CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

PART I

4.1. OVERVIEW

This chapter is based on the analysis and interpretation of data by analysing the implementation of sports policy and its impact on sports development in Northeast India. The findings are organized based on the research objectives and variables, using both qualitative and quantitative methods to provide a holistic understanding of the topic.

The objective of this study is to assess the effectiveness of sports policies in different states of Northeast India based on stakeholders' opinions on various factors influencing sports development. The chapter begins with a description of the demographic profiles of the respondents, using graphs, tables and charts to present the results clearly and understandably. Qualitative findings from the documentation and field observations are also included to contextualize the numerical data and provide a more balanced picture of how sports policy impacts stakeholders. The chapter finally ends with key findings, introducing the next chapter on conclusions and recommendations.

4.2. TEST OF SIGNIFICANCE

This chapter is the most important part of the thesis, as it examine the hypothesis and forms the basis for a meaningful conclusion. While testing the hypothesis, a systematic statistical value known as significance tests was utilised. This test has an important function in determining whether the differences in the data were caused by actual effects or a result of chance. If the significance value was less than 0.05, the hypothesis was accepted, indicating a significant difference in the means between the groups being compared. However, if the significance value was greater than 0.05, the null hypothesis was rejected, indicating that there was no significant difference between the means of the two groups.

The chapter utilized advanced statistical analysis to guarantee that the results are precise and accurate. Nonetheless, the findings not only validate or prove the hypothesis but also point out the overall implications of the research to shape the subsequent conclusions and recommendations that are stated in the other chapters.

4.3. LEVEL OF SIGNIFICANCE

The significance level of 0.05 was used to test the data obtained for all variables and was considered appropriate for the study to reduce the likelihood of a Type I error. This is a standard criterion in research as it allows meaningful interpretation of the data while ensuring statistical rigor.

4.4. FREQUENCY DISTRIBUTION BASED ON THE DEMOGRAPHIC PROFILE OF RESPONDENTS ACROSS VARIOUS STATES OF NORTHEAST INDIA.

4.4.1. Frequency Distribution based on the respective State of respondents.

Table 4.1 shows the frequency distribution of respondents across various states in Northeast India.

Table 4.1

Total number of respondents based on their State

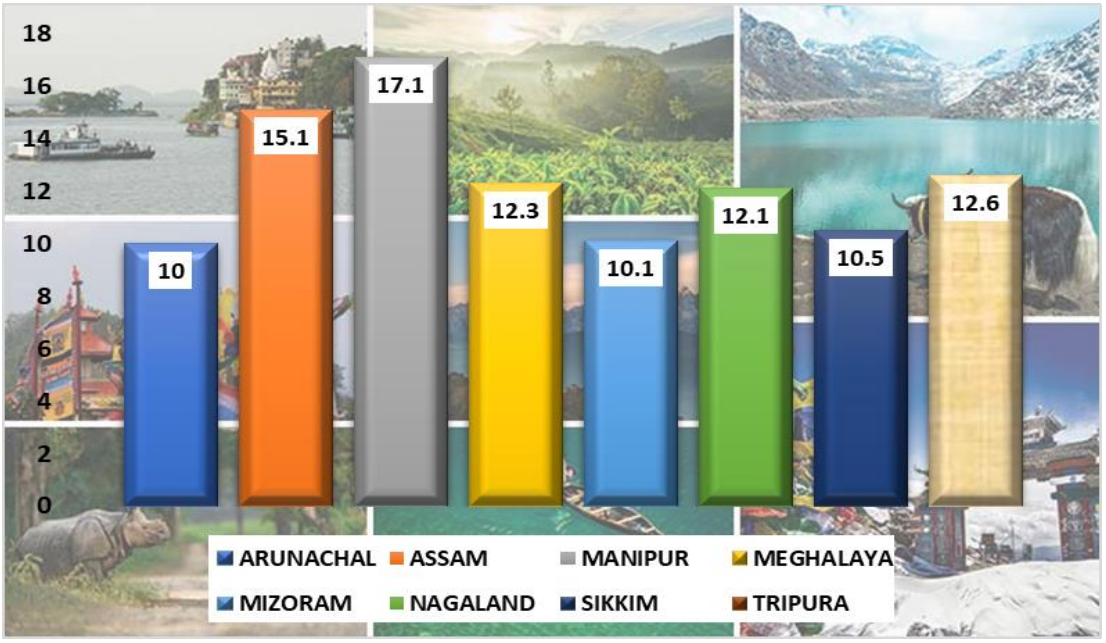
STATE	*FREQUENCY*	*PERCENTAGE*
ARUNACHAL PRADESH	60	10
ASSAM	91	15.1
MANIPUR	103	17.1
MEGHALAYA	74	12.3
MIZORAM	61	10.1
NAGALAND	73	12.1
SIKKIM	63	10.5
TRIPURA	76	12.6
TOTAL	**601**	**100**

The table above illustrates the percentage and frequency distribution of data depending on respondents' states. It was evident that Manipur has the highest number of respondents with a major percentage of 17.1%. Followed by Assam with a percentage of 15.1%. Tripura accounts for a percentage of 12.6% while Meghalaya contributes a slight change in percentage with 12.3%. Similarly, Nagaland has a percentage of 12.1% while Sikkim has a percentage of 10.5%. However, Arunachal Pradesh and Mizoram have the lowest percentages of respondents at 10% and 10.1% respectively. The total frequency is 601, which is 100% of the data. This breakdown helps to understand the percentage of data from different states of North East India.

The following is a graphical representation of the respondent's percentages based on their states.

Figure 4.1

Graphical representation of the total number of respondents based on their State



4.4.2. Frequency Distribution based on the role of respondents

The frequency distribution based on the role or position of stakeholders at various sports organizations is mentioned in Table 4.2 below.

Table 4.2

Total number of respondents based on their role

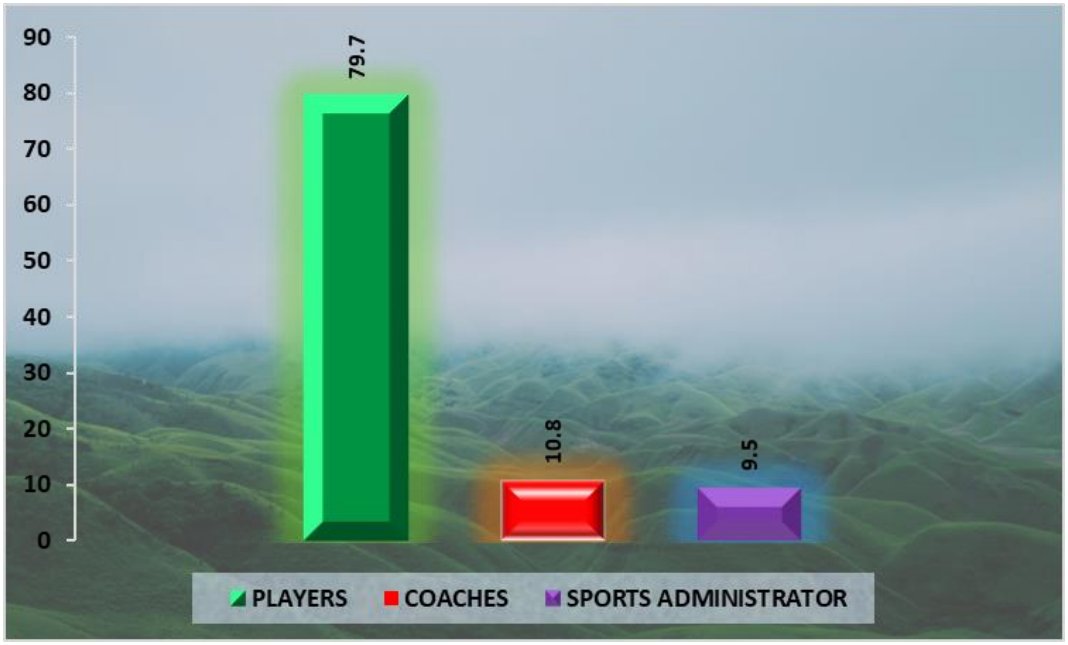
ROLE	*FREQUENCY*	*PERCENTAGE*
PLAYERS	479	79.7
COACHES	65	10.8
SPORTS ADMINISTRATOR	57	9.5
TOTAL	**601**	**100**

It can be seen from the table above that players have a high-frequency distribution with 79.7% of respondents. Followed by coaches at 10.8% and sports administrators at the lowest percentage of 9.5%. This distribution emphasized the important roles that players have in this surveyed population. While coaches and sports administrators are less represented, they still play a crucial role that contribute to the overall effectiveness of this research rationale.

The graphical representation of the total number of respondents based on their roles is presented in Figure 4.2 below.

Figure 4.2

Graphical representation of the total number of respondents based on their role



4.4.3. Frequency Distribution based on the age of respondents

The frequency distribution based on the age of stakeholders is mentioned in Table 4.3 below.

Table 4.3

Total number of respondents based on age

AGE	*FREQUENCY*	*PERCENTAGE*
Less than 25 Yrs	317	52.7
26 to 35 Yrs	206	34.3
36 to 45 Yrs	59	9.8
46 Yrs. above	19	3.2
Total	**601**	**100**

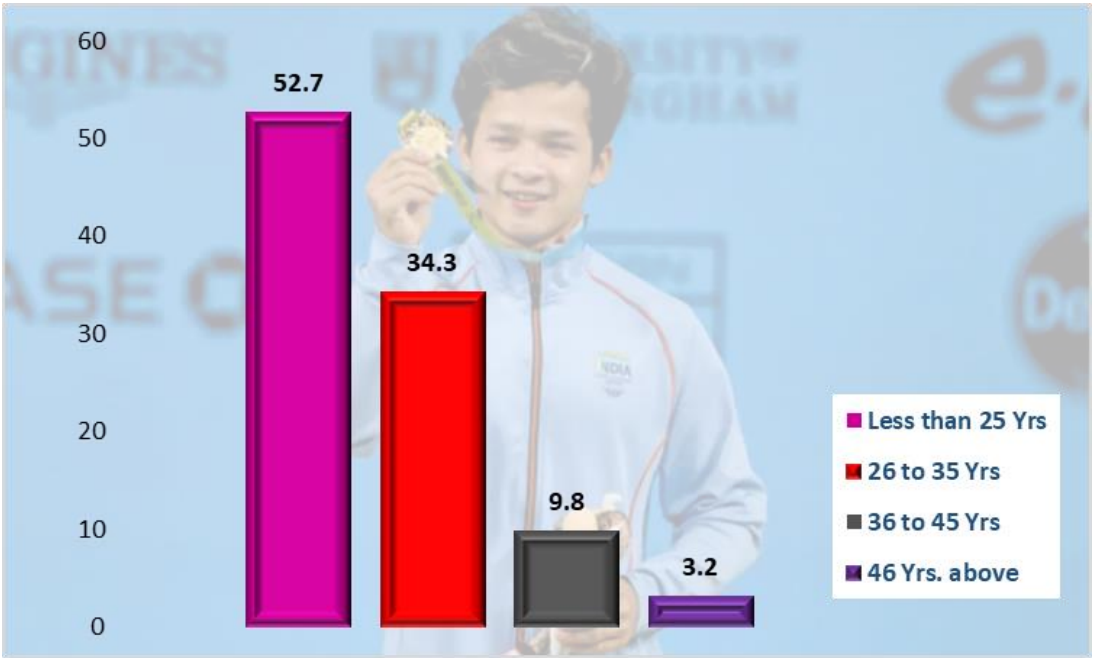
The table above shows the total number of respondents based on their age category. It can be seen that the majority of respondents (52.7%) belong to the age group of 'Less than 25 years' category, followed by 34.3% at the ’26 to 35 years’ age category. The age group of ‘36

to 45 years' received a percentage of 9.8% and the lowest percentage of 3.2% was at the age group '46 years and above.

The graphical representation of the total number of respondents based on their age is presented in Figure 4.3 below.

Figure 4.3

Graphical representation of the total number of respondents based on their age



4.4.4. Frequency Distribution based on the Gender of Respondents

The frequency distribution based on the gender of stakeholders is mentioned in Table 4.3 below.

Table 4.4

Total number of respondents based on Gender

GENDER	*FREQUENCY*	*PERCENTAGE*
Male	375	62.4
Female	226	37.6
Total	**601**	**100**

The above table shows that with a dominant percentage of 62.4%, the majority of respondents are male, followed by female respondents with an average percentage of 37.6%. This gender distribution demonstrate that there is a significant imbalance in the sample population which could influence the overall findings of the study.

The graphical representation of the total number of respondents based on their gender is presented in Figure 4.4 below.

Figure 4.4

Graphical representation of the total number of respondents based on their gender

4.4.5. Frequency Distribution based on the respondent's level of experiences

The frequency distribution based on the respondent's level of experience in various sports organizations is mentioned in Table 4.5 below.

Table 4.5

Total number of respondents based on their experiences

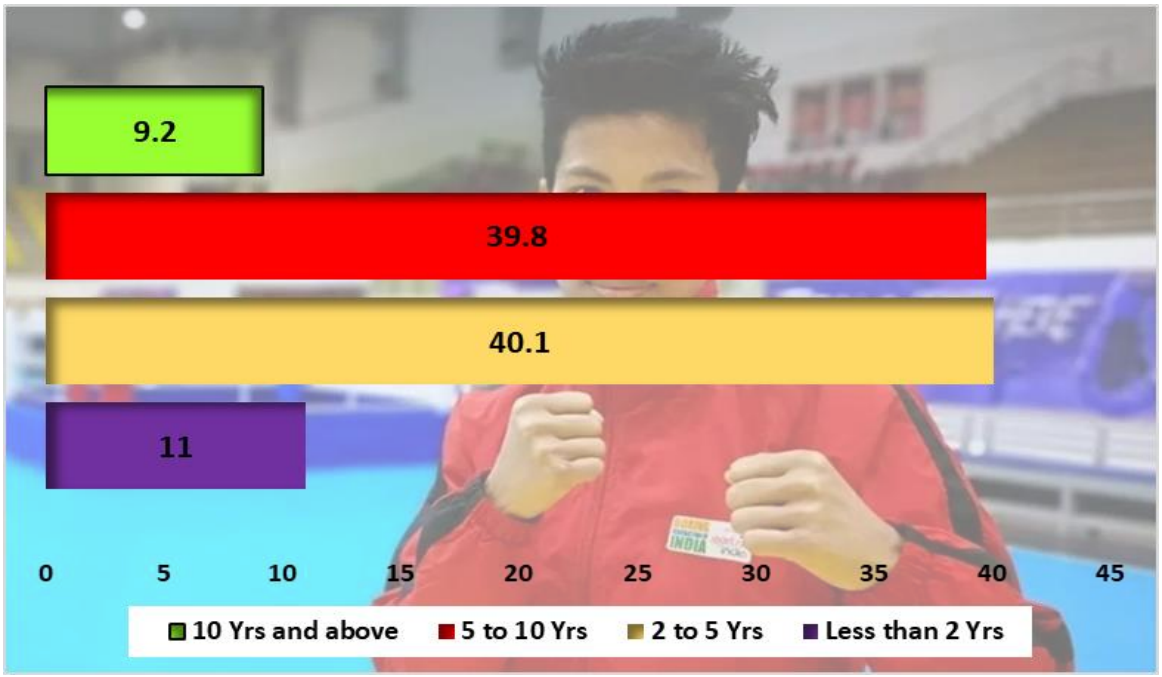
NUMBER OF YEARS	*FREQUENCY*	*PERCENTAGE*
Less than 2 Yrs	66	11
2 to 5 Yrs	241	40.1
5 to 10 Yrs	239	39.8
10 Yrs and above	55	9.2
Total	**601**	**100**

From the preceding table, it is evident that the majority of respondents are under the experience group of "2-5 years" which is 40.1%. Followed by the experience group of "5 to 10 yrs," at 39.8%. Similarly, the respondents with "Less than 2 years" of experience received a percentage of 11%, and the smaller number of 9.2% respondents is in the experience group of "10 years and above".

The graphical representation of the total number of respondents based on their experience is presented in Figure 4.5 below.

Figure 4.5

Graphical representation of the total number of respondents based on their level of experience.



4.4.6. Frequency Distribution based on the respondent's level of education

The frequency distribution based on the respondent's level of education is mentioned in Table 4.6 below.

Table 4.6

Total number of respondents based on their level of education

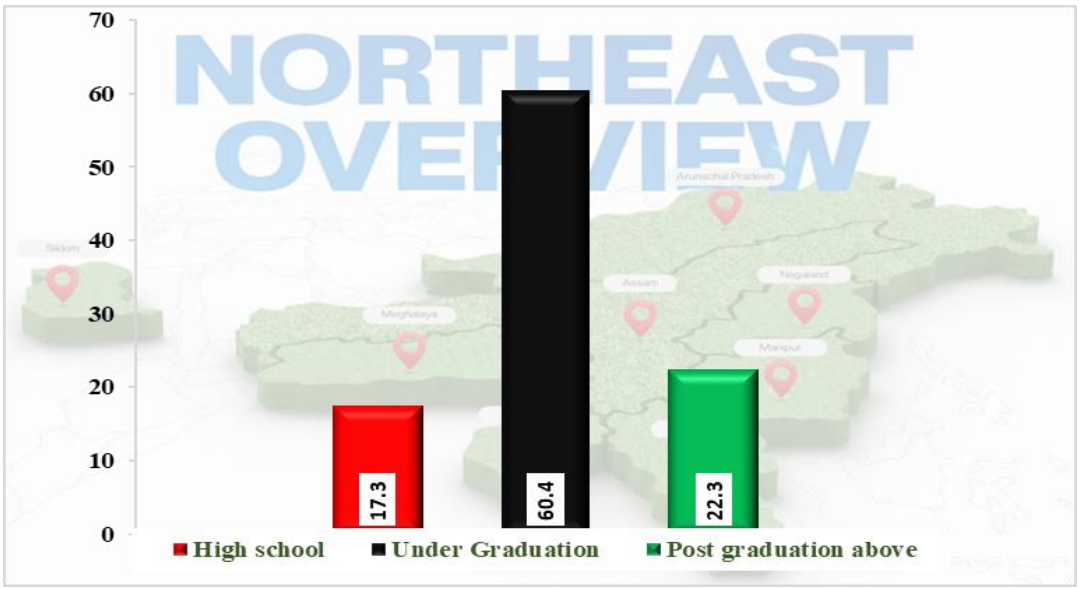
EDUCATION LEVEL	*FREQUENCY*	*PERCENTAGE*
High school	104	17.3
Under Graduation	363	60.4
Post graduation above	134	22.3
Total	**601**	**100**

It can be observed from the preceding table that the highest percentage of 60.4% of respondents lies within the category of 'Under Graduation' level. Followed by the 'Post Graduation and above' which is 22.3%. However, the lowest number of 17.3% of respondents have a minimum education of 'High school' level.

The graphical representation of the total number of respondents based on their level of education is presented in Figure 4.6 below.

Figure 4.6

Graphical representation of the total number of respondents based on their level of education.



4.4.7. Frequency Distribution based on the respondent's Sports Policy level of awareness.

The frequency distribution based on the respondent's level of Sports Policy awareness is mentioned in table 4.7 below.

Table 4.7

Total number of respondents based on their Level of Sports Policy awareness.

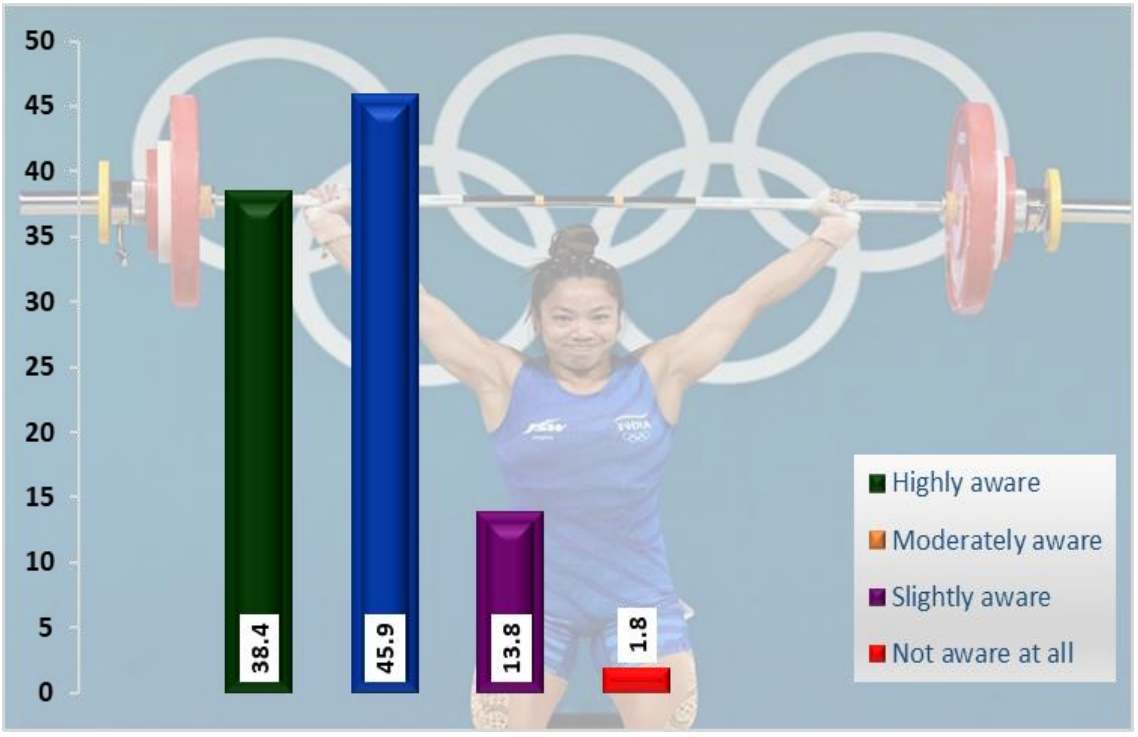
AWARENESS LEVEL	*FREQUENCY*	*PERCENTAGE*
Highly aware	231	38.4
Moderately aware	276	45.9
Slightly aware	83	13.8
Not aware at all	11	1.8
Total	**601**	**100**

The table above presents the data of the total number of respondents categorized based on their level of awareness on sports policy. Out of 601 respondents, 45.9% have a moderate awareness on sports policies, followed by 38.4% with a high level of awareness. Furthermore, 13.8% of the respondents have a slight awareness of sports policies, and a minor fraction of 1.8% of respondent reported to no awareness. This distribution shows that although most respondents have at least a moderate knowledge of sports policy, a small percentage have little to no knowledge, which suggests that there is a possible gap in public participation and policy transmission.

The graphical representation of the total number of respondents based on their level of awareness of sports policy is presented in Figure 4.7 below.

Figure 4.7

Graphical representation of the total number of respondents based on their level of awareness of Sports Policy



4.4.8. Crosstabulation analysis on the frequency distribution of respondent's roles across northeast states

The crosstabulation analysis of the respondent's role across all Northeastern states can be found in the table 4.8 below.

Table 4.8

Distribution of Stakeholders Role Across Northeastern States

Sl.No.	STATE		PLAYERS	COACHES	SPORT ADMINISTRATORS	TOTAL
1.	ARUNACHAL PRADESH	Frequency	45	7	8	60
		%	75	11.7	13.3	100
2.	ASSAM	Frequency	71	9	11	91
		%	78	10	12	100
3.	MANIPUR	Frequency	82	14	7	103
		%	79.7	13.5	6.8	100
4.	MEGHALAYA	Frequency	53	11	10	74
		%	71.6	14.9	13.6	100
5.	MIZORAM	Frequency	50	4	7	61
		%	82	6.6	11.4	100

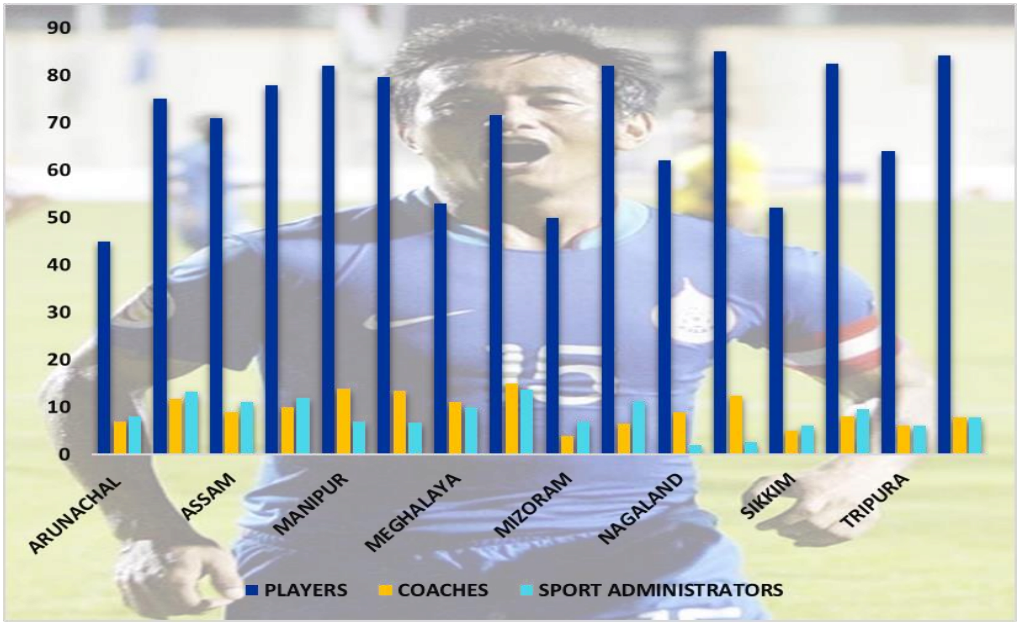
6.	**NAGALAND**	Frequency	62	9	2	73
		%	85	12.3	2.7	100
7.	**SIKKIM**	Frequency	52	5	6	63
		%	82.5	8	9.5	100
8.	**TRIPURA**	Frequency	64	6	6	76
		%	84.2	7.9	7.9	100
	TOTAL	Frequency	479	65	57	601
		%	79.8	10.8	9.4	100

It is inferred from the table that Manipur has a highest frequency of respondents which includes of 82 players, 14 coaches and 7 sports administrators. Followed by Assam with 71 players, 9 coaches and 11 sports administrators. Tripura received the frequency of 76 respondents which includes of 64 players, 6 coaches and 6 sports administrators and Nagaland with 62 players, 9 coaches and 2 sports administrators. Similarly with a total respondents of 74, Meghalaya received a frequency of 53 players, 11 coaches and 10 sports administrators and Mizoram with 50 players, 4 coaches and 7 sports administrators. The lowest frequency of respondents is of Sikkim with 52 players, 5 coaches and 6 administrators and the state of of Arunachal pradesh with 45 players, 7 coaches and 8 sports administrators.

This table also shows that manipur has the highest number of respondents and their share of percentage is comparitively high compared to the other state with a low frequency. The percentage values of the respondents position across all northeast states is presented in the figure 4.8 below.

Figure 4.8

Distribution of Stakeholders Role Across Northeastern States



4.4.9. Crosstabulation analysis on the frequency distribution of gender across northeast states

The crosstabulation analysis on the frequency distribution of the respondent's gender category across all Northeastern states can be found in the table 4.9 below.

Table 4.9
Distribution of Stakeholders Gender Across Northeastern States

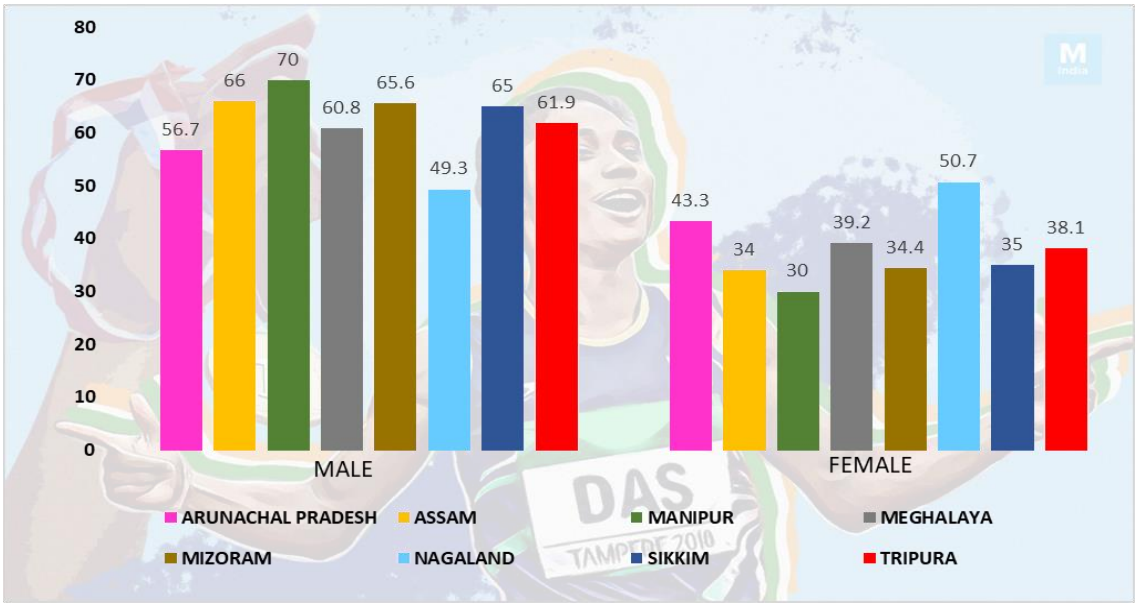
Sl.No.	STATE		MALE	FEMALE	TOTAL
1.	ARUNACHAL PRADESH	Frequency	34	26	60
		%	56.7	43.3	100
2.	ASSAM	Frequency	60	31	91
		%	66	34	100
3.	MANIPUR	Frequency	72	31	103
		%	70	30	100
4.	MEGHALAYA	Frequency	45	29	74
		%	60.8	39.2	100
5.	MIZORAM	Frequency	40	21	61
		%	65.6	34.4	100
6.	NAGALAND	Frequency	36	37	73
		%	49.3	50.7	100
7.	SIKKIM	Frequency	41	22	63
		%	65	35	100
8.	TRIPURA	Frequency	47	29	76
		%	61.9	38.1	100
	TOTAL	Frequency	375	226	601
		%	62.4	37.6	100

As shown in the table above, Manipur has the highest frequency of respondents with 72 male and 31 female, followed by Assam with 60 male and 31 female. Tripura has a frequency of 47 male and 29 female, whereas Nagaland has a share frequency of 36 male and 37 female. Similarly, Meghalaya has a frequency of 45 male and 29 female respondents, while Mizoram has 40 male and 21 female respondents. Arunachal Pradesh and Sikkim have the lowest frequency of 60 and 63 respondents, with 34 male and 26 female respondents for Arunachal Pradesh and 41 male and 22 female respondents for Sikkim.

This table also shows the uneven distribution of the respondents, where males are dominating females in terms of sports participation in Northeast India. However, in the case of Nagaland, there is an equal distribution of respondents, which demonstrates that the state has equal opportunities for both genders in sports participation.

The graphical representation on the gender distribution across all Northeastern states are presented in the figure 4.9 below.

Figure 4.9
Distribution of Stakeholders Gender Across Northeastern States



4.4.10. Crosstabulation analysis on the respondent's level of sports policy awareness across northeast states

The crosstabulation analysis on the level of Sport Policy awareness of respondents across all Northeastern states can be found in the table 4.10 below.

Table 4.10

Distribution of Stakeholders Sports Policy awareness Across Northeastern States

Sl.No.	STATE		Highly aware	Moderately aware	Slightly aware	Not aware	TOTAL
1.	ARUNACHAL PRADESH	Frequency	24	26	10	-	60
		%	40	43.3	16.7		100
2.	ASSAM	Frequency	38	31	22	-	91
		%	41.8	34	24.2		100
3.	MANIPUR	Frequency	36	67	-	-	103
		%	35	65	-	-	100
4.	MEGHALAYA	Frequency	31	24	19	-	74
		%	41.9	32.4	25.7	-	100
5.	MIZORAM	Frequency	32	16	2	11	61
		%	52.5	26.2	3.3	18	100
6.	NAGALAND	Frequency	26	40	7	-	73
		%	35.6	54.8	9.6	-	100
7.	SIKKIM	Frequency	23	33	7	-	63
		%	36.5	52.4	11.1	-	100
8.	TRIPURA	Frequency	21	39	16	-	76
		%	27.7	51.3	21	-	100
	TOTAL	Frequency	231	276	83	11	601
		%	38.4	45.9	13.8	1.9	100

As seen from the above table, a high percentage of 45.9% shows that majority of the respondents in all the North Eastern states are moderately aware about sports policy implementation, followed by the respondents who are highly aware at 38.4%. however, 13.8% of respondents know little about sports policy, and a small percentage of 1.9% know nothing about the sports policy.

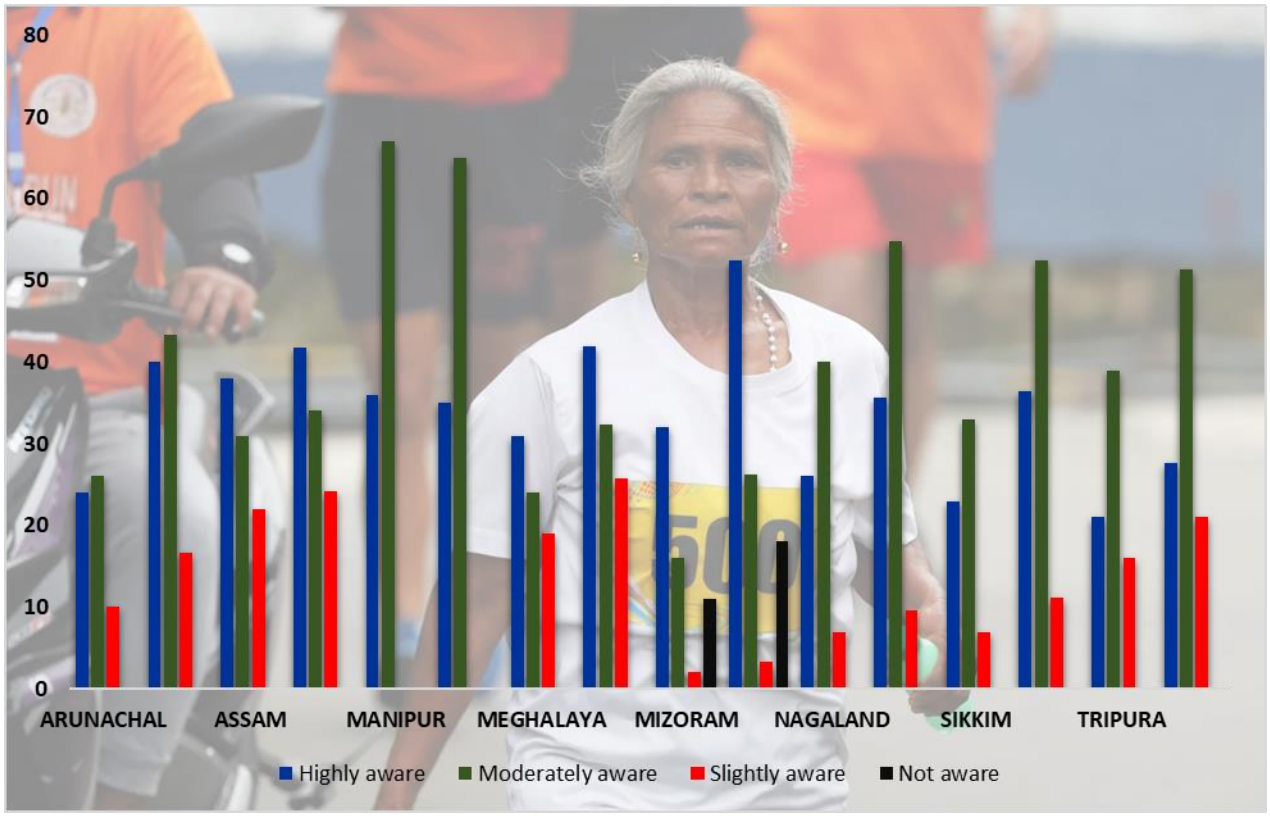
Comparing the level of awareness on sports policy across various states, it is found that Mizoram has the highest awareness level of 52.5% in the 'Highly aware' category and is also

the only state where a section of respondents are unaware of the policy. Meghalaya and Assam level of awareness percentage of 41.9% and 41.8% is in the 'Highly aware' category which indicates that almost all the respondents are aware of the policies implemented in their state. Manipur (65%), Nagaland (54.8%), Tripura (51.3%), Sikkim (52.4%) and Arunachal Pradesh (43.3%) have a high number of respondents in the moderate awareness category, which means that the respondents are aware of the policies but not to the optimal level.

The graphical representation on the level of awareness of Sports Policy are presented in the figure 4.10 below.

Figure 4.10

Distribution of Stakeholders Level of awareness on Sports Policy implementation across Northeastern States



4.4.11. Crosstabulation analysis on the gender distribution of stakeholder's role in northeastern states

The crosstabulation analysis on the on the gender distribution of stakeholder's role in all Northeastern states can be found in the table 4.11 below.

Table 4.11

Gender Distribution of Stakeholders Role in Northeastern States

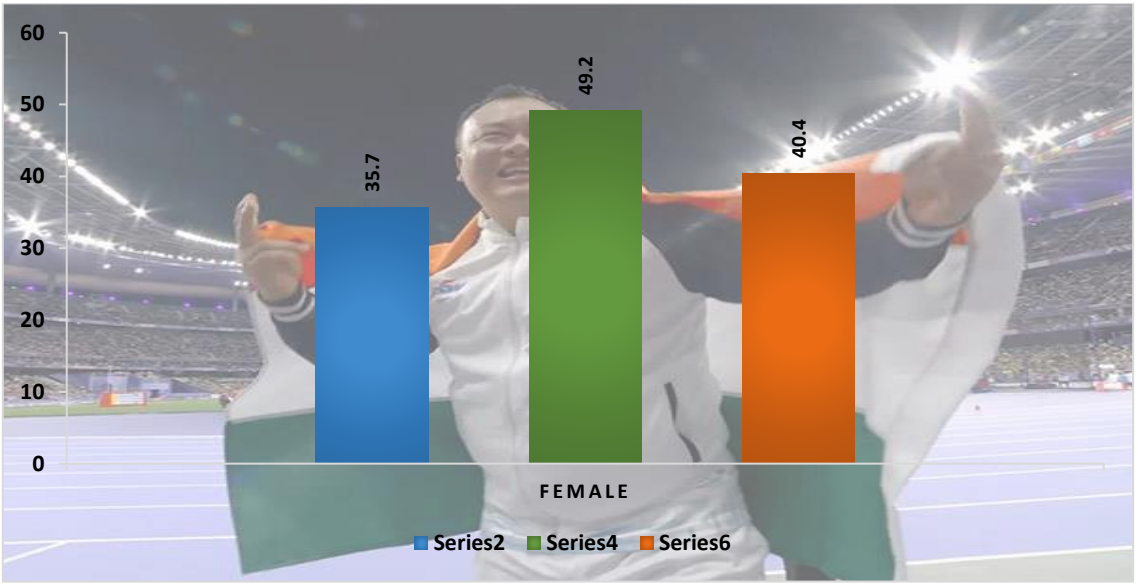
Sl.No.	ROLE		MALE	FEMALE	TOTAL
1.	PLAYERS	Frequency	308	171	479
		%	64.3	35.7	100
2.	COACHES	Frequency	33	32	65
		%	50.8	49.2	100
3.	SPORTS ADMINISTRATOR	Frequency	34	23	57
		%	59.6	40.4	100
4.	TOTAL	Frequency	375	226	601
		%	62.4	37.6	100

As shown in the preceding table, players have a high frequency distribution in all categories, with a total of 308 male and 171 female respondents. Followed by coaches, with an equal distribution of 33 male and 32 female respondents. However, sports administrators have achieved the lowest frequency distribution, with 34 male and 23 female respondents. This shows that in Northeast India there is a male dominant in each role of stakeholders' involvement at various sports organisation.

The percentage of gender distribution among stakeholders roles is graphically presented in Figure 4.11 below.

Figure 4.11

Gender Distribution of Stakeholders Role in Northeastern States



4.4.12. Crosstabulation analysis on the education level distribution of stakeholder's role in northeastern states

The crosstabulation analysis on the education level distribution of stakeholder's role in all Northeastern states can be found in the table 4.12 below.

Table 4.12

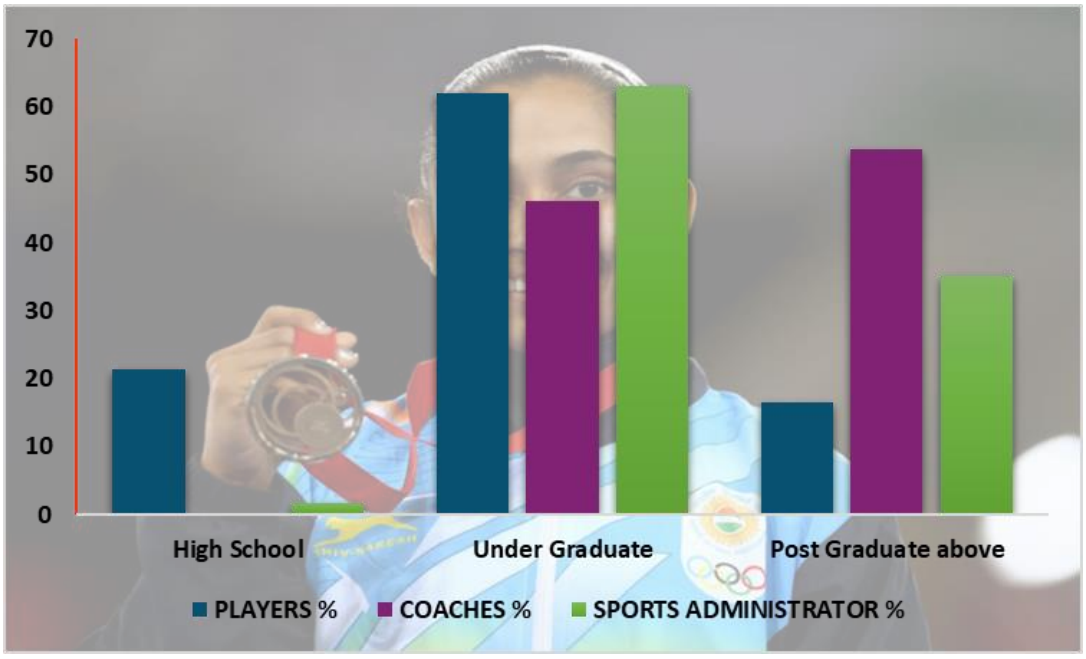
Distribution of the Stakeholders Education Level based on their Role

Sl.No.	ROLE		High School	Under Graduate	Post Graduate above	TOTAL
1.	PLAYERS	Frequency	103	297	79	479
		%	21.5	62	16.5	100
2.	COACHES	Frequency	-	30	35	65
		%	-	46.2	53.8	100
3.	SPORTS ADMINISTRATOR	Frequency	1	36	20	57
		%	1.8	63.1	35.1	100
4.	TOTAL	Frequency	104	363	134	601
		%	17.3	60.4	22.3	100

It is inferred from the above table that a majority of players and Sports administrators received a high level of distribution at the 'Under Graduate' level which is 62% and 63.1%. On the other hand, Coaches seem to have a high education level under the category of 'Post Graduate and above,' which is 53.8%. The overall total of frequency distribution among the stakeholders roles is 104 at the high school level, 363 at the undergraduate level, and 134 at the postgraduate and above level.

The percentage distribution of the respondents education level based on their role is graphically presented in Figure 4.12 below.

Figure 4.12
Distribution of the Stakeholders Education Level based on their Role



4.4.13. Crosstabulation analysis of stakeholder roles and their experience levels in sport in northeast states

The crosstabulation analysis on the stakeholder roles and their corresponding experience levels across all Northeastern states is presented in the table 4.13 below.

Table 4.13

Distribution of the Stakeholders Experience Level based on their Role

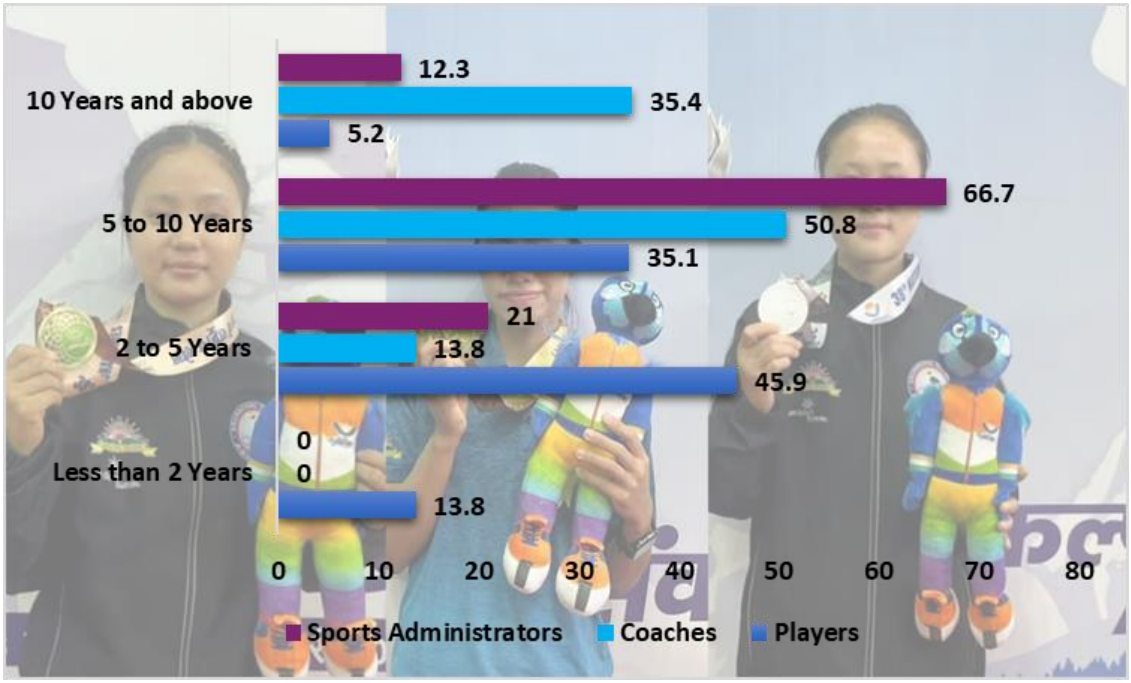
Sl.No.	ROLE		Less than 2 Years	2 to 5 Years	5 to 10 Years	10 Years and above	TOTAL
1.	PLAYERS	Frequency	66	220	168	25	479
		%	13.8	45.9	35.1	5.2	100
2.	COACHES	Frequency	-	9	33	23	65
		%	-	13.8	50.8	35.4	100
3.	SPORTS ADMINISTRATOR	Frequency	-	12	38	7	57
		%	-	21	66.7	12.3	100
4.	TOTAL	Frequency	66	241	239	55	601
		%	11	40.1	39.8	9.1	100

The above table shows that a majority of 45.9% of players have an experience level of '2 to 5 years', and a majority of 50.8% of coaches have an experience level of '5 to 10 years'. Similarly, sports administrators have a high experience level in the '5 to 10 years' category which is 66.7%. The overall experience is 11% at the 'less than 2 years' category, 40.1% at the '2 to 5 years' category, 39.8% at the '5 to 10 years' category, and a lower frequency of 9.1% at the category of '10 years and above'. Therefore, this table demonstrates that almost all of the respondents have many years of involvement and experience in sports.

The percentage distribution of the respondents experience level based on their role is graphically presented in Figure 4.13 below.

Figure 4.13

Distribution of the Stakeholders Experience Level based on their Role



4.4.14. Crosstabulation analysis of stakeholder roles and their levels of sports policy awareness in northeast states

The crosstabulation analysis on the stakeholder roles and their level of Sports Policy awareness across all Northeastern states is presented in the table 4.14 below.

Table 4.14

Distribution of the Stakeholders Level of Sports Policy Awareness based on their Role

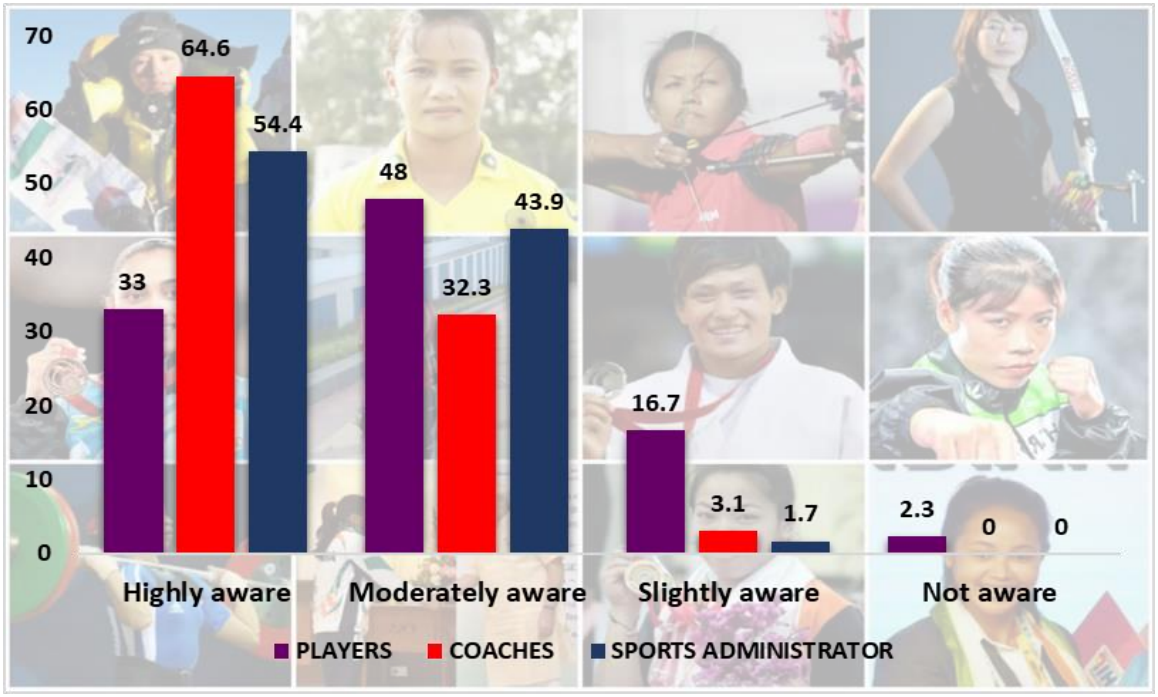
Sl.No.	ROLE		Highly aware	Moderately aware	Slightly aware	Not aware	TOTAL
1.	PLAYERS	Frequency	158	230	80	11	479
		%	33	48	16.7	2.3	100
2.	COACHES	Frequency	42	21	2	-	65
		%	64.6	32.3	3.1	-	100
3.	SPORTS ADMINISTRATOR	Frequency	31	25	1	-	57
		%	54.4	43.9	1.7	-	100
4.	TOTAL	Frequency	231	276	83	11	601
		%	38.5	45.9	13.8	1.8	100

As shown in the preceding table, a majority of 48% of players have a moderate awareness of sports policy implementation, whereas, with a high percentage of 64.6%, coaches are 'Highly aware' of the various sports policy implementation in their state. Sports administrators have an almost equal share percentage of 54.4% and 43.9% at the 'highly aware' and 'moderately aware' categories which shows that even though most of the respondents are not fully aware of the policy implementation, their little to slight knowledge of the policy implementation indicates a potential for growth in understanding and engagement of sports in the region.

The graphical representation of the stakeholder roles and their level of Sports Policy awareness across all Northeastern states is presented in the Figure 4.14 below.

Figure 4.14

Distribution of the Stakeholders Level of Sports Policy Awareness based on their Role



4.4.15. Crosstabulation analysis of stakeholder education and their levels of sports policy awareness in northeast states

The crosstabulation analysis on the stakeholder education and their level of Sports Policy awareness across all Northeastern states is presented in the table 4.15 below.

Table 4.15

Distribution of the Stakeholders Level of Sports Policy Awareness based on their Role

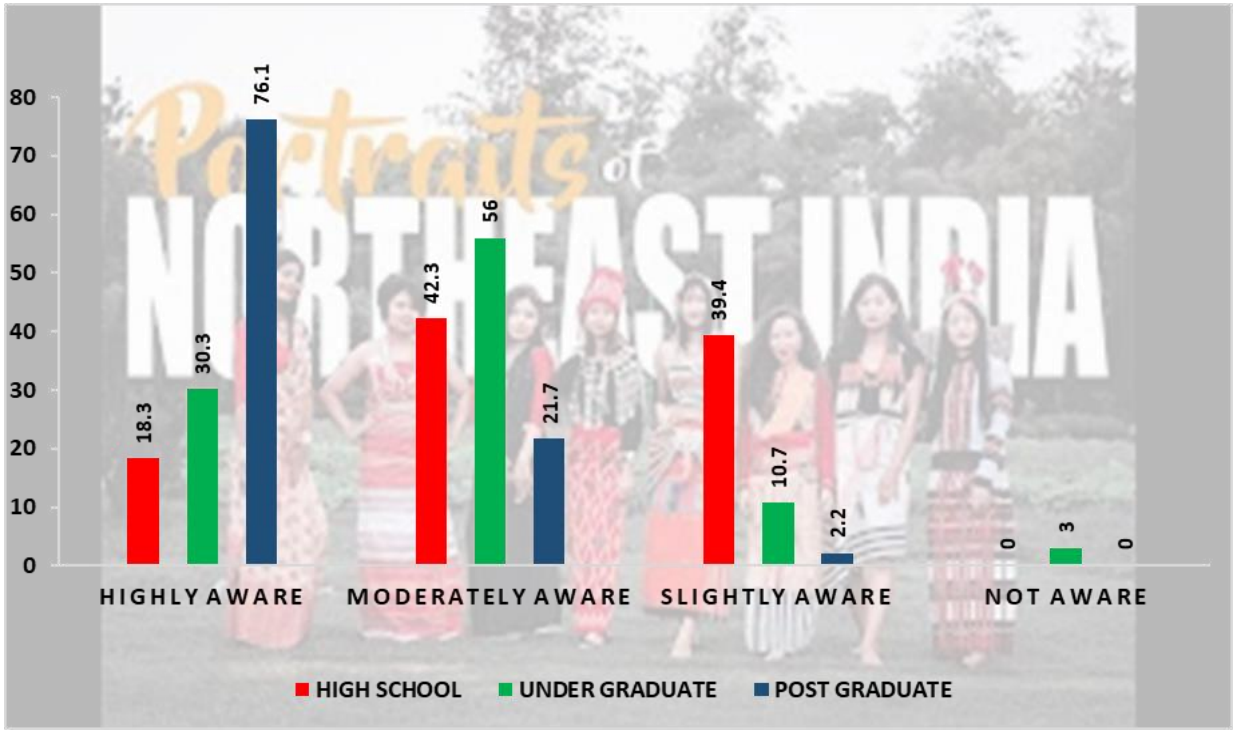
Sl.No.	EDUCATION		Highly aware	Moderately aware	Slightly aware	Not aware	TOTAL
1.	HIGH SCHOOL	Frequency	19	44	41	-	104
		%	18.3	42.3	39.4	-	100
2.	UNDER GRADUATE	Frequency	110	203	39	11	363
		%	30.3	56	10.7	3	100
3.	POST GRADUATE	Frequency	102	29	3	-	134
		%	76.1	21.7	2.2	-	100
4.	TOTAL	Frequency	231	276	83	11	601
		%	38.4	45.9	13.9	1.8	100

As shown in the preceding table, a majority of 76.1% of respondents with a postgraduate education have a high level of awareness of sports policy implementation, followed by moderate awareness among undergraduates at 56%. However, respondents with a high school education exhibit almost equal percentages of 42.3% for moderate awareness and 39.4% for slight awareness which indicates that they are less informed compared to the more educated groups. This suggests a potential knowledge gap that could be addressed through targeted educational programs aimed at increasing awareness among individuals with lower levels of education.

The graphical representation of the stakeholder education and their level of Sports Policy awareness across all Northeastern states is presented in the Figure 4.15 below.

Table 4.15

Distribution of the Stakeholders Level of Sports Policy Awareness based on their Role



4.4.16. Descriptive statistics related to sports policy implementation of various northeast states.

The table 4.16 below present the descriptive statistics of different factors of Sports Policy based on various States in Northeast India.

Table 4.16
Descriptive statistics of different factors of Sports Policy on various Northeast States

Sl. No.	DIMENSION	Arunachal Pradesh		Assam		Manipur		Meghalaya		Mizoram		Nagaland		Sikkim		Tripura	
		Mean	SD(±)	Mean	SD(±)	Mean	SD(±)	Mean	SD(±)	Mean	SD(±)	Mean	SD(±)	Mean	SD(±)	Mean	SD(±)
1.	Financial Support	21.42	2.41	21.26	1.76	21.83	1.65	21.54	1.82	22.44	1.95	22.01	1.18	21.37	1.72	20.75	2.03
2.	Governance and Management	21.55	3.58	18.54	3.28	20.50	3.02	20.76	2.29	21.10	3.43	21.90	3.83	20.52	2.09	19.58	2.39
3.	Grassroot Sports Participation	20.37	2.06	20.84	2.40	20.94	2.29	20.80	1.46	19.97	2.53	20.58	1.93	20.46	2.30	20.83	2.19
4.	Talent identification	21.30	2.24	20.12	2.73	22.36	2.07	20.12	2.33	21.36	2.88	20.99	1.88	20.76	2.04	20.93	1.50
5.	Athletic career and post-career support	19.75	2.30	19.97	2.70	21.88	2.78	21.82	1.89	19.79	2.28	19.59	2.30	20.14	2.34	20.55	2.53
6.	Training Facilities	21.07	3.73	20.73	2.89	20.44	3.05	20.59	2.91	21.25	3.41	21.27	2.99	20.11	2.48	19.20	2.66
7.	Coaches' development	21.83	2.78	21.84	1.61	22.57	1.79	20.88	1.46	21.74	1.87	21.82	2.85	20.62	1.07	21.97	2.25
8.	Sports competition	20.60	2.84	19.40	2.64	22.39	3.45	20.34	1.95	19.67	4.41	18.16	2.23	19.25	3.97	21.80	2.25
9.	Scientific and technological support	23.10	2.49	22.80	2.19	21.41	2.41	23.36	2.17	20.93	2.77	23.01	2.36	23.35	2.23	22.92	2.38
10.	Sport Development	27.80	2.92	25.05	2.90	27.68	3.04	26.66	2.90	28.66	3.44	26.55	2.96	27.06	2.91	27.76	2.24

Table 4.16 above presents the mean difference and the standard deviation of all the dimensions based on various states of Northeast India.

As we can see from the table, Mizoram achieved the highest mean score of 22.44 and the standard deviation of 1.95 on the dimension of financial support, whereas Tripura received the lowest mean score of 20.75 and a standard deviation of 2.03. Nagaland achieved the highest mean score of 21.90 and the standard deviation of 3.83 on the dimension of governance and management, whereas Assam received the lowest mean score of 18.54 and a standard deviation of 3.28. Similarly, on the dimension of Grassroots Sports Participation, Manipur achieved the highest mean score of 20.94 and the standard deviation of 2.29, whereas Mizoram received the lowest mean score of 19.97 and a standard deviation of 2.53. Manipur achieved the highest mean score of 22.36 and the standard deviation of 2.07 on the dimension of talent identification, whereas Assam and Meghalaya received the lowest mean score of 20.12 and a standard deviation of 2.73 and 2.33. Furthermore, on the dimension of athletic career and post-career support, Manipur achieved the highest mean score of 21.88 and the standard deviation of 2.78, whereas Nagaland received the lowest mean score of 19.59 and a standard deviation of 2.30. Nagaland achieved the highest mean score of 21.27 and the standard deviation of 2.99 on the dimension of training facilities, whereas Tripura received the lowest mean score of 19.20 and a standard deviation of 2.66. The dimension of coaches' development achieved a highest mean score of 22.57 and a standard deviation of 1.79 by the state of Manipur and a lowest mean score of 20.62 and a standard deviation of 1.07 by the state of Sikkim. On the other hand, the dimension of sports competition achieved a highest mean score of 22.39 and a standard deviation of 3.45 by the state of Manipur and a lowest mean score of 18.16 and a standard deviation of 2.23 by the state of Nagaland. Meghalaya achieved the highest mean score of 23.36 and the standard deviation of 2.17 on the dimension of scientific and technological support, whereas Mizoram received the lowest mean score of 20.93 and a standard deviation of 2.77.

Nonetheless, the dependent variables of sport development achieved an overall highest mean score of 28.66 and a standard deviation of 3.44 by the state of Mizoram, whereas Assam received the lowest mean score of 25.05 and a standard deviation of 2.90. This indicates a significant variation in the perceived effectiveness of sport policy initiatives across the states. The higher mean scores suggest that states like Manipur, Meghalaya and Mizoram may have more robust initiatives in place, potentially leading to better outcomes in promoting sports and fitness among their populations.

4.5. ANALYSIS OF CORRELATION COEFFICIENT MATRIX BETWEEN VARIOUS DIMENSIONS

To find out the relationship between dependent and independent variables, the Pearson Coefficient correlation was computed, and the results are presented in the table below

TABLE 4.17

PEARSON COEFFICIENT CORRELATION ANALYSIS OF DEPENDENT AND INDEPENDENT VARIABLES

	I	II	III	IV	V	VI	VII	VIII	IX	X
I	1	.094*	.443**	.081*	.380**	.067	.152**	.066	.374**	.033
II		1	.171**	.053	.144**	.068	.132**	-.026	.026	-.018
III			1	.003	.133**	.111**	.212**	.040	.195**	-.028
IV				1	.053	.138**	.125**	.064	.099*	.031
V					1	.136**	.087**	.122**	.224**	-.120**
VI						1	147**	.099*	.210**	.065
VII							1	.097*	.146**	-.005
VIII								1	.147**	-.028
IX									1	-.076
X										1

Correlation is significant at the 0.05 level (2-tailed).

I- Sports Development, II- Financial Support, III- Governance and Management, IV, Grassroot Sports Participation, V- Talent Identification, VI- Athlete Career and Post career Support, VII- Training Facilities, VIII- Coaches Development, IX- Sports Competition, X- Scientific and Technological Support

The Pearson correlation matrix shows that the dimension of Governance and management is most correlated with the dependent variables of sports development (r=0.443), and is also considered the most significant factor. Followed by the dimension of Talent Identification, with a strong positive correlation to the dependent variable (r =0.380). This implies that organized athletic talent hunts and developmental programs have a direct relationship to sporting achievement. Talent identification also strongly relates to the dimension of Sports competition (r = 0.224) and Training Facilities (r = 0.087), which supports the belief that systematic preparation of players improves performance results.

Sports Competition is another significant variable with a very strong positive correlation with sports development (r = 0.374) whereas a variable of Training Facilities has a moderate positive correlation with the dependent variable (r = 0.152) and reflects its significance in learning skills and enhancing performance. Although training programs play an important role in competition (r = 0.146) and athlete development (r = 0.147), their isolated impact may not be enough without other enabling factors like governance and talent identification.

Financial Support, while being the most important factor for infrastructure, equipment, and athlete support, are not strongly correlated with sports development (r = 0.094). This implies that an increase in more money does not automatically result in enhanced sports performance unless the money is directed and spent with proper governance systems.

Grassroots Sports participation on the other hand does not strongly relate to the dependent variable (r = -0.081), which means that investment in grassroots sports programs may not necessarily translate into participation or performance at the professional stage. This could be a reflection of variability in patterns of transition from the professional to the grassroots stage.

Scientific and technological support as much as it can optimize performance through evidence-based interventions is not significantly related to sports development results

(r=0.033). This suggests that scientific innovation has not yet found its area of application in a coordinated way in Northeast India. This gap could also be the product range of various causes. It is therefore critical to benchmark this gap so that the advantages of scientific progress in sports training and performance are increased.

4.6. MULTIPLE REGRESSION ANALYSIS BASED ON STAKEHOLDERS' OPINION ON THE IMPACT OF SPORTS POLICY IMPLEMENTATION ON SPORTS DEVELOPMENT

To find out whether there is a significant relationship between sports policy factors and sports development among stakeholders' opinions in various Northeast States, the following Multiple regression analysis is computed

4.6.1. MULTIPLE REGRESSION ANALYSIS AMONG PLAYERS OF VARIOUS NORTHEAST STATES

Hypothesis 1: There is a significance relationship between various sports policy factors and Sports development among players of various Northeast States.

To test the above hypothesis, the analysis of multiple regression is computed and the results are presented in the table below.

Table 4.18

Multiple Correlation, R square, Adjusted R square and Standard error of estimate between Sports Policy implementation and Sports Development among Players in various Northeast States.

R	R Square	Adjusted R Square	Standard error of the Estimate
.857	.734	.729	1.559

The table above shows that there is a strong relationship between sports development and sports policy factors among players of various Northeast States. The R-square value of .734 indicates that 73% of the players agree that there is a relationship between the dependent variable of sports development and independent variables of financial support, governance and management, grassroots sports participation, talent identification, athlete career and post-career support, training facilities, coaches' development, sports competition, and scientific and technological support. The findings also demonstrated that the coefficient correlation between the dependent and independent variables is .857 which predicts a good level of the dependent variables. Hence, based on the findings it can be conclude that the hypothesis 1 is accepted.

Table 4.19

Predictor Beta Values between Sports Policy implementation and Sports Development among Players in various Northeast States.

Independent Variables	Unstandardized Coefficients		"t"	Significance
	B	Standard Error		
(Constant)	4.357	1.588	2.74	.006
Financial	-0.181	.021	-8.43	.000
Governance	0.428	.024	17.68	.000
Grassroot	-0.067	.028	-2.41	.016
Talent	0.535	.025	21.33	.000
Athlete	-0.181	.028	-6.46	.000
Training	0.280	.026	10.68	.000
Coaches	-0.076	.027	-2.85	.004
Competition	0.266	.024	11.26	.000
Scientific	0.083	.030	2.74	.006

The preceding table shows the Predictor Beta Values between Sports Policy implementation and Sports Development among Players of various Northeast States.

Table 4.20

ANOVA for regressed and Residual Principle of Dependent and Independent Variables among Players in various Northeast States.

Variance	Df	Sum of Square	Mean Square	F	Significance
Regression	9	3167.30	351.92	**144.75**	**<.001**
Residual	473	1149.92	2.431		
Total	482	4317.23			

***Significance at 0.05 level**

The table above shows that the F-value of the regression and residual items is 144.75, at a statistical significance level of <.001 which is lesser than the given level of 0.05. This indicates that the overall regression model is highly significant and can adequately explain the interaction between the predictor variables and sports development. The large beta coefficients also confirm the significance of each of the independent variables to ascertain sports development among players of various Northeast states. Based on the findings, the following multiple regression equation is calculated. The obtained equation was:

$$Y = -0.181\ X_1 + 0.428\ X_2 - 0.067\ X_3 + 0.535\ X_4 - 0.181\ X_5 + 0.280\ X_6 - 0.076\ X_7 + 0.266\ X_8 + 0.083\ X_9 + 4.357$$

Or,

Sports Development =-0.181 (Financial Support) + 0.428 (Governance and Management) - 0.067 (Grassroot Sports Participation) + 0.535 (Talent Identification) - 0.181 (Athlete Career and Post career Support) + 0.280 (Training Facilities) - 0.076 (Coaches Development) + 0.266 (Sports Competition) + 0.083 (Scientific and Technological Support) + 4.357

4.6.2. MULTIPLE REGRESSION ANALYSIS AMONG COACHES OF VARIOUS NORTHEAST STATES

Hypothesis 2: There is a significance relationship between various sports policy factors and Sports development among Coaches of various Northeast States.

To test the above hypothesis, the analysis of multiple regression is computed and the results are presented in the table below.

Table 4.21

Multiple Correlation, R square, Adjusted R square and Standard error of estimate between Sports Policy implementation and Sports Development among Coaches in various Northeast States.

R	R Square	Adjusted R Square	Standard error of the Estimate
.918	.842	.825	1.661

The multiple regression analysis indicates a strong and significant relationship between sports development and the SPLISS-related sports policy variables among coaches across various Northeast states. The R^2 value of 0.842 shows that 84.2% of the variance in sports development is explained by the independent variables, including Financial Support, Governance and Management, Grassroots Sports Participation, Talent Identification, Athlete Career and Post-career Support, Training Facilities, Coach Development, Sports Competition, and Scientific and Technological Support. This high proportion of explained variance suggests that these policy factors are highly influential in shaping coaches' perceptions of sports development. Additionally, the correlation coefficient ($R = 0.918$) indicates a very strong positive relationship between the independent and dependent variables, demonstrating that increases in policy support across SPLISS dimensions are associated with higher perceptions of sports development among coaches. These results support Hypothesis 2 (H2), confirming

that there is a significant relationship between various sports policy factors and sports development among coaches in Northeast India.

Table 4.22

Predictor Beta Values between Sports Policy implementation and Sports Development among Coaches in various Northeast States.

Independent Variables	Unstandardized Coefficients		"t"	Significance
	B	Standard Error		
(Constant)	1.376	2.379	.578	.565
Financial	0.095	.061	1.55	.125
Governance	-0.001	.059	-.023	.982
Grassroot	-0.406	.061	-6.63	.000
Talent	-0.117	.068	-1.72	.088
Athlete	-0.027	.059	-.459	.647
Training	-0.156	.066	-2.36	.021
Coaches	0.133	.056	2.37	.020
Competition	0.182	.072	2.54	.013
Scientific	1.277	.079	16.07	.000

The preceding table shows the Predictor Beta Values between Sports Policy implementation and Sports Development among Coaches of various Northeast States.

Table 4.23

ANOVA for regressed and Residual Principle of Independent Variables among Coaches in various Northeast States.

Variance	Df	Sum of Square	Mean Square	F	Significance
Regression	9	1224.94	136.10	**49.31**	**<.001**
Residual	83	229.06	2.760		
Total	92	1454.00			

***Significance at 0.05 level**

The table reveals that the F-value of the regression and residual items is 49.318, at a statistical significance level of <.001, which is lower than the stated level of 0.05. This suggests that the entire regression model is very significant and can effectively explain the relationship between predictor factors and sports development. The significant beta coefficients also demonstrate the relevance of each independent variable in predicting sports growth among coaches from diverse Northeast states. Based on the observations, the following multiple regression equation is computed. The resultant equation was:

$Y = 0.095\ X_1 - 0.001\ X_2 - 0.406\ X_3 - 0.117\ X_4 - 0.027\ X_5 - 0.156\ X_6 + 0.133\ X_7 + 0.182\ X_8 + 1.277\ X_9 + 1.376.$

Or,

Sports Development = 0.095 (Financial Support) - 0.001 (Governance and Management) - 0.406 (Grassroot Sports Participation) - 0.117 (Talent Identification) - 0.027 (Athlete Career and Post career Support) - 0.156 (Training Facilities) + 0.133 (Coaches Development) + 0.182 (Sports Competition) + 1.277 (Scientific and Technological Support) + 1.376.

4.6.3. MULTIPLE REGRESSION ANALYSIS AMONG SPORTS ADMINISTRATORS OF VARIOUS NORTHEAST STATES

Hypothesis 3: There is a significance relationship between various sports policy factors and Sports development among Sports Administrators of various Northeast States.

To test the above hypothesis, the analysis of multiple regression is computed and the results are presented in the table below.

Table 4.24

Multiple Correlation, R square, Adjusted R square and Standard error of estimate between Sports Policy implementation and Sports Development among Sports Administrators in various Northeast States.

R	R Square	Adjusted R Square	Standard error of the Estimate
.925	.855	.835	1.446

The multiple regression analysis demonstrates a very strong relationship between sports policy implementation and sports development among sports administrators across various Northeast states. The multiple correlation coefficient (R=0.925) indicates a very strong positive association between the independent variables (Financial Support, Governance and Management, Grassroots Sports Participation, Talent Identification, Athlete Career and Post-career Support, Training Facilities, Coach Development, Sports Competition, and Scientific and Technological Support) and the dependent variable (sports development). The R^2 value of 0.855 suggests that 85.5% of the variance in sports development among sports administrators is explained by these sports policy dimensions. After adjusting for the number of predictors, the Adjusted R^2=0.835 confirms that 83.5% of the variance is reliably accounted for, demonstrating the robustness and predictive strength of the model. The standard error of the estimate (1.446) indicates that the predicted values are, on average, close to the actual observed values, reflecting good accuracy of the regression model. These results support Hypothesis 3 (H3), confirming that various sports policy factors have a significant influence on sports development among sports administrators in Northeast India.

Table 4.25

Predictor Beta Values between Sports Policy implementation and Sports Development among Sports Administrators in various Northeast States.

Independent Variables	Unstandardized Coefficients		"t"	Significance
	B	Standard Error		
(Constant)	12.856	3.625	3.54	.001
Financial	0.179	.066	2.72	.008
Governance	0.498	.070	7.06	.000
Grassroot	-0.411	.064	-6.38	.000
Talent	0.143	.086	1.65	.103
Athlete	0.345	.063	5.48	.000
Training	-0.523	.066	-7.91	.000
Coaches	-0.242	.073	-3.29	.002
Competition	0.331	.055	6.07	.000
Scientific	0.353	.072	4.94	.000

The preceding table shows the Predictor Beta Values between Sports Policy implementation and Sports Development among Sports Administrators of various Northeast States.

Table 4.26

ANOVA for regressed and Residual Principle of Independent Variables among Sports Administrators in various Northeast States.

Variance	Df	Sum of Square	Mean Square	F	Significance
Regression	9	792.315	88.035	**42.07**	**<.001**
Residual	64	133.901	2.092		
Total	73	926.216			

***Significance at 0.05 level**

The table above reveals that the F-value of the regression and residual items is 42.07, at a statistical significance level of <.001, which is lower than the stated level of 0.05. This suggests that the entire regression model is very significant and can properly explain the relationship

between the predictor variables and Sports development. The significant beta coefficients further support the importance of each of the independent factors in predicting sports growth among Sports Administrators from diverse Northeast states. Based on the observations, the multiple regression equation shown below is computed. The resulting equation was:

$Y = 0.179\ X_1 + 0.498\ X_2 - 0.411\ X_3 + 0.143\ X_4 + 0.345\ X_5 - 0.523\ X_6 - 0.242\ X_7 + 0.331\ X_8 + 0.353\ X_9 + 12.856$.

Or,

Sports Development = 0.179 (Financial Support) + 0.498 (Governance and Management) - 0.411 (Grassroot Sports Participation) + 0.143 (Talent Identification) + 0.345 (Athlete Career and Post career Support) - 0.523 (Training Facilities) - 0.242 (Coaches Development) + 0.331 (Sports Competition) + 0.353 (Scientific and Technological Support) + 12.856.

4.6.4. MULTIPLE REGRESSION ANALYSIS AMONG MALE RESPONDENTS OF VARIOUS NORTHEAST STATES

Hypothesis 4: There is a significance relationship between sports policy factors and Sports development among Male respondents of various Northeast States.

To test the above hypothesis, the analysis of multiple regression is computed and the results are presented in the table below.

Table 4.27

Multiple Correlation, R square, Adjusted R square and Standard error of estimate between Sports Policy implementation and Sports Development among Male respondents in various Northeast States.

R	R Square	Adjusted R Square	Standard error of the Estimate
.878	.771	.766	1.519

The multiple regression analysis reveals a strong relationship between sports policy implementation and sports development among male respondents across various Northeast states. The multiple correlation coefficient (R=0.878) indicates a strong positive association between the independent variables- Financial Support, Governance and Management, Grassroots Sports Participation, Talent Identification, Athlete Career and Post-career Support, Training Facilities, Coach Development, Sports Competition, and Scientific and Technological Support and the dependent variable (sports development). The R^2 value of 0.771 suggests that 77.1% of the variance in sports development among male respondents is explained by these policy dimensions. The Adjusted $R^2 = 0.766$ confirms that, after accounting for the number of predictors, 76.6% of the variance is reliably captured, demonstrating the robustness of the model. The standard error of the estimate (1.519) indicates that the predicted values are reasonably close to the observed values, reflecting good predictive accuracy. These findings support Hypothesis 4 (H4), confirming that various sports policy factors have a significant influence on sports development among male respondents in Northeast India.

Table 4.28

Predictor Beta Values between Sports Policy implementation and Sports Development among Male respondents in various Northeast States.

Independent Variables	Unstandardized Coefficients		"t"	Significance
	B	Standard Error		
(Constant)	-6.530	1.709	-3.82	.000
Financial	-0.067	.041	-1.61	.108
Governance	0.392	.026	15.19	.000
Grassroot	0.026	.037	.703	.482
Talent	0.606	.035	17.24	.000
Athlete	-0.055	.032	-1.74	.082
Training	0.308	.027	11.21	.000
Coaches	0.028	.041	.690	.491

Competition	0.316	.026	12.32	.000
Scientific	0.048	.032	1.50	.134

The preceding table shows the Predictor Beta Values between Sports Policy implementation and Sports Development among Male respondents of various Northeast States.

Table 4.29

ANOVA for regressed and Residual Principle of Independent Variables among Male respondents in various Northeast States.

Variance	Df	Sum of Square	Mean Square	F	Significance
Regression	9	2843.30	315.92	**136.9**	**<.001**
Residual	365	842.12	2.307		
Total	374	3685.42			

***Significance at 0.05 level**

According to the above table, the regression and residual items' F-value is 136.9 at a statistical significance level of <.001, which is less than the 0.05 requirement. This implies that the complete regression model is very significant and capable of accurately elucidating the connection between sports development and the predictor variables. The significance of each independent factor in predicting the development of sports among male respondents from various Northeast states is further supported by the substantial beta coefficients. The following multiple regression equation is calculated based on the observations. As a result, the equation was:

$$Y = -0.067\ X_1 + 0.392\ X_2 + 0.026\ X_3 + 0.606\ X_4 - 0.055\ X_5 + 0.308\ X_6 + 0.028\ X_7 + 0.316\ X_8 + 0.048\ X_9 - 6.530$$

Or,

Sports Development = - 0.067 (Financial Support) + 0.392 (Governance and Management) + 0.026 (Grassroot Sports Participation) + 0.606 (Talent Identification) - 0.055 (Athlete Career

and Post career Support) + 0.308 (Training Facilities) + 0.028 (Coaches Development) + 0.316 (Sports Competition) + 0.048 (Scientific and Technological Support) – 6.530.

4.6.5. MULTIPLE REGRESSION ANALYSIS AMONG FEMALE RESPONDENTS OF VARIOUS NORTHEAST STATES

Hypothesis 5: There is a significance relationship between sports policy factors and Sports development among Female respondents of various Northeast States.

To test the above hypothesis, the analysis of multiple regression is computed and the results are presented in the table below.

Table 4.30

Multiple Correlation, R square, Adjusted R square and Standard error of estimate between Sports Policy implementation and Sports Development among Female respondents in various Northeast States.

R	R Square	Adjusted R Square	Standard error of the Estimate
.915	.837	.830	1.617

The multiple regression analysis demonstrates a very strong relationship between sports policy implementation and sports development among female respondents across various Northeast states. The multiple correlation coefficient (R=0.915) indicates a very strong positive association between the independent variables-Financial Support, Governance and Management, Grassroots Sports Participation, Talent Identification, Athlete Career and Post-career Support, Training Facilities, Coach Development, Sports Competition, and Scientific and Technological Support- and the dependent variable (sports development). The R^2 value of 0.837 suggests that 83.7% of the variance in sports development among female respondents is explained by these policy dimensions. The Adjusted $R^2 = 0.830$ confirms that, after adjusting for the number of predictors, 83% of the variance is reliably accounted for, indicating the robustness of the regression model. The standard error of the estimate (1.617) reflects that the

predicted values closely approximate the actual observed values, demonstrating good predictive accuracy. These results support Hypothesis 5 (H5), confirming that various sports policy factors have a significant influence on sports development among female respondents in Northeast India.

Table 4.31

Predictor Beta Values between Sports Policy implementation and Sports Development among Female respondents in various Northeast States.

Independent Variables	Unstandardized Coefficients		"t"	Significance
	B	Standard Error		
(Constant)	-9.207	2.379	-3.871	.000
Financial	0.005	.057	.095	.925
Governance	0.404	.036	11.14	.000
Grassroot	-0.247	.050	-4.941	.000
Talent	0.685	.050	13.81	.000
Athlete	-0.275	.046	-6.007	.000
Training	0.062	.037	1.710	.089
Coaches	-0.019	.050	-.377	.706
Competition	0.630	.035	18.10	.000
Scientific	0.475	.045	10.51	.000

The preceding table shows the Predictor Beta Values between Sports Policy implementation and Sports Development among Female respondents of various Northeast States.

Table 4.32

ANOVA for regressed and Residual Principle of Independent Variables among Female respondents in various Northeast States.

Variance	Df	Sum of Square	Mean Square	F	Significance
Regression	9	2897.05	321.89	**123.08**	**<.001**
Residual	216	564.87	2.615		
Total	225	3461.92			

***Significance at 0.05 level**

The regression and residual items have an F-value of 123.08 at a statistical significance level of <.001, which is lower than the required 0.05. This suggests that the regression model is very significant and able to precisely explain how the predictor variables relate to sports development. The significant beta coefficients indicate each independent factor's importance in predicting the growth of sports among female respondents from diverse Northeast states. The observations are used to create the multiple regression equation shown below. As result, the equation was:

$Y = -0.005\ X_1 + 0.404\ X_2 - 0.247\ X_3 + 0.685\ X_4 - 0.275\ X_5 + 0.062\ X_6 - 0.019\ X_7 + 0.630\ X_8 + 0.475\ X_9 - 9.207$

Or,

Sports Development = - 0.005 (Financial Support) + 0. 404 (Governance and Management) - 0. 247 (Grassroot Sports Participation) + 0. 685 (Talent Identification) - 0. 275 (Athlete Career and Post career Support) + 0. 062 (Training Facilities) - 0. 019 (Coaches Development) + 0. 630 (Sports Competition) + 0. 475 (Scientific and Technological Support) – 9.207.

4.7. ANALYSIS RELATED TO STAKEHOLDERS' OPINION ON SPORTS POLICY IMPLEMENTATION OF VARIOUS NORTHEAST STATE:

To find out the stakeholder's opinion on various dimension of Sports Policy in Northeast India, the researcher has utilised the One way- MANOVA statistics to test the hypothesis.

4.7.1. ONE-WAY MANOVA ANALYSIS OF STAKEHOLDERS' OPINIONS ON SPORTS POLICY IMPLEMENTATION ACROSS VARIOUS NORTHEAST STATES BASED ON THEIR ROLES.

Hypothesis 6: There is a significance difference between the opinion of Stakeholders on Sports policy implementation based on their role.

This hypothesis was tested using a One-Way Multivariate Analysis of Variance (MANOVA) to determine whether there were any significant differences in the stakeholders' perceptions on the implementation of sports policies based on their roles. While adjusting for Type I errors, MANOVA looks at several dependent variables simultaneously to find stakeholder differences. This method makes it possible to have a better understanding of how various stakeholders viewed the implementation of sports policies in the various Northeast Indian states.

Although MANOVA assumptions include the homogeneity of covariance matrices (tested using Box's M), this study focused on descriptive statistics, Wilks' Lambda, and post-hoc comparisons to interpret group differences. Box's M is highly sensitive to large sample sizes and minor deviations from normality, often resulting in significance even when differences are not practically meaningful. Wilks' Lambda provides a robust multivariate test of group differences, and post-hoc analyses allow identification of specific group contrasts. Therefore, the decision to report Wilks' Lambda and post-hoc results ensures a clear, interpretable, and practically meaningful presentation of stakeholder differences in perceptions across SPLISS pillars.

The descriptive statistics of Sports policy factors among independent variables are presented in the table below.

Table 4.33
Descriptive statistics among stakeholder's role in Various Dimension of Sports Policy

VARIABLES	PLAYERS		COACHES		SPORTS ADMINISTRATORS		'F'	Sig.
	Mean	S. D	Mean	S. D	Mean	S. D		
Financial Support	21.68	1.952	20.89	2.070	21.37	1.933	4.96	.007
Governance and Management	20.94	3.001	18.00	3.536	19.18	2.848	32.2	<.001
Grassroot Sports Participation	20.92	2.154	19.80	1.813	19.23	2.044	22.3	<.001
Talent identification	21.29	2.365	20.12	2.095	19.67	1.756	18.4	<.001
Athletic career and post-career support	20.91	2.456	19.29	2.720	18.74	2.100	29.3	<.001
Training Facilities	21.23	2.721	17.92	2.996	17.91	2.899	69.5	<.001
Coaches' development	21.92	2.191	21.05	1.515	20.81	1.274	11.4	<.001
Sports competition	20.89	3.172	17.45	2.652	18.74	3.062	43.2	<.001
Scientific and Technological Support	22.57	2.432	23.38	2.548	21.61	2.782	7.8	<.001

The table above demonstrates the mean, standard deviation, F test and Significance level of various dimension of sports policy across three groups which is players, coaches, and sports administrators. Each dimension represents a key factor influencing sports policy implementation and its effectiveness.

As we can see from the table above, Players reported to have a highest score in almost all the dimension of sports policy factors. The dimension of financial support (21.68), indicating their perception of better financial backing compared to coaches (20.89) and sports administrators (21.37). Players also received a high mean score of 20.94 in the dimension of governance and management, 20.92 in the dimension of grassroots sports participation, 21.29 in the dimension of talent identification, 20.91 in the dimension of athletic career and post-career support, 21.23 in the dimension of training facilities, and a highest mean of 21.92 in the

coaches' development dimension. Similarly, for the dimension of sports competition, players again had the highest mean score of 20.89, while coaches (17.45) and administrators (18.74) rated it lower. The only dimension where coaches reported the highest mean was scientific and technological support (23.38), suggesting they perceived the strongest impact of technological advancements, followed by players (22.57) and administrators (21.61). Overall, the perception of Players had much higher means in all areas except the scientific and technical support, where the coaches had the highest mean. The differences imply changes of perception among and between the three groups which possibly could have implications for sports policy and development strategies.

The F-values across the nine dimensions based on the respondent's role show that training facilities (F=69.5), sports competition (F=43.2), governance and management (F=32.2), and athletic career and post-career support (F=29.3) had the most significant impact on sports development in the region and were critical for shaping policy outcomes, whereas financial support recorded the lowest F-value at 4.96. Nevertheless, all the dimensions were found to be statistically significant at the P<.001 level, reflecting the strength of the results and further confirming that each variable influences the model significantly.

The results of the multivariate test are presented in the table below, specifically focusing on Wilks' Lambda, a key statistic used to evaluate the extent to which group differences exist across multiple dependent variables.

Table 4.34

Multivariate Analysis for Stakeholders' Role opinion in Sports Policy Implementation Across Northeast States

Test	Statistic	F	df1	df2	Sig.
Box's M (Equality of Covariance Matrices)	720.9	2.18	315	40465	< .001
Pillai's Trace (Multivariate Effect)	0.685	7.71	63	4480	< .001

Box's Test of Equality of Covariance Matrices was significant (Box's M = 720.9, F = 2.18, $p < .001$), indicating that the assumption of homogeneity of covariance matrices was violated. This is a common occurrence in studies with large sample sizes and multiple dependent variables, as Box's M is highly sensitive to these conditions (Field, 2013; Tabachnick & Fidell, 2013).

To address this, Pillai's Trace, a more robust multivariate statistic, was used to examine the differences in stakeholders' perceptions across the SPLISS pillars. Pillai's Trace was significant ($V = 0.685$, $F(63, 4480) = 7.71$, $p < .001$), demonstrating that the combined dependent variables differed significantly across stakeholder roles. This justifies conducting post-hoc comparisons to identify specific SPLISS dimensions where perceptions varied by role. These results indicate meaningful multivariate differences in stakeholders' perceptions, emphasizing the need for role-specific strategies for policy implementation and monitoring in Northeast India. Since the p-value is less than .05, the Tukey Post hoc test was computed, and the data are presented in the table below.

Table 4.35
Post-Hoc pairwise comparison for Players, Coaches and Sports Administrators on Sports Policy implementation.

VARIABLES	COMPARISON BETWEEN STAKEHOLDERS' ROLE					
	Players Vs Coaches		Players vs Sports Administrator		Coaches Vs Sports Administrator	
	MD	Sig.	MD	Sig.	MD	Sig.
Financial Support	.79	.007	.31	.448	-.48	.376
Governance and Management	2.94	<.001	1.77	<.001	-1.18	.086
Grassroot Sports Participation	1.12	<.001	1.70	<.001	.57	.295
Talent identification	1.17	<.001	1.63	<.001	.46	.515
Athletic career and post-career support	1.62	<.001	2.18	<.001	.56	.426
Training Facilities	3.30	<.001	3.32	<.001	.01	1.000

Coaches' development	.88	.004	1.12	<.001	.24	.798
Sports competition	3.44	<.001	2.15	<.001	1.29	.564
Scientific and Technological Support	.81	.036	.96	.016	1.77	<.001

MD= Mean Difference, *P-values is significance at 0.05 level.

With a P-value of 0.007, the finding shows that there is a significant difference between the opinions of coaches and players in the dimension of financial support. This indicates that players believe that the financial support factor is essential to their performance and overall development. However, there is no statistically significant difference between coaches and sport administrators (P>0.376) or between players and administrators (P>0.448). This suggests that coaches and administrators have a similar understanding of the financial constraints in the sports industry, although players may feel comparatively more financially supported.

The results indicates that there is a significant difference in the governance and management dimension between players and coaches (P<.001) and players and sports administrators (P<.001). This demonstrates that players have a more positive impression on governance systems, presumably as a result of their direct involvement in competitive opportunities and policy outcomes. Meanwhile, the difference between coaches and sports administrators (P>.086) is not statistically significant, indicating that these two groups have comparable perspectives on governance efficiency and management issues.

On the dimension of grassroots sport participation, the results show that there is a significant difference between the opinions of players and coaches (P<.001) and between players and sports administrators (P<.001). This means that players believe that grassroots sports participation initiatives are more robust than the other two categories. Nevertheless, there is no statistically significant difference between coaches and administrators (P>.295), which indicates that coaches and administrators have a similar view of grassroots sports participation.

The findings may also suggest that while coaches and administrators are aware of institutional barriers, players are more hopeful due to their direct involvement at the grassroots level.

There are significant differences between the opinions of players and coaches and players and sports administrators in the dimension of talent identification where both of the P value is significance at <.001 level. However, the difference between coaches and administrators (P>.515) is not significant, indicating that both groups might share concerns about the effectiveness or accessibility of talent scouting and development programs.

There is a significant difference between players and coaches (P<.001) and players and sports administrators (P<.001) in the dimension of athletic career and post-career support. This shows that players have a more favourable perception towards this particular factor. Whereas there is no significant difference between coaches and sports administrators (P>.426), indicating that both groups share similar views on the support provided in these areas.

There is a significant difference between the opinion of players and coaches (P<.001) and players and sports administrators (P<.001) in the dimension of training facilities. This suggests that players have a better experience as they are directly involved in the facility compared to those managing or overseeing such infrastructure. However, there is no significant difference between coaches and administrators (P>1.000), implying that both groups have a similar perception towards training facilities in various Northeast States.

There is a significant difference between the opinion of players and coaches (P<.004) and players and sports administrators (P<.001) in the dimension of coaches' development. However, there is no significant difference in the perception between coaches and administrators (P>.798) in this dimension; this suggests that both groups believe that there are limitations in professional development possibilities for coaches.

In the dimension of sports competition, finding shows that there is a significance differences between the opinion of player with both the categories of coaches (P<.001) and sports administrators (P<.001). Whereas there no significance difference between the opinion of coaches and administrators (P>.564) since the obtained p value is greater than then the significance level of .05.

There is a significant difference between Players and coaches (P<.036) and Players and sports administrators (P<.016) in the dimension of scientific and technological support. Additionally, there is also a significant difference between coaches and sports administrators (P<.001), suggesting that all the stakeholder's perception towards technological improvements, is statistically difference. The significance differences across all comparisons confirm that each group has a distinct perception of scientific and technological support.

The overall findings reveal a significant difference in stakeholders' perceptions across all dimensions of sports policy based on their roles, specifically between players and coaches, players and sports administrators, as well as between coaches and sports administrators. Based on the assumptions and results of the MANOVA analysis, the hypothesis that stakeholder perceptions differ by role is supported. These findings indicate that stakeholder role significantly influences how sports policy implementation is perceived, emphasizing the need for role-specific strategies in policy development, monitoring, and implementation.

4.7.2. ONE-WAY MANOVA ANALYSIS OF GENDER OPINIONS BASED ON SPORTS POLICY IMPLEMENTATION ACROSS VARIOUS NORTHEAST STATES.

Hypothesis 7: There is a significance difference between the opinion of Stakeholders on Sports policy implementation based on their gender.

This hypothesis was tested using a One-Way Multivariate Analysis of Variance (MANOVA) to see if gender opinions regarding sports policy implemented in Northeastern states differed

significantly. To identify stakeholder differences, MANOVA examines many dependent variables at once while correcting for Type I errors. This approach enables a deeper comprehension of the perspectives of different stakeholders on the execution of sports policy in the several states of Northeast India.

The descriptive statistics of Sports policy factors among independent variables are presented in the table below.

Table 4.36
Descriptive statistics among the genders opinion in Various Dimension of Sports Policy

VARIABLES	MALE		FEMALE		'F'	Sig.
	Mean	S. D	Mean	S. D		
Financial Support	21.69	1.952	21.36	2.002	4.07	.044
Governance and Management	20.35	3.206	20.63	3.200	1.08	.298
Grassroot Sports Participation	20.70	2.152	20.55	2.237	.604	.437
Talent identification	21.16	2.372	20.77	2.305	3.75	.053
Athletic career and post-career support	20.61	2.605	20.40	2.505	.96	.326
Training Facilities	20.63	2.970	20.44	3.227	.53	.466
Coaches' development	21.70	2.012	21.76	2.225	.09	.754
Sports competition	20.47	3.255	20.05	3.420	2.21	.137
Scientific and Technological Support	22.55	2.537	22.60	2.462	.055	.814

The table above demonstrates the mean, standard deviation, F test and Significance level of various dimension of sports policy across two gender groups which is male and female. Each dimension represents a key factor influencing sports policy implementation and its effectiveness.

As we can see from the table above, both male and reported to have a highest score in almost all the dimension of sports policy factors. The dimension of financial support received a mean score of 21.69 and 21.36 on the Male and Female category. Both male and female also received a high mean score of 20.35 and 20.63 in the dimension of governance and management, 20.70 and 20.55 in the dimension of grassroots sports participation, 21.16 and 21.77 in the dimension of talent identification, 20.61 and 20.40 in the dimension of athletic career and post-career support, 20.63 and 20.44 in the dimension of training facilities, and a highest mean of 21.70 and 21.76 in the dimension of coaches' development. Similarly, for the dimension of sports competition, both the genders received a high mean score of 20.47 and 20.05. The only dimension where both the genders reported the highest mean value among other factors was scientific and technological support with 22.55 and 22.60. This implies that both the genders have a similar perception towards all the factors of sports policy implementation.

Financial support is the sole variable with a significant difference in gender perception across male and female respondents, achieving an F-value of 4.07 and a p-value of .044, which is less than a significance level. Whereas, other dimensions exhibited no significant difference among the gender opinion on sports policy implementation. This indicates that male and female respondents had similar attitudes in the majority of such domains.

The results of Wilks' Lambda which specifically evaluate the extent to which group differences exist across multiple dependent variables multivariate test are presented in the table below.

Table 4.37

Multivariate Analysis for Stakeholders' Gender opinion on Sports Policy Implementation Across Northeast States

Test	Statistic	F	df1	df2	Sig.
Box's M (Equality of Covariance Matrices)	46.63	1.02	45	89818	.435
Pillai's Trace (Multivariate Effect)	.012	.828	9	640	.59

Box's Test of Equality of Covariance Matrices was not significant (Box's M = 46.63, F = 1.02, p = .435), indicating that the assumption of homogeneity of covariance matrices was met (Field, 2013; Tabachnick & Fidell, 2013).

Pillai's Trace was also not significant (V = 0.012, F (9, 640) = 0.828, p = .59), suggesting that there were no statistically significant differences in the combined SPLISS dimensions between male and female stakeholders. Consequently, the hypothesis that stakeholder perceptions differ by gender is not supported. This suggests that, based on the current data, male and female respondents perceive the implementation of sports policy similarly across the examined dimensions.

These results are important, as they suggest that gender may not be a differentiating factor in perceptions of sports policy implementation in Northeast India. However, further descriptive analyses can provide additional insight into mean differences, even when they are not statistically significant.

4.7.3. ONE-WAY MANOVA ANALYSIS OF STAKEHOLDERS' OPINIONS ON SPORTS POLICY IMPLEMENTATION ACROSS VARIOUS NORTHEAST STATES BASED ON THEIR AGE.

Hypothesis 8: There is a significance difference between the opinion of Stakeholders on Sports policy implementation based on their age.

This hypothesis was tested using a One-Way Multivariate Analysis of Variance (MANOVA) to determine if there are any significant differences in the stakeholders' perceptions on the implementation of sports policies based on their age. While adjusting for Type I errors, MANOVA looks at several dependent variables simultaneously to find stakeholder differences. This method makes it possible to have a better understanding of how various stakeholders viewed the implementation of sports policies in the various Northeast Indian states.

The descriptive statistics of Sports policy factors among independent variables are presented in the table below.

Table 4.38
Descriptive statistics among stakeholder's age group on various Dimension of Sports Policy implementation

VARIABLES	Less than 25 Yrs.		26 to 35 Yrs		36 to 45 Yrs.		45 Yrs. And above		'F'	Sig.
	Mean	S. D	Mean	S. D	Mean	S. D	Mean	S. D		
Financial Support	21.65	1.939	21.59	2.034	20.98	1.898	21.84	2.035	2.02	.109
Governance and Management	20.87	2.932	20.54	3.331	18.86	3.401	17.68	2.849	12.00	<.001
Grassroot Sports Participation	20.94	2.250	20.52	2.071	19.69	2.019	19.89	1.663	6.80	<.001
Talent identification	21.43	2.378	20.80	2.264	19.93	2.140	19.74	1.695	10.34	<.001
Athletic career and post-career support	21.07	2.448	20.25	2.582	19.19	2.417	18.74	2.104	15.00	<.001
Training Facilities	21.19	2.664	20.75	3.066	17.32	2.622	17.89	3.264	37.10	<.001
Coaches' development	21.97	2.126	21.65	2.172	20.83	1.379	21.16	1.642	5.75	<.001
Sports competition	21.10	3.229	20.09	3.140	17.88	2.653	17.16	2.911	25.17	<.001
Scientific and Technological Support	22.40	2.489	22.75	2.422	23.12	2.679	21.68	2.849	2.58	.053

The table above demonstrates the mean, standard deviation, F test and Significance level of various dimension of sports policy across four groups which is ‘Less than 25 Yrs’, ‘26 to 35 Yrs’, ‘36 to 45 Yrs’, and ‘45 Yrs and above’. Each dimension represents a key factor influencing sports policy implementation and its effectiveness.

As we can see from the table above, the age-wise category of ‘45 Yrs. and above’ reported having the highest mean score in the dimension of financial support, which is 21.84, whereas the age group of ‘36 to 45 Yrs.’ received the lowest mean score of 20.98. Similarly, in the dimension of governance and management, the age group of ‘less than 25 yrs.’ achieved the highest mean score of 20.87, and the age group of ‘45 yrs. and above’ received the lowest mean score of 17.68. The dimension of grassroots sports participation received the highest mean score of 20.94 in the ‘less than 25 yrs.’ age group, whereas the age group of ‘36 to 45 yrs.’ achieved the lowest mean score of 19.69. The dimension of talent identification received a highest mean score of 21.43 in the ‘less than 25 yrs’ age group, whereas the age group of ‘45 yrs. and above’ achieved the lowest mean score of 19.74. Additionally, the dimension of athletic career and post-career support received a highest mean score of 20.25 in the’ 26 to 35 years’ age group, whereas the age group of ‘45 years and above’ achieved the lowest mean score of 18.74. The dimension of training facilities received the highest mean score of 21.19 in the ‘less than 25 yrs.’ age group, whereas the age group of ‘36 to 45 yrs.’ achieved the lowest mean score of 17.32. The dimension of coaches’ development received a highest mean score of 21.97 in the ‘less than 25 yrs.’ age group, whereas the age group of ‘36 to 45 yrs.’ achieved the lowest mean score of 20.83. The dimension of sports competition received the highest mean score of 21.10 in the ‘Less than 25 yrs’ age group, whereas the age group of ‘45 Yrs. and above’ achieved the lowest mean score of 17.16. Lastly, the dimension of scientific and technological support received a highest mean score of 23.12 in the ‘36 to 45 yrs.’ age group, whereas the age group of ‘45 yrs. and above’ achieved the lowest mean score of 21.68. This distribution

shows a clear tendency in how different age groups perceive and benefit from various aspects of sports policy and support.

The significance results reveal that in the age group category, almost all of the dimensions are found to be significant, as indicated by the F values in the following criteria: Governance & Management (F=12.00, P<.001), Grassroots Sports Participation (F=6.80, P<.001), Talent Identification (F=10.34, P<.001), and Training Facilities (F=37.10, P<.001). Additionally, Athletic Career Support, Coaches' Development, and Sports Competition also appear to be statistically significant. However, financial support (P>.109) and scientific & technological support (P>.053) do not show any differences across the age groups, indicating that the age group has a similar perception towards these two dimensions.

The results of the multivariate test are presented in the table below, specifically focusing on Wilks' Lambda, a key statistic used to evaluate the extent to which group differences exist across multiple dependent variables.

Table 4.39

Multivariate Analysis for Stakeholders age group opinions on Sports Policy Implementation Across Northeast States

Test	Statistic	F	df1	df2	Sig.
Box's M (Equality of Covariance Matrices)	239.8	1.65	135	2749	<.001
Pillai's Trace (Multivariate Effect)	.443	12.33	27	1920	<.001

Box's Test of Equality of Covariance Matrices was significant (Box's M = 239.8, F = 1.65, $p < .001$), indicating that the assumption of homogeneity of covariance matrices was violated. Box's M is highly sensitive to large sample sizes and multiple dependent variables, so the violation is not uncommon and does not preclude interpretation using more robust statistics (Field, 2013; Tabachnick & Fidell, 2013).

Pillai's Trace, which is robust to violations of this assumption, was significant (V = 0.443, F(27, 1920) = 12.33, p < .001), indicating that the combined dependent variables representing SPLISS dimensions differed significantly across age groups. This supports the hypothesis that stakeholders' perceptions of sports policy implementation vary by age group.

These findings justify conducting follow-up post-hoc analyses to determine which SPLISS dimensions show significant differences between specific age categories. The results suggest that age is a meaningful factor influencing perceptions of sports policy implementation, highlighting the importance of considering age-specific perspectives when designing and implementing sports policies in Northeast India.

Table 4.40

Post-Hoc pairwise comparison for Stakeholders' Age group opinions on Sports Policy Implementation

Variables	COMPARISON BETWEEN STAKEHOLDERS' AGE CATEGORY											
	Group 1		Group 2		Group 3		Group 4		Group 5		Group 6	
	MD	Sig.	MD	Sig.	MD	Sig.	MD	Sig.	MD	Sig.	MD	Sig.
P1	.06	.987	.66	.083	.20	.975	.60	.162	.25	.949	.86	.350
P2	.33	.641	2.00	<.001	3.18	<.001	1.67	.002	2.85	<.001	1.18	.478
P3	.42	.136	1.25	<.001	1.05	.169	.83	.046	.63	.614	.20	.985
P4	.63	.013	1.50	<.001	1.69	.010	.87	.052	1.06	.216	.20	.988
P5	.82	.001	1.89	<.001	2.34	<.001	1.06	0.20	1.51	.055	.45	.902
P6	.44	.294	3.87	<.001	3.30	<.001	3.43	<.001	2.85	<.001	.57	.868
P7	.33	.293	1.14	<.001	.81	.343	.82	.039	.49	.759	.33	.932
P8	1.01	.002	3.22	<.001	3.94	<.001	2.21	<.001	2.93	<.001	.72	.818
P9	.35	.402	.71	.182	.71	.590	.37	.753	1.07	.282	1.43	.131

MD= Mean Difference, *P-values is significance at 0.05 level.

**P1-Financial Support, P2-Governance and Management, P3-Grassroot Sports Participation, P4-Talent Identification, P5- Athletic career and post-career support, P6-Training Facilities, P7-Coaches Development, P8-Sports Competition, P9-Scientific and Technological Support*

**Group 1-Less than 25 Yrs. Vs 26 to 35 Yrs, Group 2- Less than 25 Yrs. Vs 36 to 45 Yrs, Group 3-Less than 25 Yrs. Vs 45 Yrs. and above, Group 4-26 to 35 Yrs Vs 36 to 45 Yrs, Group 5-26 to 35 Yrs Vs 45 Yrs. and above, Group 6-36 to 45 Yrs Vs 45 Yrs. and above.*

The Tukey post hoc test results for the MANOVA analysis indicate significant differences in stakeholders' opinions across different age groups regarding various dimensions of sports policy implementation.

It can be seen from the table above that there is no significant difference between various age groups of stakeholders on the dimension of financial support (P1), since the p-value is greater than .05; the dimension is considered to be statistically insignificant. This suggests that stakeholders across different age groups have similar perceptions regarding financial support, indicating a consistent level of agreement on this aspect regardless of age.

There is a significant difference between the age group of 'less than 25 years' (P<.001) and all other groups in the dimension of governance and management (P2), particularly concerning those aged '36 to 45 years' and '45 years and above.' Likewise, there is a significant difference between the age group of '26 to 35 yrs and the age group of 36 to 45 years' (P<0.02); as well as between the age group of '26 to 35 years and 45 years and above' (P<.001), which indicates that stakeholders' opinions on sports policy implementation vary considerably with age.

In the dimension of Grassroot Sports Participation (P3), we observe that two of the five groups have a significant difference in their opinions regarding sports policy implementation in Northeast states. The age groups of 'Less than 25 Yrs.' and '26 to 35 years' (P<.001), as well as the age groups of '26 to 35 years' and '36 to 45 years' (P<.046), differ significantly. This finding suggests that younger respondents view grassroots participation differently from older stakeholders.

There is a significant difference between the age group of ‘less than 25 years’ (P<.001) and all the other groups in the dimension of Talent Identification (P4). However, the mean differences between other groups are not statistically significant, implying that the differences in perspectives are more prominent among the younger age categories.

There is a significant difference between the age group of ‘less than 25 years’ (P<.001) and all other groups in the dimension of Athletic Career and Post-Career Support (P5). Additionally, a significant difference exists between the age groups of ‘26 to 35 years’ and ‘36 to 45 years’ (P<.020) concerning sports policy implementation. The findings reveal strong significant differences between the youngest group and all older age categories, except for the comparison between those aged 36 to 45 years and 45 years and above (P>.055). This suggests that perceptions of post-career support change notably with increasing age.

Training Facilities (P6) shows the most substantial differences across age groups. The youngest group (less than 25 years) perceives training facilities significantly differently compared to all other age categories (P<.001) of 36 to 45 years and 45 years and above. Similarly, there is a significant difference between the opinion of the stakeholders in the age group of ‘26 to 35 Yrs and 36 to 45 Yrs’ and ‘26 to 35 Yrs and 45 Yrs and above’ (P<.001). This suggests that almost all the stakeholders might have higher expectations or different experiences regarding the adequacy of training facilities.

Regarding the dimension of Coaches' Development (P7), significant differences are seen between the age group of ‘less than 25 years and the 26 to 35 years group’ (P<.001), as well as between the age group of ‘26 to 35 years and 36 to 45 years’ (P<.039). This indicates that perspectives on coaching development evolve with age, potentially due to increased exposure to coaching structures.

In the dimension of Sports Competition (P8), the age group of ‘less than 25 years’ shows significantly different opinions compared to all other age groups (P<.001). Similarly, there is a significant difference between the opinion of the stakeholders under the age group of ‘26 to 35 years and 36 to 45 years’ and 26 to 35 years and 45 years and above.’ This clearly indicates that the perceptions of sports competition structures are not uniform across different age groups.

Finally, for the dimension of Scientific and Technological Support (P9), no significant differences are found between any of the age groups which suggests that there is a relatively consistent perception across stakeholders regarding to sports technological advancements in Northeast India.

Overall, the significant differences across multiple SPLISS dimensions suggest that stakeholders’ perspectives on sports policy implementation are influenced by their age, particularly in governance, talent identification, training facilities, and sports competition. The hypothesis that age impacts perceptions of sports policy implementation is supported for most dimensions, except for financial support and scientific and technological support. These findings indicate that age is an important factor in shaping how stakeholders perceive the effectiveness and implementation of sports policies, highlighting the need to consider age-specific perspectives when designing, monitoring, and implementing sports programs in Northeast India.

4.7.4. ONE-WAY MANOVA ANALYSIS OF STAKEHOLDERS' OPINIONS ON SPORTS POLICY IMPLEMENTATION ACROSS VARIOUS NORTHEAST STATES BASED ON THEIR EDUCATION.

Hypothesis 9: There is a significance difference between the opinion of Stakeholders on Sports policy implementation based on their level of education.

This hypothesis was tested using a One-Way Multivariate Analysis of Variance (MANOVA) to determine if there are any significant differences in the stakeholders' perceptions on the implementation of sports policies based on their education. While adjusting for Type I errors, MANOVA looks at several dependent variables simultaneously to find stakeholder differences. This method makes it possible to have a better understanding of how various stakeholders viewed the implementation of sports policies in the various Northeast Indian states.

The descriptive statistics of Sports policy factors among independent variables are presented in the table below.

Table 4.41
Descriptive statistics among stakeholder's education level on various Dimension of Sports Policy implementation

VARIABLES	HIGH SCHOOL		UNDER GRADUATE		POST GRADUATE AND ABOVE		'F'	Sig.
	Mean	S. D	Mean	S. D	Mean	S. D		
Financial Support	21.77	1.823	21.55	1.988	21.47	2.062	.726	.484
Governance and Management	21.10	2.653	20.50	3.268	19.84	3.329	4.61	.010
Grassroot Sports Participation	21.05	2.274	20.65	2.218	20.30	1.966	3.49	.031
Talent identification	21.65	2.405	20.98	2.393	20.60	2.099	6.01	.003
Athletic career and post-career support	21.48	2.348	20.42	2.638	20.08	2.365	9.75	<.001
Training Facilities	21.38	2.490	20.54	3.133	19.96	3.169	6.48	.002
Coaches' development	22.33	2.031	21.72	2.108	21.26	1.992	7.76	<.001
Sports competition	21.49	2.949	20.42	3.379	19.10	3.058	16.53	<.001
Scientific and Technological Support	22.25	2.184	22.32	2.596	23.49	2.283	12.12	<.001

The table above demonstrates the mean, standard deviation, F test and Significance level of various dimension of sports policy across three groups which is High School, Undergraduate,

and PPostgraduateand above. Each dimension represents a key factor influencing sports policy implementation and its effectiveness.

As we can see from the table above, the education category of 'High School' is reported to have the highest mean score in all the dimensions except for Scientific and Technological Support. The dimension of financial support received the highest mean score of 21.77. The dimension of governance and management achieved the highest mean score of 21.10, the dimension of grassroots sports participation received the highest mean score of 21.05, and the dimension of talent identification received the highest mean score of 21.65. Additionally, the dimension of athletic career and post-career support received the highest mean score of 21.48, the dimension of training facilities received the highest mean score of 21.38, the dimension of coaches' development received the highest mean score of 22.33, and the dimension of sports competition received the highest mean score of 21.49. Lastly, the dimension of scientific and technological support received the highest mean score of 23.49 in the 'Postgraduate and above' category. This distribution shows a clear tendency in how different education-level groups perceive and benefit from various aspects of sports policy and support.

Findings show that there is a significant difference between stakeholders' perceptions across almost all of the dimensions of sports policy implementation based on their education level. Governance and management ($F=12.00$, $P<.001$), grassroots sports participation ($F=6.80$, $P<.001$), talent identification ($F=10.34$, $P<.001$), training facilities ($F=37.10$, $P<.001$), athletic career and post-career support ($F=9.75$, $P<.001$), and coaches' development ($F=7.76$, $P<.001$) indicates that stakeholder's opinion are statistically difference between these dimensions. However, financial support ($P>.109$) and scientific & technological support ($P>053$) do not show any significant differences with regard to their education.

The results of the multivariate test specifically focusing on Wilks' Lambda, a key statistic used to evaluate the extent to which group differences exist across multiple dependent variables are presented in the table below.

Table 4.42

Multivariate Analysis for Stakeholders opinions on Sports Policy Implementation based on their education level.

Test	Statistic	F	df1	df2	Sig.
Box's M (Equality of Covariance Matrices)	145.37	1.57	90	30747	<.001
Pillai's Trace (Multivariate Effect)	.169	6.56	18	1280	<.001

Box's Test of Equality of Covariance Matrices was significant (Box's M = 145.37, F = 1.57, p <.001), indicating that the assumption of homogeneity of covariance matrices was violated. This violation is common in large samples and when multiple dependent variables are involved, and it does not prevent interpretation when using robust multivariate statistics (Field, 2013; Tabachnick & Fidell, 2013).

Pillai's Trace, which is robust to such violations, was significant (V = 0.169, F(18, 1280) = 6.56, p<.001), indicating that the combined dependent variables representing SPLISS dimensions differed significantly across education levels. This supports the hypothesis that stakeholder perceptions of sports policy implementation vary by education level.

These results suggest that education influences how stakeholders perceive the implementation of sports policies, with differences likely present in dimensions such as governance, talent identification, and training facilities. Follow-up post-hoc analyses are recommended to identify the specific SPLISS dimensions where education level leads to significant differences. This highlights the importance of considering educational background when designing, monitoring, and implementing sports policies in Northeast India.

Table 4.43
Post-Hoc pairwise comparison for Stakeholders' opinions on Sports Policy Implementation baes on their education level

VARIABLES	COMPARISON BETWEEN STAKEHOLDERS' EDUCATION					
	High School vs. Undergraduate		High School vs Postgraduate		Undergraduate vs Postgraduate	
	MD	Sig.	MD	Sig.	MD	Sig.
Financial Support	.22	.566	.30	.479	.08	.925
Governance and Management	.59	.214	1.25	.008	.66	.103
Grassroot Sports Participation	.40	.232	.75	.023	.35	.241
Talent identification	.67	.026	1.05	.002	.38	.248
Athletic career and post-career support	1.06	<.001	1.40	<.001	.36	.357
Training Facilities	.84	.034	1.43	<.001	.58	.139
Coaches' development	.61	.023	1.07	<.001	.46	.074
Sports competition	1.07	.009	2.39	<.001	1.33	<.001
Scientific and Technological Support	.07	.962	1.24	<.001	1.17	<.001

MD= Mean Difference, *P-values is significance at 0.05 level.

The Tukey post hoc test results for the MANOVA analysis indicate significant differences in stakeholders' opinions across different education groups regarding various dimensions of sports policy implementation.

It can be seen from the table above that there is no significant difference between various education groups of stakeholders on the dimension of financial support, since the p-value is greater than .05; the dimension is considered to be statistically insignificant. This suggests that stakeholders across different education groups have similar perceptions regarding financial support, indicating a consistent level of agreement on this aspect regardless of education.

There is a significant difference between the opinions on education groups of ‘high school level and postgraduate’ (P<.008) in the dimension of governance and management. However, since the P-value is greater than .05, it is found that there is no significant difference between the opinions on the education groups of ‘high school and undergraduate’ and ‘undergraduate and postgraduate level.’ This indicates that the perceptions between these groups are similar, and hence the value is insignificant.

In the dimension of Grassroots Sports Participation, we can observe that one of the three groups has a significant difference in their opinions regarding sports policy implementation in Northeast states. The education groups of ‘high school level and postgraduate’ (P<.023) differ significantly, whereas the opinions on the education groups of ‘high school and undergraduate’ and ‘undergraduate and postgraduate level’ are statistically insignificant.

There is a significant difference between the opinion on education groups of ‘high school level and undergraduate’ (P<.026) and the education groups of ‘high school level and postgraduate’ (P<.002) in the dimension of Talent Identification. However, the mean differences between the ‘undergraduate and postgraduate levels’ are not statistically significant, implying that the differences in perspectives are more prominent among the other education categories.

There is a significant difference between the education group of ‘high school level and undergraduate’ (P<.001) and the education group of ‘high school level and postgraduate’ (P< .002) in the dimension of Athletic Career and Post-Career Support. However, since the P-value between the ‘undergraduate and postgraduate levels’ is greater than the 0.05 level, this implies that the differences in perspectives among these education categories are statistically insignificant.

The dimension of Training Facilities reveals a significant difference between the education groups of 'high school level and undergraduate' (P<.034) and 'high school level and postgraduate' (P<.001). However, since the P-value between the 'undergraduate and postgraduate levels' is more than 0.05, the variations in the perception across these education groups are statistically insignificance.

There are significant differences between the education groups of "high school level and undergraduate" (P<.023) and "high school level and postgraduate" (P<.001) with respect to the Coaches' Development dimension. However, since the P-value between 'undergraduate and postgraduate levels' is more than 0.05, the differences in the opinion between these educational categories are statistically insignificant.

In the dimension of sports competition, it can be found that there are significant differences between all the education groups, such as ‘high school level and undergraduate’ (P<.009), ‘high school level and postgraduate’ (P<.001), and ‘undergraduate and postgraduate levels' (P<.001). This clearly indicates that the perceptions of sports competition structures are not uniform across different education groups.

Finally, for the dimension of Scientific and Technological Support, it can be found that there are significant differences between the education groups of ‘high school level and postgraduate’ (P<.001) and ‘undergraduate and postgraduate levels' (P<.001). However, no statistically significant differences are found between the education group of ‘high school level and undergraduate’, suggesting a relatively inconsistent perception across stakeholders regarding technological advancements in sports.

Overall, the significant differences across several SPLISS dimensions indicate that stakeholders’ opinions on sports policy implementation are influenced by their education level. The hypothesis that education affects stakeholders’ perceptions of sports policy implementation

is supported for all dimensions except financial support. These findings highlight that education plays an important role in shaping stakeholders' perspectives, emphasizing the need to consider educational background when designing, monitoring, and implementing sports policies in Northeast India.

4.7.5. ONE-WAY MANOVA ANALYSIS OF STAKEHOLDERS' OPINIONS ON SPORTS POLICY IMPLEMENTATION ACROSS VARIOUS NORTHEAST STATES BASED ON THEIR EXPERIENCE.

Hypothesis 10: There is a significant difference between the opinions of Stakeholders on Sports policy implementation based on their experience level.

This hypothesis was tested using a One-Way Multivariate Analysis of Variance (MANOVA) to determine if there are any significant differences in the stakeholders' perceptions on the implementation of sports policies based on their experience level. While adjusting for Type I errors, MANOVA looks at several dependent variables simultaneously to find stakeholder differences. This method makes it possible to have a better understanding of how various stakeholders viewed the implementation of sports policies in the various Northeast Indian states.

The descriptive statistics of Sports policy factors among independent variables are presented in the table below.

Table 4.44
Descriptive statistics among stakeholder's experience group on various Dimension of Sports Policy implementation

VARIABLES	Less than 2 Yrs.		2 to 5 Yrs		5 to 10 Yrs.		10 Yrs. And above		'F'	Sig.
	Mean	S. D	Mean	S. D	Mean	S. D	Mean	S. D		
Financial Support	21.82	1.68	21.50	1.96	21.70	2.00	20.98	2.16	2.45	.062
Governance and Management	20.80	2.86	20.88	3.02	20.36	3.32	18.64	3.27	7.88	<.001
Grassroot Sports Participation	20.85	2.09	20.87	2.23	20.47	2.14	20.15	2.15	2.55	.055
Talent identification	22.39	2.13	21.10	2.35	20.80	2.26	19.91	2.26	13.14	<.001
Athletic career and post-career support	22.06	2.52	20.84	2.48	20.04	2.50	19.47	2.26	16.09	<.001
Training Facilities	21.09	2.58	20.97	2.79	20.21	3.28	19.62	3.46	4.99	.002
Coaches' development	22.36	1.79	21.79	2.18	21.48	2.07	21.71	1.99	3.29	.020
Sports competition	22.86	3.39	20.66	3.00	19.69	3.22	18.44	3.03	25.15	<.001
Scientific and Technological Support	21.41	2.17	22.40	2.39	22.98	2.60	22.93	2.52	7.89	<.001

The table above demonstrates the mean, standard deviation, F test and Significance level of various dimension of sports policy across four experience groups which is 'Less than 2 Yrs', '2 to 5 Yrs', '5 to 10 Yrs', and '10 Yrs and above'. Each dimension represents a key factor influencing sports policy implementation and its effectiveness.

As we can see from the table above, the experience category of 'Less than 2 yrs' reported having the highest mean score in the dimension of financial support, which is 21.82, whereas

the experience group of '10 Yrs and above' received the lowest mean score of 20.98. Similarly, in the dimension of governance and management, the experience group of '2 to 5 yrs.' achieved the highest mean score of 20.88, and the group of '10 yrs. and above' received the lowest mean score of 18.64. The dimension of grassroots sports participation received the highest mean score of 20.87 in the 'less than 2 yrs.' experience group, whereas the group of '10 yrs. and above' achieved the lowest mean score of 20.15. The dimension of talent identification received the highest mean score of 22.39 in the 'less than 2 yrs.' experience group, whereas the group of '10 yrs. and above' achieved the lowest mean score of 19.91. Additionally, the dimension of athletic career and post-career support received the highest mean score of 20.06 in the 'Less than 2 years' experience group, whereas the group of '10 years and above' achieved the lowest mean score of 19.47. The dimension of training facilities received the highest mean score of 21.09 in the 'less than 25 yrs.' experience group, whereas the group of '10 yrs. And above' achieved the lowest mean score of 19.62. The dimension of coaches' development received the highest mean score of 22.36 in the 'less than 2 yrs.' experience group, whereas the group of '5 to 10 yrs.' achieved the lowest mean score of 21.48. The dimension of sports competition received the highest mean score of 22.86 in the 'Less than 2 yrs.' experience group, whereas the group of '10 yrs. and above' achieved the lowest mean score of 18.44. Lastly, the dimension of scientific and technological support received the highest mean score of 22.98 in the '5 to 10 yrs.' experience group, whereas the experience group of 'Less than 2 years' achieved the lowest mean score of 21.41. This distribution shows a clear tendency in how different experience groups perceive and benefit from various aspects of sports policy and support.

The significance results reveal that in the experience category, almost all of the dimensions are found to be significant, as indicated by the F and P values in the following criteria: Governance & Management ($F=7.88$, $P<.001$), Talent Identification ($F=13.14$, $P<.001$), Athletic Career and Post-Career Support ($F=16.09$, $P<.001$), and Training Facilities ($F=4.99$,

P<.002). Additionally, Coaches' Development (F=3.29, P<.020), Sports Competition (F=25.15, P<.001), and scientific & technological support (F=7.89, P<.001) also appear to be statistically significant. However, financial support (P > .062) and grassroots sports education (P>.055) do not show any differences among all the experience groups; this indicates that the experience groups have a similar perception towards these two dimensions.

The results of the multivariate test specifically focusing on Wilks' Lambda, a key statistic used to evaluate the extent to which group differences exist across multiple dependent variables are presented in the table below.

Table 4.45

Multivariate Analysis for Stakeholders experience group opinions on Sports Policy Implementation Across Northeast States

Test	Statistic	F	df1	df2	Sig.
Box's M (Equality of Covariance Matrices)	198.8	1.41	135	14673	.001
Pillai's Trace (Multivariate Effect)	.264	6.87	27	1920	<.001

Box's Test of Equality of Covariance Matrices was significant (Box's M=198.8, F=1.41, p =.001), indicating that the assumption of homogeneity of covariance matrices was violated. Such violations are common in studies with large sample sizes and multiple dependent variables, and interpretation can still proceed using robust multivariate tests (Field, 2013; Tabachnick & Fidell, 2013).

Pillai's Trace, which is robust to violations of Box's M, was significant (V = 0.264, F(27, 1920=6.87, p<.001), demonstrating that stakeholders' perceptions of sports policy implementation differ significantly across experience levels. This supports the hypothesis that experience level influences stakeholder perceptions across the SPLISS dimensions.

These results suggest that stakeholders' years of experience are an important factor shaping their perspectives on policy implementation, particularly in areas such as governance, talent identification, and training facilities. Follow-up post-hoc analyses are recommended to identify specific dimensions where experience leads to significant differences. The findings emphasize the need to consider experience-based perspectives when designing, monitoring, and implementing sports policies in Northeast India.

Table 4.46
Post-Hoc pairwise comparison for Stakeholders' Experience group opinions on Sports Policy Implementation

Variables	COMPARISON BETWEEN STAKEHOLDERS' EXPERIENCE GROUP CATEGORY											
	Group 1		Group 2		Group 3		Group 4		Group 5		Group 6	
	MD	Sig.	MD	Sig.	MD	Sig.	MD	Sig.	MD	Sig.	MD	Sig.
P1	.32	.646	.12	.975	.84	.093	.21	.665	.52	.297	.72	.069
P2	.07	.998	.44	.743	2.17	<.001	.52	.278	2.24	<.001	1.72	.002
P3	.02	1.00	.38	.591	.70	.289	.40	.197	.73	.115	.32	.753
P4	1.29	<.001	1.59	<.001	2.48	<.001	.30	.474	1.19	.003	.89	.046
P5	1.22	.002	2.02	<.001	2.59	<.001	.80	.003	1.37	.001	.57	.416
P6	.12	.992	.89	.155	1.47	.040	.77	.030	1.35	.016	.59	.569
P7	.57	.199	.89	.012	.65	.313	.32	.345	.08	.993	.23	.878
P8	2.21	<.001	3.17	<.001	4.43	<.001	.96	.005	2.22	<.001	1.26	.038
P9	.99	.021	1.57	<.001	1.52	.004	.58	.047	.53	.477	.06	.999

MD= Mean Difference, *P-values is significance at 0.05 level.

**P1-Financial Support, P2-Governance and Management, P3-Grassroot Sports Participation, P4-Talent Identification, P5- Athletic career and post-career support, P6-Training Facilities, P7-Coaches Development, P8-Sports Competition, P9-Scientific and Technological Support*

**Group 1-Less than 2 Yrs. Vs 2 to 5 Yrs, Group 2- Less than 2 Yrs. Vs 5 to 10 Yrs, Group 3-Less than 2 Yrs. Vs 10 Yrs. and above, Group 4- 2 to 5 Yrs Vs 5 to 10 Yrs, Group 5-2 to 5 Yrs Vs 10 Yrs. and above, Group 6- 5 to10 Yrs Vs 10 Yrs. and above.*

The Tukey post hoc test results for the MANOVA analysis indicate that there is a significant difference in stakeholders' opinions regarding various dimensions of sports policy implementation among different experience groups.

The table above shows that there is no significant difference between various experience groups of stakeholders on the dimension of financial assistance (P1). Since the P-value is greater than.05; the dimension is considered to be statistically insignificant. This implies that stakeholders from various experience groups have comparable perspectives on financial support, suggesting a constant degree of consensus on the matter regardless of their experience level.

There is a significant difference between the experience groups of 'less than 2 years and 10 years and above (P<.001), '2 to 5 years and 10 years and above (P<.001), and the experience groups of '5 to 10 years and 10 years and above' (P<.002) in the dimension of Governance and Management (P2). However, since the p-value is greater than .05, the experience groups of 'less than 2 years and 2 to 5 years,' 'less than 2 years and 5 to 10 years,' and the group of '2 to 5 years vs. 10 years and above' are found to be statistically insignificant. This suggests that while there are notable differences in governance and management experiences between certain groups, the lack of statistical significance among the other comparisons indicates that factors other than experience may also play a role in these dimensions.

There is no significant difference between various experience groups of stakeholders on the dimension of Grassroot Sports Participation (P3). Since the P-value is greater than.05; the dimension is considered to be statistically insignificant. This means that stakeholders from diverse experience groups have similar perspectives on grassroots sports, indicating a consistent level of agreement on the subject regardless of their level of experience.

There is a significant difference between the experience groups of ‘Less than 2 years and 2 to 5 years (P<.001), ‘Less than 2 years and 5 to 10 years’ (P<.001), and the experience groups of ‘Less than 2 years and 10 years and above’ (P<.001) in the dimension of Talent Identification (P4). However, since the mean differences and the p-value between the other groups are less than .05, those groups are considered to be statistically insignificant.

There is a significant difference between the experience group of ‘less than 2 years’ (P<.001) and all other groups in the dimension of Athletic Career and Post-Career Support (P5). Additionally, a significant difference exists between the experience groups of ‘2 to 5 years and ‘5 to 10 years’ (P<.003) as well as ‘2 to 5 years and ‘5 to 10 years’ (P<.001) concerning sports policy implementation. The findings reveal strong significant differences between all the experience groups, except for the group of ‘5 to 10 years and 10 years and above (P>.416). This indicates that while newer athletes may face distinct challenges and opportunities in navigating sports policy, those with over a decade of experience tend to have a more consistent understanding of the implementation processes.

The dimension of training facilities (P6) shows that there is a significant difference between the opinions of stakeholders among three groups. The experience groups of ‘less than 2 years and 10 years and above’ (P<.040), ‘2 to 5 years and 5 to 10 years’ (P<.030), and the experience group of ‘2 to 5 years and 10 years and above’ (P<.016) perceive training facilities significantly differently compared to all other experience group categories. However, no significant difference is found in the other three groups since the p-value is less than .05. These findings indicate that people with diverse degrees of experience have different perceptions on the effectiveness of training facilities, emphasizing the importance of personalized training programs that suit the particular demands of different experience levels.

Regarding the dimension of Coaches' Development (P7), significant differences are seen only in one group, which is between the experience group of ‘less than 2 years and 5 to 10 years’ (P<.012), whereas all the other groups are seen to be statistically insignificant. This suggests that coaches with varying levels of experience may benefit differently from development programs, particularly those with less than two years of experience compared to those with five to ten years.

In the dimension of Sports Competition (P8), all the experience groups are seen to be statistically significant, as their p-value is less than the required 0.05. This clearly indicates that the perceptions of sports competition structures are not uniform across different experience groups in this particular dimension.

Lastly, for the dimension of Scientific and Technological Support (P9), four of the six experience groups are found to be significantly different from each other. The experience group of ‘less than 2 years’ is found to be significant to all the other groups of ‘2 to 5 years (P<.021), ‘5 to 10 years’ (P<.001), and ’10 years and above’ (P<.004). Similarly, the experience group of ‘2 to 5 years and 5 to 10 years’ (P<.047) is found to be significant. However, since the other two groups significance levels are less than the required .05, they are therefore considered to be statistically insignificant.

Overall, the significant differences across multiple SPLISS dimensions suggest that stakeholders’ perspectives on sports policy implementation are strongly influenced by their years of experience in sports. The hypothesis that experiences level affects stakeholders’ perceptions of sports policy implementation is supported. These findings highlight the importance of considering experience-based perspectives when designing, monitoring, and implementing sports policies in Northeast India.

4.7.6. ONE-WAY MANOVA ANALYSIS OF STAKEHOLDERS' OPINIONS ON SPORTS POLICY IMPLEMENTATION ACROSS VARIOUS NORTHEAST STATES BASED ON THEIR AWARENESS LEVEL.

Hypothesis 11: There is a significant difference between Stakeholder opinion on Sports policy implementation across Northeast States based on their level of awareness.

This hypothesis was tested using a One-Way Multivariate Analysis of Variance (MANOVA) to determine if there are any significant differences in the stakeholders' perceptions on the implementation of sports policies based on their awareness level. While adjusting for Type I errors, MANOVA looks at several dependent variables simultaneously to find stakeholder differences. This method makes it possible to have a better understanding of how various stakeholders viewed the implementation of sports policies in the various Northeast Indian states.

The descriptive statistics of Sports policy factors among independent variables are presented in the table below.

Table 4.47
Descriptive statistics among stakeholder's awareness level group on various Dimension of Sports Policy implementation

VARIABLES	Highly aware		Moderately aware		Slightly aware		Not aware		'F'	Sig.
	Mean	S. D	Mean	S. D	Mean	S. D	Mean	S. D		
Financial Support	21.63	2.05	21.43	1.88	21.67	2.12	22.73	1.19	1.84	.137
Governance and Management	20.20	3.33	20.57	3.09	20.43	3.18	23.09	2.12	3.11	.026
Grassroot Sports Participation	20.34	2.06	20.82	2.21	21.11	2.10	19.09	3.05	5.26	<.001
Talent identification	20.73	2.33	21.26	2.30	20.72	2.38	22.91	2.55	5.03	.002
Athletic career and post-career support	20.29	2.54	20.67	2.67	20.95	2.12	18.82	2.56	3.34	.019

Training Facilities	20.25	3.25	20.63	2.99	21.17	2.75	20.55	2.91	1.92	.125
Coaches' development	21.46	1.98	21.91	2.14	21.84	2.21	21.45	1.97	2.11	.098
Sports competition	19.73	3.34	20.86	3.35	20.36	2.70	18.55	4.01	6.07	<.001
Scientific and Technological Support	22.87	2.53	22.32	2.47	23.10	2.09	18.55	1.44	13.52	<.001

The table above demonstrates the mean, standard deviation, F test and Significance level of various dimension of sports policy across four awareness level groups which is categories as 'Highly aware', 'Moderately aware', 'Slightly aware', and 'Not aware'. Each dimension represents a key factor influencing sports policy implementation and its effectiveness.

As we can see from the table above, the awareness category of 'Not aware' reported having the highest mean score in the dimension of financial support, which is 22.73, whereas the awareness group of 'Moderately aware' received the lowest mean score of 21.43. Similarly, in the dimension of governance and management, the awareness group of 'not aware' achieved the highest mean score of 23.09, and the group of 'highly aware' received the lowest mean score of 20.20. The dimension of grassroots sports participation received the highest mean score of 21.11 in the 'Slightly aware' group, whereas the group of 'Not aware' achieved the lowest mean score of 19.09. The dimension of talent identification received the highest mean score of 22.91 in the 'Not aware' group, whereas the group of 'Slightly aware' achieved the lowest mean score of 20.72. Additionally, the dimension of athletic career and post-career support received the highest mean score of 20.95 in the 'Slightly aware' category, whereas the group of 'Not aware' achieved the lowest mean score of 18.82. The dimension of training facilities received the highest mean score of 21.17 in the 'moderately aware' category, whereas the group of 'highly aware' achieved the lowest mean score of 20.25. The dimension of coaches' development received the highest mean score of 21.91 in the 'Moderately aware'

category, whereas the group of ‘Not aware’ achieved the lowest mean score of 21.45. The dimension of sports competition received the highest mean score of 20.86 in the ‘Moderately aware’ category, whereas the group of ‘Not aware’ achieved the lowest mean score of 18.55. Lastly, the dimension of scientific and technological support received the highest mean score of 23.10 in the ‘Slightly aware’ category, whereas the awareness group of ‘Not aware’ achieved the lowest mean score of 18.55. This distribution shows a clear tendency in how different awareness groups perceive and benefit from various aspects of sports policy and support.

In the awareness category, nearly all dimensions are found to be significant, as indicated by the F and P values in the following criteria: Governance & Management (F=3.11, P<.026), Grassroots Sports Education (F=5.26, P<.001), Talent Identification (F=5.03, P<.002), and Athletic Career and Post-Career Support (F=3.34, P<.019). Sports competition (F=6.07, P<.001) and scientific/technological assistance (F=13.53, P<.001) were also found to be statistically significant. However, there are no significant differences in the dimensions of financial support, training facilities, and coaches' development, indicating that the groups have a comparable perspective for these three aspects.

The results of the multivariate test specifically focusing on Wilks’ Lambda, a key statistic used to evaluate the extent to which group differences exist across multiple dependent variables are presented in the table below.

Table 4.48

Multivariate Analysis for Stakeholders awareness level group’s opinion on Sports Policy Implementation Across Northeast States

Test	Statistic	F	df1	df2	Sig.
Box’s M (Equality of Covariance Matrices)	243.7	1.52	135	3957	<.001
Pillai’s Trace (Multivariate Effect)	.181	4.56	27	1920	<.001

Box's Test of Equality of Covariance Matrices was significant (Box's M = 243.7, F = 1.52, p<.001), indicating a violation of the assumption of homogeneity of covariance matrices. This is not uncommon in large samples with multiple dependent variables and does not preclude interpretation when using robust multivariate tests (Field, 2013; Tabachnick & Fidell, 2013). Pillai's Trace, which is robust to such violations, was significant (V = 0.181, F (27, 1920) = 4.56, p < .001), indicating that stakeholders' perceptions of sports policy implementation differ significantly based on their level of awareness. This supports the hypothesis that awareness level influences stakeholder perceptions across the SPLISS dimensions.

These results suggest that stakeholders with different levels of awareness perceive the implementation of sports policies differently, particularly in dimensions such as governance, talent identification, and training facilities. Follow-up post-hoc analyses are recommended to identify the specific SPLISS dimensions where awareness level leads to significant differences. These findings emphasize the importance of promoting stakeholder awareness to ensure effective policy implementation in Northeast India.

Table 4.49
Post-Hoc pairwise comparison for Stakeholders' Awareness group's opinion on Sports Policy Implementation

Variables	COMPARISON BETWEEN STAKEHOLDERS' AWARENESS LEVEL GROUP											
	Group 1		Group 2		Group 3		Group 4		Group 5		Group 6	
	MD	Sig.	MD	Sig.	MD	Sig.	MD	Sig.	MD	Sig.	MD	Sig.
P1	.197	.262	.043	.866	1.09	.072	.240	.332	1.29	.033	1.05	.633
P2	.369	.195	.230	.573	2.88	.003	.139	.728	2.51	.010	2.67	.010
P3	.473	.014	.766	.006	1.25	.061	.293	.279	1.72	.010	2.01	.004
P4	.529	.011	.009	.977	2.17	.003	.538	.065	1.64	.022	2.18	.004
P5	.376	.099	.657	.045	1.47	.061	.282	.379	1.85	.019	2.13	.009
P6	.376	.169	.918	.019	.294	.755	.542	.158	.081	.931	.623	.526
P7	.450	.016	.380	.155	.009	.989	.070	.790	.458	.475	.389	.562
P8	1.13	<.001	.634	.131	1.18	.243	.497	.226	2.31	.022	1.81	.085
P9	.556	.011	.222	.476	4.32	<.001	.778	.011	3.77	<.001	.778	.011

MD= Mean Difference, *P-values is significance at 0.05 level.

**P1-Financial Support, P2-Governance and Management, P3-Grassroot Sports Participation, P4-Talent Identification, P5- Athletic career and post-career support, P6-Training Facilities, P7-Coaches Development, P8-Sports Competition, P9-Scientific and Technological Support*

**Group 1-Highly aware Vs Moderately aware, Group 2- Highly aware Vs Slightly aware, Group 3- Highly aware Vs Not aware, Group 4- Moderately aware Vs Slightly aware, Group 5- Moderately aware Vs Not aware, Group 6- Slightly aware Vs Not aware.*

The Tukey post hoc test results for the MANOVA analysis indicate that there is a significant difference in stakeholders' opinions regarding various dimensions of sports policy implementation among different awareness groups.

The table above shows that there is no significant difference between various experience groups of stakeholders on the dimension of financial assistance (P1) except for the awareness group of 'Moderately aware and Not aware'(P<.033). Since the P-value is greater than.05; the dimension is considered to be statistically insignificant. This implies that stakeholders from various awareness groups have comparable perspectives on financial support, suggesting a constant degree of consensus on the matter regardless of their level of awareness.

There is a significant difference between the awareness groups of 'Highly aware and Not aware' (P<.003), 'Moderately aware and Not aware'(P<.010), and the awareness group of 'Slightly aware and Not aware'(P<.010), in the dimension of Governance and Management (P2). However, since the p-value is greater than .05, the awareness groups of 'Highly aware and Moderately aware', 'Highly aware and Slightly aware' and the group of 'Moderately aware and Slightly aware' are found to be statistically insignificant. This suggests that while there are notable differences in governance and management opinions between certain groups, the lack of statistical significance among the other comparisons indicates that factors other than level of awareness may also play a role in these dimensions.

There is a significant difference between various awareness groups of stakeholders, such as 'highly aware and moderately aware' (P<.014), 'highly aware and Slightly aware'(P<.006), the

groups of ‘Moderately aware and Not aware’(P<.010) and the awareness groups of ‘Slightly aware and Not aware’(P<.004) on the dimension of Grassroot Sports Participation (P3). However, since the mean differences and the p-value between the other two groups are less than .05, they are therefore considered to be statistically insignificant.

The awareness groups of 'highly aware and moderately aware' (P<.011), 'highly aware and not aware' (P<.003),'moderately aware and not aware' (P<.022), and 'slightly aware and not aware' (P<.004) differ significantly in the dimension of Talent Identification (P4). However, the remaining groups are regarded as statistically insignificant since their mean differences and p-value are less than.05.

There is a significant difference between the awareness group of ‘highly aware and Slightly aware’(P<.045), and the awareness groups of ‘slightly aware and Not aware’(P<.009) in the dimension of athletic career and post-career support (P5). However, since the remaining groups mean differences and p-values are less than .05, they are therefore regarded as statistically insignificant. This suggests that while there are significant differences in perceptions among certain awareness groups, the overall findings indicate that most groups share similar views on the dimension.

The dimension of training facilities (P6) indicates that there is no significant difference between the opinions of stakeholders across all groups, except for the awareness groups of ‘highly aware' and ‘slightly aware’ (P<.019). However, because the p-value is less than .05 in the other five groups, they are therefore, considered to be statistically insignificant. This suggests that while awareness levels may influence perceptions of training facilities among certain stakeholders, the overall consensus remains largely uniform.

The dimension of Coaches' Development (P7) reveals significant differences only in one group, which is 'Highly aware and Moderately aware' (P<.016), whereas other groups are

statistically insignificant. This implies that coaches with diverse degrees of awareness may have distinct developmental demands and approaches. As a result, customized training programs might help overcome these disparities and improve overall coaching efficacy.

There is a significant difference between the awareness group of 'highly aware and Moderately aware'(P<.001), and the awareness groups of 'slightly aware and Not aware'(P<.022) in the dimension of Sports Competition (P8). Since all the other groups p-value is less than the required 0.05, they are therefore regarded as statistically significant. This indicates that varying levels of awareness have a prominent impact on perceptions of sports competition.

Lastly, for the dimension of Scientific and Technological Support (P9), four of the six awareness groups are found to be significantly different from each other. The awareness group of 'highly aware and moderately aware (P<.011), the awareness group of 'highly aware and not aware (P<.001), 'moderately aware and slightly aware (P<.011), and the awareness group of 'moderately aware and not aware' (P<.001) are found to be significant. However, since the other two groups significance levels are less than the required .05, they are therefore considered to be statistically insignificant. This suggests that there are distinct differences in awareness levels among the groups that were found to be significant, indicating potential areas for targeted interventions.

Overall, the significant differences across multiple SPLISS dimensions suggest that stakeholders' perspectives on sports policy implementation are strongly influenced by their level of awareness in sports policy. The hypothesis that awareness level affects stakeholders' perceptions of sports policy implementation is supported. These findings highlight the importance of enhancing stakeholder awareness to ensure more effective design, monitoring, and implementation of sports policies in Northeast India.

PART II.

MEASURING OF SPORTS POLICY IMPLEMENTATION THROUGH SECONDARY DATA SOURCES

Part II of this chapter provides an in-depth understanding into the implementation of sports policy in Northeast India through the analysis of different sources of secondary data. This section explores the level to which Sports policy has been implemented, its effectiveness, and any gaps or challenges met during its execution. Through examination of government documents, academic papers, media reporting, and other related materials, this analysis seeks to offer a well-rounded insight into how the policy has been taken from theory to reality. In addition, it identifies major trends, patterns, and outcomes from the implementation of the policy and its effect on the subject areas. This assessment also provides the basis for determining if the goals set in the policy have been attained and how its implementation can be enhanced in the future.

Pillar 1: Financial Support

Concept and Definition:

Collecting accurate data on state-level financial support for sports development presents considerable challenges. Despite extensive efforts by the researcher to compile budgetary records from multiple states, certain financial details remain inaccessible or are not publicly disclosed. The lack of transparency and inconsistencies in reporting further complicate efforts to obtain a complete and reliable picture of government investment in sports.

To ensure clarity and maintain focus in the analysis, the researcher has restricted the examination to budget allocations provided by various state governments to their respective sports departments during the financial years 2019–2024. These allocations encompass expenditures directed toward the development of sports infrastructure, support for athletes, grassroots initiatives, and other programs aimed at enhancing the overall sports ecosystem in

each region. While this approach provides a structured and systematic framework for assessing financial support, it is important to acknowledge that limitations arising from unavailable or incomplete data may influence the comprehensiveness of the analysis regarding state-level investment in sports.

Key Findings:

Table 4.50
Budget allocation by various Northeast States to State sports department

STATE	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
	In Crores (₹)					
ARUNACHAL PRADESH	53.00	29.00	17.5	45.00	87.10	116.00
ASSAM	177.00	174.40	143.12	226.60	200.00	210.30
MANIPUR	100.00	71.00	129.00	104.75	95.15	99.54
MEGHALAYA	N. A	280.00	200	208.00	178.29	242.19
MIZORAM	10.25	133.00	N. A	N. A	N. A	98.00
NAGALAND	N. A	N. A	7.90	8.75	10.25	10.55
SIKKIM	18.17	24.19	29.42	45.08	30.00	NA
TRIPURA	72.26	80.95	82.30	99.48	103.58	173.34

Source: Financial accounts report, Assembly speech reports.

Assam, the largest state in Northeast and one of the most developed states in the region is a leader when it comes to sports investment among Northeast states. With budgetary allocations ranging from ₹177.00 crores in 2019–20 to ₹210.30 crores in 2024–25 and ₹226.60 crores in 2022–23, this state has demonstrated its great efforts to promote sports and development in Assam. These long-term investments indicate a high emphasis on sports facility development

and participation alongside the connection with programs such as Khelo India and the state prominent hosting of elite sporting events such as the ISL, IPL, etc.

Meghalaya is known for its love for sports, especially football, and has invested heavily in the development of sports in the region. With an impressive sum of ₹280.00 crores in 2020-21; half of which goes towards the development of a multi-complex sports facility in Tura, this investment is by far the highest in the Northeast. The budget fluctuated over the next few years but remained in limbo. In the 2024-25 the state government has allocated an amount of ₹242.19 crore, underlining the state's commitment towards developing a sports ecosystem in Meghalaya. Such continuous investments in sports infrastructure will prepare Meghalaya to promote real competition among players and youth while opening up new opportunities for business and tourism by hosting of big events such as the National Games, ISL, and even international games.

Manipur, known for producing top athletes of the country, has had fluctuating allocations, peaking at ₹129.00 crores in 2021–22 but declining to ₹99.54 crores in 2024–25. Despite this drop, the state continued its investment which shows that it is focusing on maintaining its reputation as a sporting powerhouse. Manipur also received an extensive amount of funding from the union ministry every year, considering the National Sports University and many other central training centres located in the state.

Arunachal Pradesh and Tripura have both incrementally increased their budgets for sports over the year which signify an amplified focus on developing sports in the region. The budget of Arunachal Pradesh began at ₹53.00 crores during 2019–20, fell to ₹17.5 crores in 2021–22, but rose significantly to ₹116.00 crores during 2024–25. This specifies that the government of Arunachal has strategized a new attempt to promote sports by developing sports infrastructure and providing support for athletes. Tripura, on the other hand, has maintained a steady upward

tendency in its budget, rising from ₹72.26 crores in 2019–20 to a significant ₹173.34 crores in 2024–25. This increase indicates a long-term commitment to improving sports facilities, training programs, and athlete development in the state

Similarly, Mizoram's sports budget has shown an irregular pattern due to the fluctuating of government priorities and funding strategies over the years. In 2020-21, ₹133.00 crore was invested in sports development; however, no official budget statistics are available for the subsequent three years. This may be owing to the integrated approach whereby the government has allocated a single budget to the Ministry of Education, Arts and Sports, and Youth Affairs. The announcement of the 2024-25 budget of ₹98.00 crore indicates that Mizoram has made significant strides towards promoting and developing sports in the state.

Nagaland and Sikkim have consistently allocated lower budgetary allocations for sports development compared to other regional governments. With figures ranging from ₹7.90 crores to ₹10.55 crores, Nagaland has shown its minimal spending on sports over the years. Sikkim, on the other hand, has invested a substantial amount from ₹18.17 crores in 2019–20 to ₹45.08 crores in 2022–23. However, this was followed by a decline to ₹30.00 crores in 2023–24. No data was available for Sikkim for the year 2024–25 and for Nagaland for the year 2023-24.

For some states, particularly Nagaland, Mizoram, Sikkim and Meghalaya, missing data for certain years makes it challenging to assess the financial trends accurately. The absence of records could indicate gaps in financial transparency, delays in budget reporting, or irregular disbursement of funds. This lack of data presents a challenge in evaluating the long-term impact of sports funding in these regions.

Pillar 2: Governance and management

Concept and Definition:

This pillar focuses on management and governance of sports in Northeast India. This includes various strategies such as the organizational structure, policies and administrative processes that govern its development. Governance includes the decision-making structures, policy-making and oversight of the system by government agencies, sports federations and the private sector. Administration encompasses the operational processes, including allocation of funds, infrastructure development, training of athletes, organization of events and general management of sport on and off the field.

The regulation of sports in the northeastern region is a mélange of central and state policy, local involvement, and the involvement of external factors such as private investors and NGOs. Central government policies are set by the Ministry of Youth Affairs and Sports (MYAS), while state governments implement this policy at the local level. Regional bodies such as the State Olympic Association and the State Sports Council oversee the overall development of sports in the region, while state sports federations regulate and promote a particular sport in their area. Although the entire organized system is available, there are still problems such as poor governance, lack of finance, and coordination gaps that hinder the development of sports in the region.

Key Findings:

1. Transparency and Accountability:

Findings show that there is a lack of transparency in the sport's governing bodies of all the northeast states. Documents such as annual reports, minutes, administrative decisions, and

other reports are not regularly update and publicly available, which makes accountability difficult.

2. Sports Management System:

Currently, there is no centralized database or digital management system for tracking athlete performance, fund distribution, or infrastructure status. Furthermore, there is no history of monitoring or evaluating the implementation of a policy. This data-driven void ultimately hampers effective decision-making in sports governance.

3. Stakeholders' representation:

It is found that there is no committee of stakeholder representation in northeast India. Almost all of the decisions are made by the politicians and policy maker rather than engaging athletes, coaches and sports management professionals in the decision-making process. The lack of structured committees and advisory panels, therefore, hinders the development of sports in the region

Pillar 3: Grassroot Sports Participation

Concept and Definition:

Grassroots sports participation refers to the involvement of individuals, particularly children and youth, in sporting activities at the community and school levels. It forms the foundational base for both recreational engagement and the development of elite athletes. One of the key objectives of the National Sports Policy (2001) is to promote "broad-basing in sports," emphasizing diversification, accessibility, inclusiveness, and systematic talent identification. The policy aims to ensure that sports participation extends beyond professional athletes and is encouraged among the wider population.

In the context of **Northeast India**, grassroots participation is particularly significant for fostering a strong sports culture, as a substantial number of children engage in sports informally and recreationally. By strengthening physical education programs in schools, nurturing talent at the grassroots level, and providing opportunities for individuals with special abilities to participate in sports, the region has the potential to emerge as a prominent sporting hub. Such initiatives not only facilitate the development of future athletes but also contribute to producing sportspersons capable of achieving national and international recognition, thereby enhancing the overall sports ecosystem in Northeast India.

Key Findings:

1. Extra-Curricular School Sports Competitions

In Northeast India, inter-school sports competitions organized by the state government are held at least 2–3 times a year to allow students to participate in sports beyond their regular classes. However, the frequency and level of competition at the school level varies from state to state and school to school, with centrally run government and military schools showing an improvement over private and public schools.

2. Opportunities for Participation Sports

Although there are sporting opportunities in most schools, participation depends mainly on the infrastructure available, the budget and the priority each school gives to sport. In centrally funded institutions such as Kendriya Vidyalaya, Army schools and Assam Rifles schools, sports activities are organized and encouraged, while in most government-funded schools, sports are sometimes considered an elective or low-priority extracurricular activity.

3. Availability of Certified PE Teachers:

There is no data available on the number of certified physical education teachers in schools in Northeast India. While schools with more funding and resources ensure that physical education is taught by certified teachers, most government schools either do not have full-time physical education teachers or use general subject teachers to teach physical education. The lack of qualified physical education teachers affects the quality of education and organized physical education at the grassroots level.

4. Women's Participation:

Female engagement in sports in Northeast India is still limited compared to other states owing to the lack of events and leagues dedicated to women. Although there has been progress over the years, opportunities for women athletes continue to be greatly inferior compared to males. Of the very few initiatives, the Assam Rifles Women's Football Championship, which kicked off in June 2024, offered competitive ground for women footballers with matches being organized in Lokra, Assam, and Shillong, Meghalaya. Moreover, the Sikkim Women's Super League started in August 2023 offers platforms for local women footballers to showcase their talent. Despite this, issues like lack of infrastructure, absence of organized competitions, and poor financial support still limit the participation of women in sports at the grassroots level.

5. Sports participation of para-athletes:

Para-athlete sports participation in Northeast India is still very limited as there are only some committed events available for differently-abled sportsmen and women. Among the main efforts was the North East Para Games that took place from November 27 to 29, 2024, in Guwahati, Assam. It included events such as para-athletics, para-swimming, para boccia, para-badminton, and para-table tennis disciplines for sportsmen and women with varying levels of disabilities. While this was a key step towards being inclusive, a lack of para-competitions at

regular state levels all over the region is still restricting the development of para-sports. There needs to be more investment in infrastructure, coaches, and regular competitions for the sustained interest and development among para-athletes in Northeast India.

Pillar 4: Talent identification System

Concept and definition:

Pillar 4 focuses on national strategies for identifying young sporting talent (De Bosscher et al., 2015). Talent identification programs are structured initiatives designed to identify and select individuals who demonstrate the potential to become successful competitive athletes. As a critical component of sports policy, talent identification is essential for developing a robust athlete pipeline, as it systematically evaluates emerging or young talent based on physical, technical, psychological, and tactical characteristics.

These programs employ scientific assessments, performance statistics, and expert evaluations to select individuals with the requisite qualities for high-performance sports. The approach extends beyond mere selection, encompassing continuous monitoring, early engagement, and targeted developmental support to nurture athletes from the grassroots to elite levels. By aligning closely with national sports policy, talent identification programs ensure that resources, coaching, and training infrastructure are effectively allocated to those with the highest potential. Ultimately, such strategic initiatives enhance the nation's capacity to achieve competitive success at international sporting events, while simultaneously strengthening the overall sports development framework.

Key Findings:

Talent identification programs play a vital role in recognizing potential athletes and guiding their progression and development. These initiatives ensure that raw talent is systematically nurtured into skilled athletes through structured coaching, training, and mentorship. While

precise statistics on the number of athletes who have participated in or benefited from these programs are not readily available, it is noteworthy that every state in Northeast India implements talent identification initiatives. These programs operate at both national and state levels, often in collaboration with multiple stakeholders, including sports federations, educational institutions, and private organizations. Consequently, some of the prominent talent identification programs in the Northeast include the following:

1. Khelo India Rising Talent Identification Program (KIRTI):

The Khelo India Rising Talent Identification (KIRTI) Scheme, which was launched under the Khelo India Scheme, is designed to identify young talented sports persons between the age group of 9 to 18 years from remote and weaker sections of regions. The programs utilize IT-based tools to adopt a systematic and standardized approach to spot talent at grassroots levels in every State and Union Territories (UTs). One of the primary objectives of KIRTI is to streamline the identification of talent by employing standardized tests to assess general fitness as well as sports-specific abilities. This helps establish a Bharat Benchmark, that is, an all-India standard for athletic potential measurement. The assessment is conducted for various sports disciplines including Archery, Athletics, Badminton, Boxing, Football, Hockey, Kabaddi, Kho-Kho, Volleyball, Weightlifting, and Wrestling.

Through this program, the government aims to make sure that young talented sports persons are given proper guidance and training so that they can perform well in their sports. The state-wise information on assessments of athletes done under this program is given in the table below.

Table 4.51

Khelo India Rising Talent Identification Program

SN	STATE	No of Assessments
1	Arunachal Pradesh	3461
1.	Assam	11361
2.	Manipur	2306
3.	Meghalaya	4160
4.	Mizoram	4225
5.	Nagaland	3504
6.	Sikkim	1617
7.	Tripura	3646

Source: Rajya Sabha documents, Govt of India, MYAS

2. Elite Pathway Program (EPP) (Meghalaya)

The Elite Pathway Program (EPP) is an initiative by the Government of Meghalaya that was introduced under the STAR program in collaboration with the Meghalaya State Olympic Association (MSOA). The program focuses on identifying and nurturing young athletes through structured training and coaching. Under this program, 14,500 candidates were screened through scientific tests to identify athletes with high potential. In addition, 200 athletes underwent a year-long training program through the EPP, which consisted of app-based training modules combined with quarterly in-person training camps to develop skills. For the 2024-25 series, the program tested with 10,000 additional participants, including children as young as six years old, while 200 more athletes were selected for the second EPP camp. The program also consists of the Super Elite Program, which aims to develop the selected 11 promising athletes who are internationally and nationally competitive and offer them more advanced training along with exposure to help them improve their competitive advantage.

3. Empowering Mizoram Sports (EMS) Programs

Empowering Mizoram Sports (EMS) is a government-led program that aims to develop the sports ecosystem of Mizoram by identifying, developing and supporting young talented athletes. The program emphasizes on grassroots talent identification, organized training programs and facility development to create a sustainable sporting pathway for athletes to perform at regional, national and international levels. The EMS program uses scientific talent identification methods to identify talented athletes in various sports categories. These athletes receive intensive coaching, training opportunities with modern equipment and are used in competitions to improve their performance. The program also works with state sports associations, academies and government agencies to provide comprehensive development opportunities and ensure that athletes receive the resources they need to reach their full potential.

Pillar 5: Athlete career and post career support

Concept and Definition:

Career and post-career assistance for athletes plays an important role in ensuring that not only do athletes deliver their best on the field but they also have an easy transition to life beyond sports. This pillar emphasizes the current support systems for athletes which include education, healthcare, statutory rights, and financial support as well as resources and programs that assist them in establishing a sustainable post-retirement future. In the Northeast Indian context, in which most athletes hail from rural and financially weaker sections, such aid assumes a critical role in determining their future well-being.

Key Findings

1. Athlete Welfare and Support Systems:

Northeast India has contributed several talented athletes who represented the country in the global arena, but their access to existing support systems is found to be moderately satisfied. Though there are government schemes at the state level, the availability of these schemes is not transparent or bureaucratically inconvenient. The athletes find it difficult to receive continuous financial support, and those outside the elite national schemes get negligible institutional support. They depend on word-of-mouth contacts or sponsorship, which are uncertain and short-lived.

2. Legal Entitlements and Assistance Programs:

There are statutory provisions like sport quota posts under government employment of various departments, but these are also extremely competitive. National programs such as the Khelo India Scheme and TOPS (Target Olympic Podium Scheme) offer financial benefits to chosen participants, but lifelong security is not available. Some state governments have policies of pensions for retired sports personnel or systematic money planning; Northeast India does not have any systemic post-career support, thereby making most participants unsure of the future.

3. Academic Opportunities for Athletes:

Reconciling sport and education is still a challenge for athletes in the region. Although sport-integrated education exists in some institutions, it is not widespread. Most young athletes have to drop out of school because of training requirements, and few are able to pursue higher education alongside their sporting careers. Without appropriate educational qualifications, it is difficult to pursue a career after sport. There should be additional flexible learning programmes,

scholarships and career counselling services to help athletes prepare for life beyond their playing days.

4. Post-Career Pathways for Athletes:

For most top athletes, sports are the only profession they have ever had. Although some earn a second chance through coaching, refereeing, or sports administration, formal transition schemes are few and far between. Government employment under the sports quota continues to be the preferred post-retirement alternative, though numbers are limited. Private sector attempts at taking in former players remain few. Without career transition programs, most players end up living in financial uncertainty after retirement.

5. Jobs offer for medallists:

Findings show that several Northeast Indian states have taken a big step towards employing medal winners in the government sector. The policies are geared towards rewarding the performance of sportspersons by providing them with jobs in various departments.

- The Assam government has taken the initiative by approving the recruitment of medalists from various types of events. Class I government posts are given to the Olympic, Commonwealth, and Asian Games winners. Medalists from World Championships are entitled to Class II posts, and National Games medalists are given to Class III posts.
- Likewise, The Manipur government has a tradition of rewarding its athletes who gain international success. For example, following her silver medal win at the 2020 Tokyo Olympics, weightlifter Saikhom Mirabai Chanu was appointed as an Additional Superintendent of Police (Sports) in the Manipur State Police.
- Following the success of National Games 2025, the Meghalaya government has also taken the initiative by approving the Meghalaya Outstanding Sportsperson Direct

Appointment Policy 2025. This policy will provide jobs to medal winners from different categories such as Grade A to Olympic medal winners, Grade B to Asian games, Commonwealth Games winners and Grade C for National Games winners.

- Tripura's government has also implemented reservations for sportspersons in government employment, especially for Group C and D posts. This will stimulate youth involvement in sports through career prospects in the state government.
- The government of Mizoram has also released guidelines on the recruitment and promotion of meritorious sportspersons. The guidelines establish "meritorious sportspersons" as those who are domiciled in Mizoram and have represented the state in national and international competitions. Such eligible sportsmen can be recruited directly to sportspersons' reserved vacancies in government departments.
- However, no official details regarding government job offers for medal winners in Sikkim, Arunachal Pradesh, and Nagaland are available. Although the latter two states provide financial assistance and scholarships to support their athletes, no documented schemes for direct employment in government service based on athletic performance can be found.

6. Incentive Schemes:

In Northeast India like any other region, state-run governments have introduced various cash rewards and incentive schemes to recompense and motivate the achievements of athletes at the national and international levels. The following is a brief outline of available information pertaining to such programs:

Table 4.52
Incentive scheme and cash rewards by Northeast state-run government

STATE	INCENTIVE SCHEME	CASH AWARD AMOUNT
ASSAM	Olympic Games	Rs 40 lakh, Rs 20 lakh and Rs 10 lakh for gold, silver and bronze medal winners
	World cup, Asian and Commonwealth Games	Rs 10 lakh, Rs 5 lakh and Rs 3 lakh for gold, silver and bronze medals
	National Games Medalists	Rs 3 lakh, Rs 2 lakh and Rs 1 lakh
ARUNACHAL PRADESH	Olympic Medalists	₹3 Cr (Gold), ₹2 Cr (Silver), ₹1 Cr (Bronze), ₹60L (Participant)
	Asian and Commonwealth Games	Rs 3 lakh, Rs 3 lakh and Rs 3 lakh for gold, silver and bronze medals
	National Games Medalists	Rs 80k, Rs 70k and Rs 60k
MANIPUR	Olympic Medalists	₹1.20 Cr (Gold), ₹1 Cr (Silver), ₹75 Lakh (Bronze)
	Asian and Commonwealth Games	Rs 20 lakh, Rs 15 lakh and Rs 10 lakh for gold, silver and bronze medals and 4 Lakhs for participants
	National Games Medalists	Rs 5 lakh, Rs 3 lakh and Rs 1 lakh for gold, silver and bronze medals and Rs 15 Lakhs, Rs 10 Lakhs and Rs 5 Lakhs for team game
MEGHALAYA	Olympic Medalists	₹75L (Gold), ₹50L (Silver), ₹30L (Bronze) and ₹5L for participation
	World cup, Asian and Commonwealth Games	₹30L (Gold), ₹20L (Silver), ₹10L (Bronze) and ₹2L for participation
	National Games Medalists	₹2L (Gold), ₹1.5L (Silver), ₹1L (Bronze)
	Khelo India	Rs 60k, Rs 40k and Rs 25k
MIZORAM	Olympic Medalists	₹1 Cr (Gold), ₹75 lakhs (Silver), ₹50Lakhs (Bronze), ₹15L (Participant)
	World cup, Asian and Commonwealth Games	₹25L (Gold), ₹15L (Silver), ₹7.5L (Bronze) and ₹3L for participation
	National Games Medalists	₹6L (Gold), ₹4L (Silver), ₹2L (Bronze)
	North East Olympics Medalists	Rs 10k, Rs 7k and Rs 5k
NAGALAND	Olympic Medalists	No record
	World cup, Asian and Commonwealth Games	No record
	National Games Medalists	No record
	North East Olympics Medalists	₹50,000 (Gold), ₹25,000 (Silver), ₹10,000 (Bronze)

SIKKIM	Olympic Medalists	No record
	Special Olympics	₹5L (Gold), ₹3L (Silver), ₹2L (Bronze)
	World cup, Asian and Commonwealth Games	No record
	National Games Medalists	₹1L (Gold), ₹75k (Silver), ₹50k (Bronze)
TRIPURA	Olympic Medalists	No record
	International Paralympic medal	₹1 Cr (Gold), ₹75 lakhs (Silver), ₹50Lakhs (Bronze),
	World cup, Asian and Commonwealth Games	No record
	National Games Medalists	₹3L (Gold), ₹2L (Silver), ₹1L (Bronze)

Source: State Government reports

Pillar 6: Training Facilities

Concept and Definition:

Training and facilities play an important role in development of athletes by providing the necessary infrastructure, resources and equipment to improve athletes' performance and ensure long-term progress. Pillar 6 is an important part of the sports policy and addresses the availability, accessibility and quality of sports centres so that participants can benefit from structured and high-performance training. Equipped stadiums and sports complex as well as highly specialised sports facilities help to create an ideal environment for sporting excellence. The effectiveness of facilities is determined not only by their presence but also by their management, maintenance and integration into athlete support systems. With broad access, athletes at all levels can train in the best possible conditions and ultimately succeed at national and international levels.

Key Findings:

The results indicate that national training centers and state-level athletic facilities play a significant role in athlete development by offering structured training programs, professional coaching, and performance enhancement support. While some states possess modern, high-

quality infrastructure, others are constrained by limited funding, outdated facilities, and inadequate maintenance. National Training Centres under the **Sports Authority of India (SAI)** have sought to address these disparities by providing quality training and sports science support. Nonetheless, issues such as limited awareness and restricted accessibility, particularly for athletes from rural regions, remain significant barriers. Therefore, state governments must implement targeted measures to improve facility management, increase investment, and ensure coordination with grassroots programs to maximize the effectiveness of training centers and foster a more inclusive and high-performing sports ecosystem.Some of the national centres and state-owned facilities are listed below.

Table 4.53
State-owned facilities

STATE	SPORTS INFRASTRUCTURE	
	EXISTING	UPCOMING
ARUNACHAL PRADESH	— Golden Jubilee Stadium, Yupia — Rajiv Gandhi Stadium, Naharlagun — National Institute of Mountaineering and Allied Sports (NIMAS), Dirang — Indoor Stadium-cum-Auditorium at GHSS, Basar	— State Sports Academy, Miao TCL Region, Phase-I — Multipurpose Sports Stadium, Yupia — Mini Football Stadium at Chowkham, Namsai District
ASSAM	— Nehru Stadium — Indira Gandhi Athletics Stadium — Karmabir Nabin Chandra Bordoloi Indoor Stadium — Dr. Zakir Hussain Aquatic Complex — Md. Maulana Tayabullah Hockey Stadium — Bhogeswari Phukanani Indoor Stadium — Deshbhakta Tarun Ram Phukan Indoor Stadium	— Multi-Disciplinary Sports Complex in Khanikar, Dibrugarh — State-of-the-Art Sports Stadium in Kokrajhar — Sports Complex at Chandrapur — Indoor Stadium and Swimming Pool in Sarupathar — Mini Stadium at Dwarbondh in Dholai
MANIPUR	— Khuman Lampak Sports Complex — National Sports University — Special Area Games (SAG) Centre, Imphal	— National Sports University Permanent Campus — Mini Sports Complex at Akampat SEYO Club Ground — Football Field with RCC Gallery at Chajing
MEGHALAYA	— Jawaharlal Nehru Sports Complex, Shillong — P.A. Sangma Sports Complex, Tura — Wahiajer Stadium, Jaintia Hills	— 40,000-Capacity Football Stadium at Mawkhanu — Upgradation of Sunny Hills Indoor Stadium, Tura — State-of-the-Art Swimming Pool at Mawkhanu
MIZORAM	— Rajiv Gandhi Stadium, Aizawl — Lammual Stadium, Aizawl — Zawlnuam Sports Complex	— Lawngtlai Playground, Lawngtlai District — Laying of Synthetic Hockey Turf at Muallungthu, Aizawl District — Construction of Mini Sports Complex at Khawbung
NAGALAND	— Indira Gandhi Stadium, Kohima — Chümoukedima Football Stadium	— Sammogooting Stadium, Chümoukedima — Pre-Fabricated Multi-Discipline Sports Stadiums
SIKKIM	— Bhaichung Bhutia Stadium — Paljor Stadium, Gangtok	— Indoor Stadium Gymnasium Hall at Soreng — Jaslal Pradhan Boxing Academy
TRIPURA	— Dasarath Deb State Sports Complex, Badharghat — Swami Vivekananda Stadium, Agartala	— Narsingarh International Cricket Stadium — Synthetic Football Turfs and Athletic Track

The table above presents the details of some of the existing and future sports infrastructure in the North East. Due to the vast number of facilities in the region, the researcher has only included the major infrastructures that are used especially for hosting various competitions at the state and national level. Sports facilities are essential for the training and development of athletes, but their maintenance and upkeep remain a challenge. Some of the stadiums, training facilities and complexes, especially in the rural areas, are outdated, which affects their efficiency. Therefore, the government needs to address these issues through better planning, support and long-term sustainability strategies for the maintenance, optimal utilisation and hosting of various sports competitions.

National Centre

Besides state-owned sporting facilities, the Union government has set up various high-performance training centres in the Northeast, such as the SAI Training Centres (STCs), Khelo India State Centres of Excellence (KISCE), and National Centres of Excellence (NCOE). These centres are essential in nurturing talent by offering organized training programs, exposure to sports science support facilities, and coaching at an international standard. They are a significant hub for sportspersons who wish to compete nationally and internationally. Below are the strengths of athletes presently trained at these centres.

Table 4.54
Sai training centre (STCs)

STATE	Residential		Total	Non residential		Total	Grand Total
	Male	Female		Male	Female		
Arunachal Pradesh	45	40	85	10	10	20	105
Assam	93	199	292	37	38	75	367
Manipur	151	60	211	11	03	14	225
Meghalaya	64	59	123	24	5	29	152

Mizoram	56	66	122	0	0	0	122
Nagaland	61	0	61	0	0	0	61
Sikkim	46	0	46	8	20	28	74
Tripura	31	0	31	16	0	16	47

Source: Sports authority of India website

Table 4.55
National Centres of Excellence (NCOEs)

STATE	Residential		Total	Non residential		Total	Grand Total
	Male	Female		Male	Female		
Arunachal Pradesh	28	20	48	6	4	10	58
Assam	47	71	118	18	25	43	161
Manipur	107	100	207	0	0	0	207

Source: Sports authority of India website

Table 4.56
National Sports Talent Contest (NSTC) scheme- Regular School

STATE	Residential		Total	Non residential		Total
	Male	Female		Male	Female	
Assam	0	0	0	25	12	37
Manipur	0	0	0	34	0	34
Tripura	0	0	0	15	0	15

Source: Sports authority of India website

Table 4.57
Khelo India State Centres of Excellence (KISCE)

STATE	Male	Female	Total
Arunachal Pradesh	30	41	71
Assam	38	38	76
Manipur	38	52	90
Meghalaya	0	0	0

Mizoram	17	13	30
Nagaland	42	29	71
Sikkim	30	20	50
Tripura	31	41	72

Source: Sports authority of India website

Pillar 7: Coach development

Concept and Definition:

Coach development encompasses a range of organized initiatives designed to enhance the competence, skills, and career progression of coaches through certification programs, workshops, mentorship opportunities, and continuous professional development. This pillar examines the availability of such provisions for regional coaches, considering factors such as financial support, institutional backing, and exposure to contemporary coaching methodologies. Additionally, it assesses the presence of legal or professional associations that advocate for coaches' rights, benefits, and working conditions, as well as their representation in decision-making bodies and governance structures. Empowering coaches with a voice in policy and administrative decisions is crucial, as it directly influences sports development, athlete training, and the overall effectiveness of the sporting ecosystem. By strengthening the knowledge, skills, and professional standing of coaches, sports policies can ensure more structured and high-quality athlete development programs across the region.

Key Findings:

The findings indicate that, although comprehensive data on the exact number of professional coaches employed across central, state, or private organizations in the region is unavailable, observations suggest that a majority of coaches possess adequate qualifications and are actively engaged in elite training centers to develop high-performance athletes. However, access to formal coach development programs remains limited, with only a few systematic training and

certification initiatives, particularly in sports such as football. Economic support and institutional backing for coaches are inconsistent, and there is no evidence of a dedicated legal union advocating for their rights and professional interests. Furthermore, the minimal representation of coaches in board meetings and sports governance bodies restricts their capacity to influence decisions related to training facilities and athlete development. These limitations highlight the need for more structured professional development opportunities, stronger institutional support, and greater inclusion of coaches in policy-making processes to enhance sports outcomes in the region.

Pillar 8: Sports competition

Concept and Definition:

Sports competitions play a pivotal role in athlete development by providing platforms for talent identification, skill enhancement, and progression from regional to national and international levels. This pillar assesses the effectiveness of states and regions in organizing and hosting competitive events, examining both the frequency and quality of such competitions. High-quality sporting events not only offer athletes opportunities to test and refine their skills under competitive conditions but also serve as a mechanism for benchmarking performance, motivating participation, and promoting a culture of excellence. The availability and accessibility of competitions are therefore critical indicators of a region's capacity to nurture talent and facilitate the transition from grassroots engagement to elite performance.

Key findings:

The table below shows the types of events organised by the state government from the year 2019-2024

Table 4.58
Types of main events held in the region

STATE	STATE LEVEL	NATIONAL LEVEL	INTERNATIONAL LEVEL
Arunachal Pradesh	- Tawang Marathon - Central Dree Festival Committee (CDFC)	- 36th Senior National Tug of War Championship - Khelo India university Games 2024	-
Assam	- ATPA Shield - Dewkon Memorial Inter District School Football Tournament - Khel Maharan 2024	- 2020 Khelo India Youth Games - Khelo India university Games 2024	-
Manipur	- Manipur Olympic Games 2022 - MNCA tournaments - Unity Utsav	-	-
Meghalaya	- Meghalaya Games - Shillong Premier League - 2022 North East Olympic Games	Hosted several ISL matches in 2025	- International Meghalaya Kayaking festival 2023 - Cherrapunji international Marathon
Mizoram	- Mizoram Premier League (MPL) - District level sports league	Khelo India university Games 2024	-
Nagaland	- Nagaland Super League - Nagaland Olympic & Paralympic Games - North East Games 2024 - Dr. T. Ao football tournament	- 68th National School Games - 56th National Cross-Country championships 2022	South Asian Cross-Country Championships 2022
Sikkim	2024 Sikkim Gold Cup	Khelo India university Games 2024	-
Tripura	State-level para games	- 73rd BN Mullik Memorial All India Police Football Championship 2025	-

The number of sporting events in Northeast India, especially at the international and national level, is very low compared to other regions. This is due to the lack of modern infrastructure

required to host professional tournaments. However, in recent years the state governments have made great efforts to bring major sporting events to the region. Among various northeast states, Assam and Meghalaya have made great improvements in this regard. Assam has recently hosted the South Asian Games 2016, Khelo India University Games and several ISL and IPL Games matches, while Meghalaya has successfully hosted the South Asian Games 2016, North East Olympic Games and other major adventurous sports events in the last ten years. In the future, Meghalaya will host the upcoming National Games 2027, a highlight in the region's sporting development. More national and international level competitions and games are also planned, heralding a new movement of more sporting opportunities in the North East. The number of opportunities for athletes to participate in sporting events and their achievements in various national and international events are mentioned in the other factor below.

Pillar 9: Scientific and technological support

Concept and definition:

Scientific and technological support in sport refers to the application of advanced research, innovation, and technology to enhance athlete performance, prevent injuries, optimize training efficiency, and foster the overall development of sports. This pillar encompasses a wide range of domains, including sports science, biomechanics, data analytics, nutrition, recovery strategies, and performance monitoring. The integration of technology ensures that training programs are evidence-based, equipment is optimized, and decision-making by athletes and coaches is informed and precise. From an administrative and developmental perspective, this pillar evaluates the extent to which scientific research and technological resources are accessible, effectively utilized, and integrated to support athletes across all levels. Proper implementation of this pillar is essential to create a systematic and modern sports ecosystem

capable of producing elite performers while supporting the broader goals of athlete development and sustainability in sport.

Key Findings:

The Northeastern region of India has witnessed modest advancements in sports infrastructure, particularly in the development of high-performance training facilities. However, with the exceptions of Assam and Manipur, most states in the region have yet to establish comprehensive scientific support systems for athletes. Notably, Assam inaugurated the Centre for Developing Sports Training and Rehabilitation at Jorhat in October 2023, a ₹23.78 crore initiative supported by the state government, Oil India Limited, and Numaligarh Refinery Limited. This centre offers scientific training and rehabilitation facilities aimed at enhancing athlete performance. Additionally, the KISCE project has upgraded several sports centres in the northern part of the region, integrating scientific support to improve training outcomes. These initiatives seek to provide world-class training facilities, elite coaching, and advanced sports science resources to foster athlete development and strengthen the region's representation at national and international levels. Nevertheless, the absence of sports science laboratories, performance analysis equipment, and research-based training programs in other northeastern states continues to hinder athlete development and limits their competitiveness on larger platforms.

4.8. PARTICIPATION RATE

The table below present the participation rate of athletes from the Northeast region in various national and international events.

Table 4.59
Khelo India Youth game participation list

STATE	2019	2020	2021	2022	2023	2024
Arunachal Pradesh	52	37	28	78	15	16
Assam	58	646	62	75	138	138
Manipur	134	102	84	145	125	125
Meghalaya	18	35	32	42	19	19
Mizoram	117	78	59	26	44	44
Nagaland	13	10	9	19	9	9
Sikkim	13	11	18	14	4	4
Tripura	31	47	85	7	88	100

Source: Khelo India Website

Table 4.60
Khelo India University game participation list

STATE	2020	2021	2022	2023
Arunachal Pradesh	4	9	0	6
Assam	4	0	0	2
Manipur	34	16	19	24
Mizoram	4	4	4	0
Tripura	0	0	0	9

Source: Khelo India Website

The tables above illustrate the participation rates of athletes from the northeastern states in various national-level competitions, including the Khelo India Games and the National Games. It is evident that Manipur and Assam consistently demonstrate the highest levels of athlete participation across multiple sports disciplines. This performance reflects a strong commitment to talent development, supported by comparatively superior infrastructure, training facilities, and government backing. Manipur, renowned for its robust sports culture, has produced numerous elite athletes, particularly in weightlifting, boxing, and football. While other

northeastern states also contribute to national events, their representation remains comparatively lower, largely due to limited infrastructure, inadequate scientific support, and fewer competitive opportunities. Consequently, significant investment in sports development across all northeastern states is imperative to enhance athlete participation and performance, thereby strengthening the region's contribution to national and international competitions over time.

4.9. ACHIEVEMENTS

The table below presents the Performances and Achievements of Athletes from various Northeastern states in major national and international sporting events

Table 4.61
Northeast India achievements at the National Games

STATE	2011	2015	2022	2023	2025	TOTAL
Arunachal Pradesh	11	4	7	13	13	48
Assam	34	25	28	56	34	177
Manipur	118	69	50	82	55	374
Meghalaya	6	3	0	0	5	14
Mizoram	6	6	4	5	3	24
Nagaland	2	0	0	8	2	12
Sikkim	4	0	1	1	2	8
Tripura	9	5	3	1	0	0

Source: Media reports

Table 4.62
Northeast India achievements at the Khelo India youth game

STATE	2019	2020	2021	2022	2023	2024
Arunachal Pradesh	14	10	7	10	10	2
Assam	10	41	21	7	7	24
Manipur	32	35	28	28	34	31

Meghalaya	0	0	1	2	2	1
Mizoram	13	6	4	2	2	2
Nagaland	0	0	0	1	1	2
Sikkim	0	0	0	2	2	0
Tripura	6	5	7	1	1	3

Source: Khelo India Website

Table 4.63
States achievements at the Northeast games' editions.

STATE	1st Edition	2nd Edition	3rd Edition	Total
Arunachal Pradesh	76	112	47	235
Assam	140	203	140	483
Manipur	159	240	130	529
Meghalaya	40	149	55	244
Mizoram	52	106	58	216
Nagaland	41	78	134	253
Sikkim	25	50	31	106
Tripura	20	42	16	78

Source: Media reports

The above tables indicate that Manipur and Assam are the only northeastern states that have consistently secured medals in major events such as the Northeast Games, Khelo India Games, and the National Games. This achievement reflects both a deeply rooted sporting culture and proactive government support. In Manipur, sports are integral to daily life, motivating young athletes to strive for excellence from an early age. Assam, similarly, has gained recognition for its sporting achievements and has invested substantially in infrastructure and training programs to facilitate high-performance development. The combination of athletes' dedication and

structured state support provides a solid foundation for the recurring emergence of national champions from these two states.

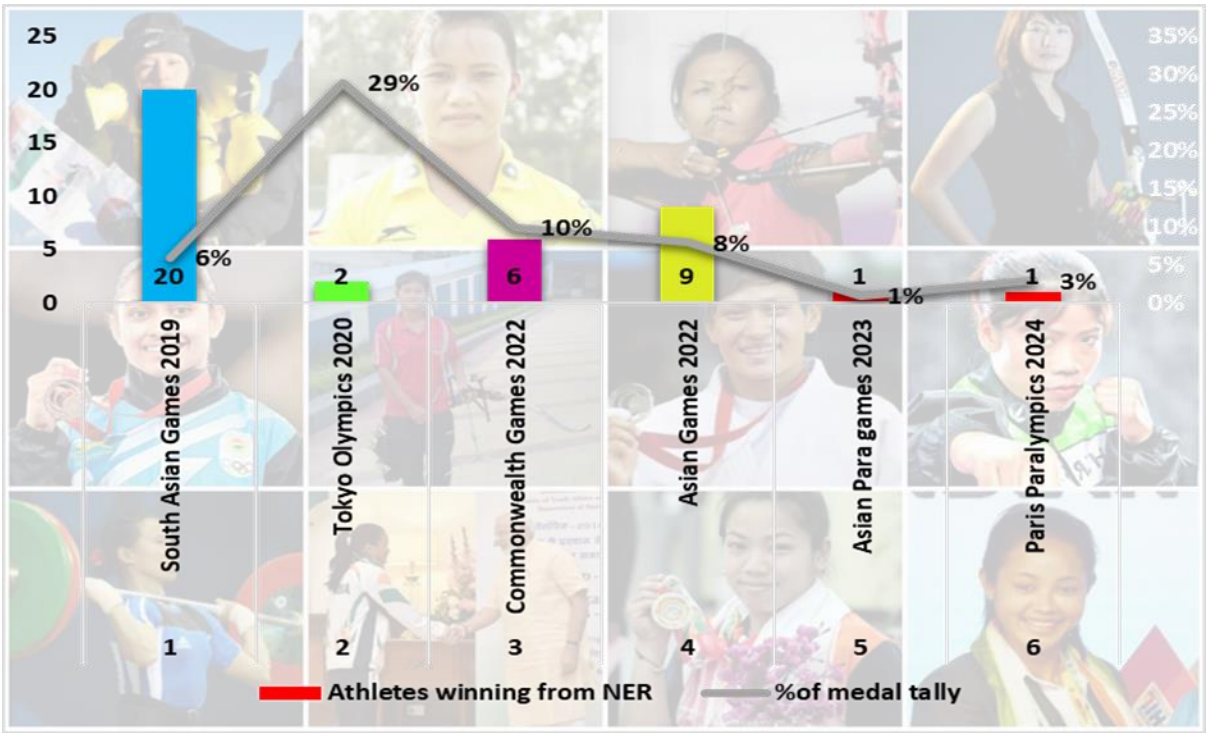
Table 4.64

Number of Medals won by Northeast athletes at the International Events.

SN.	Events	Total medal tally	Athletes winning from NER	%of medal tally
1.	South Asian Games 2019	312	20	6%
2.	Tokyo Olympics 2020	7	2	29%
3.	Commonwealth Games 2022	61	6	10%
4.	Asian Games 2022	106	9	8%
5.	Asian Para games 2023	111	1	1%
6.	Paris Paralympics 2024	29	1	3%

Source: Media reports

Table 4.16
Graphical representation of the Number of Medals won by Northeast athletes at the International Events.



The table and figure above illustrate the percentage of medals won by athletes from the northeastern states in various international competitions, highlighting their contribution to India's overall sporting achievements. Although the region's medal share remains comparatively low, there is significant potential for growth. With strategic investments in infrastructure, modern training centres, and structured athlete development programmes, the northeastern states can enhance their performance on the international stage. The strong sporting culture in Manipur and Assam demonstrates the region's latent talent; however, athletes from other northeastern states continue to lag behind. By prioritizing grassroots sports development, improving access to resources, and actively supporting young athletes, the entire region can increase its medal tally and establish itself as a formidable presence in global sports.

CHAPTER V

FINDINGS, RECOMMENDATION, AND CONCLUSION

This chapter provides an overall assessment of the sports policy implementation in Northeast India. By evaluating the effectiveness of sports policy implementation, the chapter analyzes the structural, financial, administrative, and other factors of policy performance, mapping areas where development has been achieved and areas where gaps persist and need to be addressed. The chapter also delves into opportunities available for enhancing the implementation process, taking into account factors like better governance, higher investment, and community engagement.

In conclusion, the chapter provides the major research evidence and discusses the wider implications for sports development in Northeast India. The debate entails more than just the assessment per se, e.g., reporting of the socio-economic and developments of policy interventions on sport participation, talent development, and infrastructure enhancement. Moreover, the research limitations, such as data access challenges and regional divergence, are discussed. This section also points out possible avenues for further research, with an urgent call for longitudinal studies, comparative policy analysis, and qualitative case studies to further advance the body of knowledge in this area of sports policy in the region.

To ensure clarity and coherence, the researcher has structured this chapter as follows:

1. **Findings of the Study**: This section presents the major findings that have been concluded from the study.
2. **Recommendations Based on Study Findings:** With reference to the study findings, this section provides practical recommendations that will enhance policy implementation, mitigate issues which are present, and cultivate sport in Northeast India.