

Many local communities in rural areas with smaller catchment areas worked together to create smaller halls and sports facilities as hubs for communities and local life.

Furthermore, technical developments in building techniques made it possible to build larger facilities at lower costs. The number of sports halls (typically handball sized halls 20 x 40 meter), football pitches, swimming pools, badminton halls etc. grew rapidly in the 1960's-1980's. In many aspects this building boom was a necessity to cater for the growing number of voluntary sports clubs and sports activities and to establish the basic opportunities to practice sport and leisure activities in local sports associations throughout the country.

Traditional facilities that can be seen in hundreds of Danish villages, towns and cities. Left: School gym hall. Right upper: Community house (forsamlingshus). Right lower: 20 x 40-meter sports hall (handball size) with glulam beams in the ceiling.

In the 1990's and up to present days the tendency has in principle continued. Nowadays with a greater diversity in the activities of the sports facilities and with a larger emphasis of other values such as aesthetics, architecture, transparency, and outreach to wider user groups than just leisure activities for children, youth and adults organised in voluntary sports clubs.

This development has not least been inspired by the establishment of the Danish Foundation for Sports and Culture Facilities (Lokale- og Anlægsfonden[3]) in 1994. The Foundation is funded by a fixed proportion of the proceeds from the Danish national lotteries (88,8 M DKK in 2021) and has the task of developing and co-funding new and attractive types of sports and culture facilities in partnership with local associations, public authorities, or other investors. While the foundation does not have enough funds to finance entire buildings on its own, it can co-finance and 'push' developers of new sports and leisure facilities in a more open and experimental or innovative direction.

[3] Lokale og Anlægsfonden (The Danish Foundation for Sports and Culture Facilities): www.loa-fonden.dk

The cultural history of Danish sports facilities and their role and management can be divided into three or four eras. This is obviously a simplistic model with many overlaps and exceptions, but the overall development is described by the article 'The influence of voluntary sports clubs on the management of community sports facilities in Denmark[4]' which describes the changing role of the leading staff of sports facilities in Denmark over the years:

The formative era (1890-1920)
This era was very much about establishing the sports associations and the basic requirements and venues for various sports. The role of the managers was to solve the technical issues associated with building, operating, and maintaining sports facilities.

The confirmative era (1960-1980)
This era established the formal structures for voluntary sports clubs/associations as the main recipient of public support and formal rights of access to facilities for their activities. The welfare state through its local authorities played a central role in establishing, providing, and financing the facilities, while the role of the managers was to operate the facilities and put them at the disposal of the voluntary sports clubs and sports associations who then provided the content in terms of leisure time activities for their members.

The challenging era (1997-)
In this era, voluntary sports clubs/associations were still the main stakeholders but the scope of sports organisations in terms of providing for various target groups was broadened. Sports facilities were increasingly expected to take a proactive approach to the local community in terms of attracting new target groups, new activities etc.

In this period changes in sports participation patterns were leading to more adult and senior participants, more outdoor leisure activities, and more commercial activities and facilities organised or established by gyms and private operators. The role of many sports facility managers increasingly broadened from merely maintaining and keeping the facilities to provide a service to the local sports clubs (and schools) to taking a more proactive approach to organising or attracting a broader group of sports providers to the facilities.

A deeper look into the trends in public policy and development of sports facilities in Denmark will be the subject of the concluding part of this paper.

[4] Forsberg, P.: Danske idrottsplatsor I förändring (2022), Centrum för idrottsforskning. Part of the anthology 'Idrottsanläggninger i dag och i morgon. Om behov, tillgänglighet och konkurrerande intressen. https://centrumforidrottsforskning.se/kunskap-om-idrott/rapporter/idrottsanlaggningar-i-dag-och-i-morgon

Sports facilities – the present supply

Over the years, the Danish model has resulted in a massive supply of facilities for sport. The facility database (Facilitetsdatabasen.dk) developed by the Danish Foundation for Sports and Culture Facilities and the Danish Institute for Sports Studies lists more than 12.000 pitches, courts, halls, gyms, and various indoor and outdoor facilities. The total number of multi sports complexes in Denmark with various sports facilities mainly used by voluntary sports clubs and local schools and institutions is probably above 1.000.

Below please find a table with the status in 2022 for the most common types of sports facilities. The table shows the number of facilities (locations) as well as the total number of courts, pitches, holes etc.

Facilities, 2022	No. of locations	No. of pitches, courts etc.	Inhabitants per pitch, court etc.
Athletics facilities	321	0	0
(of which with 400 m synthetic track)	67		87.663
Badminton halls/courts	62	334	17.585
Bowlingcentres	83	1015	5.787
Fitness centres	1516	0	0
Football facilities/pitches (11 m)	1858	4594	1.279
(of which 11 m articifial pitches)	309	381	15.415
Golf facilities/holes	191	3576	1.643
Large sportscomplexes/halls (>800 m2)	1660		
(of which 20 x 40 m handball halls*)		1599	3.673
Medium halls (300-799 m2)	666	0	0
Smaller halls/school gyms (<300 m2)	2345	1	5.873.420
Mountain bike tracks	322	0	0
Padel centres/courts	269	818	7.180
Parkour facilities	109	0	0
Equestrianism centres	549	0	0
Skate facilities	186	0	0
Ice and skate facilities	33	73	80.458
Shooting ranges	770	0	0
Squash centres/courts	65	182	32.272
Swimming facilities/pools	390	856	6.862
Tennis facilities/courts, outdoor	632	2033	2.889
Tennis halls/courts	90	207	28.374

Source: Facilitetsdatbasen.dk, 2022

Over the years, legislative as well as political and cultural conditions have created a diverse picture of the ownership of sports facilities in Denmark.

Whereas outdoor sports facilities such as football pitches and athletics tracks are typically built, owned, and operated by local authorities, indoor facilities like sport halls and swimming centres have a more diverse ownership divided between municipality owned, self-governing local trusts (not-for-profit), or club owned (not-for-profit).

Newer developments in the sports sector with a larger focus of recreational or health-related activities such as fitness, yoga or in recent years padel have to a large extent been driven by commercial enterprises. Thus, the main part of fitness or yoga studios, crossfit boxes, golf courses, climbing centres, or padel centres are owned and operated by commercial entrepreneurs often with limited connections to local sports strategies or co-operation with the leisure departments of local authorities. However, during the last decades an increasing number of gyms have also been established and operated by self-governing local trusts (sports centres) and/or voluntary sport clubs.

The path in building, operating, and accessing various kinds of facilities have in many aspects been determined by differences in the years of formation of various sports activities or changes in the legislation.

There is a tendency that facilities for common, traditional sports such as football, handball (volleyball, basketball), swimming, badminton, gymnastics, tennis, athletics, which were popular and important in the confirmative period (1960-1980), are still to a large extent operated, owned, or subsidised by local authorities.

Facilities for large sport and leisure activities for girls such as dance and equestrianism tend to be more commercially oriented, while facilities for newer and emerging wellness or fitness-oriented activities such as fitness, yoga, golf, padel, crossfit, climbing etc. are mostly - but not exclusively - dominated by commercial enterprises.

The legislation around public support for sport as expressed in the 'Fritidsloven' from 1968 states some principles that have a large influence on the way sports facilities and the role of local authorities. The principles continued in the current 'Law on non-formal education and leisure activities (Folkeoplysningsloven), which replaced 'Fritidsloven' in 1991[5],.

First, 'Folkeoplysningsloven' is directly encouraging the formation of democratic and voluntary sports clubs. Denmark has more than 11.000 such sports clubs (idrætsforeninger).

Secondly, the Folkeoplysningsloven from 1991 states that local authorities *must*:

1. Subsidise activities in voluntary associations such as sports clubs for children and youth up to 25 years.

2. Refer voluntary associations such as sports clubs to 'suitable' and available facilities such as sports halls and outdoor facilities owned by the local authority or other public institutions.

[5] Folketinget (1990): Lov om støtte til folkeoplysende voksenundervisning, frivilligt folkeoplysende foreningsarbejde og daghøjskoler samt om Folkeuniversitetet. Retsinformation.dk. Current edition: https://www.retsinformation.dk/eli/lta/2011/854

3. Subsidise the rental costs of voluntary associations such as sports clubs who need to use privately owned facilities such as self-governing trusts or club owned facilities for their activities. The current edition of the law states that at least 65 pct. of the rent for club organised activities for children and youth in private facilities must be subsidised by the local authority.

4. When referring clubs to facilities the local authorities must give priority to activities for children and youth before non-formal adult education and sport/leisure activities for adults.

The law merely states the above obligations as a framework for local implementation by the municipalities. The law does not give detailed directives for the practical implementation in the 98 local authorities. In practice this means that the 98 municipalities each develop and adopt their own strategies and rules for building, operating, and subsidising sports and leisure facilities, as well as the guiding principles for the access to these facilities for local clubs or other user groups.

1. Some local authorities charge clubs relatively minor fees for the use of the facilities.

2. Some local authorities make facilities available for free for all user groups from clubs including adults etc.

3. Some local authorities have a very high supply of facilities and available time slots for clubs, while other local authorities have a smaller supply of facilities and available time slots.

The legal framework is not stating which kind of facilities or how many facilities the local authorities are expected to build, operate, or subsidise. These decisions are in principle up to local democracy and initiative. One could argue that since the 1980's-1990's the basic need for football pitches, halls, gym halls etc. has been more or less covered by most local authorities – naturally with some very local exemptions.

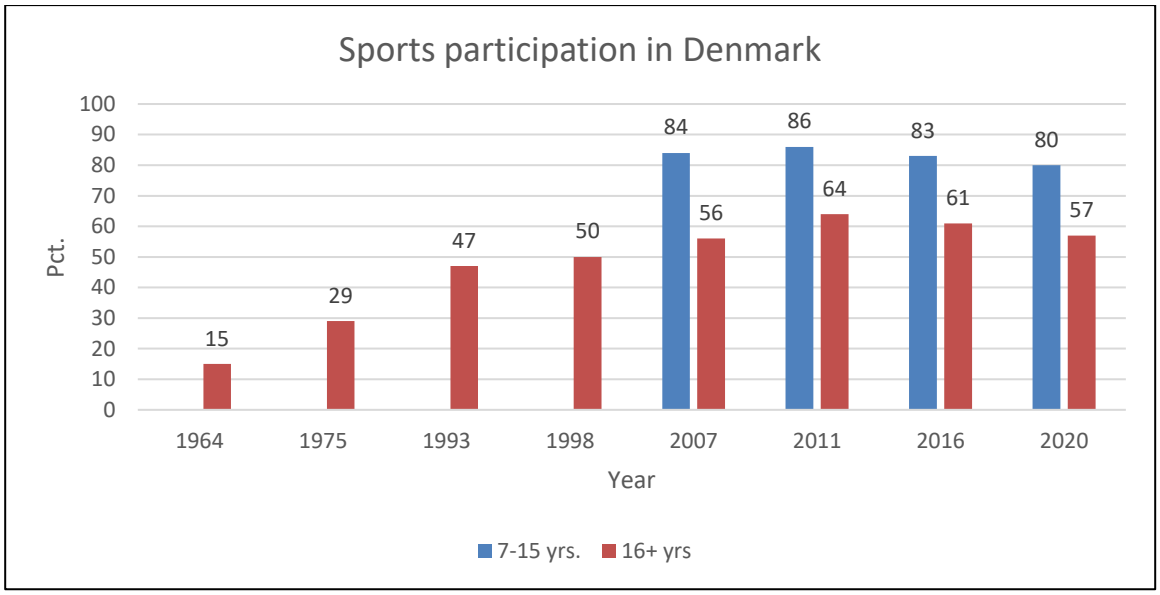
Over the years, a general picture has emerged that local authorities are catering for the local sports clubs with a reasonable supply of facilities. Furthermore, the principle that facilities owned by public authorities must be put at the disposal of voluntary sports and leisure clubs, means that e.g., local school facilities such as education facilities, gym halls, football pitches and halls are to a very large extent used by voluntary associations (for free or almost for free) in the afternoons or evenings after normal school hours.

Sports participation trends – challenges for sports infrastructure

Having investigated the supply of facilities as well as the cultural and legal framework around sports facilities we will now investigate the actual role of sports facilities in the sports participation in Denmark.

First, we will look at the actual sports participation patterns of the Danish population. Regular data of trends in sports participation exist back to 1964. In 2007, 2011, 2016 and 2020 the Danish Institute for Sports Studies undertook detailed national surveys and research into trends in sports participation of the Danish population (Danskernes motions- og sportsvaner).[6]

The figure below shows the general increase in sport participation among adults over the years. The figure also shows a general decline in sports participation in recent years among children and adults. It is to be noted however, that the latest survey in 2020 was conducted during Covid-19 lockdown and possibly affected by various restrictions on public assemblies during these months:



The survey question in 2007-220 has been "Do you regularly take part in sport and physical activity (motion).
Source: Danskeres motions- og sportsvaner, Idrættens Analyseinstitut, Danish Institute for Sports Studies.

Over the years the perception of 'sport and physical activity' might change. The survey therefore also asks in detail what kind of activities people are undertaking on a regular basis.

The tables below show the top 20 of activities among children (7-15 yrs.) and adults (16+ yrs.). Marked in *italic* are the activities that are in general perceived as traditional (often competitive) sports while the other popular activities are to be categorised as urban sports or recreational/fitness exercises with the aim of promoting personal fitness and wellbeing.

[6] Rask, S., Petersen, F., Hansen, K. & Eske, M. (2021): Danskernes motions- og sportsvaner 2020. Baggrundsrapport. Idrættens Analyseinstitut. https://www.idan.dk/media/fg0jwckc/baggrundsrapport-final.pdf

The figures for children show very big differences in the sport participation patterns of the youngest and the oldest kids with fitness and physical exercise taking a more predominant role than sport in the teenage years.

Top 20 activities for children 7-15 yrs. 2020:

Activities	Total	Girls	Boys	7-9 yrs.	10-12 yrs.	13-15 yrs.
Swimming	34	36	32	51	37	17
Football	31	17	45	34	33	27
Walking	29	30	28	30	27	30
Trampoline	28	30	27	37	32	17
Scooter	25	21	29	39	29	10
Running	23	22	24	15	21	32
Gymnastics	22	33	11	32	23	13
Strength training	17	15	18	2	8	38
Roller skates	14	22	7	23	16	6
Dance	14	25	2	15	13	13
Handball	13	13	12	13	13	12
Badminton	11	7	15	8	13	12
Esport	10	2	19	5	13	13
Equestrianism	8	15	1	9	9	7
Mountain bike	8	4	13	7	8	9
Skate/wake board	8	6	10	6	9	8
Martial arts	7	5	9	7	8	7
Skiing	7	6	8	8	7	6
Various fitness disciplines	6	7	5	1	4	13
Basketball	5	2	7	3	4	6

The table show share of total population practicing the activities in a regular basis.
Source: Danskernes motions- og sportsvaner 2020, Danish Institute for Sports Studies, idan.dk

Looking into the most popular activities for adults (16+ yrs.) it again becomes clear that competitive sports are most widespread among the youngest age groups while various forms of fitness, exercise and wellbeing related activities are much more common in most adult age groups.

Golf is the only sport with a larger appeal for the older than the younger age groups, while swimming (not competitive) has high appeal to all age groups. Walking is by far the largest activity for adults. It must be stressed that the figure shows walking and cycling as a means of exercise/recreation and explicitly not walking and cycling as a means of transport.

Top 20 activities for adults 16+ yrs. 2020:

Activity	Total	Women	Men	16-19 yrs	20-29 yrs	30-39 yrs	40-49 yrs	50-59 yrs	60-69 yrs	70-79 yrs	80+ yrs
Walking	72	66	77	66	74	70	71	75	79	73	57
Strength training	35	38	33	74	60	39	36	29	20	20	14
Running	33	36	31	73	60	52	39	26	11	5	2
Various fitness disciplines	23	17	28	38	33	27	24	22	18	15	11
Swimming	17	17	17	26	22	23	19	13	14	11	10
Yoga/pilates etc.	16	5	25	22	24	20	18	16	12	10	4
Road cycling	13	17	9	17	12	13	11	15	14	12	6
Spinning/indoor cycling	12	13	11	19	11	11	13	16	12	9	6
Football	9	15	5	37	20	14	7	4	2	1	1
Gymnastics	9	5	13	18	5	4	2	4	10	22	23
Mountain bike	9	14	5	15	9	10	12	13	5	2	0
Dance	9	3	13	27	13	7	7	6	6	6	4
Open water swimming	8	9	8	13	13	8	7	9	7	7	4
Badminton	8	10	6	26	11	8	7	6	6	5	2
Bowling/skittles	8	9	6	17	13	10	8	5	4	5	3
Billiards/pool	6	9	4	15	11	7	6	5	3	3	2
Crossfit	6	7	6	15	14	9	6	4	1	1	0
Winter bathing	6	5	7	6	11	6	7	6	5	3	1
Skiiing	6	7	5	16	9	5	6	6	3	3	1
Golf	5	8	3	4	6	3	3	6	7	9	5

The table show share of total population practicing the activities in a regular basis.
Source: Danskernes motions- og sportsvaner 2020, Danish Institute for Sports Studies, idan.dk

While the general activity pattern of the Danish population is very broad, the activity pattern in voluntary sports clubs is narrower.

Local sports clubs are typically affiliated to one or more of the three national sports organisations, DGI, Danish Company Sport, or The National Olympic Committee and Sports Confederation of Denmark (DIF). DIF is the largest national sports organisation and works as an umbrella structure comprising 62 national sports federations. The membership figures from 2021 below show membership figures of clubs who are affiliated to DIF, DGI or Company Sports.

The total number of memberships of Danish sports organisations was 2.529.029 in 2021 (1.452.074 males and 1.076.955 females). The figures below do not overlap between the three national sports organisations (each membership only counts once). However, if a person has a membership of more than one sports club (e.g., both a swimming and a handball club), the person will count twice in the figures below:

Membership of voluntary sports clubs, 2021, Top 20

Membership sports clubs, 2021	Men	Women	Total
Football	296.211	71.847	368.058
Gymnastics[7]	74.674	191.706	266.380
Swimming	100.682	130.308	230.990
Fitness (voluntary sports club)	93.578	109.024	202.602
Golf	123.882	49.842	173.724
Badminton	84.650	38.523	123.173

[7] Gymnastics comprises the Olympic version of gymnastics such as artistic gymnastics, however in the Danish tradition gymnastics is a very broad concept mostly comprising various forms of non-competitive team gymnastics, movement, and exercise.

Handball	48.554	51.582	100.136
Tennis	53.819	32.578	86.397
Equestrianism	6.050	58.652	64.702
Running	31.016	29.427	60.443
Sailing	45.011	14.611	59.622
Shooting	49.827	8.675	58.502
Cycling	39.767	10.878	50.645
Canoe/kayak	18.237	15.430	33.667
Sport for the elderly	11.235	21.729	32.964
Dance	8.256	24.469	32.725
Basketball	14.319	5.037	19.356
Volleyball	9.700	8.848	18.548
Rowing	7.887	7.663	15.550
Karate	9.181	4.868	14.049

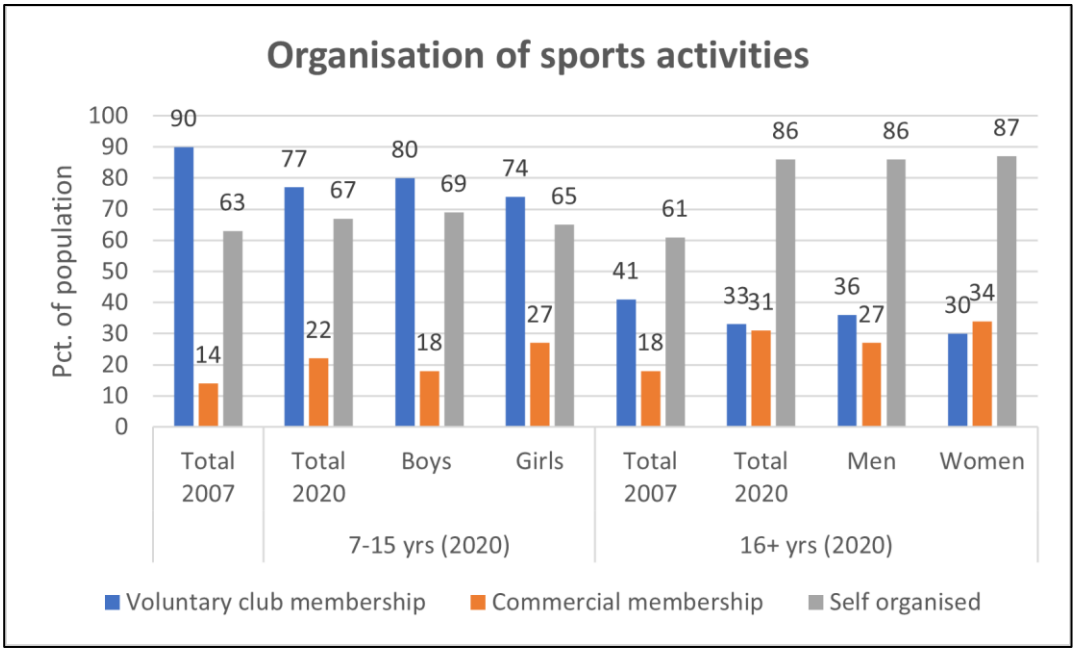
The table shows the number of members in voluntary sports clubs practicing the activities
Source: Central ForeningsRegister, statistikbanken.dk.

As shown above there is quite a difference between the share of population practicing various sports or recreative activities, and the formal membership figures of sports clubs.

A way to examine this difference closer is to investigate the market share of the three main forms of organisation of sport in Denmark. Club-based membership, commercial membership (e.g., fitness centre) or self-organised activities (no membership).

The figure below shows a general trend in recent years towards an increasing market share for commercially or self-organised sports activities, while club-based activities have a declining overall market share. However, club-based sports are still very important for children and youth.

In 2020 a national survey showed for the first time that more adult women were active in commercial than in club-based settings.

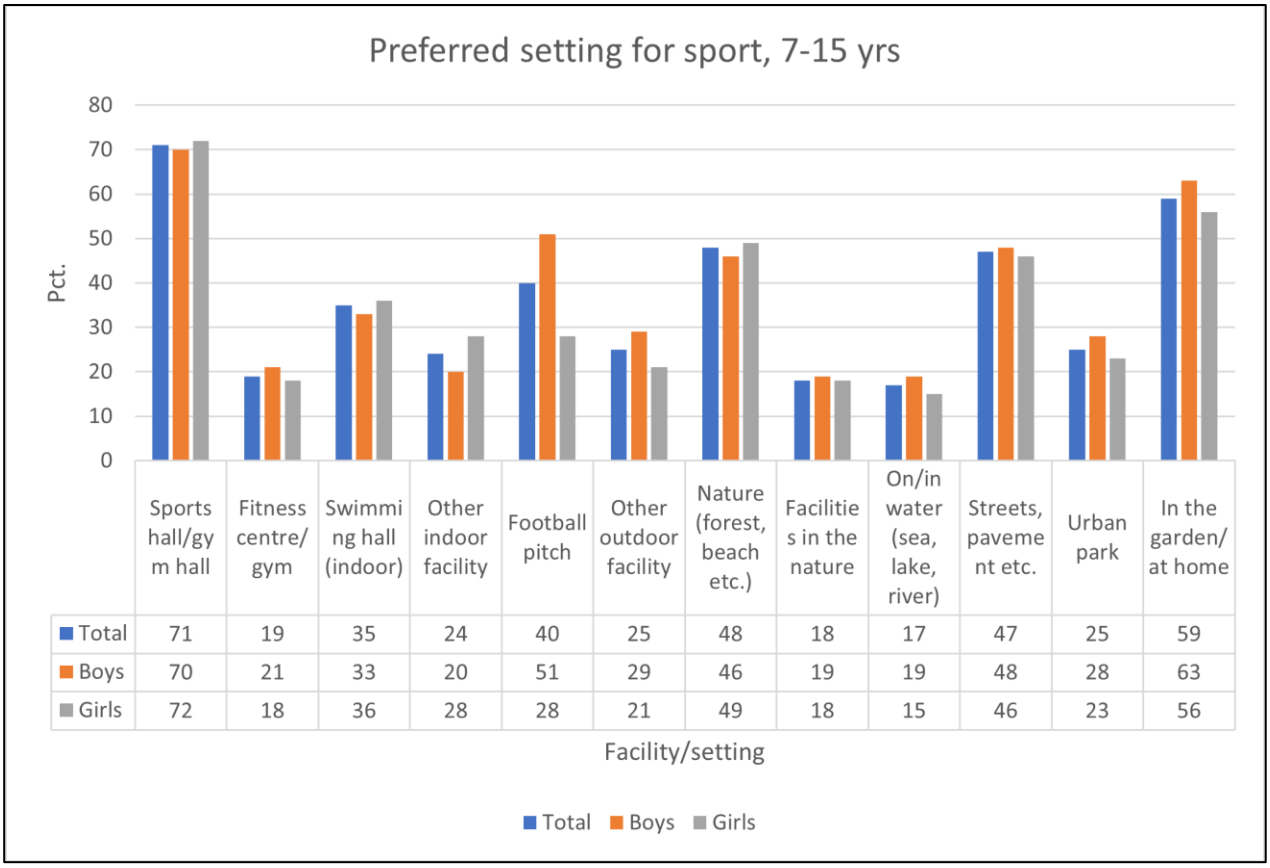


The figure shows the share of the total population taking part in activities under the various forms of organization.
Source: Danskernes motions- og sportsvaner 2020, Danish Institute for Sports Studies, idan.dk

The changing sports participation patterns have a high importance for the future structure and role of sports facilities. While the facilities cater for the main part of the public budgets for promoting sport and active recreation, the facilities tend to play a smaller role in terms of underpinning the overall sports participation of the population.

It should be noted that sports facilities are very important for sports activities and local networks around voluntary sports clubs and their activities, especially aimed at children and youth. Sports facilities play an important role as hubs for their local communities and are obviously necessary to facilitate the practising of many traditional sports.

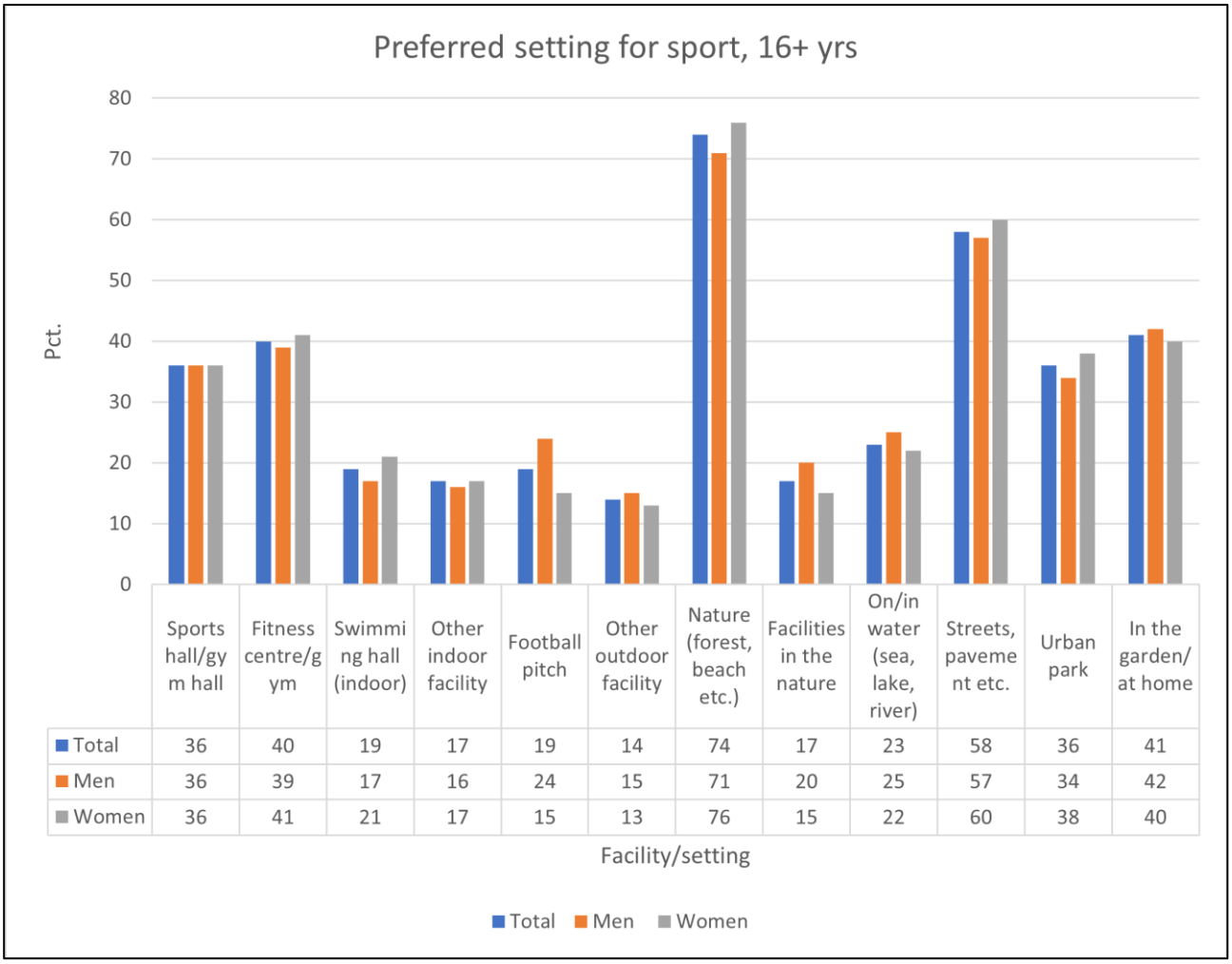
The figure below shows the preferred settings for sport for children 7-15 yrs. Sports halls/gym halls are still the most used facilities for children. Other sports facilities such as swimming halls, football pitches and other indoor sports facilities are very popular among children too:



The figure shows the share of the total population 7-15 yrs. using the various facilities or settings for sport or physical recreation.
Source: Danskernes motions- og sportsvaner 2020, Danish Institute for Sports Studies, idan.dk

The picture among the adult population (+ 16 yrs.) is more diverse. Outdoor settings such as nature, parks, streets, and gardens/at home are more popular as settings for sport activities than built spots facilities.

Among built facilities, fitness centre/gyms are used more commonly by adults than traditional sports facilities such as halls, football pitches, other indoor facilities, or swimming halls.



	Sports hall/gym hall	Fitness centre/gym	Swimming hall (indoor)	Other indoor facility	Football pitch	Other outdoor facility	Nature (forest, beach etc.)	Facilities in the nature	On/in water (sea, lake, river)	Streets, pavement etc.	Urban park	In the garden/ at home
Total	36	40	19	17	19	14	74	17	23	58	36	41
Men	36	39	17	16	24	15	71	20	25	57	34	42
Women	36	41	21	17	15	13	76	15	22	60	38	40

The figure shows the share of the total population +16 yrs. using the various facilities or settings for sport or physical recreation.
Source: Danskernes motions- og sportsvaner 2020, Danish Institute for Sports Studies, idan.dk

Structural challenges for the sports infrastructure

Having explored the cultural and economic environment for sports facilities as well as the supply of facilities and the sports participation patterns and demand for sports infrastructure this final part of the paper will briefly recap some key structural challenges facing sports facilities and their operation and management during these years.

First, the changes in participation patterns, demographics, and public needs and expectations for the role of the sports infrastructure means increased demands for good governance and strong management of sports facilities.

Taking a step from traditionally servicing local clubs and institutions into a more market-oriented and proactive approach to cater for new target groups and increase usage and relevance for sports facilities in their local communities require a new type of governance and management of sports facilities.

The traditional tasks of managers of sports facilities are still very much in demand:

The importance of high hygienic standards and good management of the building infrastructure has increased in recent years following the Covid-19 health crisis and rising energy prices.

Adding to these tasks for the future management of sports facilities are the ability to work in an environment where sports facilities are increasingly expected to be able to act as catalysts and hubs for new activities, new partnerships, and new target groups. Sports facilities are increasingly expected to enhance their use and relevance by supporting programs of the traditional users like voluntary sports clubs, schools, and other institutions, and on the same time look for revenue and activities from commercial, self-organised, and/or public initiatives.

This development is taking place at a time were demand for skilled workforce is increasing in society in general, and where many traditional managers of sports facilities are approaching their retirement age or lacking the tradition for or means to continued professional development all through their working life.

To sum up, sports facilities must develop their activities and target groups and prove their value and relevance for sport and community at a time at which operational costs are rising and the level of public subsidies might become tighter.

Some key challenges:

Changing demographics

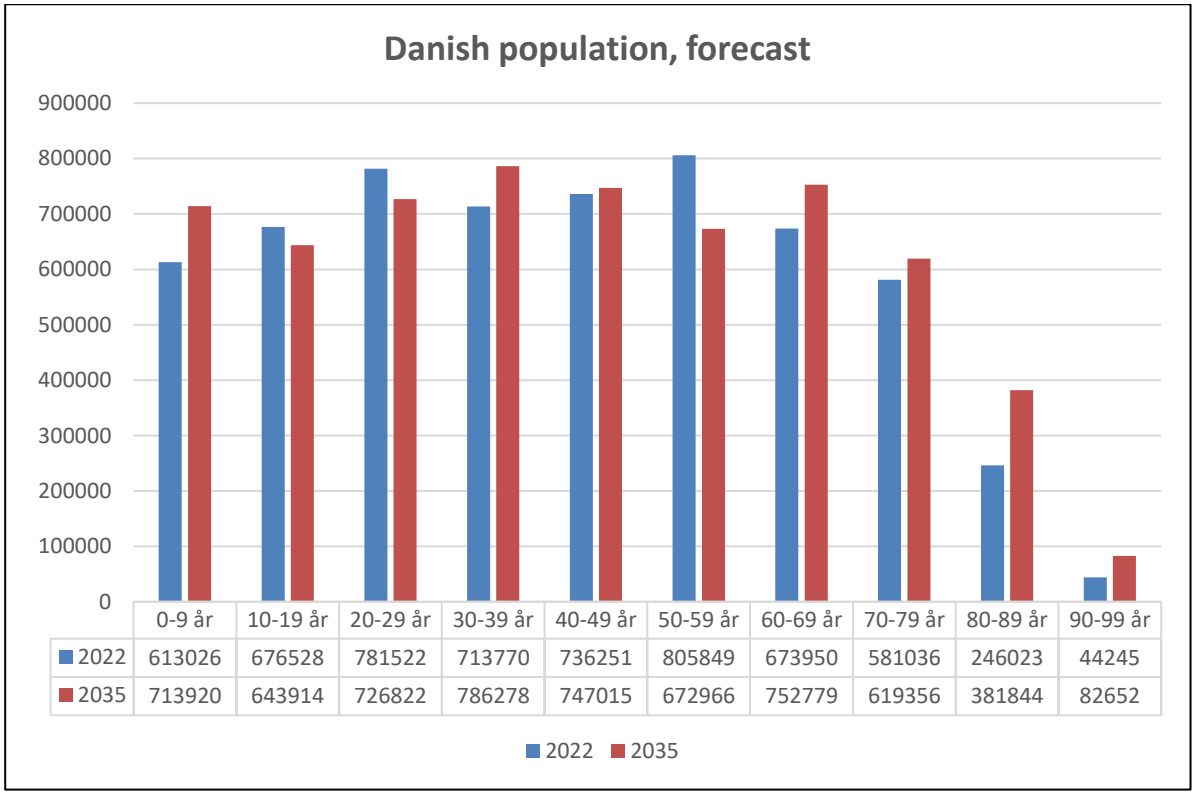
Like many other countries in Europe, Denmark is facing demographic changes.

For several years the trend has been growth in the population centres in the larger cities and declining population in many urban areas. Furthermore, the population has in general been ageing. This trend is

forecasted to continue in the coming years. The official forecast from Denmark's Statistik forecasts less teenagers and young people, less people in the most active years on the labor market and more people among the children and the oldest age groups in the years until 2035.

The picture varies from region to region and from local area to local area but since the supply of sports infrastructure supplied by or subsidised by public authorities have traditionally been directed at sports patterns for children and younger age groups, there is no doubt that many sports facilities face demographic patterns that urge them to take a closer look at the design, activities, and target groups of their facilities.

Urbanisation means more people having to share less space and a supply of facilities in the major cities, where costs for investment in new sports facilities or space for physical recreation are affected by the generally higher demand for land or property. On the other hand, depopulation of rural areas means that many sports facilities in these areas also must change to attract new sports, activities, broader user groups or age groups than they were initially built for if they want to stay viable and relevant.



	0-9 år	10-19 år	20-29 år	30-39 år	40-49 år	50-59 år	60-69 år	70-79 år	80-89 år	90-99 år
2022	613026	676528	781522	713770	736251	805849	673950	581036	246023	44245
2035	713920	643914	726822	786278	747015	672966	752779	619356	381844	82652

Social context and role of sports infrastructure

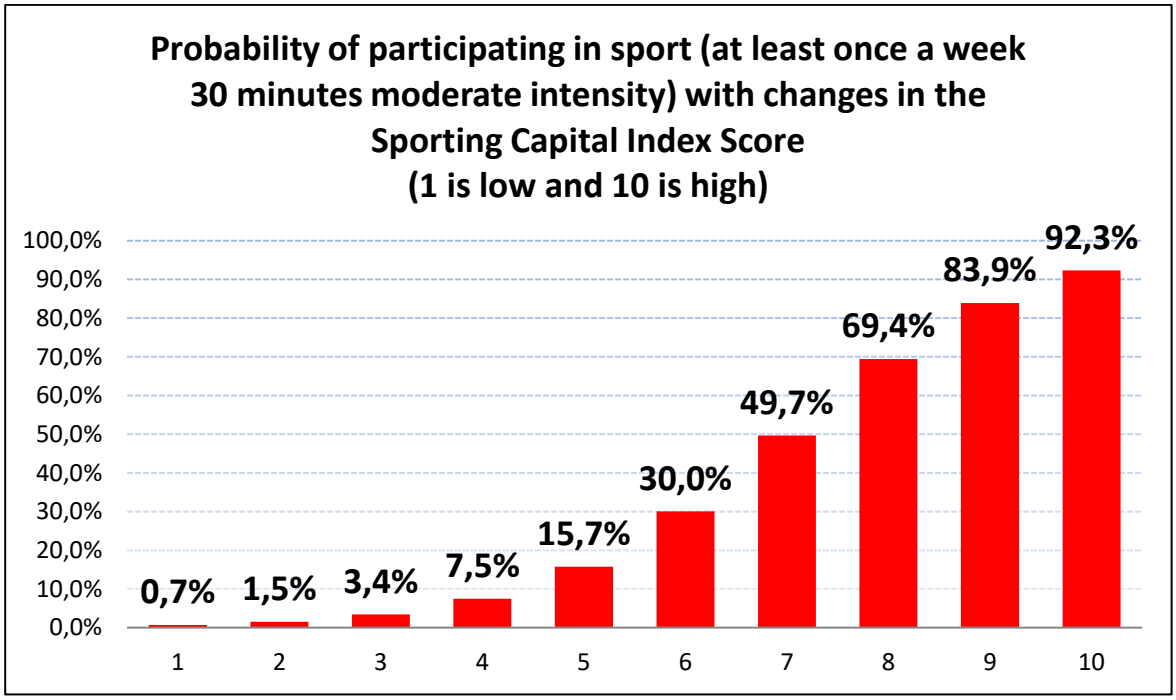
In recent years physical inactivity, mental health issues, and social cohesion e.g., in population centres with a large proportion of migrants or ethnic minorities have been highly prioritised on the public agenda. Physical inactivity has been highlighted as one of the largest threats to the general health of the population only surpassed by smoking as a major risk factor.

In this light, sport and sports organisations are expected to play a role in meeting the overall challenges faced by society. Sport is increasingly measured by its ability to reach other target groups than the most skilled or motivated children, young people, or adults.

The social environment of children (e.g., active, or inactive parents) and the educational or occupation profile of adults are among the largest indicators for the level of sports participation.

In this picture sports infrastructure is expected to reach out to, assist or create programs with appeal to other population groups than the most motivated or 'sporty' groups, who tend to enjoy sports and are more likely to enter membership of sports clubs by their own initiative.

The figure below is developed by Nick Rowe based on his theory of sporting capital[8] in the UK. If adult people are questioned about their physical, physical, and socioeconomic backgrounds and relations to sport and divided into a 10-scale index, Nick Rowe's research show that people with the highest 'sporting capital index' (10) are very likely to be actively involved in sport and physical activity no matter their age or present life situation, while people at the other end of the scale are highly unlikely to take part in any form of sport or physical activity no matter their present life situation. The implication for society and thereby also for public infrastructure for sport is that a real increase in the public value for sport requires an ability to reach out to other target groups than the self-motivated and sporty ones.



Sporting Capital. Sport participation of +15 adults in England with various levels of sporting capital.

[8] Rowe, N (2020): Sporting Capital. Transforming sport development policy and practice. Rutledge Research in Sport, Culture and Society.

The technological development increases demand for investment and accessibility

Sports facilities are increasingly expected to be able to connect with user groups through social media, to be connected, and to be available for bookings and activities all year round. Technology such as AI-cameras and CRM-systems increase the pressure on sports facilities to increase capacity exploitation and commercial income and to be able to document their usage by various user groups.

Technology is also playing a larger role in the sports content itself, E-sports, SIM-sports, exergaming and connected fitness equipment are increasingly becoming state of the art in commercial settings, and public or semi-public sports facilities need to cater for the expectations of their visitors. There is an increasing pressure on sports facilities to be able to invest in, exploit and adapt to the rapid technological development in society.

Technology in many forms plays an increasing role in sports infrastructure and increases the demand and urge for constant change and investment for the sports facility. Photos collected by Henrik Brandt.

Sustainability issues are becoming real

Sports infrastructure is affected by rising energy costs and demands for higher environmental sustainability. Sports facilities are looking into ways to increase their sustainability and alignment with the sustainable development goals of the United Nations but often such measures demand knowhow and capital for long term investment, which can be hard to find for facilities that are already under financial pressure.

Challenges to connect with outdoor trends

As shown from the data on the use of sports facilities by the active population, sport and physical activity is increasingly performed in outdoor settings such as forests, parks, and urban spaces. At the same time most public investment and subsidies in sport are directed at the built infrastructure. This leaves a challenge to

spots facilities but also an opportunity to connect the built infrastructure with the rapidly growing outdoor trends.

Challenges from new funding streams and other sectors

In recent years the most rapidly growing type of sports facilities have been commercially driven facilities such as fitness centres, crossfit boxes, climbing centres, golf courses, and padel courts. This trend means that the public infrastructure needs to adapt its strategy. Should they go with the market and try to catch up with the commercially driven trends, or should they choose an alternative path and risk losing out on valuable user groups or revenue streams?

There is no simple answer to this question but there is no doubt that managers of sports facilities as well as public authorities are faced with some strategic choices in their approach to funding models, public-private partnerships, or increased segregation between the publicly funded or the privately funded sports facilities. The most advanced sports facilities are working in a complex environment where they are not just sports facilities but might also tap into other sectors such as health, education, culture, tourism, property development and urban development etc. Again, the picture varies from facility to facility but the complexity in operation and developing spots facilities are ever increasing.

Activit	Total	Girls	Boys	7-9 yrs	10-12 y	13-15 y
Swimmin	34	36	32	51	37	17
Football	31	17	45	34	33	27
Walking	29	30	28	30	27	30
Trampoli	28	30	27	37	32	17
Scooter	25	21	29	39	29	10
Running	23	22	24	15	21	32
Gymnasti	22	33	11	32	23	13
Strength	17	15	18	2	8	38
Roller ska	14	22	7	23	16	6
Dance	14	25	2	15	13	13
Handball	13	13	12	13	13	12
Badminto	11	7	15	8	13	12
Esport	10	2	19	5	13	13
Equestria	8	15	1	9	9	7
Mountair	8	4	13	7	8	9
Skate/wa	8	6	10	6	9	8
Martial a	7	5	9	7	8	7
Skiing	7	6	8	8	7	6
Various fi	6	7	5	1	4	13
Basketba	5	2	7	3	4	6

The structure and role of sports facilities in Norway

Jartrud Marie Åsvold

Introduction

Building sport facilities is one of the main public means of encouraging sport and physical activity in many countries. Knowledge of the policies and politics for the construction and management of these facilities is necessary to understand the role of facilities for sport and physical activity.

In Norway, the sport is seen as an important welfare policy task. Thus, the sports infrastructure has been established with considerable financial support from official authorities. 'Sport for all' has been central to the policies of governments and confederations of sports in Norway. Norway is among the countries with the highest number of sports facilities per capita in the world, and the range and geographical spread of facilities has given the population a greater opportunity to take part in sports (Rafoss og Troelsen, 2010).

Today, Norwegian Sports Confederation is the largest voluntary organization in Norway, of which almost half of Norway's population is a member. The Norwegian Sports Confederation offers organized sports for the entire population, where children and youth are the main target groups.

New forms of activity and sports have emerged in Norway in the last three decades. Whereas in the 1980s the majority of those who regularly exercised participated in organized activities, the great majority today exercise independently (Rafoss & Troelsen, 2010). The number of people using private fitness centers has grown steadily since the 1990's. Also, commercial centers like crossfit boxes, climbing centers, golf courses, and padel courts are more and more popular.

International studies also show that the participation rates in self-organized sports and physical activity have grown in popularity the last three decades, especially among youth and young adults (Bakken, 2019; Breivik & Rafoss, 2017;Brymer & Schweitzer, 2013; Gilchrist & Wheaton, 2017; Säfvenbom et al., 2018; Wheaton, 2010). Reports from Norway show that the majority of youth and young adults are exercising on their own (Levekårsundersøkelsen, SSB, 2021; Ungdata 2022), and the participation rates for organized sports have decreased (Bakken, 2019, Ungdata 2022)

The majority of sports facilities in Norway are traditional, standardized, competition-oriented sports facilities designed for organized sport. Maybe not that strange, since over 90 percent of all young people have participated in organized sports during their upbringing (Ungdata, 2017). At the same time, most youth of adults' exercise on their own. Therefore, we wonder; are we building the «right» facilities? What are the challenges in the Norwegian policy and politics in the development of sports facilities?

The purpose of this article is to give an insight of the national structures for building and managing sport facilities in Norway-based on sports policy, sports politics, sports facilities, sports participation and trends, the use of sports facilities, and the challenges in development of sports facilities for all (from Tverga's point of view).

Historical background

Norwegian Sports Confederation (full name: Norwegian Sports Confederation and Olympic and Paralympic Committee), by the abbreviation NIF, was founded in 1861 as the Central Association for the Promotion of Physical Exercises and Weaponry.

Ever since 1863, organized sport has received financial support from the government. However, the first sports facilities in Norway were financed by private means (Rafoss og Troelsen, 2010).

The first national government funding to sport facilities came as early as 1917 (Rafoss and Breivik 2012). However, it was not until after the Second World War that the resources and the means for a substantial growth in sport facilities were at hand (Bergsgard and Rommetvedt, 2006). As the welfare state expanded in Norway after the Second World, sports policy emerged. Organized sport had a central role in the social development of the society. The establishment of a State Office for Sports and a national gambling agency in 1946 was an important milestone (Rafoss og Troelsen, 2010). It was decided that all the gambling profits from the National Gambling Corporation (Norsk Tipping AS) should be spent on the development of sports facilities (Goksøyr, Andersen, and Asdal 1996).

Gradually, a conflict arose between the Norwegian Confederation of Sports (1946–96), which requested more funds for sports activities, and the State Youth and Sport Office (STUI), which was intent on developing sports facilities. The conflict led to the establishment of the Government's Sports Council (1957–88), which was in charge of distributing assets from gambling. State's Youth and Sports Office (STUI) contributed heavily to the development of facilities. Among other things, swimming pools were built all over the country.

Until the late 1960s, only one in ten Norwegians was a member of the sports movement. The next ten years, the number of members in the Norwegian Sports Confederation more than tripled, from 370,000 to 1.2 million. The number increased further to 1.6 million in 1985. This period is known as the "sports revolution".

However, this does not mean that activity increased accordingly. The Norwegian *"hiking culture"* was partly replaced by a *"sports culture"*. Children and young people moved the activity from the street and the loop to the sports fields.

From the 1970s, the relationship between the state and Norwegian Sports Confederation became closer. Sport was defined by the state as part of cultural life. State and municipal support made it possible for sport to provide a better and wider offer.

In the 1990s, the first white paper for sport was published in Norway. In collaboration with the organized sports movement and the municipalities, a unified sports policy was designed where collaboration, division of labor and funding were to ensure that political goals were achieved.

The two last white papers from the Norwegian Government, the state's sports policy has had a health-promoting purpose underscore that the goal of building sport facilities is to contribute to sport for all (St.

meld. nr. 14 1999–2000; Meld. St. 26 2011–2012) (Skille & Säfvenbom, 2011). The goal is to meet increasing challenges related to physical inactivity (Gilchrist & Wheaton, 2017). This means that everyone who wants, should have the opportunity to participate in organized sports or engage in self-organized physical activity.

As mentioned at the beginning, Norwegian Sports Confederation is the largest voluntary organization in Norway, with 1.9 million memberships. Norwegian Sports Confederation consists of over 10,000 sports clubs, 375 sports councils, 11 regional confederations and 55 national federations.

Norwegian Confederation of Sports has traditionally had a near-monopoly as a receiver of gambling funds to sport activities. Due to the lack of investment in sport facilities for self-organized sport and psychical activity, and due to the fact that self-organized physical activity is a focus area in the last white paper from the Norwegian Government, the Ministry of Culture commissioned a resource center for self-organized sports and physical activity in 2017. In 2018, Tverga- Resource center for self-organized sports and physical activity was established.

Tverga is a voluntary organization established by *Ungdom og Fritid* and *Oslo Skateboardforenin*g. Tverga guides municipalities and volunteers in the development of arenas for self-organized sports and physical activity, completely free of charge.

Tverga's role is to identify needs and challenges and promote knowledge and competence in self-organized sports and physical activity. The mission is to strengthen municipalities and volunteers in the development of sustainable meeting places for self-organized sports and physical activity.

Tverga is unique worldwide. No other country in Europe or the rest of the world that we know of has a similar organization.

Status sport facilities

Almost all sports facilities in Norway are registered in the facility register anleggsregisteret.no. The facility register was established in 1992 to map and keep a running record of sports facilities in Norway.

In 2022, 50 646 sports facilities are registered in Norway. This includes both facilities for organized and self-organized sport and physical activity. In addition, there are sports facilities that have not received gambling funds, and are therefore not registered on anleggsregisteret.no.

Below is an overview of different types of facilities divided into 15 facility types (Telemarksforskning, 2022). The most common facilities are football fields, sport halls and outdoor activities and orientation. The category "various sports" is also high.

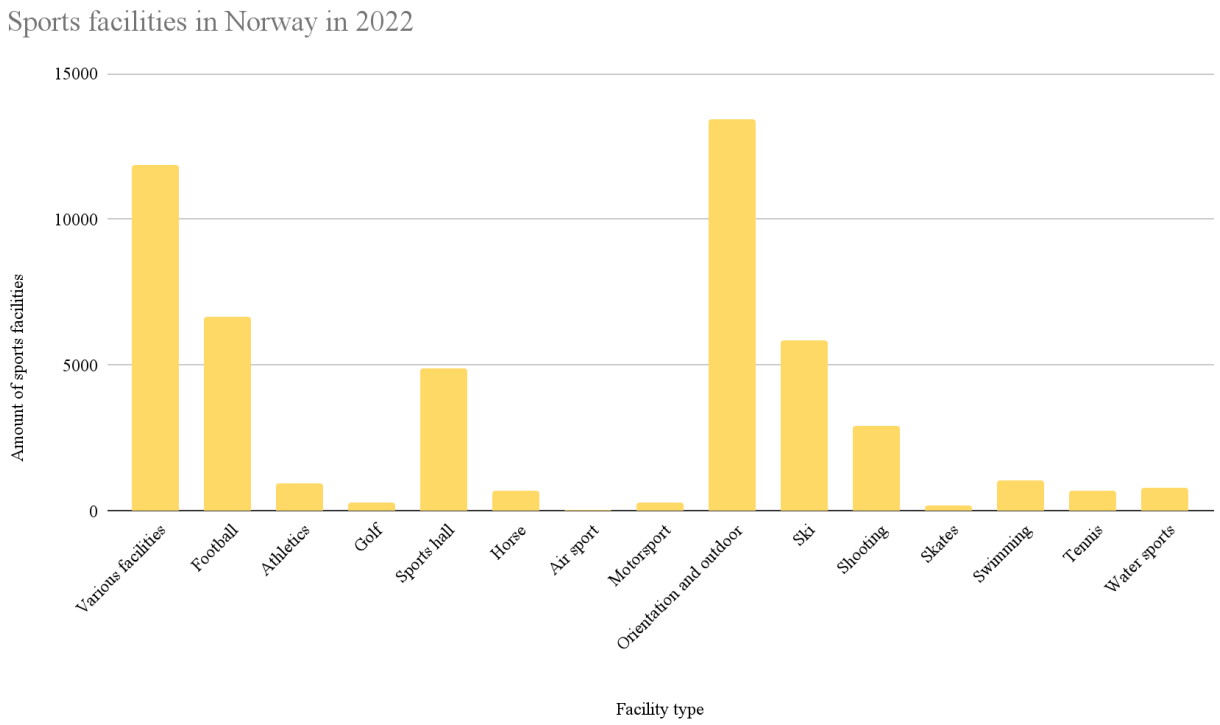


Table 1. The illustration shows the status of the number of sports facilities in Norway in 2022. The illustration is based on [data from Telemarksforskning](#).

In order to be able to compare small and large facilities, Telemarksforskning has given all facility types of different points. This gives another picture (and more realistic) on the facilities situation in Norway. See Table 2.

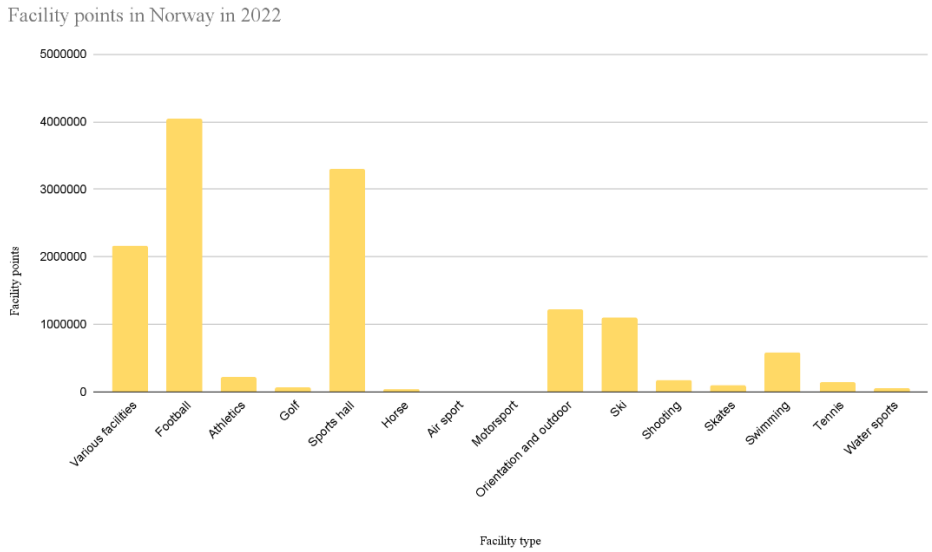


Table 2. The illustration shows the facilities points in every sports facility type in Norway in 2022. The illustration is based on [data from Telemarksforskning](#).

According to the Center for sports facilities and technology, around 800 new facilities are built each year (Öhman, 2020). The same report shows that approximately 65% of all facilities that have been realized between 2006 and 2020 are facilities for self-organized physical activity (Öhman, 2022). This may indicate that the gambling money reflects the population's use of facilities and activity patterns. But, if we look at table 2 (distribution of facilities based on points) and the distribution of money (see table below), the support for football facilities, sports- and activity halls, are much higher than the support for facilities for self-organized sports, for example outdoor facilities. In addition, it can be discussed to what extent the facilities that are defined as "facilities for self-organized physical activity", are actually used for self-organized sports and physical activity.

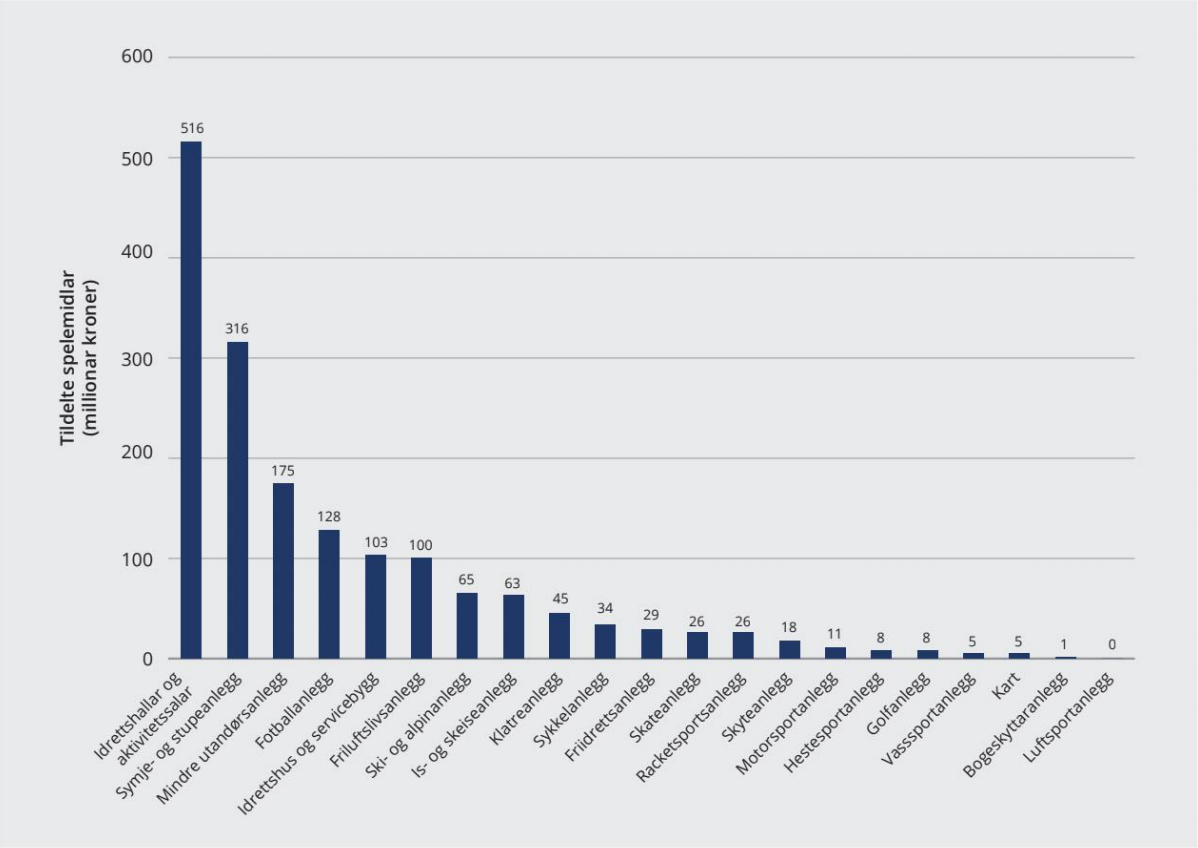


Table from Granly and Aas 2021

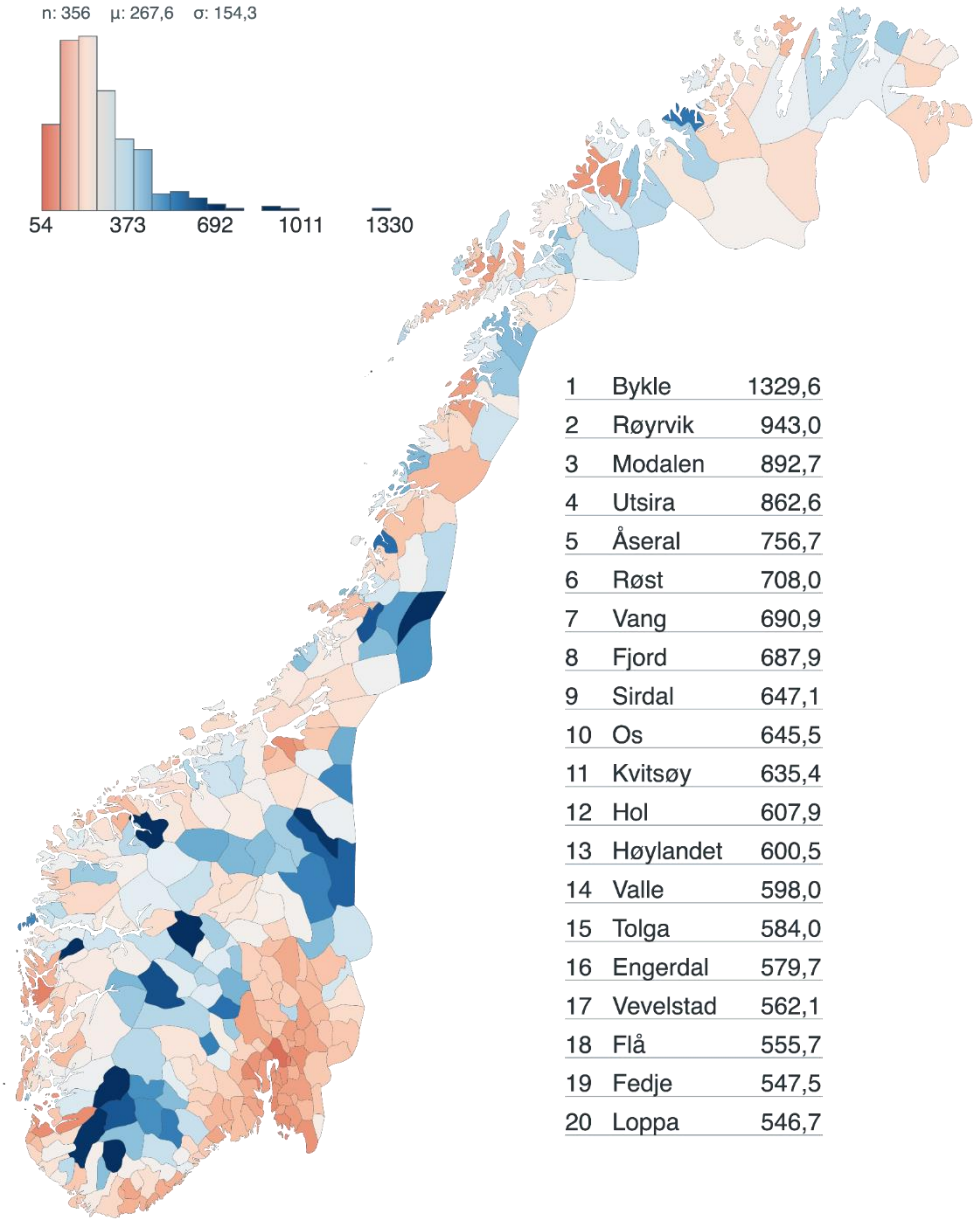
Facility coverage

In Norway, there is far better coverage of facilities in rural areas than in the big cities. Thus it is clear that geographically there are large differences in the coverage of facilities. At the same time, municipalities in rural areas spend a far greater amount than their urban counterparts on funding sports activities and facilities (Rafoss and Troelsen, 2010).

Despite the better conditions in the less dense areas, with greater availability and more financial support, it is not possible to identify a general correlation between the coverage of facilities and the degree of participation in sports (Rafoss and Troelsen, 2010).

Telemarkforskning have collected and structured data on the coverage of facilities in all the municipalities in Norway. The facility register (anleggsregisteret.no) contains an overview of large and small facilities in Norway. In order to be able to compare small and large sport facilities, all facility types are given different facilities points. The sum of these facilities is used to assess the construction situation in the municipalities.

As mentioned above, the facility coverage per inhabitant is often greater in municipalities with relatively few inhabitants. This also affects the facilities map. The most construction points per inhabitant can be found in Bykle municipality. Only 948 people live in Bykle. The capital of Norway; Oslo, with 700 000, inhabitants, is at the bottom of the list.



1	Bykle	1329,6
2	Røyrvik	943,0
3	Modalen	892,7
4	Utsira	862,6
5	Åseral	756,7
6	Røst	708,0
7	Vang	690,9
8	Fjord	687,9
9	Sirdal	647,1
10	Os	645,5
11	Kvitsøy	635,4
12	Hol	607,9
13	Høylandet	600,5
14	Valle	598,0
15	Tolga	584,0
16	Engerdal	579,7
17	Vevelstad	562,1
18	Flå	555,7
19	Fedje	547,5
20	Loppa	546,7

Inhabitants per facility on a municipality, regional, and national basis. Dark blue represents high facility coverage while dark red indicates low facility coverage.

Read more about facilities coverage here.

Financing and ownership of the sports facilities

The policy for sport facilities can be described as a tripartisanship between sport clubs (and other volunteer organizations), municipalities and the national government. It is important that all of these three parties contribute to increase the funding for facilities (Seippel 2008).

Table 2. The ownership/management structure of sport facilities in the four countries (percentage).

Owned/managed by	Denmark	Finland	Norway	Sweden
Municipalities (public)	47	71	54	57
Sport clubs	8	7	30	23
Trusts	37	1	6	13
Others (private companies, NGOs)	8	22	10	7

Notes: The figures are estimates and dependent on which type of facilities that are included in the statistics. For instance, if smaller facilities (from maps to smaller playgrounds) were to be included in the same way as the larger facilities, the share owned by sport clubs would be larger in Denmark and Norway.

Table 2 (Bergsgard et al. 2017)

It is the municipalities, the local sport councils and the sport clubs that are central for developing local sport facilities, especially the municipalities that build and manage the largest and most costly facilities. On average, for 2009–2014, the municipalities spent more than € 280 million in gross investment yearly for sport facilities (€28 per inhabitant in 2014), however with a decline over the period (Håkonsen 2015). Just above €225 million yearly were on average used to net running costs for sport facilities from 2009 to 2014, with a substantial increase. In addition, €100 million was on average spent on supporting sport clubs, a large part going to the clubs' own facilities (Håkonsen 2015: Table 2). In 2014, the municipalities spent €365 million on financing sport facilities and €290 million on running costs for facilities and for supporting sport activities (Kulturdepartementet, 2016).

Table 1. The main public funding for local sport facilities in the four countries (€).

	Denmark	Finland	Norway	Sweden
Municipal funding of sport facilities (investments and running costs)	561 million (yearly average 2009–2014)	450 million (2015)a	605 million (yearly average 2009–2014)	1750 million (to sport and leisure facilities combined, 2012)
Municipal funding per inhabitant	100 (yearly average 2009–2014)	82 (2015)	97 (2014)	183 (2012)
National/regional gross investment in facilities	7 million (2012)	25 million (2015)	92 million (2014)	6.6 million (2012)

Notes: a) This includes the municipalities' spending on rents, salaries and materials for the sport sector.

As a rule, the national government (via gambling funds) contributes up to one third of the development costs, although there are many exceptions in the upwards direction. In reality, the funding from the national government is on average not more than around one-fifth of the development and construction costs, more for the costlier facilities and less for the cheaper (Bergsgard, Nødland, and Seippel 2009; Ministry of Culture 2016). The national gambling funds are, however, important as a catalyst for funds from municipalities and for involving sport clubs' resources such as voluntary work, fundraising and loans. Applying for the national gambling fund is thus decisive for the local actors. On average, €92 million (in 2014-currency) of the gambling money was distributed to local sport facilities for 2009–2014. In 2022, the government distributed approximately € 300 million (NOK 3,3 billion) through the gambling funds scheme for sports purposes in Norway, of which € 160 million (NOK 1.7 billion) of this money were distributed to facilities for sports and physical activity.

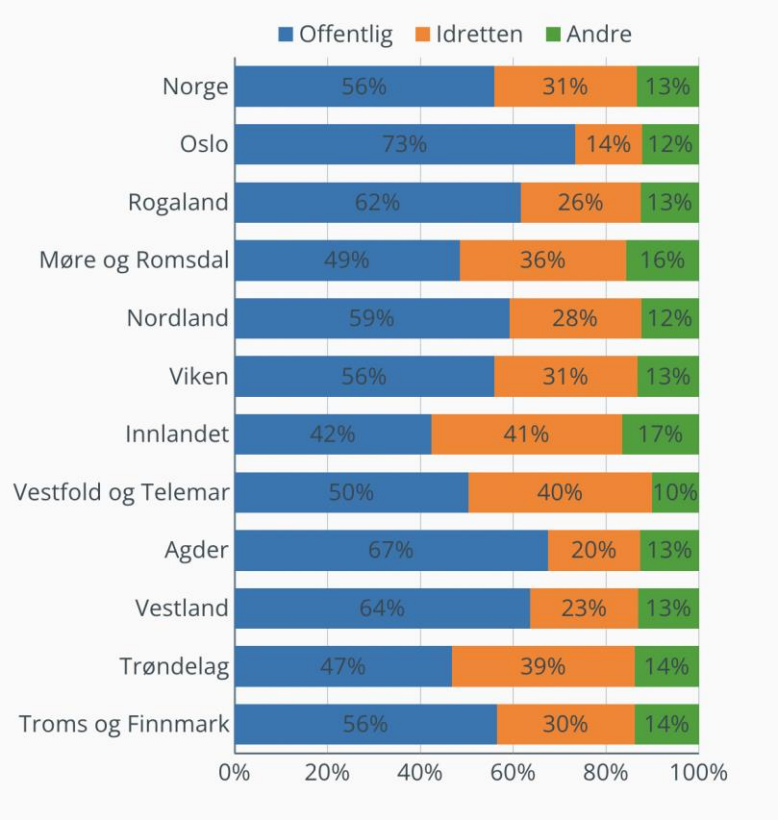
Compared to our neighbor countries in the Nordic, Norway has a very generous and predictable subsidy scheme.

In this system, regional governments are less involved as facility developers and facility owners. However, in the role as coordinator of applications upwards and distributor of funds downwards regional governments can play an important part.

In total, The Ministry of Culture and Equality has estimated that Norway invests approximately € 745 60 million (NOK 8 billion) annually for the construction and rehabilitation of facilities for sports and physical activity (Ministry of Culture and Norwegian Sports Confederation, 2021).

Sport clubs are also important owners of facilities. Around three of ten facilities are owned by sport clubs, 54% are owned by the public, mainly municipalities (52%) and the rest are owned by other voluntary organizations and companies (Groven and Kleppe 2017). The general picture is that sport clubs' facilities are smaller and to a larger degree located in rural areas, predominantly facilities for football, skiing and shooting, while the municipalities own the costlier facilities (e.g. multisport facilities, swimming facilities). The investments in publicly owned facilities are around 80% of the total investments in sport facilities.

The table below shows the distribution of ownership in the different counties in Norway in 2022. In Oslo and Vestland, the municipalities own approximately 70 percent of the facilities. In Innlandet, Vestfold og Telemark, and Trøndelag, the sports clubs own around 40 percent of the facilities.



The table is from [Telemarksforskning, 2022](#).

Physical activity level, sports participation and trends

The physical activity level

The increasing physical inactivity we see both nationally and globally is part of a trend that is constantly moving in the wrong direction. Changes in society, both structural and individual, create societies with ever-increasing physical inactivity.

About nine out of ten of the 6-year-olds' children meet the recommendations for physical activity in Norway. The older the children get, the less physically active they become. Half of 15-year-olds are not active enough according to national recommendations for physical activity. More boys in all age groups meet the recommendations compared to girls (Helsedirektoratet.no).

One in three (32 percent) adults meet the recommendations for physical activity (Directorate of Health - Statistics on physical activity level and sedentary time). Adults spend an average of nine hours per day sitting still (Helsedirektoratet.no).

The mapping also shows social differences (Helsedirektoratet.no).

Among the elderly, there are large differences in the level of activity between the various groups. On average, around 31 per cent of the older recommendations meet (Helsedirektoratet.no).

Organized and self-organized sports and physical activity

Organized sports under the auspices of parents and other adults are an important contributor to the increased level of physical activity among children and young people today. As mentioned earlier, Norway's sports organizations have 1,9 million members, and over 90 percent of all young people have participated in organized sports at one time or another during their upbringing (Youth data, 2017). Girls and boys with an immigrant background have a lower participation rate in youth sports compared to children with Norwegian-born parents. Economy and communication/language, and culture highlighted as barriers to participation in organized sports.

The table below shows the most popular organized sports activities for children from 6-12 years old. Football, handball, gymnastics, swimming and skiing are the most popular organized sports for children in 2021.

Barn 6-12 år	2015	2021	Endring i aktivitetstall siste seks år	Prosentvis endring siste seks år	Andel av aldersgruppen i 2021
Norges Fotballforbund	168 635	157 605	-11 030	-7 %	33 %
Norges Håndballforbund	59 641	59 973	332	1 %	13 %
Norges Gymnastikk- og Turnforbund	50 080	51 519	1 439	3 %	11 %
Norges Svømmeforbund	38 283	42 596	4 313	11 %	9 %
Norges Skiforbund	57 686	40 919	-16 767	-29 %	9 %
Norges Friidrettsforbund	21 516	18 207	-3 309	-15 %	4 %
Norges Kampsportforbund	18 243	16 163	-2 080	-11 %	3 %
Norges Bandyforbund	9 461	9 332	-129	-1 %	2 %
Norges Tennisforbund	5 971	7 291	1 320	22 %	2 %
Norges Ishockeyforbund	6 068	5 937	-131	-2 %	1 %
Norges Basketballforbund	2 765	5 901	3 136	113 %	1 %
Norges Rytterforbund	5 435	5 306	-129	-2 %	1 %
Norges Danseforbund	4 488	4 950	462	10 %	1 %
Norges Motorsportforbund	3 706	4 544	838	23 %	1 %
Norges Cykleforbund	4 148	4 239	91	2 %	1 %
Norges Skøyteforbund	3 661	4 230	569	16 %	1 %
Norges Klatreforbund	3 684	4 176	492	13 %	1 %
Norges Orienteringsforbund	4 829	3 717	-1 112	-23 %	1 %
Norges Golfforbund	2 284	3 296	1 012	44 %	1 %
Norges Amerikanske Idretters Forbund	1 994	2 630	636	32 %	1 %

The table shows the most popular national federations (activities) for children from 6-12 years old and the number of participation in 2015 and 2021.

	2015	2021	Endring i aktivitetstall siste seks år	Prosentvis endring siste seks år	Andel av totalt aktivitetstall
Norges Fotballforbund	375 020	356 754	-18 266	-5 %	22 %
Norges Håndballforbund	120 841	131 888	11 047	9 %	8 %
Norges Bedriftsidrettsforbund	186 330	125 679	-60 651	-33 %	8 %
Norges Golfforbund	101 226	125 130	23 904	24 %	8 %
Norges Skiforbund	166839	115 045	-51 794	-31 %	7 %
Norges Gymnastikk- og Turnforbund	100 965	96 360	-4 605	-5 %	6 %
Norges Friidrettsforbund	75541	70 888	-4 653	-6 %	4 %
Norges Svømmeforbund	65448	68 785	3 337	5 %	4 %
Norges Studentidrettsforbund	33 867	40 965	7 098	21 %	2 %
Norges Tennisforbund	25 671	39 164	13 493	53 %	2 %
Norges Cykleforbund	49 495	36 690	-12 805	-26 %	2 %
Norges Skytterforbund	30 221	34 701	4 480	15 %	2 %
Norges Kampsportforbund	38 191	33 612	-4 579	-12 %	2 %
Norges Rytterforbund	30 863	32 388	1 525	5 %	2 %
Norges Klatreforbund	19170	27 610	8 440	44 %	2 %
Norges Padleforbund	19113	26 702	7 589	40 %	2 %
Norges Bandyforbund	28 260	26 431	-1 829	-6 %	2 %
Norges Motorsportforbund	22 439	24 669	2 230	10 %	1 %
Norges Volleyballforbund	20 167	22 143	1 976	10 %	1 %
Norges Orienteringsforbund	23 798	21 146	-2 652	-11 %	1 %

The table shows the number of participants in the most popular national federations in the Norwegian Sports Confederation in 2015 and 2021.

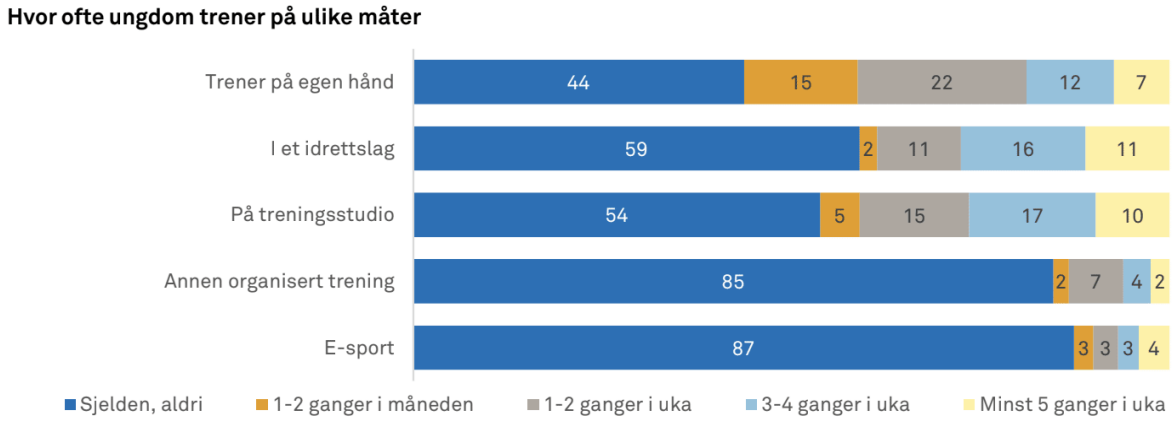
However, there is a large drop-out from organized sports (Seippel et al. 2005), and the drop-out has increased in recent years in Norway (Ungdata, 2022). 60 percent of young people stop participating in organized sports before they turn 18. According to the overview article (Crane and Temple, 2015) the main reasons why young people choose to quit organized sports are a lack of joy, a strong focus on performance, poorer coaches and not feeling good enough. Motivation is at risk when those with a "have fun" attitude to sports participation meet a sports environment with a distinct "development" attitude where everything revolves around "practicing a lot to become good" and winning.

The dropout is not necessarily a problem. The fact that young people stop participating in organized sports does not mean that they become physically inactive. Many of the young people who quit organized sports start training on their own.

Several international scientific studies indicate that self-organized forms of activity have increased in popularity in the last two decades, especially among young people and young adults (Bakken, 2019; Breivik & Rafoss, 2017; Brymer & Schweitzer, 2013; Gilchrist & Wheaton, 2017; Säfvenbom et al., 2018; Wheaton, 2010). At the same time, one must be aware that the absence of organization makes self-organized sports activity difficult to predict and measure.

The last numbers in the Ungdata 22 survey, shows that the activity pattern among young people has changed somewhat in recent years: Fewer people participate in organized leisure activities, exercise on their own and the proportion who use leisure clubs has remained stable, while more exercise in a gym, especially among boys.

There are roughly the same number of young people who exercise in a sports team, exercise on their own and exercise at a gym in 2022. Training habits change throughout the teenage years.

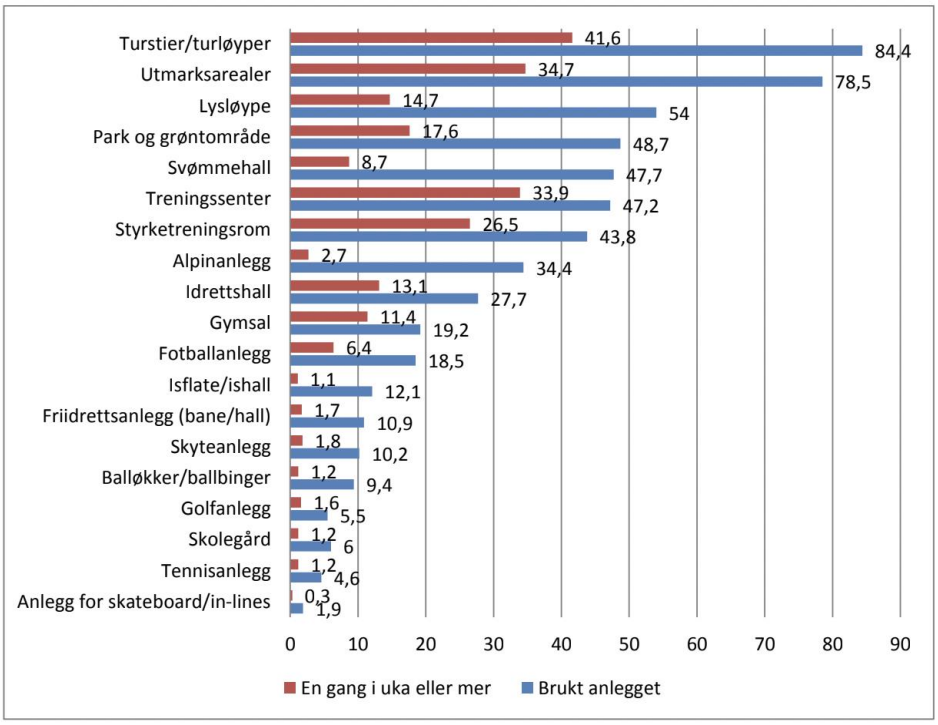


Summary: How are Norwegians physically active in 2022?

- Over 90 percent of all young people have participated in organized sports at one time or another during their upbringing (Ungdata, 2017).
- Approximately, 70 percent of children are participating in organized sport in 2022 (Ungdata junior, 2022).
- There are roughly the same amount of youth who exercise in sports clubs, exercising independently and exercising at the gym (Ungdata,2022).
- One of three 18-year-olds are members of Norwegian Sports Confederation and play organized sport (Norwegian Sports Confederation).
- Fewer than one of ten adults (over the age of 16) are active members of a sports club (Norwegian Sports Confederation)
- Eight of ten adults (over the age of 16) engage in self-organized sports and physical activity (Levekårsundersøkelsen, Statistics Norway, 2021).

The use of the sports facilities

As you can see from the table below from 2017, the most popular sports facilities for adults (16 years and older) are hiking trails, open field areas in nature, fitness centers and strength training rooms. The study used questionnaires to measure the use of sport facilities.



Figur 58. Hvilke idrettsanlegg har du benyttet i 2015? Prosentandel av befolkningen over 15 år som har brukt anlegget, og andelen som har brukt anlegget en gang eller mer i uken.

In Norway, participation in all forms of self-organized physical activity and training has increased over the past two decades, while participation in organized sports remains fairly the same (-3%) (Breivik & Rafoss, 2012, p.53, p.55). Organized sports is still an important source of physical activity in the population, but the sports clubs are not as important as before (Breivik & Rafoss, 2012, p.42).

Strength training (+25%), hiking (+9%), cross-country skiing (+14%) and other lifestyle activities have had the greatest increase in support over the past 20 years (Breivik & Rafoss, 2017, p.51). Training on your own is now considered the most important setting for the level of activity (Breivik & Rafoss, 2012, p.44). Seventy-nine percent of the population between the ages of 15-24 exercise on their own at least once a month (Breivik & Rafoss, 2017, p.41). Fifty-seven percent of this age group engage in outdoor activities once a month in the season, and just over a third state that they engage in lifestyle activities (Breivik & Rafoss, 2017, p.41).

The youngest age groups are thus the most frequent users of sports facilities. Under is a table from 2010 that shows the frequency of young people's use of sports facilities. The findings indicate that sports facilities in general were less used by girls, adolescents (14—16 years) and the least active (physically active ≤ 1 times/week outside school) than by boys, children (6—13 years) and the most active (physically active ≥ 4 times/ week outside school). More general, multifunctional facilities were used to a greater extent than specialized facilities, particularly by the least active. Distance to the facility was important for the use of common facilities (Limstrand and Rehrer, 2008).

Table I. Frequency of young people's use of sports facilities.

Generic facilities and specific facilities		Variables: Users *n* (%)	Percentage of girls/boys who used facilities: Girls	Boys	Percentage of different grade students who used facilities: 1st–4th	5th–7th	8th–10th	Pattern[a]	Use, outside (O) or inside (S) school	Percentage of the most active group (m) and the least active group (l) who used facilities: m	l	m/l
Schoolyards, any (n=5; V, E, H, F)		810 (88)	89	87	98	89	73	·····:··	SO	93*	84	1.1
Walkways, any (n=4; V, E, H, F)		762 (83)	84	83	87	83	78	·····	S	93**	71	1.3
Gyms, any (n=4; V, H, F)		726 (79)	79	79	74	83	82	·····	S	90**	71	1.3
Swimming pool (V)		710 (77)	77	78	89	82	57	·····:··	SO	81*	71	1.1
Ski/walkway, any (n=3; V, E, H)		667 (73)	72	73	63	81	78	··:·····	S	80**	57	1.4
Large soccer fields, any (n=3; V, F)		636 (69)	65	74*	55	81	79	··:·····	SO	87**	51	1.7
Small soccer fields, any (n=4; E, H, F)		632 (69)	64	73*	82	76	44	·····:··	SO	79**	56	1.4
Beach (E)		609 (66)	69	64	59	73	71	··:·····	SO	73*	59	1.2
Skating rinks, any (n=3; V, E, F)		600 (65)	70*	60	59	79	61	··:····:··	SO	74**	47	1.6
Sports centre (V)		569 (62)	60	63	45	74	75	··:·····	O	74**	47	1.6
Tennis and bowling centre (E)		440 (48)	46	50	25	69	60	··:····:··	O	54**	32	1.7
Athletic field (V)		367 (40)	36	44*	10	58	64	··:·····	SO	54**	17	3.2
Playgrounds, any (n=3; V, E, H)		357 (39)	40	37	48	49	18	·····:··	O	38	38	1.0
Sledging hill (V)		261 (28)	30	27	10	39	44	··:·····	S	39**	17	2.3
Wrestling room (V)		159 (17)	11	24**	5	30	22	··:····:··	O	26**	5	5.2
Gym at high school (V)		155 (17)	16	18	2	27	28	··:·····	O	26**	5	5.2
Ski/snowboard resort[a]		146 (16)	11	21**	2	26	26	··:·····	O	24**	7	3.4
Fitness centre (V)		124 (14)	12	15	7	18	19	··:·····	O	20**	6	3.3
Firing range (V)		90 (10)	8	12*	1	14	18	··:·····	O	12*	5	2.4
Frequency of	Adjusted n	918	453	465	384	260	274	–	–	332	256	–
	Real n	662	325	337	128	260	274	–	–	252	156	–

E, Erikstad suburb; F, Finneid suburb; H, Hauan suburb; V, Vestmyra suburb; *$p<0.05$; **$p<0.01$; [a]spatial alignment of dots shows trends of usage over age groups.

Table 1 is from Limstrand and Rehrer, 2008.

These results raise the question of whether sports facilities significantly increase physical activity among ''all'' young people, which is the government's stated goal. They recommend more research on sports facilities use and physical activity levels among males and females of all ages (Limstrand and Rehrer, 2008). These findings support the studies about adults' use of sports facilities.

The most used leisure arena for young people today, after organized sports, are the leisure clubs and youth centers in Norway. Leisure clubs contribute to both good mental and physical health for the children and young people who use them. About 78% of leisure clubs in Norway help to facilitate self-organized sports and physical activity both outside and/or inside.

Summary - the use of facilities

- Strength training, hiking, cross-country skiing and other lifestyle activities have had the greatest increase over the past 20 years among adults (16+) (Breivik and Rafoss, 2012; Breivik and Rafoss, 2017)
- A growing part of adults' physical activity in their free time takes place outdoors.
- The use of fitness centers to exercise have increased among youth (Ungdata, 2022)
- Multifunctional facilities were used to a greater extent than specialized facilities, particularly by the least active (children) (Limstrand and Rehrer, 2010)

- Distance to the facility was important for the use of common facilities (Limstrand and Rehrer, 2010).
- Leisure clubs are an important arena for self organized sports and physical activity.

Discussion: Structural challenges for the sports infrastructure

Norway and other Nordic countries invest a lot of money on sports facilities to increase the physical activity level in the population. The Nordic countries are at the top of the ranking when it comes to the number of active citizens, which is partly due to a long tradition of well-organized sports associations. However, there are still well over 1/3 of the population who may not see themselves in the existing sports communities or who, for other reasons, are not active. How do we get more citizens that are not accustomed to sports involved and engaged in recreational activities? Should we build more of the same, or supplement with other types of facilities and perhaps think across sectors? How can the facility contribute in organizing the activity and help lower the barrier to participation?

Are the right facilities being built in Norway? Do we design sports facilities for all? Have we built facilities that have kept pace with new sports movements and cultures? Are people more physically active as a result of the facilities? What are the challenges in sports facility development?

More facilities = higher participation rates?

In a review of sport participation in 16 countries, Nicholson, Hoye, and Houlihan (2011) did not find a systematic correlation between the delivery system for sport in a given country and its population's participation in sport. Investments in sport facilities are no exception: 'It is unclear what the direct impact of the facility provision has been on participation rates, although it is clear that access to sport facilities is an important aspect of effective national government participation policy. So even if participation rates are higher in the Nordic countries than the EU average, we know little about whether this fact is indicative of successful facility policy (Bergsgard et al., 2017) .

An ongoing project in Denmark; *Danmark i bevægelse- motiver og muligheder"*has some similar results. They found that the facility coverage in the municipalities (number of inhabitants in relation to the number of facilities) has little significance for the proportion of the adult population that practices facility-dependent sports and exercise activities. They also found that high or low nature capital (relative extent of usable nature) in the municipalities has little significance for the proportion of the adult population that practices sports and exercise in nature, and the adult population who practice hiking or cycling on an ordinary bicycle in their free time. Adult citizens who live in municipalities that have a coast practice water activities in nature to a greater extent than citizens who live in municipalities where there is no access to the coast.

This can mean that the social background (education, employment, origin and age) is much more decisive for participation in sport and exercise than the opportunities for this. The study also points out that access to sports facilities, nature and water (coast and streams) are of course important for sports and exercise habits - but the differences between the municipalities in terms of access to these are of relatively little

importance. However, this study only investigated the movement habits of adults, and not children. Therefore, we must consider these results with caution.

Table 1. Numbers of selected sports facilities in relation to capita per installation and the number of adult users (per week) in Norway.

	Norway			*Denmark*	
Selected sports facilities	*Number of installations*	*Capita per installation*	*Number of adult users (>15 years) per installation*	*Number of installations*	*Capita per installation*
Football grounds	4,450	1,041	45	5,214	1,037
Gyms	3,050	1,527	121	2,917	1,855
Cross-country ski tracks	2,400	1,944	75	13	416,061
Outdoor ball fields	2,231	2,091	102	1,950	2,773
Swimming pools	1,030	4,234	262	476	11,363
Sports halls	839	5,551	430	1,495	3,617
Track-and-field arenas	740	6,297	68	570	9,488
Riding grounds	495	9,426	–	631	8,570
Alpine skiing centres	485	9,621	198	4	1,352,040
Private fitness centres	400	11,666	1,100	334	16,118
Tennis courts	459	10,166	48	2,108	2,565
Golf courses	158	29,531	316	195	27,735
Squash courts	64	72,910	–	181	29,878
Indoor ice rinks	43	108,525	–	24	225,333

Table 1 shows the number of installations, capital per installation and number of adult users (per week)(Rafoss and Troelsen, 2010).

In 2010, Rafoss og Troelsen did a similar study in Norway. They investigated the correlation between the degree of coverage and the specific use of facilities among adults (15 +). They found no correlation. Moreover, there was also an imbalance in the use made of the various types of facilities, with some facilities appealing more to certain groups than to others. This can be shown in relation to gender, age, education, profession and location. The table is over 10 years old, but it still can give a good picture of the adults' use of the sports facilities.

Based on these studies, more facilities are not necessarily the best solution to get a higher participation rate in sport and physical activity, especially for adults.

New trends: Self-organized sports and physical activity

Changes in activity patterns and new trends show a need for new adapted sports facilities where individuals can be active in different ways than before. The facilities should, to a greater extent, be adapted to the population's activity pattern.

Over the past ten years, the majority of investment costs for facilities have gone to sports halls, football facilities and swimming pools. In 2018, the investments to these facilities accounted for 75 percent of the total investments (Spillemidler til idrettsanlegg, 2018). When you compare these investments to the number of people who actually do sports and physical activity in these facilities, one wonders whether the whole population actually has the opportunity to do sports and physical activity at all levels.

Data from the Norwegian Monitor show that only 10 percent of the population do sports and physical activity at a football facility and 19 per cent in a sports hall. In other words, the vast majority of the population do sports and physical activity in places other than where the main weight of the investment goes. Breivik and Rafoss support this in their data, which shows that the financing of new facility types does not harmonize well with the population's activity profile and that if you want to reach larger segments of the population with facility construction, facility construction and facility financing must change significantly (Brevik and Rafoss, 2017).

If the main aim of building facilities is to give as many people as possible the opportunity to practice sport and physical activities, the priority should be given to installations and facilities that fit the activity profile of children, youth and adults. Continuing to spend most of the money on football facilities and sports halls is a wrong investment. Greater investment in self-organized sports and physical activity is essential to ensure a more diverse range of activities that better matches the population's activity needs. There is far more to be gained via outdoor activities and self-organized activities. Breivik and Rafoss recommend that the public sector should strengthen the provision and financing of "green facilities" such as hiking trails, light trails, parks and green areas and local environmental facilities where people live. Also in Denmark, the scientist recommends greater political focus on creating more attractive outdoor 'spaces' for physical activity. These facility types reach large user groups and have a broad social profile (Pedersen et al. 2021).

National guidelines for gambling money - a limiting factor for development of innovative and multifunctional sport facilities

The Ministry designs central guidelines for supporting sport facilities with gambling funds, and thus prioritizes specific types of facilities (Nenseth 2009). In Norway the use of this money for funding sports is the single most important factor in explaining the mutual dependency between the voluntary sports organizations and the political system.

The design of installations is largely based on the requirements of the sports organizations. The installations were constructed according to regulations set by the individual sports federations, and most of them are

geared to either competitive sports or traditional gymnastics, and thus to the needs of sports club members (Rafoss & Troelsen, 2010).

In the period of growth, organized sports had the privilege of influencing the standard of facilities and in many cases monopolizing their use, but in the 1990s, as participation in sport diversified, the issue of sports facilities became more controversial. Despite the relatively high number of sports installations in Norway, the expansion in facilities has not kept pace with new sports movements and cultures. Many of the existing sports facilities are either outdated, mono-functional or built mainly for spectator sports (Rafoss og Troelsen, 2010). Also in 2022, we have the more or less the same challenges.

Thus, for schools and self-organized physical activity, the guidelines can be a limiting factor. It can be argued that greater flexibility in the design can ensure greater use potential for schools and self-organized physical activity. The way in which sports facilities are subsidized may in fact create a barrier against innovation and the development of alternative spaces for sports.

As stated before, the municipalities play an important role in developing sport facilities locally, both as a developer and owner, as financial contributor to the facilities owned by local sport clubs, and as a planning authority (Bergsgard, Nødland, and Seippel 2009). Still, the sport clubs (and local sport councils) also play an important role, especially regarding setting the premises when it comes to the type of facility needed.

When the local actors (the sport clubs and the municipalities) were asked about the influence on the process of developing local sport facilities, the following pattern appears sport clubs influence the process most, then the municipalities and third the national sport organizations (Bergsgard, Nødland, and Seippel 2009).

On the other hand, the Norwegian Sports Confederation plays a rather minor role providing general policy recommendations for sport facilities.

The particular system of distributing gambling profits in Norway and the strong ‘family bonds’ between bureaucrats in the Ministry of Sports and the heads of the sports clubs has led to a depoliticizing of sports politics in Norway: the division of gambling profits is not up for political discussion. Questions have seldom been raised about how the money is spent, and as a result the organizational pattern has become very static (Rafoss and Troelsen, 2010).

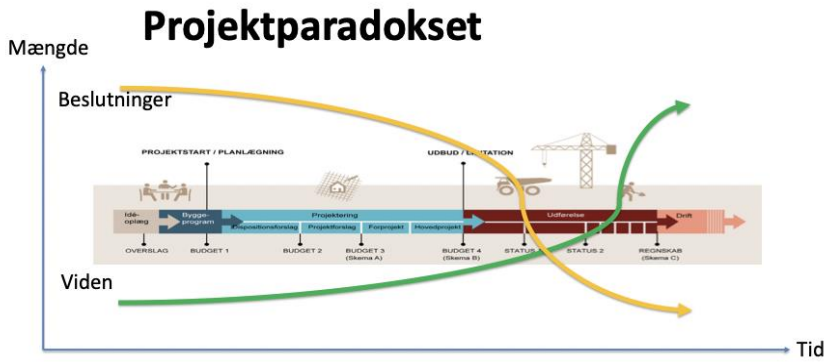
There are some tensions between municipalities on the one hand and sport clubs on the other. This tension might stem from the case that municipalities represent all their inhabitants, while sport clubs represent their members, and the latter possess both the networks and symbolic power to define legitimate needs.

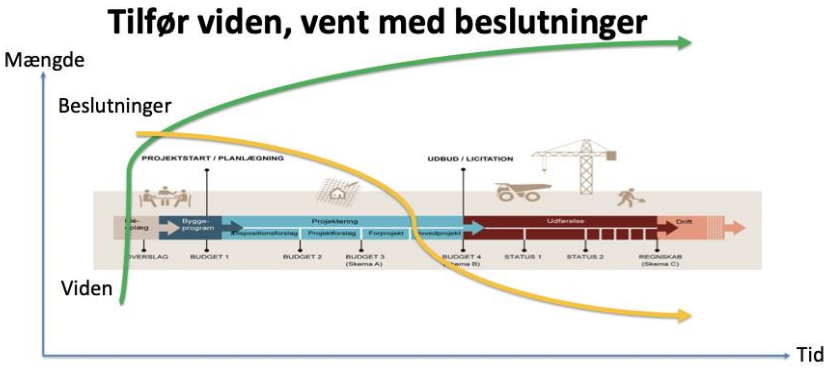
The last few years, there have been some positive changes in the guidelines for gambling money. There is a bigger investment in activity parks for self-organized physical activity. From 2018-2021, municipalities could get a significant amount of money for innovative activity parks. In 2018, Tverga was established. This year, the Ministry of Culture is reviewing the guidelines for gambling money. Hopefully, the guidelines will be more flexible and to a greater extent support facilities that fit the activity profile of both children, youth and adults.

More time and resources on the process

Development of facilities should, to a greater extent, be based on knowledge about the problems in society and the activity patterns and trends. We must use more time of money in the process of development of new sports facilities, to make sure that the facilities will be used by the target groups. We need to understand the users, challenging assumptions, redefining problems and creative innovative solutions. We have to look for and understand the diversity within and between different target groups (age, sex, cultural background and many other factors). And most importantly we have to talk with the target groups and not only them. We have to think differently and ask different questions. Instead of only asking what they want, we should ask WHY, for WHO and WHERE, before jumping to ideas and solutions. We need to use time in the process. By thinking differently and using more time and resources in the process, the municipalities can build new and surprising introductory outdoor facilities that would activate the part of the population that are less-active or non-active.

The municipalities have an important role in collecting information about the problems in the society and the needs of the population, and how the facilities can solve the problems. The illustrations below explain the "project paradox". To succeed with a project, you need knowledge to make the right decisions. The more knowledge, the better.





The illustrations are from [Lokale and Anlægsfonden](#).

Also, more knowledge about how facilities invite young people and adults to engage in self-organized physical activity is necessary (Bakken, 2019; Breivik & Rafoss, 2017).

Gender challenges

Outdoor sports grounds, e.g. sports fields, woods, rivers and lakes, are used primarily by men, whereas women's activities are mainly based in indoor sports facilities. In Norway it is clear that swimming pools and fitness centers are key arenas for women, whereas men more frequently make use of football grounds, illuminated skiing tracks and track-and-field arenas (Rafoss and Troelsen, 2010).

The facilities for sports and physical activity are also more used and appeal more to boys than to girls (Limstrand and Rehrer, 2008; Blomdahl, 2012, GAME & Lokale and Anlægsfonden, 2020). Girls prefer other types of facilities than traditional sports facilities (Pawlowski et al., 2019), and are more concerned with the social aspects of an activity than the activity itself (Blatchford et al., 2003). Development of sports facilities should to a greater extent meet girls' needs to promote physical activity in the entire population.

Better interaction with the national action plan for physical activity

Based on the fact that we are generally too little physically active and spend too much time at rest, the Government also created a new national action plan in 2020, *Together for active lives*, to address the importance of creating more activity-friendly societies in Norway. Physical activity is important for achieving several of the UN's sustainability goals, which, together with the above-mentioned global recommendations, form the basis of the action plan. Research shows that activity-friendly local environments can contribute to better conditions for both physical and social life, which further benefits both the global and national economy.

If we are to succeed in achieving the national targets in physical activity, it is therefore crucial that this is reflected in the facilities policy, where the use of means of action is greatest. Since the action plan is cross-ministerial, each ministry is responsible for follow-up within its own policy area, cf. the sectoral responsibility principle.

Sustainable development

ALso, FN´s sustainability goals should be essential for the development of sports facilities. To achieve the goal of good health and quality of life, we must facilitate more inclusive and active local environments that originate from human and local needs. Furthermore, we must choose the good solutions that contribute to reducing social differences. Sports facilities can be an important arena to equalize social differences. The project in Denmark , showed that social background (education, employment, origin and age) is much more decisive for participation in sport and exercise than the opportunities for this (Pedersen et. al, 2021). This may indicate that improving the social background (via education and employment) is an important strategy to increase the use of sports facilities.

There is a need for more knowledge and expertise in environmental sustainability in the development and construction of sports and outdoor facilities. Both locally and nationally. There is particularly little focus and knowledge and awareness of outdoor facilities for physical activity.

State authorities, in collaboration with international actors, municipalities, volunteers, non-profit or private actors, can contribute by setting requirements for/encouraging the design of outdoor areas which absorb

more CO2 over time than they release when established. Increasing the biological diversity in the area, and using species suitable for the location, should also be put on the agenda. Furthermore, consideration should be given to introducing area neutrality when building meeting places/activity facilities. In this way, nature can be secured, also in larger cities. Investigations carried out by SINTEF show that the rehabilitation of facilities can produce lower emissions compared to the construction of new facilities. State authorities should therefore encourage rehabilitation to a greater extent.

Coherent green structures close to where people live and stay, should be taken care of. Good infrastructure for pedestrians and cyclists makes it possible for people to be physically active and use nature as a source of health. Land pressure and the reduction of important nature and outdoor recreation areas in the local environment is worrying and unfortunate for both public health, natural diversity and the climate. In addition to encouraging all municipalities to adopt long-term development limits on fields and open air areas, consideration should be given to introducing area neutrality when building meeting places/activity facilities in order to avoid the destruction of natural areas. In streets and squares, hard materials should be replaced with vegetation. It offers benefits for stormwater management, local climate, particulate matter and reduced wind forces.

Changing demographics

The period 2009 to 2019 shows significant demographic changes in the Norwegian population. The population as a whole has increased by 11 per cent, while the age group 67-79 has increased by as much as 46 per cent and the group 90 and over has increased by 29.7 per cent. There was a smaller increase for the younger age groups.

The demographic changes will vary with the size of the municipality. The trend is for the elderly to live in rural areas while the younger ones move to the cities. Urbanization means more people having to share less space and supply of facilities in the major cities.

Uneven geographical distribution

Like stated earlier, there is an uneven geographical distribution in the numbers of locally supported installations, with a higher coverage of installations per capita in rural districts compared to dense urban areas(Rafoss & Troelsen, 2010; Telemarksforskning, 2022). The degree of coverage is often five to six times higher in rural areas than in the cities (Rafoss & Troelsen, 2010). It is a paradox that while there is great demand for sports arenas in Norwegian towns and cities, the distribution of funds in the Norwegian model has led to an increased infrastructure of facilities in local communities where the population is actually decreasing.

Commercial centers

The move towards more commercial and independent activity in the field of sports has led to a growth in other types of installations and the use of new rooms and arenas. The private fitness centers, beach volleyball courts, multi-functional activity centers and skating rinks depart from the traditional model, providing unlimited access to all who wish to use them (Rafoss & Troelsen, 2010). However, it costs money to use them. This can increase social health differences.

The majority of multi-functional centers and private studios are located in bigger cities. Unfortunately, the village can't offer the same facilities.

Conclusion

Despite the relatively high number of sports installations in Norway, the expansion in facilities has not kept pace with new sports movements and cultures. Many of the existing sports facilities are either outdated, mono-functional or built mainly for organized sport. Today's facility structure thus largely reflects the power structure found in the sports field. The sports organizations define the needs and partly set the premises for the facilities policy, while it is mainly the public sector that pays.

This finding indicates that the sport facility policies implemented include only part of the population. Greater political focus on creating more attractive outdoor spaces for physical activity, and innovative, multifunctional facilities for self-organized sports and physical activities can contribute to achieve the goal of sports and physical activity for all. However, club-based sports are still very important for children and youth, thus, a majority of game money should go to facilities for organizing sports.

The national action plan for physical activity and the UN's Sustainable Development Goals, should to a greater extent, be implemented in the sports facility policy.

Nevertheless, there have been some changes in the last decade. The last white paper has self-organized sport and physical activity as a focus area. In 2018, Tverga- Ressurscenter for self-organized sport and physical activity was established. There is more focus on sustainable development in the sports sector. And at this moment, the guidelines for game money are reviewed. The result of this review will be decisive for future facilities development in Norway. Hopefully, the new guidelines will, to a greater extent, support innovation and the development of facilities for self-organized sports and physical activity.

Desk research conclusion

The aim of this report was to map the provision and strategies around sports infrastructure in Norway, Lithuania, the Faroe Islands and Denmark based on available sources.

In spite of not having access to the same information or directly comparable information in all four countries, the project identifies some common challenges as well as some cultural and political differences between the countries, which are clearly reflected in the figures of general sports participation, club participation, and provision and usage of sports infrastructure.

Lithuanian sports facilities are very much aimed at sports schools and athletes and mostly used by children and youth with the main aim of providing the infrastructure for competitive sport. The same pattern can be seen in the Nordic countries but to a lesser extent than in Lithuania. In all countries the question arises whether public spending and investments in sports infrastructure caters for the full population and the societal aims of sport in the most efficient way.

Looking into the sports participation figures from Eurobarometer and national surveys, it is clear that few adult citizens +25 years are using the sports facilities, particularly in Lithuania. The largest arenas for sports participation are outdoor, at home, at work or in other settings which are not directly related to build sports infrastructure. Furthermore, most young and adult people are not motivated by competitive sport but by other motives such as health and wellbeing, physical appearance, fun, socialization with friends, or relaxation. In the worst case, the public investment in sport infrastructure is simply getting out of touch with the societal development and needs of the largest part of the population.

The debate and discussion of accessibility, tasks, core audience etc. of sports infrastructure have been strong in Denmark and Norway for several years. While most sports facilities in all four countries are still mainly catering for children and youth through schools, sports clubs/sports schools, or elite athletes, there is a growing movement, particularly in Denmark towards sports facilities becoming hubs for their local communities, catering not only for clubs and athletes but proactively entering into partnerships with health authorities, local institutions, NGO's, businesses and private enterprise in order to reach broader target groups and maximise the public investment and the public value of sports facilities towards broader parts of the population.

Norway and Denmark have a strong debate on new ways to develop sports infrastructure to give access to other target groups such as urban sports, and health and wellbeing related activities, while still catering for the standards and needs of traditional sports, elite athletes and sports clubs.

As part of the project, the personal exchanges and visits to local community sports centres have given concrete examples of operational models and local sports infrastructure with a broader scope than catering for competitive sport and athletes.

In Denmark recent research have shown that the role of managers of sports infrastructure is changing from typical maintenance and servicing of the facilities while the primary users from sports clubs and schools were delivering the sports programmes, into a more enterprising and proactive role where managers of

sports infrastructure are in charge of local hubs which are always aiming to maximise exploitation of the capacity and to invite a wider range of sports providers and partners to deliver their sports and wellbeing services to the local population under the physical umbrella of the local sports facilities.

Both in Denmark and Norway, there are legal and cultural challenges to this development, but the reality is that the best attended, and most inviting sports facilities are able to balance their operation towards still meeting the needs of traditional users such as sports clubs and schools, while also creating their own sports programmes or inviting new providers in.

Maintaining the present situation where by far the largest part of public investment in sport is spent on sports infrastructure which is not 'relevant' or do not provide access to the main part of the local population might not be sustainable in the long run, particularly in an environment where all countries are facing health challenges as well as challenges in the demographic development between various age groups and between rural areas and urban centres.

Key recommendations

The project therefore have some key recommendations that should obviously be adapted to the cultural and legal frameworks and the local situation in each of the four countries and local authorities:

Revisit the strategic outlook of the sports infrastructure
What is the local provision and what are the local needs and demographic trends?

Is the local sports infrastructure sufficiently relevant in terms of catering for the population groups in need of access to sport and physical activity in its local area?

Revisit investment in sports infrastructure
Be clear on the purpose and aims of public investment in sports infrastructure, capital costs as well as subsidy models.

Is the main scope just to live up to the standards of competitive sport and athlete development for competitive sport? Or should the scope and the target groups of local sports infrastructure be broader?

How should the success of a given investment be measured? In the visiting numbers? In sports results and visiting spectators? In the number of active participants? In the number of new target groups and new sports providers reached? In public value such as social cohesion, health and social benefits for the local population?

Build or redevelop sports infrastructure based on knowledge
Investment in sports facilities should to a greater extent than commonly seen today be based on knowledge about the needs, challenges and demographics of the local community and the most common activity patterns and trends. More knowledge than just input and requirements from sports governing bodies is often needed if sports facilities are to invite more young people and adults to engage in self-organized or organized physical activity.

The municipalities have a particularly important role in collecting information from both existing and potential future stakeholders in a given facility before final decisions are taken about the building or redevelopment, design, or operational models of sports infrastructure. In the development of future infrastructure for sport, the involvement of more user groups should be mandatory, tools such as the 'Prosessveileder' (Process advisor) of Tverga is an example of a best practice.

Revisit the tasks of the management of sports infrastructure
If sports local infrastructure is to play a more attractive role for a larger part of the population and more local stakeholders, it might be necessary to revisit the skills, competences and focus of the local management and boards of sports facilities.

This comprises the management and planning of sports facility strategies on a municipal level as well as the governance and management of sports centres and sports infrastructure on the local level.

In short: How should success be measured for the local sports centre? Which kinds of skills and competences are needed to increase the relevance and reach the targets of the public sports infrastructure? Who is in charge of continued professional development of sports facility managers and boards?

Assess the environment sports facilities are working in
While public sports infrastructure is often lacking access to funding and commercial opportunities, the public sports facilities increasingly have to function in an environment where commercial providers are able to invest and adapt faster to new trends and technologies and attract the most affluent parts of the sports consumers.

In recent years most of the growing trends such as fitness, crossfit, yoga, padel, running, cycling, urban sports, outdoor sports etc. have not been driven by public sports infrastructure or organized sport. Particularly in the larger urban areas where the potential customer base for commercial enterprise is large and where public sports facilities are in less supply, this development is increasingly leading to a 'parallel society' between public, semi-public and commercial sports infrastructure. This development again leads to increased societal segregation in the local environments.

Local authorities must assess whether this development is desirable, and whether it is unavoidable, and maybe look for new ways into balancing the need for private funding with the need to cater for more people and maybe less affluent or sports savvy parts of the populations in the future.

Monitor the development. Lower the gap between the best and the 'poorest' sports facilities
Local authorities are recommended to create a framework for monitoring the performance of local infrastructure in terms of usage, exploitation of the available space and time slots, environmental and financial sustainability, user satisfaction, maintenance, technological and architectural standards. Framework for such monitoring exists e.g. in UK, the Netherlands and Denmark and can be adapted to local needs and environments in rural as well as urban areas.

Setting up good national or local standards in monitoring the development in and relevance of sports infrastructure could comprise the development of monitoring tools such as facility data bases (Norway and Denmark), indexes of usage of facilities (monitoring by AI cameras etc.), regular user surveys, surveys among managers of sports facilities, regularly monitoring of the development in sports participation, and membership figures in federations, clubs and school sport programmes etc.

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