

An analytical study of the impact of Adivasi School improvement schemes of the Government of Maharashtra during the period 2000 to 2020 – Role for Teacher Education Institutes

¹Mr. Sagar Ananda Patil (PhD scholar), ²Dr. Balasaheb D. Mashere (Research guide)

^{1,2}Tilak College of Education
Savitribai Phule Pune University Pune, India

Abstract

A research entitled “an analytical study of the impact of Adivasi School improvement schemes of the Government of Maharashtra during the period 2000 to 2020” was undertaken to ascertain the socio-economic impact on the lives of tribals. 400 beneficiary students and 400 teachers from the scheme implementing institutions were surveyed using questionnaires. There was sizable disagreement to the claim that there has been an economic and social impact on the lives of the tribal beneficiary students due to educational improvement schemes implemented by Government of Maharashtra. There was a 79% agreement from the teacher respondents that there are major challenges in implementing educational improvement schemes launched by Government of Maharashtra. There was a 79% agreement from the teacher respondents that the proposed suggestions would be effective to improve the implementation of educational improvement schemes launched by Government of Maharashtra. On an overall basis it can be concluded that even though the Government of Maharashtra has launched a number of educational improvement schemes for the benefit of tribals, they have not been successful in significantly influencing the socio-economic status of the tribals. There are major challenges in implementation of these schemes which need to be addressed if major benefits are to be achieved. This paper examines the role of teacher education Institutes in helping the schools.

Keywords: Tribals, Educational improvement schemes, Government of Maharashtra, Socio-economic impact

1. Introduction

The state of Maharashtra has a sizable backward tribal population. As per census of 2011 out of the states population of 1123.74 lakhs, the tribal population was 105.10 lakhs, that is, 9.35 percent. The population of the backward tribal community is increasing in sizable terms. Between 1971 and 1981 the increase was 19.31 lakhs, between 1981 and 1991 the increase was 15.46 lakhs, between 1991 and 2001, the increase was 12.59 lakhs and from 2001 to 2011 the increase was 19.33 lakhs. In percentage terms the average increase per ten years is around 30% which is quite significant. On an overall basis, the backward tribal community represents around 10% of the population of the state of Maharashtra.

Adivasi or Tribal communities in India are the least educationally developed. First generation learners have to face social, psychological and cultural barriers to get education. This has been one of the reasons for poor performance of tribal students in schools. Tribal students have very high drop-out rates during school education. Tribal children in middle and high schools and higher education institutions are central to government policy, but efforts to improve a tribe's educational status have had mixed results. Recruitment of qualified teachers and determination of the appropriate language of instruction also remain troublesome. Many tribal schools are plagued by high drop-out rates. Children attend for the first three to four years of primary school and gain a smattering of knowledge, only to lapse into illiteracy later. Few who enter continue up to the tenth grade; of those who do, few manage to finish high school.

Given this background of the tribals, the researcher undertook a research entitled “An analytical study of the socio-economic impact of Adivasi School improvement schemes of the Government of Maharashtra during the period 2000 to 2020.” This paper presents the findings, conclusions, and suggestions of the study. It examines the role of teacher education Institutes in helping the schools.

2. Literature review

Kumar (2008) attempts to explore and understand the low level of literacy and education among tribal children in Jharkhand. The paper discusses the role of government, institutions, programs and links between education and development. Various programs and schemes have been started but very few of them have reached and benefited the tribal children. Many of the programs did not benefit the tribal community because the programs were not contextualized and localized considering regional, geographical and physical differences and barriers. Lack of political will, corruption and less attention given to development in tribal areas are other reasons for not achieving the benefits of tribal programmes. The article

highlights the need for a special focus on tribal education that includes context-specific traditional and innovative interventions.

Sethi et al. (2021) in a chapter examines the implementation of the Tribal Sub-Plan (TSP) strategy and how it affects the progress of tribal development policies, focusing on one of the tribal dominated districts of Odisha state. It also analyzes the benefits of TSP programs and their impact on the livelihood of tribal people. The results show that the schemes have not yet achieved the desired results. Most of the tribal population still struggle to cross the poverty line due to lack of transparency or partisan funding and ignorance of various development schemes. Yet by providing access to better healthcare, education, housing and employment opportunities, it is gradually reducing the inequality that exists between tribal communities and others. A certain level of protection against exploitation and oppression is also provided by the TSP schemes, which is essential for tribal progress. But in view of the large gaps in implementation, the state needs to make more concerted efforts to strengthen the implementation of TSP programs.

Asha (2020) states that education is the most important element in the development of any community. India has the largest concentration of tribal population in the world. The government has introduced many policies and programs for the development of education of the tribal community. They have yet to reap the benefits of these policies and programs and lag far behind the general population. In Kerala, although the overall indices of educational development are much higher than the national level, disparities in educational attainment among tribal communities still persist and remain a dilemma. The study attempts to examine the status of tribal education in Kerala. This study on tribal education in Kerala mainly focuses on issues such as the low literacy level of the tribal community and the high dropout rate of tribal students. The investigation reveals the educational problems of tribal students and highlights the reasons for their dropping out of school. Various proposals for improving tribal education are formulated. The study has significant implications for improving tribal education.

Priyadarshani and Abhilash (2019) have written that anthropogenic changes in planetary biophysical systems lead to climate change and environmental degradation at global, regional, and national scales. Nations around the world recognize that learning from the indigenous knowledge of communities living in harmony with nature can provide an immense boost to national conservation strategies and aid research aimed at mitigating the effects of climate change. With a tribal population of 8.6%, India has access to a vast body of indigenous knowledge that, through proper recognition, adoption and mainstreaming, has the

potential to provide sustainable solutions to problems related to declining agricultural productivity and soil quality, loss of biodiversity, water scarcity, pollution, as well as many other social problems. This work therefore attempts to compare the traditional practices of Indian tribes in these sectors as well as their socio-economic status with specific Sustainable Development Goals (SDGs), targets and national indicators. For this, an in-depth analysis of the available datasets related to Scheduled Tribes of India has been done and interpretations and extrapolations have been made accordingly. Bubble analysis was conducted to understand the relationship between poverty and education among tribal communities of different Indian states. The results suggest that creating functional linkages between traditional practices and specifically SDGs 2, 6 and 15 would significantly assist climate policy in India. At the same time, improving income, women's and children's health and education of these communities through specialized interventions would have a direct positive impact on national SDG indicators 1, 2, 3 and 4. In addition, effective policy interventions targeting tribal welfare would significantly reduce harmful effects in the long run climate change.

There is very little research on tribals from Maharashtra even though the state has a sizable population of tribals. Moreover a study evaluating the impact of the educational improvement programs on the socio-economic status of the tribals is not seen. Both Central and State Governments have taken efforts to improve the literacy levels of tribals. But to what extent this has impacted the standard of living of the tribals has not been researched.

3. Methodology

The research's main purpose was to study socio-economic impact of educational improvement schemes of Government of Maharashtra on the lives of tribals.

Based on the purpose and the scheme of variables following scheme of hypotheses formulation emerged:

Ho1: There is a significant economic impact of the Tribal educational improvement schemes of Government of Maharashtra

Ha1: There is no significant economic impact of the Tribal educational improvement schemes of Government of Maharashtra

Ho2: There is a significant social impact of the Tribal educational improvement schemes of Government of Maharashtra

Ha2: There is no significant social impact of the Tribal educational improvement schemes of Government of Maharashtra

Ho3: There are no major challenges in implementation of the Tribal educational improvement schemes of Government of Maharashtra

Ha3: There are major challenges in implementation of the Tribal educational improvement schemes of Government of Maharashtra

Ho4: Suggestions will not be effective

Ha4: Suggestions will be effective

Method set for testing of Hypotheses

The steps designed for testing the hypotheses are outlined below:

- Survey questionnaires were designed to collect primary data in order to test the hypothesis as stated earlier
- Questionnaires were administered to beneficiary students and teachers of implementing educational institutions.
- The questionnaire was divided into two sections each
- Each section had ten questions/statements
- Responses to these questions were taken on 5-point Likert scale of agree/disagree
- For each of the sections, agreement /disagreement score was found out
- Weights of 2 were used to value extreme responses and distinguish them from moderate (somewhat) responses
- Average agreement/disagreement score for each of the sections was calculated for all the 10 sub-responses under each of them for the 400 respondents
- Using a t-test, the average score (average of 10 sub-responses) was compared with hypothesized population mean of 50% connoting an event by chance.
- P-values were calculated and the null hypotheses were checked for rejection or non-rejection.

Population and Sample

Population

FirstPost (2020) gives the following data:

“Most of the Adivasi students study in the state government-run Zila Parishad schools. These schools provide free education to children who can’t afford private schooling. There are over 60,000 Zila Parishad schools in the state with 4.6 million students.” (Firstpost, 2020).

Researcher, therefore, assumes that the population of both the Adivasi school students and teachers from Maharashtra is a large population, that is, 10,000 each

Sample Size

At 95% confidence level and 5% confidence interval the sample size for a population of 10,000 is 370. The size of 370 was rounded off to 400.

Convenience sampling method was used.

4. Data analysis and interpretation

Testing of Hypothesis

Ho1: There is a significant economic impact of the Tribal educational improvement schemes of Government of Maharashtra

Ha1: There is no significant economic impact of the Tribal educational improvement schemes of Government of Maharashtra

This hypothesis was tested by comparing sample mean (average disagreement score) with hypothesized population mean of 50% (connoting the event by chance). The results are tabulated below:

Table 1: Average disagreement ratings for Section I (student's questionnaire)

Statements	1	2	3	4	5	6	7	8	9	10	Total
Disagree %	85%	86%	84%	86%	87%	79%	84%	85%	90%	85%	85%

Table 2: Hypothesis testing – H1

Parameter	Value
Sample Mean (\bar{x})	85%
SD of sample	0.93674
Hypo. population mean (μ)	50%
Ho	0.85
N	400
t-value	7.50
p-value	<0.0001
Decision	Reject Null

The null hypothesis was rejected in favor of the alternate which means, there is no significant economic impact of the Tribal educational improvement schemes of Government of Maharashtra.

Ho2: There is a significant social impact of the Tribal educational improvement schemes of Government of Maharashtra

Ha2: There is no significant social impact of the Tribal educational improvement schemes of Government of Maharashtra

This hypothesis was tested by comparing sample mean (average disagreement score) with hypothesized population mean of 50% (connoting the event by chance). The results are tabulated below:

Table 3: Average disagreement ratings for Section II (student's questionnaire)

Statements	1	2	3	4	5	6	7	8	9	10	Total
Disagree %	77%	86%	85%	88%	89%	84%	76%	84%	85%	85%	84%

Table 4: Hypothesis testing – H2

Parameter	Value
Sample Mean (\bar{x})	84%
SD of sample	0.93418
Hypo. population mean (μ)	50%
Ho	0.84
N	400
t-value	7.22
p-value	<0.0001
Decision	Reject Null

The null hypothesis was rejected in favor of the alternate which means, there is no significant social impact of the Tribal educational improvement schemes of Government of Maharashtra.

Ho3: There are no major challenges in implementation of the Tribal educational improvement schemes of Government of Maharashtra

Ha3: There are major challenges in implementation of the Tribal educational improvement schemes of Government of Maharashtra

This hypothesis was tested by comparing sample mean (average agreement score) with hypothesized population mean of 50% (connoting the event by chance). The results are tabulated below:

Table 5: Average agreement ratings for Section I (Teachers questionnaire)

Statements	1	2	3	4	5	6	7	8	9	10	Total
Agree %	82%	80%	82%	78%	81%	83%	81%	79%	71%	73%	79%

Table 6: Hypothesis testing – H3

Parameter	Value
Sample Mean (\bar{x})	79%
SD of sample	0.97595
Hypo. population mean (μ)	50%
Ho	0.79
N	400
t-value	5.94
p-value	<0.0001
Decision	Reject Null

The null hypothesis was rejected in favor of the alternate which means, there are major challenges in implementation of the Tribal educational improvement schemes of Government of Maharashtra.

Ho4: Suggestions will not be effective

Ha4: Suggestions will be effective

This hypothesis was tested by comparing sample mean (average agreement score) with hypothesized population mean of 50% (connoting the event by chance). The results are tabulated below:

Table 7: Average agreement ratings for Section II (Teachers questionnaire)

Statements	1	2	3	4	5	6	7	8	9	10	Total
Average agreement %	79%	85%	82%	77%	79%	80%	82%	79%	70%	73%	79%

Table 8: Hypothesis testing – H4

Parameter	Value
Sample Mean (\bar{x})	79%
SD of sample	0.97056
Hypo. population mean (μ)	50%
Ho	0.79
N	400
t-value	5.89
p-value	<0.0001
Decision	Reject Null

The null hypothesis was rejected in favor of the alternate which means, suggestions will be effective.

5. Findings, Conclusions, and Suggestions

Findings related to profile – beneficiary students

- i) The division of respondents was 79 from Konkan and Mumbai region, 89 from Western Maharashtra, 72 from Vidarbha, 67 from Marathwada, and 93 from Northern Maharashtra.
- ii) The division of respondents Gender was 201 of Male group; and 199 for Female group.
- iii) The distribution of Age was 16 of <20 years group; 195 for 20-25 years group; and 189 for >25 years group.
- iv) The spread of respondents Marital status was 157 of Single group; and 243 for Married group.
- v) The division of respondents Education was 6 up to SSC, 18 up to HSC, 183 Graduation, 171 PG, and 22 others.
- vi) The distribution of Occupation was 16 for student, 23 for job, 34 for business/self-employed, 62 for homemaker, and 265 for unemployed category.
- vii) The spread over the schemes was 73 for Government Aashram Group School Scheme, 76 for economic assistance to institutions, 93 for Aadarsh Aashram Schools, 70 for Eklavya English Medium Schools, and 88 for a mix of these.

Findings related to profile – teachers

- i) The division of respondents was 78 from Konkan and Mumbai region, 78 from Western Maharashtra, 75 from Vidarbha, 82 from Marathwada, and 87 from Northern Maharashtra.
- ii) The division of respondents Gender was 123 of Male group; and 277 for Female group.
- iii) The distribution of Age was 25 of <30 years group; 122 for 30-39 years group; 124 for 40-49 years, and 129 for >=50 years group.
- iv) The spread of respondents Marital status was 7 of Single group; and 393 for Married group.
- v) The distribution of Education was 25 of Graduation group; 345 for PG group; and 30 for Others group.
- vi) The division of Work experience was 24 of <5 years group; 62 for 5-10 years group; 190 for 11-15 years group; and 124 for >15 years group.
- vii) The spread over the schemes was 75 for Government Aashram Group School Scheme, 76 for economic assistance to institutions, 88 for Aadarsh Aashram Schools, 83 for Eklavya English Medium Schools, and 78 for a mix of these.

Inferential and finer data analysis

- i) There was a 85% disagreement to the claim that there has been an economic impact on the lives of the tribal beneficiary students due to educational improvement schemes implemented by Government of Maharashtra. The disagreement was found to be statistically significant.
- ii) There was a 84% disagreement to the claim that there has been a social impact on the lives of the tribal beneficiary students due to educational improvement schemes implemented by Government of Maharashtra. The disagreement was found to be statistically significant.
- iii) There was a 79% agreement from the teacher respondents that there are major challenges in implementing educational improvement schemes launched by Government of Maharashtra. The agreement was found to be statistically significant.
- iv) There was a 79% agreement from the teacher respondents that the proposed suggestions would be effective to improve the implementation of educational improvement schemes launched by Government of Maharashtra. The agreement was found to be statistically significant.

- v) The seven demographic variables do not show any significant influence on the response pattern of the economic impact section.
- vi) The seven demographic variables do not show any significant influence on the response pattern of the social impact section.
- vii) The seven demographic variables do not show any significant influence on the response pattern of the challenges section.

Conclusions

- 1) There is no significant economic impact of the Tribal educational improvement schemes of Government of Maharashtra. This has been concluded based on sizable disagreement to statements like : Education has helped / can help me get a job or earn self-employment, I am economically independent, My family has moved from below poverty line to above poverty line , I have a bank account and I am a part of financial inclusion, I do not have any loans from private money-lenders at exorbitant rates, I can save a little bit from my income, I have reasonable housing arrangements, I can buy other basic necessities of life, I can take admission for higher education which will improve my economic condition and I am financially literate.
- 2) There is no significant social impact of the Tribal educational improvement schemes of Government of Maharashtra. This has been concluded based on sizable disagreement to statements like : I have gained social acceptance, My existence in the society is recognized, I am part of social groups, I have a better acceptance in community programs, Being educated I am considered more valuable by the society, My marriage prospects increased due to education, People at times seek my advice, My ability to make informed judgments makes me more acceptable, My family and children have better social acceptance and Society looks at me as a learned and cultured citizen
- 3) Major challenges are faced in implementation of the educational improvement schemes for the tribals. This conclusion has been reached based on large-scale agreement to statements like: Delay in receipt of funds , Complicated procedures, Lack of clarity in rules and regulations, Demand for money at the time of releasing funds, Inadequate financial support, Poor administrative set-up, Too much paper work and documentation, Lack of support from beneficiaries while submitting claims, Fraudulent claims by beneficiaries and Frequent changes in norms
- 4) There is no correlation between the demographic variables like division, gender, age, education, occupation, marital status, and type of scheme with the economic and

social impacts. This means that dismal condition of socio-economic impact is same across all categories of division, gender, age, education, occupation, marital status, and type of scheme.

- 5) In case of teachers the challenges faced are the same irrespective of their division, gender, age, education, experience, marital status, and type of scheme. There is no difference in the challenges which can be attributed to a specific demographic variable. In other words, the same types of challenges are faced at all categories of the demographic variables.

Suggestions

Following ten suggestions were offered:

- i. Implementation of 100% direct benefit transfer to parents account
- ii. More support for English medium schools
- iii. Extensive use of IT and web portal services for scheme administration
- iv. Simplification of rules and procedures
- v. Aadhaar linked document verification to prevent fraudulent claims
- vi. Close monitoring of outcomes of the schemes
- vii. Outcome based modifications in the schemes
- viii. Involvement of Corporate through CSR initiatives
- ix. Training for teachers and other staff
- x. Up-gradation of facilities at the schools

Effectiveness of these was validated by the teacher respondents on a large-scale.

On an overall basis it can be concluded that even though the Government of Maharashtra has launched a number of educational improvement schemes for the benefit of tribals, they have not been successful in significantly influencing the socio-economic status of the tribals. There are major challenges in implementation of these schemes which need to be addressed if major benefits are to be achieved.

6. Role of teacher education institutes

Teachers are an important stakeholder in implementing the educational improvement schemes for the benefits of the tribals. If the teachers are well-trained there is a chance that the implementation of the educational improvement schemes would be efficient and more effective. Hence there is a strong case for intervention of teacher education institutes. The teachers of the tribal schools have registered a significant agreement to one of the suggestions that they should be trained properly. This training can come from the teacher education institutes. Such institutes should first understand the problems faced by the teachers of the

schools who are dealing with tribal students. Some of the problems are academic and some of them are non-academic. Giving due regard to the nature of the problems faced the teacher education institutes should design a customized training programs for the teachers of the schools who are dealing with tribal students. The teacher education institutions due to their experience and expertise are in a much better position compared to any other institution to train the teachers. The only point is due consideration of the specific issues that are required to be addressed in this case. Senior members from the teacher education institutions should carefully study the problems faced by teachers in implementing the educational improvement schemes for the benefits of the tribals. These problems have been highlighted in the research. A tailor-made training program should be worked out. The trainees should include the non-teaching members also. It is felt that the teacher education institutions can play an important role in helping out the schools in carrying a better implementation of the educational improvement schemes for the tribals.

References

1. Asha, C. M. (2020). Education of tribal communities in Kerala. *International Journal of Social Science and Economic Research*, 6, 1390-1399.
2. FirstPost. (2020). 'Out of coverage area': E-learning divide in Maharashtra's Palghar leaves Adivasi, poorer students in lurch - India News , Firstpost. Retrieved 20 March 2021, from <https://www.firstpost.com/india/out-of-coverage-area-e-learning-divide-in-maharashtras-palghar-leaves-ativasi-poorer-students-in-lurch-8752791.html>
3. Kumar, A. (2008). Education of Tribal Children in Jharkhand-A Situational Analysis. *Jharkhand Journal of Development and Management Studies*, XISS, Ranchi, 6(4), 3111-3123.
4. Priyadarshini, P., & Abhilash, P. C. (2019). Promoting tribal communities and indigenous knowledge as potential solutions for the sustainable development of India. *Environmental Development*, 32, 100459.
5. Sethi, N., Bhujabal, P., & Rout, L. (2021). Implementation of tribal sub-plan schemes in Odisha: An assessment. In *Mainstreaming the Marginalised* (pp. 156-170). Routledge India.
6. Tribal Development Department. (2022). क्षेत्र व लोकसंख्या-आदिवासी विकास विभाग, महाराष्ट्र शासन, भारत. Tribal.maharashtra.gov.in. Retrieved 20 July 2022, from <https://tribal.maharashtra.gov.in/1062/Area--Population>.