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HUMAN RESOURCE DEVELOPMENT PERSPECTIVES ON THE ROLE OF PRIMARY EDUCATION INSTITUTES: INDICES BASED APPROACH

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Abstract:

Human development is primary for the development of a society. Education and employability are the basis on which human resource development (HRD) can be achieved. With the aim to study the impact of primary education on human resource development the present work explores the education quality indices. HRD in the modern concept encompasses physical, intellectual, psychological, social, political, moral and spiritual development. In this paper some of the relevant HRD indices pertaining to the primary education sector, which are helpful to the educationists, researchers, planners and administrators for assessing the development of a region and how much is the contribution of primary education to the human development. The important indices that need to be looked into are enrolment rates, availability of teachers and proper infrastructure. The adult literacy rate will be automatically high once the inputs are improved.

Keywords: HRD indices, primary education, human development.

I. Introduction

To assess the growth of a nation, the growth of the human resources in terms of education, living conditions, food and shelter, job opportunities etc. need to be assessed. Though the Gross Domestic Product is used to measure the growth of a nation, which encompasses all the criteria required to assess the human objectives, still it is necessary to measure how the growth impacts on the human development of a nation across the various societies. Human Resource Development (HRD) means the development of the knowledge, skills, capacities and the standard of living of the people. The important aspect of HRD is education. If the population is not imparted appropriate knowledge and technical skills, then they would not be able to contribute to the growth of a nation. The result will be economic and social backwardness which will cripple a country. The scope of HRD, according to Rao (1995) is two pronged. One, points to development of competencies of human resource through knowledge, skill building, modifying teaching values, and the other points to the creation of conditions through public policy, programs and other interventions to help people to apply these competencies for their own and others' benefits and making things happen.

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Primary education is of utmost importance for the development of an economy and society. Studies reveal that investment in elementary education increases the productivity in all sectors of economy than other levels of education and that the return on investment (ROI) in elementary education is greater than those in other levels of schooling (Christopher, 1980). Recognizing the importance, the Sarva Shikshya Abhiyan (SSA) was started by the Government of India and the State governments. This has promoted decentralized planning of education by focusing on district level planning. The aim being to achieve universal elementary education by 2010. A phenomenal growth in education at the elementary level, under SSA has been witnessed (Bhunia et al., 2012).

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Measurement of National development not only should be based on per capita income but also on the achievements in the health and education sector. In 1990, United Nation Development Programme (UNDP) released the first Human Development Report, which opened up new measures of development which was not solely based on per capita income. A framework was provided in that report for measuring performance of human development through Human Development Index (HDI) (Sagar and Najam, 1998). HDI has a three dimensional approach viz. i) long and healthy life measured by life expectancy at birth, ii) knowledge acquisition measured by years of schooling and iii) standard of living measured by national per capita income.

Many of the government funded schools in India, suffer from administrative lacunae and inadequacy of resources. To enhance the education system and to improve the quality of education, several steps have been taken. These include recruitment of qualified teachers, providing free books to the students belonging to economically backward section, fee waivers, providing mid-day meal etc. For gauging the effectiveness of these programs, timely availability of quality information is needed. This paper attempts to provide the relevant indicators needed for policy making for assessment of the impact of the progressive steps taken for the growth of education system in a nation. The purpose is to integrate the results in policy formulation with the objective of human development.

II. Indices and their significance

Indicators are used to measure and monitor the results, forecast the trends and analyse changes, etc. The purpose of indicators is to serve as yardstick to measure how the variables involved are related to each other and to observe the change in them. This information can be used to compare against a standard or benchmark to assess the progress towards an objective (Shavelson et al., 1991).

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Educational indicators reflect the important aspects of education system. They take into account various factors such as, education input, participation in education, efficiency and outcomes in education. These indicators consider different variables with their measurements (Narayana, 2006). Education indicators can be classified as inputs that cause a response on the beneficiaries to achieve the output for the overall outcome (Rob, 1996) (Table 1). Input indicators is the expenditure incurred on the students, like the buildings, teachers etc. Participation indicators is the beneficiaries which is measured by the gross enrolment ratio. Access indicators are the factors that determine the use of the services i.e., the distance of the school from the place where villages are located, school, the annual income of the household, etc. Efficiency is measured as percentage of repeaters to the total enrolment of students. The outcome is measured by adult literacy rate which is percentage of male and female literacy.

Table 1. Classification of education indicators on the basis of their characteristics

Characteristic	Description	Indicator options
Input	The cost incurred per student, i.e.	Pupil teacher ratio
	that is the resources employed to	Primary schools with buildings
	achieve the objective.	Classrooms per school (primary)
		Primary schools having toilet facilities
		Primary schools having drinking water
		facilities
		Number of teachers (primary education)
		Trained primary school teachers
Participation	The ultimate users of the	Enrolment in pre-primary education
	services. This refers to the target	institutions
	population who are enrolled in	Gross Enrolment Ratio for Age Groups 3-
	school.	5 Years
		Gross enrolment rate (primary education)
		Net enrolment rate (NER)
Access	The factors responsible for the	Villages without the pre-primary
	use of the input. The accessibility	education facility
	of the schools by the target	Habitations having Primary Schooling
	population.	Facilities within 1 km
		Number of primary schools
Output	This measures the achievement	Adult literacy rate
	of the objective.	

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The indicators are described as under:

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1. Adult literacy rate:

Literacy is an individual's capability for intellectual enhancement thus contributing to the society's socio economic and cultural growth. Adult literacy represents the population over 15 years who can read and write. Adult literacy rate reflects the success of primary education and adult literacy programmes in imparting reading and writing skills to the people.

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2. Villages without the pre primary education facility:

This indicator considers children in the age group of 3-5 years. This indicates the success or failure of the education programmes in providing primary education to young children. This indicator takes into consideration the gross enrolment in early childhood care programmes.

3. Enrolment in pre primary education institutions:

This indicator measures the growth in the enrolment. It also covers the enrolment in early childhood care and education (ECCE) programs.

4. Gross Enrolment Ratio For Age Groups 3-5 Years:

This indicator measures the participation of children within 3-5 years in ECCE. It indicates the success of the state's efforts in preparing children for primary education.

5. Habitations having Primary Schooling Facilities within 1 km:

It is expressed as percentage of habitations having primary school within a distance prescribed (1 km) to the total population.

6. Number of primary schools:

Educational institutions which impart education upto Grade V qualify as Primary schools. These institutions have to be accredited to or sanctioned by some public authority. A recognized school follows course (s) of study prescribed by government. The entry age is 5 to 6 years and the level is for 5 years of full time schooling.

7. Primary schools with buildings:

People get attracted to schools with proper infrastructure. They are prompted to send their children to these type of schools. Such institutions are able to retain the students in the system.

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8. Classrooms per school (primary):

The number of classrooms allotted per primary school gives information regarding the infrastructural facilities.

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9. Primary schools having toilet facilities:

Toilet in a school is part of the infrastructural facilities. Presence or absence of toilets have a immense effect on the enrolment in the school. Hence this aspect should be given due importance.

10. Primary schools having drinking water facilities:

Drinking water facility in a school has great impact on the enrolment in the school. This is a basic need which should be given utmost importance, since parents will be unwilling to send their children to a school which does not have drinking water facility.

11. Gross enrolment rate (primary education):

The GER presents the general level of participation and capacity of primary education. It is expressed as enrolment in primary education (I-V) regardless of age as percentage of eligible official school-age (6-11 years) population corresponding to the same level of education in a given school-year.

12. Net enrolment rate (NER):

It gives a more accurate measurement of the participation of children in primary education in the official school age. NER calculation takes total enrolment in all types of primary schools- public, private and other institutions providing organized educational programmes at the primary level.

13. Number of teachers (primary education):

The number of teachers teaching primary classes measures the human resource aspect. This indicator is linked to pupil teacher ratio and trained teacher.

14. Trained primary school teachers:

The number of trained teachers is expressed as a percentage of the total teachers in primary education. The primary school teachers who are certified to have been trained in teaching primary education, can more efficiently use the instructional materials and teach effectively. This also implies

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how much the state is committed in investing in the development of the human resources involved in teaching activities. A trained teacher can contribute more effectively in inculcating learning skills and developing the scholastic capabilities of the students.

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15. Pupil teacher ratio:

Teachers are those persons possessing professional capabilities to impart knowledge and skills to the students within a defined curriculum. This indicator is used to assess the human resource input to the size of the pupil population.

III. Discussion:

Depending on the type of policy decisions, the information requirement, the indicators' relevance can be only determined upon. The Department of Educational Management Information System, National University of Educational Planning and Administration (NUEPA) has suggested the grouping of indicators into four groups – Access, infrastructure, Teachers' and Outcome which would aid in assessment of situation in a particular state or district.

Lately educational indicators have been used to assess the competitiveness of countries on global platform. In addition to the adult literacy, the enrolment ratio of primary and secondary level schools, average years of schooling have been used as some of the important indicators, as human development is the foundation of international competitiveness of a country. For assessing human development, the participation indicators and outcome indicators are of importance, since these indicators imply the goals and targets set for primary and secondary education, for the purpose of economic and human development. The Karnataka Government's Department of Primary and Secondary Education has included some indicators of education input, participation, efficiency and outcome in the Departmental Medium Term Fiscal Plan, the objectives being enhancement of literacy rates and reduction in gender disparities in enrolment in education. For human development the literacy and enrolment indicators are utmost important, as an educated society is the foundation for economic development of a nation (Narayana, 2006).

Studies have been conducted on infrastructural availability in the education system, which indicate that availability of infrastructure viz. toilets, electricity, library etc. has an immense positive effect on the learning environment (Bhunia et al., 2012). Sarva Sikshya Abhiyan (SSA) initiated by Government of India to increase infrastructure up to elementary level for raising the literacy rate has

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not been much effective. The distribution of infrastructure facilities is not even in all places. Some are having good facilities while some do not. Reasons may be socio economic barrier, political problem and low accessibility of the area. Geoinformatics technology is suggested for assessing the infrastructure development requirement, so that the decision makers can formulate plans for infrastructure development for the success of SSA mission (Bhunia et al., 2012).

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Sebake et al. (2007) have found out that indicators are necessary to measure the impact of availability of infrastructure on quality of education. They recommended that to improve the performance of infrastructure, a policy on physical infrastructure has to be developed. Norms and standards have to be set and performance indicators and tools have to be developed to help the schools and the districts they function in planning, designing and management of the concerned school.

The Gender disparity studies conducted on Haryana state reveal that the Gross Enrolment Ratio (GER) in the age group of 6 to 11 years is less than the ratio of India as a whole and its neighbouring states. The GER of girls is more than the boys in all age groups in Haryana. This indicates that the government schemes on achieving universal elementary education is unsuccessful. To make it successful, information on schemes for free education and importance of education should be spread amongst the masses more aggressively (Gakhar and Kour, 2012).

There is a close relationship between economic growth and primary education. This has been recognized by Bangladesh government and steps have been taken to improve primary education in the country. The enrolment rates of students in pre-primary and primary levels is 97.3%, while the rate is much lower than other countries of South Asia. The country has also been able to reduce gender parity in education. The dropout rate is reduced to 19 % and the retention rate in classes has increased. (Shihab Rezwan, 2018).

The pupil teacher ratio in primary schools is the ratio of number of pupils in primary schools to the number of teachers in primary school. Large class size is not effective for a teacher to impart knowledge. Therefore the pupil to teacher ratio should be less for a teacher to be more effective in the class. The teacher student ratio and academic performance has an important effect on students. The quality of education is dependent on factors like quality of teachers, years of experience of teachers, quality of infrastructure and instructional materials (Idowu and Akinyele, 2014).

The pupil teacher ratio (PTR) is alarming in many developing countries. This is due to the fact that teachers are less in comparison to students enrolled. This causes low efficiency in teachers

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which is the reason for poor quality education in most of the developing countries (Waita, 2015). They have suggested in their study that the impact of PTR is manifested not only on pupil's better performance but also on improving discipline and enhancing teachers' motivation. Michaelowa (2001) concluded that smaller class size manifested in better academic performance of students.

IV. Conclusion

A country's economic and social development is dependent on the root factor "the education". Education results in human resource development vis a vis employability. Employable mass can bring about increase in the GDP of a country which in turn results in the progress of a nation. Hence many developing and underdeveloped countries are focusing on improving the quality of education at the primary and the pre-primary school level. The approach should be a holistic one and should have a far reaching effect. Hence, policy has to be laid out and implementation of the policy should be well planned. For determining the policy, education quality improvement indicators are required which help in deciding which areas need more attention and should be given utmost priority. The indices that are most important are those relating to the enrolment ratios, availability of teachers and adequate infrastructure. If these indices are improved then consequently the adult literacy rate will be high. The education quality indices help in determining the areas which require more attention for improvement and to remove the bottlenecks that are hindrances to the achievement of objective of education for all. The paper tries to focus on those indicators which come handy for the policy makers in planning, implementing and monitoring the schemes meant for promoting literacy and providing quality education.

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