

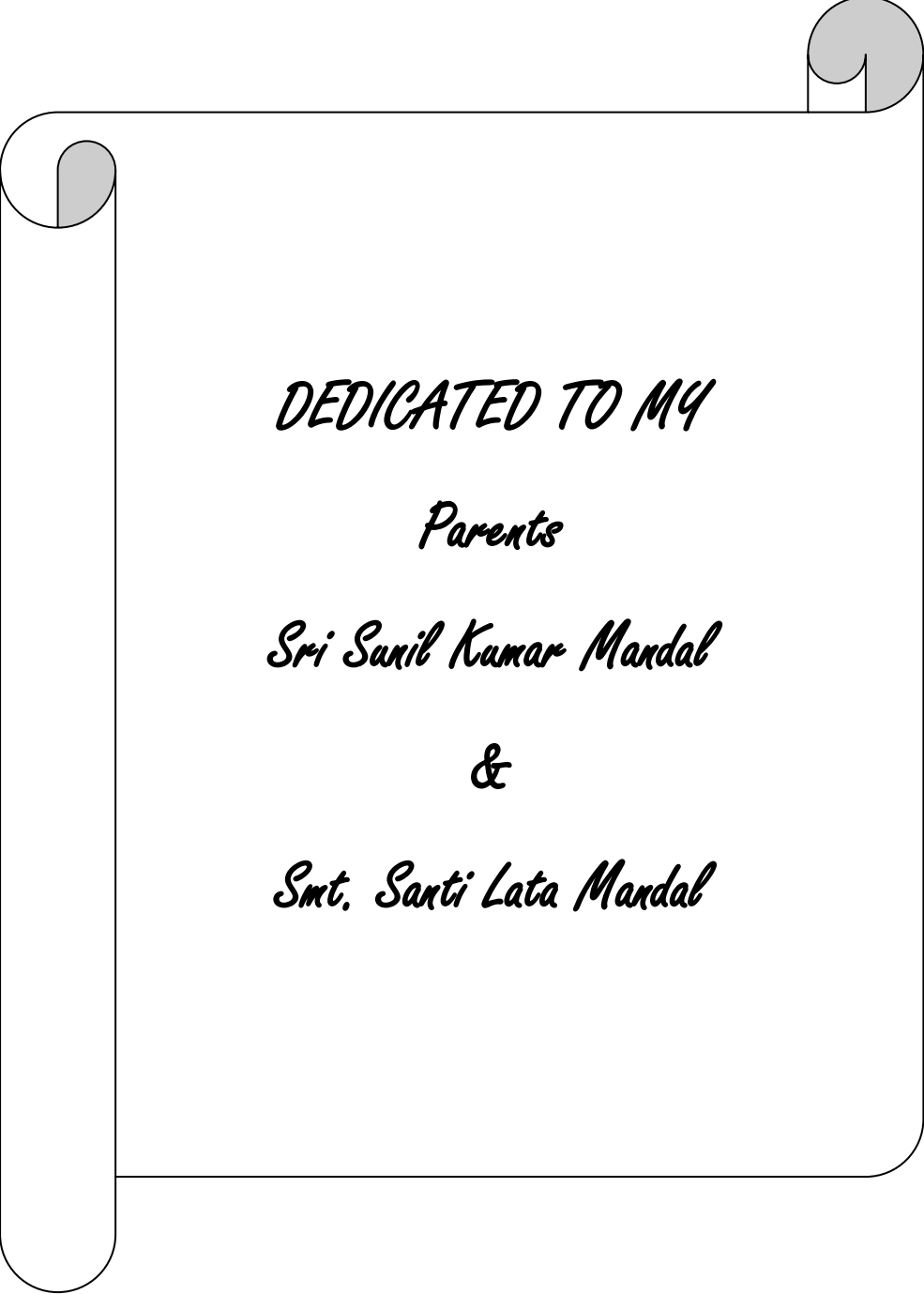
**A STUDY ON CONTRIBUTION OF NETAJI SUBHAS
NATIONAL INSTITUTE OF SPORTS (NSNIS)
TOWARDS IMPROVEMENT OF
PERFORMANCE SPORTS
IN INDIA**

**A THESIS SUBMITTED TO THE JADAVPUR UNIVERSITY
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
IN ARTS**

**By
SUJIT MANDAL**

**DEPARTMENT OF PHYSICAL EDUCATION
JADAVPUR UNIVERSITY
KOLKATA-700032
WEST BENGAL
INDIA**

JUNE, 2021



DEDICATED TO MY

Parents

Sri Sunil Kumar Mandal

&

Smt. Santi Lata Mandal

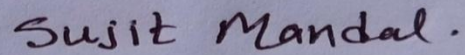
CERTIFICATE

Certified that the thesis entitled “**A STUDY ON CONTRIBUTION OF NETAJI SUBHAS NATIONAL INSTITUTE OF SPORTS (NSNIS) TOWARDS IMPROVEMENT OF PERFORMANCE SPORTS IN INDIA**” submitted by me for the award of the Degree of Doctor of Philosophy in Arts at Jadavpur University is based upon my work carried out under the supervision of **Professor Ashoke Kumar Biswas**, Department of Physical Education, Jadavpur University, Kolkata and that neither this thesis nor any part of it has been submitted before for any degree or diploma anywhere /elsewhere.


Dr. Ashoke Kumar Biswas
Professor
Department of Physical Education
Jadavpur University
Kolkata - 700 032

(Countersigned by the Supervisor)

Dated: 10.06.2021



(Signature of the Candidate)

Dated: 10.06.2021

ACKNOWLEDGEMENT

The investigator is indebted to all those from whom and from whose works help has been taken directly or indirectly in conducting this study. Some of course deserve special mention.

At the very beginning researcher express his heartfelt gratitude to his supervisor Prof. Ashoke Kumar Biswas, Department of Physical Education, Jadavpur University for his valuable advice, constructive suggestions, constant encouragement and penetrating interest throughout the study. This is his effort which leads the researcher to submit the thesis within a good period of time.

The researcher expresses his finest gratitude to Prof. Sudip Sundar Das, Head, Department of Physical Education, Jadavpur University for his sympathetic cooperation and assistance required for the execution of the study.

Researcher express his heartiest thank and deepest gratitude to Professor Sudarsan Bhowmick, Former UGC Emeritus Fellow, Department of Physical Education, Jadavpur University and Retired Professor, Department of Physical Education, University of Kalyani for his precious advice in planning of research, valuable suggestion and guidance, constant assistance and encouragement throughout the journey of this work.

Researcher express his sincere gratitude to all the teachers, research scholars, faculty members of the Department of Physical Education, Jadavpur University for constructive suggestions and cooperation to the study.

Researcher express his sincere grateful to Executive Director (NSNIS), all the administrators, coaches, sports scientists, staff of publication section and Librarian for their constant assistance in collection of data.

The researcher offers his sincere thanks to the librarian and staff members of central library as well as departmental library of Jadavpur University for assistance in collecting data and all other information related to research work.

Researcher express his special thanks to all present and former research scholars in this department, all of my friends and family members for their cooperation in completing my research work.

CONTENTS

Particulars	Page No.
List of Tables	viii-ix
List of Figures	x-xii
Abbreviations	xiii
Chapter-I: Introduction	1-29
1.1 General Introduction	1
1.1.1 History of Establishment and Development of NSNIS, Patiala	2-4
1.1.2 Organizational Structure of Sports Authority of India	5
1.1.2.1 Academic Wing of Sports Authority of India	5-6
1.1.2.2 NSNIS Southern Centre, Bangalore	6-7
1.1.2.3 NSNIS Eastern Centre, Kolkata	7
1.1.2.4 LNCPE, Thiruvananthapuram	8
1.1.3 Mission of NSNIS, Patiala	8
1.1.4 Vision of NSNIS, Patiala	8-9
1.1.5 Administrative Set-up of NSNIS, Patiala	9
1.1.5.1 The Board of Governors of NSNIS Patiala (1963)	10-11
1.1.5.2 The Composition of the SNIPES Board (1969-1970)	11
1.1.5.3 Chairpersons, Board of Governors, NIS	11
1.1.5.4 Head of the Institute	12
1.1.6 Infrastructural Facilities of NSNIS, Patiala	12
1.1.6.1 Existing Outdoor Facilities	13
1.1.6.2 Existing Indoor Facilities	14
1.1.7 NSNIS Library	14-15
1.1.8 Audio- Visual Section	15-16
1.1.9 National Sports Museum	16
1.1.10 Grounds, Fields and Indoor Halls of Different Games of NSNIS, Patiala	16-23
1.1.11. Establishment of NSNIS in India	23
1.1.11.1 Ad-hoc Enquiry Committee on Games and Sports	24
1.1.12 Functions of the Institute as per the Ordinance	25

Particulars	Page No.
1.1.13 Justification of selection of the Problem of the Study	25-26
1.2 Statement of the Problem	26
1.3 Objectives of The Study	26-27
1.4 Delimitations of the Study	27
1.5 Limitations of the Study	27
1.6 Hypothesis of the Study	28
1.7 Significance of The Study	28
1.8 Definition and explanation of The Terms	29
Chapter-II: Review of Related Literature	30-38
Chapter-III: Methodology	39-44
3.1 Methods and Tools	39
3.2 Criterion measures	39
3.3 Procedure Followed for Collection of Information	40
3.3.1 Collection of data through Questionnaires	40
3.3.1.1 Validity of Questionnaire	40
3.3.2 Visitation	41
3.3.3 Interview	41
3.4 Procedure for Collection of Data	41-44
Chapter- IV: Presentation of Result and Discussions	45-101
4.1 Contribution of NSNIS for Preparation of Coaches	45
4.1.1 Ad-hoc Course in Sports Coaching	46
4.1.1.1 Ad-hoc Course in Sports Coaching organized by NSNIS, Patiala	46-47
4.1.2 One-Year Diploma Course in Sports Coaching	47
4.1.2.1 Coaches trained through One-Year Diploma Course in Sports by NSNIS during 1963-1983	47-48
4.1.2.2 Coaches trained through One-Year Diploma course in Sports by NSNIS during 1984-2016	49-51
4.1.2.3 Foreign Students completed Diploma in Sports Coaching at different SAI Centers up to 2007-2008	51-52
4.1.3 Two-Years M.Sc. Course in Sports Coaching	53
4.1.3.1 Year-wise two-years M.Sc. Course in Sports coaching Number of coaches trained by NSNIS up to 2017	54-56
4.1.4 Six- Weeks Certificate Course in Sports Coaching	56-57

Particulars	Page No.
4.1.4.1 Six-Weeks Certificate Course in Sports Coaching organized by NSNIS, Patiala	57-59
4.1.5 Refresher Course for Coaches	60
4.1.5.1 Year-wise Refresher Course for Coaches trained by NSNIS, Patiala	60-61
4.2 Training of National Athletes for International Competition	61-62
4.2.1 National Coaching Camp	62
4.2.1.1 Year-wise National Coaching Camps organized by NSNIS, Patiala	63-64
4.2.1.2 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2007-2008	64-65
4.2.1.3 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2008-2009	65-66
4.2.1.4 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2009-2010	67-68
4.2.1.5 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2010-2011	68-69
4.2.1.6 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2011-2012	70-71
4.2.1.7 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2012-2013	71-72
4.2.1.8 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2013-2014	73-74
4.2.1.9 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2014-2015	74-75
4.2.1.10 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2015-2016	76-77
4.2.1.11 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2016-2017	77-78
4.2.1.12 Discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the Commonwealth Games and Asian Games, 2010	78-79
4.2.1.13 Discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the Commonwealth Games and Asian Games, 2010	80-81
4.2.1.14 Discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the London Olympic 2012	81-82

Particulars	Page No.
4.2.1.15 Discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the London Olympic 2012	83-84
4.2.2 Indian Medal Tally in Beijing Olympics 2008, Commonwealth Games 2010 and Asian Games 2010	85
4.2.2.1 Beijing Olympics 2008	85
4.2.2.1.1 Beijing Olympics 2008 Indian Medalists	85-86
4.2.2.1.2 Contribution of NSNIS, Patiala to Indian Medal Tally at Beijing Olympics 2008	86
4.2.2.2 Commonwealth Games 2010	86
4.2.2.2.1 India at the 2010 Commonwealth Games Medal Table	87-88
4.2.2.2.2 Contribution of NSNIS, Patiala to Indian Medal Tally at Commonwealth Games-2010	88
4.2.2.3 Asian Games 2010	88
4.2.2.3.1 India at the 2010 Asian Games Medal Table	89-90
4.2.2.3.2 Contribution of NSNIS, Patiala to Indian Medal Tally at Asian Games-2010	90
4.2.3 Honors for NSNIS, Patiala	90
4.2.3.1 Padma Bhushan	90
4.2.3.2 Padma Shri Award	91
4.2.3.3 Arjuna Award	91
4.2.3.4 Dronacharya Award	91
4.2.3.5 Dhyan Chand Award	92
4.2.3.6 Ashoka Chakra to NSNIS Alumnus	92
4.2.3.7 Boxing Coach Shri G. S. Sandhu becomes member of Association International de Boxe Amateur (AIBA) Coaches Commission	92
4.3 Scientific Research of NSNIS, Patiala	92
4.3.1 Sports Science Wing Function of NSNIS, Patiala	92-94
4.3.2 Function of Sports Scientists of NSNIS, Patiala	94-95
4.4. P.G. Diploma in Sports Medicine	95
4.5 Publication of Sports Literature	95-96
4.5.1 List of publication of NSNIS Patiala	96-98

Particulars	Page No.
4.6 The Results	99
4.6.1 Results regarding development of trained coaches for the country	99
4.6.2 Results regarding organizing coaching camps for Training National athletes	100
4.6.3 Results regarding development of Sports Scientific Research	100
4.6.4 Diploma in Sports Medicine	100
4.6.5 Publication of Sports Literature	101
4.7 Discussion of Results	101
4.8 Testing of Hypothesis	101
Chapter-V: Summary, Conclusions and Recommendations	102-104
5.1 The Summary	102-103
5.2 Conclusions of the Study	103-104
5.3 Recommendations of the Study	104
5.3.1 Recommendations for Future Studies	104
5.3.2 Recommendations for Future Application	104
Bibliography	105-110
Appendices	I-XIII

LIST OF TABLES

TABLE	DESCRIPTION	PAGE
1	List of Board of Governors of NSNIS Patiala (1963)	10
2	The Composition of the SNIPES Board (1969-1970)	11
3	List of Head of the Institution	12
4	Existing Outdoor Facilities	13
5	Existing Indoor Facilities	14
6	Ad-hoc Enquiry Committee on Games and Sports	24
7	Ad-hoc Course in Sports Coaching organized by NSNIS, Patiala	46
8	Coaches trained through One-Year Diploma Course in Sports Coaching by NSNIS during 1963-1983	47
9	Coaches trained through One-Year Diploma Course in Sports Coaching by NSNIS during 1984-2016	49
10	Foreign Students completed Diploma in Sports Coaching at different SAI Centers up to 2007-2008	52
11	Year-wise two-years M.Sc. Course in Sports Coaching- Number of coaches trained by NSNIS up to 2017	54
12	Six-weeks Certificate Course in Sports Coaching organized by NSNIS, Patiala	57
13	Year-wise Refresher Course for Coaches trained by NSNIS	60
14	Year-wise National Coaching Camps organized by NSNIS	63
15	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2007-2008	64
16	Discipline-wise number of National Coaching Camp held at NSNIS, Patiala in the year 2008-2009	65
17	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2009-2010	67
18	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2010-2011	68
19	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2011-2012	70
20	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2012-2013	71
21	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2013-2014	73
22	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2014-2015	74

TABLE	DESCRIPTION	PAGE
23	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2015-2016	76
24	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2016-2017	77
25	Discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the Commonwealth Games and Asian Games, 2010	78
26	Discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the Commonwealth Games and Asian Games, 2010	80
27	Discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the London Olympic 2012	81
28	Discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the London Olympic 2012	83
29	Beijing Olympics 2008 Indian Medalists	85
30	Contribution of NSNIS, Patiala to Indian Medal Tally at Beijing Olympics 2008	86
31	India at the 2010 Commonwealth Games Medal Table	87
32	Contribution of NSNIS, Patiala to Indian Medal Tally at Commonwealth Games-2010	88
33	India at the 2010 Asian Games Medal Table	89
34	Contribution of NSNIS, Patiala to Indian Medal Tally at Asian Games-2010	90
35	List of Dronacharya Award	91
36	List of publication of NSNIS, Patiala	97

LIST OF FIGURES

FIGURE	DESCRIPTION	PAGE
1	NSNIS, Patiala at present (Front view)	3
2	Moti Bagh Estate	4
2/1	Moti Bagh Estate (Front View)	4
3	Organizational Structure of Sports Authority of India	5
4	Synthetic Athletic Track	17
5	Basketball Court	17
6	Hockey Grassy Field	18
7	Hockey Synthetic Field	18
8	Swimming Pool	19
9	Cycling Velodrome	19
10	Volleyball Hall	20
11	Boxing Hall	20
12	Judo Hall	21
13	Table Tennis Hall	21
14	Wrestling Hall	22
15	Conditioning Hall	22
16	Weightlifting Hall	23
17	Collection of data from Library, NSNIS,Patiala	41
17/1	Collection of data from Library, NSNIS, Patiala	42
18	Interview of Sports Scientist	42
19	Interview of Administrator	43
20	Interview of Publication Section Staff	43
21	Interview of Publication Section Staff	44
22	Collection of data from Sports Museum	44
23	Coaches trained through One-year Diploma Course in Sports Coaching by NSNIS During (1963-1983)	48
24/1	Coaches trained through One-Year Diploma Course in Sports by NSNIS during (1984-1994)	50
24/2	Coaches trained through One-Year Diploma Course in Sports by NSNIS during (1995-2005)	50
24/3	Coaches trained through One-Year Diploma Course in Sports by NSNIS during (2006-2016)	51

FIGURE	DESCRIPTION	PAGE
25/1	Year-wise two-years M.Sc. Course in Sports coaching- Number of coaches trained by NSNIS during (1979-1991)	55
25/2	Year-wise two-years M.Sc. Course in Sports coaching- Number of coaches trained by NSNIS during (1992-2003)	55
25/3	Year-wise two-years M.Sc. Course in Sports coaching- Number of coaches trained by NSNIS during (2004-2017)	56
26/1	Six-weeks Certificate Course in Sports Coaching Number of coaches trained by NSNIS during (1986-1996)	58
26/2	Six-weeks Certificate Course in Sports Coaching Number of coaches trained by NSNIS during (1996-2006)	58
26/3	Six-weeks Certificate Course in Sports Coaching Number of coaches trained by NSNIS during (2006-2016)	59
27	Year-wise Refresher Course for Coaches trained by NSNIS	61
28	Year-wise National Coaching Camps organized by NSNIS	63
29	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2007-2008	65
30	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2008-2009	66
31	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2009-2010	67
32	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2010-2011	69
33	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2011-2012	70
34	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2012-2013	72
35	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2013-2014	73
36	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2014-2015	75
37	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2015-2016	76
38	Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2016-2017	77
39	Discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the Commonwealth Games and Asian Games, 2010	79

FIGURE	DESCRIPTION	PAGE
40	Discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the Commonwealth Games and Asian Games, 2010	80
41	Discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the London Olympic 2012	82
42	Discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the London Olympic 2012	84

ABBREVIATION

Ath.	: Athletics
Bad.	: Badminton
BB	: Basketball
Box.	: Boxing
CPWD	: Central Public Works Department
Ckt.	Cricket
DG	: Director General
FB	: Football
Fig.	: Figure
Govt.	: Government
GTMT	: General Theory and Method of Sports Training
Gym.	: Gymnastics
Hky.	: Hockey
HB	: Handball
LNCPE	: Lakshmibai National College of Physical Education
Lt.	: Lieutenant
Maj. Gen.	: Major General
NIS	: National Institute of Sports
NSNIS	: Netaji Subhas National Institute of Sports
Retd.	: Retired
SAI	: Sports Authority of India
SNIPES	: Society for National Institute of Physical Education and Sports
TEAMS	: Training of Elite Athlete Management Support
TT	: Table Tennis

CHAPTER – I
INTRODUCTION

CHAPTER – I

INTRODUCTION

In this chapter General Introduction have been presented as a background of the study. In addition to Statement of problem, Objectives, Delimitation of the study, Limitation of the study, Hypothesis, Significance of the study, Definition and explanation of some selected terms have been presented.

1.1 GENERAL INTRODUCTION

Participation in play, games and sports is an innate tendency of human being. It is an important aspect in individual's life. Sports participation helps to improve health and fitness of individuals. It inculcates social qualities, moral values and positive personality traits. Sports are an important part of culture of a Nation. Sports have unique contribution to bring harmony among countries of the world. Nature of sports participation and performance in National and International competitions reflect country's status and fame.

In 1958, third Asian Games were held in Tokyo (Japan) where India gave a very poor performance especially in Hockey. We lost to Pakistan in the final match. The defeat in Hockey gave a major shock to the Govt. of India and all concerned with sports in our country. In view of the poor show given by the Indian teams, Govt. of India set up an Ad-hoc Enquiry Committee in 1958 to study the causes of low standards in sports in our country and to suggest ways and means to improve the deteriorating situation. The chairman of the committee was Maharaja Yadavindra Singh of Patiala. The committee recommended to establish a "Central Training Institute to provide First Class Coaches in different Sports and Games".

National Institute of Sports (NIS), Patiala was established by the Government of India on May 07, 1961 with the objective of developing sports in the country on the scientific lines and to train the coaches in the different sports disciplines. The institute was renamed as Netaji Subhas National Institute of Sports (NSNIS), Patiala on January 23, 1973. With the formation of Sports Authority of India (SAI) in 1984, the erstwhile Society for National Institutes of Physical Education and Sports (SNIPES) consisting

of NSNIS, Patiala and two physical education colleges named Lakshmibai National College of Physical Education (LNCPE), located at Gwalior and Thiruvananthapuram respectively were merged with SAI in 1987. So, towards promotion and development of sports NSNIS Patiala which is also Asia's largest Sports Institution was considered as a high level institution in this country. This institution is popularly known as the 'Mecca' of the Indian sports. It has produced coaches of high caliber and significantly contributed in rendering their expertise and assistance in preparation of National teams for various International Competitions.

1.1.1 History of Establishment and Development of NSNIS, Patiala

During 1950, the sports scenario in our country was not very encouraging. Sports and games were generally a pass-time and a source of recreation only. Competitive sports were a distant dream except for a few who pursued it seriously, like some athletes and hockey players. Educational Institutions which should be the nurseries for sports were less involved for development of sports. Many reasons for this- lack of urge in students for participation in competitive sports, lack of playground, insufficiency of fund and lack of proper coaching facilities in school to colleges and even universities.

The Ad-hoc Inquiry Committee made a number of recommendations for promotion of sports. The following were the major recommendations pertaining to sports coaching:

- Central plan for Coaching;
- Establishment of a Central Training Institute;
- Role of Physical Education Institutes and their Teachers in Coaching;
- Building up of a Cadre of Coaches;

On recommendations of All India Council of Sports, Government of India decided to set up the National Institute of Sports at Moti Bagh Estate, the former residence of Maharaja of Patiala.

Subsequently, Punjab Government purchased the Moti Bagh Palace from his Highness Yadavindra Singh, the Maharaja of Patiala, in the year 1985. The Estate became the property of Punjab Government. Thereafter, as per an agreement entered between the parties in the year 1968 the Punjab Government agreed to sell this estate

to Government of India, Department of Sports and sale deed was finally registered on 3rd March, 1988 for an area of 1001 bighas. The Institute campus is about 4 km. from the Railway Station of Patiala and the Bus Stand is well connected to the National Highway No. 1 by road and railway. Chandigarh being the nearest Airport. The Moti Bagh estate had an extensive well laid out parks and an area of about 268 acres was handed over to the Institute as its campus. The main building of the Estate the Moti Bagh Palace stood imposingly in the center of the estate surrounded by a number of buildings, which served well as accommodation for offices, class-rooms, student hostels and residences for the staffs. It had an ample provision of accommodation and land for the present and future development and expansion. At present the faculty has teaching departments in the following Sports disciplines: Athletics, Basketball, Boxing, Cricket, Cycling, Fencing, Football, Gymnastics, Handball, Hockey, Judo, Table Tennis, Volleyball, Weightlifting, Wrestling and Wushu.



Figure 1: NSNIS, Patiala at present (Front view)



Figure 2: Moti Bagh Estate



Figure 2/1: Moti Bagh Estate (Front View)

1.1.2 Organizational Structure of Sports Authority of India

Director General of SAI was the Principal Executive officer of the organization. He was assisted by a team of senior functional heads of the Academic Institutions / Regional Centers / Sub- Centers. The details of Organizational Structure of Sports Authority of India have been presented in Fig.-3. The topic of the research work is based on the academic spheres of Sports Authority of India and here the discussion has been confined on that matter only.

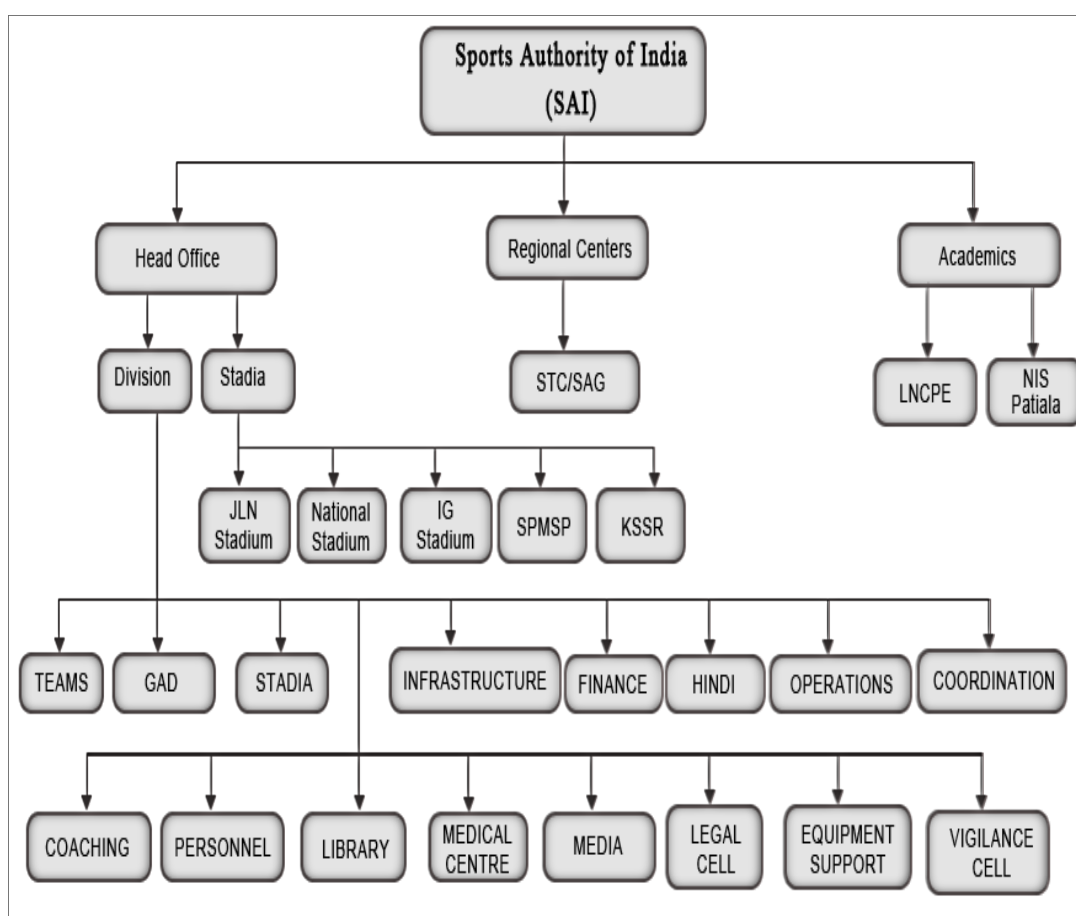


Figure 3: Organizational Structure of Sports Authority of India

1.1.2.1 Academic Wing of Sports Authority of India

NSNIS Patiala is the Academic Wing and the main academic center of SAI. The Institute also has three academic sub-centers, (i) the NSNIS Southern Centre, Bangalore, (ii) NSNIS Eastern Centre, Kolkata and (iii) LNCPE, Thiruvananthapuram.

The Institute also conducts some regular and periodic Sports Education programmes at these centers from time to time.

1.1.2.2 NSNIS Southern Centre, Bangalore

To facilitate the training of sportspersons, close to their home states and to train the coaches in the Southern Region of the Country, the SNIPES Board constituted a committee to select a suitable site for establishment of the Southern Centre of NSNIS. The Committee after visiting Hyderabad, Madras, Trivandrum, and Bangalore, recommended Bangalore as the suitable place; since the Government of Karnataka was ready to offer the required facilities. Pending the construction of the NSNIS Southern Complex, the Govt. of Karnataka placed at the disposal of the Institute, three buildings and some playfields in Shri Kanteerva Stadium Complex for starting this Centre. Prof. Nurul Hasan, Union Education Minister, laid the foundation stone of NSNIS Southern Centre, at the Kanteerva Stadium, on 13th April, 1975.

The academic activities were started at this Centre with the introduction of a Six-Week Orientation Course (Now Certificate Course in Sports Coaching) in 12 sports disciplines, in May 1975. The Diploma in Sports Coaching was started at this Centre in July 1976. Later on, National Coaching Camps and Refresher Course for coaches were also started at this Centre.

The Government of Karnataka handed over 85 Acres of land in the Jnanbharti Campus of Bangalore University, on 13th July 1981; and the construction of the infrastructure was carried out by the Central Public Work Department (CPWD) in two phases. The first phase included construction of two hundred beds Hostel, Staff quarters, Gymnasium building, Playfields, Landscaping and Electrification while the Administrative and Academic block, Synthetic Hockey field and Synthetics Athletic Track were completed in the second phase.

The foundation stone for the construction of the Complex was laid on 23rd January, 1982 by Shri Neelam Sanjeeva Reddy, President of India; and the complex was inaugurated on 29th July, 1985 by Giani Zail Singh, President of India. After the merger of SNIPES with SAI, this Centre became the SAI Netaji Subhas Southern Centre. At present the faculty has teaching departments in the following sports

disciplines: Athletics, Badminton, Hockey, Kabaddi, Kho-Kho, Softball, Swimming, Taekwondo, Tennis and Volleyball.

1.1.2.3 NSNIS Eastern Centre, Kolkata

Keeping in view the great rush of trainees from the Eastern part of the Country at NSNIS Patiala, a need was felt for opening of the Eastern Centre of the Institute. Two meetings were held in Kolkata in 1979 to finalize the details of the establishment of Eastern Centre of NSNIS. The meeting was attended by Chairman, SNIPES, Director, NSNIS and Shri A.S. Talwar, Deputy Secretary, Union Ministry of Education and Culture. Later, the NSNIS Director visited kolkata for the follow-up. The Eastern Centre started functioning in July, 1981.

The 42-acre campus of the NSNIS Eastern Centre was formally inaugurated by president of India, Giani Zail Singh, at Salt Lake City in Calcutta (now Kolkata) on 23rd January, 1983 on the birthday of Netaji Subhas Chandra Bose to whose memory the Institute has been dedicated.

The academic programme Diploma in Sports Coaching was started in this Centre in July 1983 with four sports disciplines of Athletics, Basketball, Volleyball and Football. Later on in 1985-86 academic session two disciplines of Gymnastics and Swimming were added to this education programme. The Six-weeks Certificate Course in Sports Coaching was also being regularly conducted at this Centre.

Apart from being an academic Sub-Centre, National Coaching Camps for training of elite Sportspersons were also being conducted at this Centre from time to time. In 1987, after the merger of SNIPES with SAI, this Centre was converted into one of the Regional Centers of SAI with the nomenclature, SAI Netaji Subhas Eastern Centre Kolkata. At this Centre the academic programme in popular sports disciplines were being conducted as usual under the supervision of the main academic center, NSNIS Patiala; while rest of the activities were being controlled by the SAI Head Office, under the charge of Regional Director. The faculty has teaching departments in the following sports disciplines: Archery, Athletics, Boxing and Football.

1.1.2.4 LNCPE, Thiruvananthapuram

Lakshmibai National College of Physical Education, Kariavattom, Thiruvanthapuram came into existence on 17th August, 1985 under the auspices of the Department of Youth Affairs and Sports, Ministry of Human Resource Development, Government of India. With the amalgamation of SNIPES with Sports Authority of India on 1st May, 1987, the college became a part of the academic wing of the Sports Authority of India at par with Netaji Subhas National Institute of Sports, Patiala and Lakshmibai National College of Physical Education, Gwalior. It was established in 50 acres of land taken over from University of Kerala, Karyavattom campus on the Northern side of NH-47, 1km away from Karyavattom Jn., Thiruvanthapuram. The faculty has teaching departments in the following sports disciplines: Rowing, Canoeing and Kayaking.

1.1.3 Mission of NSNIS, Patiala

The mission is to identify young talented boys and girls at the right age and to impart scientific and systematic training to them so as to make them capable of attaining sports performance comparable to National and International standards. In the process of growing those inputs from different disciplines of sports science namely Science of Sports Training, Exercise Physiology, Sports Bio-mechanics, Sports Medicine, Sports Psychology etc. were incorporated so that it would be utilized and those young sports persons would be able to achieve sports performance in commensuration with their talent. All NSNIS employees, especially the Coaches, Sports Scientists and sports persons are fully committed in this regard. The entire NSNIS family would put in dedicated and sincere effort and no stone would be left unturned in order to attain the above goals.

1.1.4 Vision of NSNIS, Patiala

The vision of the institute was to create a number of well-educated coaches. The main aim of the setting up of the Institute could be found out from the background that led to its establishment in 1961. A lot of criticism by the public and the press in the late 1950, led to the appointment of an Ad-hoc Inquiry Committee on Game and Sports. Following the recommendations of this Committee, the Govt. of India had set up the

Central Training Institute to provide first class coaches in different games and sports to facilitate the training and coaching of sports persons. To create sports consciousness as well as awareness among the citizen of India and to train and develop young boys and girls as they can attain the optimum level of performance in sports so that they can bring honor and prestige to the country. In order to achieve these goals, a very strong base needs to be created. The vision was to strengthen Sports and Physical Education programmes at the school level up to the college and university levels. This would facilitate making sports as an important component of total education process. In addition, also to help in providing much needed impetus thus creating a conducive environment for promotion and development of sports in the country.

1.1.5 Administrative Set-up of NSNIS, Patiala

As far as the management of Sports Authority of India, Netaji Subhas National Institute of Sports is concerned; it has a very chequered history. To begin with the National Institute of Sports (NIS), Patiala, was registered as a society, under the Societies Registration Act of 1860 and it had its own Constitution, Memorandum of Association, Rules and Regulations. The Institute was managed by an eleven-member autonomous Board of Governors. The ten members of this governing body were nominated by the Government of India.

To begin with, Dr. Prem Kirpal, Union Education Secretary was the Chairperson of the Governing Board of NIS, from 10th August 1960 to 31st January, 1961. Thereafter, Rajkumari Amrit Kaur, former Union Minister of Health and Chairperson, Rajkumari Sports Coaching Scheme was the Chairperson from 1st February 1961 to 16th May 1962; Maharaja Fatehsinghrao Gaekwad from 17th May 1962 to 1st September 1963, Shri M. R. Krishna was the Chairman of the Board from 2nd September 1963 to 16th August 1965.

1.1.5.1 The Board of Governors of NSNIS Patiala (1963)

Table-1 represents the list of The Board of Governors of NSNIS Patiala in 1963.

Table-1

List of Board of Governors of NSNIS Patiala (1963)

Name	Designation
Shri M. R. Krishna, M.P.	Chairman
Brigadier Sant Singh (Retd.)	Director / Secretary
Raja Bhalindra Singh	Member
Shri Harbans Singh	Member
General Gopal Gurunath Bewoor	Member
Shri Dalip Bose	Member
Shri V.N. Kak	Member
Syed Mushtaq Ali	Member
Shri V.T. Dahejit (Financial Advisor)	Member
Shri R.K. Kapur	Member

In 1967-68, the management of the Institute was vested in the Society for the Administration of Central Institutes in the field of Physical Education and the Sports (SACIPES). The Society was composed of 19 members out of which three were the representatives of Govt. of India, one of whom acted as the Financial Adviser. The Society was registered under the Societies Registration Act, 1860, and had its own Memorandum of Association and Rules & Regulations (Prospectus 1968-69). Field Marshal Kodandera Madappa Cariappa was Chairman of the Society.

Later on, in a special meeting of the Society held on 24th February 1968, the name of the Society was changed to the Society for National Institutes of Physical Education and Sports (SNIPES). This Society was composed of 16 members of which two members were the representatives of Govt. of India, one of whom acted as Financial Adviser and two members represented the State Government (Prospectus 1972-73). Dr. Ram Niwas Mirdha, M.P. Minister in the Union Ministry of Home Affairs was the first Chairman of Board of Governors of the Society (SNIPES), Dr. Roshan Lal Anand, Director of the Institute was the Member- Secretary of the Board.

Thereafter, Shri Vidya Charan Shukla, M.P. was the Chairman from 1st June 1976 to 13th April 1977; Shri Sikander Bakht, Union Minister from 20th April, 1977 to 30th June, 1978; Dr. Amrik Singh, Vice-Chancellor, Punjabi University, Patiala from 1st July, 1978 to 31st July, 1982.

1.1.5.2 The Composition of the SNIPES Board (1969-1970)

Table-2 represents the Composition of the SNIPES Board in 1969-1970.

Table-2

The Composition of the SNIPES Board (1969-1970)

Name	Designation
Shri Ram Niwas Mirdha, M.P	Chairman
Syed Mushtaq Ali (Padma Shri)	Member
Dr. P. M. Joseph (Padma Shri)	Member
Shri S.S. Bhandarkar	Member
Shri Kanti Chaudhri	Member
Shri J. Varan Raghavan	Member
Shri S.D. Chopde	Member
Shri T.D. Ranga Ramanujan	Member
Shri V.N. Kak	Member
Shri Dalip Bose	Member
Col. B.S. Jaswal	Member

1.1.5.3 Chairpersons, Board of Governors, NIS

The Chairpersons, Board of Governors, of NSNIS were as follows-

- i) Dr. Prem Kripal
- ii) Rajkumari Amrit Kaur
- iii) Maharaja Fatehsinghrao Gaekwad
- iv) Shri M. R. Krishna

1.1.5.4 Head of the Institute

Table-3 represents the list of Head of the Institution from 1961 to 2020.

Table-3
List of Head of the Institute

Name	Period
Shri M.K. Kaul	Formative period from July, 1960 to 18 th May 1961
Brigadier Sant Singh (Retd.)	After its formal inauguration, from 19 th May 1961 to 17 th July 1964
Maj.Gen. M.S. Chopra (Retd.)	18 th July 1964 to 30 th April 1967
Lt. Col. B.S. Jaiswal	1 st May 1967 to 14 th January 1970
Shri M.C. Dhawan	15 th January 1970 to 2 nd June 1970
Shri S.D. Chopde	3 rd June 1970 to 3 rd July 1970
Dr. R.L. Anand	4 th July 1970 to 30 th November 1986
Shri S.K. Chaturvedi	1 st December 1986 to 13 th December 1986
Dr. C.M. Muthiah	13 th December 1986 to 30 th April 1990
Dr. D.K. Tandon	1 st May 1990 to 30 th May 1995
Dr. D.N. Mathur	1 st June 1995 to 2 nd February 1996
Shri A.S.V. Prasad	3 rd February 1996 to 30 th June 1998
Maj. O.P. Bhatia	1 st July 1998 to 2 nd December 1998
Shri G.S. Anand	3 rd December 1998 to 30 th June 1999
Lt. Col. B.S. Ahluwalia	1 st July 1999 to 30 th April 2004
Dr. B.K. Sinha	1 st May 2004 to 16 th June 2004
Dr. M.P. Ganesh	17 th June 2004 to 31 st July 2006
Dr. L.S. Ranawat	1 st August 2006 to 30 th October 2013
Shri S.S. Roy	31 st October 2013 to 30 th June 2019
Col.Raj Singh Bishnoi	1 st July 2019 to till date

1.1.6 Infrastructural Facilities of NSNIS, Patiala

Present facilities in form of Playground, Athletic tracks, Swimming pool, Gymnasiums, Conditioning halls, shooting range and other of NSNIS, Patiala were personally visited by the researcher himself. The results of this have been presented in form of tables and pictures as follows.

1.1.6.1 Existing Outdoor Facilities

Existing Outdoor Facilities of NSNIS Patiala have been shown in Table-4.

Table- 4

Existing Outdoor Facilities

Discipline	Field	Number
Athletics	Synthetic Track	02
	Grassy Track	01
Endurance Track	Synthetic	01
Basketball Court	Hard	03
	Grassy	01
Cricket Ground	Half practice pitches	04
Football	Grassy	02
Handball	Hard	01
	Grassy	02
	Sand Beach (practice court)	01
Hockey	Synthetic	02
	Grassy	02
Swimming Pool	Standard-50m	01
	Diving	01
	Beginners	01
Tennis Courts	Synthetic	03
	Gravel & Clay	03
Cycling	Velodrome	01
Volleyball Court	Cinder	03
	Sand Beach (practice court)	01
Sand Running Circuit		01
Cross Country Circuit		01
Golf Course-9 Holes		01

1.1.6.2 Existing Indoor Facilities

Existing Indoor Facilities of NSNIS Patiala have been presented in Table-5.

Table- 5
Existing Indoor Facilities

Name	Hall	Number
INDOOR HALL NO. I	Wrestling Hall	01
	Weightlifting Hall	01
INDOOR HALL NO. II	Boxing Hall	01
	Table Tennis Hall	01
INDOOR HALL NO. III	Boxing Hall	01
	Wushu Hall	01
	Judo Hall	01
	Fencing Hall	01
SWIMMING POOL & GYM COMPLEX	Judo Hall	01
	Gymnastics Hall	01
	Audio-visual Hall	01
	Auditorium-240 seats	01
SQUASH COURTS COMPLEX	Squash Courts	02
	Sauna Bath	02
	Steam Bath	02
	Shooting Range 10m	01
	Archery Ranges – Lake Area	01
	Techno gym- Main Place	01
	Conditioning Hall - FOSS	01
	Billiards Room	01

1.1.7 NSNIS Library

It started in a small way in 1963. The Institute library at Patiala is one of the biggest collections of literature on sports and games. There are about 20,000 books, magazines, journals in this library. The library also subscribes to a large number of foreign sports science journals. A large number of faculty members, students and researchers avail the services of this library. There is an exclusive library period for the

students. The academic Sub-Centers of NSNIS, Patiala that is NSNIS Southern Centre, Bangalore and NSNIS Eastern Centre, Kolkata also have their own Libraries.

1.1.8 Audio- Visual Section

The Audio-Visual Section was set-up at the Institute in the initial years with the appointment of a Cameraman-cum-Projectionist. The main function of the section was photo coverage, video recording, video coverage and film projection.

The cameraman of the Institute visited venues of major meets and tournaments to prepare the loop films and action series of outstanding sportspersons. These loop films were used for analysis of techniques and also as teaching aids for the students and training aids for elite sportspersons. The equipment like Epidiascope and Slide Projector were procured for the Section in initial years.

The Section prepared video films for training purposes during the National Camps for IX Asian Games 1982, held at Delhi. The section also made action photographs and color transparencies of sportspersons for the Special Organizing Committee of the games for use in the Brochures, Bulletins and Souvenir. It was also assigned to cover the Asian Games extensively and prepare video films of 100-hours duration. It also recorded video tapes of all the sports programmes telecast by Doordarshan.

The Section organized exhibition of sports photographs of International Sportspersons entitled 'Sports Parade' during National games at Madras in January 1968 during All India Seminar on Physical Education. The Section also organized exhibition of charts, maps and photographs, depicting the functioning of NSNIS at Bangalore in 1982 and 1985 during the stone-laying ceremony and inauguration of the NSNIS South Centre at Bangalore and during January 1983 in Kolkata at the time of the inauguration of NSNIS Eastern Centre and in 1991 at Guwahati during All India Rural Sports Competitions in collaboration with the Publication Section of the Institution.

This Section also organized an exhibition on the activities of the Institute on 21st and 22nd February 1987 at the time of the conference of Presidents and Secretaries of State Sports Council at NSNIS Patiala. This exhibition was inaugurated by Union Minister of Youth Affairs & Sports, Govt. of India. This Section also prepared sequence

pictures of actions of various sportspersons like outstanding Throwers, Hurdlers and Sprinters etc. for preparation of chart etc. It plays an important part in the teaching and coaching functions of the Institute.

1.1.9 National Sports Museum

In order to preserve the sports mementoes for posterity, the Institute mooted the idea of setting up of the National Sports Museum. The National Sports Museum was inaugurated by former Vice-President of India Shri G.S. Pathak on 4th March, 1972, with the sports mementoes received from Maharaja Yadavindra Singh of erstwhile Patiala State and Shri Pankaj Gupta, a patron of sports. Outstanding Sportspersons Professor Moin-ul-Haq, Col C.K.Naidu, Capt. Mustaq Ali, Shri Balbir Singh, Shri Milkha Singh and Maj. Dhyan Chand donated a number of sports items to this Museum.

The Museum was managed for some time by the administrative staffs of the Institute. In the academic session 1979-80, a postgraduate diploma holder in Musicology was appointed as the Assistant Director (Museum). This post was merged into the general cadre during 1991-92 and the incumbent of this post was transferred to Gandhinagar, as an Assistant Director. Since then, this Museum does not have any professional caretaker. By 2015-16, the Museum had a collection of 1546 items which includes Photographs, Medals, Trophies, Badges, Stamps and Dress material donated by famous sportsmen.

1.1.10 Grounds, Fields and Indoor Halls of Different Games of NSNIS, Patiala

Present facilities in form of Athletic track, Playgrounds, Swimming pool, Gymnasiums, Cycling Velodrome, Boxing Hall, Judo Hall, Table Tennis Hall, Wrestling Hall and Conditioning hall of NSNIS, Patiala have been presented in pictures as follows.



Figure 4: Synthetic Athletic Track



Figure 5: Basketball Court



Figure 6: Hockey Grassy Field



Figure 7: Hockey Synthetic Field



Figure 8: Swimming Pool



Figure 9: Cycling Velodrome



Figure 10: Volleyball Hall



Figure 11: Boxing Hall



Figure 12: Judo Hall

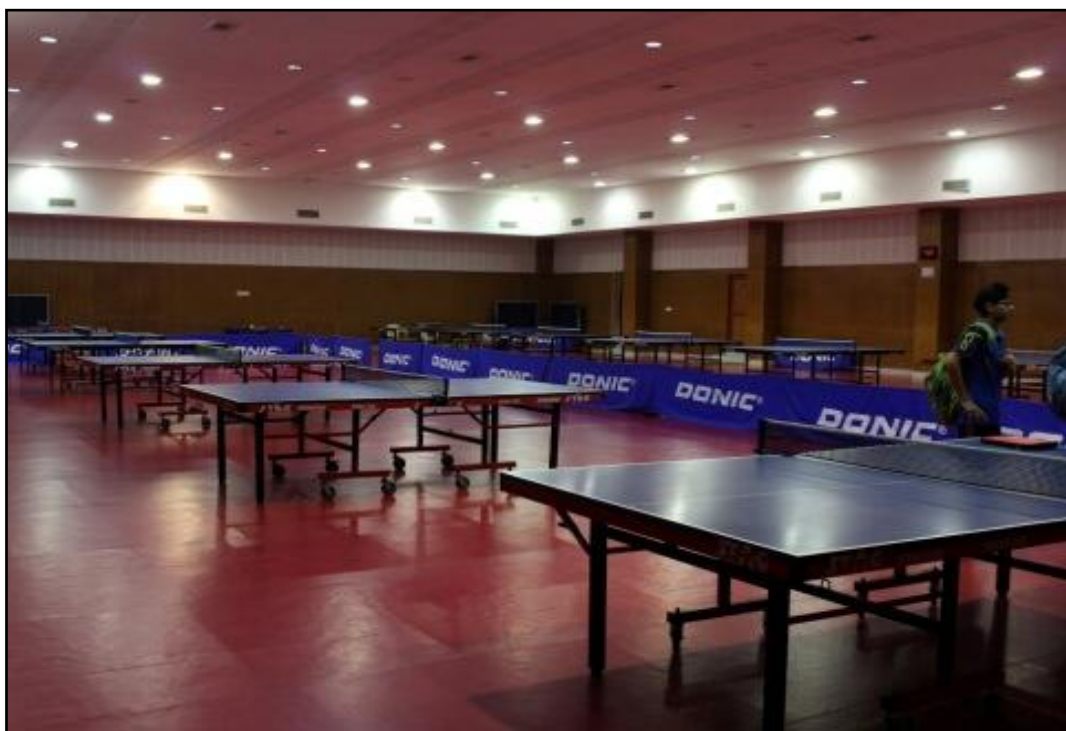


Figure 13: Table Tennis Hall

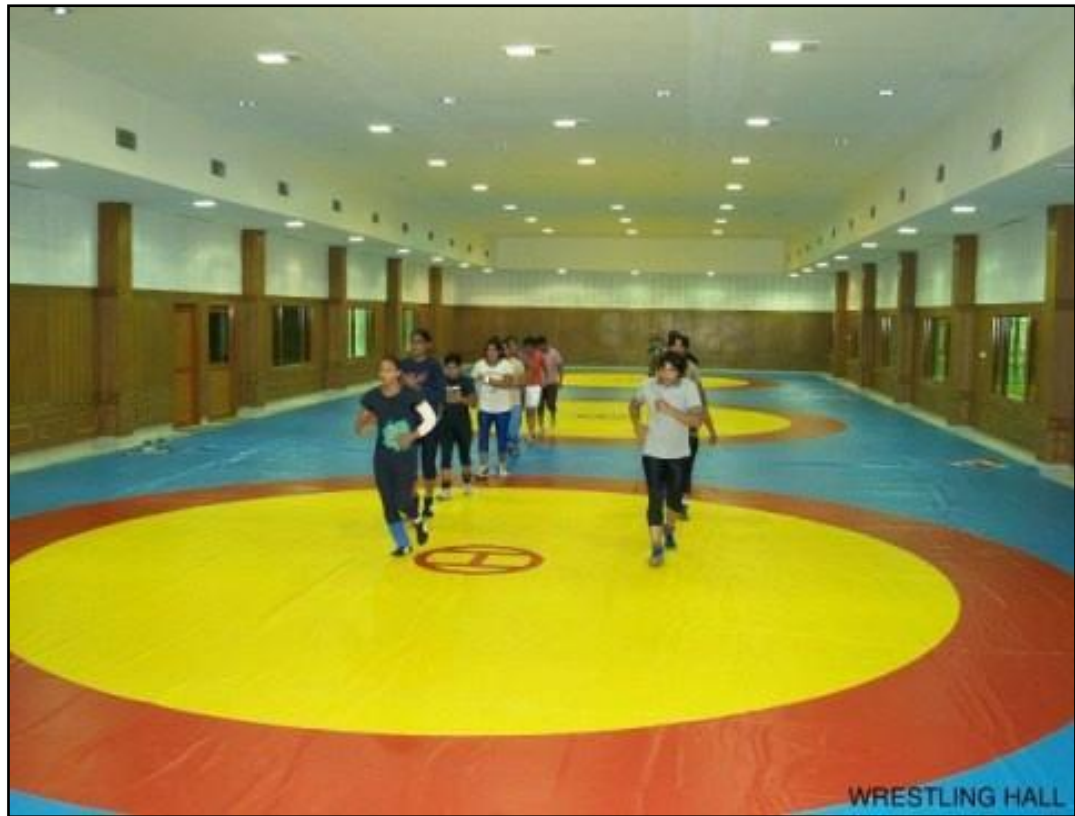


Figure 14: Wrestling Hall



Figure 15: Conditioning Hall



Figure 16: Weightlifting Hall

1.1.11. Establishment of NSNIS in India

An Ad-hoc Inquiry Committee was constituted by the Government of India in July, 1958 to study the standard of sports in the country. The committee recommended establishment of a Central Training Institute to provide first-class coaches in different sports and games. Consequently 'Kaul-Kapoor Committee' visited certain countries to study their sports institutions. On the advice of the All-India Council of Sports the present campus of the National Institute of Sports (NIS) was inaugurated at Patiala on 7th May, 1961.

1.1.11.1 Ad-hoc Enquiry Committee on Games and Sports

Table-6 represents the Member of Ad-hoc Enquiry Committee on Games and Sports.

Table-6

Ad-hoc Enquiry Committee on Games and Sports

Name	Designation
H.H. the Maharajadhiraj of Patiala (Shri Yadavindra Singh)	Chairman
Shri Naval Hormusji Tata	Member
Rajkumari Amrit Kaur	Member
Shri Sayyid Muhammad Moni-ul-Haq	Member
Dr. P. Subh	Member
Shri Jaipal Singh	Member
Gen. K.S. Thimayya	Member
Shri K.S. Duleepsinhji	Member
Shri N.N. Wanchoo	Member
Shri P.N. Kirpal	Member
Shri M.N. Masud	Member

The Mandate of the Committee was-

- To inquire into the reasons for the poor performance of Indian competitors in International competitions;
- To suggest measures to arrest the gradual decline in the level of performance and
- To recommend steps for the improvement of sports standard.

1.1.12 Functions of the Institute as per the Ordinance

The ordinance of National Institute of Sports identified the following functions of the institute:

- i) To produce highly qualified coaches and to raise the technical competence of the existing coaches;
- ii) To serve as a center where greatest possible information about the games and sports is concentrated;
- iii) To supplement the work of responsible sports bodies in raising the general standard of sports and games by making available sports coaches with specialized knowledge with thorough extension services as well as making available use of its facilities as training center for selected sportsmen and teams before National and International Competitions;
- iv) To provide Physical Education Colleges in the country with necessary technical personnel in the field of games and sports (Institute Prospectus, 1963-64);
- v) To impart proper coaching to all National teams before their participation in International Competitions and
- vi) To publish Books, Periodicals, Bulletins, Journals and up to date information on games and sports.

Since beginning in 1961 this National Institution has developed in area of functioning and size to contribute necessary impetus for performance sports of the country. It is, therefore, interesting and essential to study and analyze the role of National Institute of Sports for development of National Sports performance in International Competition during last 55 years. With this motive the present study has been planned. Basic purpose of this study was to analyze the historical development of National Institution of Sports and its effective contribution towards improvement of performance sports in India.

1.1.13 Justification of selection of the Problem of the Study

Planning has three main phases – (i) setting of goal, (ii) development of methods to achieve the goal set and (iii) evaluation to assess how far the goal has been realized. On the basis of results of evaluation, the goal is to reset if necessary and

required changes are brought about in methods and again the evaluation is carried. So, all these phases are linked in a circular fashion and carried out periodically for successful planning and its implementation. NSNIS was set up to achieve the goal of improving performance of India in the field of Competitive Sports. The institution has been functioning for about more than fifty years. So, it is the time to evaluate the total process to understand its success or failure, problems and prospects and necessary changes to be incorporated may be in goal setting or present method of functioning of this National Institute of India. Present study has been planned in light of this need. It is believed that the findings will indicate important information to the Institution, the Government of India and the people of India in general.

1.2 STATEMENT OF THE PROBLEM

With the purpose of analyzing and identifying the contribution of National Institute of Sports in improvement of performance sports in India, the functioning of the institute and its impact on the National Sports performance have been studied in great detail in the present investigation. Accordingly, the problem of the present investigation has been stated as **“A STUDY ON CONTRIBUTION OF NETAJI SUBHAS NATIONAL INSTITUTE OF SPORTS (NSNIS) TOWARDS IMPROVEMENT OF PERFORMANCE SPORTS IN INDIA”**.

1.3 OBJECTIVES OF THE STUDY

Considering the functions of the National Institute of Sports as identified in its Ordinance, proposed study was carried out with following objectives:

- i) To know the contribution of NSNIS, Patiala in performance Sports of the country of India;
- ii) To review the process of developing highly qualified coaches and to raise the technical competence of the existing coaches done by NSNIS;
- iii) To review its functioning as a center of information about the games and sport;
- iv) To study its functioning for imparting coaching to all National teams before their participation in International Competition;

- v) To review its role in publishing Books, Periodicals, Bulletins, Journals and up to date information on games and sport and
- vi) To study its role in conducting sports scientific research.

1.4 DELIMITATIONS OF THE STUDY

Present investigation was carried out with following delimitations -

- i) The data collection about NSNIS, Patiala was done using secondary sources;
- ii) For collecting information regarding different aspects of NSNIS, Patiala Interview method was used;
- iii) For collecting information about functional aspects of NSNIS, Patiala the questionnaire was used;
- iv) Present conditions of programmes, infrastructural facilities including hostels, residential accommodation, medical facilities, library facilities etc. were noted through observation;
- v) Collecting information about NSNIS, was delimited to the NSNIS, Patiala center only and
- vi) Among different functions of NSNIS, Patiala only the coaches' preparation, scientific research and training of National athletic were covered.

1.5 LIMITATIONS OF THE STUDY

Present investigation was conducted under limitations mentioned hereunder:

- i) Information about the Institute NSNIS used for finding results and drawing conclusions were dependent on the responses of the different group of subjects;
- ii) Due to non-availability of standard questionnaire, self-made questionnaire under the guidance of experts was used to collect information;
- iii) There was no control over will and emotional feeling of the respondents during their response to the questions and
- iv) Time and finance were also limiting factors.

1.6 HYPOTHESIS OF THE STUDY

The hypothesis upon which the present investigation had been formulated was as follows:

There would be positive contribution of NSNIS towards improvement of performance sports of India during last five decades of its functioning.

1.7 SIGNIFICANCE OF THE STUDY

It is believed that the results of the study will be highly significant in the History of performance sports of India in the following ways:

- i) The results of this study would help knowing the contribution of NSNIS, Patiala in performance sports of the country of India;
- ii) The findings would help to understand the role of NSNIS, Patiala in the process of developing highly qualified coaches and to raise the technical competence of the existing coaches done by NSNIS;
- iii) The results would help to review its functioning as a center of information about the games and sports;
- iv) From findings it would be possible to understand its functioning for imparting coaching to all national teams before their participation in International Competitions;
- v) The results would indicate to review its role in publishing books, periodicals, bulletins, journals and up to date information on games and sports;
- vi) It would be possible to understand the role of NSNIS, Patiala in conducting sports scientific research and
- vii) The information received will provide a feedback to the authority of institute, Government and the public of the country of India regarding role of NSNIS, Patiala.

1.8 DEFINITION AND EXPLANATION OF TERMS

In order to understand the basic nature and significance of the present study, following terms should be specifically understood as followed.

a) Sports: Sports have been explained as the human activities in which individuals participate in contests and challenges involving physical activities controlled by historically development well defined rules and regulations. Generally, activities like Mountaineering, Horse Riding, Fencing, Track and Field and Swimming etc. are considered as sports. But in the present study all the major games involving physical activities have been considered as sports.

b) Performance Sports: On the basis of objectives of sports participation, there may be different types of sports such as (i) Recreational Sports, (ii) Educational Sports, (iii) Fitness Sports and (iv) Performance Sports. In recreational sports, the main purpose is to gain recreation. Similarly, the main objective of performance sports is the high level performance. There are National and International competitions for different games and sport where the participants compete for highest possible sports performance such as Olympic Games, World Championships, Inter-Continental Championships and Commonwealth Games etc. In the present study performance sports was understood as the group of sporting activities where the performance was considered as the main purpose of participation.

c) NSNIS: Netaji Subhas National Institute of Sports is abbreviated as NSNIS. It is the National Institute of sports in India. It has been established on the basis of Parliamentary decision and it has been functioning since 1961 as premier institution of sports to raise the standard of national sports performance in international arena.

CHAPTER-II
REVIEW OF RELATED
LITERATURE

CHAPTER-II

REVIEW OF RELATED LITERATURE

The present chapter gives the detailed account of the literature available on the present topic, in research terminology it is known as the review of literature. The researcher did his best effort to review the concerned literature based on previous research work and the corresponding finding from them.

The main objective of the review of literature in the process of doing research is to unearth the problems and determine the objectives of the concerned research project. Moreover, such survey is helpful to delineate the results of the present study. The review of literature helps the researcher in supporting the results based discussion and in giving the suggestion by taking the supports of yester period researchers. Keeping all these things into consideration, this chapter is devoted to review literature in the following pages.

Loveless (1953) conducted an investigation on “Duties of the State Directors of Health and Physical Education” and found that directors performed administrative and specific duties in the states of America. On the basis of his study concluded that directors of health and physical education performed various duties which were as under.

- i) Planning the programmed was a major concern of all directors;
- ii) Directors were responsible for planning and coordinating activities;
- iii) Directors had significant duties regarding their own staff and
- iv) Directors assigned duties to the staff members and worked with associates on specific projects.

Sharma (1956) investigated a survey in connection with personnel, facilities and equipment's that revealed that only seventeen out of thirty High or Higher Secondary Schools in Delhi had got Director of Physical Education and Sports (D.P.E.S) as in- charge of physical education. He studied that fifty percent of the schools had provided only one or two periods for each class per week for physical education. He traced that eighty-three percent of the schools in Delhi suffered badly for wanted of playground facilities.

Kennlnson (1960) made a survey on physical education curriculum, facilities and administrative practices in eighty-one elementary schools of the Leland Empire areas of Washington. The questionnaire was given to Principals concerning the facilities and administrative practices and to the physical education teachers concerning the curriculum. He concluded that unsuitable activities should be excluded. Outdoor and indoor facilities should be developed, additional playgrounds equipment's should be increased and the established administrative practices should be followed.

Bhullar (1965) has shown revealing facts in her study "Evaluation of existing programme of physical education in Government High/ Higher Secondary School in Chandigarh". She found that all these institutions in Chandigarh had no planned programme of physical education, all these school had six acres' land for play grounds, but some of them presented a horrible picture and served as cattle ranches. The equipment was not adequate, time allocation for physical education period was discriminatory, specially no attention was paid to games and sports. They were not having any organized pattern for the conduct of intramurals and extramural competitions. Physio-Medical examination was done without any follow up.

Sharma (1972) traced the contribution of Punjab towards the promotion of Basketball in post and pre Independence periods. The study surveyed the following things:

- i) Contribution of Punjab for making International players as compared to other states or units;
- ii) Bio-data of International players produced by Punjab;
- iii) Contribution of Punjab in producing champion teams as compared to other states of various levels;
- iv) Reviewed the brief study of basketball and
- v) Facilities provided to the players of Punjab.

Gans (1974) conducted an investigation on “Sequential steps in Planning Facilities for Health, Physical Education, Recreation and Athletics”. His study was focused on to develop and describe specific sequential steps for planning and constructing facilities for health, physical education, recreation and athletics of United States. An analysis of his research revealed the following: -

- i) That there is a need existed for careful organization and development of sports programme, prior to planning the construction of facilities;
- ii) The desire to obtain facilities quickly tended to result in limitations of important considerations and procedures and
- iii) Insufficient care regarding selection of architect to be common the use of educational consultancy may be helpful when no qualified person exists on the campus.

Pal (1974) surveyed the problem “The Origin and Development of Hockey in India”. In her study are surveyed how hockey was started in Persia. The Persian Played Polo and as this game was played on horseback those people could not afford horses imitated on their own feet. Then the Greeks borrowed the idea from Persians and in turn passed it on to Romans. Eventually it found its own way to Britain, after that hockey came to India. The development of hockey was assumed through various association which were affiliated to Indian Hockey Federation.

Bowen (1975) traced the origin of cricket in India to the social occupation which cricket provided for the English residents in India till the third decade of the 19th century. He has mentioned certain historical land area, such as establishment of Delhi and District Cricket Association in 1883, founding of the cricket clubs of India in New Delhi in 1933. Besides he offers to the various tournament and establishment of records by individual cricketers.

Doland (1977) undertook an investigation to study the functions of Athletic Directors in selected institutions of Higher Education of Louisiana State University and its Agricultural and Mechanical Colleges. The purpose of his study was to determine the role and status of Athletic Director in selected institutions of higher education. Specifically, the study was concerned with personal and professional characteristics of Athletic Directors as well as their duties and responsibilities. From the result of his investigation he found that most important task of an Athletic Director was supervision

of various sports programme and it was the duty of athletic director to make the programme successful.

Kensal (1979) conducted a study of women's Basketball in India. The data were collected through questionnaire, related reviews from periodical and interview. He traced that the Y.M.C.A. College of physical Education, Madras was the pioneer institution in Basketball of India.

Krishna Rao (1980) conducted an investigation on the historical development of Kabaddi in India. The data were collected through questionnaire, selected reading from text books, related articles, periodicals, seminar reports, reports of the Kabaddi Federation of India and interview of different units. He had traced how the modern form of Kabaddi was systematized in the first decade of the 20th century in Maharashtra and had referred to the formation of Asian Amateur Kabaddi Federation with India, Bangladesh, Nepal, Pakistan, Malaysia, and Sri Lanka as constituent member of nations.

Tancred (1980) conducted a study on "An Assessment of Management Policies and Procedures of Sports Centers in England." He found that when policies and procedures were related to the management of personnel, organizations, finance, scheduling, etc., the managerial functions could be performed with more efficiency and effectively.

Biswas (1981) conducted the study on historical development of Kho-Kho in India, he concluded that,

- i) The game Kho-Kho is Indian origin. It is one of the most popular and traditional game in India;
- ii) In the year 1914 the game Kho-Kho came into existence by Deccan Gym Khanna, Poona;
- iii) The rules of Kho-Kho were first published as a book form in the year 1934 by Akhil Maharashtra Sharirik Shikshan Mandal and Second edition was published in 1938;
- iv) The Kho-Kho Federation of India was formed in the year 1955 at Kolkata;
- v) In the Year 1970 Kho-Kho Federation of India started the National Championship and

- vi) Netaji Subhas National Institute of Sports, Patiala introduced the six-week orientation course for Kho-Kho in the year 1971.

Bhatt (1982) conducted in his study of development of Physical Education and Sports in Kashmir that through in salient features of the Ministry of Education and Social Welfare has provided the policy in the country making physical education compulsory at school level. But very few schools in Kashmir were fully equipped to have such fields and rural areas were still lacking of open space facilities like urban areas too.

Jose (1982) investigated that the duties of sports administrators in selected Brazilian Sports Associations with implication for professional preparation and found that the administrators performed 91 duties in terms of performance independently, co-operatively as on a delegated basis. He also stated what type of difficulties the sports administrators faced in performing their duties. In his investigation he also identified the reasons of difficulties in performing their duties.

Miller (1983) conducted an investigation to bring refinement and for updating the standards recommended Spora and Kenny in 1959-60 regarding space used for Athletics, Physical Education and Recreation in United States. In this replication of the earlier study, Miller suggested the enrolment ratio of the students according to the space and facilities. Due to the results of his investigation he was able to establish standards for the amount and type of facilities needed for Athletics, Physical Education and Recreation.

Frisby (1984) stated in his study on the organizational structure and effectiveness of Canadian National Sports Governing Bodies, that those organizations which were to acquire more financial resources, also more successful in achieving the goal.

Jefferies (1984) traced an investigation about the youth sports in the Soviet Union. The main purpose of his study was to examine the organization and administration of youth sports in Soviet Union and to examine the phenomena of sports in Soviet cultural life. From his investigation he found that:

- i) Sports Committee of U.S.S.R. had responsible for implementation of all national sports policy;
- ii) Responsibilities of various subordinating governmental and public authorities in the organization of sports;
- iii) The Soviets Union retains their talented athletes as coaches;
- iv) Coaches are highly qualified;
- v) The Soviets had brought sports to the people;
- vi) Facilities are available locally and
- vii) Participation is free and talented athletes are afforded opportunities to develop their abilities to the highest level of performance.

India also to start the movement in the country, to broad the base of sports at grass root level, to bring sports consciousness amongst the people of various age groups, the National Sports Talent Scheme (N.S.T.S.) was launched during 1985-86. The sports Authority of India in 1988 had prepared a battery tests for identification of talents for National Sports Talent scheme. The Soviet experts associated with Netaji Subhash National Institute of Sports South Centre Bangalore did some pioneering work and with the help of National Institute of sports, Patiala and Laxmibai National College of Physical Education (presently Laxmibai National Institute of Physical Education Deemed University Gwalior) a battery of tests were prepared for selection of students in 1989 NSTCS (G. Wakharkar,1995). The Sports Authority of India is contributing towards development of sports through its various programs like National Sports Talent Contest (NSTC) started in 1985 which helps to identify talented school children in the age group of 9th to 12th years. Children are selected in ten (10) Olympic disciplines - Athletics, Basketball, Badminton, Boxing, Football, Gymnastics, Hockey, Table Tennis, Volleyball and Wrestling through a series of tests and contests held at various levels. Following selection, these children are admitted in SAI adopted where their boarding, lodging and tuition fees are met by SAI. SAI also provides coaches and special infrastructure facilities to these schools, along with recurring grants for maintenance and equipment.

In the year 1991-92 Army Boys Sports Companies Scheme was introduced which is an extension of the N.S.T.C. Scheme. SAI and Army authorities have jointly launched this Scheme to scout talented boys up to the age of 14th years from rural, semi-urban and tribal areas and train them in sports.

Seventeen Boys Sports Companies for 2000 boys are to be set up during the VIII Plan at selected Regimental Centers. It also provides a onetime grant to the Army for creation and development of sports infrastructure, purchase of essential sports equipment up to rupees three lacs and for training kit/aid up to rupees one lacs. Thereafter, an annual grant of rupees fifty thousand is provided. Seventeen Boys Sports Companies have become functional with a total strength of 859 sportspersons.

National Coaching Scheme which was first introduced in 1955 is meant to encourage people to take up coaching. The Scheme, over the years has undergone numerous changes and is now a major source for meeting the requirement of coaches by various user agencies. Under the Scheme, coaches are made available to States/UTs for State coaching centers, district coaching and university field stations and also to national sports federations/associations. Coaches are also deployed in SAI regional centers, academic wings and in house training centers (**Development of Sports in India www.sports.indiapress.org/, 2005**).

Prasad and Sharma (1993) investigated on the Facilities, Organization and Administration of Physical Education and Sports in Himachal Pradesh University. He observed that majority of respondents were not satisfied with sports facilities, training facilities, coaching camps and incentives given to the players. On the basis of these results of the study, he also recommended that universities as well as state authorities should give sufficient financial powers to the Director, Principal and department should run without any pressure.

Lim, Rho, Kim, Chung, Kang and Park (1994) conducted a study to examine the financial investment factors in promoting mass sport in Korea and to determine their relative importance and investment priorities. This information would be guidance for sports administrators' decision making in establishing investment policy. In this study six investment factors with twenty-one sub factors were derived. The top investment priority was given to the sports facilities factors.

Daisy Rani (2002) conducted a study, “Development of physical education and sports in Haryana State” which observed that the standard of sports in Haryana state improved only after the appointment of coaches and increased budget for sports. Olympic Bhawan of International level develops infrastructure in Haryana. Sports quota has been fixed at all levels in both admissions of various course and jobs. It is only in Haryana where “Crorepati Scheme” for sports person has been started and other incentives facilities are also given to players for the development of sports.

Bala, Indu (2002) in her study, “Evaluation of Effectiveness of Himachal Pradesh Sports” looks after the sports in the state. There was no proper promotion policy for the coaches. The administrators and coaches expressed dissatisfaction with program and policies of sports.

Mwisukha, Njororai, W.W.S. and Vincent (2003) traced on contributions of sports towards national Development in Kenya and they found that there has been a positive relationship between sports and social economic, political and cultural development in Kenya. To keep up the spirit of Competitive and Recreational Sports as a vehicle for national development, all aspects that affect and influence the promotion of sport needs to be addressed. This includes the inevitable need for preservation and development of sports facilities, training of sports manpower and provision of the necessary financial support.

Parvinder Singh (2007) conducted study on assessment of organizational and administrative set up of sports academics. He concludes that majority of sample of administrator, experts and players are satisfied with refreshment, incentives after winning position, selection procedure of coaches, quality of equipment's and coaching facilities.

Klasslschchkov, Oleksandy (2009) in his study Beijing Olympics China 2008 and Asia Leading the world reveals that Asian countries improved a lot in development of sports. South East Asia strengthen in position with Indonesia, Malaysia and Singapore's improved standing in the overall Medal tally India did realize its medal winning potential by finally and deservingly breaking the drought for the Olympic gold medal and successfully adding another two bronzes to its credit. Asia is obviously growing not only wide, but also tall. Providing that is the fact of twelve out of nineteen

winning Asian countries finished with gold medals, to their credit, in Beijing; compared to eight medals winning Asian countries in 2000 Sydney, and ten in 2004 Athens.

Sports Canada Contribution Guidelines, (2013-14): In Canadian Sport Policy the Sports Support Programme is the primary agencies to channelize the funding to eligible organizations in support of programming that supports the goals of the Canadian Sports Policy. The basic objectives of this program is to increase the opportunities to sports participation in quality sports activities for all Canadians, including underrepresented groups as well as also to increase the capacity of the sports system to achieve elite class results in International competitions. This funding also promotes the provision of leadership in sports and simultaneously to inculcate values and ethics in sports.

Indeed, the review of literature is an essential aspect of a research, the investigator needs up-to-date information about what is already know, what others have attempted to find in particular area, which methods are promising and what promises remains to be solved and answers of these are provided by the review of related literature.

Keeping importance of a thorough review of related research in conducting a good piece of research, an attempt was made by the present investigation to look at the studies conducted in India and abroad.

Therefore, the researcher has pointed his thrust to identify the role of NSNIS in promotion of sports throughout the country. To get into more insight, the researcher had collected several information and performance record of players of NSNIS and analyzes the same which will be presented in the subsequent chapters.

CHAPTER-III
METHODOLOGY

CHAPTER-III

METHODOLOGY

In this chapter methods of collection of data and analysis of data have been included:

3.1 METHODS AND TOOLS

A case study is an in-depth analysis of different aspects of a person, organization and institution. Present research was a case study. The purpose was to analyze the contribution of NSNIS towards National performance in games and sports of India. Generally, in case studies, different methods like interview, observation and visitation etc. are used with tools like checklist, questionnaire etc. In present study the methods of interview, observation and visitation were used. For collecting information, questionnaire was also applied.

Before collecting data, the research scholar had to obtain formal permission from Executive Director, Academics of NSNIS. Permission was given by Executive Director, Academic to the Research Scholar.

3.2 CRITERION MEASURE

The Contribution of NSNIS in performance sports in India was studied for its following functions:

- i) Preparation of Coaches;
- ii) Training of National Athletes for International Competitions;
- iii) Scientific Research;
- iv) Diploma in Sports Medicine;
- v) Publication of Sports Literature and
- vi) Present facilities for training and playing different games and sports were also considered as the measuring criteria.

3.3 PROCEDURE FOLLOWED FOR COLLECTION OF INFORMATION

Following procedure were used to collect information for assessing attitude of different categories of people of NSNIS towards state and status of functioning of the institute.

- i) Information Records: a) Departmental and b) Central Office;
- ii) Interview;
- iii) Questionnaires and
- iv) Visitation of the infrastructural facilities of the institute;

3.3.1 Collection of data through Questionnaires

To obtain the comprehensive data, questionnaires were used for different groups of persons in this study. The questionnaire administered for the Administrators, Coaches and Players with separate queries and different questions. The research scholar explained clearly to all respondents about the purpose of the questionnaire and how the questionnaire had to be completed. The questionnaire was developed by the researcher on the guidance of experts, supervisor and on the basis of available literature. Total questionnaire was divided in five parts i.e. (i) Information regarding historical development of NSNIS, (ii) Information regarding infrastructural facilities of NSNIS, (iii) Information regarding coaching education of NSNIS, (iv) Information regarding achievement of performance sports in International level of NSNIS and (v) Information regarding faculty of Sports Science.

3.3.1.1 Validity of Questionnaire

Face validity of questionnaire was employed to judge the questionnaire. Opinion from three experts of Physical Education, Health and Sports Management were taken into consideration.

3.3.2 Visitation

The researcher visited the existing Infrastructural Facilities of different Games, Hostels, Class-rooms, Libraries, Museums, Publication Sections, Sports Science Departments and Administrative blocks etc. for number of times to get relevant data.

3.3.3 Interview

Interview was conducted by researcher with the Administrators, Sports Scientists, Coaches, Librarians, Publishers and Players.

Preparation for Interview

- i) Submitting the application seeking interview;
- ii) Preparation of questions for the purpose and
- iii) Recording the interview.

3.4 PROCEDURE FOR COLLECTION OF DATA

Following photographs have been presented to show procedure of conduction of interview, using questionnaire to groups in some cases.



Figure 17: Collection of data from Library, NSNIS, Patiala



Figure 17/1: Collection of data from Library, NSNIS, Patiala



Figure 18: Interview of Sports Scientist



Figure 19: Interview of Administrator



Figure 20: Interview of Publication Section Staff



Figure 21: Interview of Publication Section Staff



Figure 22: Collection of data from Sports Museum

CHAPTER-IV
PRESENTATION OF RESULT
AND DISCUSSION

CHAPTER-IV

PRESENTATION OF RESULT AND DISCUSSION

The data gathered from different sources were statistically analyzed adopting methods mentioned in chapter- III. The results have been presented in this chapter in tabular and graphical forms. The data collected and their analysis regarding contribution of National Institute of Sports have been presented in the following sections. The contribution was studied for its following functions:

- i) Preparation of Coaches;
- ii) Training of National Athletes for International Competitions;
- iii) Scientific Research;
- iv) Diploma in Sports Medicine and
- v) Publication of Sports Literature.

4.1 CONTRIBUTION OF NSNIS FOR PREPARATION OF COACHES

The main objective for setting up of the National Institute of Sports at Patiala, in 1961, was preparation of coaches through coaches' education programmes. The coaches thus prepared could organize systematic and scientific coaching from the grass root to the national level with the aim of raising the standard of the Indian sportspersons participating at the International Sports Competitions, like Asian Games, Commonwealth Games and Olympic Games and such others. Data were analyzed from the commencement year to 2016. Some of the disciplines have covered a period of fifty years i.e. five decades and the period of remaining disciplines have been considered from the commencement year to 2016. The major coaches' education programmes organized by NSNIS, Patiala were as follows:

- i) Ad-hoc Course in Sports training of six months' duration;
- ii) One-year Regular Course in Sports coaching;
- iii) Two-years M.Sc. Course in sports coaching;
- iv) Six-weeks Certificate Course in sports coaching and
- v) Refresher Course for sports coaches.

4.1.1 Ad-hoc Course in Sports Coaching

The Board of Governors initially decided to organize a number of Ad-hoc Course of six-months duration each, primarily for coaches, who were working as such with various organizations and institutions. The course was started on 20th March 1961, as following disciplines- Athletics, Football, Hockey, Cricket, Volleyball and Gymnastics. The details of these Ad-hoc Courses have been presented in Table-7.

4.1.1.1 Ad-hoc Course in Sports Coaching organized by NSNIS, Patiala

Table- 7

Ad-hoc Course in Sports Coaching organized by NSNIS

Course	Date of Commencement	Games covered
1 st Ad-hoc Course	20 th March, 1961	Athletics, Football, Hockey, Cricket, Volleyball and Gymnastics
2 nd Ad-hoc Course	3 rd November, 1961	Athletics, Football, Hockey, Cricket, Volleyball, Gymnastics, Wrestling and Badminton
3 rd Ad-hoc Course	3 rd September, 1962	Athletics, Football, Hockey, Cricket, Volleyball, Gymnastics, Wrestling, Badminton and Tennis
	1 st April, 1963	Swimming
	5 th August, 1963	Basketball
	9 th September, 1963	Table Tennis

Total Number of Coaches trained in this course were four hundred thirty-five (435)

It is seen from the Table- 7, Ad-hoc Courses were started on 20th March 1961, as following disciplines- Athletics, Football, Hockey, Cricket, Volleyball, and Gymnastics. The courses were gradually increased on 3rd November, 1961 in the discipline of Wrestling, Badminton, on 3rd September, 1962 in the discipline of Tennis,

on 1st April, 1963 in the discipline of Swimming, on 5th August, 1963 in the discipline of Basketball and 9th September, 1963 in the discipline of Table Tennis. A total of 435 coaches in different disciplines were trained in this programme.

4.1.2 One-year Diploma Course in Sports Coaching

The Institute introduced One-year Regular Certificate Course in 1963-64, in the disciplines of Athletics, Gymnastics, Hockey, Cricket, Football, Volleyball, Wrestling, Tennis and Badminton. The name of this Regular Course was changed to Diploma in Sports Coaching in the year 1983. The requisite educational qualification in the beginning was Matriculation / Higher Secondary or equivalent pass, with prescribed proficiency in the sports disciplines concerned. The minimum and maximum age for this education programme was 21 to 35 years. The admission was made on the basis of written test in general knowledge and knowledge about the sports disciplines concerned, practical tests and interview.

4.1.2.1 Coaches trained through One-year Diploma Course in Sports by NSNIS during 1963-1983

Table- 8

Coaches trained through One-year Diploma Course in Sports by NSNIS during 1963-1983

YEAR/ SESSION	NUMBER OF COACHES	YEAR/ SESSION	NUMBER OF COACHES	YEAR/ SESSION	NUMBER OF COACHES
1963-1964	137	1970-1971	252	1977-1978	404
1964-1965	151	1971-1972	247	1978-1979	420
1965-1966	113	1972-1973	264	1979-1980	390
1966-1967	112	1973-1974	251	1980-1981	360
1967-1968	169	1974-1975	316	1981-1982	324
1968-1969	217	1975-1976	307	1982-1983	329
1969-1970	203	1976-1977	409	-	-
Total number of coaches			5375		

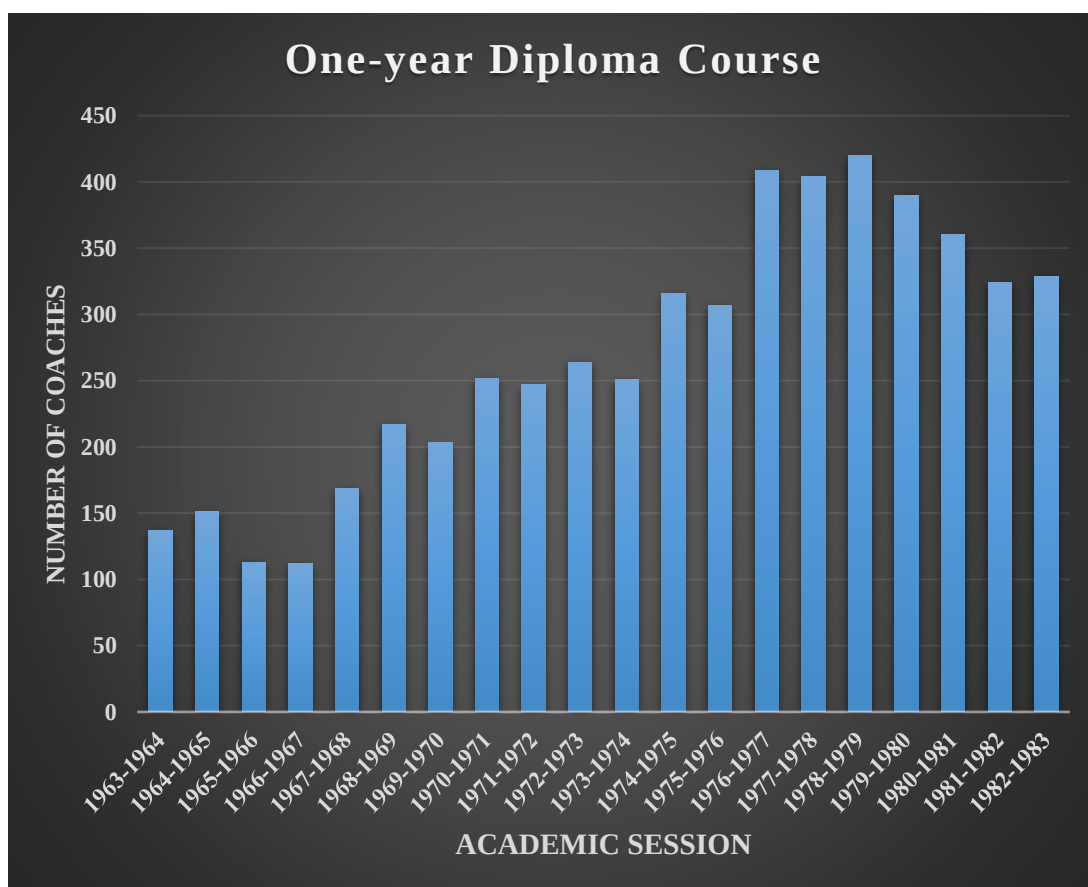


Figure 23: Coaches trained through One-year Diploma Course in Sports coaching by NSNIS During (1963-1983)

According to the table-8 and figure-23, One- year Diploma course in Sports Coaching was started in 1963 with one hundred thirty seven (137) candidates. In the year 1978-1979 the number of participants taking part in this programme were four hundred twenty (420) which was the highest. This table clearly indicates that the number of trainees of this course gradually increased up to the academic session 1978-1979. It is also seen that the number of trainees decreased in last four academic sessions, that is 1979-80, 1980-81, 1981-82 and 1982-83 as the number of candidates admitted was not enough in those years. A total of 5375 coaches were trained in this programme during this period. This programme continued further and the numbers of coaches trained during 1984 to 2016 have been presented in table-9.

4.1.2.2 Coaches trained through One-year Diploma Course in Sports by NSNIS during 1984-2016

Table- 9

Coaches trained through One-year Diploma Course in Sports by NSNIS during 1984-2016

YEAR/ SESSION	NUMBER OF COACHES	YEAR/ SESSION	NUMBER OF COACHES	YEAR/ SESSION	NUMBER OF COACHES
1983-1984	413	1994-1995	409	2005-2006	395
1984-1985	402	1995-1996	195	2006-2007	422
1985-1986	531	1996-1997	62	2007-2008	428
1986-1987	552	1997-1998	145	2008-2009	357
1987-1988	540	1998-1999	184	2009-2010	361
1988-1989	455	1999-2000	339	2010-2011	459
1989-1990	440	2000-2001	452	2011-2012	425
1990-1991	387	2001-2002	336	2012-2013	418
1991-1992	348	2002-2003	359	2013-2014	453
1992-1993	427	2003-2004	348	2014-2015	473
1993-1994	396	2004-2005	307	2015-2016	482
Total number of coaches			12700		

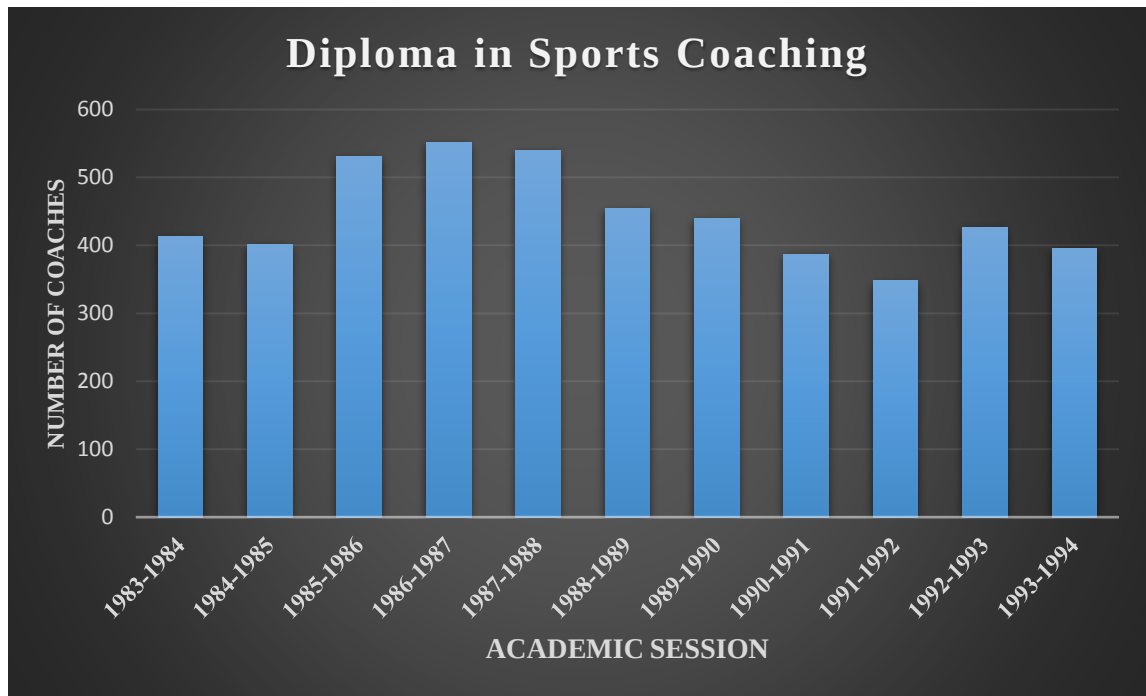


Figure 24/1: Coaches trained through One-year Diploma Course in Sports by NSNIS during (1984-1994)

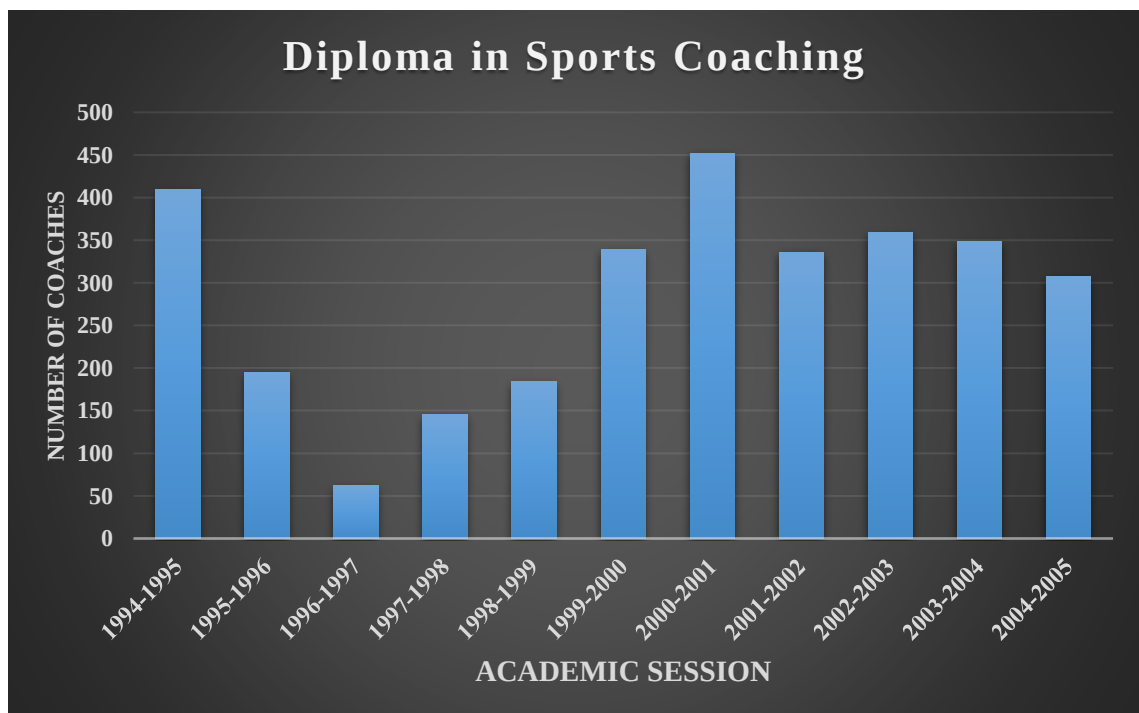


Figure 24/2: Coaches trained through One-year Diploma Course in Sports by NSNIS during (1995-2005)

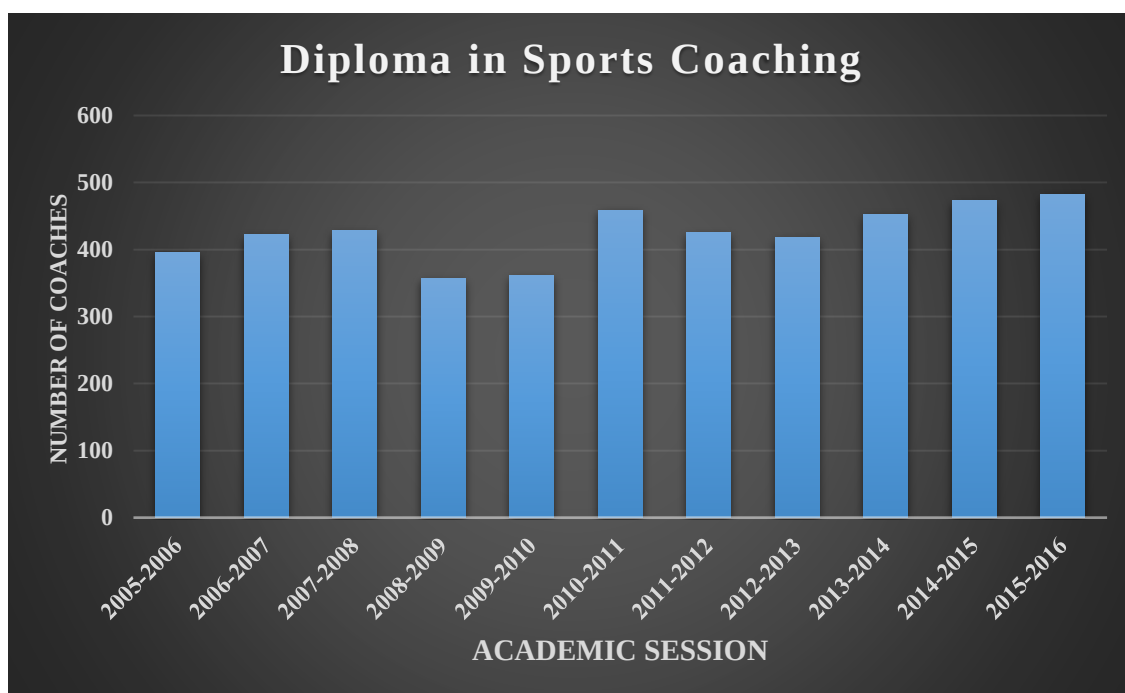


Figure 24/3: Coaches trained through One-year Diploma Course in Sports by NSNIS during (2006-2016)

According to the table-9, figure- 24/1, 24/2 and 24/3 Diploma in Sports coaching was started in 1983 and the number of candidates were four hundred thirteen (413). In the year 1986-1987 the number of candidates taking part in this programme were 552 which was highest. However, the number of candidates remained almost same or slightly more in the year 1985,1986, 1987, 1988, 1989, 1992, 2000, 2006, 2007, 2010, 2011,2012, 2013,2014 and 2015. In all other years the number of trainees decreased as the number of candidates admitted was not enough in those years. A total of 12700 coaches were trained in this programme during the said period.

Thus, it is seen that the programme had produced a total of 18,075 coaches in different disciplines for shouldering the responsibilities of identifying and grooming up the sports talents of the country. In addition, the National Institute of Sports had trained sports coaches and trainers for the neighboring countries through this programme.

4.1.2.3 Foreign Students completed Diploma in Sports Coaching at different SAI Centers up to 2007-2008

Table-10 shows that the results of foreign students trained in Diploma in Sports Coaching at different SAI Centers. From the data as shown in the table it is clear that a total of 512 foreign coaches were trained through One-year Diploma in sports coaching programme.

Table-10**Foreign Students completed Diploma in Sports Coaching at different SAI Centers up to 2007-2008**

Discipline	Bangladesh	Nepal	Nigeria	Kenya	Iraq	Mauritius	Sri Lanka	Yemen	Bhutan	Fiji	Ethiopia	Ghana	Maldives	S. Korea	Seychelles	Uganda	Total
Ath.	33	25	04	01	01	-	02	-	-	-	-	-	-	-	-	-	66
Bad.	02	11	01	-	-	02	02	-	01	-	-	-	-	-	-	-	19
B.B.	03	03	02	-	-	-	01	-	-	-	-	-	-	-	-	-	09
Box.	05	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22
Cyc.	01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01
Ckt.	27	06	01	-	-	-	-	-	-	-	-	-	-	-	-	01	35
F.B.	39	33	03	-	-	01	-	02	04	02	01	-	-	-	-	-	85
Gym	14	14	01	-	-	-	-	-	-	-	-	-	-	-	-	-	29
H.B.	09	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19
Hky.	25	02	37	01	-	-	04	-	-	-	-	05	02	01	-	-	77
Judo	01	05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	06
KK/K	08	03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
Swg.	28	08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36
Tennis	01	-	01	-	-	-	-	-	-	-	-	-	-	-	-	-	02
T.T	01	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
VB	19	29	01	-	-	01	02	-	-	-	-	-	-	-	01	-	53
Wt.lif.	05	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
Wrst.	01	03	01	-	-	03	-	-	-	-	-	-	-	-	-	-	08
Wushu	-	01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01
TOTAL	222	197	52	02	01	07	11	02	05	02	01	05	02	01	01	01	512

4.1.3 Two-years M.Sc. Course in Sports Coaching

In order to provide a pathway for higher studies in the coaching career, the Institute introduced a two-year duration Master's Course in Sports Coaching from 1979-80 academic session, in five sports disciplines : Athletics, Basketball, Football, Gymnastics and Hockey for graduates having passed the ten-month basic training programme (Diploma), or its equivalent from NSNIS, Patiala, in the first or second division, having aptitude for research, proficiency in sports and five years coaching experience. This Master's Course was not affiliated to any university. However, the syllabus of this programme was at par with the other foreign sports institutions of repute.

Later on, in the year 1991-92, this two-year education programme was rechristened as M.Sc. Course in Sports Coaching and it was affiliated to Punjabi University, Patiala. The SAI coaches attending this programme were granted study leave. No admissions were made to this course during 1982-83 due to the rush of coaching camps, at the Institute, for preparation for Asiad'82.

The course curriculum of this program was revised by the Board of Studies, Punjabi University, Patiala, on 24 February, 2010. Number of candidates educated in this higher education programme have been presented in Table-11. It is seen that a number of 226 coaches from different disciplines were educated in this programme (Dhaliwal & Roy, Netaji Subhas National Institute of Sports in Perspective, 2017).

4.1.3.1 Year-wise two-years M.Sc. Course in Sports coaching- Number of coaches trained by NSNIS, Patiala up to 2017

Table-11

Year-wise two-years M.Sc. Course in Sports coaching- Number of coaches trained by NSNIS up to 2017

YEAR/ SESSION	NUMBER OF COACHES	YEAR/ SESSION	NUMBER OF COACHES	YEAR /SESSION	NUMBER OF COACHES
1979-1981	10	1992-1994	13	2004-2006	04
1980-1982	09	1993-1995	09	2005-2007	06
1981-1983	10	1994-1996	06	2006-2008	05
1983-1985	12	1995-1997	04	2007-2009	04
1984-1986	07	1996-1998	02	2008-2010	05
1985-1987	05	1997-1999	03	2009-2011	06
1986-1988	08	1998-2000	10	2010-2012	04
1987-1989	05	1999-2001	08	2011-2013	06
1988-1990	08	2000-2002	04	2012-2014	03
1989-1991	08	2001-2003	08	2013-2015	03
1990-1992	02	2002-2004	05	2014-2016	03
1991-1993	09	2003-2005	04	2015-2017	08
Total number of coaches			226		

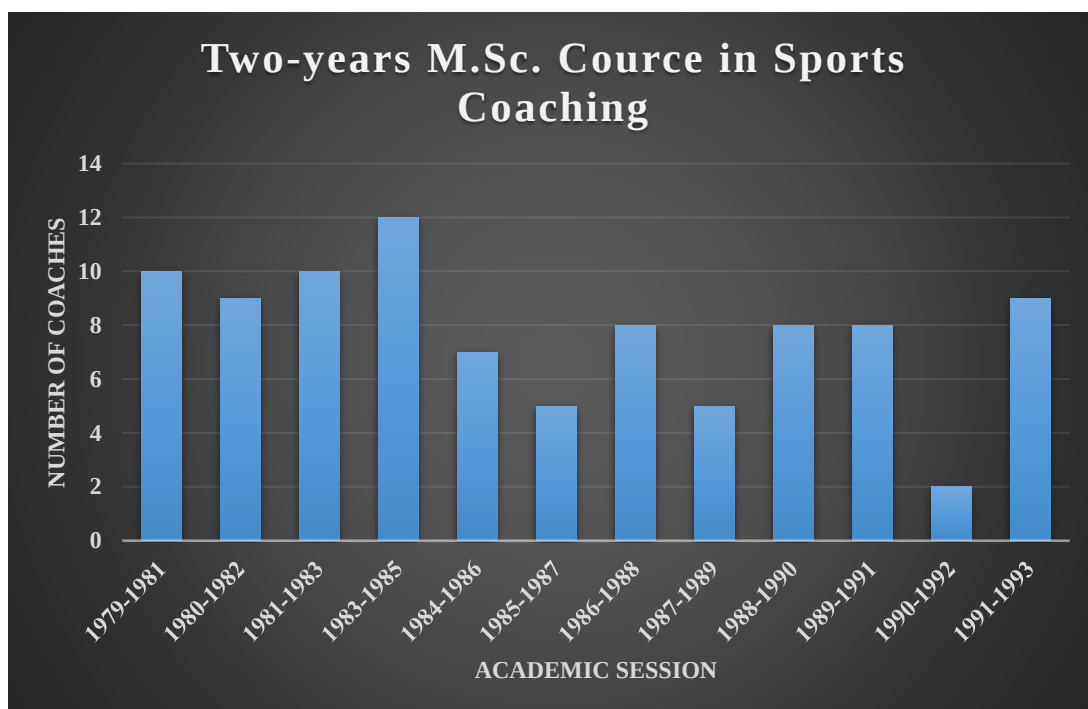


Figure 25/1: Year-wise two-years M.Sc. Course in Sports coaching- Number of coaches trained by NSNIS during (1979-1991)

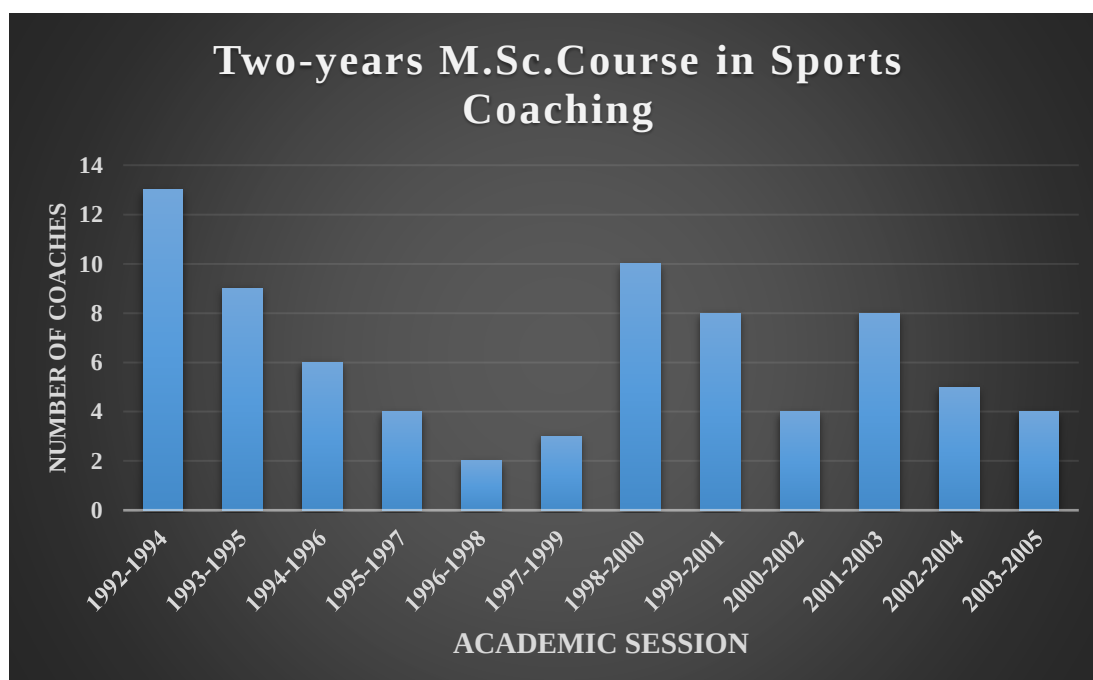


Figure 25/2: Year-wise two-years M.Sc. Course in Sports coaching- Number of coaches trained by NSNIS during (1992-2003)

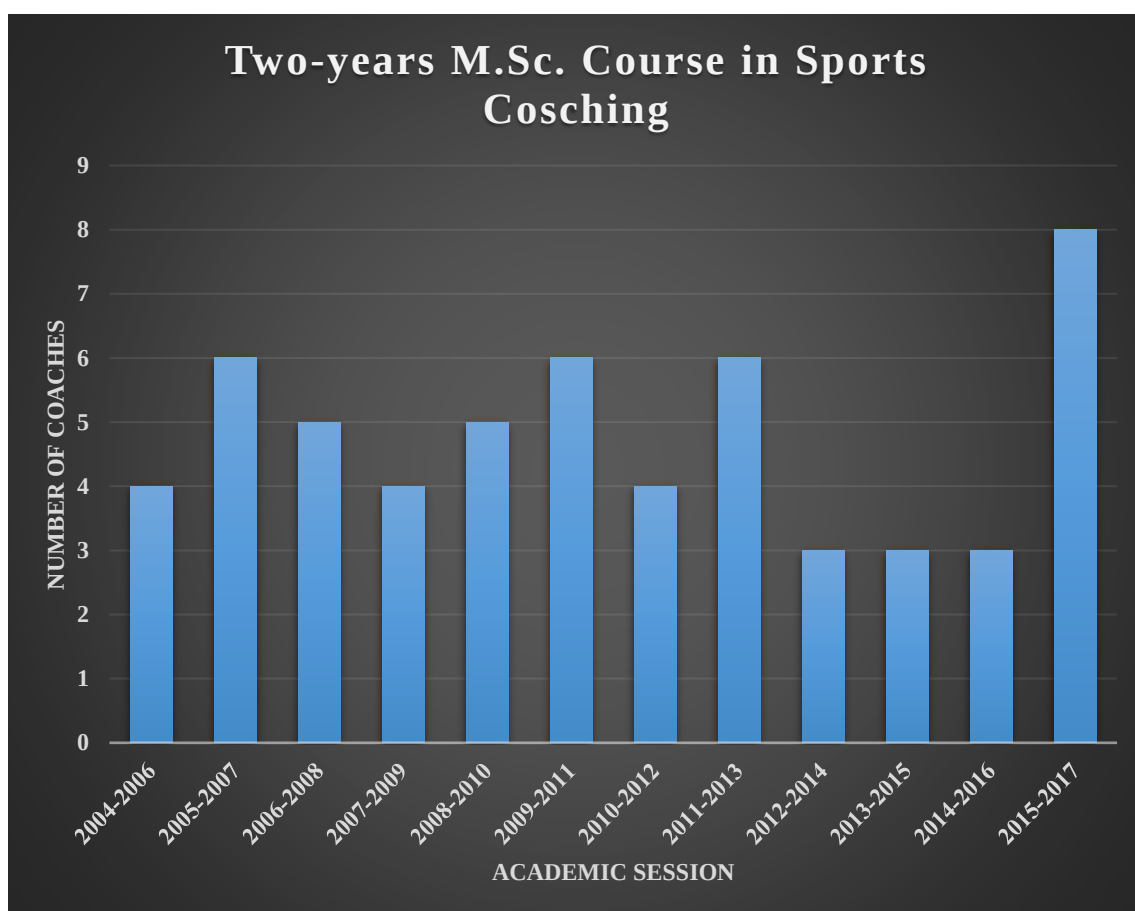


Figure 25/3: Year-wise two-years M.Sc. Course in Sports coaching- Number of coaches trained by NSNIS during (2004-2017)

According to the Table-11, Figure 25/1, 25/2 and 25/3 Two-years M.Sc. Courses in Sports coaching was started in 1979-80 academic session and the number of candidates were ten (10). In the year 1992-1994 the number of participants taking part in this programme were 13 which was highest. However, the number of candidates remained almost same or slightly more in the year 1981, 1983, 1992 and 1998. In all other years the number of candidates decreased as the number of candidates admitted was not enough in those years. It is seen that a number of 226 coaches from different disciplines were educated in this programme.

4.1.4 Six- weeks Certificate Course in Sports Coaching

With a view to develop sports in the education sector, under the Mass Sports Participation Program of Govt. of India, the institute introduced a Six-weeks Orientation Course in Sports Coaching in the academic session 1986-87 for Physical Education teachers, class-room teachers of schools, colleges and universities and

persons having flair for sports, aged between 22 to 40 years. This elementary programme was conducted during May- June, the summer vacation period to facilitate the participation of teachers. The name of this programme was later changed to the Certificate Course in Sports Coaching. Number of coaches trained in this program have been presented in Table-12. It is seen from the table that a total of 18,091 coaches were trained through this programme. Year-wise number of coaches trained have also been shown in Figure 26/1, 26/2 and 26/3.

4.1.4.1 Six-weeks Certificate Course in Sports Coaching organized by NSNIS, Patiala

Table-12

Six-weeks Certificate Course in Sports Coaching organized by NSNIS

YEAR/ SESSION	NUMBER OF COACHES	YEAR/ SESSION	NUMBER OF COACHES	YEAR/ SESSION	NUMBER OF COACHES
1986-1987	872	1996-1997	394	2006-2007	919
1987-1988	718	1997-1998	322	2007-2008	599
1988-1989	582	1998-1999	221	2008-2009	335
1989-1990	491	1999-2000	335	2009-2010	311
1990-1991	561	2000-2001	553	2010-2011	368
1991-1992	534	2001-2002	623	2011-2012	485
1992-1993	633	2002-2003	445	2012-2013	561
1993-1994	622	2003-2004	1091	2013-2014	820
1994-1995	534	2004-2005	923	2014-2015	1035
1995-1996	588	2005-2006	505	2015-2016	1111
Total Number of Coaches			18091		

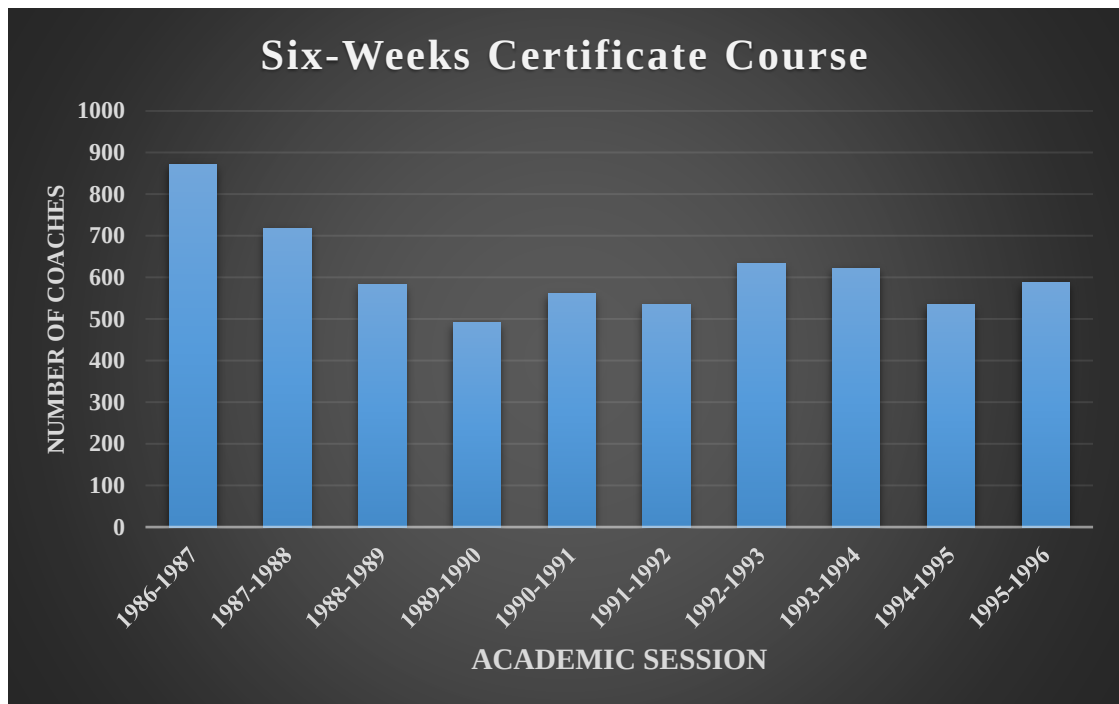


Figure 26/1: Six-weeks Certificate Course in Sports coaching- number of coaches trained by NSNIS during (1986-1996)

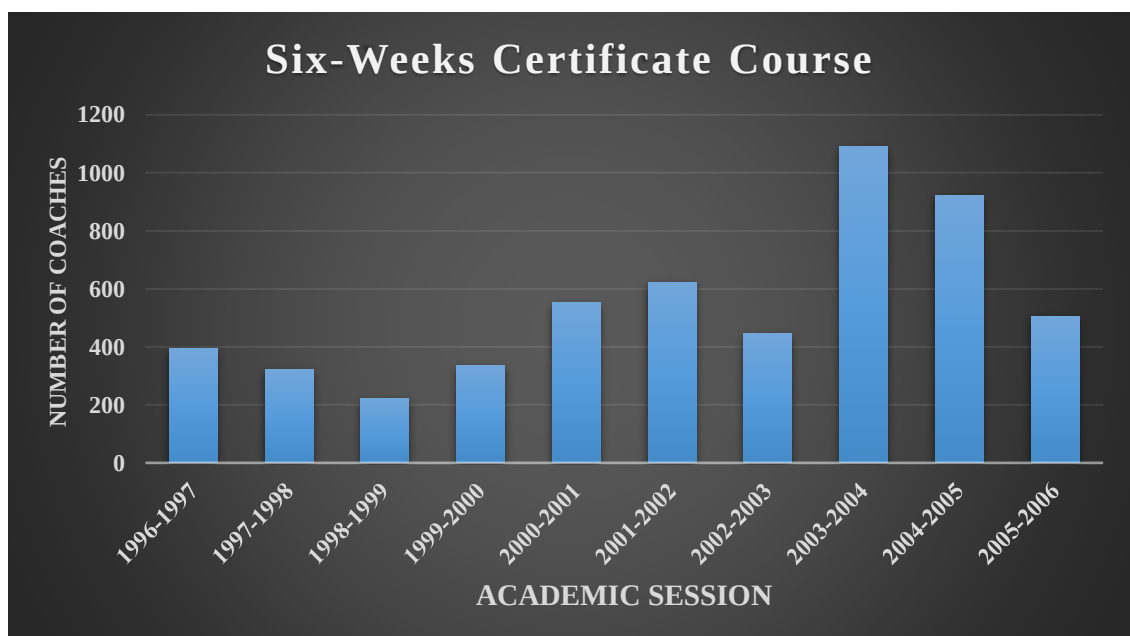


Figure 26/2: Six-weeks Certificate Course in Sports coaching- number of coaches trained by NSNIS during (1996-2006)

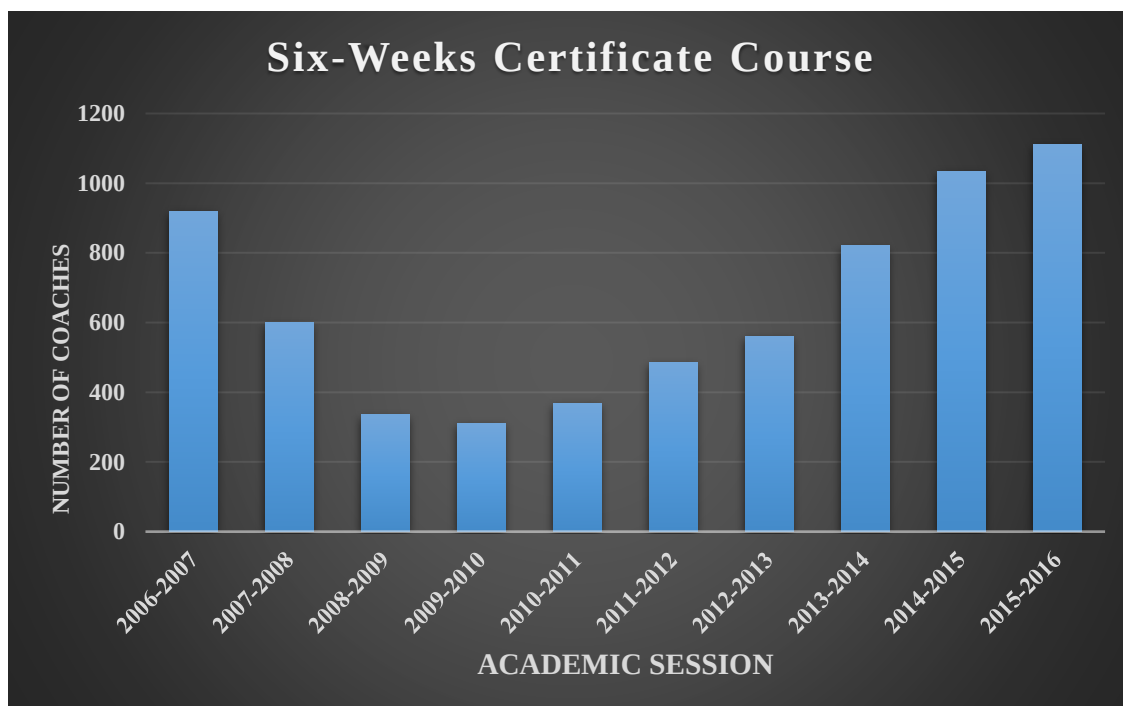


Figure 26/3: Six-weeks Certificate Course in Sports coaching- number of coaches trained by NSNIS during (2006-2016)

According to the Table-12, Figure 26/1, 26/2, and 26/3 Six-weeks Certificate Course in Sports coaching was started in 1986-87 academic session and the number of candidates were eight hundred seventy-two (872). In the year 2015-2016 the number of participants taking part in this programme were 1111 which was highest. However, the number of candidates remained almost same or slightly more in the year 1988 to 1996, 2004, 2005, 2006, 2007 and 2008. In all other years that is 2009 to 2016 the number of candidates increased as the number of trainees admitted more in those years.

4.1.5 Refresher Course for Coaches

From the very beginning, the management of the Institute was aware of the need to conduct some sort of Refresher Courses for in-service coaches. The purpose of these courses was to update their knowledge of the game, changes in the rules and its interpretation etc. In 1976, the institute decided to organize such Refresher Courses once in two years. A number of such training courses were organized, in selected disciplines, from time to time, especially for the in-service NSNIS/SAI coaches. After the merger of SNIPES with SAI, this short-duration education program, continued to be organized periodically in various sports disciplines at NSNIS Patiala and its academic sub centers Bangalore and Kolkata. Number of coaches trained through the refreshers' course have been presented in Table-13. It is seen that a total of 2764 coaches were trained through refreshers' courses. The information on Refresher Course from 1988 to 2009 have been furnished here. Due to the lack of adequate data, the information on the course for the other years can't be mentioned. This has also been presented in Figure No. 27 below.

4.1.5.1 Year-wise Refresher Course for Coaches trained by NSNIS, Patiala

Table-13

Year-wise Refresher Course for Coaches trained by NSNIS

YEAR	NUMBER OF COACHES	YEAR	NUMBER OF COACHES	YEAR	NUMBER OF COACHES
1988	50	1998	154	2004	53
1991	139	1999	171	2005	13
1992	113	2000	200	2008	123
1994	345	2001	187	2009	30
1996	449	2002	350	-	-
1997	92	2003	295	-	-
Total Number of coaches			2764		

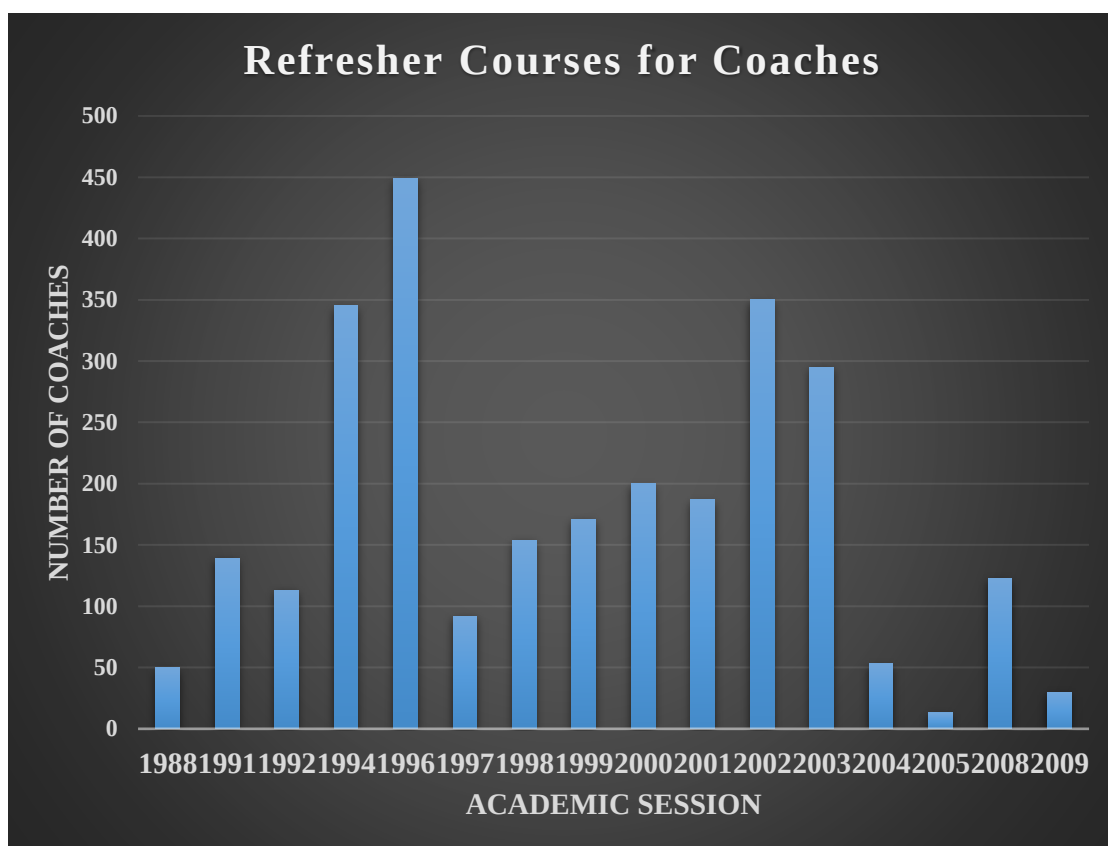


Figure 27: Year-wise Refresher Course for Coaches trained by NSNIS

It is seen from the Table-13 and Figure-27 Refresher Courses for Coaches was started in the year 1988 and the number of trainees were fifty (50). The highest number of candidates participated in the year 1996, which was four hundred forty-nine (449). However, the number of candidates remained almost same or slightly more in the year 1991, 1994, 1998, 1999, 2000, 2001, 2002 and 2002. In all other years the number of candidates decreased as the number of candidates admitted was not enough in those years. It is seen that a number of 2764 coaches from different disciplines were educated in this programme.

4.2 Training of National Athletes for International Competition

Another major responsibility of the Institution was organizing the training camps for elite sportspersons and the probable sports persons for International Competitions. Information regarding contribution of NSNIS, Patiala for preparation of National Team for International Competition have been presented here. All necessary information regarding National Coaching Camps held at NSNIS, Patiala both Year-

wise and Discipline-wise have been furnished here. Discipline-wise total duration of National Coaching Camps and number of athletes participated in National Coaching Camps held at the Institute in preparation for the Commonwealth Games 2010, Asian Games, 2010 and London Olympic 2012; Contribution of NSNIS, Patiala to Indian Medal Tally at Beijing Olympics 2008, Commonwealth Games-2010 and Asian Games-2010 have been furnished here.

4.2.1 National Coaching Camp:

The training of International Probable's, National Teams are carried out by the National Coaches, as per the Long-Term Development Plan prepared by the National Sports Federations concerned. The training programmes planned by the SAI Training of Elite Athlete Management Support (TEAM) Division, in consultation with the respective National Sports Federations, were implemented and monitored by the Institution.

The Institute provides comfortable residential accommodation, sports infrastructure of international standard, hygienic and nutritious boarding facilities and a sporting environment at the two SAI centers, NSNIS Patiala and the SAI High altitude Training Centre, Shilaroo, Himachal Pradesh.

The Faculty of Sports Science of the Institute conduct scientific tests and evaluation and the scientific support, counselling are being provided accordingly. The considerable contribution of the Institute on this front becomes evident from a cursory look at the Indian medal tallies of various International Competitions. The information about National Coaching Camps held at NSNIS in Patiala during the academic years from 1971-1972 to 1985-1986, have been furnished here. The information regarding such camps held in other years cannot be presented here as the authority of NSNIS could not provide complete data. This is an indication of a drawback of this research work which can be rectified by some future research work. Table -14 represents the National Coaching Camps organized by NSNIS. This has also been presented in fig. No. 28 below.

4.2.1.1 Year-wise National Coaching Camps organized by NSNIS, Patiala

Table-14

Year-wise National Coaching Camps organized by NSNIS

YEAR/ SESSION	NUMBER OF CAMPS	YEAR/ SESSION	NUMBER OF CAMPS	YEAR/ SESSION	NUMBER OF CAMPS
1971-1972	17	1976-1977	51	1981-1982	154
1972-1973	19	1977-1978	45	1982-1983	129
1973-1974	28	1978-1979	52	1983-1984	71
1974-1975	40	1979-1980	55	1984-1985	87
1975-1976	46	1980-1981	64	1985-1986	135
Total number of camps			993		



Figure 28: Year-wise National Coaching Camps organized by NSNIS

According to the Table-14 and figure-28 total number of National Coaching Camps held in the academic session 1971-1972 were seventeen (17). In the year 1981-

1982 the number of National Coaching Camps held in this institution were 154 which was the highest. This table clearly indicates that the number of National Coaching Camps gradually increased up to the academic session 1985-1986. A total of 993 National Coaching Camps held during this period.

4.2.1.2 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2007-2008

Training of the National teams for International Sports competitions is one of the major functions of the Institute. After the merger of SNIPES with SAI, the control of training of elite sportspersons was allotted to the Training of Elite Athlete Management Support (TEAMS) Wing of SAI. The TEAMS Wing allotted these National Coaching Camps to various camp venues. The information regarding discipline-wise National Coaching Camps held at NSNIS in Patiala during the academic years from 2007-2008 to 2016-2017, have been mentioned here. This information has been collected from the Annual Report of SAI, As the authority of NSNIS could not provide with detailed information records of other years regarding the National Coaching Camps have not been furnished here. Table -15 represents the discipline-wise number of National Coaching Camps organized by NSNIS Patiala, in the year 2007-2008. This has also been presented in Figure No. 29 below.

Table-15
Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2007-2008

Discipline	Number of camps
Athletics	05
Boxing	09
Hockey	01
Judo	11
Table Tennis	04
Weightlifting	07
Wrestling	10
Total	47



Figure 29: Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2007-2008

According to the Table-15 and Figure-29 total number of National Coaching Camps held in the academic session 2007-2008 were forty-seven (47). In this academic session highest number of coaching camps held in Judo were eleven (11). Discipline-wise the number of National Coaching Camps held in this institution were - Athletics-05, Boxing-09, Hockey-01, Judo-11, Table Tennis-04, Weightlifting-07 and Wrestling-10.

4.2.1.3 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2008-2009

Table-16

Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2008-2009

Discipline	Number of camps
Athletics	07
Boxing	06
Cycling	02
Gymnastics	01
Handball	02
Judo	02
Table Tennis	07
Weightlifting	02
Wrestling	09
Total	38

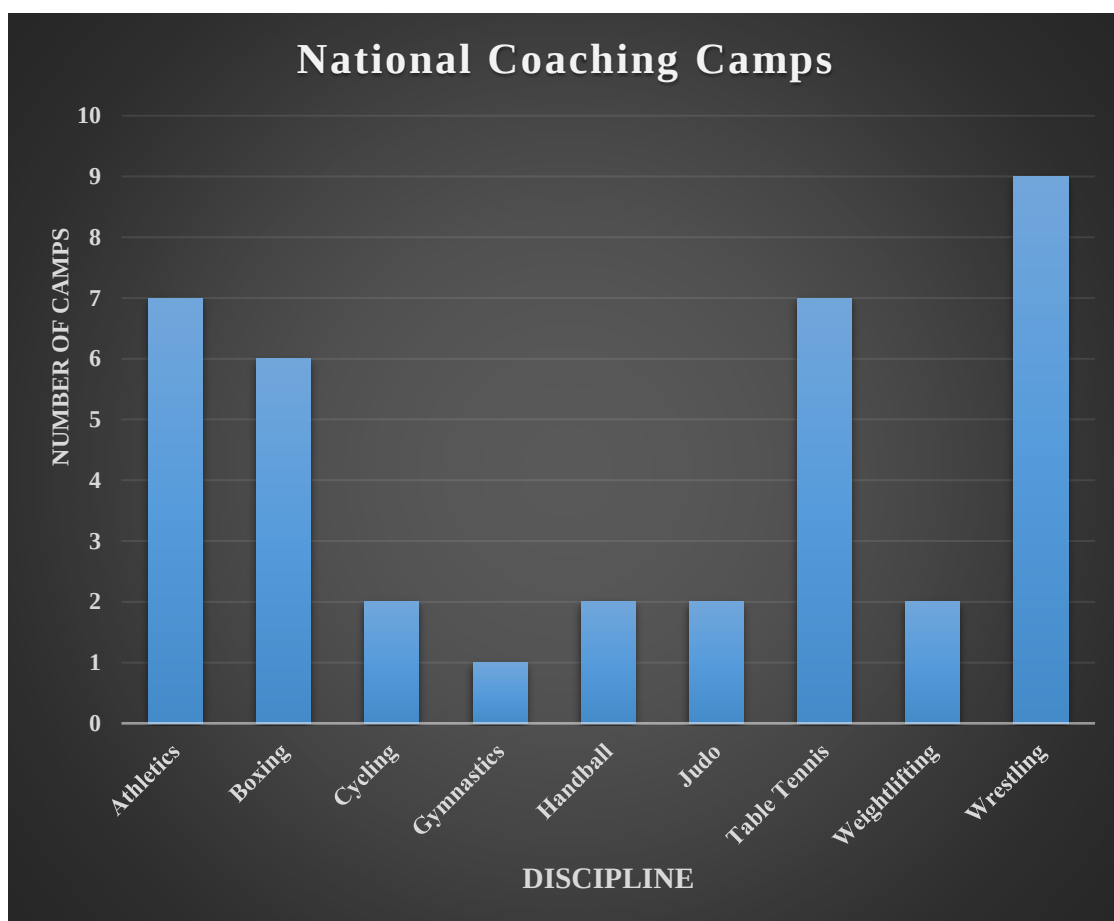


Figure 30: Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2008-2009

Table-16 and Figure-30 showed that the total number of National Coaching Camps held in the year 2008-2009 were thirty-eight (38). In this academic session the highest number of coaching camps held in Wrestling were nine (09). Discipline-wise the number of National Coaching Camps held in this institution were - Athletics-07, Boxing-06, Cycling-02, Gymnastics-01, Handball-02, Judo-02, Table Tennis-07, Weightlifting-02 and Wrestling-09.

4.2.1.4 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2009-2010

Table-17

Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2009-2010

Discipline	Number of camps
Athletics	02
Boxing	08
Cycling	04
Fencing	02
Gymnastics	05
Hockey	01
Shooting	01
Weightlifting	03
Wrestling	07
Total	33

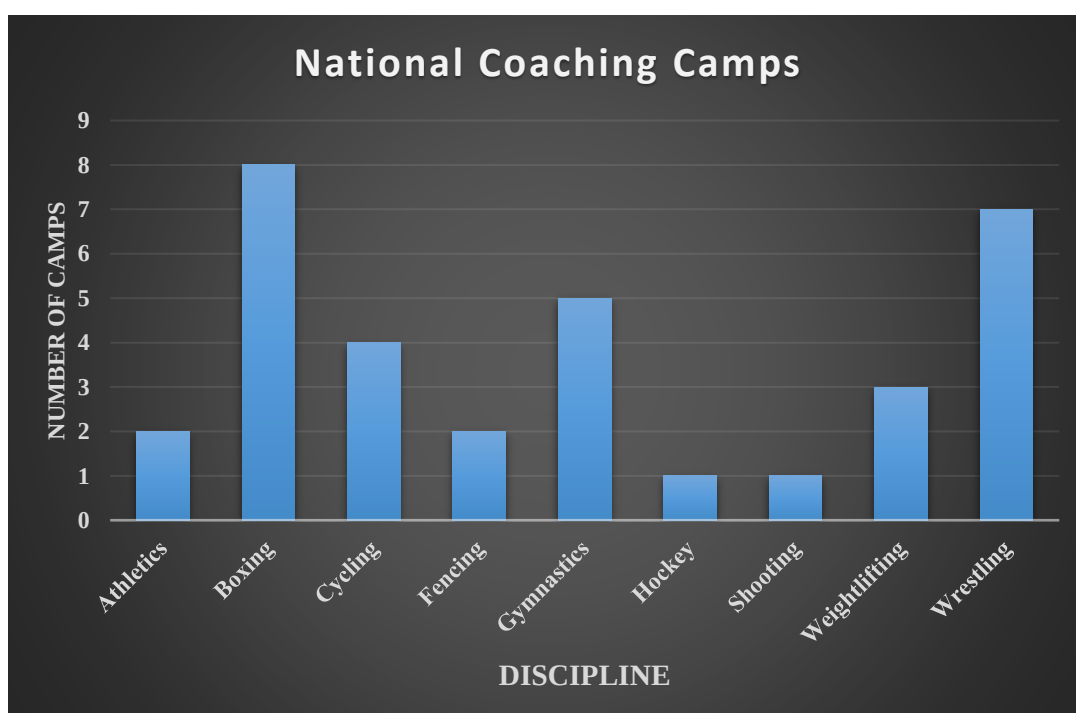


Figure 31: Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2009-2010

Table-17 and figure-31 showed that the total number of National Coaching Camps held in the year 2009-2010 were thirty-three (33). In this academic session the

highest number of coaching camps held in Boxing was eight (08). Discipline-wise the number of National Coaching Camps held in this institution were - Athletics-02, Boxing-08, Cycling-04, Fencing-02, Gymnastics-05, Hockey-01, Shooting-01, Weightlifting-03 and Wrestling-07.

4.2.1.5 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2010-2011

Table-18

Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2010-2011

Discipline	Number of camps
Archery	01
Athletics	03
Boxing	09
Cycling	03
Fencing	04
Gymnastics	01
Handball	05
Hockey	03
Shooting	01
Table Tennis	02
Weightlifting	02
Wrestling	12
Wushu	01
Total	47

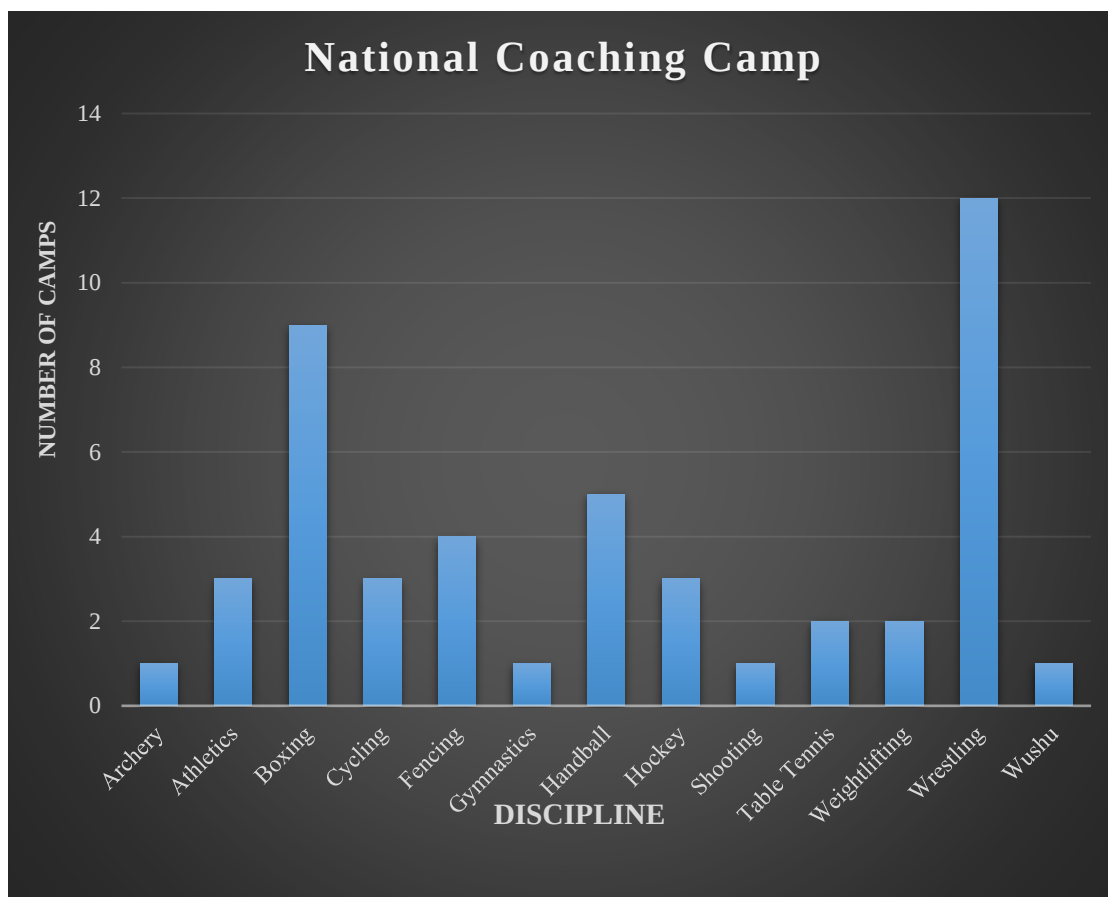


Figure 32: Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2010-2011

According to the Table-18 and Figure-32 total number of National Coaching Camps held in the academic session 2010-2011 were forty-seven (47). In this academic session the highest number of coaching camps held in Wrestling were twelve (12). Discipline-wise the number of National Coaching Camps held in this institution were - Archery-01, Athletics-03, Boxing-09, Cycling-04, Fencing-04, Gymnastics-01, Handball-05, Hockey-03, Shooting-01, Weightlifting-02, Wrestling-12 and Wushu-01.

4.2.1.6 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2011-2012

Table-19

Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2011-2012

Discipline	Number of camps
Athletics	05
Boxing	11
Gymnastics	01
Judo	04
Shooting	03
Table Tennis	08
Weightlifting	05
Wrestling	02
Wushu	01
Total	40



Figure 33: Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2011-2012

Table-19 and Figure-33 showed that the total number of National Coaching Camps held in the year 2011-2012 were forty (40). In this academic session the highest

number of coaching camps held in Boxing were eleven (11). Discipline-wise the number of National Coaching Camps held in this institution were - Athletics-05, Boxing-11, Gymnastics-01, Judo-04, Shooting-03, Table Tennis-08, Weightlifting-05, Wrestling-02 and Wushu-01.

4.2.1.7 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2012-2013

Table-20

Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2012-2013

Discipline	Number of camps
Athletics	05
Boxing	07
Cycling	01
Hockey	02
Judo	03
Shooting	01
Table Tennis	06
Weightlifting	04
Wrestling	07
Total	36

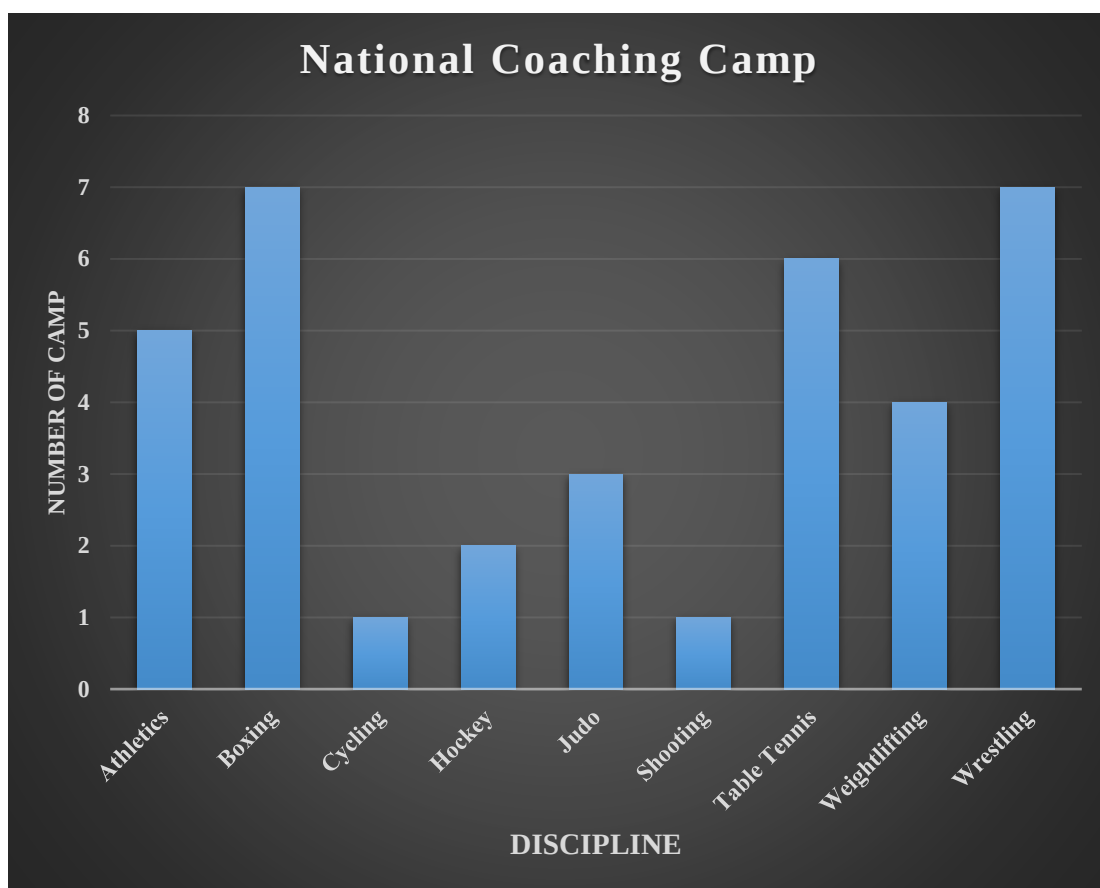


Figure 34: Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2012-2013

Table-20 and Figure-34 showed that the total number of National Coaching Camps held in the year 2012-2013 were thirty-six (36). In this academic session the highest number of coaching camps held in both Boxing and Wrestling were seven (07). Discipline-wise the number of National Coaching Camps held in this institution were- Athletics-05, Boxing-07, Cycling-01, Hockey-02, Judo-03, Shooting-01, Table Tennis-06, Weightlifting-04, and Wrestling-07.

4.2.1.8 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2013-2014

Table-21

Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2013-2014

Discipline	Number of camps
Archery	02
Athletics	04
Boxing	06
Handball	01
Hockey	19
Judo	01
Shooting	01
Table Tennis	02
Weightlifting	13
Wrestling	02
Total	51



Figure 35: Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2013-2014

According to the Table-21 and figure-35 total number of National Coaching Camps held in the academic session 2013-2014 were fifty-one (51). In this academic

session the highest number of coaching camps held in Hockey were nineteen (19). Discipline-wise the number of National Coaching Camps held in this institution were- Archery-02, Athletics-04, Boxing-06, Handball-01, Hockey-19, Judo-01, Shooting-01, Table Tennis-02, Weightlifting-13, and Wrestling 02.

4.2.1.9 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2014-2015

Table-22

Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2014-2015

Discipline	Number of camps
Archery	01
Athletics	04
Boxing	09
Football	01
Handball	01
Hockey	06
Power Lifting	01
Shooting	01
Table Tennis	04
Weightlifting	07
Total	35

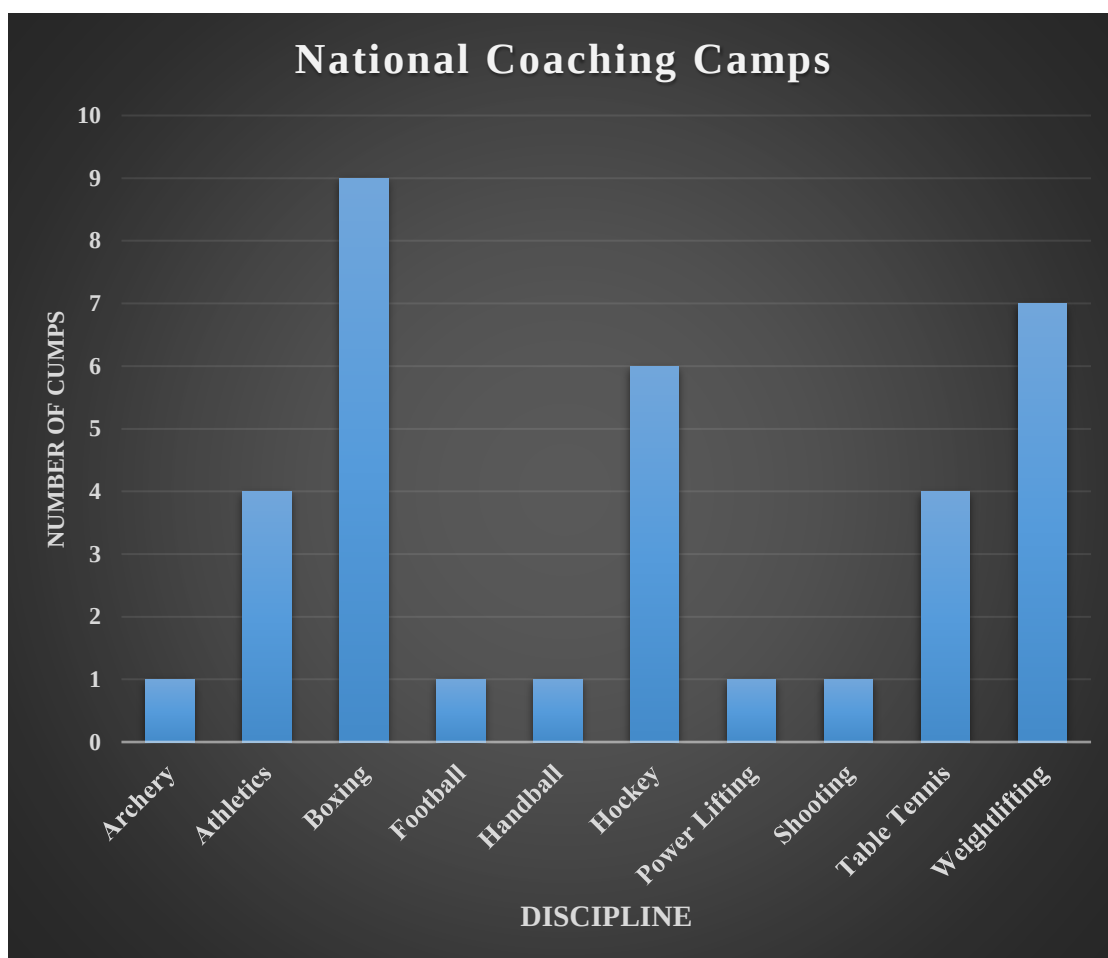


Figure 36: Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2014-2015

According to the table-22 and figure-36 the total number of National Coaching Camps held in the year 2014-2015 were thirty-five (35). In this academic session the highest number of coaching camps held in Boxing were nine (09). Discipline-wise the number of National Coaching Camps held in this institution were- Archery-01, Athletics-04, Boxing-09, Football-01, Handball-01, Hockey-06, Power Lifting-01, Table Tennis-04 and Weightlifting-07.

4.2.1.10 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2015-2016

Table-23

Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2015-2016

Discipline	Number of camps
Athletics	02
Boxing	06
Fencing	02
Handball	02
Power Lifting	01
Shooting	04
Table Tennis	04
Weightlifting	09
Total	30

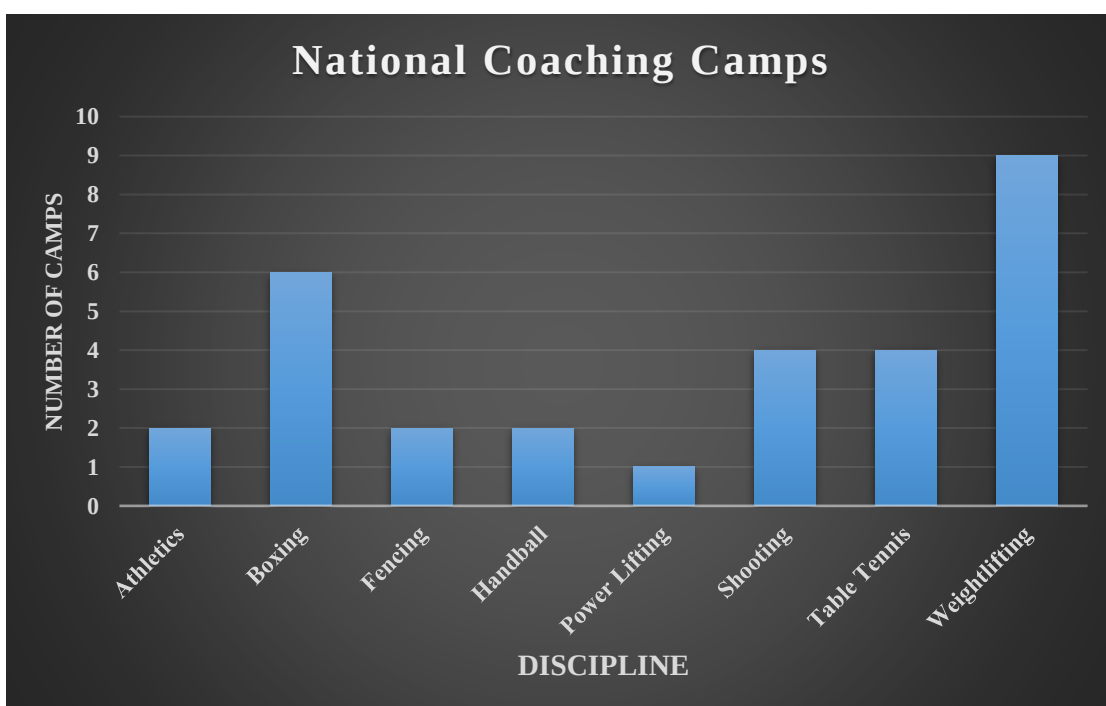


Figure 37: Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2015-2016

Table-23 and figure-37 showed that the total number of National Coaching Camps held in the year 2015-2016 were thirty (30). In this academic session the highest number of coaching camps held in Weightlifting were nine (09). Discipline-wise the number of National Coaching Camps held in this institution were- Athletics-02,

Boxing-06, Fencing-02, Handball-02, Power Lifting-01, Shooting-04, Table Tennis-04 and Weightlifting-09.

4.2.1.11 Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2016-2017

Table-24

Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2016-2017

Discipline	Number of camps
Athletics	07
Boxing	06
Fencing	04
Football	01
Table Tennis	05
Weightlifting	17
Wushu	03
Total	43

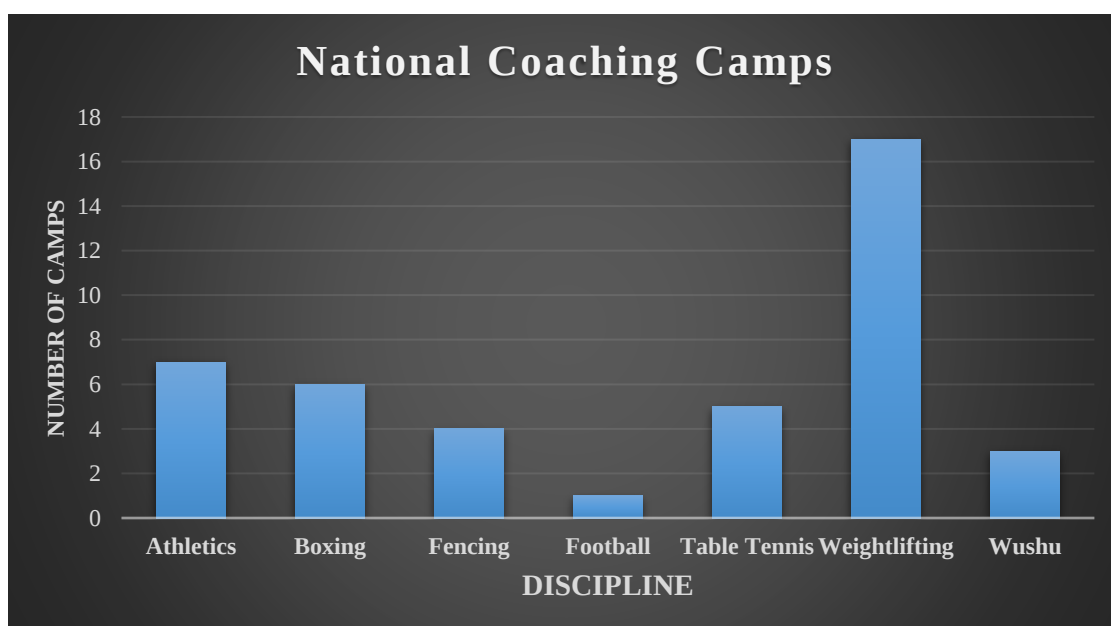


Figure 38: Discipline-wise number of National Coaching Camps held at NSNIS, Patiala in the year 2016-2017

Table-24 and figure-38 showed that the total number of National Coaching Camps held in the year 2016-2017 were forty-three (43). In this academic session the highest number of coaching camps held in Weightlifting were nine (09). Discipline-wise the number of National Coaching Camps held in this institution were- Athletics-

07, Boxing-06, Fencing-04, Football-01, Table Tennis-05, Weightlifting-17 and Wushu-03.

4.2.1.12 Discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the Commonwealth Games and Asian Games, 2010

The information about the National Coaching Camps organized for the preparation for the Commonwealth Games 2010 and the Asian Games 2010 have only been included here. Due to the lack of adequate data the information about the other National Coaching Camps held for the preparation of the Commonwealth Games and Asian Games could not be furnished here.

Table-25

Discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the Commonwealth Games and Asian Games, 2010

Discipline	Number of Days
Athletics (M&W)	728
Boxing (Men)	581
Cycling (M&W)	456
Gymnastics (M&W)	604
Hockey (W)	20
Table Tennis (M&W)	65
Weightlifting (M&W)	207
Wrestling (W)	687
Total	3,348

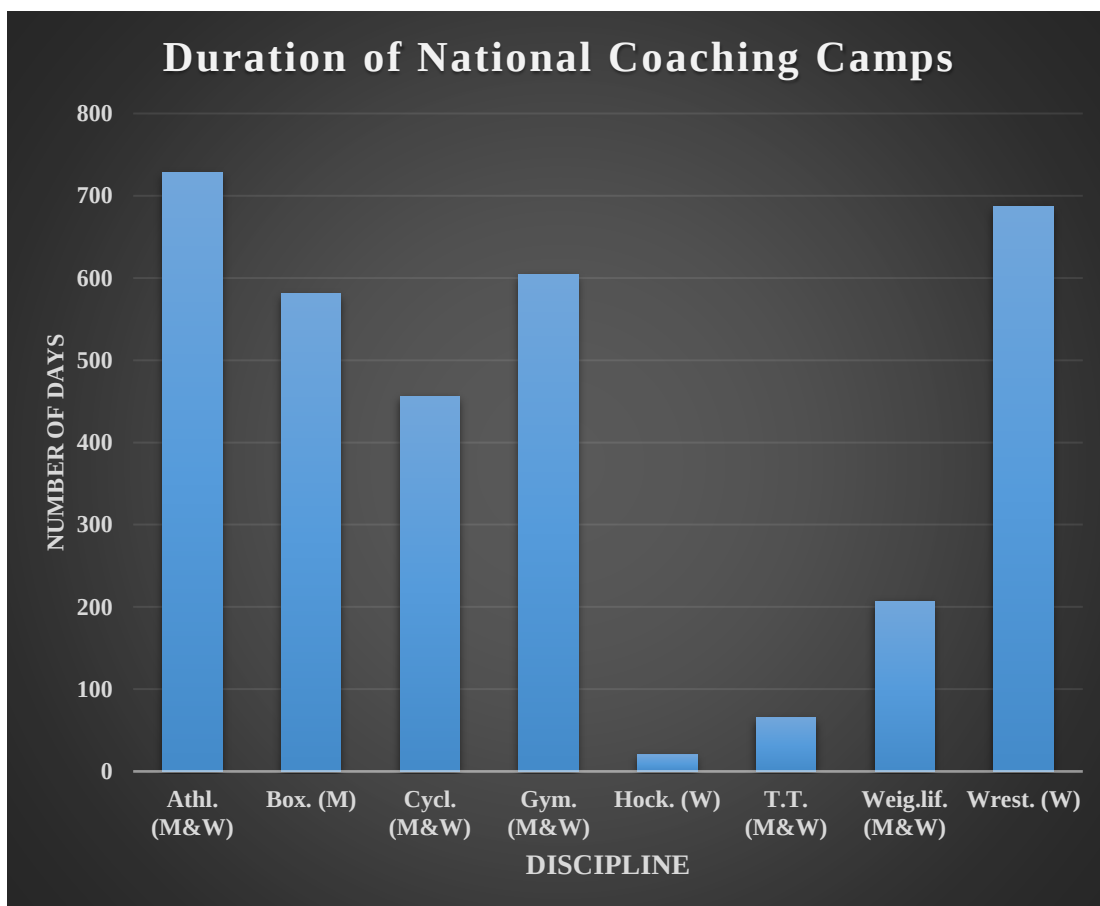


Figure 39: Discipline-wise total duration of National Coaching Camps

Table-25 and figure-39 showed that discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the Commonwealth Games and Asian Games, 2010 were three thousand three hundred forty-four (3348) days. It is also seen that the maximum duration of National Coaching Camps held in the discipline of Athletics were seven hundred twenty-eight (728) days. Discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the Commonwealth Games and Asian Games, 2010 were - Athletics (M&W) -728, Boxing (Men)-581, Cycling (M&W) -456, Gymnastics (M&W)- 604, Hockey (W)-20, Table Tennis (M&W) -65, Weightlifting (M&W)- 207 and Wrestling (W)-68.

4.2.1.13 Discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the Commonwealth Games and Asian Games, 2010

Table-26

Discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the Commonwealth Games and Asian Games, 2010

Discipline	Number of Athletes
Athletics (M&W)	148
Boxing (Men)	56
Cycling (M&W)	62
Gymnastics (M&W)	11
Hockey (W)	38
Table Tennis (M&W)	28
Weightlifting (M&W)	54
Wrestling (W)	37
Total	434

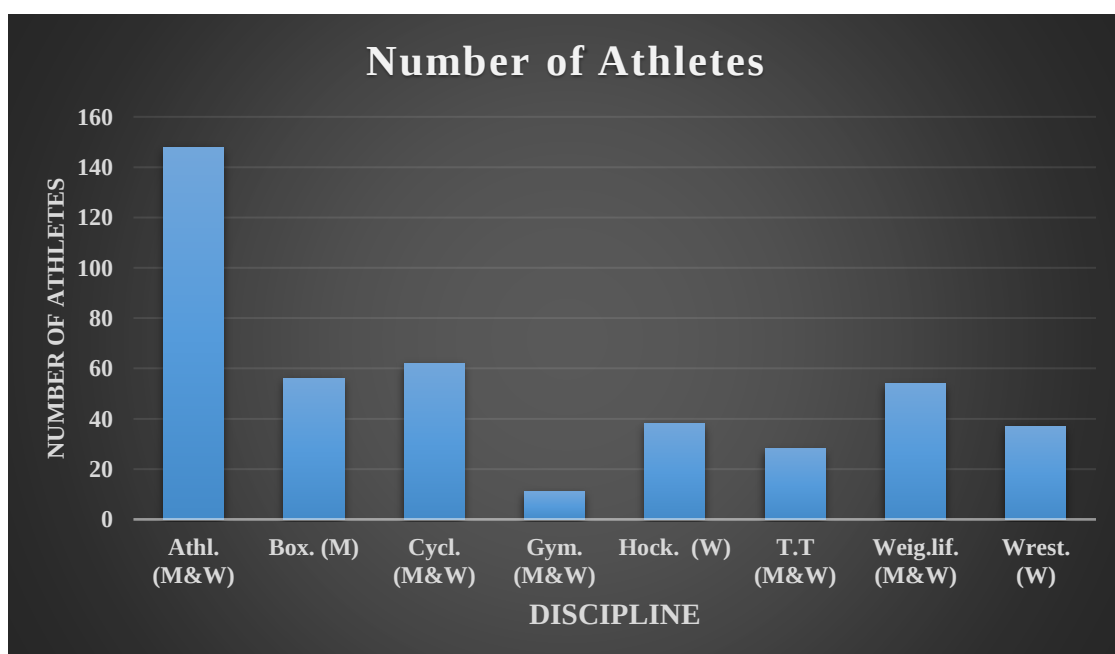


Figure 40: Discipline-wise number of Athletes participated in National Coaching Camps

Table-26 and figure-40 showed that Discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the

Commonwealth Games and Asian Games, 2010 were four hundred thirty-four (434). It is also seen that the maximum number of athletes participated in National Coaching Camps held in the discipline of Athletics were one hundred forty-eight (148). Discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the Commonwealth Games and Asian Games, 2010 were - Athletics (M&W)-148, Boxing (Men)-56, Cycling (M&W) -62, Gymnastics (M&W)-11, Hockey (W)-38, Table Tennis (M&W) -28, Weightlifting (M&W) -54 and Wrestling (W)-37.

4.2.1.14 Discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the London Olympic 2012

The necessary information about the National Coaching Camps held for the preparation for the London Olympics 2012 at NSNIS have only been mentioned here. For the lack of detailed information, the records of the National Coaching Camps organized for the preparation of other Olympic Games cannot be included in this research paper.

Table-27

Discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the London Olympic 2012

Discipline	Number of Days
Athletics (M&W)	512
Boxing (M&W)	700
Shooting (M&W)	39
Gymnastics (Women)	51
Judo (M&W)	127
Table Tennis (M&W)	135
Weightlifting (M&W)	152
Wrestling (Women)	380
Total	2,096

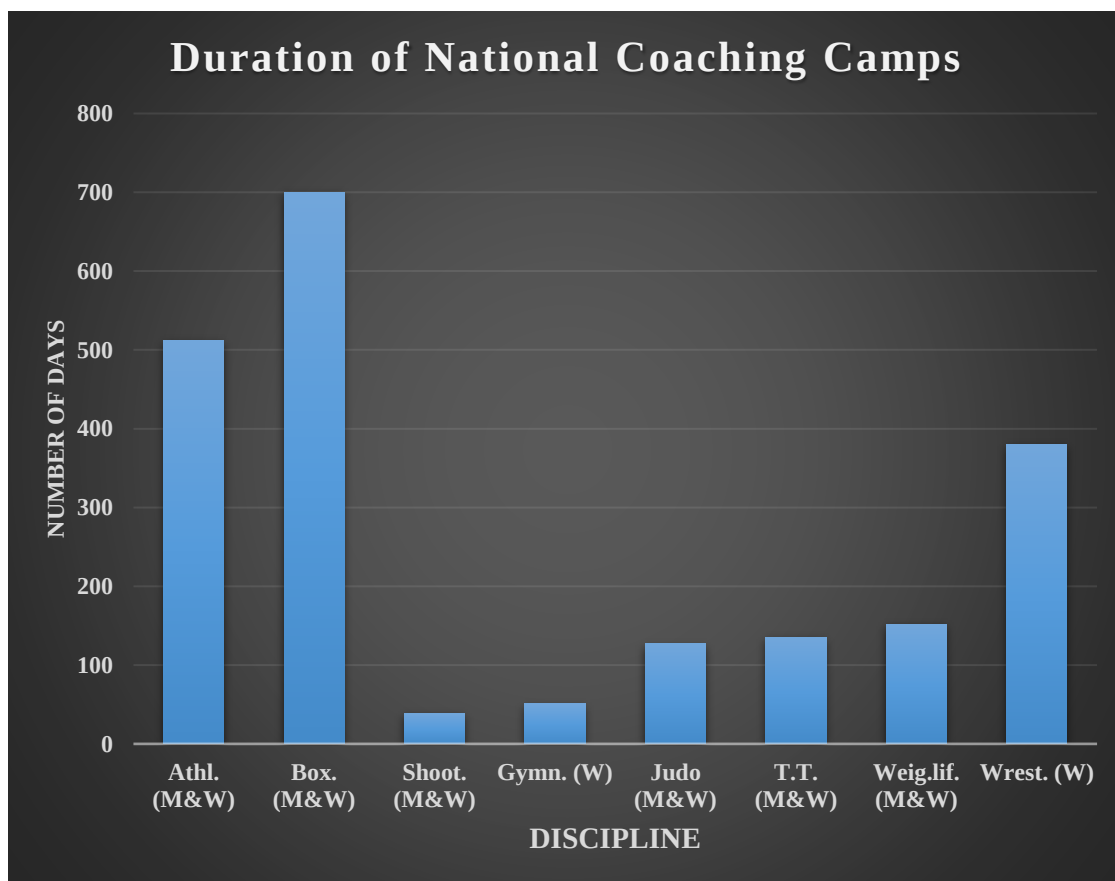


Figure 41: Discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the London Olympic 2012

Table-27 and figure-41 showed that discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the London Olympic 2012 were two thousand ninety-six (2096) days. It is also seen that the maximum duration of National Coaching Camps held in the discipline of Boxing were seven hundred (700) days. Discipline-wise total duration of National Coaching Camps held at the Institute in preparation for the London Olympic 2012 were -Athletics (M&W) -512, Boxing (M&W) -700, Shooting (M&W) -39, Gymnastics (Women)-51, Judo (M&W) -127, Table Tennis (M&W) -135, Weightlifting (M&W) -152 and Wrestling (Women)-380.

4.2.1.15 Discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the London Olympic 2012

Table-28

Discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the London Olympic 2012

Discipline	Number of Athletes
Athletics (M&W)	42
Boxing (M&W)	447
Shooting (M&W)	52
Gymnastics (Women)	01
Judo (M&W)	36
Table Tennis (M&W)	137
Weightlifting (M&W)	39
Wrestling (Women)	146
Total	900

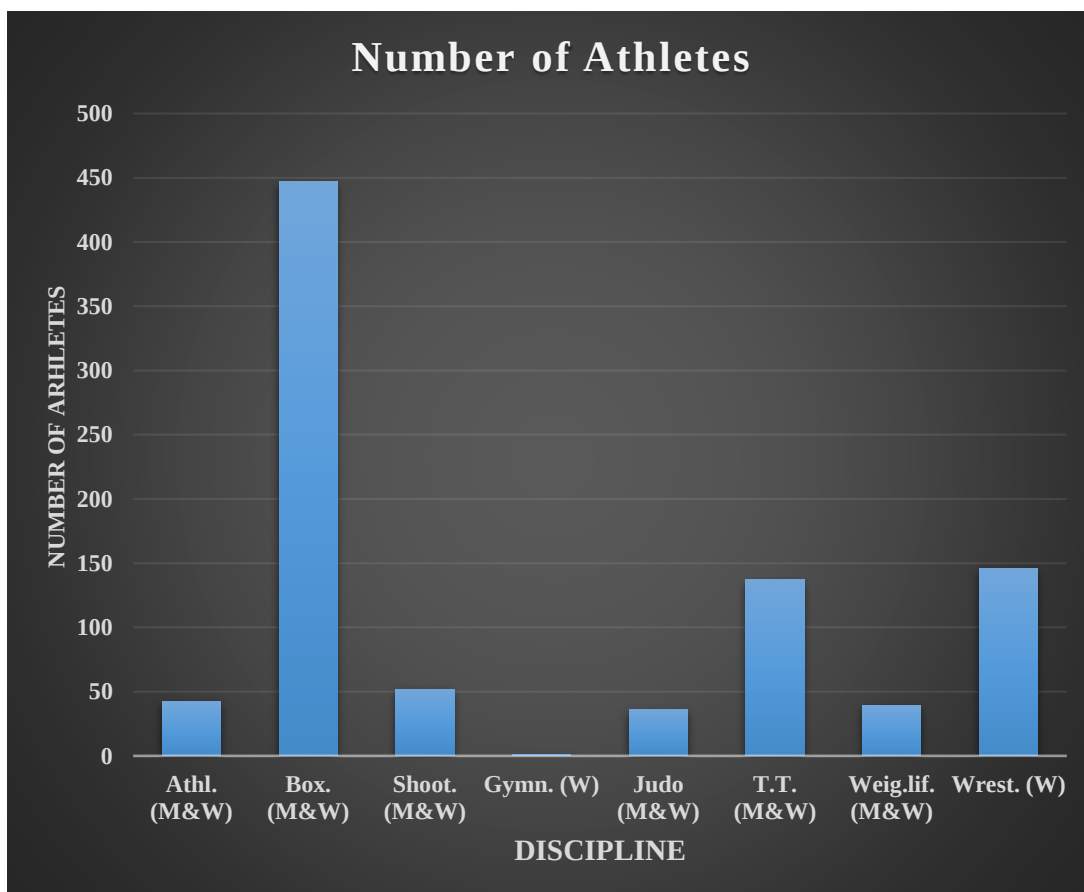


Figure 42: Discipline-wise number of Athletes participated in National Coaching Camps

Table-28 and figure-42 showed that discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the London Olympic 2012 were nine hundred (900). It is also seen that the maximum number of athletes participated in National Coaching Camps held in the discipline of Boxing were four hundred forty-seven (447). Discipline-wise number of athletes participated in National Coaching Camps held at the Institute in preparation for the London Olympic 2012 were Athletics (M&W) -42, Boxing (M&W) -447, Shooting (M&W) -52, Gymnastics (W)-01, Judo (M&W) -36, Table Tennis (M&W) -137, Weightlifting (M&W) -39 and Wrestling (W)-146.

4.2.2 Indian Medal Tally in Beijing Olympics 2008, Commonwealth Games 2010 and Asian Games 2010

The necessary information regarding the contribution of NSNIS to India's effort to achieve medals in the Beijing Olympics 2008, Commonwealth Games 2010 and in the Asian Games 2010 have only been furnished here. Due to the lack of sufficient data the information about the other Olympic Games, the Commonwealth Games and the Asian Games cannot be mentioned here.

4.2.2.1 Beijing Olympics 2008

India competed at the 2008 Summer Olympics in Beijing, China from 8th to 24th August 2008. A total of 56 athletes, competed in 12 sports events. On 11 August 2008, Abhinav Bindra won the Gold Medal in the men's 10m air rifle. It was a huge achievement for India at the Olympic Games Shooting event. He won the first ever individual Gold Medal for India. The previous highest individual achievements for India were two Silver Medals won by Norman Pritchard, an Englishman born in India, at the 1900 Paris Olympics and one Silver Medal won by the 2008 flagbearer Rajyavardhan Singh Rathore at 2004 Athens Olympics. Sushil Kumar won the second ever Wrestling Medal for India, the first being the Bronze earned by Khashaba Dadasahed Jadhav in the 1952 Helsinki Olympics. Vijender Singh won a Bronze Medal in the middle weight boxing category, having lost in the semifinals. This was India's first-ever Olympic medal in boxing.

4.2.2.1.1 Beijing Olympics 2008 Indian Medalists

Table-29

Beijing Olympics 2008 Indian Medalists

Medals	Name	Sports	Event
Gold	Abhinav Bindra	Shooting	Men's 10 m air rifle
Bronz	Vijender Singh	Boxing	Middleweight 75 kg
Bronze	Sushil Kumar	Wrestling	Men's freestyle 66 kg

Table-29 showed that in Beijing Olympics 2008 India won Three Medals. Out of Three Medals One Gold and Two Bronze. Gold Medal won by Shooter, Abhinav

Bindra in Men's 10 m air rifle event. Bronze Medal won by Boxer, Vijender Singh in Middleweight 75 kg event. Another Bronze won by Sushil Kumar in Men's freestyle 66 kg event.

4.2.2.1.2 Contribution of NSNIS, Patiala to Indian Medal Tally at Beijing Olympics 2008

Table-30

Contribution of NSNIS, Patiala to Indian Medal Tally at Beijing Olympics 2008

		Gold	Silver	Bronze	Total
Beijing Olympics 2008	Total Medals won by India	1	-	2	3
	Medals won by Sportspersons Trained at NSNIS	-	-	2	2

Table-30 showed out of the total fifty-six (56) members of the Indian contingent that participated in Beijing Olympics, twenty-two (22) members were trained at the Institute in various National Coaching Camps prior to the Olympics. The Boxer, Bronze Medal winner Vijender Singh, the quarter-finalist Akhil Kumar and Jatinder Kumar had been trained at NSNIS, Patiala for a number of years. The SAI Centre of Excellence, Patiala, contributed three members to this contingent. The institute experts had also provided some scientific support to Abhinav Bindra, prior to his golden feat.

4.2.2.2 Commonwealth Games 2010

The Commonwealth Games which are considered to be the second largest International multi-disciplinary sporting event after the Olympic Games are held every four years. The XIX Commonwealth Games was scheduled to be held in Delhi from 3rd to 14th October, 2010. A total of 4352 sportspersons from 71 countries were likely to participate in these Games. India got the distinction of hosting these Games for the first time. Hosting a sporting event of a scale such as the Commonwealth Games is a matter of International prestige for the Country. The legacy of the Games will be to boost the sports culture as part of the daily life of every Indian, particularly the youth.

India won 101 medals in total, including 38 Gold medals, enabling it to finish the Games at Second Position behind Australia. For the first time in the history of the Games India won over 100 medals in total. It was after a gap of 52 years that India won a Gold in Athletics when Krishna Poonia won Gold in Women's discus throw. For the first time in the history of the Games, India won a medal in Gymnastics, where Ashish Kumar won a Silver and a Bronze. In this Games Geeta Phogat won India's first ever Gold Medal in women's Wrestling.

4.2.2.2.1 India at the 2010 Commonwealth Games Medal Table

Table-31

India at the 2010 Commonwealth Games Medal Table

Sports	Gold	Silver	Bronze	Total
Archery	03	01	04	08
Athletics	02	03	07	12
Badminton	02	01	01	04
Boxing	03	0	04	07
Gymnastics	0	01	01	02
Hockey	0	01	0	01
Shooting	14	11	05	30
Swimming	0	0	01	01
Table Tennis	01	01	03	05
Tennis	01	01	02	04
Weightlifting	02	02	04	08
Wrestling	10	05	04	19
Total	38	27	36	101

Table-31 showed that in Commonwealth Games 2010 India won hundred one (101) Medals in total. Out of 101 Medals there were 38 Gold, 27 Silver and 36 Bronze.

In Shooting discipline India won 30 Medals which was highest. Out of 30 medals there were 14 Gold, 11 Silver and 05 Bronze respectively.

4.2.2.2 Contribution of NSNIS, Patiala to Indian Medal Tally at Commonwealth Games-2010

Table- 32

Contribution of NSNIS, Patiala to Indian Medal Tally at Commonwealth Games-2010

		Gold	Silver	Bronze	Total
Commonwealth Games-2010	Total Medals won by India	38	27	36	101
	Medals won by Sportspersons Trained at NSNIS	11	08	19	38

Table-32 showed out of the total hundred-one (101) medals won by India, in 2010 Commonwealth Games at New Delhi, the sportspersons trained at the Institute won thirty-eight (38) medals. Out of the total thirty-eight (38) Gold, twenty-seven (27) Silver and thirty-six (36) Bronze medals won by India, the sportspersons trained at NSNIS, Patiala contributed eleven (11) Gold, eight (08) Silver and nineteen (19) Bronze Medals.

4.2.2.3 Asian Games 2010

The 2010 Asian Games, also known as the XVI Asian Games was a multi-sport event celebrated in Guangzhou, China from 12th to 27th November 2010. A total of 9704 athletes from 45 countries participated in these Games. The number of participants of Indian Contingent were 625 in 36 sports events. India finished the games with 65 medals including 14 golds which is India's Second best performance ever since the inception of Asian Games in 1951.

4.2.2.3.1 India at the 2010 Asian Games Medal Table

Table-33

India at the 2010 Asian Games Medal Table

Sports	Gold	Silver	Bronze	Total
Archery	0	01	02	03
Athletics	05	02	05	12
Boxing	02	03	04	09
Chess	0	0	02	02
Cue Sports	01	01	02	04
Golf	0	01	0	01
Gymnastics	0	0	01	01
Hockey	0	0	01	01
Kabaddi	02	0	0	02
Roller Sports	0	0	02	02
Rowing	01	03	01	05
Sailing	0	01	0	01
Shooting	01	03	04	08
Squash	0	0	03	03
Swimming	0	0	01	01
Tennis	02	01	02	05
Wrestling	0	0	03	03
Wushu	0	01	01	02
Total	14	17	34	65

Table-33 showed that in Asian Games 2010 India won sixty-five (65) Medals in total. Out of 65 Medals there were 14 Gold, 17 Silver and 34 Bronze. In Athletics

discipline India won 12 Medals which was highest. Out of 12 medals there were 05 Gold, 02 Silver and 05 Bronze respectively.

4.2.2.3.2 Contribution of NSNIS, Patiala to Indian Medal Tally at Asian Games-2010

Table-34

Contribution of NSNIS, Patiala to Indian Medal Tally at Asian Games-2010

		Gold	Silver	Bronze	Total
Asian Games-2010	Total Medals won by India	14	17	33	64
	Medals won by Sportspersons Trained at NSNIS	05	03	03	11

Table-34 showed the institute made significant contribution to the Asian Games-2010 Medal Tally. Out of the total sixty-four (64) medals won by India at Guangzhou, China, the sportspersons trained at NSNIS contributed five (5) Gold medals, three (3) Silver medals and three (3) Bronze medals. Boxers made the biggest haul, two (2) Gold, three (3) Silver and two (2) Bronze medals. The athletes trained at NSNIS contributed three Gold and Bronze medals.

4.2.3 Honors for NSNIS, Patiala

Information regarding honors for NSNIS, Patiala have been presented here. All necessary information regarding Padma Bhushan Award, Padma Shri Award, Arjuna Award, Dronacharya Award and Dhyan Chand Award have been furnished here.

4.2.3.1 Padma Bhushan

The Padma Bhushan is the third –highest civilian award in India, preceded by the Bharat Ratna and The Padma Vibhushan. This award instituted on 2nd January 1954. Major Dhyan Chand, Hockey wizard, who was a member of the institute faculty for a number of years, was awarded Padma Bhushan in 1956.

4.2.3.2 Padma Shri Award

Padma Shri is the fourth-highest civilian award in India. It is awarded by the Government of India every year on India's Republic Day. Shri R.L. Anand, Director, NSNIS, was honoured with Padma Shri Award by the President of India, Shri Fakhruddin Ali Ahmed, on the Republic Day in 1976. Ms. Kamaljeet Kooner, Athletic Coach of the Institute was awarded Padma Shri in 1971 for her achievement as an athlete.

4.2.3.3 Arjuna Award

The Arjuna Award is the sports honour of India. It is awarded annually by the Ministry of Youth Affairs and Sports. Dr. Ms. Kalpana Deb Nath was honoured with this award in 2000 for her achievements as a gymnast. Shri Akhtar Ali, Tennis Coach, was honoured with Arjuna Award in 2000 for his achievements as a player.

4.2.3.4 Dronacharya Award

The following NSNIS teaching faculty members received this Award: Shri B.B. Bhagwat, Chief Wrestling Coach and Shri OP Bhardwaj, Chief Boxing Coach, received Dronacharya Award, in its inaugural year 1985. Table-35 represents the list of Dronacharya Award of NSNIS Patiala.

Table-35

List of Dronacharya Award

Name	Discipline	Year
Shri Joginder Singh Saini	Athletic Coach	1997
Shri G.S.Sandhu	Boxing Coach	1998
Shri Gurdial Singh Bhangu	Hockey Coach	2000
Ms. Hansa Sharma	Weightlifting Coach	2000
Shri E. Prasad Rao	Kabaddi Coach	2002
Ms. Sunita Sharma	Cricket Coach	2004
Shri Baldev Singh	Hockey Coach	2009
Dr. Ajay Kumar Bansal	Hockey Coach	2010
Shri Bhiwani Mukherjee	Table Tennis Coach	2012
Shri Harbans Singh	Athletic Coach	2015

4.2.3.5 Dhyan Chand Award

The Dhyan Chand Award is the lifetime achievement sporting honour of India. It is awarded annually by the Ministry of Youth Affairs. The award recipients are selected by a committee constituted by the Ministry and honoured for their contribution to sports both during their active sporting career and after retirement. Shri Jagraj Singh Mann, Athletic Coach of the Institute was awarded Dhyan Chand Award in 2012 for his achievement in sports.

4.2.3.6 Ashoka Chakra to NSNIS Alumnus

Major Laishram Jyotin Singh, an alumnus of the Institute, was awarded the highest peace-time Gallantry Award, 'Ashok Chakra', posthumously, on the Republic Day in January, 2011 for making the supreme sacrifice, in the face of a terrorist attack, while serving the Country in Afghanistan. As a mark of respect, his bust has been installed in the Faculty of Sports Sciences of the Institute.

4.2.3.7 Boxing Coach Shri G. S. Sandhu becomes member of Association International de Boxe Amateur (AIBA) Coaches Commission

Shri G. S. Sandhu, Chief National Boxing Coach, an alumnus of the Institute and a former member of the Institute Faculty, has been taken as a member of AIBA, the International Boxing Association Coaches Commission. He is the first Indian in AIBA panel of coaches.

4.3 Scientific Research of NSNIS, Patiala

4.3.1 Sports Science Wing Function of NSNIS, Patiala

It was started in 1961, with a Health Centre where medical fitness of the students and sportspersons were tested and clinical care was provided to staff and students in the campus. During 1978-79, the Institute had set up a Sports Medicine Research Wing with a Clinical Section, which included Physiotherapy, Rehabilitation and Physiology section. Set up in 1983, the faculty of Sports Sciences of the Institute has the following departments, equipped with proper laboratories:

- i) Sports Physiology;
- ii) Sports Psychology;
- iii) Sports Biomechanics;

- iv) Sports Anthropometry;
- v) Sports Medicine;
- vi) Sports Biochemistry and
- vii) General Theory & Methods of Training.

The Faculty is recognized as a scientific research institution by the Department of Science and Technology. It was also recognized by the Medical Council of India (MCI) for conducting P.G. Diploma in Sports Medicine.

Prof. Dr. G. Marhold, was appointed as the Scientific Advisor during 1982-83. He underlined the following points for the development of the Faculty in his report:

1. The NSNIS as a sports scientific institution shall utilize and develop sports sciences by

- a) Carrying out teaching work with a higher scientific level in all concerned teaching areas.

- b) Formulating and carrying out research work in all scientific disciplines.

- c) By guiding the training process, its planning, execution, documentation and evaluation with a higher scientific level.

2. Subject of research and scientific work shall include the documentation, planning and analysis of training processes, especially for the purpose of national training camps, which are to be fixed annually in consultation with the National Sports Federations.

- i) Only when the sports science in India was developed to a certain level, it will be possible and purposeful to establish a sports scientific institute with the sole purpose of realizing the research work.

- ii) The contribution of Netaji Subhas National Institute of Sports, for the development of sports and sports sciences in India is to increase.

- a) By carrying out teaching work with a higher scientific level in all concerned teaching areas.

- b) By formulating and carrying out sports science research work in all scientific disciplines in combination with teaching work.

Dr. Marhold rejoined the Institute in 1985; and on his recommendations, the faculties of the Institute were bifurcated as the Faculty- I (Applied Faculty) and Faculty- II (Basic discipline of sports Sciences). The Faculty- I was divided into four departments:

- Department- I / 1 (Individual Sports) – Athletics, Swimming, Gymnastics and Cycling;
- Department- I / 2 (Team Games) – Hockey, Football, Handball, Cricket, Basketball and Volleyball;
- Department- I / 3 (Weight Category Sports) – Boxing, Judo, Weightlifting and Wrestling;
- Department –I/4 (Racket Sports)–Badminton, Table Tennis, Tennis and Squash.

The Faculty – II was divided into three departments:

- Department – II /1 – Sports Medicine, Sports Physiology, Sports Biomechanics, Sports Anthropometry and Sports Orthopedics;
- Department- II / 2- General Theory and Method of Training, Sports Psychology, Sports Pedagogies and Sports Sociology;
- Department- II/ 3 – Applied Mathematic including Statistics, Mechanical and Electronic Workshops.

4.3.2 Function of Sports Scientists of NSNIS, Patiala

Normally the Scientists of the faculty carried out the following tasks:

- Teaching work of various academic programme of the Institute;
- Scientific support to the National Coaching Camps and sports promotion schemes of SAI, through the medical examination and various types of physiological, psychological, and bio-chemical tests of the elite sportspersons to help the coaches design their training schedules;
- Advice on the nutritional requirements of sportspersons of various sports disciplines;
- Participation in various seminars and conferences from time to time;
- Organization of periodic Skill Development Programme in sports sciences;
- Two-year PG Diploma programme in Sports Medicine and
- Research-work.

In addition to the teaching work of various academic programmes, the Faculty members also delivered special lectures in various International course like International Association of Athletics Federation (IAAF) and International Olympic Committee (IOC) Solidarity Course, which were held at NSNIS from time to time, in collaboration with foreign experts. The Faculty of Sports Science of the Institute also organized various conferences, seminars and workshops at NSNIS from time to time for the benefit of the coaches, scientists and elite athletes.

In the year 2014, the Institute launched a Skill Development Programme for skill training of coaches, scientists, supporting staffs and general public. Under this programme short duration training course in sports and sports science topics are being organized by the faculty in order to increase the employment potential of our professionals (Dhaliwal & Roy, Netaji Subhas National Institute of Sports in Perspective, 2017).

4.4. P.G. Diploma in Sports Medicine

In view of the increasing demand for sports medicine doctors, the Institute launched the One-year Postgraduate program in Sports Medicine in the academic session 1986-87 in collaboration with Indian Association of Sports Medicine (IASM) and International Federation of Sports Medicine (FIMS). This education programme was affiliated to Punjabi University, Patiala. During 1993-94 academic session this education program was christened as P.G. Diploma in Sports Medicine and the duration of this program was increased to two years. This programme was meant for MBBS doctors and has been recognized by the Medical Council of India (MCI) and is at present affiliated to Baba Farid University of Health Sciences, Faridkot.

4.5 Publication of Sports Literature

Being an academic institution the publication of sports literature is an important function of the Institute. The beginning was made in 1961 with the appointment of a Publication and Public Relation Officer; publication of the bi-monthly NIS Newsletter. By 1970 this section was bringing out the magazines entitled 'NIS Journal', a quarterly containing articles on sports and sports sciences; 'Athletic Asia', bi-annual publication of Asian Track & Field Research Centre (ATFRC), which had its head office at NSNIS

; ‘Asia International’, the annual publication, the statistical organ for use of Athletics officials ; ‘Sports Medicine Journal’, a bi-annual publication of Indian Association of Sports Medicine, based at NSNIS ; and the quarterly NIS Newsletter.

The name of NIS journal was changed to SNIPES journal in 1978 and ‘Sports Medicine’ Journal was merged in this quarterly journal. It was further renamed as ‘Journal of Sports and Sports Sciences’ in 2000; and it is now being published quarterly under the registered title ‘Sports Research’.

In 1983 the institute introduced a bi-monthly journal entitled ‘Statistical Bulletin’, which was later discontinued. The Institute continued to publish the quarterly NIS Newsletter which was circulated free to the subscribers of the scientific journal. It was discontinued in the year 2013 when the SAI Head office decided to publish a combined SAI Newsletter ‘Utkarsh’.

In 1983 the Publication Section was being supervised by an Assistant Director. Considering the importance of the section, a post of Deputy Director (Publication) was sanctioned which was never filled. At this stage the Section had the strength of one Assistant Director (Publication), one Assistant Editor, two Publication Assistants, two clerks and one Personal Assistant. In 2014-15 academic session this publication section had only part-time Assistant Director and two clerks.

In addition to its regular publications, this section also published publicity and public relation literature like Brochure, Folders, Prospectus of the institute syllabus of various education programme and Annual Report of the Institute. The section also handled press releases and organized press conferences at required.

The Section also designed, fabricated and organized exhibitions of charts and photographs etc. on the activities of the Institute, during important event/functions, at NSNIS Patiala, Bangalore, Kolkata, and Guwahati in collaboration with the Audio-Visual Section of the Institute (Dhaliwal & Roy, Netaji Subhas National Institute of Sports in Perspective, 2017).

4.5.1 List of publication of NSNIS Patiala

Table-36 represents that data regarding the most important contribution of the section are the publication of the following books / booklets on Sports and Sports sciences.

Table- 36

SL.NO.	TITLE	AUTHOR	YEAR
1	Lawn Tennis	Dr. L. Govindaraju	1971
2	Kabaddi	C. V. Rao	1971
3	Track and Field: Fundamental Techniques	Ken O. Bosen	1972
4	Pole Vaulters Manual	Ken. O. Bosen	1972
5	Cricket	S.B. Aibara	1973
6	Badminton	R.K. Seth	1974
7	Basketball	S.Srivatsan	1974
8	Guide to Middle & Long Distance	W.J. Squire	1974
9	Kabaddi (Hindi Edition)	R.K. Seth	1975
10	Playing Field Manual	R.L. Anand	1975
11	Playing Field Manual (2 nd Edition)	R.L. Anand	1977
12	Training Systematics in Throwing	Vidyasagar	1979
13	Outline of Sports Psychology (Translation)	Gurbaksh Singh	1980
14	Throws : Study Material	Ken O. Bosen	1984
15	Training & teaching Throws	Ken O. Bosen	1985
16	Sports Training : General Theory & Methods	Hardyal Singh	1985
17	Improve Football Techniques	Biru Mal and T.S. Kaka	1986
18	NIS Silver Jubilee Commemorative Volume	NIS Publication Section	1987
19	Who's Who of Indian Gold Medalists of International Events	NIS Statistical Section	1988
20	SNIPES Journal Index	Luis D. Silva	1989
21	Strength Training	Dr. C.M. Muthiah	1990
22	Volleyball : A Modern Approach	Dr. Hubert Dhanaraj	1991
23	National Games Records	NIS Statistical Section	1991
24-33	Training Manuals on Cycling, Table Tennis, Mind Training, Talent Selection & Initial Training, Badminton, Wrestling, Weightlifting, Judo and Football	By various senior coaches of NSNIS	From 1990 to 2010
34	Hockey - A study on Indian Performance	Dr. M.P. Ganesh	2011
35	Motivation & Sports Performance	Dr. Agyajit Singh	2012
36	Golden Jubilee Commemorative Volume	NIS Publication Section	2012

List of publication of NSNIS Patiala

The book 'Training Systematic in Throwing' by NSNIS Athletics Coach Shri Vidyasagar won a prize in the 10th National Prize Competition for Published Literature on Physical Education and Sports.

NIS Silver Jubilee Commemorative Volume was released by Union Minister for Human Resource Development, Shri P.V. Narsimha Rao, at NSNIS, Patiala, on 21st February, 1987. The comments of some sports personalities on the Silver Jubilee Commemorative Volume of the Institute make interesting reading. International Olympic Committee president, Mr. Juan Antonio Samaranch wrote, 'it is most kind of you to forward the NIS Silver Jubilee Commemorative book. This publication will certainly enrich our library at the Olympic Museum.' The Secretary General of International Amateur Athletic Federation, Mr. J.B. Holt wrote, 'I am writing immediately to thank you most sincerely for the magnificent commemorative publication on the occasion of the Silver Jubilee of the National Institute of Sports, which we are delighted to have as a very welcome addition to our library. Please accept my congratulation on this work, which has made fascinating reading.' The Dean of International Olympic Academy Dr. Otto Szymiczek wrote, 'Please accept my congratulations for excellent edition and also convey that to your collaborators'.

The book 'Improve Football Techniques', by Biru Mal and T.S. Kaka, NIS Football coach, published by the Institute in April, 1986 also won the first prize under the Govt. of India scheme of National Prize Competitions for Physical Education and Sports Literature of Govt. of India.

4.6 THE RESULTS

Analysis of data regarding various aspects of functioning and contribution of National Institute of Sports for improvement of performance sports in India revealed following results.

4.6.1 Results regarding development of trained coaches for the country:

National Institute of Sports conducted five different types of coaches' education programme. These were: (i) Ad-hoc Course in Sports training of six months' duration, (ii) One-year Diploma course in sports coaching, (iii) Two-years M. Sc. course in sports coaching, (iv) Six-weeks certificate course in sports coaching and (v) Refresher course for coaches.

- i) Total number of coaches educated in Ad-hoc course were four hundred thirty-five (435);
- ii) Number of coaches educated in One-year Diploma course were eighteen thousand seventy-five (18075) up to 2015-2016 academic session;
- iii) Number of foreign coaches trained in diploma course in various discipline were five hundred twelve (512);
- iv) Number of coaches educated in Two-years M.Sc. course in sports coaching were two hundred twenty-six (226);
- v) Number of coaches educated in Six-weeks certificate course in sports coaching were eighteen thousand ninety-one (18091) up to 2015-2016 academic session and
- vi) Number of coaches educated in Refresher course for sports coaches were two thousand seven hundred sixty-four (2764) up to 2009 academic session.

4.6.2 Results regarding organizing coaching camps for Training National Athletes:

- i) Total number of coaching camps from 1971 to 1986 were nine hundred ninety-three (993);
- ii) Total number of coaching camps from 2007 to 2016 were four hundred (400);
- iii) In 2010 for Commonwealth and Asian Game preparation long duration coaching camps for three thousand three hundred forty-four (3348) days were organized in which the number of athletes were four hundred thirty-four (434) and
- iv) In 2012 for London Olympics preparation a long term coaching camp for two thousand ninety-six (2096) days was organized in which the number of participating athletes were nine hundred (900);

4.6.3 Results regarding development of Sports Scientific Research:

Considering the need of scientific research related to the improvement of national performance in sports, the institution took initiative for development of research laboratories for different disciplines. This included a) Sports Physiology research lab, b) Sports Psychology research lab, c) Sports Biomechanics research lab, d) Sports Anthropometry research lab, e) Sports Medicine research lab, f) Sports Biochemistry research lab and g) General Theory & Methods of Training research lab. These laboratories were made functional using experts to provide sports scientific backup for coaching of International athletes.

4.6.4 Diploma in Sports Medicine:

To organize Diploma in sports medicine course has been a unique contribution of National Institute of Sports for developing experts in sports medicine in our country. This course was started in 1986-1987 academic session.

4.6.5 Publication of Sports Literature:

National Institute of Sports took initiative to publish literature regarding different games and sports. There have been altogether 36 publications including literature on sporting events, reports, training manuals and commemorative volumes.

4.7 DISCUSSION ON RESULTS

Results of the present study clearly indicates that National Institute of Sports had significant contribution toward improvement of performance sports in India as well as surrounding countries. It contributed directly for this purpose by coaching national athletes for International Competitions. It also had significant contribution in preparing trained coaches for different games and sports and thus improving the process of identification and nurturing of sporting talents at different parts of the country. This had a great impact on improvement of the standard of performance sport of the country. It also developed standard facilities for different sports and games and thus helped in improving the standard of performance sports of the country. Results also indicated that National Institute of Sports had contribution for development of sports science including training of sports scientists and sport scientific research to create positive influence on preparation of national athletes for International Competitions.

4.8 TESTING OF HYPOTHESIS

Present study was based on the research hypothesis that there would be positive contribution of NSNIS towards improvement of performance sports of India during last five decades of its functioning.

The results of the study have confirmed the contribution of Netaji Subhas National Institute of Sports for improvement of performance sports in the country directly and indirectly. So, on the basis of results of the study the formulated hypothesis was accepted.

CHAPTER-V
SUMMARY, CONCLUSION
AND RECOMMENDATION

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATION

In this chapter the summary of all the previous chapters have been included. In addition to that the conclusions drawn on the basis of results obtained and the recommendations for future studies and practical application have been included in this chapter.

5.1 THE SUMMARY

As an independent nation India emphasized on development of national performance in the sphere of games and sports. National Institute of Sports (NIS), Patiala was established by the Government of India on May 07, 1961 with the objective of developing sports in the country on the scientific lines and to train the coaches in the different sports disciplines. The mission was to identify young talented boys and girls at the right age and to impart scientific and systematic training to them so as to make them capable of attaining sports performance comparable to National and International standards. The vision of such endeavor was to create sports consciousness as well as awareness among the citizens of India and to train, develop young boys and girls as they can attain the optimum level of performance in sports so that they can bring honor and prestige to the country. The ordinance of National Institute of Sports identified the following functions of the institute:

- i) To produce highly qualified coaches and to raise the technical competence of the existing coaches;
- ii) To serve as a center where greatest possible information about the games and sports is concentrated;
- iii) To extend its infrastructural facilities both material and human resource for selected sportspersons and teams before National and International Competitions;
- iv) To provide Physical Education Colleges in the country with necessary technical expertise in the field of games and sports;
- v) To impart proper coaching to all National teams before their participation in International Competitions and
- vi) To publish books, periodicals, bulletins, journals and up to date information on games and sports.

The function of NSNIS was started in 1961 with its formulated mission, vision and function. The institution has been functioning for more than fifty years. So, it is the time to evaluate the total process with its outcomes to evaluate its success or failure, problems and prospects. Present study was planned in light of this need. With this idea the present study was taken up as a research project to analyze the contribution of Netaji Subhas National Institute of Sports (NSNIS) towards improvement of performance sports in India.

Present study was a case study. For obtaining necessary information primary and secondary sources were used. For collecting information visitation, interview and questionnaire were used. The Contribution of NSNIS in performance sports in India was studied for its following functions:

- i) Preparation of Coaches;
- ii) Training of National Athletes for International Competitions;
- iii) Sports Scientific Research;
- iv) Publication of Sports Literature;

5.2 CONCLUSION OF THE STUDY

Within the limitations of the study the following conclusions were drawn on the basis of results obtained in the present investigation:

- i) Since its beginning the National Institute of Sports of India has produced a good number of scientifically trained coaches for different games and sports for identifying and nurturing sports talents at different parts of the country;
- ii) In addition to develop trained coaches for the country, the institute also has helped neighboring countries in this aspect;
- iii) The National Institute of Sports has organized various training and coaching camps very successfully for future athletes and selected National teams for International Competitions and thus helped to improve the standard of performance sports of the country;
- iv) The institute has done pioneering work to initiate and develop sports scientific research for both basic and applied purposes;

- v) The Institute has also taken a particularly important role to publish sports scientific literature by the experts. It also has published a renowned sports scientific journal on a regular basis and
- vi) The institute has also organized academic courses to develop sports scientific personnel for the country. Master course in some sports disciplines and Diploma in Sports Medicine course were included in this category.

5.3 RECOMMENDATION OF THE STUDY

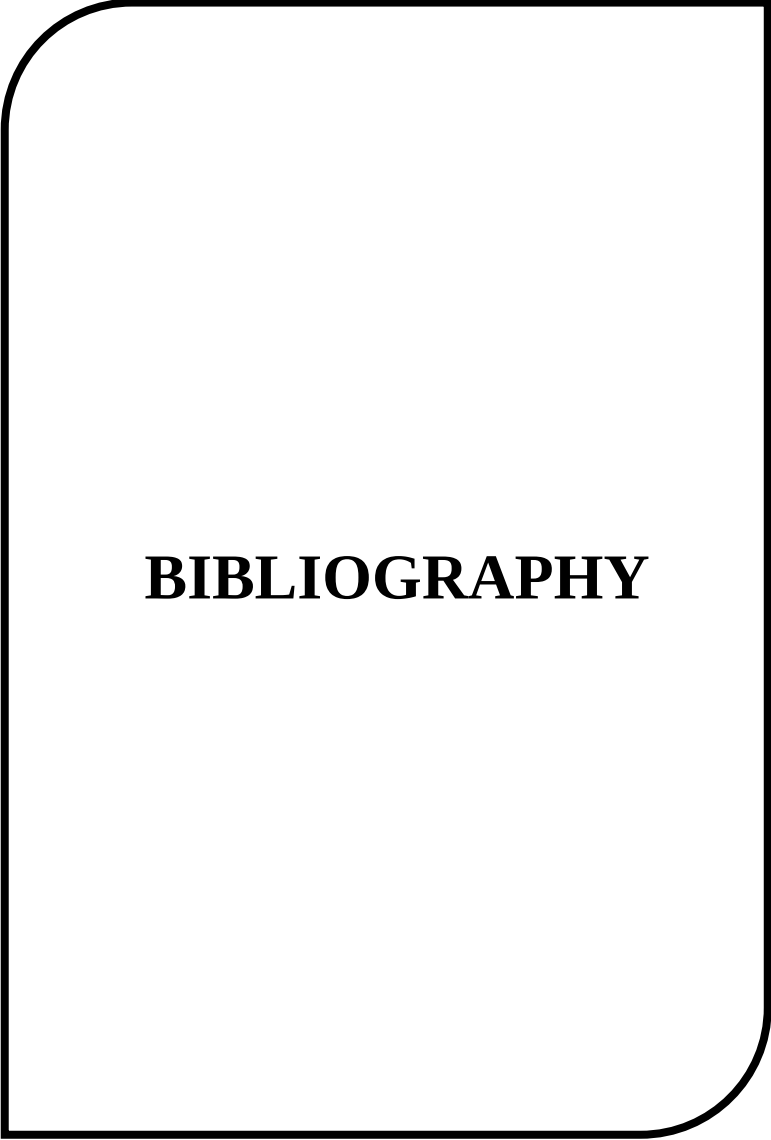
On the basis of results obtained and conclusion drawn, the following recommendations were made for future studies and practical application.

5.3.1 Recommendation for Future Studies:

- i) Similar studies can be planned to analyze the contribution and state of functioning of other sub-centers of NSNIS;
- ii) Case Study of similar nature can be planned to analyze the state of functioning of sports department of individual universities;
- iii) Future studies may be planned to analyze the state of functioning of different administrative bodies controlling performance sports in the country (National Sports Council, Olympic Association etc.) and
- iv) Future studies may be planned to analyze the contribution of different Non-Government Organizations, Clubs, Sports Academy in performance sports of the country.

5.3.2 Recommendation for Future Application:

- i) NSNIS may be upgraded to higher level of institute so that the talented sports persons of the country can be nurtured for more years and
- ii) Adequate measures may be taken to improve the state of functioning of the institute up to the satisfaction of coaches, sports scientists and athletes.



BIBLIOGRAPHY

BIBLIOGRAPHY

BOOK

- Barrow, H. M. (1979). *A practical approach to measurement in physical education* (3rd ed.). Philadelphia: Lea and Febiger.
- Dhaliwal, S. S. (1987, February 5). Commemorative Volume (1961-1986) Silver Jubilee. *Commemorative Volume (1961-1986) Silver Jubilee*. Patiala, Panjab, India: Netaji Subhas National Institute of Sports Patiala.
- Dhaliwal, S. S. (2012, January 6). Commemorative Volume (1961-2011) Golden Jubilee. *Commemorative Volume (1961-2011) Golden Jubilee*. Patiala, Panjab, India: Netaji Subhas National Institute of Sports Patiala.
- Dhaliwal, S. S., & Roy, S. S. (2017). *Netaji Subhas National Institute of Sports in Perspective* (1st ed.). New Delhi, India: Khel Sahiyya Kendra.
- Gans, M. (1974). *Sequential steps in planning facilities for health, physical education, recreation, and athletics*. Eugene, Or.: University of Oregon, College of Health, Physical Education and Recreation. Retrieved June 10, 2018
- Garrett, H. E. (2007). *Statistics in Psychology and Education* (6th ed.). New Delhi, India: Paragon International Publishers.
- Horine, L., & Stotlar, D. (2013). *Administration of physical education and sport programs* (5th ed.). Long Grove: Waveland Press. Retrieved June 20, 2018, from <https://books.google.co.in/>
- Hylton, K., Bramhan, P., Jackson, D., & Nesti, M. (2001). *Sports Development : Policy, Process and Practice* (1st ed.). London: Routledge. Retrieved July 10, 2018, from <https://books.google.co.in/>
- Reddy, P. A. (2005). *Sports promotion in India* (1st ed.). New Delhi: Discovery Pub. House. Retrieved September 28, 2017
- Rose, J., Thomson, C., & Hsu, S.-H. (2013). *Global perspectives on physical education and after-school sport programs*. Lanham: University Press of America.
- Shilbury, D., Phillips, P., Karg, A., & Rowe, K. (2020). *Sports Management in Australia : An Organisational Overview* (5th ed.). New York: Routledge. Retrieved June 10, 2020, from

<https://books.google.co.in/books?id=gSfxDwAAQBAJ&printsec=frontcover#v=onepage&q&f=false>

Verma, J. (2012). *Statistical methods for sports and physical education*. New Delhi, India: Tata McGraw Hill Education Private Ltd.

JOURNAL

Akhtar, M. B., Murtaz, S. T., & Imran, M. (2012). Evaluation of Selection Criteria of Sports Persons in Eastern Region of SAI, India. *European Journal of Business and Management*, 4(6), 63-66. Retrieved September 28, 2017

Alter, J. (2007). Physical education, sport and the intersection and articulation of 'modernities': The Hanuman Vyayam Prasarak Mandal. *The International Journal of the History of Sport*, 24(09), 1156-1171. doi:10.1080/09523360701448299

Bandyopadhyay, K. (2005). Sports History in India: Prospects And Problems. *The International Journal of the History of Sport*, 22(4), 708-721. doi:10.1080/09523360500123143

Basu, S. (2004). Bengali girls in sport: A socio- economic study of Kabadi. *The International Journal of the History of Sport*, 21(3-4), 467-477. doi:10.1080/09523360409510551

Chakrabarty, D. (2004). Introduction: The fall and rise of Indian sports history. *The International Journal of the History of Sport*, 21(2-3), 337-343. doi:10.1080/09523360409510543

Chander, S. (2019). Haryana sports policy at the grass root level for goal orientation: A Critical Study. *RESEARCH REVIEW International Journal of Multidisciplinary*, 4(5), 1546-1547. Retrieved January 10, 2020, from https://rrjournals.com/wp-content/uploads/2019/07/1546-1547_RRIJM190405333.pdf

Chelladurai, P., Shanmuganathan, D., Jothikaran, J., & Negeswaran, A. S. (2002). Sport in Modern India: Policies, Practices and Problems. *The International Journal of the History of Sport*, 19(2-3), 366-383. doi:10.1080/714001754

De Bosscher, V., De Knop, P., & Van Bottenburg, M. (2006). A Conceptual Framework for Analysing Sports Policy Factors Leading to International Sporting Success.

European Sport Management Quarterly, 6(2), 185-215.
doi:10.1080/16184740600955087

- Ghosh, A., Mondal, P., & Das, S. S. (2013). Development of Sports and Sports Facilities in India. *International Journal of Research Pedagogy and Tchonology in Education and Movement Science*, 1(4), 11-23. Retrieved January 10, 2017
- Gormley, H., & van Nieuwerburgh, C. (2014). Developing coaching cultures: a review of the literature. *Coaching: An International Journal of Theory, Research and Practice*, 7(2), 90-101. doi:10.1080/17521882.2014.915863
- Green, M., & Collins, S. (2008). Policy, Politics and Path Dependency: Sport Development in Australia and Finland. *Sport Management Review*, 11(3), 225-251. doi:10.1016/s1441-3523(08)70111-6
- Green, M., & Oakley, B. (2001). Elite sport development systems and playing to win: uniformity and diversity in international approaches. *Leisure Studies*, 20(4), 247-267. doi:10.1080/02614360110103598
- Gupta, V. (2014). Indian Scenario for Promotion of Physical Education. *International Journal in IT & Engineering*, 2(11), 63-72. Retrieved September 28, 2017
- Jefferies, S. (1984). Sport and Education: Theory and Practice in the USSR. *Quest*, 36(2), 164-176. doi:10.1080/00336297.1984.10483811
- Kumar, M., & Kaur, A. (2019). Curriculum and Practicum Status of Physical Education and Sports in Different Colleges of Punjab. *International Journal of Physical Education, Sports and Health*, 6(3), 47-79. Retrieved January 15, 2020
- Lim, B.-J., Rho, H.-D., Kim, T.-J., Chung, U.-K., Kang, S., & Park, J.-K. (1994). Priorities of Financial Investments in Mass Sport in Korea. *Journal of Sport Management*, 8(1), 57-62. doi:10.1123/jsm.8.1.57
- Loveless, J. C. (1953). Duties of the State Directors of Health and Physical Education. *Research Quarterly. American Association for Health, Physical Education and Recreation*, 24(2), 188-193. doi:10.1080/10671188.1953.10624910
- McLeod, J., Shilbury, D., & Zeimers, G. (2020). An Institutional Framework for Governance Convergence in Sport: The Case of India. *Journal of Sport Management*, 1-14. doi:10.1123/jsm.2020-0035

- Mili, A. (2016). Status of Physical Education and Sports Development in North Eastern Region: A Critical Study. *International Education & Research Journal*, 2(12), 137-140. Retrieved June 15, 2018
- Mwisukha, A., Niororal, W.W.S., & Vincent, O. (2003). Contribution of Sports towards national development in Kenya. *East African Journal of Physical Education*, 73-81. Retrieved June 10, 2016, from <https://ir-library.ku.ac.ke/>
- Nalapat, A., & Parker, A. (2005). Sport, Celebrity and Popular Culture: Sachin Tendulkar, Cricket and Indian Nationalisms. *International Review for the Sociology of Sport*, 40(4), 433-446. doi:10.1177/1012690205065750
- Nandakumar, T., & Sandhu, J. S. (2014). Factors Influencing International Sporting Success- An Analysis of Indian Sports System. *International Journal of Sport Management, Recreation & Tourism*, 15, 13-31. doi:10.5199/ijsmart-1791-874x-15b
- Saini, A. (2019). Role of Physical Education in Society and National Building in 21st Century. *International Journal of Yogic, Human Movement and Sports Sciences*, 4(2), 26-30. Retrieved January 10, 2020
- Singh, D., Singh, S., & Chawla, C. (2013). A Study on Impact of National Coaching Scheme of Sports Authority of India on Sports Promotion in Uttar Pradesh. *Arts and Education*, 2(12), 5-13. Retrieved June 15, 2018, from <http://www.abhinavjournal.com>
- Thibault, L., & Babiak, K. (2005). Organizational Changes in Canada's Sport System: Toward an Athlete-Centred Approach¹. *European Sport Management Quarterly*, 5(2), 105-132. doi:10.1080/16184740500188623
- V, M. (2018). Sports Authority of India- Leading the Sports Culture towards Youth Progression new Challenges. *Asian Journal of Development Matters*, 12(2), 190-194. Retrieved January 10, 2020

THESIS / REPORT

- Akhtar, B., & Ali, J. (2008). *A Critical Evaluation of the Organizational Structure, Administrative frame-work and facilities of Sports Authority of India (Eastern Rdgion)*. Aligarh: Aligarh Muslim University. Retrieved September 28, 2017

- Arzoo, S., & Banerjee(Biswas), K. (2017). *Contribution of Bangladesh Krira Shikkha Protisthan in Performance Sports of Bangladesh*. University of Kalyani, Department of Physical Education. Kalyani: Department of Physical Education.
- Commission, P. (2002). *Impact of National Coaching Scheme of Sports Authority of India: A Study on Sports Promotion in the Eastern Region*. Bhubaneswar: Institute for Development of Backward Regions. Retrieved June 20, 2016, from https://niti.gov.in/planningcommission.gov.in/docs/reports/sereport/ser/stdy_ncsprts.pdf
- Daisy, R., & Singh, B. G. (2002). *Development of physical education and sports in Haryana state*. Patiala: Panjabi University. Retrieved March 20, 2017, from <http://hdl.handle.net/10603/83534>
- Diganta, S., & Niru, H. (2017). *Study of sports policy with special emphasis on sports for all policy in Assam*. Gauhati: Department of Political Science. Retrieved June 10, 2018, from <https://shodhganga.inflibnet.ac.in/handle/10603/218521>
- Doland, J. (1977). *The athletic director in selected institutions of higher education*. Louisiana: Louisiana State University and Agricultural and Mechanical College. Retrieved April 10, 2017, from <https://digitalcommons.lsu.edu>.
- Frisby, W. (1984). *The Organizational Structure and effectiveness of Canadian national sports governing bodies*. Canada: University of Waterloo. Retrieved March 15, 2018, from <https://elibrary.ru>
- M, S. K., & K, J. (2011). *Impact of sports on Indian society with special reference to tamil nadu*. Tamilnadu Physical Education and Sports University, Department of Physical Education. Chennai: Department of Physical Education. Retrieved June 20, 2015, from <https://shodhganga.inflibnet.ac.in/handle/10603/214219>
- Meetei, R. K., & Singh, L. (2007). *Contribution of physical education in the development of games and sports in Manipur 1980- 2006*. Manipur University, Department of Education. Manipur: Department of Education. Retrieved July 20, 2016, from <https://shodhganga.inflibnet.ac.in/handle/10603/98907>
- Prasad, Y., & Sharma, S. (1993). *Study of facilities organization and administration of physical education and sports in Himachal Pradesh universities*. Panjab

University, Department of Physical Education. Patiala: Department of Physical Education. Retrieved July 15, 2017, from <http://hdl.handle.net/10603/81766>

Tancred, W. (1980). *An Assessment of Management Policies and Procedures of Sports Centers in England*. West Virginia: West Virginia University. Retrieved March 13, 2019, from <https://www.elibrary.ru/item.asp?id=7295319>

WEBSITE

<https://yas.nic.in/>. Retrieve (2015, June 10).

<http://indiansportsfederation.com/>. Retrieve (2016, June 10).

<https://nsnis.org/>. Retrieve (2016, June 10).

<https://www.olympic.ind.in/>. Retrieve (2016, July 20).

www.sportsauthorityofindia.nic.in. Retrieve (2017, July 20)

APPENDICES

APPENDIX-I

QUESTIONNAIRE FOR NETAJI SUBHAS NATIONAL INSTITUTE OF SPORTS, PATIALA

NSNIS, Patiala, is the premier Institute of India in the field of sports. For better functioning and effective implementation of the programs your opinion is very important for this research work. The information received will be used exclusively for the purpose of research and no information will be disclosed or shared for any other purpose. Identity of the person providing information will not be disclosed in anyway.
- Researcher.

Name of the respondent:

Mob. No.:

Designation:

Email ID:

INFORMATION REGARDING HISTORICAL DEVELOPMENT OF NSNIS:

Q. Which Commission / Committee /plan were recommended for established of this institution

Q. Have any written or published documents about historical development of NSNIS, Patiala?

Q. Described the organizational set-up of NSNIS, Patiala?

INFORMATION REGARDING INFRASTRUCTURAL FACILITIES:

Q. Which type of infrastructural facilities was developed by NSNIS, Patiala?

Q. Number of teams or individuals performed in international level is being trained in NSNIS, Patiala or Regional Centre where coaches may be foreign or other than NSNIS coaches but facilities of NSNIS have been utilized for the team or individual?

INFORMATION REGARDING COACH EDUCATION:

Q. How many numbers of faculties for coaches' education in NSNIS?

Q. How many coaches' education courses are organized by NSNIS, Patiala?

Q. When started coaches' education programmed by NSNIS, Patiala?

Q. The number of coaches in various discipline produce by NSNIS since 1961 to 2010:

Decades	Diploma in sports coaching	M .Sc. in sports coaching	Certificate of sports coaching	Remarks
1961-1970				
1971-1980				
1981-1990				
1991-2000				
2001-2010				

Q. Number of coaches of specific discipline trained by NSNIS since 1961 to 2010:

Diploma in Sports Coaching

Year-wise

Discipline	1961-1970	1971-1980	1981-1990	1991-2000	2001-2010	Achievement
Athletics						
Basketball						
Boxing						
Cricket						
Cycling						
Fencing						
Football						
Gymnastics						
Handball						
Hockey						
Judo						
Table Tennis						
Volleyball						
Weightlifting						
Wrestling						
Wushu						

Discipline	1961-1970	1971-1980	1981-1990	1991-2000	2001-2010	Achievement
Badminton						
Kabaddi						
Kho-kho						
Softball						
Swimming						
Taekwondo						
Tennis						
Archery						
Rowing						
Canoeing						
Kayaking						

M.Sc. in Sports Coaching

Year Wise

Discipline	1961-1970	1971-1980	1981-1990	1991-2000	2001-2010	Achievement
Athletics						
Basketball						
Boxing						
Cricket						
Cycling						
Fencing						
Football						
Gymnastics						
Handball						
Hockey						
Judo						
Table Tennis						
Volleyball						

Discipline	1961-1970	1971-1980	1981-1990	1991-2000	2001-2010	Achievement
Weightlifting						
Wrestling						
Wushu						
Badminton						
Kabaddi						
Kho-kho						
Softball						
Swimming						
Taekwondo						
Tennis						
Archery						
Rowing						
Canoeing						
Kayaking						

Certificate Course in Sports Coaching

Year-wise

Discipline	1961-1970	1971-1980	1981-1990	1991-2000	2001-2010	Achievement
Athletics						
Basketball						
Boxing						
Cricket						
Cycling						
Fencing						
Football						
Gymnastics						
Handball						
Hockey						

Discipline	1961-1970	1971-1980	1981-1990	1991-2000	2001-2010	Achievement
Judo						
Table Tennis						
Volleyball						
Weightlifting						
Wrestling						
Wushu						
Badminton						
Kabaddi						
Kho-kho						
Softball						
Swimming						
Taekwondo						
Tennis						
Archery						
Rowing						
Canoeing						
Kayaking						

Q. Whether any coaches of NSNIS where working as a coaching stuff of Indian national team or individual in international level?

Name of the coach	Discipline	Team /Individual	Achievement	Year

Q. How many International sports persons have been produced by the coaches of NSNIS?

Name of the coach	Discipline	Name of the sports person	Achievement	Year

INFORMATION REGARDING ACHIEVEMENT OF PERFORMANCE SPORTS IN INTERNATIONAL LEVEL

Q. How many number of players which trained by NSNIS performed in international level?

INFORMATION REGARDING FACULTY OF SPORTS SCIENCES:

Q. Which year set up the faculty of Sports science?

Q. Number of faculty of sports science?

Q. Is there proper laboratory facilities avail?

Q. Have any doping test unit or facilities?

Research Work:

Q. Any research work like PhD, M.Phil. organized by NSNIS, Patiala or any regional center?

Q. Any research journal published by NSNIS regularly?

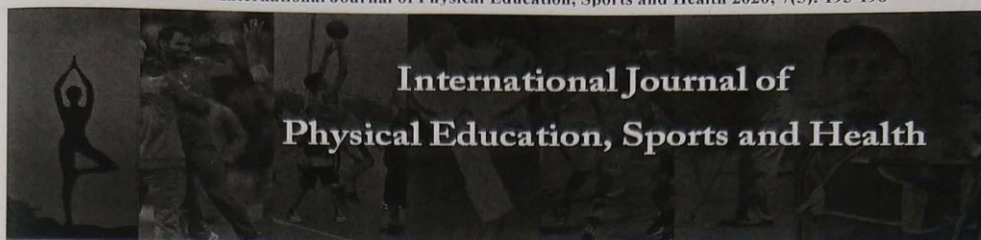
Q. Any written or published documents about chronological development of journal which published by NSNIS?

Library:

Numbers of books, journals, magazine etc. are in the library of NSNIS?

Research Publication

International Journal of Physical Education, Sports and Health 2020; 7(5): 195-198



P-ISSN: 2394-1685
E-ISSN: 2394-1693
Impact Factor (ISRA): 5.38
IJPESH 2020; 7(5): 195-198
© 2020 IJPESH
www.kheljournal.com
Received: 17-06-2020
Accepted: 03-08-2020

Sujit Mandal
Research Scholar,
Department of Physical
Education, Jadavpur University,
Kolkata, West Bengal, India

Ashoke Kumar Biswas
Professor,
Department of Physical
Education, Jadavpur University,
Kolkata, West Bengal, India

Contribution of Netaji Subhas National Institute of Sports (NSNIS) towards improvement of diploma in coaching education in India

Sujit Mandal and Ashoke Kumar Biswas

Abstract

Introduction: A case study is an in-depth analysis of different aspects of a person, organization and institution. Present research was a case study. Since beginning in 1961 Netaji Subhas National Institute of Sports has developed in area of functioning and size to contribute necessary impetus for performance sports of the country. It is, therefore, interesting and essential to study and analyze the role of National Institute of Sports for development of National Sports performance in international competition during last 55 years. With this motive the present study has been planned. Basic purpose of this study was to analyze the effective contribution towards improvement of coaching education in sports in India.

Objective: The main objective of this study was to know the contribution of NSNIS towards improvement of coaching education in sports in India.

Methodology: The purpose was to analyze the contribution of NSNIS towards improvement of coaching education in sports in India. Generally in case studies, different methods like interview, observation and visitation etc. are used with tools like checklist, questionnaire etc. In present study the methods of interview, observation and visitation were followed used. For collecting information questionnaire was also applied.

Results: The result of the study showed that a positive contribution of this institution towards improvement of coaching education in sports in India.

Conclusions: The findings of the study will help to know present coaches education status in India.

Keywords: Coaching Education, Netaji Subhas National Institute of Sports

Introduction

Participation in play, games and sports is an innate tendency of human being. It is an important aspect in individual's life. Sports participation helps to improve health and fitness of individuals. It inculcates social qualities, moral values and positive personality traits. Sports are an important part of culture of a nation. Sports have unique contribution to bring harmony among countries of the world. Nature of sports participation and performance in National and International competitions reflect country's status and fame.

National Institution of sports (NIS), Patiala was established by the Government of India on May 07, 1961 with the objective of developing sports in the country on the scientific lines and to train the coaches in the different sports disciplines. The institute was renamed as Netaji Subhas National Institute of Sports (NSNIS), Patiala on January 23, 1973. With the formation of Sports Authority of India (SAI) in 1984, the erstwhile Society for National Institutes of Physical Education and Sports (SNIPES) consisting of NSNIS, Patiala and two physical education colleges name Lakshmbai National College of Physical Education (LNCPE), located at Gwalior and Thiruvananthapuram respectively were merged with SAI in 1987. So, towards promotion and development of sports NSNIS Patiala which is also Asia's largest sports institution is considered as a high level institution in this country. This institution is popularly known as the "Mecca" of the Indian sports. It has produced coaches of high caliber and significantly contributed in rendering their expertise and assistance in the preparation of the national teams for various International competitions.

An Ad Hoc Inquiry Committee was constituted by the Government of India, in July 1958, to study the standard of sports in the country.

Corresponding Author:
Sujit Mandal
Research Scholar,
Department of Physical
Education, Jadavpur University,
Kolkata, West Bengal, India

The committee recommended establishment of a Central Training Institute, to provide first-class coaches, in different sports and games. Consequently, Kaul-Kapoor Committee visited certain countries to study their sports institution. On the advice of the All-India Council of Sports, the present campus of the National Institute of Sports (NIS) was inaugurated, at Patiala, on 7th May, 1961. (Dhaliwal & Roy, 2017) [3].

Since beginning in 1961 this National institution has developed in area of functioning and size to contribute necessary impetus for performance sports of the country. It is, therefore, interesting and essential to study and analyze the role of National Institute of Sports for development of National Sports performance in international competition during last 55 years.

With this motive the present study has been planned. Basic purpose of this study was to analyze the historical development of National Institution of Sports and its effective contribution towards improvement of performance sports in India.

Planning has three main phases – (i) setting of goal, (ii) development of methods to achieve the goal set, and (iii) evaluation to assess how far the goal has been realized. On the basis of results of evaluation the goal is to reseat if necessary and required changes are brought about in methods and again the evaluation is carried. So, all these phases are linked in a circular fashion and carried out periodically for successful planning and its implementation. NSNIS was set up to achieve the goal of improving performance of India in the field of competitive sports. The institution has been functioning for about more than fifty years. So, it is the time to evaluate the total process to understand its success or failure, problems and prospects and necessary changes to be incorporated may be in goal setting or present method of functioning of this National Institute of India. Present study has been planned in light of this need. It is believed that the findings will indicate important information to the Institution, the Government of India and the people of India in general.

Purpose of the Study

Proposed study will be conducted with the following objectives:

- i) To know the contribution of NSNIS in coaching education of the country of India;
- ii) To understand the problems and prospects of the institute as the premier organization of the country;
- iii) To indicate the possibilities of improvement in functioning of the institute;
- iv) To provide feedback to the authority, Government and the public of the Country of India regarding the role of NSNIS.

Methodology

A case study is an in-depth analysis of different aspects of a person, organization and institution. Present research was a case study. The purpose was to analyze the contribution of NSNIS towards national performance in games and sports of India. Generally in case studies, different methods like interview, observation and visitation etc. are used with tools like checklist, questionnaire etc. In present study the methods of interview, observation and visitation were used. For collecting information questionnaire was also applied.

Procedure followed for collection of information

Following procedure were used to collect information for assessing attitude of different categories of people of NSNIS towards state and status of functioning of the institute.

- i) Information Records: a) Departmental, b) Central Office
- ii) Questionnaires
- iii) Visitation of the infrastructural facilities of the institute;

Collection of data through questionnaires

To obtain the comprehensive data, questionnaires were used for different groups of persons in this study. The questionnaire administered for the Administrators, Coaches, and Players with separate queries and with different questions. The research scholar explained clearly to all respondents about the purpose of the questionnaire and how the questionnaire had to be completed.

Visitation

The researcher visited the existing Infrastructural Facilities of different Games, Hostels, Class Room, Library, Museum, Publication Section, Sports Science Department and Administrative blocks etc. for number of times to get relevant data.

Interview

Interview was conducted by researcher with the Administrators, Sports Scientists, Coaches, Librarian, Publisher and Players.

Results and Discussion

The main objective of the setting up of the National Institute of Sports at Patiala, in 1961, was the education of good number of sportspersons as sports coaches who could herald an era of systemic and scientific coaching, from the grass root to the national level, with the aim of raising the standard of the Indian sportspersons participating at the International sports competitions, like Asian Games, Commonwealth Games and Olympics etc. The data regarding coaches' education programme have been presented in tabular and graphical forms. Discussion have been made according to the number of coaches were trained by NSNIS in year wise as well as decades wise. Data were analyzed for the period between the year of commencement and 2016.

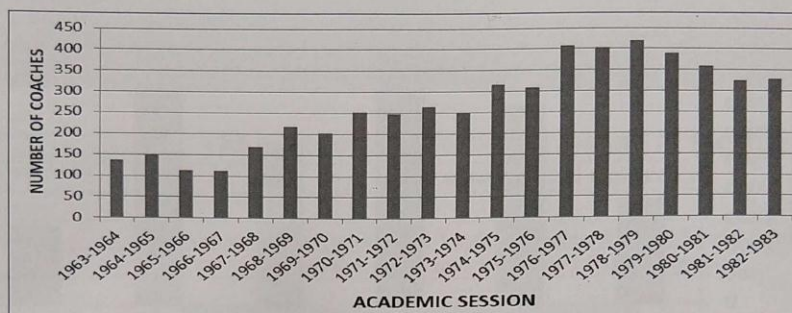
One-year Regular Course in Sports Coaching

The Institute introduced one-year Regular certificate Course in 1963-64, in the disciplines of Athletics, Gymnastics, Hockey, Cricket, Football, Volleyball, Wrestling, Tennis and Badminton. The name of this Regular Course was changed to Diploma in Sports Coaching, in the year 1983. The requisite educational qualification, in the beginning, was Matriculation / Higher Secondary / Senior Cambridge or equivalent pass, with prescribed proficiency in the sports disciplines concerned. The minimum and maximum age for this education programme was 21 to 35 years. The admission was made on the basis of written test in general knowledge and knowledge about the sports disciplines concerned, practical tests and interview.

Data regarding One-year Regular course in Sports Coaching were presented as per following tabular and diagram form

Table 1: One-year Regular course in Sports coaching Number of coaches trained by NSNIS year wise (1963-1983)

Year/Session	Number of Coaches	Year/Session	Number of Coaches	Year/Session	Number of Coaches
1963-1964	137	1970-1971	252	1977-1978	404
1964-1965	151	1971-1972	247	1978-1979	420
1965-1966	113	1972-1973	264	1979-1980	390
1966-1967	112	1973-1974	251	1980-1981	360
1967-1968	169	1974-1975	316	1981-1982	324
1968-1969	217	1975-1976	307	1982-1983	329
1969-1970	203	1976-1977	409	-	-

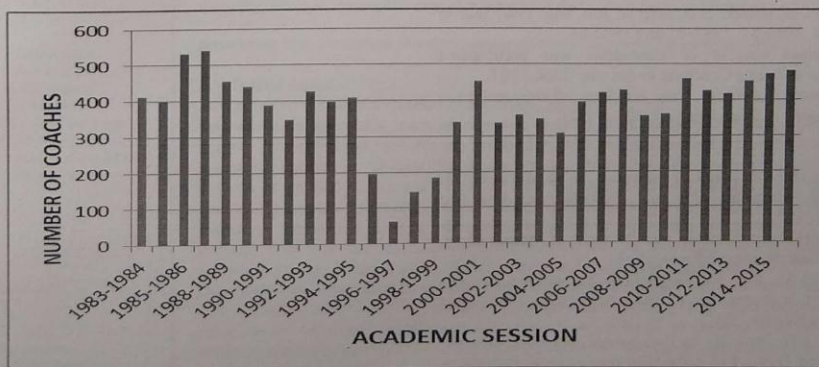
**Fig 1:** One-year Regular course in Sports coaching Number of coaches trained by NSNIS year wise (1963-1983)

It is seen from the figure-01 that one- year Regular course in Sports Coaching was stated in 1963. This table clearly indicated that the numbers of trainee of this course has been

gradually increased in the year 1978-1979. It also seen that numbers of trainee decreased in last four year, that is 1979-80, 1980-81, 1981-82 and 1982-83.

Table 2: Diploma in Sports coaching Number of coaches trained by NSNIS year wise (1984-2016)

Year/Session	Number of Coaches	Year/Session	Number of Coaches	Year/Session	Number of Coaches
1983-1984	413	1994-1995	409	2005-2006	395
1984-1985	402	1995-1996	195	2006-2007	422
1985-1986	531	1996-1997	62	2007-2008	428
1986-1987	552	1997-1998	145	2008-2009	357
1987-1988	540	1998-1999	184	2009-2010	361
1988-1989	455	1999-2000	339	2010-2011	459
1989-1990	440	2000-2001	452	2011-2012	425
1990-1991	387	2001-2002	336	2012-2013	418
1991-1992	348	2002-2003	359	2013-2014	453
1992-1993	427	2003-2004	348	2014-2015	473
1993-1994	396	2004-2005	307	2015-2016	482

**Fig 2:** Diploma in Sports coaching Number of coaches trained by NSNIS year wise (1984-2016)

It is seen from the figure-02 that Diploma in Sports coaching was stated in 1983 and the number of candidates was 413. However the number of candidates remain almost same or

slightly more in the year 1985, 1986, 1987, 1988, 1989, 1992, 2000, 2006, 2007, 2010, 2011, 2012, 2013, 2014 and 2015. In all other year number of candidates decreased.

Table 3: One-year Regular course in Sports coaching Number of coaches trained by NSNIS Decade wise

Decade/Session	Number of Coaches	Decade/Session	Number of Coaches	Decade/Session	Number of Coaches
1963-1972	1865	1983-1992	4495	2003-2012	3920
1973-1982	3510	1993-2002	2877	2013-2016	1408

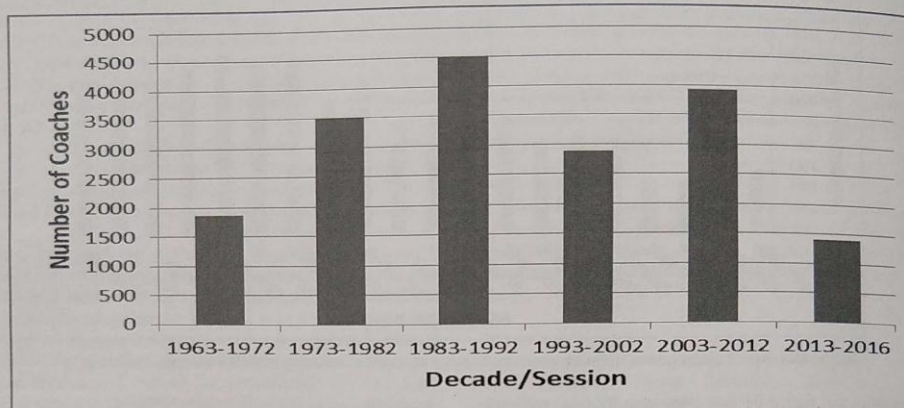


Fig 3: One-year Regular course in Sports coaching Number of coaches trained by NSNIS Decade wise

Figure-03 showed the number of trainees of first decade was 1865, in second decades 3510, in third decades 4495, in fourth decades 2877 and 3920 in last decades respectively. It also showed that last three sessions that is 2013-2016 numbers of trainees was 1408. This table clearly indicated that the participation of this course has been gradually increased in first three decades. In last two decades slightly decreased.

Conclusion

From the analysis of the information following conclusions were drawn:

- One year regular course in Sports Coaching has been gradually increased in year 1978-1979.
- Numbers of trainee decreased in last four year, that is 1979-80, 1980-81, 1981-82 and 1982-83.
- The height number of candidates was participated Diploma in Sports Coaching in the year 1986-1987.
- In respect of decades wise numbers of trainees more participated in third decades (1983-1992)

Reference

- Barrow HM. A practical approach to measurement in physical education (3rd ed.). Philadelphia: Lea and Febiger, 1979.
- Clark HH. Fundamental Considerations of Measurement. New York: Academic Press, 1973.
- Dhaliwal SS, Roy SS. Netaji Subhash National Institute of Sports in Perspective (1st ed.). New Delhi, India: Khel Sahitya Kendra, 2017.
- Garrett HE. Statistics in Psychology and Education (6th ed.). New Delhi, India: Paragon International Publishers, 2007.
- India. Ministry of Information and Broadcasting. India 2012: A Reference Annual. New Delhi: Compiled by

Research, Reference and Training Division, 2012, 1222p.

- Sports and Games. In The New Encyclopedia Britannica 15th Edition. Chicago: Encyclopedia Britannica, 1997; 11:112p.
- Verma J. Statistical methods for sports and physical education. New Delhi, India: Tata McGraw Hill Education Private Ltd., 2012.

APPENDIX-II

Permission for Research Work

যাদবপুর বিশ্ববিদ্যালয়
কলকাতা-৭০০০৩২, ভারত



JADAVPUR UNIVERSITY
KOLKATA-700032, INDIA

শারীর শিক্ষা বিভাগ, কলা অনুষদ / DEPARTMENT OF PHYSICAL EDUCATION, FACULTY OF ARTS

To
Executive Director, Academics,
Sports Authority of India,
Netaji Subhas National Institute of Sports,
Patiala – 147001

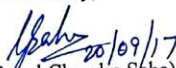
Sir,

I have the honour to inform you that Sri Sujit Mandal is a Part-Time Research Scholar of Department of Physical Education, Jadavpur University since 29.7.2015. For the purpose of his research work he needs help from you to use the library of your institution so that he can start to process his research work and complete the same in due time.

I, therefore, request you kindly to take necessary measures for giving him the permission to use your institute library.

With regards,

Yours Faithfully,


(Dr. Gopal Chandra Saha)

H. O. D.
Dept. of Physical Education
Jadavpur University, Kolkata

*Established on and from 24th December, 1955 vide Notification No. 10986-Edn/IU-42/55 dated 6th December, 1955 under Jadavpur University Act, 1955 (West Bengal Act XXXIII of 1955) followed by Jadavpur University Act, 1981 (West Bengal Act XXIV of 1981)

দূরভাষ : (০৩৩) ২৪১৩-৬৭৮৬

Website : www.juphysicaleducation.org
E-mail : juped@rediffmail.com

Phone : (033) 2413-6786

Permission for research work

Incharge Academic <academics.nispatiala@gmail.com>

Fri, Oct 6, 2017 at 12:24 PM

To: 1984sujitmandal@gmail.com

Reference e-mail from Dr.Gopal Chandra Saha, Jadavpur University, Kolkata. You are permitted to use the library of this Institute for your research work. Inform the dates when you want to come to this Institute.

D.K.Rathore

Incharge Academics

Sports Authority of India

Netaji Subhas National Institute of Sports,

Patiala

Dr Rajdeep Kaur <dr Rajdeepkaur@yahoo.com>

Wed, Oct 11, 2017 at 4:01 PM

Reply-To: Dr Rajdeep Kaur <dr Rajdeepkaur@yahoo.com>

To: "1984sujitmandal@gmail.com" <1984sujitmandal@gmail.com>

On Wednesday, October 11, 2017 12:56 PM, Dr Rajdeep Kaur <dr Rajdeepkaur@yahoo.com>
wrote:

Dr. Gopal Chandra,

This has reference to your letter dated 20.09.2017 regarding research work of Sri Sujit Mandal. I
am directed to convey you that he can take help of our library for his research work.

Regards

Dr. Rajdeep Kaur Talwar

Dean (Sports Science)

SAI NS NIS, Patiala