PROJECT REPORT

Higher Education Financial Support toTribal Students: Impact Assessment

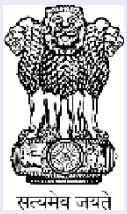
Implemented By

Dr. Pranati Mishra

Principal Investigator

Centre in Science & Technology Customisation for TribalDevelopments,
Jatni, Khurda, Odisha - 752050

File No. DST/NSTMIS/05/208/2017-18



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DISCLAIMER

Every care has been taken to provide the authenticated information. However, the onus of authenticity of data rests with the PI of the project.

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Preface

Education has brought several changes in the social and economic life of the tribal community in India. But, the majority of the tribal mass are not getting the privilege of higher education due to various factors most common being the financial condition of the tribal community and several social inhibitions. The Government has come up with various schemes for the upliftment of the Scheduled tribes and there is financial support being extended to tribal community students in form of scholarships and stipends, relaxed fee structure etc. who are interested in pursuing higher education.

But, the million-dollar question that arises is “Has Financial Support and their enrolment in Higher Education made the socio-economic condition of the Tribal Students any better?” Has it made any impact on the HDI index?

A project was launched by DST, GOI to assess impact assessment for Tribal students. Centre for Science & Technology Customisation for Tribal Developments (CSTCTD) has been entrusted with the study of this project in this National Programme.

To have a clear picture for the most-awaited questions we present our study “Higher Education Financial Support to Tribal Students: Impact Assessment”. It mainly studies the impact of higher education (here BTECH Course has been considered for the data study) among Scheduled Tribes. The objective of the project/ study is to know and to establish new findings to measure the impact on socio-economic condition of Tribal students. The findings from this study will facilitate the Government in many decision-making processes related to scholarship, fee relaxation schemes for the tribal students in various professional courses across the country.

Acknowledgements

I would like to deeply acknowledge my gratitude and sincere thanks to everyone who has taken active participation in this project.

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I would like to thank from the core of my heart Dr. Brajendra Kumar Mishra and Dr. Pradeep KumarSahu for their beneficial support to carry out the research activities.

My heartfelt thanks also go to all members of the project, Sophitorium Group of Institutions, Khurda, Odisha for their time-to-time support.

I would like to convey my benign gratitude and special acknowledgement below mentioned officials and expert committee members of NSTMIS Division, Department of Science & Technology, Technology Bhawan, Govt. of India, New Delhi for sponsoring the project and helping me to enhance my knowledge on the subject concerned.

Abstract

The project "Higher Education Financial Support to Tribal Students: Impact Assessment" is Catalyzed and funded by CHORD-NSTMIS, DST, GOI to assess to measure the qualitative life of STstudents. CSTCTD has been entrusted to do the study under this Project. The objective of the project is to know the impact of Higher Education Financial support on Tribal Students after completion of B.Tech. degree.

The scholars analyzed by collecting data from both primary and secondary sourcesand also collected feedback from the students concerned which help to conclude the findingsunder the DST, Govt. of India supported projects.

Human Development Techniques are used to analyze the data. The data are collected under different categories like Personal, Academic, Family, Income and Job Status. Then Life Expectancy Index (LEI), Education Index (EI) and Income Index (II) are calculated to know the individual's scoring under Human Development Index. The progressive HDI parameter which is derived during the analysis is established a new finding to measure the qualitative life of ST students after passing the course.

Keywords: Tribal Technical Students, Scholarship, Human Development Index, Life Expectancy Index, Education Index, Income Index, Progressive HDI, Impact Analysis

Executive Summary

1. **Importance of this Study**

The project "Higher Education Financial Support to Tribal Students: Impact Assessment" is Catalysed and funded by CHORD-NSTMIS, DST, GOI to assess and measure the qualitative life of ST students after passing BTech degree. The goal of thisstudy is to bring advancement, development and improvement in Tribal communities. CSTCTD has been entrusted to do the study in this project under the National Programme.

2. **Objectives of the study**

The main objectives of the present studies i.e. "Higher Education Financial Support toTribal Students: impact assessment" are as follows:

a) To collate information of B.Tech. Graduates during the last 10 years from 10different Colleges who were the recipient of tribal bursary.
b) To acquire information regarding: a. Job Profile b. Placement, Perks c. FuturePlan and prospects etc.
c) To analyse the impact of the bursary.

3. **Methodology details**

Data has been collected from both primary and secondary sources:

a) By visiting different Govt. agencies like academic institutions; technicaleducation directorates; concerned Colleges.
b) Collecting personal feedback from the students through the Android Application developed for this purpose (i.e., Questionnaire's survey).

Relevant data as required for the study are collected under the following groups:

a) Personal Data
b) Academic Data
c) Family Data
d) Income Status
e) Job Status
f) Life Expectancy Index (LEI)
g) Education Index (EI)
h) Income Index (II)
i) Human Development Index (HDI)

The calculation was carried out based on the above UNDP Human Development Indices indicators.

4. **Limitations of the study**

a) The study does not cover all the support schemes launched by Govt. The calculation is based only on Scholarships availed during the study period.
b) All possible attempts have been made to extract the correct information from the respondents, yet the peculiar behaviour of some respondents might have caused limitation to some extent in extracting the true information.

5. **Results and Discussions**

The results of HDI (Before), HDI (After) and the Progressive HDI was studied. It isnoticed that:

a) All top 20 students have secured more than the standard HDI value 0.64 in HDI (Before). The highest value in the study is 0.68.
b) Similarly, all 20 students have secured more than the standard HDI value of 0.64in HDI (After). The highest value in the study is 0.86.
c) After completion of B.Tech degree, their HDI value is increased to 18%.
d) In the end, all 20 students have positive progressive HDI comparing both HDI(Before) and HDI (After). The highest progression value is 0.28 and the lowest 0.01.

6. **Impact Assessment / Findings from the Study**

a) The Living condition of the Tribal students has been raised.

b) Socio-economic changes like i. Direct changes (Income/savings increased) ii. Perceived changes (Personal change, Debts cleared, House and appliance purchased) iii. Psychological aspects (feel comfortable, Improved communication skills) have been improved.

c) The income status and other financial conditions of these families have improved.

7. **Policy implication Suggestions and recommendations**

A detailed study has been carried out on the B Tech candidates from the colleges under consideration. However, the study could be extended to all tribal students availing scholarships, including technical and professional courses of all streams for finer results.

Human Development is imperative for any tribal students and The Progressive HDI Parameter as mentioned above is established a new finding to measure the qualitative life of ST students. The findings from this study will facilitate the Government in many decision-making processes related to scholarship, fee relaxation schemes for the tribal students in various professional courses across the country.

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Chapter - 1

1.0. Introduction

1.1. Overview

In India, modern education is seen as a significant tool to bring about justice, liberty, equality and fraternity among the citizens of the multilingual, multi-religious and multi-ethniccountry. Education in this respect is conceived as an instrument of social and economic change for the future democratic society. Educational schemes for marginalized communities are introduced by the Government of India to provide equal opportunity for scheduled tribes to empower them with free educational facilities.

Previously Tribal students were graduated from college with huge loan debts. The thoughtof repaying all the money had squeezed their education. It also created immense pressureon them for getting placed at good packages. This was the reason why most students couldnot pursue their careers. Ultimately, they landed in a sector that did not pay high salaries at the entry-level. On the other hand, a scholarship comes as free money and allows studentsto start a good career. It helps in empowering tribal students' academic and career goals byremoving the financial barrier.

1.2. Brief Description about Odisha and its tribal People.

1.2.1. The State of Odisha

The Odisha state, which was once a land of Kings and Kingdoms, now boasts of being a rich source of natural resources. Its people, temple architecture, classical dance, religions, fairs and festivals, unique handlooms and handicrafts, green woodlands, rock caves, charming blue hills have always attracted historians, tourists and travellers from all over the world. Its rich history, revolutionary freedom movement, fascinatingly sculptured temples and monuments, tribal life characterized by dance, music, rituals, hunting, gaiety and wild ways have become important topics of research for great historians and scholars.

For the economic development of any state, industrialization plays a vital role. But for creating a viable atmosphere for industries and corporate houses a sound and smooth infrastructure become the top priority for the government. Keeping that sentiment in view the government of Odisha for a few years has consistently tried to provide a fine-tuned industry and investment-friendly infrastructure. In that direction, the government is becoming successful which is seen through a lot of major changes and improvements that occurred in the fields of infrastructure. The most important agenda of the government of Odisha has become to provide the state best connectivity through roads, rail, sea, and air.

On the eastern coast of India, perpetually washed by the blue waters of the Bay of Bengal,lies the many splendours of the State of Odisha. Endowed with a rich cultural heritage of old-world charms and bestowed liberally with the bounties of nature, sometimes tender, sometimes awe-inspiring, it is a kaleidoscope of past splendours and present glamour, a fascinating state with unspoiled beaches, sprawling lakes, luxuriant forests, teeming wildlife, superb monuments, exotic handicrafts, traditional tribes, colourful fairs and festivals, scintillating music and dances. It is a land of unforgettable memories and hiddentreasures. Many parts of this fascinating land remain relatively unexplored.

(Collected from Know India - https://knowindia.Nov.in/)

1.2.2. **Education & Literacy Scenario of Odisha**

As per Census 2011 population of Odisha is 4,19,74,218. Out of this the Rural population of Odisha is 3,49,70,562 and the Urban population is 70,03,656. During the period, out of 52,73,194 Child Populations in the age group 0-6 years recorded in the State 45,25,870 are concentrated in rural areas whereas in urban areas it is 7,47,324.

The number of literates in Odisha is 2,67,42,595 out of which 2,13,77,915 are recorded inrural areas whereas in urban areas the number of literates recorded is 53,64,680. The literacy rate of Odisha as per the 2011 Census is 72.9 per cent. In rural areas, the literacy rate is 70.2 per cent whereas in urban areas it is 85.7 per cent. The male rural literacy rate is79.6per cent whereas the female literacy rate in the rural area is 60.7 per cent. The male literacy rate in the urban area is 90.7 per cent and in the case of females, the literacy rate is 80.4 per cent.

Among the districts, the highest literacy rate in rural areas noticed is in the district of Jagatsinghpur (86.5%) whereas the highest literacy rate in urban areas recorded is in the district of Khordha (91.0 %). The lowest literacy rate of 43.9 per cent is recorded in therural areas of Nabarangpur district whereas the lowest urban literacy rate of 74.5 per cent is recorded in the district of Malkangiri. The highest male literacy rate of 92.5 per cent is recorded in the rural areas of Jagatsinghpur district whereas the highest urban male literacy rate recorded is in the district of Khordha (94.2 %). The lowest rural male literacyrate is recorded in the district of Koraput (54.1 %) whereas the lowest urban male literacyrate is recorded in the district of Malkangiri (83.4 %). The highest female literacy rate inrural areas is noticed in the district of Jagatsinghpur (80.4 %) whereas the lowest ruralfemale literacy rate recorded is in the district of Koraput (31.3 %). The highest urban femaleliteracy rate of 87.5 per cent is recorded in the district of Khordha whereas the lowesturban female literacy rate 64.9 per cent recorded is in the district of Malkangiri.

(Collected from the department of Schools and Mass Education https://sme.odisha.gov.in/index.html)

The literacy rate of the State is 0.4 per cent less than the national average of 77.7 per cent. Similarly, the percentage of an educated person is around 7.3 per cent less thanthe national average of 38.7 per cent. The male literacy rate of the State is around 84 per cent while the female literacy rate stands at 70.3 per cent. The literacy rate in urban and ruralareas remains 90.2 per cent and 74.9 per cent respectively. Odisha's literacy rate is higherthan neighbours Andhra Pradesh (66.4 per cent) and Jharkhand (74.3 per cent) but lower than West Bengal (80.5 per cent). The literacy rates of Odisha and Chhattisgarh are equal.Kerala has the highest literacy rate of 96.2 per cent. Likewise, the percentage of educatedpersons in the State is lower than its neighbour Andhra Pradesh (33.9 per cent) and Chhattisgarh (32 per cent) but higher than West Bengal (30 per cent) and Jharkhand (28.7per cent).

1.2.3. **Literacy Rate of tribals in Odisha**

As per the 2011 Census, the Scheduled Tribe (ST) population of the State of Orissa is 9,590,756. Of this, 8,994,967 are in rural areas and 595,789 in urban areas. This constitutes 22.8 per

cent of the total population of the State and 9.7 per cent of the total tribal populationof the country. The state holds 3rd and 11th rank among the States/UTs in terms of ST population and the proportion of ST population to the total population of the State respectively. The highest number of Scheduled Tribes has been recorded in Mayurbhanj (1,479,576) and the lowest in Puri (6,129). The State has a total of sixty-two (62) ScheduledTribes.

1.3. Constitutional Provisions for Educational Development of Tribals in India In the context of educational development Article 46 and its clauses, Article 15 (4), Article29 (2) of the Indian Constitution are the important articles.

Article 46 states that "*The State shall promote, with special care, the education and economic interests of the weaker sections people, and in particular, of the Scheduled Castesand Scheduled Tribes, and shall protect them from social injustice and all forms of social exploitation.*" This article gives protection to the Scheduled Castes, Scheduled Tribes and weaker sections from social injustice and exploitation.

The important clauses of Article 46 are discussed here. The clauses mainly discuss theissue of financial responsibility of state and union government for the higher education ofScheduled Tribes as stated below:

a) "Governments both Union and State shall be required to assume financial responsibility for the higher education of the Tribes and shall be required to make adequate provisions in their budgets. Such provisions shall form the first charge onthe Education Budget of the Union and State Governments.
b) The responsibility for finding money for secondary and College education of the Scheduled tribes in India shall be upon the State Governments and the different States shall make provisions in their budgets for the said purpose in proportion to the population of the Scheduled tribes to the total budget of the States.
c) The responsibility for finding money for foreign education of the Scheduled tribes shall be the responsibility of the Union Government and the Union Government shall make a provision of rupees ten lakhs per year in its annual budget on that behalf.
d) These special grants shall be without prejudice to the right of the Scheduled tribes to

share in the expenditure incurred by the State Government for the advancement of primary education for the people of the state".

From the above responsibilities in the draft of Ambedkar, it is clear that the overall educational development of Scheduled Tribes is the responsibility of both the State and the Union governments. It can be concluded that Article 46 simplifies the concept of 'distributive justice.' The concept suggests the elimination of educational and economicalinequalities by rectifying injustice resulting from the dealing between unequal groups of society. Thus, this is a significant article in India for the removal of educational and economic inequality.

Article 29 (2) states that "No citizen shall be denied admission into any educational institution maintained by the State or receiving aid out of State funds on grounds only of religion, race, caste, language or any of them."

Article 15 (4) states that "Nothing in this article shall prevent the state from making any special provision for the advancement of any socially and educationally backward classes of citizens or the Scheduled Tribes."

Under Article 15(4) various welfare schemes are run by the Central Government itselfand also through the State Governments.

1.3.1. **Educational Development for Higher Education of Tribes**

For the promotion of education among Tribes the following schemes are in operation:

a) ***Centrally Sponsored scheme of post-metric scholarship***: This scheme provides financial assistance to all ST students for the pursuance of post-metric studies in recognised institutions within India.
b) ***National overseas scholarship scheme for higher studies abroad***: Ministry of Tribal Affairs provides annually financial assistance to meritorious ST students for post-graduate, doctoral studies in foreign universities/ institutions of repute.
c) ***Book bank scheme***: Under this scheme Ministry gives financial assistance for setting

up Book-Banks in institutions running professional courses.

d) ***Scheme of up-gradation of merit***: Under this scheme, Ministry provides financial assistance for the up-gradation of merit to the ST students.

e) ***Coaching for Competitive examinations***: This Scheme provides 100% central assistance to State/ UT administration for arranging coaching classes in reputed Colleges for developing competence among ST students.

1.3.2. United Nations Development Programme (UNDP) and Human Development Reports

1.3.3. Human Development

"*The real wealth of a nation is its people. And the purpose of development is to create an enabling environment for people to enjoy long, healthy, and creative lives. This simple but powerful truth is too often forgotten in the pursuit of material and financial wealth.*" (Mahbub Ul Haq, 1990)

The dominant theoretical approaches used throughout the world for the development of a nation usually consider economic growth as the only major factor for a country's overall development. Although economic growth is an important factor, the aforementioned statement is a fallacious claim, in the sense that it underestimates the other determining factors of a nation's progress. Countries and states for the longest of time have focussed only on the economic aspect of growth and therefore have failed miserably in providing a meaningful life to their citizens. Doing well is equated with the increase in a country's Gross National Product (GNP) per capita but the quality of lives people live is never considered. A country's GNP can never be used as a criterion to contemplate the distribution of incomein society. The most neglected sections include the poor and the women. So, the quality of human lives in a country does not seem to be very well related to economic growth. Promoting growth does not automatically improve people's health, education, opportunities for political participation, or the opportunities of women to protect themselves from rape and domestic violence (Martha C. Nussbaum, 2009). Economic growth might suggest well-implemented policies but such policies fail to promote human capabilities. In the 1970s and 80s

development debate considered using alternative focuses to go beyond GDP, including putting greater emphasis on employment, followed by redistribution with growth, and then whether people had their basic needs met. Theseideas helped pave the way for the human development approach. Human development, as an approach, is concerned with what Amartya Sen took to be the basic development idea: namely, advancing the richness of human life, rather than the richness of the economy in which human beings live, which is only a part of it. The approach gained prominence with the publication of UNDP's first Human Development Report in 1990. It was pioneered by Mahbub ul-Haq.

"*Human development is a process of enlarging people's choices"* (HDRO, 1990). The Human Development approach insists that the fundamental aim of development policy should beto expand the opportunities that people have to lead meaningful lives.

The idea of Human Development concerning the people, the opportunities and the choices as put forth by the Human Development Report Office of the United Nations Development Programme is as follows:

a) ***People***: the human development approach focuses on improving the lives people lead rather than assuming that economic growth will lead, automatically, to greater opportunities for all. Income growth is an important means of development, rather than an end in itself.
b) ***Opportunities***: human development is about giving people more freedom and opportunities to live lives they value. In effect, this means developing people's abilities and giving them a chance to use them. For example, educating a girl would build her skills, but it is of little use if she is denied access to jobs, or does not havethe skills for the local labour market.
c) ***Choices***: human development is, fundamentally, about more choice. It is about providing people with opportunities, not insisting that they make use of them. No one can guarantee human happiness, and the choices people make are their concern. The process of development – human development - should at least create an environment for people, individually and collectively, to develop to theirfull potential

and to have a reasonable chance of leading productive and creative lives that they value.

1.3.4. **Indicators of Human Development**

The indicators of Human Development include Longevity, measured by life expectancy at birth, Educational Attainment, measured by literacy rates and combined primary, secondary and tertiary school enrolment, and access to resources measured by income per capita.

a) ***Participation in the Knowledge Sector***: This is a quantitative indicator of human development in the sense that this indicator seeks to recognise the number of enrolment of students in schools at the primary, secondary and tertiary levels. This indicator fails to realise that, if the participation or the enrolment of students in school is fruitful, do they really gain knowledge to lead a meaningful life or is it just for the sake of increasing numbers of attendance. Hence, this aspect doesnot take into account the quality rather is based on quantity. But this dimension aims to identify the capability to acquire knowledge. In the 1990s when the first Human Development Report was published to various changes that have been made over the years in Education, as one of the indicators of Human Development:1990: Education was initially measured by literacy rates.

   - ✓ 1991: Mean years of schooling was added to literacy rates attainment (weights are given one-third and two-thirds respectively). This comprised acomposite indicator to measure educational attainment.
   - ✓ 1995: The estimate for mean years of schooling was replaced by the combined gross enrolment rate at primary, secondary and tertiary levels. This was dueto the unavailability of data on average years of schooling in most countries.

b) ***Life Expectancy at Birth***: Life expectancy at birth is defined as the average number of years that a newborn could expect to live if he or she were to pass through life subject to age-specific mortality rates of a given period. This is also a quantitative indicator of human development, life expectancy at birth does not reveal if the years lived are

healthy and enjoyable. For the quality of health, we need to look at the output indicators, i.e., healthy life expectancy rate, which provides information on whether the years lived are expected to be in good health,and lost health expectancy, which is the relative difference between life expectancyand healthy life expectancy expressed as the percentage of life expectancy at birth.The healthy life expectancy rate is usually less than the life expectancy at birth.

c) ***Per Capita Income***: Per capita income or average income measures the average income earned per person in a given area in a specified year. Per Capita Income is considered as one of the factors of Human Development to determine the ability to achieve a decent standard of living. Per Capita Income per se is a quantitative indicator. The income per capita: HDI is based on the premise that there are diminishingreturns from income for human development. Within this context, the following changes were made:

- ✓ 1990: Per capita income above the poverty line was given zero weight.
- ✓ 1991: Per capita income was given progressively diminishing weight. That is, income above the poverty line has an effect, but is still a marginal one.

1.3.5. **Status of Human Development in India**

Though India's situation in human development has improved significantly over the years(between 1990 and 2017), India's HDI value increased from 0.427 to 0.640, an increase of nearly50%), its position is still lowest among its peer countries (Asian and Developing economies). Asper UNDP's Human Development Index (HDI) India is ranked 130 among 189 countries. The HDI is a summary measure for assessing long-term progressin three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. However, India's performance in some of the metrics is commendable: between 1990 and 2017, India's life expectancy at birth has increased by nearly 11 years, with even more significant gains in expected years of schooling where today's Indian school-going

children can expect to stay in school for 4.7 years longer than in 1990.

Subnational Human Development Index (SHDI) for the Indian States, this index is an average of the subnational values of three dimensions, mainly education, health and standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.

a) Subnational Human Development Index during the period 1990 to 2017 indicated that States like Kerala, Goa and Punjab occupy the top three positions while Stateslike Bihar, UP and MP are at the bottom of the rank.
b) However, if we look at the change in ranks for all the States between 1990 to 2017, Haryana, Himachal Pradesh, Tamil Nadu and Karnataka have seen a significant jump in their HDI rank, while most of the North-Eastern states like Nagaland, Meghalaya and Manipur have seen slippages in the ranking.
c) Both UP and Bihar have continued to remain at the bottom of the rank list in the last 27years.
d) Another interesting fact is that the States who were the worst-performing states inHDI during the 1990s are presently doing well in the social parameter since 2014. E.g., Rajasthan, UP, Odisha & MP have seen the largest jump in the change in HDI value among the 25 major States in India.

1.3.6. **Human Development Index (HDI)**

The Human Development Index (HDI) is currently used for many different purposes, froma comparative index to a decision-making instrument for public policy decisions. It is also used as a 'blaming and shaming' index in the media. For this reason, we delve into the foundations of the HDI, exploring to what extent it can be considered to be the use of the gross national product (GNP) as the main measure of human development.

1.3.7. **Principles used as guidelines during the search for the HDI**

According to Ul Haq, the work on national income accounts had five decades of investmentand research. During the search for the HDI, the following six principles were used as guidelines:

a) The new index would measure the basic concept of human development to enlarge people's choices.
b) The new index would include a limited number of variables to keep it simple and manageable.
c) A composite index would be constructed rather than a plethora of separate indices.
d) The HDI would cover both social and economic choices.
e) The HDI should be kept the coverage and methodology of the HDI

1.4. Objectives:

The main objectives of the present studies i.e., "Higher Education Financial Support toTribal Students: impact assessment" are as follows:

a) To collate information of B.Tech. Graduates during the last 10 years from10 different Colleges who were the recipient of tribal bursary.
b) To acquire information regarding these students:
c) Job Profile
d) Placement, Perks
e) Future Plan and prospects etc.
f) To analyse the impact of the bursary.

1.5. Limitations of the study:

a) The study does not cover all the support schemes launched by Govt. The calculation is based only on Scholarships availed during the study period.
b) All possible attempts have been made to extract the correct information from the respondents, yet the peculiar behaviour of some respondents might have caused

limitation to some extent in extracting the true information.

1.6. Design of the study / Chapter Plan:

The entire information collected for the project is divided into two parts — The preliminary Part and the Main Part of the report. The first part consists of the Title, Inner Title followed by the disclaimer, Preface, Acknowledgements, Abstracts, and Content. The main body of reports is divided into 06 Chapters summarised as follows:

a) 1st chapter gives the background of Scheduled tribes along with various development programmes launched by the government. It also highlights the objectives of the study, the hypothesis proposed research methodology, design of thestudy and its limitations.
b) The second chapter deals with the review of the literature.
c) Sampling Design, Data sources etc is discussed in the third chapter. This chapter has been added as an informative chapter to bring forth the socio-economic realities of the sample collected from different institutions pursuing studies in the study area.
d) The fourth chapter discusses the detailed analysis of data i.e., Sex ratio, religion, Martial status, district wise projections, student career, income pattern, Life Expectancy Index (LEI), education Index (EI), Human Development Index (HDI)
e) Important results with Discussions are discussed in the fifth chapter.
f) Chapter Sixth deals with the main findings of the study, conclusions & recommendations for bringing further improvements in Higher education financial support to Tribal students.
g) In the end, References and an Appendix is given.

Chapter – 2

2.0. Review of Literature

2.1. Introduction

Education is a driving force for sustenance and the most important tool for global competitiveness. No civilization can flourish without educating its people. Since independence, the government of India has taken several initiatives. Govt has introduced and implemented several schemes and programmes and allocated funds to providecompulsory education among the tribals and also educate them in several professional courses. No doubt all these efforts are significant and highly appreciable, but despite all these efforts, enrolment in higher education among the tribals especially Bachelor in Technology degrees is very sluggish. Not many studies have been taken by researchers on the impact of financial assessment provided for higher education and the result on the development of the socio-economic condition of tribal students after pursuing such degrees. Anthropologists, Sociologists, Geographers, Historians, Economists and a large number of other researchers have only made extensive studies on various aspects of scheduled tribes. However, studies/researches about the relative standards of development as referred to in Human Development Index HDI vis-a-vis enrolment of tribal students into higher education i.e., BTech remains in the grey area. A few studies done in these related fields are listed below for our reference.

Nübler, Irmgard (1995) studied on the Human Development Index revisited and stated that the emergence of the Human Development Index has stimulated wide-ranging debate about its usefulness and ability to measure human development adequately.' This article discusses whether the HDI should be rejected given the criticism it has attracted, improved, refined and more widely used. The special significance of the HDI lies in its normative function. It emphasizes human development as the development objective and therefore sets new development goals and standards. In this function, the HDI acts as a counterweight to the growth-oriented development concepts associated with per capita income. Finally, the HDI represents the human development concept, a concept that has won broad consensus in

development policy, especially since the experiences of the "lost decade". The success of development efforts must therefore be measured in terms of the progress made in human development. This implies much greater use of the HDI as a development indicator.

Parayil, G. (1996) highlighted the drastic development that took place in Kerala owing to the Kerala Model based on the concept of Sustainable Development. Also, provides a realistic example of the adoption of qualitative aspects of human development. But the article fails to talk about the high rates of suicide in Kerala.

Sagar, Ambuj D. and Adil Najam (1998) reviewed the human development index and discussed that since 1990, the United Nations Development Programme (UNDP) has published a series of annual Human Development Reports (HDRs) in which the human development index (HDI) is computed for each country. This index has become an important alternative to the traditional unidimensional measure of development (i.e. the gross domestic product). Although the index still fails to include any ecological considerations, it has broadened the discussion surrounding the evaluation of development. Unfortunately, over the years, the HDRs seem to have become stagnant, repeating the same rhetoric without necessarily increasing the HDI's utility. This paper evaluates how well these reports have lived up to their conceptual mandate and assesses the ability of the HDI to further the development debate. We find that the reports have lost touch with their original vision and the index fails to capture the essence of the world it seeks to portray. In addition, the index focuses almost exclusively on national performance and ranking but does not pay much attention to development from a global perspective.

Sen, Amartya (2000) mentions the relation between unemployment and capability deprivation. Unemployment other than loss of income has serious effects on the lives of the individuals including psychological harm, loss of work motivation, skill and self-confidence, increase in aliments, and morbidity, disruption of family relations and social life, hardening of social exclusion and accentuation of racial tensions and gender asymmetries. The previous research were confined to the point that unemployment is one of the causes of low human development. But Amartya Sen has highlighted the deep3 causes concerning unemployment that can further lead to the deterioration of human development.

Sakiko Fukuda-Parr (2001) was studied Indicators of human development and human rights – overlaps, differences and stated that The Human Development Index (HDI) is a summary measure of human development. This paper reviews the strengths and limitations of the HDI as a monitoring instrument of human development and human rights in economic and social areas. It focuses on the following questions:

– The what and why – the purpose of the HDI as a summary measure of average national achievement in human development, focussing on survival, knowledge and a decent standard of living.

– Beyond the HDI – beyond national average achievements to focussing on deprivation and inequality perspectives.

– Beyond the HDI – beyond the 3 HDI dimensions (survival, knowledge and decent standard of living) to other important dimensions of human development such as personal security, participation.

– HDI and human rights – human rights and human development are two sides of a coin but not the same thing.

– HDI and human rights – human rights measures focusing on accountability.

– Statistics and human rights.

Somers, Kay B. (2007) explored the United Nations' Human Development Index and stated that the human development index (HDI) is an international index used for comparing human well-being across countries. The activities that follow introduce this index and provide a look at an important method for finding a summary measure of a not readily quantifiable concept. The computational details behind this index provide a way to explore mathematical concepts such as scaling, averages, linear relationships, and logarithms. Further investigations allow the use of the index to explore some statistical ideas. Because the activities use real data, they provide another way for students to see the utility of mathematics. To understand the context of the activities, students will be asked to read and think about the input values that are needed to compute such an index.

Godbole, Madhav (2002) highlighted the Human Development Report of Maharashtra, the emerging interstate disparities and imbalance in development. Also, mentions the pathetic state of tribal children and the Muslim population and questions the reliability of data collected by government-run institutions. Therefore, suggests a reordering of policies and priorities and a people-centred development plan.

Engineer, M. & King, I. (2013) mentioned the human development index and suggested the quantification and aggregation that provides a summary measure poses many conceptual as well as methodological problems. Also, suggests the use of alternative indicators of development and policies for redistribution that will equalize the distribution of income and thereby promote welfare in society. But, this article per se did not talk about the inclusion of qualitative measures descriptively and realistically.

The Training Material for Producing National Human Development Reports of UNDP (2015) on The Human Development Index (HDI) discusses that The Human Development Index (HDI) measures achievements in three aspects of human development: health, education and living standards. The global HDI, first presented in the 1990 Human Development Report (HDR), measures a country's success in the following human development achievements for its citizens: a long and healthy life (using health data), access to knowledge (using education data) and a decent standard of living (using income per capita).

The HDI was introduced as an alternative to conventional measures of economic development such as income per capita and the rate of economic growth. While income has the potential to expand people’s choices, it is also an imperfect guide to the human development successes of a given country or region. In many instances, countries with higher average incomes do have higher health and educational achievements and consequently a higher HDI. But although there is a definite correlation between income and human well-being, this relationship breaks down in many societies and inter-country comparisons. Some countries, for example, have high levels of income per capita but low levels of other human development indicators (and vice versa), while some countries at similar levels of average income have vastly different levels of human development. Consequently, how income is distributed and spent within countries is decisive. Moreover, excessive attention to the growth of income per

capita can obscure the ultimate objective of enriching human lives. Given the imperfect nature of economic wealth as a gauge of human development, the HDI offers a powerful alternative to conventional measures for measuring well-being and socio-economic progress.

The HDI simplifies and captures only part of what human development entails. It does not reflect on inequalities, poverty, human security, empowerment, etc. The HDRO offers the other composite indices as a broader proxy on some of the key issues of human development, inequality, gender disparity and poverty.

Vollmer, S. and Ziegler, Maria (2016) studied the political institutions and human development and discussed on Institutions are a major field of interest in the study of developmental processes. The authors contribute to this discussion by concentrating our research on political institutions and their effect on the non-income dimensions of human development. First, they elaborate a theoretical argument why and under what conditions democracies compared to autocratic political systems might perform better with regards to the provision of public goods. Due to higher redistributive concerns matched to the needs of the population democracies should show a higher level of human development. In the following, they analyze whether our theoretical expectations are supported by empirical facts. The authors perform a static panel analysis over the period of 1970 to 2003. The model confirms that living in a democratic system positively affects human development measured by life expectancy and literacy rates even controlling for GDP. By analyzing interaction effects, they find that the performance of democracy is rather independent of the circumstances. However, democracy leads to more redistribution in favour of health provision in more unequal societies.

2.2 **Outcome from the literature survey**

To measure the growth of students is not a single entity. It is depending on 03 factors. The first factor is the life expectancy of students which reflects the overall mortality level of a population. It summarizes the mortality pattern that prevails across all age groups - children and adolescents (students), adults and the elderly. The average number of years that a newborn is expected to live if current mortality rates continue to apply. In other words, it speaks about the health status of a student. The second factor is their education. Expecting

education may be a parameter in their development growth. Good education or knowledge may be responsible for better developmental growth. The last factor is the income of the students. It is, therefore, suggested to study developmental growth using the concept of the Human Development Index (HDI).

The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and having a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.

The health dimension is assessed by life expectancy at birth, the education dimension is measured by the mean of years of schooling for adults aged 25 years and more and expected years of schooling for children of school entering age. The standard of living dimension is measured by gross national income per capita. The HDI uses the logarithm of income, to reflect the diminishing importance of income with increasing GNI. The scores for the three HDI dimension indices are then aggregated into a composite index using a geometric mean. Refer to technical notes for more details.

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Chapter – 3

3.0. **Research Methodology**

3.1. **Problem Statement**

In any research, it becomes very difficult to know the problem area. Determining the problem area helps in chalking out plans to research appropriately. It is said that a problem that is well defined is half solved.

In the present context, the main problem area is evaluation relating to PRE- HDI, POST – HDI and Progressive HDI for tribal students having higher education in B.Tech. Degree.

CSTCTD is entrusted to carry out the job of collection of data from different govt. agencies like academic institutions; technical education directorate; different Engineering Colleges of Odisha for study and analysis.

3.2. **Objectives**

a) To collate information of B.Tech. Graduates during the last 10 years from 10different Colleges who were the recipient of tribal bursary.
b) To acquire information regarding these students:Job Profile Placement, Perks, Future Plan and prospects etc.
c) To analyse the impact of the bursary.

3.3. **Period of study**

The academic year 2009-10 to 2018-19has been taken into consideration for our sampling.

3.4. **Data Collection Methodology**

Data has been collected from both primary and secondary sources.

a) By visiting different Govt. agencies like academic institutions; technical education directorates; concerned Colleges.
b) Collecting personal feedback from the students through the Android Application developed for this purpose (i.e., Questionnaire survey).

In keeping with the study objective and scope of research, the respondent group consists of only tribal respondents who have availed of a scholarship scheme for their career development. Data/information has been collected only from BTech graduates for analysisand the impact of the bursary. Therefore, we targeted a population of B.Tech. students from20 different Colleges from each discipline like Electrical engineering, Civil Engineering, Mechanical Engineering, Electronics and Communication Engineering and Computer Science Engineering from the batch enrolled 2009 - 2010 to 2018-2019 for making career profile for study and analysis. The concerned institution is adopted the following methodology to collect the data from the tribal students:

a) Team Formation: CSTCTD has formed a team to do survey in different Govt. Agencies, academic Institutions, different Colleges of Odisha in which a team leader is present to guide the team members of that team. The number of teams formed based on Govt. Agencies, academic Institutions and Colleges. The team leader trained their teams for gathering the information fruitfully.
b) Questionnaire Set: The team members discussed the following points with each student based on questionnaire set:
    - ✓ Personnel Information
    - ✓ Projects Related Information, Academic Data
    - ✓ Family Data
    - ✓ Income Status
    - ✓ Current job details/status

c) Field Visit: After the preliminary study the project team visited different academic institutions/Engineering Colleges.
d) Contact Over Phone/Mail/Fax/Speed Post/Social Sites: All possible means of contact used to collect the preliminary data from the students.
e) Online Filling of Questionnaire: To make the data filling easier, a link is provided to the individual for proving data. The input data is monitored and validated through a dedicated link to the concerned PI.

Relevant data as required for the study are collected under the following groups:

a) Personal Data
b) Academic Data
c) Family Data
d) Income Status
e) Job Status
f) Life Expectancy Index (LEI)
g) Education Index (EI)
h) Income Index (II)
i) Human Development Index (HDI)

The calculation was carried out based on the above UNDP Human development Indices and indicators.

3.5. **Problems and Challenges**

During the data collection, it is noticed that it is not so easy to collect data from different agencies, different institutions as per the questionnaires. Most of them are not respondingto Emails, Speed Post or Mobile. This situation is due to a change of address, the concerned students leaving the institution after completion of the College education., not proper contact address etc. is available in the Colleges. Many questionnaires also returned due to invalid address is the major hurdle in collecting data.

On the other hand, some students are hesitant to fill certain fields due to fear. Due to proper guidance, they used to leave blanks to many of the fields. The team found difficultyin the authentication of the record.

3.6. **Sampling Design and Detailed Data Processing Methodology**

Data is collected as per our objectives from the year 2009-2010 and the last period selectedfor the above study is 2018-19. We have collected 54,515 samples from different Govt. Agencies, Academic institutions, Concerned Colleges for the above period. But subsequently, we filtered the entire data as per our objectives and collected 12826 samples.

For the first instance out of the above-mentioned selected data, a sample of 148 data are collected from Sophitorium Engineering College, Khordha. This has been completely studied as per the objectives laid down earlier. This study has been completely discussed before DST team on 17th December 2019 at Hyderabad. After reviewing the sample data, theproject team has undertaken the complete study of another 19 Colleges.

The Stage by stage Progress of the Project has been discussed on 29th October 2020 through virtual mode.

TABLE 3.1: Status of Data collected for the study.

Year	Total No. Students
2009-10	1315
2010-11	2629
2011-12	1876
2012-13	3751
2013-14	4047
2014-15	8092
2015-16	7574
2016-17	7573
2017-18	8970

2018-19	8688
Total	**54515**

TABLE 3.2: Status of Selected Data collected for the study.

Year	Selected Students
2012-13	686
2013-14	1031
2014-15	1408
2015-16	1607
2016-17	2000
2017-18	2007
2018-19	4086
Total	**12826**

This may please be noted that the year mentioned above is the year of the passing of the candidate under consideration. I,e the student admitted in 2009-10 is passed in 2012-13. Therefore, while processing the data the HDI before consideration has been considered during the period of 2009-10 when the candidate took admission to 1st year B Tech degreeand post HDI is calculated after the candidate is passed out/ placed.

TABLE 3.3: List of Institutions and Samples collected for the study.

Sl. No	Institution	Samples
1	Sophitorium Engineering College, Khurda	177
2	Orissa Engineering College, Bhubaneswar	195
3	Trident Academy of Technology, Bhubaneswar	32
4	Bhubaneswar College of Engineering, Khurda	342
5	Capital Engineering College Bhubaneswar	148
6	Einstein Academy of Technology & Management, Khurda	190
7	Mahavir Institute of Technology, Bhubaneswar	370
8	NM Institute of Engineering & Technology Bhubaneswar	179
9	Oxford college of engineering &Management,Bhubaneswar	353
10	Vivekananda Institute of Technology, Bhubaneswar	368

11	Bhubaneswar Engineering College, Bhubaneswar	283
12	Eastern Academy of Science &Technology, Bhubaneswar	1375
13	Hitech Institute of Technology, Bhubaneswar	372
14	Indic Institute of Design & Research, Bhubaneswar	926
15	Indus College of Engineering, Bhubaneswar	1499
16	KMBB College of Engineering & Technology, Khurda	649
17	Nalanda Institute of Technology, Bhubaneswar	1333
18	Sudhananda Engineering & Research Center, Bhubaneswar	2136
19	Synergy Institute of Technology, Bhubaneswar	1757
20	Temple City Institute of Engineering & Technology, Khurda	142
	Total	**12826**

3.7. **Tools and Techniques used**

The outcome from UNDP Development Report calculated the HDI combining three dimensions:

1. **A long and healthy life:** Life expectancy at birth
2. **Education Index:** Mean years of schooling and Expected years of schooling
3. **A decent standard of living:** Gross National Income (GNI) per capita (Purchasing Power Parity - PPP US$)

First Step

Life Expectancy Index (LEI) = $\frac{\text{LE} - 20}{85-20}$

LEI is 1 when life expectancy at birth is 85 and 0 when life expectancy at birth is 20.

LE: Life expectancy at birth

For the study: LE in Odisha for **Male** or **Female** or **State** at the year of availing scholarship and also the year of completion to measure the changes.

Second Step

Education Index (EI) = $\frac{\text{MYSI}}{\text{EYSI}}$

Mean Years of Schooling Index = $\frac{\text{MYS}}{15}$

15 is the projected maximum of this indicator of 2025

Expected Years of Schooling Index (EYSI) = $\frac{\text{EYS}}{18}$

18 is equivalent to achieving a master degree in most countries

For the study:

MYS = Duration in schooling

EYS = Duration in completing Master Degree = B.Tech.

Third Step

Income Index (II) = [ln(GNIpc)] – [(ln(100)]/ [ln(75000)] – [(ln(100)]

II is 1 when GNI per capita is $75,000 and 0 when per capita is $100

GNIpc = Gross National Income at purchasing power parity per capita

For the study:

GNIpc = Total Family income in $ and divided by number of members

HDI Calculation

$$\textbf{Human Development Index} = \frac{\textbf{LI + EI + GNIpc}}{\textbf{3}}$$

For the easy calculation purpose, the EXCEL spread-sheet is used for the following fields:

Name of the Scholar

DOB

Year of Scholarship

LE (Year of entry)

Life Expectancy Index (LEI)

Duration of schooling

MYSI

EYSI

Education Index (EI)

Income in Rs. (Before)

Income in Dollar

Income Index (II)

HDI Calculations for both pre and post

Then, Progressive HDI

Logical Assumptions: Longevity of life speaks better health to carry out maximum workload which leads to maximum earnings and better financial health. Similarly, education or knowledge will lead to better development. The third parameter says growth in total income by ensuring the present and future human development growth. In this context, the concept may be indicated that better life expectancy, education/knowledge and total income leads to better development growth.

3.8. **Limitations of the study**

a) The study does not cover all the support schemes launched by Govt. The calculation is based only on Scholarships availed during the study period.
b) All possible attempts have been made to extract the correct information from the respondents, yet the peculiar behaviour of some respondents might have caused limitation to some extent in extracting the true information.

Chapter – 4

4.0. **Data Analysis**

4.1. **Introduction**

An analysis is made as per the data collections from different govt. agencies like academic institutions; technical education directorate; concerned Engineering Colleges; and personal feedback. After filtering the final data is made sub-table to analyse and interpreted as warranted.

The data were subjected to statistical analysis, Percentage calculation, HDI calculations according to the objectives laid for the study for impact analysis. The analysis is carried out on Sex Ratio, Religions, Marital Status, District-wise projections, Student Career, Income Pattern, Educational Success Ratio, Life Expectancy Index (LEI), Education Index (EI) Income Index (II), Human Development Index (HDI).

The calculation is made as per Human Development Index (HDI). The Human Development Index (HDI) is a statistic composite index of life expectancy, education (mean years of schooling completed and expected years of schooling upon entering the education system), and per capita income indicators, which are used to rank countries into four tiersof human development. A country scores a higher HDI when the life span is higher, the education level is higher, and the gross national income GNI (PPP) per capita is higher. It was developed by economist Mahbub ul Haq and was further used to measure a country'sdevelopment by the United Nations Development Programme (UNDP)'s Human Development Report Office.

4.2 . **Method for calculation Human Development Index (HDI)**

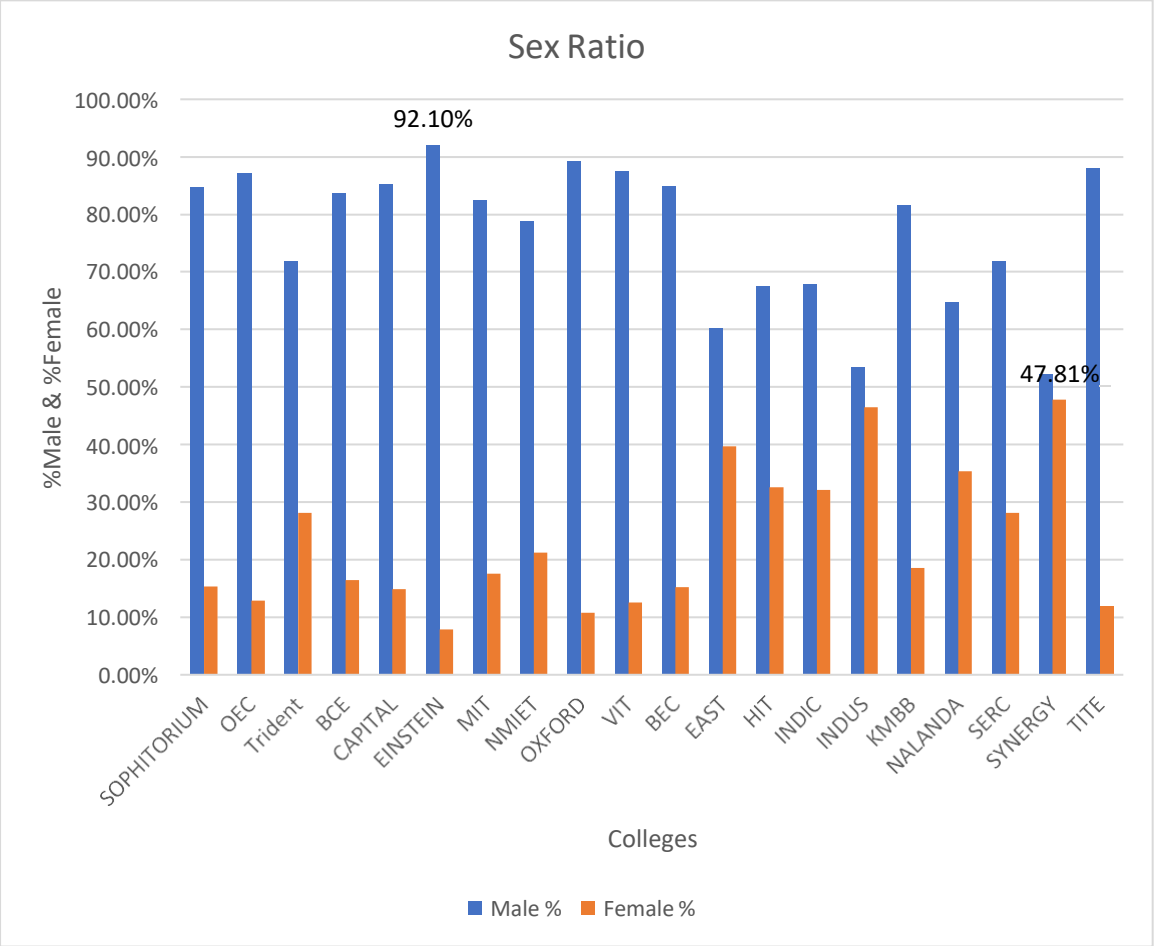
Details of the calculation are in Chapter-3 (Research Methodology). HDI calculation is made using the method as discussed.

4.2.1. **Student Sex Ratio, Marital Status, Religion**

TABLE 4.1: Distribution of Tribal Student Scholarship beneficiary, Percentage Ratio (Male, Female)

Institution	Samples	Male	Female	% Sex Ratio Male	% Sex Ratio Female
SOPHITORIUM	177	150	27	84.75%	15.25%
OEC	195	170	25	87.17%	12.82%
Trident	32	23	9	71.88%	28.12%
BCE	342	286	56	83.62%	16.37%
CAPITAL	148	126	22	85.13%	14.86%
EINSTEIN	190	175	15	92.10%	7.90%
MIT	370	305	65	82.43%	17.57%
NMIET	179	141	38	78.77%	21.23%
OXFORD	353	315	38	89.23%	10.77%
VIT	368	322	46	87.50%	12.50%
BEC	283	240	43	84.80%	15.20%
EAST	1375	829	546	60.29%	39.71%
HIT	372	251	121	67.47%	32.53%
INDIC	926	629	257	67.92%	32.08%
INDUS	1499	802	697	53.50%	46.50%
KMBB	649	529	120	81.51%	18.49%
NALANDA	1333	862	471	64.66%	35.34%
SERC	2136	1036	1100	71.88%	28.12%
SYNERGY	1757	917	840	52.19%	47.81%
TITE	142	125	17	88.02%	11.98%
Total	12826	8233	4553	76.74%	23.26%

Fig. 4.1: Student Sex Ratio



It is noticed that out of total 12826 sample studied 8233 (76.74%) are male and 4533 (23.26%) are female. Maximum 92.10% male students pursue their BTech study in Einstein engineering College and 46.50% female students pursue their BTech study in Indus engineering College.

TABLE4.2: Distribution of Student beneficiary, Percentage Religion

Institution	Samples	Hindu	Christianity	% Religion Hindu	% Religion Christianity
SOPHITORIUM	177	150	27	84.75%	15.25%
OEC	195	191	4	97.95%	2.05%
Trident	32	32	0	100.00%	0.00%
BCE	342	342	0	100.00%	0.00%
CAPITAL	148	146	2	98.65%	1.35%
EINSTEIN	190	190	0	100.00%	0.00%
MIT	370	370	0	100.00%	0.00%
NMIET	179	179	0	100.00%	0.00%
OXFORD	353	353	0	100.00%	0.00%
VIT	368	368	0	100.00%	0.00%
BEC	283	283	0	100.00%	0.00%
EAST	1375	1375	0	100.00%	0.00%
HIT	372	372	0	100.00%	0.00%
INDIC	926	926	0	100.00%	0.00%
INDUS	1499	1499	0	100.00%	0.00%
KMBB	649	649	0	100.00%	0.00%
NALANDA	1333	1333	0	100.00%	0.00%
SERC	2136	2136	0	100.00%	0.00%
SYNERGY	1757	1757	0	100.00%	0.00%
TITE	142	142	0	100.00%	0.00%
Total	12826	12793	33	99.74%	0.26%

The study reveals that out of 12826 samples studied, 12793 (99.74%) are from the Hindu religion and 33(0.26%) are from the Christian community. The majority of students pursue B.Tech. degree from the Hindu religion.

TABLE 4.3: Distribution of Student beneficiary, Percentage of Marital Status

Institution	Samples	Married	Unmarried	% MaritalStatus Unmarried	% Marital/ Status Married
SOPHITORIUM	177	2	175	98.87%	1.13%
OEC	195	0	195	100.00%	0.00%
Trident	32	0	32	100.00%	0.00%
BCE	342	0	342	100.00%	0.00%
CAPITAL	148	0	148	100.00%	0.00%
EINSTEIN	190	0	190	100.00%	0.00%
MIT	370	0	370	100.00%	0.00%
NMIET	179	0	179	100.00%	0.00%
OXFORD	353	0	353	100.00%	0.00%
VIT	368	0	368	100.00%	0.00%
BEC	283	0	283	100.00%	0.00%
EAST	1375	0	1375	100.00%	0.00%
HIT	372	0	372	100.00%	0.00%
INDIC	926	0	926	100.00%	0.00%
INDUS	1499	0	1499	100.00%	0.00%
KMBB	649	0	649	100.00%	0.00%
NALANDA	1333	0	1333	100.00%	0.00%
SERC	2136	0	2136	100.00%	0.00%
SYNERGY	1757	0	1757	100.00%	0.00%
TITE	142	0	142	100.00%	0.00%
Total	12826	2	12824	99.98%	0.02%

The marital status of 12826 samples was studied for this purpose. It is found that a less no. ofstudents i.e. (0.02%) are married.

4.2.2. **Wise Analysis of ST students**

TABLE 4.4: Distribution of Tribal Student Scholarship beneficiary across Districts

Institution / District	SOPHITORIUM	CAPITAL	EINSTEIN	NMIET	OXFORD	TRIDENT	NALANDA	SYNERGY
Angul	-	5	5	7	5	2	12	12
Balasore	-	4	4	4	2	3	8	18
Baragarh	10	3	3	3	15	4	19	19
Bhadrak	-	2	2	2	5	1	5	5
Bolangir	14	8	8	8	3	1	45	45
Cuttack	-	-	-	1	1	1	1	17
Dhenkanal	-	5	5	5	5	1	21	51
Ganjam	1	1	1	1	2	1	13	13
Jagatsinghpur	-	1	1	1	-	1	10	10
Jajpur	6	3	3	3	12	1	12	42
Jharsuguda	-	6	6	6	30	1	49	89
Kalahandi	3	7	7	8	19	1	89	89
Kandhamal	11	9	9	9	20	-	23	23
Keonjhar	14	12	13	12	15	-	82	82
Khordha	2	-	5	7	7	-	43	43
Koraput	-	-	12	13	36	-	63	63
Malkangiri	-	8	8	8	8	-	34	34
Mayurbhanj	28	23	32	24	51	8	280	369
Nabarangpur	1	4	4	4	10	-	60	60
Nuapada	16	4	4	4	12	-	15	53
Rayagada	-	5	5	5	30	1	24	24
Sambalpur	10	10	18	12	16	-	34	53
Sundergarh	44	10	17	13	31	5	223	366
Boudh	3	5	5	5	5	-	29	29
Deogarh	-	4	4	4	9	-	43	45
Sonepur	1	4	4	4	2	-	44	49
Nayagarh	1	5	5	6	2	-	52	54
Puri	-	-	-	-	-	-	-	-
TOTAL	177	148	190	179	353	32	1333	1757

TABLE 4.5: Distribution of Tribal Student Scholarship beneficiary across Districts Contd.

Institution / District	BCE	MIT	OEC	VIT	BEC	EAST	HIT	INDIC	INDUS	KMBB	SERC	TITE
Angul	5	5	6	5	9	5	5	5	12	5	18	4
Balasore	2	4	4	4	5	17	4	17	8	17	27	3
Baragarh	15	18	3	18	5	12	18	12	19	12	13	2
Bhadrak	5	2	2	2	3	10	2	10	5	10	87	2
Bolangir	3	17	8	17	13	89	17	39	45	39	89	7
Cuttack	1	8	-	8	2	5	8	5	1	5	16	-
Dhenkanal	5	5	5	5	4	12	5	12	21	12	17	4
Ganjam	2	1	1	2	5	21	3	21	13	21	21	1
Jagatsinghpur	-	1	2	2	5	15	4	15	10	15	15	1
Jajpur	12	3	3	3	15	23	6	23	12	23	78	3
Jharsuguda	30	6	6	6	17	82	6	52	49	52	82	6
Kalahandi	19	34	7	34	15	43	34	43	89	43	75	7
Kandhamal	20	9	9	9	15	63	9	33	23	33	63	9
Keonjhar	15	35	14	35	12	34	35	34	82	34	84	12
Khordha	-	5	5	5	7	4	5	4	43	6	19	-
Koraput	35	12	12	13	16	53	13	53	63	53	83	-
Malkangiri	8	8	8	8	15	45	8	45	34	45	85	8
Mayurbhanj	50	62	33	62	17	375	62	155	425	55	475	23
Nabarangpur	10	4	4	4	15	23	4	23	60	23	87	4
Nuapada	12	4	4	4	12	45	4	45	15	25	89	4
Rayagada	30	5	5	5	13	39	5	39	24	29	46	5
Sambalpur	15	21	19	21	18	54	21	54	34	24	154	10
Sundergarh	30	25	17	25	13	158	25	88	235	9	258	10
Boudh	5	24	5	24	5	52	24	52	29	12	52	5
Deogarh	9	22	4	22	8	32	22	32	45	32	32	4
Sonepur	2	14	4	14	12	52	13	12	49	12	52	4
Nayagarh	2	15	5	11	7	12	10	3	54	3	19	4
Puri	-	1	-	-	-	-	-	-	-	-	-	-
TOTAL	342	370	195	368	283	1375	372	926	1499	649	2136	142

TABLE 4.6: Cumulative Details of Tribal Student Scholarship beneficiary across Districts.

District	Total Students
Angul	132
Balasore	155
Baragarh	223
Bhadrak	162
Bolangir	515
Cuttack	80
Dhenkanal	200
Ganjam	145
Jagatsinghpur	109
Jajpur	286
Jharsuguda	581
Kalahandi	666
Kandhamal	399
Keonjhar	656
Khordha	210
Koraput	593
Malkangiri	417
Mayurbhanj	2609
Nabarangpur	404
Nuapada	371
Rayagada	339
Sambalpur	598
Sundergarh	1602
Boudh	370
Deogarh	373
Sonepur	348
Nayagarh	270
Puri	1
TOTAL	**12826**

It is noticed from the observed data that the majority of ST students are from the districtMayurbhanj who are availing scholarships to pursue their B.Tech. degree.

4.2.3. **Student Career**

TABLE 4.7: Student Securing 60% and above in 10th.

Institution	Sample	10th	% Of Students with Respect to Sample
SOPHITORIUM	177	51	28.81%
OEC	195	104	53.33%
TRIDENT	32	29	90.63%
CAPITAL	148	117	79.05%
EINSTEIN	190	52	27.37%
MIT	370	127	34.32%
NMIET	179	32	17.88%
OXFORD	353	15	4.25%
BCE	342	25	7.31%
VIT	368	15	4.08%
BEC	283	20	7.07%
EAST	1375	87	6.33%
HIT	372	39	10.48%
INDIC	926	115	12.42%
INDUS	1499	52	3.47%
KMBB	649	52	8.01%
NALANDA	1333	132	9.90%
SERC	2136	52	2.43%
SYNERGY	1757	75	4.27%
TITE	142	12	8.45%
Total	12826	1203	9.38%

From the data above, it is found that 1203(9.38%) students have secured 60% and above marks in the Class X examination. The study also reveals that 90.63% of students enrolled for BTechdegree from Trident have secured 60% or above marks in Class X examination and then followed by CAPITAL (79.05%) and OEC (53.33%) respectively.

TABLE 4.8: Student Securing 60% and above in 12th.

Institution	Sample	+2 or Diploma	% of Students Concerning Sample
SOPHITORIUM	177	117	66.10%
OEC	195	120	61.54%
TRIDENT	32	23	71.88%
CAPITAL	148	120	81.08%
EINSTEIN	190	118	62.11%
MIT	370	119	32.16%
NMIET	179	112	62.57%
OXFORD	353	139	39.38%
BCE	342	225	65.79%
VIT	368	212	57.61%
BEC	283	125	44.17%
EAST	1375	190	13.82%
HIT	372	123	33.06%
INDIC	926	120	12.96%
INDUS	1499	118	7.87%
KMBB	649	156	24.04%
NALANDA	1333	275	20.63%
SERC	2136	453	21.21%
SYNERGY	1757	575	32.73%
TITE	142	108	76.06%
Total	12826	3548	27.66%

It is found that 3548(27.66%) students have secured 60% and above marks in the +2Sc. or Diplomaexamination. In +2Sc. or Diploma examination (81.08%) of the students enrolled for BTech degree of CAPITAL have secured 60% or above marks and then followed by TITE (76.05%) andTrident (71.88%) respectively.

TABLE 4.9: Student Securing 60% and above in B.Tech.

Institution	Sample	B Tech.	% of Students concerning Sample
SOPHITORIUM	177	177	100.00%
OEC	195	195	100.00%
TRIDENT	32	32	100.00%
CAPITAL	148	148	100.00%
EINSTEIN	190	190	100.00%
MIT	370	370	100.00%
NMIET	179	179	100.00%
OXFORD	353	353	100.00%
BCE	342	342	100.00%
VIT	368	368	100.00%
BEC	283	283	100.00%
EAST	1375	1375	100.00%
HIT	372	372	100.00%
INDIC	926	926	100.00%
INDUS	1499	1499	100.00%
KMBB	649	649	100.00%
NALANDA	1333	1333	100.00%
SERC	2136	2136	100.00%
SYNERGY	1757	1757	100.00%
TITE	142	142	100.00%
Total	12826	12826	100.00%

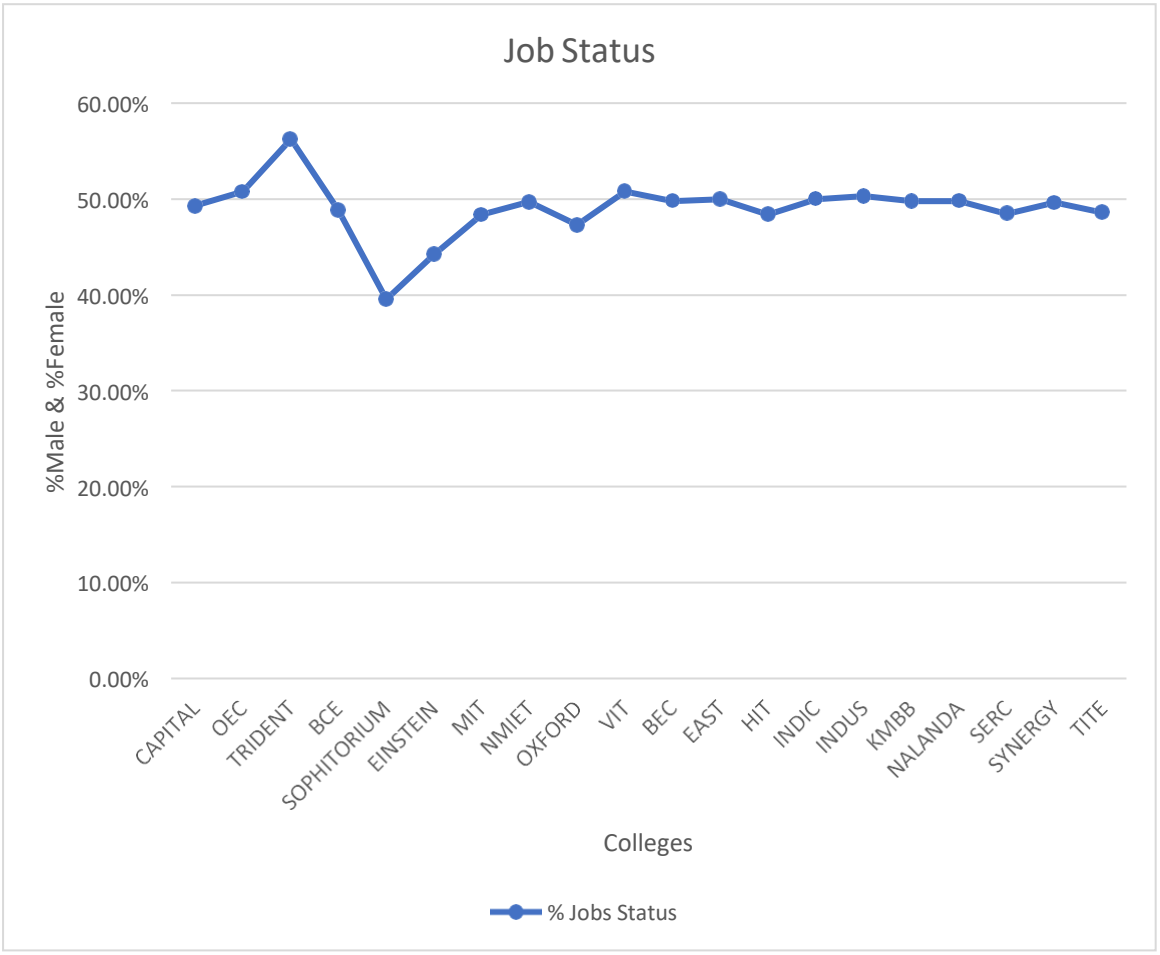
The study reveals that all the students enrolled for BTech degrees have secured 60% or above marks in their B.Tech. examination irrespective of their class 10^{th} or +2/Diploma examination.

4.2.4. **Job Status:**

TABLE 4.10: Student landing a Job after B.Tech.

Institution	Sample	Job after B.Tech.	% Of Students concerning Sample
CAPITAL	148	73	49.32%
OEC	195	99	50.77%
TRIDENT	32	18	56.25%
BCE	342	167	48.83%
SOPHITORIUM	177	70	39.55%
EINSTEIN	190	84	44.21%
MIT	370	179	48.38%
NMIET	179	89	49.72%
OXFORD	353	167	47.31%
VIT	368	187	50.82%
BEC	283	141	49.82%
EAST	1375	687	49.96%
HIT	372	180	48.39%
INDIC	926	463	50.00%
INDUS	1499	754	50.30%
KMBB	649	323	49.77%
NALANDA	1333	664	49.81%
SERC	2136	1035	48.46%
SYNERGY	1757	872	49.63%
TITE	142	69	48.59%
Total	12826	6321	49.28%

Fig. 4.2: Job-status after B.Tech:



From the sample study, it is found that a maximum of 56.25% of ST students from Trident have got the job after completion of BTech degree. More ever it is also found that 6321(49.28%) of totalstudents got their job with B.Tech. degree out of 12826 samples studied.

4.2.5. **Life Expectancy Index (LEI)**

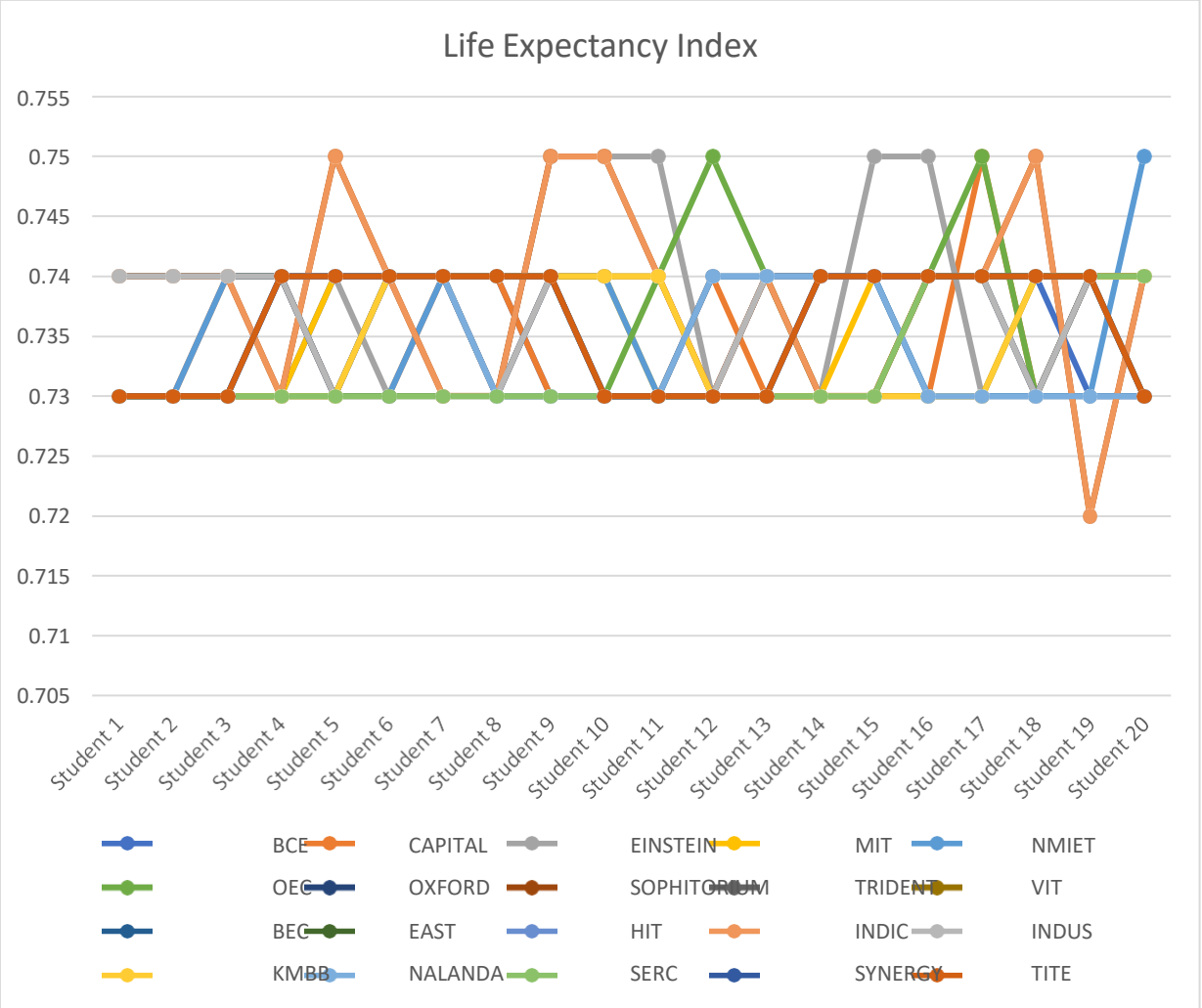
TABLE 4.11: Top 20 ST Students from 20 different Institutions and their LEI

Institutions	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
BCE	0.73	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.73	0.73
CAPITAL	0.73	0.73	0.74	0.74	0.73	0.73	0.74	0.74	0.73	0.73
EINSTEIN	0.74	0.74	0.74	0.74	0.74	0.73	0.73	0.73	0.75	0.75
MIT	0.73	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.74
NMIET	0.73	0.73	0.74	0.74	0.73	0.73	0.74	0.74	0.74	0.74
OEC	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.73
OXFORD	0.74	0.74	0.74	0.74	0.73	0.74	0.74	0.73	0.74	0.73
SOPHITORIUM	0.74	0.74	0.74	0.73	0.75	0.74	0.73	0.73	0.75	0.75
TRIDENT	0.74	0.74	0.74	0.74	0.73	0.74	0.74	0.73	0.74	0.73
VIT	0.73	0.73	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74
BEC	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.73	0.73	0.73
EAST	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
HIT	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.74	0.73
INDIC	0.74	0.74	0.74	0.73	0.75	0.74	0.73	0.73	0.75	0.75
INDUS	0.74	0.74	0.74	0.74	0.73	0.74	0.74	0.73	0.74	0.73
KMBB	0.73	0.73	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74
NALANDA	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.73	0.73	0.73
SERC	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
SYNERGY	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.74	0.73
TITE	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.74	0.73

TABLE 4.12: Top 20 ST Students from 20 different Institutions and their LEI Contd.

Institutions	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20
BCE	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.74	0.73	0.73
CAPITAL	0.73	0.74	0.73	0.73	0.73	0.73	0.75	0.73	0.74	0.74
EINSTEIN	0.75	0.73	0.73	0.73	0.75	0.75	0.73	0.73	0.73	0.73
MIT	0.73	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.74
NMIET	0.73	0.73	0.73	0.74	0.74	0.73	0.73	0.73	0.73	0.75
OEC	0.74	0.75	0.74	0.73	0.73	0.74	0.75	0.73	0.74	0.73
OXFORD	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.73	0.74	0.74
SOPHITORIUM	0.74	0.73	0.74	0.73	0.73	0.74	0.74	0.75	0.72	0.74
TRIDENT	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.73	0.74	0.74
VIT	0.74	0.73	0.73	0.73	0.73	0.73	0.73	0.74	0.74	0.74
BEC	0.73	0.74	0.74	0.74	0.74	0.73	0.73	0.73	0.73	0.73
EAST	0.73	0.73	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74
HIT	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.74	0.73
INDIC	0.74	0.73	0.74	0.73	0.73	0.74	0.74	0.75	0.72	0.74
INDUS	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.73	0.74	0.74
KMBB	0.74	0.73	0.73	0.73	0.73	0.73	0.73	0.74	0.74	0.74
NALANDA	0.73	0.74	0.74	0.74	0.74	0.73	0.73	0.73	0.73	0.73
SERC	0.73	0.73	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74
SYNERGY	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.74	0.73
TITE	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.74	0.73

Fig. 4.3: Life Expectancy Index (LEI)



Indian standard life expectancy index is 0.59. It is noticed all are above the standard life expectancy index (LEI) in the sample list. We studied the category of specific education mass and is supposed to be the better living in the society.

4.2.6. **Education Index (EI)**

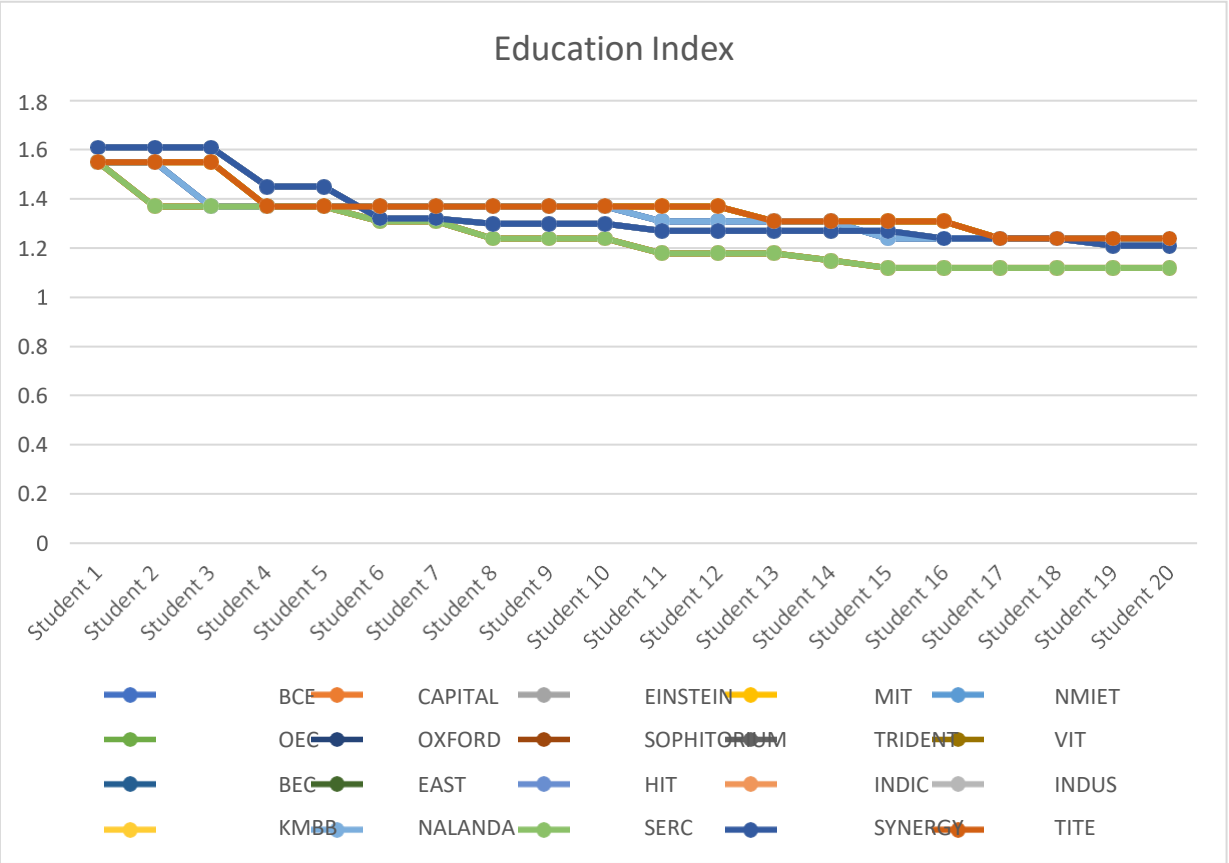
TABLE 4.13: Top 20 ST Students from 20 different Institutions and their EI.

Institutions	S 1	S 2	S 3	S 4	S 5	S 6	S 7	S 8	S 9	S 10
BCE	1.55	1.55	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
CAPITAL	1.55	1.37	1.37	1.37	1.37	1.31	1.31	1.24	1.24	1.24
EINSTEIN	1.61	1.61	1.61	1.45	1.45	1.32	1.32	1.3	1.3	1.3
MIT	1.55	1.55	1.55	1.37	1.37	1.37	1.37	1.37	1.37	1.37
NMIET	1.55	1.55	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
OEC	1.55	1.37	1.37	1.37	1.37	1.31	1.31	1.24	1.24	1.24
OXFORD	1.61	1.61	1.61	1.45	1.45	1.32	1.32	1.3	1.3	1.3
SOPHITORIUM	1.55	1.55	1.55	1.37	1.37	1.37	1.37	1.37	1.37	1.37
TRIDENT	1.55	1.55	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
VIT	1.55	1.37	1.37	1.37	1.37	1.31	1.31	1.24	1.24	1.24
BEC	1.61	1.61	1.61	1.45	1.45	1.32	1.32	1.3	1.3	1.3
EAST	1.55	1.55	1.55	1.37	1.37	1.37	1.37	1.37	1.37	1.37
HIT	1.55	1.55	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
INDIC	1.55	1.37	1.37	1.37	1.37	1.31	1.31	1.24	1.24	1.24
INDUS	1.61	1.61	1.61	1.45	1.45	1.32	1.32	1.3	1.3	1.3
KMBB	1.55	1.55	1.55	1.37	1.37	1.37	1.37	1.37	1.37	1.37
NALANDA	1.55	1.55	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
SERC	1.55	1.37	1.37	1.37	1.37	1.31	1.31	1.24	1.24	1.24
SYNERGY	1.61	1.61	1.61	1.45	1.45	1.32	1.32	1.3	1.3	1.3
TITE	1.55	1.55	1.55	1.37	1.37	1.37	1.37	1.37	1.37	1.37

TABLE 4.14: Top 20 ST Students from 20 different Institutions and their EI Contd.

Institutions	S 11	S 12	S 13	S 14	S 15	S 16	S 17	S 18	S 19	S 20
BCE	1.31	1.31	1.31	1.31	1.24	1.24	1.24	1.24	1.24	1.24
CAPITAL	1.18	1.18	1.18	1.15	1.12	1.12	1.12	1.12	1.12	1.12
EINSTEIN	1.27	1.27	1.27	1.27	1.27	1.24	1.24	1.24	1.21	1.21
MIT	1.37	1.37	1.31	1.31	1.31	1.31	1.24	1.24	1.24	1.24
NMIET	1.31	1.31	1.31	1.31	1.24	1.24	1.24	1.24	1.24	1.24
OEC	1.18	1.18	1.18	1.15	1.12	1.12	1.12	1.12	1.12	1.12
OXFORD	1.27	1.27	1.27	1.27	1.27	1.24	1.24	1.24	1.21	1.21
SOPHITORIUM	1.37	1.37	1.31	1.31	1.31	1.31	1.24	1.24	1.24	1.24
TRIDENT	1.31	1.31	1.31	1.31	1.24	1.24	1.24	1.24	1.24	1.24
VIT	1.18	1.18	1.18	1.15	1.12	1.12	1.12	1.12	1.12	1.12
BEC	1.27	1.27	1.27	1.27	1.27	1.24	1.24	1.24	1.21	1.21
EAST	1.37	1.37	1.31	1.31	1.31	1.31	1.24	1.24	1.24	1.24
HIT	1.31	1.31	1.31	1.31	1.24	1.24	1.24	1.24	1.24	1.24
INDIC	1.18	1.18	1.18	1.15	1.12	1.12	1.12	1.12	1.12	1.12
INDUS	1.27	1.27	1.27	1.27	1.27	1.24	1.24	1.24	1.21	1.21
KMBB	1.37	1.37	1.31	1.31	1.31	1.31	1.24	1.24	1.24	1.24
NALANDA	1.31	1.31	1.31	1.31	1.24	1.24	1.24	1.24	1.24	1.24
SERC	1.18	1.18	1.18	1.15	1.12	1.12	1.12	1.12	1.12	1.12
SYNERGY	1.27	1.27	1.27	1.27	1.27	1.24	1.24	1.24	1.21	1.21
TITE	1.37	1.37	1.31	1.31	1.31	1.31	1.24	1.24	1.24	1.24

Fig. 4.4: Education Index (EI)



The sample is studied for all technical students which is much more than the standard EI value of 0.341.

4.2.6. **Income Index (II)**

TABLE 4.15: Top 20 ST Students from 20 different Institutions and their II (Before and II After)

Institutions		S 1	S 2	S 3	S 4	S 5	S 6	S 7	S 8	S 9	S 10
BCE	*Before*	0.16	0.16	0.22	0.22	0.22	0.22	0.18	0.18	0.19	0.19
	After	0.61	0.61	0.57	0.57	0.57	0.57	0.53	0.53	0.53	0.53
CAPITAL	*Before*	0.16	0.22	0.22	0.18	0.19	0.19	0.19	0.2	0.25	0.21
	After	0.61	0.57	0.57	0.53	0.53	0.49	0.49	0.49	0.54	0.48
EINSTEIN	*Before*	0.22	0.22	0.26	0.26	0.26	0.22	0.22	0.22	0.27	0.27
	After	0.53	0.53	0.53	0.53	0.53	0.52	0.52	0.52	0.55	0.55
MIT	*Before*	0.16	0.16	0.22	0.22	0.22	0.22	0.22	0.18	0.18	0.18
	After	0.61	0.61	0.57	0.57	0.57	0.57	0.57	0.53	0.53	0.53
NMIET	*Before*	0.16	0.16	0.22	0.22	0.22	0.22	0.18	0.18	0.19	0.19
	After	0.61	0.61	0.57	0.57	0.57	0.57	0.53	0.53	0.53	0.53
OEC	*Before*	0.16	0.22	0.22	0.18	0.19	0.19	0.19	0.2	0.25	0.21
	After	0.61	0.57	0.57	0.53	0.53	0.49	0.49	0.49	0.54	0.48
OXFORD	*Before*	0.22	0.22	0.26	0.26	0.26	0.22	0.22	0.22	0.27	0.27
	After	0.53	0.53	0.53	0.53	0.53	0.52	0.52	0.52	0.55	0.55
SOPHITORIUM	*Before*	0.16	0.16	0.22	0.22	0.22	0.22	0.22	0.18	0.18	0.18
	After	0.61	0.61	0.57	0.57	0.57	0.57	0.57	0.53	0.53	0.53
TRIDENT	*Before*	0.16	0.16	0.22	0.22	0.22	0.22	0.18	0.18	0.19	0.19
	After	0.61	0.61	0.57	0.57	0.57	0.57	0.53	0.53	0.53	0.53
VIT	*Before*	0.16	0.22	0.22	0.18	0.19	0.19	0.19	0.2	0.25	0.21
	After	0.61	0.57	0.57	0.53	0.53	0.49	0.49	0.49	0.54	0.48
BEC	*Before*	0.22	0.22	0.26	0.26	0.26	0.22	0.22	0.22	0.27	0.27
	After	0.53	0.53	0.53	0.53	0.53	0.52	0.52	0.52	0.55	0.55
EAST	*Before*	0.16	0.16	0.22	0.22	0.22	0.22	0.22	0.18	0.18	0.18
	After	0.61	0.61	0.57	0.57	0.57	0.57	0.57	0.53	0.53	0.53
HIT	*Before*	0.16	0.16	0.22	0.22	0.22	0.22	0.18	0.18	0.19	0.19
	After	0.61	0.61	0.57	0.57	0.57	0.57	0.53	0.53	0.53	0.53
INDIC	*Before*	0.16	0.22	0.22	0.18	0.19	0.19	0.19	0.2	0.25	0.21
	After	0.61	0.57	0.57	0.53	0.53	0.49	0.49	0.49	0.54	0.48
INDUS	*Before*	0.22	0.22	0.26	0.26	0.26	0.22	0.22	0.22	0.27	0.27

	After	0.53	0.53	0.53	0.53	0.53	0.52	0.52	0.52	0.55	0.55
KMBB	*Before*	0.16	0.16	0.22	0.22	0.22	0.22	0.22	0.18	0.18	0.18
	After	0.61	0.61	0.57	0.57	0.57	0.57	0.57	0.53	0.53	0.53
NALANDA	*Before*	0.16	0.16	0.22	0.22	0.22	0.22	0.18	0.18	0.19	0.19
	After	0.61	0.61	0.57	0.57	0.57	0.57	0.53	0.53	0.53	0.53
SERC	*Before*	0.16	0.22	0.22	0.18	0.19	0.19	0.19	0.2	0.25	0.21
	After	0.61	0.57	0.57	0.53	0.53	0.49	0.49	0.49	0.54	0.48
SYNERGY	*Before*	0.22	0.22	0.26	0.26	0.26	0.22	0.22	0.22	0.27	0.27
	After	0.53	0.53	0.53	0.53	0.53	0.52	0.52	0.52	0.55	0.55
TITE	*Before*	0.16	0.16	0.22	0.22	0.22	0.22	0.22	0.18	0.18	0.18
	After	0.61	0.61	0.57	0.57	0.57	0.57	0.57	0.53	0.53	0.53

TABLE 4.16: Top 20 ST Students from 20 different Institutions and their II (Contd.)

Institutions		S 11	S 12	S 13	S 14	S 15	S 16	S 17	S 18	S 19	S 20
BCE	*Before*	0.19	0.19	0.19	0.19	0.19	0.2	0.2	0.2	0.25	0.25
	After	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.54	0.54
CAPITAL	*Before*	0.26	0.23	0.24	0.25	0.23	0.22	0.24	0.28	0.24	0.2
	After	0.53	0.53	0.53	0.53	0.53	0.5	0.53	0.59	0.53	0.45
EINSTEIN	*Before*	0.27	0.26	0.26	0.26	0.29	0.29	0.29	0.29	0.24	0.24
	After	0.55	0.54	0.54	0.54	0.59	0.59	0.57	0.57	0.53	0.53
MIT	*Before*	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.2	0.2	0.2
	After	0.53	0.53	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
NMIET	*Before*	0.19	0.19	0.19	0.19	0.19	0.2	0.2	0.2	0.25	0.25
	After	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.54	0.54
OEC	*Before*	0.26	0.23	0.24	0.25	0.23	0.22	0.24	0.28	0.24	0.2
	After	0.53	0.53	0.53	0.53	0.53	0.5	0.53	0.59	0.53	0.45
OXFORD	*Before*	0.27	0.26	0.26	0.26	0.29	0.29	0.29	0.29	0.24	0.24
	After	0.55	0.54	0.54	0.54	0.59	0.59	0.57	0.57	0.53	0.53
SOPHITORIUM	*Before*	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.2	0.2	0.2
	After	0.53	0.53	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
TRIDENT	*Before*	0.19	0.19	0.19	0.19	0.19	0.2	0.2	0.2	0.25	0.25
	After	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.54	0.54
VIT	*Before*	0.26	0.23	0.24	0.25	0.23	0.22	0.24	0.28	0.24	0.2
	After	0.53	0.53	0.53	0.53	0.53	0.5	0.53	0.59	0.53	0.45
BEC	*Before*	0.27	0.26	0.26	0.26	0.29	0.29	0.29	0.29	0.24	0.24
	After	0.55	0.54	0.54	0.54	0.59	0.59	0.57	0.57	0.53	0.53
EAST	*Before*	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.2	0.2	0.2
	After	0.53	0.53	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
HIT	*Before*	0.19	0.19	0.19	0.19	0.19	0.2	0.2	0.2	0.25	0.25
	After	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.54	0.54
INDIC	*Before*	0.26	0.23	0.24	0.25	0.23	0.22	0.24	0.28	0.24	0.2
	After	0.53	0.53	0.53	0.53	0.53	0.5	0.53	0.59	0.53	0.45
INDUS	*Before*	0.27	0.26	0.26	0.26	0.29	0.29	0.29	0.29	0.24	0.24
	After	0.55	0.54	0.54	0.54	0.59	0.59	0.57	0.57	0.53	0.53
	Before	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.2	0.2	0.2

KMBB	*After*	0.53	0.53	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
NALANDA	*Before*	0.19	0.19	0.19	0.19	0.19	0.2	0.2	0.2	0.25	0.25
	After	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.54	0.54
SERC	*Before*	0.26	0.23	0.24	0.25	0.23	0.22	0.24	0.28	0.24	0.2
	After	0.53	0.53	0.53	0.53	0.53	0.5	0.53	0.59	0.53	0.45
SYNERGY	*Before*	0.27	0.26	0.26	0.26	0.29	0.29	0.29	0.29	0.24	0.24
	After	0.55	0.54	0.54	0.54	0.59	0.59	0.57	0.57	0.53	0.53
TITE	*Before*	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.2	0.2	0.2
	After	0.53	0.53	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49

Fig. 4.5: Income Index (II) before BTech

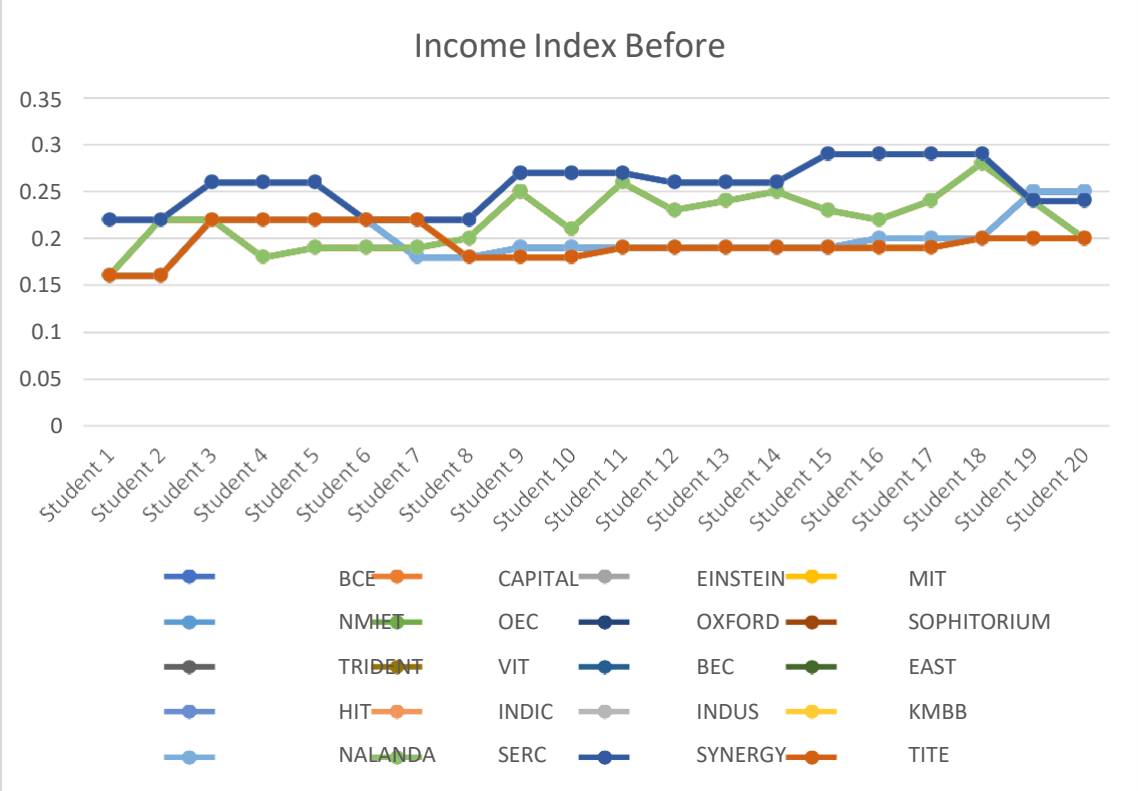
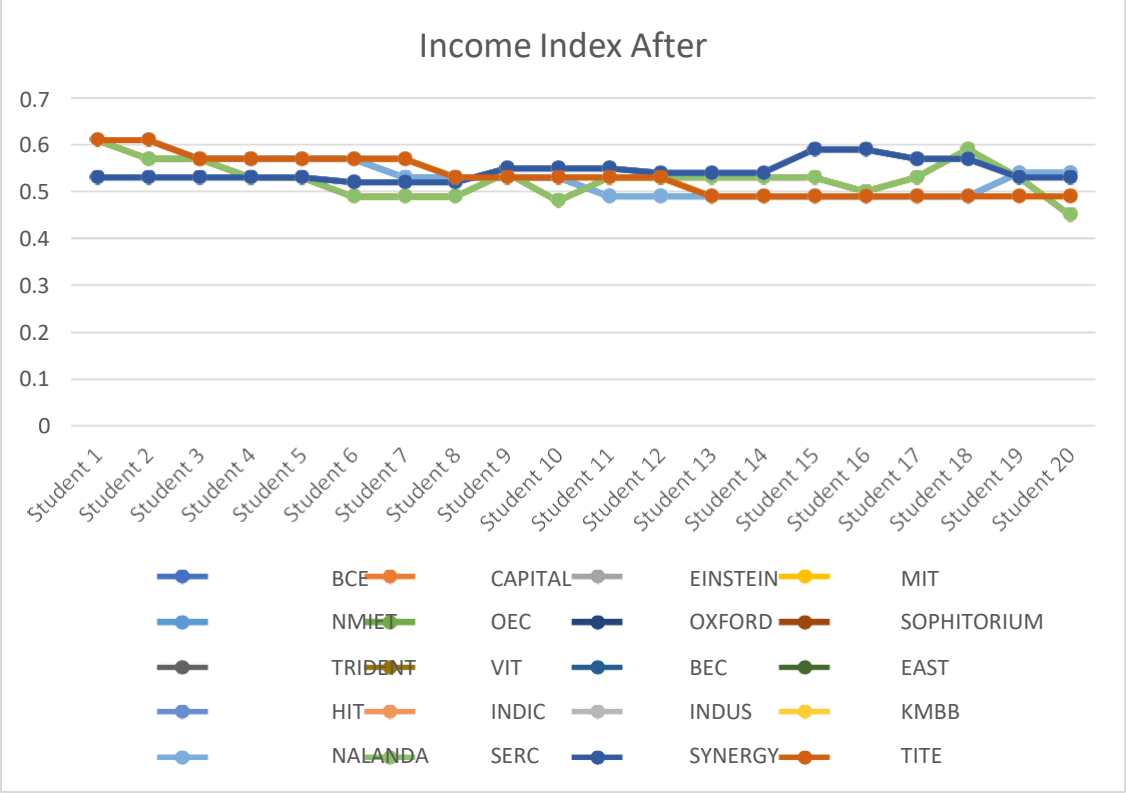


Fig. 4.6: Income Index(II) after BTech



ST students have less than the standard value 0.509 under Income Index before enrolling to B. Tech degree, but on the other hand, the same value-enhanced after completion of B.Tech. examination.

4.2.7. **Human Development Index (HDI)**

TABLE 4.17: Top 20 ST Students from 20 different Institutions and their HDI Before, HDI After,HDI Progressive.

Institutions		**S 1**	**S 2**	**S 3**	**S 4**	**S 5**	**S 6**	**S 7**	**S 8**	**S 9**	**S 10**
BCE	*HDI Before*	0.49	0.49	0.58	0.58	0.58	0.58	0.49	0.49	0.5	0.5
	HDI After	0.76	0.76	0.8	0.8	0.79	0.79	0.7	0.7	0.7	0.7
	Progressive	0.28	0.28	0.22	0.22	0.22	0.22	0.21	0.21	0.2	0.2
CAPITAL	*HDI Before*	0.49	0.58	0.58	0.49	0.5	0.5	0.5	0.5	0.59	0.53
	HDI After	0.76	0.8	0.79	0.7	0.7	0.68	0.68	0.67	0.76	0.71
	Progressive	0.28	0.22	0.22	0.21	0.2	0.19	0.18	0.18	0.18	0.17
EINSTEIN	*HDI Before*	0.54	0.54	0.68	0.68	0.68	0.54	0.54	0.54	0.62	0.62
	HDI After	0.73	0.73	0.86	0.86	0.86	0.72	0.72	0.72	0.78	0.78
	Progressive	0.24	0.21	0.29	0.38	0.38	0.25	0.25	0.26	0.22	0.28
MIT	*HDI Before*	0.49	0.49	0.58	0.58	0.58	0.58	0.58	0.49	0.49	0.49
	HDI After	0.76	0.76	0.8	0.8	0.79	0.79	0.79	0.7	0.7	0.7
	Progressive	0.28	0.28	0.22	0.22	0.22	0.22	0.21	0.21	0.2	0.2
NMIET	*HDI Before*	0.49	0.58	0.58	0.49	0.5	0.5	0.5	0.5	0.59	0.53
	HDI After	0.76	0.8	0.79	0.7	0.7	0.68	0.68	0.67	0.76	0.71
	Progressive	0.28	0.22	0.22	0.21	0.2	0.19	0.18	0.18	0.18	0.17

OEC	*HDI Before*	0.54	0.54	0.68	0.68	0.68	0.54	0.54	0.54	0.62	0.62
	HDI After	0.73	0.73	0.86	0.86	0.86	0.72	0.72	0.72	0.78	0.78
	Progressive	0.24	0.21	0.29	0.38	0.38	0.25	0.25	0.26	0.22	0.28
OXFORD	*HDI Before*	0.57	0.57	0.54	0.54	0.68	0.68	0.54	0.54	0.62	0.62
	HDI After	0.79	0.79	0.73	0.73	0.86	0.86	0.72	0.72	0.78	0.78
	Progressive	0.22	0.22	0.19	0.19	0.18	0.18	0.18	0.18	0.16	0.16
SOPHITORIUM	*HDI Before*	0.57	0.54	0.68	0.54	0.62	0.58	0.66	0.6	0.57	0.62
	HDI After	0.79	0.73	0.86	0.72	0.78	0.74	0.82	0.76	0.73	0.78
	Progressive	0.22	0.19	0.18	0.18	0.16	0.16	0.16	0.16	0.16	0.16
TRIDENT	*HDI Before*	0.51	0.52	0.56	0.57	0.52	0.55	0.58	0.55	0.55	0.58
	HDI After	0.72	0.7	0.74	0.74	0.68	0.7	0.72	0.67	0.65	0.67
	Progressive	0.2	0.18	0.18	0.17	0.16	0.15	0.14	0.12	0.1	0.09
VIT	*HDI Before*	0.49	0.49	0.58	0.58	0.58	0.58	0.49	0.49	0.5	0.5
	HDI After	0.76	0.76	0.8	0.8	0.79	0.79	0.7	0.7	0.7	0.7
	Progressive	0.28	0.28	0.22	0.22	0.22	0.22	0.21	0.21	0.2	0.2
BEC	*HDI Before*	0.49	0.58	0.58	0.49	0.5	0.5	0.5	0.5	0.59	0.53
	HDI After	0.76	0.8	0.79	0.7	0.7	0.68	0.68	0.67	0.76	0.71
	Progressive	0.28	0.22	0.22	0.21	0.2	0.19	0.18	0.18	0.18	0.17
EAST	*HDI Before*	0.54	0.54	0.68	0.68	0.68	0.54	0.54	0.54	0.62	0.62
	HDI After	0.73	0.73	0.86	0.86	0.86	0.72	0.72	0.72	0.78	0.78
	Progressive	0.24	0.21	0.29	0.38	0.38	0.25	0.25	0.26	0.22	0.28

HIT	*HDI Before*	0.49	0.49	0.58	0.58	0.58	0.58	0.49	0.49	0.5	0.5
	HDI After	0.76	0.76	0.8	0.8	0.79	0.79	0.7	0.7	0.7	0.7
	Progressive	0.28	0.28	0.22	0.22	0.22	0.22	0.21	0.21	0.2	0.2
INDIC	*HDI Before*	0.49	0.58	0.58	0.49	0.5	0.5	0.5	0.5	0.59	0.53
	HDI After	0.76	0.8	0.79	0.7	0.7	0.68	0.68	0.67	0.76	0.71
	Progressive	0.28	0.22	0.22	0.21	0.2	0.19	0.18	0.18	0.18	0.17
INDUS	*HDI Before*	0.54	0.54	0.68	0.68	0.68	0.54	0.54	0.54	0.62	0.62
	HDI After	0.73	0.73	0.86	0.86	0.86	0.72	0.72	0.72	0.78	0.78
	Progressive	0.24	0.21	0.29	0.38	0.38	0.25	0.25	0.26	0.22	0.28
KMBB	*HDI Before*	0.49	0.49	0.58	0.58	0.58	0.58	0.49	0.49	0.5	0.5
	HDI After	0.76	0.76	0.8	0.8	0.79	0.79	0.7	0.7	0.7	0.7
	Progressive	0.28	0.28	0.22	0.22	0.22	0.22	0.21	0.21	0.2	0.2
NALANDA	*HDI Before*	0.49	0.58	0.58	0.49	0.5	0.5	0.5	0.5	0.59	0.53
	HDI After	0.76	0.8	0.79	0.7	0.7	0.68	0.68	0.67	0.76	0.71
	Progressive	0.28	0.22	0.22	0.21	0.2	0.19	0.18	0.18	0.18	0.17
SERC	*HDI Before*	0.54	0.54	0.68	0.68	0.68	0.54	0.54	0.54	0.62	0.62
	HDI After	0.73	0.73	0.86	0.86	0.86	0.72	0.72	0.72	0.78	0.78
	Progressive	0.24	0.21	0.29	0.38	0.38	0.25	0.25	0.26	0.22	0.28
SYNERGY	*HDI Before*	0.49	0.49	0.58	0.58	0.58	0.58	0.49	0.49	0.5	0.5
	HDI After	0.76	0.76	0.8	0.8	0.79	0.79	0.7	0.7	0.7	0.7
	Progressive	0.28	0.28	0.22	0.22	0.22	0.22	0.21	0.21	0.2	0.2

TITE	*HDI Before*	0.49	0.58	0.58	0.49	0.5	0.5	0.5	0.5	0.59	0.53
	HDI After	0.76	0.8	0.79	0.7	0.7	0.68	0.68	0.67	0.76	0.71
	Progressive	0.28	0.22	0.22	0.21	0.2	0.19	0.18	0.18	0.18	0.17

TABLE 4.18: Top 20 ST Students from 20 different Institutions and their HDI Before, HDI After,HDI Progressive Contd.

Institutions		**S 11**	**S 12**	**S 13**	**S 14**	**S 15**	**S 16**	**S 17**	**S 18**	**S 19**	**S 20**
BCE	*HDI Before*	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.59	0.59
	HDI After	0.68	0.68	0.68	0.68	0.68	0.67	0.67	0.67	0.76	0.76
	Progressive	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
CAPITAL	*HDI Before*	0.64	0.53	0.56	0.59	0.53	0.52	0.54	0.56	0.53	0.5
	HDI After	0.81	0.7	0.73	0.76	0.7	0.69	0.7	0.72	0.69	0.66
	Progressive	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16
EINSTEIN	*HDI Before*	0.62	0.6	0.6	0.6	0.62	0.62	0.62	0.62	0.52	0.52
	HDI After	0.78	0.76	0.76	0.76	0.78	0.78	0.78	0.78	0.68	0.68
	Progressive	0.16	0.24	0.21	0.18	0.26	0.27	0.25	0.23	0.16	0.2
MIT	*HDI Before*	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	HDI After	0.7	0.7	0.68	0.68	0.68	0.68	0.68	0.67	0.67	0.67
	Progressive	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
NMIET	*HDI Before*	0.64	0.53	0.56	0.59	0.53	0.52	0.54	0.56	0.53	0.5
	HDI After	0.81	0.7	0.73	0.76	0.7	0.69	0.7	0.72	0.69	0.66
	Progressive	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16
OEC	*HDI Before*	0.62	0.6	0.6	0.6	0.62	0.62	0.62	0.62	0.52	0.52
	HDI After	0.78	0.76	0.76	0.76	0.78	0.78	0.78	0.78	0.68	0.68
	Progressive	0.16	0.24	0.21	0.18	0.26	0.27	0.25	0.23	0.16	0.2
OXFORD	*HDI Before*	0.58	0.58	0.66	0.66	0.6	0.6	0.57	0.57	0.62	0.62
	HDI After	0.74	0.74	0.82	0.82	0.76	0.76	0.73	0.73	0.78	0.78
	Progressive	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
SOPHITORIUM	*HDI Before*	0.62	0.62	0.54	0.52	0.58	0.58	0.53	0.68	0.62	0.61
	HDI After	0.78	0.78	0.7	0.68	0.73	0.73	0.68	0.83	0.77	0.76

	Progressive	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.15	0.15	0.15
TRIDENT	*HDI Before*	0.67	0.64	0.66	0.63	0.69	0.67	0.67	0.67	0.53	0.56
	HDI After	0.74	0.7	0.7	0.65	0.7	0.68	0.68	0.68	0.53	0.56
	Progressive	0.07	0.06	0.04	0.02	0.01	0.01	0.01	0.01	0	0
VIT	*HDI Before*	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.59	0.59
	HDI After	0.68	0.68	0.68	0.68	0.68	0.67	0.67	0.67	0.76	0.76
	Progressive	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
BEC	*HDI Before*	0.64	0.53	0.56	0.59	0.53	0.52	0.54	0.56	0.53	0.5
	HDI After	0.81	0.7	0.73	0.76	0.7	0.69	0.7	0.72	0.69	0.66
	Progressive	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16
EAST	*HDI Before*	0.62	0.6	0.6	0.6	0.62	0.62	0.62	0.62	0.52	0.52
	HDI After	0.78	0.76	0.76	0.76	0.78	0.78	0.78	0.78	0.68	0.68
	Progressive	0.16	0.24	0.21	0.18	0.26	0.27	0.25	0.23	0.16	0.2
HIT	*HDI Before*	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.59	0.59
	HDI After	0.68	0.68	0.68	0.68	0.68	0.67	0.67	0.67	0.76	0.76
	Progressive	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
INDIC	*HDI Before*	0.64	0.53	0.56	0.59	0.53	0.52	0.54	0.56	0.53	0.5
	HDI After	0.81	0.7	0.73	0.76	0.7	0.69	0.7	0.72	0.69	0.66
	Progressive	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16
INDUS	*HDI Before*	0.62	0.6	0.6	0.6	0.62	0.62	0.62	0.62	0.52	0.52
	HDI After	0.78	0.76	0.76	0.76	0.78	0.78	0.78	0.78	0.68	0.68
	Progressive	0.16	0.24	0.21	0.18	0.26	0.27	0.25	0.23	0.16	0.2
KMBB	*HDI Before*	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.59	0.59
	HDI After	0.68	0.68	0.68	0.68	0.68	0.67	0.67	0.67	0.76	0.76
	Progressive	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
NALANDA	*HDI Before*	0.64	0.53	0.56	0.59	0.53	0.52	0.54	0.56	0.53	0.5
	HDI After	0.81	0.7	0.73	0.76	0.7	0.69	0.7	0.72	0.69	0.66
	Progressive	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16
SERC	*HDI Before*	0.62	0.6	0.6	0.6	0.62	0.62	0.62	0.62	0.52	0.52
	HDI After	0.78	0.76	0.76	0.76	0.78	0.78	0.78	0.78	0.68	0.68
	Progressive	0.16	0.24	0.21	0.18	0.26	0.27	0.25	0.23	0.16	0.2
SYNERGY	*HDI Before*	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.59	0.59
	HDI After	0.68	0.68	0.68	0.68	0.68	0.67	0.67	0.67	0.76	0.76

	Progressive	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
TITE	*HDI Before*	0.64	0.53	0.56	0.59	0.53	0.52	0.54	0.56	0.53	0.5
	HDI After	0.81	0.7	0.73	0.76	0.7	0.69	0.7	0.72	0.69	0.66
	Progressive	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16

Fig. 4.7: HDI Before, top 20 ST Students from 20 different Institutions.

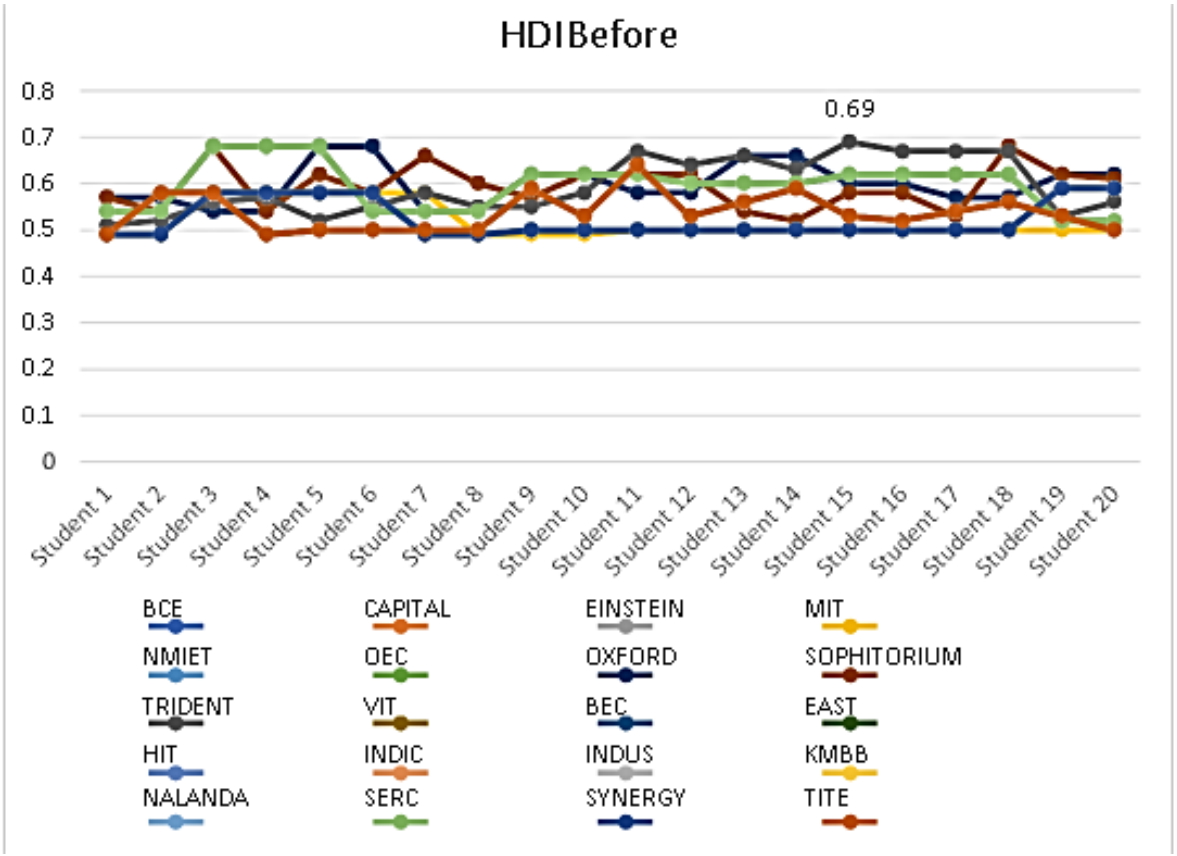


Fig. 4.8: HDI after, top 20 ST Students from 20 different Institutions

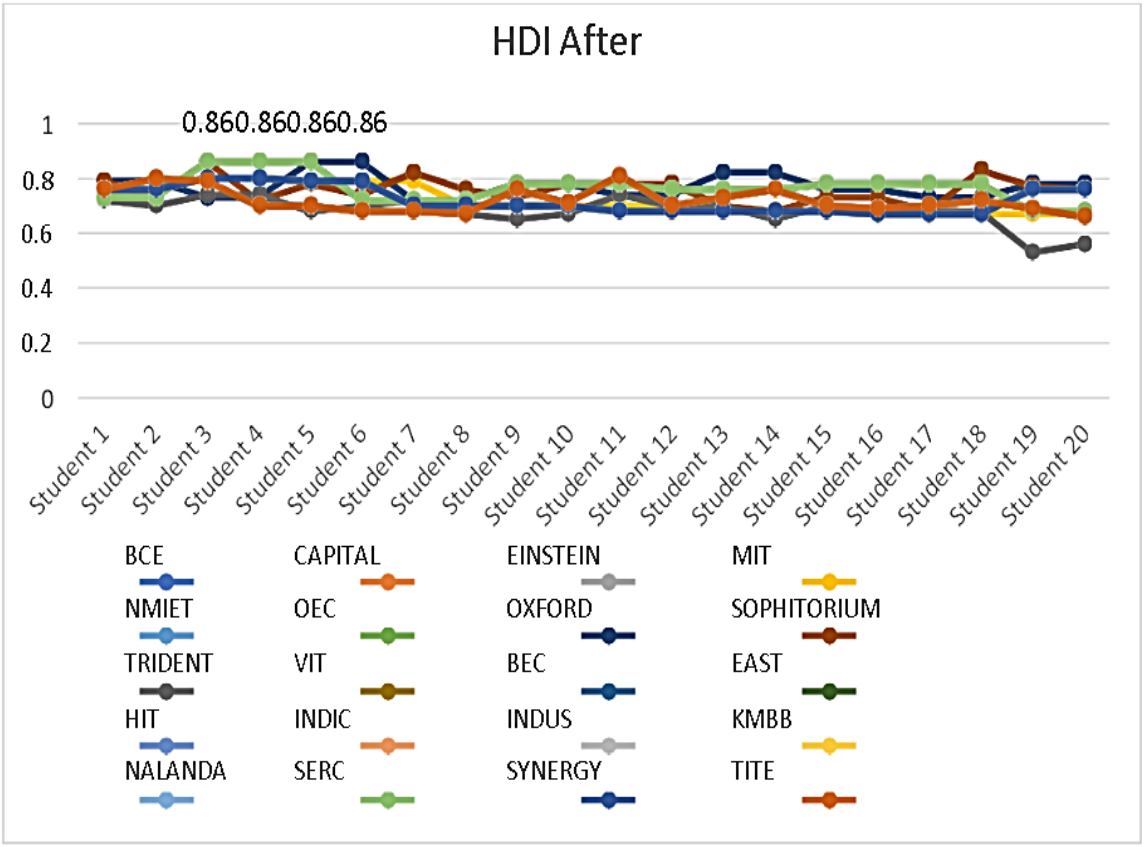
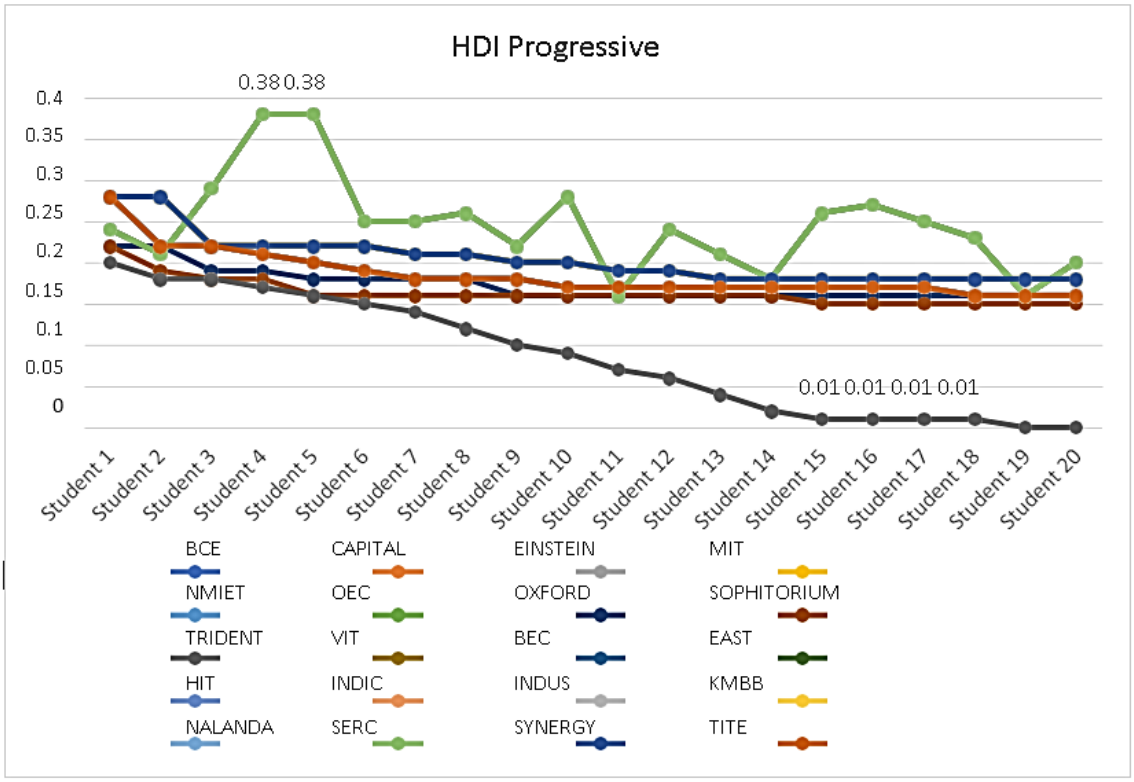


Fig. 4.9: HDI Progressive, top 20 ST Students from 20 different Institutions



HDI (Before) –Students have secured more than the standard HDI value of 0.64. The highest value in the study is 0.68.

HDI (After) – All 20 students have secured more than the standard HDI value of 0.64. The highest value in the study is 0.86. So after completion of their B.Tech. their HDI value is enhanced to 18%.

Progressive HDI – Most of the 20 top ST students have progressive HDI comparing both HDI (Before) and HDI (After). The highest progression value is 0.38 and the lowest value is 0.01.

Chapter – 5

5.0. **Result and Discussion**

5.1. **Introduction**

Earning any scholarship is prestigious. Since tribal students get a scholarship on merit as well as based on government welfare scheme, it has helped to leave a good impact (increase in income/savings, clear Debts, Purchasing power of Household appliances, improvement in communication skill, feeling comfortable, increase outside contact) on them as well as on their future course of life.

5.2. **Societal Background**

Out of 12826 sample studies, it is found that Male is 8233 (76.74%) and Female is 4553 (23.26%). Male students are more attracted to B.Tech. education rather than females.Tribal are married early even while pursuing their studies. But there is a change is noticedin the present study. It is only 02 (0.01%) students married during their study. Their religion share as practising is 12793 (99.74%) Hindu and 33 (0.26%) Christians.

5.3. **Student's Career**

In career development, social cognitive theory helps to explain how a person can set up their career development plan for success. So, when any tribal student received financial support to pursue his or her career. Under a positive view of their own abilities and surrounding themselves with a positive network of mentors, a person has a better chanceof achieving their career goals. It opens the horizon of career development and growth. Of course, the students are required to pursue their respective studies in the institutions of choice and are required to make their own efforts in seeking admission in accredited Universities/Institutions in programmes/fields specified in the scheme. From the data it is found that 1203(9.38%) students have secured 60% or above in Class X examination followed by 3548(27.66%) in Class XII/Diploma before pursuing B.Tech. and passed cent percent in the technical degree examination out of total samples 12826. From the samplestudy, it is found that only 6321

(49.28%) ST students got the job after acquiring B Tech out of 12826 sample. So, the success rate is 49.28% to achieve their goal. The percentagemay be debated under different societal angles.

5.4. **Life Expectancy Index (LEI), Education Index (EI) and Income Index (II)**

The samples, which has selected for the study, are collected from Technical Students' Cluster. Their academic career is also discussed in previous para. As expected, it is noticedhigh Life Expectancy Index (LEI) and High Education Index (EI)in the sample. Indian standard Life Expectancy Index (LEI) is 0.59 and 0.341 for Education Index (EI). It is noticed that all are above the standard LEI and EI in the sample list. But the Income Index (II) will vary anddepend on their family income. Only 202(1.57%) ST students have more than the standardIncome Index (II)value 0.509 under Income Index (II) study before pursuing the degree. But on the other hand, the same Income Index (II) value enhanced from 202 to 2935 (20.88%)of the value 19.31% at the end of the session.

5.5. **Human Development Index (HDI)**

Finally, the results of HDI (Before), HDI (After) and the Progressive HDI was studied. It is noticed that all top 20 students have secured more than the standard HDI value 0.64 in HDI (Before). The highest value in the study is 0.68. Similarly, all 20 students have securedmore than the standard HDI value 0.64 in HDI (After). The highest value in the study is 0.86. After completion of BTech degree their HDI value is increased to 18%. At the end, all 20 students have positive progressive HDI comparing both HDI (Before) and HDI (After). The highest progression value is 0.28 and lowest 0.01.

5.6. **Other societal contexts**

Since scholarships have become so essential to a majority of tribal students, tribal students should look for Colleges and universities that offer scholarships. Apply for them and put their best foot forward to avail maximum scholarship on their college degree. Scholarshipwill allow many tribal students to focus more on his college studies with less pressure on repaying College and thinking financial burden on their parents.

Tribal students have different dreams and different goals, and opportunities like this ensure each is prepared for success. This financial assistance helps the many tribal students to pursue their career in B.Tech. and to pursuit a good professional goal. This study shows that 100 percent tribal students secure 60% or more in their B.Tech. studies.

In this connection of tribal students and their career growth by taking financial support, we shall discuss Bandura's social cognitive theory. Social cognitive theory, developed by Albert Bandura, is the idea that an individual's motives and behaviours are based on experience. These experiences can break into three main categories:

a) A person is influenced by self-efficacy, or what they believe they can achieve.
b) A person is influenced by what they see other people achieve and the actions they take.
c) A person is influenced by factors around them that they cannot control.

In this study of relationships between financial support and career perspectives among tribal students, we have tried to incorporate two segments, first a list B.Tech. graduates with their HDI Index. Second an analysis for this perplexing data. 12,826 students are selected as sample studies and also their graduates functioning is evaluated by means of a questionnaire. More than a hundred semi structured interviews are conducted with employed and unemployed graduates, employers and educational officers with the aim ofextending the structured data gathered through the questionnaire. Graduates achieved valuable personal and professional achievement that is education had a positive impact on these graduates functioning capabilities. Comparative analysis between the College, financial support and student's

outcome indicated that graduates' capabilities significantly varied as a consequence of pre-existing circumstances. This is reflected in the education index. Since the sample studied for all technical students which is much more than the standard Education Index (EI)value 0.341.

The outcome is very visible one is career exposure and another one is better life style thekey feature of this drive is to encourage originality through an active participation and holistic acceptance by tribal students. They also use proven techniques and strategies to enhance their skills, career and life style. The study focuses on seven critical components.This help to ignite imagination and explore original ideas, give exposure to openness and novel experiences, help in decision making, effective communication, motivation, teamwork and boost creative potential with physical activities among tribal students pursuing B.Tech. studies.

In such unmatched times of a global crisis, there is a need to create a strong innovation- driven culture among tribal student, innovators and aspiring entrepreneurs in academic institutions. The scholarship / financial support is a unique initiative to utilise its existing resources to nurture student-led innovations by involving them in education. Social Cognitive Theory (Sociological) states that people choose careers based upon their belief in their ability to perform the job. In other words, people are motivated by careers that require skills that they believe they have and are confident they can be successful in that job. The same notion drives tribal students to opt for job. As per this study, 49.28% present students are getting jobs according to their skills.

A comparison between Census, 2001 and 2011 shows that the proportion of cultivators reduced by more than 10%, while the proportion of agricultural laborer increased by 9%among the ST population. It is estimated that, in the last decade, about 3.5 million tribal people have left agriculture and agriculture-related activities to enter the informal labourmarket. About 55 per cent of the country's tribal population now resides outside their traditional habitats. It is known that migration of tribal population, increasingly distress- driven, has been increasing. This study reveals that students are migrating from their conventional territory to township for employment and opportunity. Only 202 (1.57%) STstudents have more than the standard Income Index (II) value 0.509 under Income Index study before out of sample 12826. But on

the other hand, the same Income Index (II) valueenhanced from 202 to 2935 (20.88%) of the value 19.31%**.**

Research shows that 44% of tribal children under-5 in India is stunted, 45% underweight and 27% wasted. Severe stunting in tribal children is 9 points higher than in non-tribal children (29% vs 20%). This study shows two things about life expectancy and morbidity. Firstly, which emphasize the 'end point' or utilization of the formal system, or health careseeking behaviour secondly, there are those which emphasize the 'process' (illness response, or health seeking behaviour). Health care seeking behaviour says about the utilization of the system there is often a tendency for studies to focus specifically on the act of seeking 'health care' as defined officially in a particular context. Although data are also gathered on self-care, visits to more traditional healers and unofficial medical channels, these are often seen largely as something which should be prevented, with the emphasis on encouraging people to opt first for the official channels. Second is the adoption of process. In both the cases a better education, good life styles and employmentchallenge traditional tribal health system and encourage a modern medical treatment. Asper this study Indian standard life expectancy index is 0.59. It is noticed all are above the standard Life Expectancy Index LEI) in the sample list.

Chapter – 6

6.0. Findings and Recommendations

6.1. Suggestions and recommendations

Qualitative Indicators of Human Development should be included to calculate the Human Development Index. The inclusion of the indicators like levels of poverty, gender discrimination, etc. would make the Human Development Index even more realistic.

HDI (Before) – 20% of students have secured more than the standard HDI value of 0.64. The highest value in the study is 0.73. In other words, 80% of students are below the standard HDI value. The said figure will be helping to quantify the development progress in the future calculation.

HDI (After) – 56% of students have secured more than the standard HDI value of 0.64. The highest value in the study is 0.83. The fact may be interpreted that 56% of students are successful after availing of the scholarship and engaging themselves in the mainstream.

Human Development is imperative for any tribal students and The ***Progressive HDI Parameter*** as mentioned above is established a new finding to measure the qualitative life of ST students.

Progressive HDI – Nearly 50% of students have progressive HDI comparing both HDI (Before) and HDI (After). The highest progression value is 0.28 and the lowest is 0.01. The overall success rate is 50% in this study. So, the required assistance may be provided to the rest 50% by the concerned institutions and concerned Govt. agencies. It is also recommended that the extension study may be carried out with additional time and financial support to know the reasons and find the means to improve the success rate.

The findings from this study will facilitate the Government in many decision-making processes related to scholarship, fee relaxation schemes for the tribal students in various professional courses across the country.

6.2. The success story of some selected Students who availed scholarship during B.Tech. study. The following success stories of some beneficiaries who availed of scholarship are covered:

a. ***Er. Nabin Kumar Nag*** – My name is Mr. Nabin Kumar Nag. Now I am working as a Technical Assistant in Computer Science Engg. Dept. at Sophitorium Engineering College at Khurda. I have completed my B.Tech. from Sophitorium Engineering College, Khurda - I am employed and have decent earnings which have improved my financial stability for my family. This has helped me to gain an increase in income/savings, clear debts and purchase household appliances. Now I feel comfortable and my communication skill has been improved.

b. ***Er. Aarti Tete***– My name is Aarti Tete. Now I am working as an Engineer in Gupta Cables Pvt. Ltd located at Khurda. I have completed my BTech from Sophitorium Engineering College at Khurda. I availed Govt scholarship during my period of study B.Tech. - I am employed and my income/savings have been increased. I have cleared all debts and can purchase household appliances for my family. My outside contact and communication skill has been improved.

c. Er. Tejas Naik– I am Tejas Naik. Now I am working as a Technical Assistant in Mechanical Engineering Dept. at Sophitorium Engineering College, Khurda. I have completed my BTech from Sophitorium Engineering College at Khurda. Socio-economic condition has been improved. My income/savings have been increased.

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Appendix 1

Questionnaire Form Used for Data collection

1. Name of the Candidate:
2. Date of Birth:
3. Father's Name:
4. Mother's Name:
5. Sex: Male / Female
6. Religion:
7. Nationality:
8. Caste:
9. Married / Unmarried:
10. Full Address:
11. Permanent Address:
12. Address for Communication:
13. Academic Records:

Class	Name of The School/College	Name of The Board/University	% Of Marks Secured	Year ofPassing

14. Physical Deficiencies or Disability (If Any):

15. Details of The Family Members:

Sl.No	Name ofthe person	Age	Relationship withcandidate	Dateof Birth

16. Father's Occupation:

17. Father's Annual Income:

18. Mother's Occupation:

Per Capita Income Details: Sl.no	Name of theperson working	Place of work	Relationship of the person with the candidate	Salary

19. Scholarship Details:

Sl.No.	AcademicPeriod	Bursary Received(Yes/No)	Duration	Total Amount

20. Job Details:

a) Nature of Job (Govt./Private/Others):
b) Nature of Selection (On/Off-Campus):
c) Name of The Company/ Agency/Organization:
d) Job Location:
e) Designation:
f) Annual Income:

Photo Gallery

Conduct of Focused Group Discussion (FGD) with Students during Data Collection:

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