



Impact Of Science And Research On Enhancing Effectiveness Of Tribal Development

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India has the single largest tribal population in the world which lives in about 15 percent of the country's area, in various ecological and geo-climatic conditions ranging from plains to hills and inaccessible areas. Broadly, the Scheduled Tribes inhabit in two distinct geographical areas – Central India and North – East India. The present article analyzes the impact of Science and Research technology on development and support to people belonging to Scheduled Tribes and other traditional Scheduled Tribes through schemes on education, infrastructure, and livelihood to fill in for critical gaps and has been taking various steps for facilitating livelihood for tribal populations in different sectors.

Keywords: Triable Research institute, & Science and Research technology.

Introduction

The development of the Tribal population has engaged the attention of the Government since Independence. Ministry of Tribal Affairs has also taken several initiatives for the welfare and development of tribal people such as the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, Panchayats (Extension to the Scheduled Areas) Act, 2006 and Minor Forest Produce Act 2005, the Tribal Sub-Plan (TSP) strategy, Establishment of Ashram Schools in TSP areas, Vocational Education Training centers, Scholarships for higher education etc. Despite significant investment by the Government, development and empowerment of Scheduled Tribes continues to remain a challenge. The linkage between the Sustainable Development Goals and tribal development becomes important as they focus on equality, inclusion, and the principle of 'Leave No One Behind'. SDGs cannot be achieved in India unless they are achieved at the subnational lowest levels and reaches to those who are the most vulnerable.

India has the single largest tribal population in the world which lives in about 15 percent of the country's area, in various ecological and geo-climatic conditions ranging from plains to hills and inaccessible areas. Broadly, the Scheduled Tribes inhabit in two distinct geographical areas – Central India and North–East India. The Scheduled Tribes (STs) are notified in 32 States/UTs and the number of individual

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ethnic groups, etc. notified as STs is 705 as per 2011, census. They have also been provided with special protection by the Constitution of India under Schedules V and VI. The Scheduled Tribes population of the country, as per the census 2011, is 10.43 crore, constituting 8.6 percent of the total population. Overall, the ST population within the total population of India increased from 8.2% in 2001 to 8.6% in 2011. Recent estimates based on National Health Family Survey (NHFS) –IV showcases that the Infant mortality rate and under-five mortality rate is 44.4% and 57.2% as compared to the national average of 40.7% and 49.7% respectively. Data reveals that there has been improvement in the nutritional status of ST children over the years, however, there are still significant gaps. At 990 per 1000 males, the sex ratio among STs is much better than the all India average of 943.

The livelihood of tribal communities is mostly dependent on forest, agriculture, and animal husbandry. But they have not been able to realize the benefits of economic growth due to lack of adequate efforts for their skill development and inclusion in main stream development process. Ministry aims to provide much needed safety net and support to people belonging to Scheduled Tribes and other traditional forest dwellers through schemes on education, infrastructure and livelihood to fill in for critical gaps and has been taking various steps for facilitating sustainable livelihood for tribal.

Literature Review

There exists a substantial amount of literature on the condition of tribal research and education in India. A brief review is worthwhile in order to highlight what has already been done in the field. In a study on tribes of Andhra Pradesh, K. Sujatha (1994) contends that the perspective adopted for research and educational development of tribal communities fails to adequately address the specific disadvantages characterizing the tribal population. They found that one of the major constraints of tribal education at the planning level is the adoption of a dual system of administration. Rani, M (2000) reviewed in her study that due to the language barrier the tribal children are unable to establish communication link with the teacher and thus leading to the termination of their education in some point or the other. Vaidyanathan and Nair, (2001) suggested that teacher motivation contributes more to teaching – learning process than teacher competence. Sujatha, K. (2002) revealed that though education was not a critical demand among Scheduled Tribes, government policy focused on education as the main avenue by which to integrate them into „mainstream“ society. Jha&Jhingran, D. (2002) have strongly advised the use of the mother tongue or home language as medium of instruction in early stages of education. This assumes greater significance in the context of education of tribal children because their mother tongue is often quite distinct from the prominent languages in the state or regional languages and it is desirable to have a local teacher from the same tribal community. The Praitchi Committee Report (2002) counters that cost of schooling, lack of motivation of teachers, lack of inspection, and the increasing dependence on private tutoring to be the main hurdles in the path of education for tribal children.

Gautam, V. (2004) in his review found that high “dropout” rates among tribal children He analysed that due to wrong medium of instruction, the appointment of non-tribal teachers in tribal areas and communication gap between the teachers and tribal children are the causes of high dropout rates in tribal schools. Maharatna, A. (2005) the key challenge does not concern how tribes can be brought within the folds of mainstream society and culture, but how a more voluntary and mutual interaction between tribes and mainstream society can be developed. Lal, M. (2005) found that among all school dropouts, Adivasis and Dalits form the biggest group. Further, the largest group amongst them is girls.

Education, thus for the weaker sections of the society needs to become the panacea and an inclusive growth strategy for their economic and social up-liftment. Education has special significance for the SCs and STs who are facing a new situation in the development process. Sedwal, M. and Kamat, S. (2008) focused on issues related to Scheduled Castes and Scheduled Tribes – groups which are recognised for affirmative action within the Constitution of India. Abdul raheem, A. (2011) explained that education as an important parameter for any inclusive growth in an economy and the policies have to focus on inclusive rather than divisive growth strategies.

Impact of Science and Research

Tribal Research Institutes (TRIs) have been established and administratively supported by concerned State Governments. Despite political, social and economic commitments, the development gaps exist between tribal and non-tribal people. Preservation of the uniqueness of the tribal culture becomes all the more important given the fast-changing economic pattern and life style coupled with technological advancements across the country. In this regard, the Ministry of Tribal Affairs had taken a decision to continue the scheme "Support to TRIs" with revised financial norms and identified interventions. It is envisaged that TRIs should work as body of knowledge & research more or less as a think tank for tribal development, preservation of tribal cultural heritage, providing inputs to States for evidence based planning and appropriate legislations, capacity building of tribals and persons / institutions associated with tribal affairs, dissemination of information and creation of awareness.

A meeting of Parliamentary Standing Committee on Social Justice & Empowerment was held on 05.01.2023 from 15:00 Hours in Committee Room No. 3 Parliament House Annexe Extension, New Delhi wherein the Hon'ble members of the Committee were briefed by the representatives of the Ministry of Tribal Affairs on the subject 'Schemes for Educational and Economic Empowerment of Tribals'. For the said meeting, a brief note and power point Presentation was sent to Lok Sabha Secretariat on 30th December, 2022 and 4th January, 2023 respectively.

Status of Tribal Population in India

The tribal population constitutes a majority in the northeastern states of Mizoram and Lakshadweep (94.4 %), Meghalaya (86.1%), and Nagaland (86.5%). The states with no Scheduled tribe groups are Punjab, Chandigarh, Haryana, Delhi and Pondicherry. India has total tribal population of 10.43 crores (Table-1) which is 8.6 per cent (Table-2) of total population of India as per 2011 census.

Scheduled Tribe population and decadal change by residence in 2011 (Table-1)³

	Scheduled Tribe population 2011			Decadal change 2001-2011		
	Total	Rural	Urban	Total	Rural	Urban
India	104,281,034	93,819,162	10,461,872	23.7	21.3	49.7

ST population. (Table-2)⁴

Percentage of Scheduled Tribes to total population in India: 2001-2011

	Percentage of Scheduled Tribes 2001			Percentage of Scheduled Tribes 2011		
	Total	Rural	Urban	Total	Rural	Urban
India	8.2	10.4	2.4	8.6	11.3	2.8

³ Source - Census of India, 2011

⁴ Source - Census of India, 2011

During 2001 and 2011, the decadal change in the scheduled tribe urban population is 23.7 %, whereas it is 49.7 % in urban area and 21.3 % in rural area. The urban India has only 2.8 % ST population but Rural India has 11.3 per cent

Literacy Trends of Scheduled Tribes in India

Literacy Trends of Scheduled Tribes in India from 1961 to 2011

(in Percent) (Table- 3)⁵

Year	Male	female	Total
1961	13.83	3.16	8.54
1971	17.63	4.85	11.39
1981	24.52	8.05	16.35
1991	40.65	18.19	29.60
2001	59.17	34.76	47.10
2011	71.70	54.4	63.1

Gross Enrolment Ratio (GER)

Table-4⁶

Classes	ST (Boys)	ST (Girls)
Classes I – V (6 - 10 Years)	137.2	136.7
Classes VI - VIII (11 - 13 Years)	90.7	87
Classes IX – X (14 - 15 Years)	57.1	49.1
Classes XI – XII (16 - 17 Years)	32.7	24.8
Classes I - XII (6 - 17 Years)	96.8	92.8

Source-Statistics of School Children, 2010-2011

Gender Parity Index reflects the enrolment of girls in school in comparison to boys. The index for ST children is almost same as all categories of children except for class XI to XII. (Table-5)

Gender Parity Index in Education

Table-5

Class	ST	All
Classes I - V	1.00	1.01
Classes VI - VIII	0.96	0.95
Classes IX - X	0.86	0.88
Classes XI - XII	0.76	0.86
Classes IX - XII	0.82	0.87
Classes I - XII	0.96	0.96

The dropout rate of ST children is higher as compared to all children in India. (Table-6).

Class	ST(Boys)	All(Boys)	ST(Girls)	All(Girls)
Classes I - V	37.2	28.7	33.9	25.1
Classes I - VIII	54.7	40.3	55.4	41.0
Classes I - X	70.6	50.4	71.3	47.9

⁵ Source: National Commission for SCs & STs, Fifth Report & Census, 2011

⁶ Source- Statistics of School Children, 2010-2011

Problems of Tribal Education

There are many critical issues and problems in the field of tribal education. They are as follows:

- I. **Medium of language** – Language is one of the important constraints of tribal children which prevents them access to education.
- II. **The Location of the Village** - The physical barriers creates a hindrance for the children of a tribal village to attend the school in a neighboring village.
- III. **Economic Condition** - The economic condition of tribal people is so poor that they do not desire to spare their children or their labour power and allow them to attend schools.
- IV. **Attitude of the parents** - As education does not yield any immediate economic return, the tribal parents prefer to engage their children in remunerative employment which supplements the family income.
- V. **Teacher Related Problems** -In the remote tribal areas the teacher absenteeism is a regular phenomenon and this affects largely the quality of education.
- VI. **Lack of Proper monitoring**- Proper monitoring is hindered by poor coordination between the Tribal Welfare Department and School Education Department.

Government Policies and Programmes for Tribal Education

Starting from the First Five Year Plan Period (1951-1956) the government is steadily allocating financial resources for the purpose of tribal development. Towards the end of the plan (1954), 43 Special Multipurpose Tribal Development Projects (MTDPs) were created. During the Third Five Year Plan Period (1961-1966), the government of India adopted the strategy of converting areas with more than 66 per cent tribal concentration into Tribal Development Blocks (TBDs). By the end of Fourth Five Year Plan (1969-1974), the number of TBDs in the country rose to 504. Additionally, in 1972 the Tribal Sub-Plan Strategy (TSP) was implemented by the Ministry of Education and Social Welfare. TSP was based on twin objectives of socio-economic development and protection against exploitation. It was generally implemented in the areas where the Scheduled Tribe population was more than 50 per cent of the total population.

Suggestions

Some suggestions for improvement of tribal education are as follows-

- a) **Literacy campaign** - Proper awareness campaign should be organized to create the awareness about the importance of education. Extensive literacy campaign in the tribal dominated districts may be undertaken on a priority basis to literate the tribal.
- b) **Attitude of the tribal parents** - The attitude of the tribal parents toward education should be improved through proper counseling and guidance.
- c) **Relevant study materials in local languages** - All study materials should be supplied in local languages of tribes.
- d) **Appointment of Local teachers and female teachers** - It is suggested to appoint more tribal teachers and female teachers in the tribal areas. The ecological, cultural, psychological characteristics of tribal children should be considered carefully by the teachers in tribal areas.
- e) **Stipends and various scholarships** - Since higher education among the tribes is less, special ST scholarships should be provided to the tribal students pursuing higher education, particularly in medical, engineering, and other vocational streams.
- f) **Residential schools** - More residential schools should be established in each states and districts and extended up to PG level in tribal areas.
- g) **Social security**- Social security of students, especially of adolescent girls is of great concern in residential schools.
- h) **Proper Monitoring** - Higher level officials should check the functioning of schools frequently relating to the teaching methods, working hours, and attendance registers.

Conclusion

Education is the key to tribal development. Tribal children have very low levels of participation. Though the development of the tribes is taking place in India, but the pace of development has been rather slow. If govt. will not take some drastic steps for the development of tribal education, the status of education among tribes will be a story of distress, despair and death. Hence time has come to think to it seriously about tribal education and inclusive growth improvement with the help of science and research. So, there is an urgent need for various govt. interventions, planners and policy makers to address this problem and allocate more funds in the central and state budgets for establishment of science and research institutions to help tribal education. Easy access and more opportunities should be provided to the tribal children in order to bring them to the mainstream of economic development.

References

- [1] Abdulraheem, A. (2011) Education for the Economically and Socially Disadvantaged Groups in India: An Assessment Economic Affairs Vol. 56 No. 2 June 2011 (Page 233-242)
- [2] Jha, J., Jhingran, D. (2002), Elementary Education for the Poorest and Other Deprived Groups, Centre for Policy Research. New Delhi.
- [3] Lal, M. (2005), Education-The Inclusive Growth Strategy for the economically and socially disadvantaged in the Society
- [4] Nair, P.(2007), "Whose Public Action? Analyzing Inter-sectoral Collaboration for Service Delivery: Identification of Programmes for Study in India."International Development Department, Economic and Social Research Council.February.
- [5] Sedwal, M. &Sangeeta, K.(2008) Education and Social Equity with special focus on Scheduled Castes and Scheduled Tribes in Elementary Education,NUEPA, New Delhi
- [6] Sujatha, K. (2002) Education among Scheduled Tribes. In Govinda, R. (ed.), India Education Report: A Profile of Basic Education. New Delhi: Oxford University Press.

