

Journal of  
**Educational Planning and  
Administration**

Volume XVI

Number 3

July 2002

© NIEPA



**National Institute of Educational  
Planning and Administration**

17-B, Sri Aurobindo Marg

New Delhi 110016

ISSN 0971-3859

© NATIONAL INSTITUTE OF EDUCATIONAL PLANNING AND ADMINISTRATION. 2002

<b>Annual Subscription</b>		
	<b><i>Within India</i></b>	<b><i>Outside India</i></b>
Individuals	Rs. 120	US\$50
Institutions	Rs. 250	US\$75 (Airmail extra US \$ 10)
<b>Single Issue</b>		
Individuals	Rs. 40	US \$ 15
Institutions	Rs. 75	US \$20
Annual Subscription commences with January and ends with October every year.		
<b>Advertisement Tariff (For one issue)</b>		
Full Page	Rs. 2000	US \$ 100
Half Page	Rs. 1100	US \$ 55
Bank draft may be sent to the Director, NIEPA in the name of the <i>National Institute of Educational Planning and Administration</i> payable at <i>New Delhi</i>		

Published by the Registrar, National Institute of Educational Planning and Administration, 17-B, Sri Aurobindo Marg, New Delhi-1 10016 and printed by the Publication Unit, NIEPA at M/s. Prabhat Offset Press, 2622, Kucha Chellan, Darya Ganj, New Delhi- 1 10002.

**JOURNAL OF EDUCATIONAL PLANNING AND ADMINISTRATION**  
**Vol. XVI No. 3 (July 2002)**

**CONTENTS**

**ARTICLES**

Global Dangers: Comparing Neo-Liberal Projects and Inequality  
in Education 313  
*Michael W. Apple*

India's Literacy Panorama 333  
*Mahendra K. Premi*

Globalisation and Educational Attainment - The Indian  
Experience 351  
*K.C. Redely, K. Neelaveni and U.N. Moorthy*

**RESEARCH NOTES/COMMUNICATIONS**

Elementary Education, Poverty and Gender Differentials in  
North-East India: Some Issues 375  
*Nirankar Srivastav and Amaresh Dubey*

Gender Discrimination: A Hurdle in Primary Education 399  
*Shilpi and Suniti Sanwal*

Modern Technology Adoption Under Varying Levels of  
Education - A Micro-level Analysis 411  
*R.K. Panda*

**BOOK REVIEWS (See overleaf)**

## BOOK REVIEWS

- Dynamic Role of Adult Education: Marching Towards A Learning Society (M.V. Lakshmi Reddy) 419  
*M. C. Reddeppa Reddy*
- Education Studies (Steve Bartlett, Diana Burton and Nick Peim) 422  
*R.P. Singh*
- Hidden Challenges to Education Systems in Transition Economies (Sue E. Berryman) 424  
*Sudhanshu Bhushan*
- Operation Blackboard: Policy Implementation in Indian Elementary Education (Caroline Dyer) 427  
*P. Geetha Rani*
- Parent, Student and Teacher Collaboraion - The Power of Three (Peter Coleman) 429  
*Sushila Singhal*
- Improving School Effectiveness: Fundamentals of Educational Planning (Jaap Scheerens) 433  
*K. Pushpanadham and Anjali Khii-wadkar*
- Globalization, Growth and Marginalization (A.S. Bhalla (ed.)) 435  
*Pradeep KumarMchta*
- The University Autonomy in India: The Idea and the Reality (Bhim S. Dahiya) 438  
*S.M.I.A. Zaidi*
- Decentralizing Education in Transition Societies: Case Studies from Central and Eastern Europe (Ariel Fiszbein) 444  
*A.R. Vasavi*
- Asian Higher Education: An International Handbook and Reference Guide (Gerrard A. Postiglione and C.L. Mak Grace (eds.)) 445  
*Jandhyala B. G. Tilak*

## Global Dangers: Comparing Neo-Liberal Projects and Inequality in Education

Michael W. Apple\*

### Abstract

*This article pays particular attention to some of the most important dynamics surrounding globalization in education, \*the increasingly powerful discourses and policies of neo-liberalism concerning privatization, marketization, performativity and the "enterprising individual." While demonstrating the truly international effects of neo-liberal policies\*and the differential realities they tend to produce in real schools, it also suggests that we cannot simply read off the effects of these policies in the abstract. Their uses and effects are historically contingent. They are at least partly dependent on the balance of forces in each nation and on the histories of the ways progressive tendencies have already been instituted within the state. Yet, it also suggests that any analysis of these discourses and policies must critically examine their class and race and gender effects at the level of those who benefit from their specific institutionalizations and from their contradictory functions within real terrains of social power, especially at the level of practices and policies of education.*

### Introduction

The August 2000 issue of *Comparative Education* was devoted to the issues surrounding "Comparative Education for the Twenty-first Century." The issue was thoughtful and raised a number of important questions that deserve even more thoughtful and critical responses. Among the questions that Angela Little asked in her own contribution to the special issue were: "How will differential access to education provision and quality lead to the further marginalisation of young people?...How will different forms of education serve to legitimate and reproduce social and economic stratification?" (Little, 2000, pp. 292-293). These are questions that are not limited by geographic borders. "It is now increasingly difficult to understand education in any context without reference to the global forces that influence policy and practice" (Crossley, 2000, p. 324). In

John Bascom Professor of Curriculum and Instruction and Educational Policy Studies,  
University of Wisconsin-Madison, 225 N. Mills Street, Madison, WI 53706, USA.  
Email: [apple@education.wisc.edu](mailto:apple@education.wisc.edu); Phone: 608-263-4592, Fax: 608-263-9992

this article, the focus is on one particular set of global tendencies and on analysis of the ways in which it may engage in the legitimation and reproduction that Little asks us to pay attention to.

We are living in a period of crisis, which has affected all of our economic, political and cultural institutions. But one institution, that has been at the centre of the crisis and that struggles to overcome it, is the school. According to neo-liberals only by turning our schools, teachers and children over to the competitive market will yield a solution while as to neo-conservatives, the only way out is to return to "real knowledge." Popular knowledge, knowledge that is connected to and organized around the lives of the most disadvantaged members of our communities, is not legitimate.

While working in Brazil, I remember Paulo Freire repeatedly telling me that education must begin in critical dialogue. Both of these last two words were crucial to him. Education both must hold our dominant institutions in education and the larger society up to rigorous questioning and at the same time this questioning must deeply involve those who benefit least from the ways these institutions now function. Both conditions were necessary, since the first without the second was simply insufficient to the task of creating a critically democratic education.

Of course, many committed educators already know that the transformation of educational policies and practices—or the defense of democratic gains in our schools and communities—is inherently political. However, the mere fact that people recognize the connections between, say, education and differential power, doesn't guarantee that acting on such knowledge inevitably leads to progressive transformations. There are *multiple* actors on the social field of power in which the means and ends of education are contested. It is exactly the differential relations of power that are currently moving education in particular directions in a number of nations that is the concern in this article.

### **Right Turn**

In his influential history of curriculum debates, Herbert Kliebard has documented that educational issues have consistently involved major conflicts and compromises among groups with competing visions of "legitimate" knowledge, what counts as "good" teaching and learning, and what is a "just" society (Kliebard, 1995). That such conflicts have deep roots in conflicting views of racial, class and gender justice in education and the larger society is ratified in even more critical recent work as well (Rury and Mirel, 1997; Teitelbaum, 1996; Selden, 1999). These competing visions have never had equal holds on the imagination of educators or the general citizenry nor have they ever had equal power to effect their visions. Because of this, no analysis of education can be fully serious without placing at its very core a sensitivity to the ongoing struggles that constantly shape the terrain on which education operates.

Today is no different than in the past. In a number of countries, a "new" set of compromises, a new alliance and new power bloc has been formed that has increasing influence in education and all things social (Apple, 1996; 2000; 2001). This power bloc combines multiple fractions of capital who are committed to neo-liberal marketized solutions to educational problems, neo-conservative intellectuals who want a "return" to higher standards and a "common culture," authoritarian populist religious conservatives who are deeply worried about secularity and the preservation of their own traditions, and particular fractions of the professionally and managerially oriented new middle class who are committed to the ideology and techniques of accountability, measurement and the "new managerialism." While there are clear tensions and conflicts within this alliance, in general, its overall aims are in providing the educational conditions believed necessary both for increasing international competitiveness, profit and discipline and for returning us to a romanticized past of the "ideal" home, family and school.

In essence, the new alliance has integrated education into a wider set of ideological commitments. The objectives in education are the same as those which guide its economic and social welfare goals. They include the dramatic expansion of that eloquent fiction, the free market; the drastic reduction of government responsibility for social needs; the reinforcement of intensely competitive structures of mobility both inside and outside the school; the lowering of people's expectations for economic security; the "disciplining" of culture and the body; and the popularization of what is clearly a form of Social Darwinist thinking, as the recent popularity of *The Bell Curve* (Herrnstein and Murray, 1994) in the United States and elsewhere so obviously and distressingly indicates.

The seemingly contradictory discourse of competition, markets and choice, on the one hand, and accountability, performance objectives, standards, national testing and national curriculum, on the other, has created such a din that it is hard to hear anything else. Even though these seem to embody different tendencies, they actually oddly reinforce each other and help cement conservative educational positions into our daily lives.

While lamentable, the changes, that are occurring, present an exceptional opportunity for serious critical reflection. In a time of radical social and educational change, it is crucial to document the processes and effects of the various and sometimes contradictory elements of what might best be called "conservative modernization" (Dale, 1989/90; Apple, 2001) and of the ways in which they are mediated, compromised with, accepted, used in different ways by different groups for their own purposes, and/or struggled over in the policies and practices of people's daily educational lives (Ranson, 1995, p. 427). This paper gives a more detailed sense of how this might be happening in current "reforms" such as marketization. For those interested in international movements that

support critical educational policies and practices, not to do this means that we act without understanding the shifting relations of power that are constructing and reconstructing the social field of power. While Gramsci's saying, "Pessimism of the intellect, optimism of the will" has a powerful resonance to it and is useful for mobilization and for not losing hope, it would be foolish to substitute rhetorical slogans for the fuller analysis that is undoubtedly required if we are to be successful.

### **New Markets, Old Traditions**

Historically, in a number of "western" countries, behind a good deal of the New Right's emerging discursive ensemble was a position that emphasized "a culturalist construction of the nation as a (threatened) haven for white (Christian) traditions and values" (Gillborn, 1997a, p. 2). This involved the construction of an imagined national past that is at least partly mythologised, and then employing it to castigate the present. Gary McCulloch argues that the nature of the historical images of schooling has changed. Dominant imagery of education as being "safe, domesticated and progressive" (that is, as leading toward progress and social/personal improvement) has shifted to become "threatening, estranged and regressive" (McCulloch, 1997, p. 80). The past is no longer the source of stability, but a mark of failure, disappointment and loss. This is seen most vividly in the attacks on the "progressive orthodoxy" that supposedly now reigns supreme in classrooms in many nations (Hirsch, 1996; Ravitch, 2000).

For example, in England—though much the same is echoed in the United States, Australia and elsewhere—Michael Jones, the political editor of *The Sunday Times*, recalls the primary school of his day.

*Primary school was a happy time for me. About 40 of us sat at fixed wooden desks with ink wells and moved from them only with grudging permission. Teacher sat in a higher desk in front of us and moved only to the blackboard. She smelted of scent and inspired awe (quoted in McCulloch. 1997, p. 78).*

The mix of metaphors invoking discipline, scent (visceral and almost "natural"), and awe is fascinating. But he goes on, lamenting the past 30 years of "reform" that transformed primary schools. Speaking of his own children's experience, Jones says:

*My children spent their primary years in a showplace school where they were allowed to wander around at will, develop their real individuality and dodge the 3R\ It was all for the best, we were assured. But it was not (ibid).*

For Jones, the "dogmatic orthodoxy" of progressive education "had led directly to educational and social decline." Only the rightist reforms instituted in the



1980s and 1990s could halt and then reverse this decline (ibid). Only then could the imagined past return.

Much the same is being said on the US side of the Atlantic. These sentiments are echoed in the public pronouncements of such figures as William Bennett (1988), E.D. Hirsch, Jr. (1996), Diane Ravitch (2000) and others, all of whom seem to believe that progressivism is now in the dominant position in educational policy and practice and has destroyed a valued past. All of them believe that only by tightening control over curriculum and teaching (and students, of course), restoring "our" lost traditions, making education more disciplined and competitive as they are certain it was in the past-only then can we have effective schools.' These figures are joined by others who have similar criticisms, but who instead turn to a different past for a different future. Their past is less that of scent and awe and authority, but one of market "freedom." For them, nothing can be accomplished - even the restoration of awe and authority - without setting the market loose on schools so as to ensure that only "good" ones survive.

We should understand that these policies are radical transformations. If they had come from the other side of the political spectrum, they would have been ridiculed in many ways, given the ideological tendencies in our nations. Further, not only are these policies based on a romanticized pastoral past, these reforms have not been notable for their grounding in research findings. Indeed, when research has been used, it has often either served as a rhetoric of justification for preconceived beliefs about the supposed efficacy of markets or regimes of tight accountability or they have been based - as in the case of Chubb and Moe's much publicized work on marketization - on quite flawed research (Chubb and Moe, 1990; Whitty, 1997).

Yet, no matter how radical some of these proposed "reforms" are and no matter how weak the empirical basis of their support, they have now redefined the terrain of debate of all things educational. After years of conservative attacks and mobilizations, it has become clear that "ideas that were once deemed fanciful, unworkable or just plain extreme" are now increasingly being seen as common-sense (Gillborn, 1997b, p. 357).

Tactically, the reconstruction of common sense that has been accomplished has proven to be extremely effective. For example, there are clear discursive strategies being employed here, ones that are characterized by "plain speaking" and speaking in a language that "everyone can understand." (I do not wish to be wholly negative about this. The importance of these things is something many "progressive" educators, including many writers in critical pedagogy, have yet to understand (see Apple, 1988; 1999). These strategies also involve not only presenting one's own position as "common-sense," but also usually tacitly

**For alternatives to these policies that demonstrate the practicality of more critical and democratic possibilities, see Apple and Beane (1995 and 1999).**

implying that there is something of a conspiracy among one's opponents to deny the truth or to say only that which is -'fashionable' (Gillborn, 1997b, p. 353 and 1997b) notes,

*This is a powerful technique. First, it assumes that there are no genuine arguments against the chosen position; any opposing views are thereby positioned as false, insincere or self-serving. Second, the technique presents the speaker as someone brave or honest enough to speak the (previously) unspeakable. Hence, the moral high ground is assumed and opponents are further denigrated (p. 353)*

It is hard to miss these characteristics in some of the conservative literature such as Herrnstein and Murray's publicizing of the unthinkable "truth" about genetics and intelligence (Herrnstein and Murray, 1994) or E.D. Hirsch's and Diane Ravitch's latest "tough" discussion of the destruction of "serious" schooling by progressive educators in the United States (Hirsch, 1996; Ravitch, 2000).<sup>2</sup> Similar claims can easily be found elsewhere as well.

### **Markets and Performance**

Let us take as an example of the ways in which all this operates on element of conservative modernization - the neo-liberal claim that the invisible hand of the market will inexorably lead to better schools. As Roger Dale reminds us, "the market" acts as a metaphor rather than an explicit guide for action. It is not denotative, but connotative. It must itself be "marketed" to those who will exist in it and live with its effects (quoted in Menter, *et al.*, 1997, p. 27). Markets are marketed, are made legitimate, by a de-politicizing strategy. They are said to be natural and neutral, and governed by effort and merit. And those opposed to them are by definition, hence, also opposed to effort and merit. Markets, as well, are supposedly less subject to political interference and the weight of bureaucratic procedures. Plus, they are grounded in the rational choices of individual actors. Thus, markets and the guarantee of rewards for effort and merit are to be coupled together to produce "neutral," yet positive, results (Menter, *et al.*, p. 27). Mechanisms, hence, must be put into place that gives evidence of entrepreneurial efficiency and effectiveness. This coupling of markets and mechanisms for the generation of evidence of performance is exactly what has occurred. Whether it works is open to question. Indeed, in practice, neo-liberal policies involving market "solutions" may actually serve to reproduce - not subvert - traditional hierarchies of class and race. Perhaps this should give us reason to pause?

<sup>2</sup> For a critical analysis of the logic of their claims and of their historical inaccuracy, see Apple (in press).

Thus, rather than taking neo-liberal claims at face value, we should want to ask about their hidden effects that are too often invisible in the rhetoric and metaphors of their proponents. There are a number of issues that have been given less attention than they deserve, but on which there is now significant international research.

The English experience is apposite here, especially since proponents of the market such as Chubb and Moe (1990) rely so heavily on it and because that is where the tendencies analyzed are most advanced. In England, the 1993 Education Act documents the state's commitment to marketization. Until recently, governing bodies of local educational authorities (LEAs) were mandated to formally consider "going GM" (that is, opting out of the local school system's control and entering into the competitive market) every year (Power, Halpin, and Fitz, 1994, p. 27). Thus, the weight of the state stood behind the press towards neo-liberal reforms there. Yet, rather than leading to curriculum responsiveness and diversification, the competitive market has not created much that is different from the traditional models so firmly entrenched in schools today (Power, Halpin, and Fitz, 1994). Nor has it radically altered the relations of inequality that characterize schooling (see Gillborn and Youdell, 2000).

In their own extensive analyses of the effects of marketized reforms "on the ground," Ball and his colleagues point to some of the reasons why we need to be quite cautious here. As they document, in these situations educational principles and values are often compromised such that commercial issues become more important in curriculum design and resource allocation (Ball, Bowe, and Gewirtz, p. 39). For instance, the coupling of markets with the demand for and publication of performance indicators such as "examination league tables" in England has meant that schools are increasingly looking for ways to attract "motivated" parents with "able" children. In this way, schools are able to enhance their relative position in local systems of competition. This represents a subtle, but crucial shift in emphasis - one that is not openly discussed as often as it should be - from student needs to student performance and from what the school does for the student to what the student does for the school. This is also accompanied too uncomfortably often by a shift of resources away from students who are labelled as having special needs or learning difficulties, with some of these needed resources now being shifted to marketing and public relations. "Special needs" students are not only expensive, but deflate test scores on those all important league tables.

Not only does this make it difficult to "manage public impressions," but it also makes it difficult to attract the "best" and most academically talented teachers (Ball, Bowe, and Gewirtz, 1994, pp. 17-19). The entire enterprise does, however, establish a new metric and a new set of goals based on a constant striving to win the market game. What this means is of considerable import, not only in terms of its effects on daily school life but also in the ways all of this

signifies a transformation of what counts as a good society and a responsible citizen. Let me say something about this generally.

As noted earlier, behind all educational proposals are visions of a just society and a good student. The neo-liberal reforms construct this in a particular way. While the defining characteristic of neo-liberalism is largely based on the central tenets of classical liberalism, in particular classic economic liberalism, there are crucial differences between classical liberalism and neo-liberalism. These differences are absolutely essential in understanding the politics of education and the transformations education is currently undergoing. Mark Olssen (1996) clearly details these differences in the following passage. It is worth quoting in its entirety.

*Whereas classical liberalism represents a negative conception of state power in that the individual was to be taken as an object to be freed from the interventions of the state, neo-liberalism has come to represent a positive conception of the state's role in creating the appropriate market by providing the conditions, laws and institutions necessary for its operation. In classical liberalism, the individual is characterized as having an autonomous human nature and can practice freedom. In neo-liberalism the state seeks to create an individual who is an enterprising and competitive entrepreneur. In the classical mode! the theoretical aim of the state was to limit and minimize its role based on postulates which included universal egoism (the self-interested individual); invisible hand theory which dictated that the interests of the individual were also the interests of the society as a whole; and the political maxim of laissez-faire. In the shift from classical liberalism to neo-liberalism, then, there is a further element added, for such a shift involves a change in subject position from -'homo economicus, " who naturally behaves out of self-interest and is relatively detached from the state, to "manipulatable man, " who is created by the state and who is continually encouraged to be -'perpetually responsive. " It is not that the conception of the self-interested subject is replaced or done away with by the new ideals of -neo-liberalism, " but that in an age of universal welfare, the perceived possibilities of slothful indolence create necessities for new forms of vigilance, surveillance, 'performance appraisal" and of forms of control generally. In this model the state has taken it upon itself to keep us all up to the mark. The state will see to it that each one makes a "continual enterprise of ourselves"...in what seems to be a process of "governing without governing. " (p. 340)*

The results of Ball and his colleagues' research document how the state does indeed do this, enhancing that odd combination of marketized individualism and control through constant and comparative public assessment. Widely publicized

league tables determine one's relative value in the educational marketplace. Only those schools with rising performance indicators are worthy. And only those students who can "make a continual enterprise of themselves" can keep such schools going in the "correct" direction. Yet, while these issues are important, they fail to fully illuminate some of the other mechanisms through which *differential* effects are produced by neo-liberal reforms. Here, class issues come to the fore in ways that Ball, Bowe, and Gewirtz make clear.

Middle class parents are clearly the most advantaged in this kind of cultural assemblage, and not only as we saw because schools seek them out. Middle class parents have become quite skilled, in general, in exploiting market mechanisms in education and in bringing their social, economic and cultural capital to bear on them. "Middle class parents are more likely to have the knowledge, skills and contacts to decode and manipulate what are increasingly complex and deregulated systems of choice and recruitment. The more the deregulation, the more the possibility of informal procedures being employed. The middle class also, on the whole, are more able to move their children around the system" (Ball, Bowe, and Gewirtz, 1994, p. 19). Yet, in many nations, class and race intersect and interact in complex ways. Because marketized systems in education often *expressly* have their conscious and unconscious *raison d'être* in a fear of "the Other" and these often are hidden expressions of a racialization of educational policy, the differential results will "naturally" be decidedly raced as well as classed (Omi and Winant, 1994; McCarthy and Crichtlow, 1994; McCarthy, 1998).

Economic and social capital can be converted into cultural capital in various ways. In marketized plans, more affluent parents often have more flexible hours and can visit multiple schools. They have cars—often more than one—and can *afford* driving their children across town to attend a "better" school. They can as well provide the hidden cultural resources such as camps and after school programmes (dance, music, computer classes, etc.) that give their children an "ease," a "style," that seems "natural" and -acts as a set of cultural resources. Their previous stock of social and cultural capital—who they know, their "comfort" in social encounters with educational officials—is an unseen but powerful storehouse of resources. Thus, more affluent parents are more likely to have the informal knowledge and skill—what Bourdieu (1984) would call the *habitus* - to be able to decode and use marketized forms to their own benefit. This sense of what might be called "confidence"— which is itself the result of past choices that tacitly but no less powerfully depend on the economic resources to actually have had the ability to make economic choices - is the unseen capital that underpins their ability to negotiate marketized forms and "work the system" through sets of informal cultural rules (Ball, Bowe, and Gewirtz, 1994, pp. 20–22; see also Bernstein 1990; 1996).

Of course, it needs to be said that working class, poor and/or immigrant parents are not skill-less in this regard, by any means. (After all, it requires an immense amount of skill, courage and social and cultural resources to survive under exploitative and depressing material conditions. Thus, collective bonds, informal networks and contacts, and an ability to work the system are developed in quite nuanced, intelligent, and often impressive ways here [see Fine and Weis, 1998; Duneier, 1999]). However, the match between the historically grounded habitus expected in schools and in its actors and those of more affluent parents, combined with the material resources available to more affluent parents, usually leads to a successful conversion of economic and social capital into cultural capital (Bourdieu, 1996). And this is exactly what is happening in a number of nations (see, e.g., Lauder and Hughes, 1999)

These claims both about what is happening inside of schools and about larger sets of power relations are supported by even more recent synthetic analyses of the overall results of marketized models. This research on the effects of the tense but still effective combination of neo-liberal and neo-conservative policies examines the tendencies internationally by comparing what has happened in a number of nations - for example, the United States, England and Wales, Australia and New Zealand - where this combination has been increasingly powerful. The results confirm the arguments made here. Rehearsing some of the most significant and disturbing findings of such research may help.

It is unfortunately all too usual that the most widely used measures of the "success" of school reforms are the results of standardized achievement tests. This simply will not do. We need to constantly ask what reforms do to schools as a whole and to each of their participants, including teachers, students, administrators, community members, local activists and so on. To take one set of examples, as marketized "self-managing" schools grow in many nations, the role of the school principal is radically transformed. More, not less, power is actually consolidated within an administrative structure. More time and energy is spent on maintaining or enhancing a public image of a "good school" and less time and energy is spent on pedagogic and curricular substance. At the same time, teachers seem to be experiencing not increased autonomy and professionalism, but intensification (Apple, 1988; 2000). And, oddly, as noted before, schools themselves become more *similar*, and more committed to standard, traditional, whole class methods of teaching and a standard and traditional (and often mono-cultural) curriculum (Whitty, Power, and Halpin, 1998, pp.12-13). Only directing our attention to test scores would cause us to miss some truly profound transformations, many of which we may find disquieting.

One of the reasons these broader effects are so often produced is that in all too many countries, neo-liberal visions of quasi-markets are usually accompanied by neo-conservative pressure to regulate content and behaviour through such things as national curricula, national standards and national systems of

assessment. The combination is historically and politically contingent, that is, it is not absolutely necessary that the two emphases are combined. But there are characteristics of neo-liberalism that make it more likely that an emphasis on the weak state and a faith in markets will cohere with an emphasis on the strong state and a commitment to regulating knowledge, values and the body (Apple, 2001).

This is partly the case because of the increasing power of the "evaluative state" and the members of the managerial and professional middle class who tend to populate it. This signifies what initially may seem to be contradictory tendencies. At the same time as the state appears to be devolving power to individuals and autonomous institutions which are themselves increasingly competing in a market, the state remains strong in key areas (Whitty, Power, and Halpin, 1998, p. 36). As claimed earlier, one of the key differences between classical liberalism and its faith in "enterprising individuals" in a market and current forms of neo-liberalism is the latter's commitment to a regulatory state. Neo-liberalism does indeed demand the constant production of evidence that one is in fact "making an enterprise of oneself (Olssen, 1996). Thus, under these conditions not only does education become a marketable commodity like bread and cars in which the values, procedures and metaphors of business dominate, but its results must be reducible to standardized "performance indicators" (Whitty, Power, and Halpin, 1998, pp. 37-38; Clarke and Newman, 1997). Not only is this evidence of "performativity" (Broadfoot, 2000, p. 365), but it is ideally suited to the task of providing a mechanism for the neo-conservative attempts to specify what knowledge, values and behaviours should be standardized and officially defined as "legitimate" (Apple, 2001).

In essence, we are witnessing a process in which the state shifts the blame for the very evident inequalities in access and outcome it has promised to reduce, from itself onto individual schools, parents and children. This is, of course, also part of a larger process in which dominant economic groups shift the blame for the massive and unequal effects of their own misguided decisions from themselves onto the state. The state is then faced with a very real crisis in legitimacy. Given this, we should not be at all surprised that the state will then seek to export this crisis outside itself (Apple, 1995).'

Of course, the state is not only classed, but is inherently *sex/gendered* and *raced* as well (Fraser, 1989; Epstein and Johnson, 1998; Middleton, 1998). Arguments also point to the gendered nature of the ways in which the management of schools is thought about, as "masculinist" business models become increasingly dominant (Whitty, Power, and Halpin, 1998, pp. 60-62; also

<sup>5</sup> In this regard, we might say that this speaks to the failure of some parts of what is called "signalling theory," especially those aspects that assume that the state is necessarily successful in legitimating itself by sending signals of its commitments to, say, equality of opportunity and enhanced educational possibilities for the full range of its citizens. (On signalling theory, see Fuller 1991).

Arnot, David, and Weiner, 1999). While there is a danger of these claims degenerating into reductive and essentializing arguments, there is a good deal of insight here. They do cohere with the work of other scholars inside and outside of education who recognize that the ways in which our very definitions of public and private, of what knowledge is of most worth, and of how institutions should be thought about and run are fully implicated in the gendered nature of this society (Fraser, 1989; 1997). These broad ideological effects - for example, enabling a coalition between neo-liberals and neo-conservatives to be formed, expanding the discourses and practices of new middle class managerialism, the masculinization of theories, policies and management talk - are of considerable import and make it harder to change common-sense in more critical directions.

Other, more proximate, effects inside schools are equally striking. For instance, even though principals seem to have more local power in these supposedly decentralized schools, because of the cementing in of neo-conservative policies, principals "are increasingly forced into a position in which they have to demonstrate performance along centrally prescribed curricula in a context in which they have diminishing control" (Whitty, Power, and Halpin, 1998, p. 63). Because of the intensification mentioned before, both principals and teachers experience considerably heavier work-loads and ever escalating demands for accountability, a never ending schedule of meetings, and in many cases a growing scarcity of resources both emotional and physical (Whitty, Power, and Halpin, 1998, pp. 67-68; Gillbom and Youdell, 2000).

Further, as in the research in England, in nearly all of the countries studied the market did *not* encourage diversity in curriculum, pedagogy, organization, clientele or even image. It instead consistently devalued alternatives and increased the power of dominant models. Of equal significance, in general, it also consistently exacerbated differences in access and outcome based on race, ethnicity and class (Gillbom and Youdell, 2000).

The return to "traditionalism" led to a number of things. It *delegitimated* more critical models of teaching and learning, a point that is crucial to recognize in any attempt to think through the possibilities of cultural struggles and critical pedagogies in schools. It both reintroduced restratification within the school and lessened the possibility that detracking or destreaming would occur. More emphasis was given to "gifted" children and "fast track" classes, while students who were seen as less academically able were, therefore, "less attractive." In England, the extent of this was nowhere more visible than in the alarming rate of students being excluded from schools. Much of this was caused by the intense pressure to constantly demonstrate higher achievement rates. This was especially powerful in marketized contexts in which the "main driving force appeared to be *commercial* rather than *educational*" (Whitty, Power, and Halpin, 1998, p. 80).

A number of analyses of these worrisome and more hidden results demonstrate that among the dangerous effects of quasi-markets are the ways in



which schools that wish to maintain or enhance their market position may engage in "cream-skimming," ensuring that *particular* kinds of students with particular characteristics are accepted and particular kinds of students are found wanting. For some schools, stereotypes were reproduced in that girls were seen a more valuable, as were students from some Asian communities. Afro-Caribbean children were often clear losers in this situation (Whitty, Power, and Halpin, 1998; Gewirtz, Ball, and Bowe, 1995; Gillbom and Youdell, 2000).

So far the focus has largely been on England. Yet, as mentioned in introductory points, these movements are truly global. Their logics have spread rapidly to many nations, with results that tend to mirror those discussed so far. The case of New Zealand is useful here, especially since a large percentage of the population of New Zealand is multi-ethnic and the nation has a history of racial tensions and inequalities. Furthermore, the move toward New Right policies occurred faster there than elsewhere. In essence, New Zealand became the laboratory for many of the policies analyzed. Their exceptional study, based in large part on a conceptual apparatus influenced by Pierre Bourdieu, Lauder and Hughes (1999), documents that educational markets seem to lead to an overall decline in educational standards. Paradoxically, they have a negative, not a positive, effect on the performance of schools with large working class and minority populations. In essence, they "trade off the opportunities of less privileged children to those already privileged" (p. 2). The combination of neo-liberal policies of marketization and the neo-conservative emphasis on "tougher standards" creates an even more dangerous set of conditions. Their analysis confirms the conceptual and empirical arguments of Ball, Brown, and others that markets in education are not only responses by capital to reduce both the sphere of the state and of public control. They are also part of an attempt by the middle class to alter the rules of competition in education in light of the increased insecurities their children face. "By changing the process of selection to schools, middle class parents can raise the stakes in creating stronger mechanisms of exclusion for blue collar and post-colonial peoples in their struggle for equality of opportunity" (Lauder and Hughes, 1999, p. 49; Brown, 1997).

The results from New Zealand not only mirror what was found elsewhere, but demonstrate that the further one's practices follow the logics of action embodied in marketizing principles, the worse the situation tends to get. Markets *systematically* privilege higher SES families through their knowledge and material resources. These are the families who are most likely to exercise choice. Rather than giving large number of students who are working class, poor or of colour the ability to exit, it is largely higher SES families who exit from public schools and schools with mixed populations. In a situation of increased competition, this in turn produces a spiral of decline in which schools populated by poorer students and students of colour are again systematically disadvantaged and schools with higher SES and higher white populations are able to insulate

themselves from the effects of market competition (Lauder and Hughes, 1999, p. 101). "White flight" then enhances the relative status of those schools already advantaged by larger economic forces; schooling for the "Other" becomes even more polarized and continues a downward spiral (Lauder and Hughes, 1999, p. 132).

### **Remembering National Specificities**

Having said this, however, we need to be cautious not to ignore historical specificities and comparative realities. Social movements, existing ideological formations and institutions in civil society and the state may provide some support for countervailing logics. In some cases, in those nations with stronger and more extensive histories of social democratic policies and visions of collective positive freedoms, the neo-liberal emphasis on the market has been significantly mediated. Hence, as Petter Aasen (1998) has demonstrated in Norway and Sweden, for instance, privatizing initiatives in education have had to cope with a greater collective commitment than in, say, the United States, England, and New Zealand. However, these commitments partly rest on class compromises and ethnic similarities. They are weakened when racial dynamics enter in. Thus, for example, the sense of "everyone being the same" and hence being all subject to similar collective sensibilities is challenged by the growth of immigrant populations from Africa, Asia and the Middle East. Greater sympathy for marketized forms may arise once the commonly understood assumptions of what it means to be, say, Norwegian or Swedish are interrupted by populations of colour who now claim the status of national citizenship. For this reason, it may be the case that the collective sensibilities that provide support for less market-oriented policies are based on an unacknowledged *racial contract* that underpins the ideological foundations of a national "imagined community" (Anderson, 1991; Mills, 1997). This, then, may also generate support for neo-conservative policies, not because of neo-liberalism's commitment to "perpetual responsiveness," but rather as a form of cultural restoration, as a way of re-establishing an imagined past when "we were all one."

Because of this, it is important that any analysis of the current play of forces surrounding conservative modernization is aware of the fact that not only are such movements in constant motion, but once again we need to remember that they have a multitude of intersecting and contradictory dynamics including not only class, but race and gender as well (Arnot, David, and Weiner, 1999; Apple 2000). It should go without saying that these dynamics will have their own rhythms and specificities in different nations with different histories of their articulations and interactions. Indeed, how these interact is one of the most important issues of research in comparative education.

Most of the data drawn upon come from schools outside the United States, although they should make us very cautious and give some very serious thought

to whether it is wise to proceed with similar policies in the US and elsewhere. Yet, the United States still sits at the centre of much of the discussion in this literature. For example, charter schools and their equivalents in the U.S. and England are also put under critical scrutiny. In both places, while we need to be careful not to overstate this, they tend to attract parents who live and work in relatively privileged communities. Here too, "it would appear that any new opportunities are being colonized by the already advantaged, rather than the 'losers' identified by Chubb and Moe" (Whitty, Power, and Halpin, 1998, p. 98; Wells, 1999). This is expressly ratified in McNeil's recent study of the ways in which the emphasis on "performativity," on the use of industrial models, on reductive forms of accountability, and on the standardization of curricula and teaching, all systematically reproduce social divisions and actually create new ones in urban schools in the United States (McNeil, 2000).

In sum, then, the overall conclusions are clear. "[In] current circumstances choice is as likely to reinforce hierarchies as to improve educational opportunities and the overall quality of schooling" (Whitty, Power, and Halpin, 1998, p. 14). They put it in their arguments against those who believe that what we are witnessing in the emergence of "choice" programmes is the post-modern celebration of difference:

There is a growing body of empirical evidence that, rather than benefiting the disadvantaged, the emphasis on parental choice and school autonomy is further disadvantaging those least able to compete in the market...For most disadvantaged groups, as opposed to the few individuals who escape from schools at the bottom of the status hierarchy, the new arrangements seem to be just a more sophisticated way of reproducing traditional distinctions between different types of school and the people who attend them. (Whitty, Power, and Halpin 1998 p. 42)

All of this gives us ample reason to support Henig's insightful argument that "the sad irony of the current education-reform movement is that, through over-identification with school-choice proposals rooted in market-based ideas, the healthy impulse to consider radical reforms to address social problems may be channelled into initiatives that further erode the potential for collective deliberation and collective response" (Henig, 1994, p. 222).

This is not to dismiss either the possibility or necessity of school reform. However, we need to take seriously the probability that only by focussing on the exogenous socio-economic features, not simply the organizational features, of "successful" schools can all schools succeed. Eliminating poverty through greater income parity, establishing effective and much more equal health and housing programmes, and positively refusing to continue the hidden and not so hidden politics of racial exclusion and degradation that so clearly still characterize daily

life in many nations (and in which marketized plans need to be seen as partly a structure to avoid the body and culture of "the Other") - only by tackling these issues together can substantive progress be made.

These empirical findings are made more understandable in terms of Pierre Bourdieu's analysis of the relative weight given to cultural capital as part of mobility strategies today (Bourdieu, 1996). The rise in importance of cultural capital infiltrates all institutions in such a way that there is a relative movement away from the *direct* reproduction of class privilege (where power is transmitted largely within families through economic property) to *school-mediated* forms of class privilege. Here, "the bequeathal of privilege is simultaneously effectuated and transfigured by the intercession of educational institutions" (Wacquant, 1996, p. xiii). This is *not* a conspiracy; it is not "conscious" in the ways we normally use that concept. Rather it is the result of a long chain of relatively autonomous connections between differentially accumulated economic, social and cultural capital operating at the level of daily events as we make our respective ways in the world, including as we saw in the world of school choice.

Thus, while not taking an unyieldingly determinist position, Bourdieu (1996) argues that a class habitus tends to reproduce the conditions of its own reproduction "unconsciously." It does this by producing a relatively coherent and systematically *characteristic* set of seemingly natural and unconscious strategies-in essence, ways of understanding and acting on the world that act as forms of cultural capital that can be and are employed to protect and enhance one's status in a social field of power. He aptly compares this similarity of habitus across class actors to handwriting.

*Just as the acquired disposition we call 'handwriting ' that is a particular way of forming letters, always produces the same 'writing' - that is, graphic lines that despite differences in size, matter, and color related to writing surface (sheet of paper or blackboard) and implement (pencil, pen, or chalk), that is despite differences in vehicles for the action, have an immediately recognizable affinity of style or a family resemblance - the practices of a single agent, or, more broadly, the practices of all agents endowed with similar habitus, owe the affinity of style that makes each a metaphor for the others to the fact that they are the products of the implementation in different fields of the same schemata of perception, thought, and action. (Bourdieu. 1996, p. 273).*

This very connection of habitus across fields of power - the ease of bringing one's economic, social and cultural resources to bear on "markets" - enables a comfort between markets and self that characterizes the middle class actor here. This constantly *produces* differential effects. These effects are not neutral, no matter what the advocates of neo-liberalism suggest. Rather, they are themselves

the results of a particular kind of morality. Unlike the conditions of what might best be called "thick morality" where principles of the common good are the ethical basis for adjudicating policies and practices, markets are grounded in aggregative principles. They are constituted out of the sum of individual goods and choices. "Founded on individual and property rights that enable citizens to address problems of interdependence via exchange," they offer a prime example of "thin morality" by generating both hierarchy and division based on competitive individualism (Ball, Bowe, and Gewirtz, 1994, p. 24). And in this competition, the general outline of the winners and losers in the world of conservative modernization *has* been identified empirically.

### Conclusion

This article pays particular attention to some of the most important dynamics surrounding globalization in education—the increasingly powerful discourses and policies of neo-liberalism concerning privatization, marketization, performativity and the "enterprising individual." While seeking to demonstrate the truly international effects of neo-liberal policies - and the differential realities they tend to produce in real schools - it is also suggested that we cannot simply read off the effects of these policies in the abstract. Their uses and effects are historically contingent. They are at least partly dependent on the balance of forces in each nation and on the histories of the ways progressive tendencies have already been instituted within the state. Yet, it is also suggested that any analysis of these discourses and policies must critically examine their class *and* race *and* gender effects at the level of who benefits from their specific institutionalizations and from their contradictory functions within real terrains of social power.

Yet, there is also another agenda here. All too often, analyses of globalization and the intricate combination of neo-liberalism and neo-conservatism remain on a meta-theoretical level, disconnected from the actual lived realities of real schools, teachers, students and communities. While such meta-theoretical work is crucial, its over-use has left a vacancy. At the same time, that progressives develop their theoretical agendas, the forces of conservative modernization predictably fill that vacant space with much more (seemingly) grounded claims about the supposed efficacy of their "solutions" to what they define as "our" educational problems. Unless we speak critically and specifically to their construction of these problems and to the solutions they propose internationally, the fear is that comparative education will slide into irrelevancy - as one more arcane academic specialization that can be ignored as not speaking to the reconstructions we are witnessing all around us. As a reminder one of the most important activities scholars can engage in during this time of economic rationalism and imperial neo-conservatism is to critically analyse the production and circulation of these discourses and their effects on the lives of so many

people in so many nations (Bourdieu 1998, p. 29). We should take this role even more seriously than we had in the past.

#### References

- Aasen, P. (1998) **What Happened to Social Democratic Progressivism in Scandinavia?** Unpublished paper, Department of Education, Norwegian University for Science and Technology, Trondheim, Norway.
- Anderson, B. (1991) *Imagined Communities* (New York, Verso).
- Apple, M.W. (1988) *Teachers and Texts* (New York, Routledge).
- . (1995) *Education and Power*, second edition (New York, Routledge).
- . (1996) *Cultural Politics and Education* (New York, Teachers College Press).
- . (1999) *Power, Meaning and Identity* (New York, Peter Lang).
- . (2000) *Official Knowledge*, second edition (New York, Routledge).
- . (2001) *Educating the "Right" Way: Markets, Standards, God, and Inequality* (New York, Routledge).
- . (in press) *Standards, Subject Matter, and A Romantic Past*, *Educational Policy*.
- Apple, M.W. and Beane, J.A. (Eds) (1995) *Democratic Schools* (Washington, Association for Supervision and Curriculum Development).
- . (Eds) (1999) *Democratic Schools: Lessons From the Chalk Face* (Buckingham, Open University Press).
- Ball, S., Bowe, R., and Gewirtz, S. (1994) **Market Forces and Parental Choice**, in: S. Tomlinson (Ed) *Educational Reform and Its Consequences* (London, IPPR/Rivers Oram Press).
- Bennett, W. (1988) *Our Children and Our Country* (New York, Simon and Schuster).
- Bernstein, B. (1990) *The Structuring of Pedagogic Discourse* (New York, Routledge).
- . (1996) *Pedagogy: Symbolic Control, and Identity* (Bristol, PA, Taylor and Francis).
- Bourdieu, P. (1994) *Distinction* (Cambridge, Harvard University Press).
- . (1996) *The State Nobility* (Stanford, Stanford University Press).
- . (1998) *Acts of Resistance* (Cambridge, Polity Press).
- Broadfoot, P. (2000) **Comparative Education for the 21<sup>st</sup> Century**, *Comparative Education*, 36, pp. 357-371.
- Brown, P. (1997) **Cultural Capital and Social Exclusion**, in: A.H. Halsey, H. Lauder, P. Brown, and A.S. Wells (Eds) *Education: Culture, Economy, and Society* (New York, Oxford University Press).
- Chubb, J. And Moe, T. (1990) *Politics, Markets, and America's Schools* (Washington, Brookings Institution).
- Clarke, J. and Newman, J. (1997) *The Managerial State* (Thousand Oaks, CA, Sage).
- Crossley, M. (2000) **Bridging Cultures and Tradition in the Reconceptualisation of Comparative and International Education**, *Comparative Education*, 36, pp. 319-332.
- Dale, R. (1989/90) **The Thatcherite Project in Education**, *Critical Social Policy*, 9, pp. 4-19.
- Duneier, M. (1999) *Sidewalk* (New York, Farrar, Straus, and Giroux).
- Epstein, D. and Johnson, R. (1998) *Schooling Sexualities* (Philadelphia, Open University Press).
- Fine, M. and Weis, L. (1998) *The Unknown City* (Boston, Beacon Press).
- Fraser, N. (1989) *Unruly Practices* (Minneapolis, University of Minnesota Press).

- . (1997). *Justice Interrupts* (New York, Routledge).
- Fuller, B. (1991) *Growing Up Modern* (New York, Routledge).
- Gewirtz, S., Ball, S., and Bowe, R. (1995) *Markets, Choice, and Equity in Education* (Philadelphia, Open University Press).
- Gillbom, D. (1997a) *Race, Nation, and Education*, unpublished paper, Institute of Education, University of London.
- . (1997b) *Racism and reform*, *British Educational Research Journal*, 23, pp. 345-360.
- . and Youdell, D. (2000) *Rationing Education* (Philadelphia, Open University Press).
- Henig, J. (1994) *Rethinking School Choice* (Princeton, NJ, Princeton University Press).
- Herrnstein, R. and Murray, C. (1994) *The Bell Curve* (New York, Free Press).
- Hirsch, E.D., Jr. (1996) *The Schools We Want and Why We Don't Have Them* (New York, Doubleday).
- Kliebard, H. (1986) *The Struggle for the American Curriculum* (New York, Routledge).
- Little, A. (2000). *Development Studies and Comparative Education*, *Comparative Education*, 36, pp. 279-296.
- Lauder, H. and Hughes, D. (1999) *Trading in Places* (Buckingham, Open University Press).
- McCarthy, C. (1998) *The Uses of Culture* (New York, Routledge).
- McCarthy, C. and Crichlow, W. (Eds) (1994) *Race, Identity, and Representation in Education* (New York, Routledge).
- McCulloch, G. (1997) *Privatizing the Past?* *British Journal of Educational Studies*, 45, pp. 69-82.
- McNeil, L. (2000) *Contradictions of School Reform* (New York, Routledge).
- Menter, I., Muschamp, P., Nicholls, P., Ozga, J., with Pollard, A. (1997) *Work and Identity in the Primary School* (Philadelphia, Open University Press).
- Middleton, S. (1998) *Disciplining Sexualities* (New York, Teachers College Press).
- Mills, C. (1997) *The Racial Contract* (Ithaca, NY, Cornell University Press).
- O'Hear, P. (1994) *An Alternative National Curriculum*, in: S. Tomlinson (Ed) *Educational Reform and Its Consequences* (London, IPPR/Rivers Oram Press).
- Olssen, M. (1996) *In Defence of the Welfare State and Publicly Provided Education*, *Journal of Education Policy*, 11, pp. 337-362.
- Omi, M. And Winant, H. (1994) *Racial Formation in the United States* (New York, Routledge).
- Power, S., Halpin, D., and Fitz, J. (1994) *Underpinning Choice and Diversity?* In: S. Tomlinson (Ed) *Educational Reform and Its Consequences* (London, IPPR/Rivers Oram Press).
- Ranson, S. (1995) *Theorizing Educational Policy*, *Journal of Education Policy*, 10, pp. 427-448.
- Ravitch, D. (2000) *Left Back* (New York, Simon and Schuster).
- Rury, J. and Mirel, J. (1997) *The Political Economy of Urban Education*, in: M.W. Apple (Ed) *Review of Research in Education, Volume 22* (Washington, DC, American Educational Research Association).
- Seddon, T. (1997) *Markets and the English*, *British Journal of Sociology of Education*, 18, pp. 165-185.
- Selden, S. (1999) *Inheriting Shame* (New York, Teachers College Press).
- Teitelbaum, K. (1996) *Schooling for Good Rebels* (New York, Teachers College Press).

- Wacquant, L. (1996) Foreword to P. Bourdieu, *The State Nobility* (Stanford, Stanford University Press).
- Wells, A.S. (1999) *Beyond the Rhetoric of Charter School Reform* (Los Angeles, UCLA Graduate School of Education and Information Studies).
- Whitty, G. (1997) Creating Quasi-Markets in Education, in: M.W. Apple (Ed) *Review of Research in Education, Volume 22* (Washington, DC, American Educational Research Association).
- Whitty, G., Edwards, T., and Gewirtz, S. (1993) *Specialization and Choice in Urban Education* (New York, Routledge).
- Whitty, G., Power, S., and Halpin, D. (1998) *Devolution and Choice in Education* (Buckingham, Open University Press).

This article is based on a longer and more detailed analysis in Michael W. Apple, *Educating the 'Right' Way: Markets, Standards, God, and Inequality* (New York: Routledge, 2001).



## India's Literacy Panorama

Mahendra K. Premi<sup>1</sup>

### Abstract

*With almost two-thirds of India's population aged 7 years of age and above now literate, India has made very significant progress in this direction. An important finding of the 2001 Census count is that more than half of the females are now literate and male-female differential has narrowed down to 21.7 per cent from 24.8 per cent in 1991. The other important finding of the 2001 census is that, in the country, the absolute number of illiterates in population aged 7+ has declined for the first time by almost 32 million (21.4 million among males and 10.5 million among females). The earlier data from 1961 to 1991 indicated that the absolute number of illiterates was increasing from one decade to another. There are, however, states of Bihar, Manipur and Nagaland and the union territories of Delhi and Chandigarh where the number of illiterates increased further during the 1990s.*

### Growth in Literacy

The literacy level and its growth pattern at the state and district levels and male-female differentials in literacy rates are examined here in some detail. The status of the top 20 districts in terms of literacy rates in 1991 census is considered as of 2001 census as to how many have maintained their position and how many have slid down and the factors accounting for the same. Similarly, the position of those 20 districts that had the lowest literacy rates in 1991 is examined in the 2001 census particularly looking at their present position. Considering the decline in the number of illiterates in the country, for the first time, the nature of changes that have taken place as also the distribution of the districts where the number of illiterates has still increased have been examined. Their state-wise distribution and the factors responsible for a slow growth in literacy therein are also considered.

<sup>1</sup> Revised version of the paper presented in the seminar on Progress of Literacy in India: What the Census 2001 Prevails, organized by NIEPA (5 October 2001)

\* Former Professor of Demography, Jawaharlal Nehru University, New Delhi: Present address: 1036, Sector D-1, Vasant Kunj, New Delhi 110 070. Email: [mkpremi\(f\)hotmail.com](mailto:mkpremi(f)hotmail.com)

**Trends in Literacy Rates**

Prior to the 1991 census, the Indian census excluded only children aged 0-4 years in counting the literate population. The literacy rates were computed by taking the total population in the denominator. On the eve of the 1991 census, it was decided that all children in the 0-6 age group will be treated as illiterate by definition and literacy rates would be computed for population aged 7 years and above. In comparison to such (net) literacy rates, those computed by taking the total population in the denominator are called "crude literacy rates." As it is not feasible to work out net literacy rates right from 1901 onward, Table 1 gives crude literacy rates for India for the past one century, from 1901 to 2001.

TABLE I  
Crude Literacy Rates by Sex, India, 1901-2001

<i>Census year</i>	<i>Crude Literacy Rates</i>			<i>Decadal Change (in percentage points)</i>		
	<i>Persons</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Males</i>	<i>Females</i>
1901	5.4	9.8	0.6	—	—	—
1911	5.9	10.6	1.0	0.5	0.8	0.4
1921	7.2	12.2	1.8	1.3	1.6	0.8
1931	9.5	15.6	2.9	2.3	3.4	1.1
1941	16.1	24.9	7.3	6.6	9.3	4.4
1951	16.7	25.0	7.9	0.6	0.1	0.6
1961	24.0	34.4	13.0	7.3	9.4	5.1
1971	29.4	39.4	18.7	5.4	5.0	5.7
1981	36.2	45.9	24.8	6.8	6.5	6.1
1991	42.8	52.7	32.2	6.6	7.8	7.4
2001	55.3	64.1	45.8	12.5	11.4	13.6

Source: RGCC1 2001: (2011a: 114)

Note: 1. Figures from 1901 to 1941 are for undivided India.

2. Figures for 1981 exclude Assam and those for 1991 exclude Jammu and Kashmir as no census could be conducted in Assam in 1981 and in Jammu and Kashmir in 1991.
3. Figures for 2001 exclude the entire Kahechli district: Morvi, Maliya-Miyana and Wankaner talukas of Rajkot district: Jodiya taluka of Janmagar district of Gujarat state, and entire Kinnaur district of Himachal Pradesh where 2001 census enumeration could not be held due to natural calamities.

The crude literacy rates in various censuses from 1901 onward show an increase for both males and females. The rates were very low till 1931 but there was a sudden jump in 1941 from 9.5 per cent to 16.1 per cent. It, however, remained almost stationary at 16.7 per cent in 1951, may be due to the fact that earlier figures were for undivided India and, secondly, after the partition of the country into India and Pakistan in 1947, almost eight million people came to the Indian Union from newly created Pakistan, and around six to seven million people went

from India (Premi 1995: 628). It is almost impossible to assign reasons for the observed figures.

There has been a monotonous increase of 5 to 8 per cent in the literacy rates after 1951, it becoming 12.5 per cent in the 1991-2001 decade. Thus the literacy rate has "become more than three times during the past half-a-century.

It is noteworthy that, in recent years, the increase in female literacy rate has been higher than in male literacy rate narrowing the male-female gap particularly during the 1980s and 1990s. This can be explained partly by the general expansion of education, partly by the present policies of positive intervention followed in favour of girls and by implementation of programmes like DPEP, literacy promotion programmes through NLM and Adult Literacy Programme etc.

**Net Literacy Rates**

Literacy rates for the population aged 7 years and above presented in Table 2 indicate a very significant increase for both males and females particularly during the 1990s. As of 2001 census, almost two-thirds of India's population is now literate, the male literacy rate has risen to three-fourths while females literacy rate at 54.2 per cent indicates that more than half the female population in the country is now literate, that is, has the ability to read and write with understanding. An important finding is the reduction of gap in male and female literacy rates from 26.6 per cent in 1981 to 21.7 per cent in 2001.

TABLE 2  
**Literacy Rates by Sex, India, 1981-2001**

Year	Literacy Rate			Male -female Gap
	Person	Male	Female	
1981	43.6	56.4	29.8	26.6
1991	52.2	64.1	39.3	24.8
2001	67.2	75.8	54.2	21.6

Source: RGC'CI 2001 (2001a: 115)

Note: 1. Figures for 1981 exclude Assam and those for 1991 exclude Jammu and Kashmir as no census could be conducted in Assam in 1981 and in Jammu and Kashmir in 1991.

2. Figures for 2001 do not include the entire Kachchh district: Morvi, Maliya-Miyana and Wankaner talukas of Rajkot district: Jodiva taluka of Jamnagar district of Gujarat state, and entire Kinnaur district of Himachal Pradesh where 2001 census enumeration could not be held due to natural calamities.

**Literacy Rates by Zones and States**

The national level literacy rate for persons aged 7 years above conceals more than what it reveals as there are great disparities state-wide. For example, Kerala with literacy rate of 90.9 per cent has secured first rank closely followed by

Mizoram. Among the other six states/UTs with more than 80 per cent literacy rate, the five are union territories and Goa state belong to this category.

### ***Improvement in Literacy Rates***

At the national level, the literacy rate in population 7+ improved from 52.2 per cent in 1991 to 65.5 per cent in 2001, an improvement of 13.3 percentage points during the decade. It is only Kerala and Goa in the south, Mizoram in the north-east, Himachal Pradesh in the north and Maharashtra in the west zone that recorded literacy rates of more than 75 per cent in 2001. All the UTs except Dadra and Nagar Haveli have also recorded literacy rate of more than 80 per cent (Table 3). In 1991, among the major states (with population above 10 million), Tamil Nadu secured second rank in literacy rate, while it has slipped to the third rank now.

At the zonal level, in 2001, it is the west zone that reported the highest literacy rates well above the south zone. This is because both Gujarat and Maharashtra registered literacy rates higher than Andhra Pradesh and Kamataka that fall in the south zone. Although central zone is constituted by erstwhile Madhya Pradesh and Uttar Pradesh, both regarded as low literacy states, it is the east zone that is marked by the lowest literacy rate primarily because of a very low literacy rate in Bihar and Orissa.

As regards gains in literacy rates between 1991 and 2001, all the states and union territories without exception registered positive increase. Rajasthan recorded a maximum increase of 22.5 per cent followed by Chhatisgarh (22.3 per cent), Madhya Pradesh (19.4 per cent), Andhra Pradesh (17 per cent) and Uttar Pradesh (16.6 per cent). Thus, among the so called BIMARU states, namely Bihar, Rajasthan, Madhya Pradesh including Chhatisgarh, and Uttar Pradesh have made significant progress in their literacy drives. Detailed literacy rates by age groups would indicate whether the increment in literacy rates is largely contributed by the adult males and females or by the children in the school going age. The first factor would mean that efforts of the National Literacy Mission (NLM) and Adult Literacy Mission (ALM) and other related programmes have succeeded while the second may suggest success of the DPEP and other projects like *Lok Jumbish* in Rajasthan which have helped in reduction in school drop-outs. Both these aspects are meaningful from societal perspective and need more detailed examination.

Among the states and union territories that had literacy rates below 50 per cent in 1991, Bihar at 47.5 per cent is the only state falling in this category in 2001 as well. Further, it has recorded the minimum increase of just 10 per cent during 1991-2001.

TABLE 3  
**Percentage of Literates to Population Age 7 Years and Above by Zones and States, 1991 and 2001**

Zone/State and Union Territory	1991			2001			Gains in Literacy Rates (LR 2001-LR1991)		
	P	M	F	P	M	F	P	M	F
<b>INDIA</b>	<b>52.2</b>	<b>64.1</b>	<b>39.3</b>	<b>65.2</b>	<b>75.6</b>	<b>54.0</b>	<b>13.0</b>	<b>11.5</b>	<b>14.7</b>
<b>North Zone</b>	<b>51.2</b>	<b>63.8</b>	<b>36.9</b>	<b>66.5</b>	<b>77.6</b>	<b>54.1</b>	<b>15.3</b>	<b>13.8</b>	<b>17.2</b>
Haryana	55.9	96.1	40.5	68.6	79.3	56.3	12.7	10.2	15.8
Himachal Pradesh	63.9	75.4	52.1	77.1	86.0	68.1	13.2	10.6	16.0
Jammu & Kashmir	51.5	63.3	38.8	65.4	75.9	54.2	13.9	12.6	15.4
Punjab	58.5	65.7	50.4	70.0	75.6	63.6	11.5	9.9	13.2
Rajasthan	38.6	55.0	20.4	61.0	76.5	44.3	22.4	21.5	23.9
Chandigarh (UT)	77.8	82.0	72.3	81.8	85.7	76.7	4.0	3.7	4.4
Delhi (UT)	75.3	82.0	67.0	81.8	87.4	75.0	6.5	5.4	8.0
<b>East Zone</b>	<b>47.6</b>	<b>60.1</b>	<b>33.9</b>	<b>59.0</b>	<b>70.1</b>	<b>47.0</b>	<b>11.4</b>	<b>10.0</b>	<b>13.1</b>
Bihar	37.5	51.4	22.0	47.5	60.3	33.6	10.0	8.9	11.6
Sikkim	56.9	65.7	46.8	69.7	76.7	61.5	12.8	11.0	14.7
West Bengal	57.7	67.8	46.6	69.2	77.6	60.2	11.5	9.8	13.6
Orissa	49.1	63.1	34.7	63.6	76.0	51.0	14.5	12.9	16.3
A & N Islands (UT)	73.0	79.0	65.5	81.2	86.1	75.3	8.2	7.1	9.8
<b>North-East Zone</b>	<b>54.5</b>	<b>63.2</b>	<b>44.1</b>	<b>65.8</b>	<b>73.0</b>	<b>58.0</b>	<b>11.3</b>	<b>9.8</b>	<b>13.9</b>
Assam	52.9	61.9	43.0	64.3	71.9	56.0	11.4	10.0	13.0
Arunachal Pradesh*	41.6	51.5	29.7	54.7	64.1	44.2	13.1	12.6	14.5
Manipur	59.9	71.6	47.6	68.9	77.9	59.7	9.0	6.3	12.1
Meghalaya	49.1	53.1	44.9	63.3	66.1	60.4	14.2	13.0	15.5
Mizoram	82.3	85.6	78.6	88.5	90.7	86.1	6.2	5.1	7.5
Nagaland	61.7	67.6	54.8	67.1	71.8	61.9	5.4	4.2	7.1
Tripura	60.4	70.6	49.7	73.7	81.5	65.4	13.3	10.9	15.7
<b>Central Zone</b>	<b>42.4</b>	<b>56.6</b>	<b>26.5</b>	<b>60.1</b>	<b>72.8</b>	<b>46.2</b>	<b>17.7</b>	<b>16.2</b>	<b>19.7</b>
Madhya Pradesh	44.7	58.5	29.4	64.1	76.8	50.3	19.4	18.3	20.9
Uttar Pradesh	40.7	54.8	24.4	57.4	70.2	43.0	16.7	15.4	18.6
<b>West Zone</b>	<b>63.6</b>	<b>75.4</b>	<b>51.0</b>	<b>73.5</b>	<b>82.9</b>	<b>63.4</b>	<b>9.9</b>	<b>7.5</b>	<b>12.4</b>
Gujarat	61.3	73.1	48.6	70.0	80.5	58.6	8.7	7.4	10.0
Maharashtra	64.9	76.6	52.3	77.3	86.3	67.5	12.4	9.7	15.2
D & N Haveli (UT)	40.7	53.6	27.0	60.0	73.3	43.0	19.3	19.7	16.0
Daman & Diu (UT)	71.2	82.7	59.4	81.1	88.4	70.4	9.9	5.7	11.0
<b>Southern Zone</b>	<b>59.3</b>	<b>69.1</b>	<b>49.2</b>	<b>70.4</b>	<b>78.7</b>	<b>62.0</b>	<b>11.1</b>	<b>9.6</b>	<b>12.8</b>
Andhra Pradesh	44.1	55.1	32.7	61.1	70.9	51.2	17.0	15.8	18.5
Goa	75.5	83.6	67.1	82.3	88.9	75.5	6.8	5.3	8.4
Karnataka	56.0	67.3	44.3	67.0	76.3	57.5	11.0	9.0	13.2
Kerala	89.8	93.6	86.2	90.9	94.2	87.9	1.1	0.6	1.7
Tamil Nadu	62.7	73.8	51.3	73.5	82.3	64.6	10.8	8.5	13.3
Lakshadweep (UT)	81.8	90.2	72.9	87.5	93.2	81.6	5.7	3.0	8.7
Pondicherry (UT)	74.7	83.7	65.6	81.5	88.9	74.1	6.8	5.2	8.5

Source: RGCCI 2001 (2001a: 123-27)

Regression analysis conducted with literacy rate ( $y$ ) as the dependent variable and population growth rate during 1991-2001 decade ( $x_1$ ) and urbanisation rate in 2001 ( $x_2$ ) as explanatory variables indicate that growth rate has no correlation with literacy rate. Urbanisation rate, however, has strong correlation with literacy rate and is highly significant. The regression equation in this case works out as

$$y = 63.167 - 0.139x_1 + 0.333x_2$$

#### ***Male-Female Difference in Literacy Rate***

It is heartening to note that, at the national level, male-female difference in literacy rate has declined from 24.8 per cent in 1991 to 21.7 per cent in 2001 due to faster increase in female literacy rate than male literacy rate during the 1990s. Consequently, the male-female gap in literacy rate declined in all the states and union territories except Dadra and Nagar Haveli during this period.

An examination of the decadal difference in literacy rates by gender for 1991 and 2001, however, indicates that out of 13 states and UTs where the literacy rates are below the national average of 65.4 per cent, nine occupy the first nine positions in male-female gap. These states are Rajasthan (a gap of 32.1 percentage points), Jharkhand (28.6 per cent), Uttar Pradesh (27.2 per cent), Bihar (26.7 per cent), Madhya Pradesh (26.5 per cent), Chhatisgarh (25.5 per cent), Orissa (25 per cent), Jammu and Kashmir (23.9 per cent) and the UT of Dadra and Nagar Haveli (30.3 per cent). Their ranking in terms of the gap in male-female literacy rate has remained almost the same between 1991 and 2001 (Table 4). In contrast, male-female gap in literacy rate in 2001 is less than ten per cent only in the states of Kerala, Meghalaya, Mizoram, Nagaland and the union territory of Chandigarh. These are the states where females have high status in their respective societies.

Looking at the data in Table 4, one may conclude that the states where the overall literacy rate is low, they continue to have large gap in male-female literacy rates even after substantial improvement in female literacy. It also seems that low urbanisation and low density of population also influence the gap in male-female literacy rates. One may also say that status of women continues to remain low in those states.

TABLE 4  
Literacy Rates by Sex and Their Decadal Differences Between  
1991 and 2001, India and States/Union Territories

India/State/Union Territory/Zone	1991		Gap m A-J-F Literacy Rate	2001		Gap in Literacy Rate	Decadal Difference in Literacy Rates	
	Males	Females		Males	Females		Males	Females
(1)	(2)	(-V)	(4)	(5)	(6)	(7)	(8)	(9)
INDIA	64.1	39.3	24.8	76.0	54.3	21.7	11.8	15.0
North Zone	63.8	36.9	26.9	77.6	54.1	23.5	13.8	17.2
Jammu & Kashmir	N.A.	N.A.	N.A.	65.8	41.8	23.9	N.A.	N.A.
Himachal Pradesh	75.4	52.3	23.2	86.0	68.1	17.9	10.6	15.8
Punjab	65.7	50.4	15.3	75.6	63.6	12.0	10.0	13.1
Chandigarh*	82.0	72.3	9.7	85.6	76.6	9.0	3.6	4.3
Haryana	69.1	40.5	28.6	79.2	56.3	22.9	10.2	15.8
Delhi*	82.0	67.0	15.0	87.4	75.0	12.4	5.4	8.0
Rajasthan	55.0	20.4	34.6	76.5	44.3	32.1	21.5	23.9
Central Zone	56.6	26.5	30.1	72.8	46.2	26.6	16.2	19.7
Chhatisgarh	58.1	27.5	30.5	77.9	52.4	25.5	19.8	24.9
Madhya Pradesh	58.5	29.4	29.2	76.8	50.3	26.5	18.3	20.9
Uttar Pradesh	54.8	24.4	30.5	70.2	43.0	27.2	15.4	18.6
Uttaranehal	72.8	41.6	31.2	84.0	60.3	23.7	1 12	18.6
East Zone	60.1	33.9	26.2	70.1	47.0	13.1	10.0	13.1
Bihar	51.4	22.0	29.4	60.3	33.6	26.7	9.0	1 16
Jharkhand	55.8	25.5	30.3	67.9	39.4	28.6	12.1	13.9
Orissa	63.1	34.7	28.4	76.0	51.0	25.0	12.9	16.3
Sikkim	65.7	46.8	18.9	76.7	61.5	15.2	1 10	14.7
West Bengal	67.8	46.6	21.2	77.6	60.2	17.4	9.8	13.7
A. & N, Islands	79.0	65.5	13.5	86.1	75.3	10.8	7.1	9.8
North-Eastern Zone	63.2	44.1	19.1	73.0	58.0	15.0	9.8	13.9
Arunachal Pradesh	51.4	29.7	21.7	64.1	44.2	19.9	12.6	14.5
Assam	61.9	43.0	18.9	71.9	56.0	15.9	10.1	13.0
Manipur	71.6	47.6	24.0	77.9	59.7	18.2	6.2	12.1
Meghalaya	53.1	44.8	8.3	66.1	60.4	5.7	13.0	15.6
Mizoram	85.6	78.6	7.0	90.7	86.1	4.6	5.1	7.5
Nagaland	67.6	54.8	12.8	71.8	61.9	9.9	4.2	7.2
Tripura	70.6	49.6	21.0	81.5	65.4	16.1	10.8	15.8
West Zone	75.4	51.0	24.4	82.9	63.4	19.5	7.5	12.4
Gujarat	73.4	48.9	24.5	80.5	58.6	21.9	7.1	9.7

Contd...

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Maharashtra	76.6	52.3	24.3	86.3	67.5	18.8	9.7	15.2	
D & N Haveli*	53.6	27.0	26.6	73.3	43.0	30.3	19.8	16.0	
Daman & Diu*	82.7	59.4	23.3	88.4	70.4	18.0	5.7	11.0	
South Zone	69.1	49.2	19.9	78.7	62.0	16.7	9.6	12.8	
Andhra Pradesh	55.1	32.7	22.4	70.8	51.2	19.6	15.7	18.4	
Goa	83.6	67.1	16.5	88.9	75.5	13.4	5.2	8.4	
Karnataka	67.3	44.3	23.0	76.3	57.4	18.9	9.0	13.1	
Kerala	93.6	86.2	7.4	94.2	87.9	6.3	0.6	1.7	
Tamil Nadu	73.8	51.3	22.5	82.3	64.6	17.7	8.6	13.2	
Lakshadweep*	90.2	72.9	17.3	93.2	81.6	11.6	3.0	8.7	
Pondicherry*	83.7	65.6	18.1	88.9	74.1	14.8	5.2	8.5	

Source: RGCCI (2001a: 126 f.)

- Notes: 1. The literacy rates for India for 1991 Census in col. (3) and (4) exclude Jammu and Kashmir where 1991 census could not be conducted. Similarly, to make the data comparable the 1991 rates against India exclude entire Kachchh district; Morvi, Maliya-Miyana and Wankaner talukas of Rajkot district; Jodiya taluka of Jamnagar district of Gujarat state, and entire Kinnaur district of Himachal Pradesh where 2001 census enumeration could not be held due to natural calamities. Further, the literacy rates for India for 2001 exclude entire state of Jammu and Kashmir, and the entire Kachchh district; Morvi, Maliya-Miyana and Wankaner talukas of Rajkot district; Jodiya taluka of Jamnagar district of Gujarat state, and entire Kinnaur district of Himachal Pradesh for the above reasons.
2. The literacy rates for Himachal Pradesh in for 1991 exclude entire district of Kinnaur to make data comparable with the literacy rate of the 2001 census of the state.
3. The literacy rates shown against Gujarat in col. (2), (3), (5) and (6) for 1991 and 2001 respectively exclude the entire Kachchh district; Morvi, Maliya-Miyana and Wankaner talukas of Rajkot district; Jodiya taluka of Jamnagar district where the 2001 census enumeration could not be held due to natural calamities.
4. N.A. stands for 'not available.'

#### *Comparison of Census and NSS Literacy Rates*

The NSS had conducted a special survey on literacy and educational attainment in its 53<sup>rd</sup> round (January-December 1997). It would be useful to compare the literacy rates as obtained in the census with those of the NSS even though there is a gap of almost four years between the two sets of figures. The census literacy rate of 65.5 per cent is higher than 62 per cent recorded in the NSS. This may be partly due to the difference in the two time points for which the data relate. Of the 32 states and union territories (as of the 1991 census or in the NSS), 17 recorded a lower literacy rate in 2001 census than in the 53<sup>rd</sup> round of the NSS (Table 5).



TABLE 5  
Literacy Rates by Sex in the 2001 Census and in the National Sample Survey  
(53<sup>rd</sup> Round, Jan-Dee 1997)

India/State/Union Territory	Literacy rate						Difference Between		
	2001 Census		National Sample Survey				2001 Census	NSS	
INDIA	65	76	54	62	73	50	3	3	4
Andhra Pradesh	61	71	51	54	64	43	7	7	8
Arunachal Pradesh	55	64	44	60	69	48	-5	-5	-4
Assam	64	72	56	75	82	66	-11	-10	-10
Bihar & Jharkhand	49	62	35	489	62	34	0	0	1
Goa	82	89	76	86	93	79	-4	-4	-3
Gujarat	70	80	59	68	80	57	2	0	2
Haryana	69	79	56	65	76	52	4	3	4
Himachal Pradesh	77	86	68	77	87	70	0	-1	-2
Jammu & Kashmir	54	66	42	59	71	48	-5	-5	-6
Karnataka	67	76	57	58	66	50	9	10	7
Kerala	91	94	88	93	96	90	-2	-2	-2
Madhya Pradesh & Chhatisgarh	64	77	51	56	70	41	8	7	10
Manipur	69	78	60	76	86	66	-7	-8	-6
Meghalaya	63	66	60	77	79	74	-14	-13	-14
Mizoram	88	91	86	95	96	95	-7	-5	-9
Nagaland	67	72	62	84	91	77	-17	-19	-15
Orissa	64	76	51	51	64	38	13	12	13
Punjab	70	76	64	67	72	62	3	4	2
Rajasthan	61	76	44	55	73	35	6	3	9
Sikkim	70	77	61	79	86	72	-9	-9	-11
Tamil Nadu	73	82	65	70	80	60	3	2	5
Tripura	74	81	65	73	79	67	1	2	-2
Uttar Pradesh & Uttaranchal	58	71	44	56	69	41	2	2	3
West Bengal	69	78	60	72	81	63	-3	-3	-3
Union Territories									
A & N Islands	80	86	75	97	100	94	-16	-14	-19
Chandigarh									
Dadra & Nagar Haveli	60	73	43	49	66	30	11	7	13
Daman and Diu	81	788	70	86	95	73	-5	-7	-3
Delhi	82	87	75	85	91	76	-3	-4	-1
Lakshadweep	88	93	82	96	98	93	-8	-5	-11
Pondicherry	81	89	74	90	94	86	-9	-5	-12

Source: RGCCI (2001a: 1211)

- Notes:
1. The literacy rates for India have been worked out by excluding entire Kachchh district; Morvi, Maliya-Miyana and Wankaner talukas of Rajkot district; Jodiya taluka of Jamnagar district of Gujarat state, and the entire Kinnaur district of Himachal Pradesh where 2001 census enumeration could not be held due to natural calamities. The literacy rates for Himachal Pradesh in for 1991 exclude the entire district of Kinnaur to make data comparable with the literacy rate of the 2001 census of the state.
  2. The literacy rates for Himachal Pradesh for 2001 exclude the entire Kinnaur district where 2001 census enumeration could not be held due to natural calamities.
  3. The literacy rates shown against Gujarat exclude the entire Kachchh district; Morvi, Maliya-Miyana and Wankaner talukas of Rajkot district; Jodiya taluka of Jamnagar district where the 2001 census enumeration could not be held due to natural calamities.

Among the major states Andhra Pradesh, Haryana, Gujarat, Karnataka, erstwhile Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu and erstwhile Uttar Pradesh have recorded higher literacy rates than reported in the NSS by varying percentage points. Increase in literacy rate of Orissa by 13 percentage points is very significant and needs probing. It is, however, noteworthy that all the northeastern states Goa, Jammu and Kashmir, Kerala, Sikkim, West Bengal and the UTs of Andaman and Nicobar Islands, Delhi, Lakshadweep and Pondicherry recorded lower literacy rates in the census than what was found in the NSS for 1997. The gaps in smaller states and some of the UTs have been quite large and need explanation. Probably the NSS sample size in those states is not large enough but this needs to be examined further.

It is satisfying to note that the states that have registered higher literacy rates in the census compared to the NSS had recorded appreciable rise in literacy rates between 1991 and 2001. It is, however, surprising that Assam and West Bengal, that have reported 11.4 and 11.5 percentage points increase in their literacy rates during the 1990s, slid behind in comparison to the NSS. This would need some probing.

#### **The Illiterate Population**

Despite the rise in literacy both among males and females, there has been an increase in absolute number of illiterates (in the total population) in the country in each of the censuses uptill 1991 (Table 6). The number of illiterates increased from 334 million in 1961 to 479 million in 1991. The 2001 census has, however, indicated a decline in their numbers, moreso, among males, even though the 1991-2001 growth in literacy rate has been higher among females.

TABLE 6  
**Number of Illiterates in India by Sex in Different Censuses**

<i>Year</i>	<i>(Figures in millions)</i>		
	<i>Persons</i>	<i>Males</i>	<i>Females</i>
1961	333.9	148.5	135.4
1971	386.5	171.9	214.6
1981	424.2	182.6	241.6
1991	479.2	205.6	273.6
2001	454.1	188.6	265.5

Source: Premi (1991: 68)

The major contribution to the decline in the number of male illiterates came from Uttar Pradesh (19.5 per cent), Andhra Pradesh (13.6 per cent), Rajasthan (12.4 per cent), Madhya Pradesh (11.4 per cent), Maharashtra (9.2 per cent), Tamil

Nadu (7.1 per cent), and West Bengal (7 per cent) that accounted for a total of 80 per cent reduction in male illiterates. Similarly, the major reduction in the number of female illiterates during the 1990s came from Andhra Pradesh (23.3 per cent), Maharashtra (19.1 per cent), Tamil Nadu (17.9 per cent), West Bengal (10.8 per cent) and Chhatisgarh and Rajasthan (accounting for 9.5 per cent each). Bihar, however, registered an increase of 2.31 million in the number of female illiterates (22 per cent) during the 1990s. Other states and UTs that have shown an increase in the number of illiterates are Gujarat, Jharkhand, Manipur, Nagaland and the UTs of Delhi and Chandigarh. In-migration of illiterate workers from other states can, to a large extent, explain the increase of illiterates in the population of Delhi, Chandigarh and Gujarat. It is, however, difficult to explain increase in the number of illiterates in Bihar; quite likely the education system in that state has come to a grinding halt; the other explanation can be large immigration of illiterate persons from Nepal and Bangladesh.

As the data on illiterates by age of the 2001 census would take time the pattern of illiterates in the age group 10-14 and 15-34 has been examined here from 1961 to 1991 (Table 7). A reduction in the number of illiterates in the age group 10-14 indicates the impact of the drive for formal and non-formal education, and that in 15-34 age group indicates the impact of adult literacy programme along with that of school education.

TABLE 7  
Number of Illiterates Aged 10-14 and 15-34, India, 1961,1971,  
1981 and 1991

Sex	10-14				15-34			
	1961	1971	1981	1991	1961	1971	1981	1991
Persons	28.5	34.7	37.5	30.8	85.7	97.1	107.2	121.3
Males	12.0	14.7	15.1	12.0	28.5	37.0	39.8	43.9
Females	16.5	20.0	22.4	18.8	57.2	60.1	67.4	77.4

Source: Premi (1991: 68)

It is noteworthy that the number of illiterates in the age group 10-14 declined substantially after increasing between 1961 and 1981. The 2001 census might show further decline in the absolute number of illiterates in this age group. It is a matter of concern that the number of adult illiterates in the country remained increasing monotonically from 1961 to 1991, that is, the Adult Literacy Programme was not very successful in the country during the 1980s. As there has been a reduction in the absolute number of illiterates in the country between 1991 and 2001, there would be significant reduction in the number of illiterates in both the above age groups in 2001.

**District Level Scenario**

In the Indian context, even state is too big a unit for any meaningful analysis or policy intervention in respect of literacy. District is both an administrative unit as well as a culturally and socially homogenous unit. Within a state, one finds great diversities among its districts. On the other hand, a cluster of districts bordering two or more states can be more homogenous than far and in-between districts in the same state. District has, therefore, been recognised as a viable unit for decentralised planning and policy making. Table 8 presents frequency distribution of the districts of the 1991 and 2001 censuses by their literacy rates. The Census Organisation has already recast the 1991 district level data according to new boundaries of the districts as of the 2001 census. There are now 594 districts in the country; 1991 data are not available for 14 districts of Jammu and Kashmir where the census could not be conducted at that time. Similarly, 2001 literacy data are not available for two districts of Kinnaur in Himachal Pradesh and Kachchh in Gujarat.

TABLE 8  
**Frequency Distribution of Districts According to Total and Female Literacy Rates, 1991 and 2001**

<i>Per cent Literacy Rate</i>	<i>1991</i>		<i>2001</i>	
	<i>Persons</i>	<i>Females</i>	<i>Persons</i>	<i>Females</i>
Greater than 90	11	5	13	7
80-90	14	11	46	16
70-80	37	17	152	59
60-70	100	37	174	119
50-60	119	73	126	138
40-50	144	87	55	127
30-40	110	122	26	81
20-30	42	125	0	43
Less than and equal to 20	3	103	0	2
TOTAL	580	580	592	592

Note: (a) Literacy rates for the districts of Jammu and Kashmir for 1991 are not available as no census could be conducted there at that time,

(b) Figures for 2001 do not include the entire Kachchh district; Morvi, Maliya-Miyana and Wankaner talukas of Rajkot district; Jodiya taluka of Jamnagar district of Gujarat state, and the entire Kinnaur district of Himachal Pradesh where 2001 census enumeration could not be held due to natural calamities.

Source: RGCCI 2001 (2001b: 118-49)

There were 25 districts in the country in 1991 where the literacy rate of persons was above 80 per cent; of these, 11 districts had recorded literacy rate of more than 90 per cent. In the 2001 census, one finds 59 districts with literacy rate of

persons above 80 per cent with 13 districts recording literacy rate above 90 per cent. Since literacy rates are computed for population aged 7 and above, a rate of more than 90 per cent implies that all children above 7 are literate, many of them might have been able *to read and write with understanding* before being 7 years old. Similarly, among the older people, almost everyone is regarded as literate even if they have crossed the age of 75 or 80 years. It would be useful to understand the patterns with the help of age-specific literacy rates that have led to the observed figures; it may also be necessary to evaluate these data when the results of **Post Enumeration Check** become available.

There were 45 districts in 1991 where the overall literacy rate was below 30 per cent. Most of these districts were in Bihar, Uttar Pradesh, Orissa, Madhya Pradesh and Rajasthan. It is heartening to note that in the 2001 census, none of the 592 districts has recorded literacy rate below 30 per cent. Further, there were 228 districts (more than one-third) where the **female literacy rate** in 1991 was below 30 per cent; of those, 103 districts recorded female literacy rate of less than 20 per cent. In the 2001 census, the number of districts wherein the female literacy rate is below 30 per cent declined to just 45, and there are only two districts - Shravasti in Uttar Pradesh and Kishanganj in Bihar - that registered female literacy rate below 20 per cent.

An examination of the top 20 districts in respect of literacy rate of persons indicates that it varied from 96.6 per cent in Aizwal to 86.8 per cent in Mumbai. Aizwal is the capital of Mizoram while Mumbai is the capital of Maharashtra. Of the 14 districts of Kerala, 11 are among the first twenty. Of the remaining nine districts among the top twenty, four are from Mizoram, two from Maharashtra and one each from Pondicherry, Tamil Nadu and Lakshadweep.

On the other end of the scale, among the bottom twenty districts, eight belong to Bihar, while four each are in Uttar Pradesh and Orissa, two in Jharkhand, and one each in Chhatisgarh and Madhya Pradesh. There are 13 districts out of the bottom 20 districts of 1991 that have continued in this category even in 2001. In 1991, there were only three districts in Bihar falling in bottom 20 districts category but, in 2001, there are eight districts in this category. The three districts of Rajasthan - Banswara, Jalor and Banner - that were in bottom 20 districts, have all improved their literacy rates substantially and there is no district now in this category from that state.

Female literacy rate among the bottom twenty districts in 1991 was well below 15 per cent and three districts had it below 10 per cent. In 2001, there was no district with female literacy rates below 15 per cent and only two districts, as indicated above, had literacy rate below 20 per cent. The statewise distribution of these districts is just the same as for the literacy rates of all persons, and the districts are also the same except Sheohar in Bihar and Sahibganj in Jharkhand. When the situation is compared with 1991, all the five districts of Rajasthan that fell among bottom 20 districts have moved out of this category in 2001. Further,

there was only Kishanganj in Bihar in 1991 that fell among the bottom 20 districts; in 2001, there are eight districts from that state falling in this category. The districts identified above along with the remaining districts in Bihar, Orissa and Uttar Pradesh need very special attention in the years to come as part of the Sarva Siksha Abhiyan to very substantially raise both male and female literacy levels.

As stated earlier, there are wide variations in literacy rates of different districts within the same state. Table 9 gives the highest and the lowest literacy rate districts of all the states except Goa for 1991 and 2001. In 1991, the differences in literacy rates between the highest and the lowest districts are given according to the district boundaries as of 2001.

Of the 27 states for which the data are presented in Table 9, the districts with the highest and the lowest literacy rates are the same in 1991 and 2001 in 13 states. This difference declined in 15 states while the same increased in Uttar Pradesh, Bihar, Manipur, Tripura, Jharkhand and Chhatisgarh (Table 9). In the remaining six states, the change is only marginal within one to two per cent points. It is noteworthy that gap in the literacy rate of the districts with the highest and the lowest values was more than 40 per cent even in 2001 in Uttar Pradesh, Orissa, Chhatisgarh, Madhya Pradesh, Nagaland and Mizoram. All the four major states are educationally backward.

The district level literacy rates for the 14 districts of Kerala in 2001 varied from 95.9 per cent in Kottayam to 84.3 per cent in Palakkad (Table 9). In contrast, the literacy rates among the 70 districts of Uttar Pradesh varied from a high of 77.6 per cent in Kanpur Nagar to a low of 34.2 per cent in Shravasti. Similarly, among the 45 districts of Madhya Pradesh, the literacy rate in 2001 has varied from 78.3 per cent in Narasimhapur to a low of 36.9 per cent in Jhabua. Neither Kanpur Nagar nor Narsimhapur has reached even the lowest level of Kerala's literacy rate.

### **Impact of DPEP and Other Education Promotion Programmes**

Ever since the formulation of National Policy on Education (1986) and its updating in 1992, concerted efforts have been made by the national and state governments to improve the enrolment of children and increase the literacy level of adults. To give impetus to adult education programmes, the Government of India launched a "National Literacy Mission in May 1988. This programme along with the Adult Literacy Programme made some headway during the late 1980s and early 1990s. In 1994, the Government of India introduced a new District Primary Education Programme (DPEP) with funding from the World Bank as soft loan. This programme was introduced in the first instance in 42 districts in seven states - Assam, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra and Tamil Nadu. In the second stage, 94 districts were added, some in the already covered states and more in the new states. Thus, the first and

second phases have covered 136 districts in the country. A third phase of the project started in 1998 and covered only 27 districts, that too in Bihar alone. There have been several NGOs like *LokJumbish* in Rajasthan that are working in the field of primary education to change the scenario substantially in their area of operation.

By the time of the 2001 census, as the first and second phases had run in the country for at least five years, it is felt that there should be significant improvement both in boys' and girls' enrolment at least in the selected districts and, consequently, an improvement in literacy rate. The changes in literacy level in the DPEP districts in comparison to the non-DPEP districts are presented in Table 10. Here one should not assume that it is only the DPEP that has brought change in literacy rate since other efforts have always been there and have been helping in raising literacy rates.

An examination of Table 10 indicates that, by and large, most of the states have recorded substantially higher gains in literacy rates between 1991 and 2001, while gains have been marginal in Uttar Pradesh, Assam, Orissa and Karnataka. The gain in literacy rate in Kerala could not be much as the literacy rate there is above 90 per cent.

### **Planning Implications**

The above scenario based on a quick analysis of the provisional figures of 2001 regarding literacy rates can be taken as indicative of the changes that have been noticed in this regard. To arrive at some firm conclusions, one would need more detailed data and a more rigorous analysis than presented here. Based on trend analysis, it is, however, possible to draw some implications for future educational planning.

The gains in literacy rates have been quite good during the 1990s. Moreover, there has been a substantial reduction in the absolute number of illiterates in the country for the first time. But, still a lot of efforts have to be made to bring the country's overall literacy rate above 90 per cent and that of the females above 80 per cent during the present decade. For population control, it is necessary to intensify our efforts particularly in raising the level of girls' education. The National Population Policy has emphasized this aspect in very clear terms.

Though male-female disparities at the macro level have reduced, the literacy situation of females has still to be given priority. The state level situation indicates very significant improvement both in male and female literacy rate, especially in Madhya Pradesh and Rajasthan. It would be important for Bihar, Uttar Pradesh and Orissa to review their own literacy programmes and take necessary steps in this regard.

**TABLE 9**  
**Districts with Maximum and Minimum Values of Literacy Rate, States, 1991 and 2001**

s lo.	State	1991					2001				
		District with Maximum LR	LR	District with Minimum LR	LR	Gap	District with Maximum LR	LR	District with Minimum LR	LR	Gap
1	Jammu & Kashmir	N.A.	N.A.	N.A.	N.A.	N.A.	Jammu	77.3	Badgam	39.5	37.8
2	Himachal Pradesh	Hamirpur	74.9	Chamba	54.7	20.2	Hamirpur	83.2	Chamba	63.7	19.5
3	Punjab	Hoshiarpur	72.1	Mansa	37.2	34.9	Hoshiarpur	81.4	Mansa	52.5	28.9
4	Uttaranchal	Dehradun	69.5	Uttarkashi	47.2	22.3	Nainital	79.6	Hardwar	64.6	15.0
5	Haryana	Ambala	66.6	Kaithal	42.8	23.8	Panchkula	76.5	Fatehabad	58.2	18.3
6	Rajasthan	Kota	55.2	Banner	23.0	32.2	Kota	74.4	Banswara	44.2	30.2
7	Uttar Pradesh	Kanpur Nagar	64.0	Bahraich	22.7	41.3	Kanpur Nagar	77.6	Shravasti	34.2	43.4
8	Bihar	Patna	56.3	Kishanganj	22.2	34.1	Patna	63.8	Kishanganj	31.0	32.8
9	Sikkim	East	65.1	West	45.6	19.5	East	75.6	West	59.3	16.3
10	Arunachal Pradesh	Papum Pare	55.1	East Kameng	26.2	28.9	Papum Pare	70.9	East Kameng	40.9	30.0
11	Nagaland	Mokokchung	77.8	Mon	36.0	41.8	Mokokchung	84.3	Mon	42.2	42.1
12	Manipur	Imphal West	73.0	Senapati	46.0	27.0	Imphal West	80.6	Senapati	50.5	30.1
13	Mizoram	Aizwal	93.1	Lawngtlai	42.7	50.4	Aizwal	96.6	Lawngtlai	56.4	40.2
14	Tripura	West Tripura	65.8	South Tripura	53.0	12.8	West Tripura	77.8	Dhalai	61.6	16.2
15	Meghalaya	East Khasi Hills	64.6	Jaintia Hills	35.3	29.3	East Khasi Hills	77.0	West Garo Hills	51.0	26.0
16	Assam	Jorhat	65.5	Dhubri	38.4	27.1	Jorhat	77.9	Dhubri	49.9	28.0
17	West Bengal	Kolkata	77.6	Uttar Dinajpur	34.6	43.0	Kolkata	81.3	Uttar Dinajpur	48.6	32.7
18	Jharkhand	Purbi Singhbhum	59.0	Pakaur	24.0	35.0	Purbi Singhbhum	69.4	Pakaur	30.5	38.9
19	Orissa	Khordha	67.7	Nabarangapur	18.6	49.1	Khordha	80.2	Malkangiri	31.3	48.9
20	Chhatisgarh	Durg	58.7	Dantewala	16.5	42.2	Rajnandgaon	77.6	Dantewala	30.0	47.6
21	Madhya Pradesh	Indore	66.3	Jhabua	19.0	47.3	Narsimhapur	78.3	Jhabua	36.9	41.4
22	Gujarat	Gandhinagar	73.8	Don ad	35.8	38.0	Ahmedabad	79.9	Dohad	45.6	34.3
23	Maharashtra	Mumbai	83.6	Gadchiroli	42.9	40.7	Mumbai (Suburban)	87.1	Nandurbar	56.1	31.0
24	Andhra Pradesh	Hyderabad	71.5	Mahboobnagar	29.6	41.9	Hyderabad	79.0	Mahboobnagar	45.5	33.5
25	Karnataka	Dakshina Kannada	76.7	Raichur	34.3	42.4	Bangalore	83.9	Raichur	49.5	34.4
26	Kerala	Kottayam	95.7	Palakkad	81.3	14.4	Kottayam	95.9	Palakkad	84.3	11.6
27	Tamil Nadu	Kanyakumari	82.1	Dharmapuri	46.0	36.1	Kanyakumari	88.1	Dharmapuri	59.2	28.9

Source: RGCCI 2001(2001b: 59, 118-149).



TABLE 10  
**Comparative Improvement in Literacy Rates Between 1991 and 2001 in  
 DPEP Districts with that in Non-DPEP Districts in Different States**

<i>India/States</i>	<i>DPEP/Non-DPEP</i>	<i>Districts</i>	<i>Persons</i>	<i>Males</i>	<i>Females</i>
<b>INDIA</b>	<b>DPEP districts</b>		<b>16.51</b>	<b>15.23</b>	<b>18.13</b>
	<b>Remaining districts</b>		<b>12.06</b>	<b>10.61</b>	<b>13.77</b>
<b>Himachal Pradesh</b>	<b>DPEP districts</b>		<b>18.29</b>	<b>14.92</b>	<b>22.30</b>
	<b>Remaining districts</b>		<b>10.76</b>	<b>8.53</b>	<b>12.77</b>
<b>Haryana</b>	<b>DPEP districts</b>		<b>14.37</b>	<b>11.84</b>	<b>17.51</b>
	<b>Remaining districts</b>		<b>11.79</b>	<b>9.16</b>	<b>14.87</b>
<b>Uttar Pradesh</b>	<b>DPEP districts</b>		<b>16.62</b>	<b>16.84</b>	<b>16.87</b>
	<b>Remaining districts</b>		<b>16.66</b>	<b>14.92</b>	<b>19.21</b>
<b>Assam</b>	<b>DPEP districts</b>		<b>12.38</b>	<b>11.34</b>	<b>13.62</b>
	<b>Remaining districts</b>		<b>10.75</b>	<b>9.24</b>	<b>12.60</b>
<b>West Bengal</b>	<b>DPEP districts</b>		<b>15.73</b>	<b>13.73</b>	<b>17.99</b>
	<b>Remaining districts</b>		<b>9.90</b>	<b>8.24</b>	<b>12.00</b>
<b>Orissa</b>	<b>DPEP districts</b>		<b>14.45</b>	<b>13.51</b>	<b>15.56</b>
	<b>Remaining districts</b>		<b>14.55</b>	<b>12.62</b>	<b>16.55</b>
<b>Madhya Pradesh inc.</b>	<b>DPEP districts</b>		<b>22.72</b>	<b>21.29</b>	<b>24.52</b>
	<b>Remaining districts</b>		<b>17.35</b>	<b>15.77</b>	<b>19.16</b>
<b>Chhatisgarh</b>	<b>DPEP districts</b>		<b>12.12</b>	<b>11.33</b>	<b>13.10</b>
	<b>Remaining districts</b>		<b>8.21</b>	<b>6.83</b>	<b>9.53</b>
<b>Maharashtra</b>	<b>DPEP districts</b>		<b>18.26</b>	<b>14.71</b>	<b>22.00</b>
	<b>Remaining districts</b>		<b>10.37</b>	<b>7.98</b>	<b>12.83</b>
<b>Andhra Pradesh</b>	<b>DPEP districts</b>		<b>17.62</b>	<b>16.65</b>	<b>18.77</b>
	<b>Remaining districts</b>		<b>14.22</b>	<b>11.38</b>	<b>16.94</b>
<b>Karnataka</b>	<b>DPEP districts</b>		<b>11.93</b>	<b>10.06</b>	<b>13.97</b>
	<b>Remaining districts</b>		<b>10.36</b>	<b>8.32</b>	<b>12.52</b>
<b>Kerala</b>	<b>DPEP districts</b>		<b>1.82</b>	<b>1.25</b>	<b>2.44</b>
	<b>Remaining districts</b>		<b>0.58</b>	<b>0.08</b>	<b>1.13</b>
<b>Tamil Nadu</b>	<b>DPEP districts</b>		<b>13.81</b>	<b>11.91</b>	<b>15.96</b>
	<b>Remaining districts</b>		<b>9.90</b>	<b>7.57</b>	<b>12.39</b>

#### References

- Premi, Mahendra K. 1991: *India's Population: Heading Towards a Billion*. Delhi: B. R. Publishing Corporation.
- Registrar General & Census Commissioner, India 2001, 2001a: *Census of India 2001, Series 1, India, Provisional Population Totals, Paper 1 of 2001*. Delhi: Controller of Publications.
- Registrar General & Census Commissioner, India 2001, 2001b: *Census of India 2001, Series 1, India, Provisional Population Totals, Paper 1 of 2001, Supplement: District Totals*. Delhi: Controller of Publications.

Journal of Educational Planning and Administration  
Volume XVI No. 3, July 2002

INDIAN  
JOURNAL  
OF  
INDUSTRIAL  
RELATIONS

CONTENTS VOLUME 37 NUMBER 4 APRIL 2002

ARTICLES	<b>The Study of Industrial Relations: A Changing Field</b> <i>J.S. Sodhi and David H. Plowman</i>
	<b>Group and Intergroup Relations: Conflict and Cooperation</b> <i>Ishwar Dayal</i>
	<b>Rationalisation of Workforce - An Integral Part of Structural Adjustment</b> <i>BP Guha</i>
	<b>Type A/B Behaviour Pattern and Occupation As Predictors of Occupational Role Stress</b> <i>Manisha Jain, Prasliant Mishra and Saroj Kothari</i>
	<b>Job Delight : Beyond Job Satisfaction</b> <i>Sumita Rai and Arvind K. Sinha</i>
COMMUNICATIONS	<b>Organisations Can Develop Leaders</b> <i>Dhananjay Pandey</i>
	<b>WTO and Indian Labour</b> <i>Dipak Kumar Bhattacharyya</i>
BOOK REVIEWS	<b>Globalisation and Labour - Management Relations: Dynamics of Change (C.S. Venkata Ratnam)</b> <i>P.C. Bansal</i>
	<b>Managing More Effectively: A Professional Approach to Get the Best Out of People (Madhurendra K. Varma)</b> <i>S.P. Chauhan</i>
	<b>Developing A Culture of High Performance (Rama j. joshi and J.S. Sodhi)</b> <i>Deepak K. Srivastava</i>
INDEX OF ARTICLES	<b>Index of Articles</b> (Based on SRC Library)

A Quarterly devoted to dissemination of knowledge in the fields of Industrial Relations and Human Resources, including relevant aspects of labour relations, personnel management and rural labour. Besides, communications from Managers and Union Leaders reflecting their views and Book Reviews are also incorporated.

EDITOR : RAMA J. JOSHI

Subscription Rates : for India - Rs. 450.00 for one year; Rs. 1150.00 for three years; Rs. 1800.00 for five years; and Rs. 120.00 for a single copy. For foreign countries (Air Mail) - \$85 for one year; \$240 for three years and \$350 for five years. For foreign countries - (Sea mail) - \$50 for one year; \$140 for three years; and \$220 for five years.

*Draft yaijuhlc to*

**SHRI RAM CENTRE**

FOR INDUSTRIAL RELATIONS AND HUMAN RESOURCES

4, S. ifdar H. ishini M. irg, New Delhi-110 001.

Phone: 3352410/12/14/15/26, 3351953 Fax : 011-3351953

## Globalisation and Educational Attainment - The Indian Experience\*

K. C. Reddy\*  
K. Neelaveni\*  
U.N. Moorthy\*

### Abstract

*The crucial issue for giving policy makers a strong basis for making proper policy choice is: "What is the relative importance of economic growth as against public intervention and public spending in improving the living standards of the poor?" An analysis of data pertaining to selected Indian states in the post-reform period i.e. for the years 1990-91 and 1997-98, in regard to variation in literacy rates across Indian States, shows that those with average income did not perform well. Similarly, the variable incidence of poverty does not seem to explain much of the variation in literacy deprivation. There is, however, strong evidence that public provision of education has an over-riding importance in promoting literacy in the Indian context. Hence, the role of the State in promoting educational attainment is of crucial importance. The other two policy handles to improve educational attainment i.e., income growth and lower poverty incidence are effective only when they are accompanied by an increase in public expenditure on education. The future development initiatives in Indian States must, therefore, focus on educational development.*

### Introduction

India has brought in a paradigm shift in its development strategy and policy in the early Nineteen-nineties with the ultimate objective of integrating the economy with the global economy through various initiatives to stabilize the economy in the short run and to improve its efficiency through structural adjustment in the long run. Ten years of reform experiment appears to have yielded mixed results. Studies analyzing the reform experience under various

\* Revised version of the paper presented in the Conference on Globalization and Educational Challenges. (New Delhi, NIEPA, December 2001)

\*\* Department of Economics, Andhra University, Visakhapatnam - 530003, Andhra Pradesh.

heads, but with a broad caption, Globalization-Liberalization-Privatization (GLP), also draw mixed inferences. While the reforms have helped the economy to move towards a higher growth trajectory, which is now described as a 'New Hindu Rate of Growth' of around 6 per cent from the Hindu Rate of Growth of 3 to 3.5 per cent of the Fifties through the Seventies, the sustainability of the 6 per cent growth and more importantly the usefulness of the current growth pattern and its composition in helping to improve the quality of living of the Indian people at large is being questioned. Moreover, the data, provided by the various agencies, both private and governmental, reveal that the reforms did not bring an accelerated reduction in poverty incidence. Evidently, the mortality rates are still high and the literacy level did not show significant improvement during the reform period. The unemployment problem is becoming increasingly complex as the work participation rates declined during this period of accelerated activity and the annual growth of employment during the reform period has been lower than the population growth. Many people decry the reforms package because it lacked human face and also because the growth that India achieved during the Nineties is characterized as jobless and India's recent growth experience has only widened inequalities of varied types.

India is now at a critical stage of its development. The government of India has been advocating strategic initiatives that are expected to make reforms pro-poor under what are called second-generation reforms, which are more state, region and group specific. We feel that the governments, both the Central and State, must take a closer examination of those aspects of the Indian economy, during the reform decade, that are likely to have strong impact on the living conditions of people. This must be done before formulating fresh initiatives to make future development meaningful by making people the central focus. We are, therefore, making yet another attempt to examine State-wise data on human development variables such as literacy to analyse the causality and to indicate the policy implications of future initiatives.

We discuss the concept of educational development and its importance in the context of economic evolution of developing countries like India, the available evidence on social development oriented development strategy, analysis of results pertaining to Indian States and a brief summary of our recommendations.

### **Globalization, Economic Development and Educational Development - The Inter-connection**

Globalization is a process, difficult to quantify, but is visible in terms of certain variables and parameters like openness, reducing the role of the State in production, making the State more economical and competitive. It involves a paradigm shift in both strategy and policy and aims at achieving higher growth through improved competition and efficiency. Economic development is also a process but with well-defined goals and objectives, translated into achievable

targets using appropriate strategies. The objectives of development might vary from country to country and from time to time in a country given their resource constraints and development priorities. However, one major purpose of development for all countries would be to improve the living conditions of people. In the words of Irma Adelman, economic development, as distinct from mere economic growth, combines: (1) self-sustaining growth; (2) structural change in the patterns of production; (3) technological upgrading; (4) social, political and institutional modernization; and (5) wide-spread improvement in the human condition. While all the five aspects are important, it is perceived that the wide-spread improvement in the human condition is the critical aspect, as ultimately, development must improve the quality of life. Moreover, improved quality of life would contribute to a sustained improvement in the other aspects including technology up-gradation and modernization of institutions. Of the three essential dimensions of 'the quality of life' - knowledge as indicated by educational attainment is crucial and is the focus of our attention, it has been emphasized by the capability approach. Evolution of development economic theory towards social development approach, better described by Amartya Sen as capability approach is both revealing and interesting and is based on several studies, both theoretical and empirical. In the 1970's, thoughts on growth and redistribution crystallized into a social development approach influenced by modernization theory and the Social Development Index of Adelman and Morris (1977) could be considered as a Modernization Index. Gunnar Myrdal (1968) adopting a productivist supply-side approach to development maintains that the "welfare reforms, rather than being costly for society, actually lay the basis for more steady and rapid economic growth."

Hollis Chenery (1974) and associates in a World Bank sponsored study argued that egalitarian and development objectives are complementary. They favoured redistribution of income and assets to the poorest groups. In the 1980's, the strategy of support-mediated security initiative advocated by Dreze and Sen (1989) pursued equity without growth. These studies maintain that what matters is not growth but development that is equitable, sustainable and participatory. This model identified as the Kerala model implies a constellation of advanced social policies with comparatively high levels of education which ensure health and female empowerment. But the proponents of structural adjustment criticized the approach on the ground that pursuing equity without growth will steer an economy into a major crisis leading to severe stagnation in the spheres of material productivity, soaring unemployment, acute fiscal crisis and thus, erosion of sustainability of social welfare expenditure. "In the absence of economic growth, it is difficult to sustain, much less expand, welfare gains" (Isaac, 1995).

In the 1990's, however, the idea of redistribution with (or for) growth regained its ground in the mainstream development theory partly because of the failure of the Washington Consensus experiment in Latin America and the

success of the East-Asian experience and China. Focusing on educational development as an important component of development and also due to the growing critique and substantial evidence against the trickle down theory it is maintained that "measures to reduce inequality can simultaneously contribute to faster growth" (Griffin, 1996). The growing concern for poverty, inequality and educational and social indicators compelled economists to redefine development itself. In this direction, Haq (1995) has identified four ways to create desirable links between economic growth and human development; skills, more equitable distribution of income, government social spending and empowerment of people, especially women. Accordingly, Haq proposed a Human Development Paradigm of equity, sustainability, productivity and empowerment. It is the element of productivity, in this paradigm, that makes it useful in comparison with other paradigms including the Washington Consensus and the alternative development paradigm.

Amartya Sen's (1985) capability approach, forerunner to Human Development Approach and considered to be the main inspiration for Human Development Approach, considers that social development, if sharpened, redefined and renewed in a wider framework, may be a more inclusive and enabling perspective than Human Development itself. The World Summit for Social Development in Copenhagen in 1995 rightly stated that economic growth and social development impinge on each other, i.e. broadly effective social progress is not possible without a socially oriented economic and financial policy (UNRISD, 1995). Educational development is pursued in moral, political and economic terms. In a moral sense, educational development is advocated in the name of solidarity, compassion or decency. Galbrieth (1996) maintained that "in the good society there must not be a deprived and excluded underclass. Social and welfare policies not only enhance political stability and legitimacy but also invite trade-offs between political legitimacy and political efficacy and State autonomy. The importance of social policies and social development is more crucial in the economic sense defined as "a process of planning social change designed to promote well-being of the population as a whole in conjunction with the dynamic process of economic development" (Midgley, 1995).

Social development could be used in a narrow sense implying public welfare policies to improve human resources. But this approach suffers from compartmentalization, separating social policies from development policies in which social development policies might end up with a basket of poverty alleviation package implying below optimality. Social development could also be used in a disciplinary sense, distinguished from economic development in particular. In the context of development, social development has to be viewed in a substantive and comprehensive sense with equal emphasis on social and economic development. In other words, an integrated approach to social concerns and growth strategies is desired as "social inequality entails not merely a moral

cost and political consequence, there is a point at which social injustice undermines economic efficiency" (CSGS, 1994) Thus, the case for social development rests more on economic considerations as "economic growth does not cause an increase in the quality of life, but an increase in the quality of life does lead to economic growth" (M.R. Shelly, CSGS, 1994)

### **Available Empirical Evidence - Linking Educational Attainment**

This section takes a close look at a couple of highly influential empirical studies that have thrown up startling policy conclusions relating to social development, economic growth and poverty reduction among developing economies.

Anand and Ravallion (1993) in their study combine cross-country data analysis along with a time-series study of the exceptionally good performance of Sri Lanka for analysis using the regression framework. They pose and answer the very interesting and relevant question: "Should development priorities shift toward the provision of public services in poor countries, even if the shift is at the expense of income growth?" (ibid).

They first clarify that the fundamental difference between the mainstream income-centered approach to development policy and the capability approach lies in their treatment of ends and means. While the human development approach focuses on the quality of life people lead and not on what people own or possess; the income approach evaluates investment in health, nutrition and education (human capital) solely in terms of the additional output or income generated by such outlays. In the capability approach, peoples' health status and education attainments and improvements therein are treated as ends in themselves and they are valued highly even if they do not yield a positive rate of return.

Anand and Ravallion then go on to examine the relative importance of economic growth (of private incomes) and the provision of public services within the human development framework. The conclusion they arrive at is as follows:

"... Average affluence matters to the extent that it delivers lower income poverty and better public services. ... Though both these variables matter, it is notable that the quantitative significance of public health spending appears to be sizeable. We attribute roughly two-thirds of the elasticity of life expectancy with respect to average income to the positive effects of income on public health spending; rest is attributed to the decrease in poverty that typically accompanies higher average incomes. Sri Lanka's impressive record of progress in human development, despite its being a poor country, also illustrates what the right sort of public action can achieve, independently of income growth" (ibid).

The main conclusion is that public spending on certain crucial components is very effective in enhancing human development. Further, such effectiveness of public spending is independent of its impact on poverty reduction. This important conclusion of Anand and Ravallion is further strengthened by the study conducted by Richard Jolly and others.

Richard Jolly writes: "To be pessimistic about development in 1990's is thus to lack historical perspective" and he goes on to quote from an ILO research paper by Lipton (1996) in support of his statement - and it says "the risk, intensity and severity of poverty have fallen more sharply in the past fifty years than in the preceding thousand years. So has the risk that poverty will force its victims into illiteracy, illness or death". This is the global picture and the Indian scene need be no different. The broad aim, therefore, is to enquire into the causes for such success stories in development and try to see how they can be repeated and given enough publicity to catch the attention of policy makers.

The implication that all is very well and nothing more need be done is not correct - it is not only a call for more effort but also for more purposeful effort. One, rather a strange, fact emerges from an examination of this study. It is found that a major part of the success has been due to early and rapid advances in human development through higher levels of educational attainment. At times economic growth accompanied human development - but in some countries (mainly during the 70's and 80's), human development and educational development was rapid even when economic growth failed. The period between late 70's and early 80's is called the 'lost decade' when many countries (nearly a 100 countries) did not grow rapidly and some even declined. Nevertheless, human development improved, sometimes at faster rates even in countries where the decline in economic activity was severe. Thus, the relationship between economic growth and sustained human development (let us call it social development) needs further probing and this area of research promises to be very useful for choosing the right policy mix.

Jolly and others studied the development experience of 10 countries over a period of thirty years; six of these countries experienced steady and rapid growth of per capita income and four countries experienced low growth and even interrupted growth - meaning considerable economic decline. The surprising fact is that despite the vast differences in economic growth, human development and educational attainment advanced steadily in all these countries. This highlights the contrast between human development and income growth approaches. A given level of social expenditure can be easily maintained even when per capita incomes are unchanging at a given level so that growth is not necessary for ensuring the achievements in terms of social indicators. Economic growth may be necessary for very rapid advances in human development but if it is overall well being, it can improve by reallocating national resources to social sectors. This can be done even without economic growth.

Four sets of reasons are given by Jolly for this intriguing relation between economic growth and human development. They state that:

- (1) Remedial action was taken at the behest of the World Bank and I M F. These institutions saw that for the adjustment policy packages to work!



more attention needs to be paid to education, health and other social and human aspects. Therefore, such conditionalities were built into their structural adjustment programmes (SAPs).

- (2) The threat of very severe consequences of sudden and severe adjustment programmes gave rise to many NGOs and other organizations which emphasize human development. When IMF and the World Bank also advocated social sector safety nets together, they succeeded much better.
- (3) The third reason is very important; these interventions and remedial action undertaken by Government and NGOs were "low cost high impact" in nature. These programmes were extended to whole populations, thus bringing in "scale economies". This reason is very much in line with Amartya Sen's statement that human development programmes are labour intensive and very economical in their need for capital or high cost inputs.  
Programmes such as immunization, 'OR' therapy, promotion of breast feeding, improving child nutrition, family planning, low cost water and sanitation facilities were encouraged even while growth was absent. Their combined effect on life expectancy and IMR and CMR specially was considerable.
- (4) The fourth reason, why educational and social development continued even when economic growth was interrupted is that the suggested adjustment policies had an adverse impact upon social sector input indicators but not on the output or outcome indicators. The most important input that was reduced due to adjustment policies was public expenditure on education. But since most of the infrastructure was built in the first stage itself, the strong upward trend in education sector outcomes continued into the next 10 years or more. There was also a possible substitution of private expenditure when public expenditures declined due to adjustment policies.

The increase in quantitative measures of human development and its indicators, however, does not ensure quality improvements. Quality may have even declined as evidenced by schools without facilities such as books and clinics without medicines.

Jolly et.al. deduce two important lessons -

- (1) More comprehensive developments that encompass educational development, poverty reduction and economic growth are needed as a long run strategy.
- (2) More focused sector specific or sub-sector specific programmes are needed in the short run - comprehensive development is a long term

good - this must not lead to neglect of focused sector specific action programmes that improve health and education. This is so because substantial progress, that is very visible, is the immediate result - and it is not necessary to wait for long periods.

Another important reason is that the investments made in basic education act as foundation for more comprehensive long-term development plans for development at the 2<sup>nd</sup> stage.

In addition, 'partial rates of return' on such focused partial plans are much higher than on total investments in a broad based development plan. Fast track improvements in basic education and development of skills must be undertaken without compromising on comprehensive long term development plans.

#### **Analysis of Data Pertaining to Selected Indian States**

India's development experience with respect to educational social development could be considered inadequate even during the decade of economic reforms in terms of both absolute levels and by Asian standards, leave alone in comparison with other advanced countries. The inadequacy is quite evident if the social development indicators of India are compared with the Chinese levels. The Asian Development Bank database for 1999 shows that the adult literacy rates for females and males in India were 44 per cent and 68 per cent while for China the comparable figures were 78 per cent and 91 per cent respectively. Similarly, India is well behind China in respect of gross secondary school enrolment rates, pupil teacher ratios both for males and females, life expectancy and mortality rates. This is attributed largely to lopsided strategy towards growth both in the pre-reform and during the reform period at the expense of social development. China's better performance is explained by its strategy of development which focused on educational and social development during the early years, particularly between 1960-80.

While the development experience of China and other East Asian countries could provide insights to India, India could learn from its own experience. For example, the social development indicators of Kerala compare favourably with most of the East Asian countries, including China.

It is this emerging thinking, both among academics and policy makers, that prompted the present exercise.

We selected 14 Indian States for this study and they account for a large part of India's population, resources and income. The selected States are - (1) Andhra Pradesh, (2) Bihar, (3) Gujarat, (4) Haryana, (5) Karnataka, (6) Kerala, (7) Madhya Pradesh, (8) Maharashtra, (9) Orissa, (10) Punjab, (11) Rajasthan, (12) Tamil Nadu, (13) Uttar Pradesh and (14) West Bengal. The data pertaining to Bihar, Madhya Pradesh and Uttar Pradesh are for the erstwhile three States. Jharkand, Chattishgarh and Uttaranchal were carved out of these States

subsequently. Selection of the 14 States is dictated by data availability. However, the selected States are representative for more than one reason. They are from all the four corners of the country and capture the political, social and economic characteristics of India. The States with different levels of economic and social development, including those with highest and lowest levels, form part of this group. The results of this study, therefore, could be considered appropriate for the Indian economy as a whole.

We have taken into consideration for analysis both economic and social variables. The economic variables considered are - (a) Real per capita income, (b) Tax revenue as per cent of net State-domestic product, (c) Non-tax revenue as per cent of net State domestic product, and (d) Per capita educational expenditure. The study has taken into consideration the following social variables - (a) literacy rate, (b) life expectancy, and (c) infant mortality. Variables like tax revenue and non-tax revenue as per cent of Net State Domestic Product are expected to indicate the efficiency level and, therefore, the degree of globalization to a large extent.

The data are drawn from the publications of CMIE, RBI Bulletins, Statistical Abstract of A.P. and India, Economic Survey, unless stated otherwise.

As a preliminary step before analyzing the data pertaining to the selected States, we estimated exponential growth rates both for the economic and social variables for the period 1985-86 to 2000-2001. Growth rates were estimated for the entire period and also for two sub-periods viz., 1985-86 and 1991-92 to 1999-2000. Results for the two sub-periods are provided in Tables 1 and 2. These performance indicators are used for ranking and grouping the States into high, medium and low performing states.

At the second level, we estimated rank correlations between per capita educational expenditure and literacy. The rank correlations are provided in Table 3. We then estimated regression functions both simple and multiple with literacy rate (LR), as dependent variable and per capita income (PCI), per capita social sector expenditure (PERSE), per capita educational expenditure (PERED), tax revenue as per cent of Net State Domestic Product (TXSDP) and Non-tax revenue as per cent of Net State Domestic Product (NOTSDP) as explanatory variables. The estimated equations for two years, viz., 1991-92 and 1997-98 for the 14 selected States are all in the logarithmic form. We expect that all the income, tax and expenditure variables will influence literacy positively. The expected sign, therefore, would be positive. The summary results are provided in Table 4. Finally, as already stated, we grouped States into high performing medium and low performing States with respect to social and economic variables and paired them for two years, 1991 and 1997.

± - - NO ON - - 0 ON © | \* ° ^ ^

S-o  
 -- 4 5  
 a g 0  
 5.2 ^ ov  
 N-> NI S O  
 \* ^ 3 0 VO  
 a. uj O oo

2 -a  
 j | 1 f 1/3 E 3 P Q  
 en 3 CO a. 2. 2 S f o £ s | \* 5 5 < \*  
 EC-CNim^wSSNb 2 ~ r4 m -\*

in r- r- NO © oi r- r- r-  
 od #i rj- m n n N N - - oo

-a  
 Qu  
 is «  
 TO u.  
 l- r- -  
 .2=§  
 3' c < ^  
 (S rn  
 - NO \D 'n  
 - od od  
 ^- -t r\*) m

4> 03 -0 ..  
 No ON <U « to E.5 02 '8  
 0 oo a i CS - j= 2 2 6 o  
 a, m 6 2 :- M I ^ a Q s vo N J - O < ^  
 oo 0 m xk1 >n  
 o < ^ ^ ^ od 0 - <N  
 oo /% <ti c> \*% ^- -t r\*) m

w 3  
 -J TB  
 O CH  
 H X i  
 W CB  
 WCB

in ~ j  
 J 2 J2 « -9 E « I p  
 « E b .03 e « « is 0 2 ^ 5  
 C u ^ 03 3 3 ^ NO oo ON - - rs oel

3  
 - > m -NO M - ON  
 <N 0

03  
 So | S 8  
 - M « ffi  
 « E \* W A  
 ^ ^ O

1 2  
 \* ? \* § U ^ 2 3 'm s rsi  
 M t f H I ^ [ - oo  
 X - ri n »t  
 0 ^ M N i ^ ON ON  
 r- NO NO ON NO ON  
 K NO NO 'n §=11

it g g Q  
 -o .SL-S I! 3 E 2 £ a > O > CL  
 a. h » 0 - j = d 2  
 S -ri m

-S: ~

SO CN Ck <3  
OO t \* 1/S Tj" ^\* \*— OO Tj" 00 M T,  
m M M (N — — o

G

(8  
60  
C  
5<sup>T3</sup>  
a- s | 4\* \*S  
E ca g 4>  
i' | b co t/i co  
X 60 •i'-s ii o co e O Q

~ <N m so t- oo O - n n t

T3  
B

B5 ° ^  
cc; so  
o S OO SO Tf  
n « t fN O VI 10 00  
v> w> -3 " \*f m ci w> so  
2 as

2: a  
z  
%  
o  
a  
a.  
Q 3  
Z 2 2 2 2 3  
co co 2 3 •t Q 2 4\*  
X a x = 2 111 0 Li  
t/i co  
O Q

M n t so 00 ON → <N r'1

TABLE 2 (CONTD.)  
Indicators of Educational Attainment

<i>Literacy Rate</i>		<i>Per Capita Social Sector Expenditure Growth Rates (1991-92 to 1999-2000)</i>		<i>Per Capita Educational Expenditure Growth Rates (1991-92 to 1999-2000)</i>	
Rank	High Literacy Rate 1997	Rank	High Growth Rates	Rank	High Growth Rates
1.	Kerala 93.0	1.	Maharashtra 14.48	1.	Maharashtra 15.05
2.	Maharashtra 74.0	2.	Andhra Pradesh 14.28	2.	Punjab 14.47
3.	West Bengal 72.0	3.	Gujarat 14.2	3.	Haryana 13.91
4.	Tamil Nadu 70.4	4.	West Bengal 13.72	4.	West Bengal 13.08
5.	Gujarat 68.4	5.	Punjab 13.51	5.	Rajasthan 13.03
	Medium Level		Medium Level		Medium Level
6.	Punjab 67.0	6.	Orissa 13.33	6.	Orissa 12.77
7.	Haryana 65.0	7.	Haryana 13.30	7.	Tamil Nadu 12.65
8.	Karnataka 58.0	8.	Rajasthan 13.01	8.	Karnataka 12.33
9.	Madhya Pradesh 56.0	9.	Kerala 12.78	9.	Gujarat 12.12
10.	Uttar Pradesh 56.0	10.	Karnataka 12.40	10.	Bihar 11.78
	Lower Level		Lower Level		Lower Level
11.	Rajasthan 55.0	11.	Madhya Pradesh 11.45	11.	Kerala 11.55
12.	Andhra Pradesh 54.0	12.	Tamil Nadu 11.37	12.	Uttar Pradesh 11.30
13.	Orissa 51.0	13.	Uttar Pradesh 10.37	13.	Andhra Pradesh 11.25
14.	Bihar 49.0	14.	Bihar 9.50	14.	Madhya Pradesh 10.23

Source: Document of the World Bank, January 31, 2001.

The results pertaining to rank correlations provided in Table 3 show that literacy level is highly correlated with per capita social development expenditure and the degree of association appears to have improved between 1990-91 and 1997-98.

TABLE 3  
Rank Correlations

		1990-91	1997-98
1. Per Capita Social Sector Expenditure	Literacy	0.7516	0.8264
2. Per Capita Educational Expenditure	Literacy	0.8418	0.7626

The results pertaining to the regression functions provided in Table 4 show that the income and efficiency variables, including per capita income, do not appear to explain the literacy level significantly. When we consider specific cases, literacy rate appears to be explained largely by per capita educational expenditure (equations 3 and 11). Both per capita income and tax revenue as per cent of net State domestic production here provide coefficients with negative signs.

Thus, the results pertaining to regression equations support the inferences drawn earlier on the basis of rank correlations that variations in social development indicators such as the literacy rates are explained by sector specific expenditures like per capita social development expenditure and per capita education expenditure. The general economic and efficiency variables do not appear to be influencing the improvement in educational development.

When we examined the two-way tables (Tables 5 to 7), Kerala joined the high growth States during 1997 along with Maharashtra, Tamil Nadu and Gujarat. West Bengal also shows a double jump to join the high performing States. Punjab shows a set-back both in terms of growth and literacy. The three other Southern States (other than Kerala) appear to exhibit three different trends. While Tamil Nadu moved into high growth performance category due to high priority given to social sector expenditure in 1991 notwithstanding a deterioration in 1997, Karnataka continues to stagnate and Andhra Pradesh shows deterioration.

The State of Rajasthan appears to have focused on health sector expenditure due to high mortality rates and the State brought down its infant mortality rates by 1997. In the State of Madhya Pradesh, the focus on education through Education Guarantee Scheme appears to have stabilized its literacy level.





TABLE 5  
Two-way Tables Relating Growth of Per Capita Income and Literacy Level for Selected Indian States,  
1991 and 1997

<i>Per Capita Income Growth I LR -&gt;</i>	<i>1991</i>			<i>1997</i>		
	<b>High-91</b>	<b>Medium -91</b>	<b>Low level - 91</b>	<b>High-97</b>	<b>Medium-97</b>	<b>Low-97</b>
<b>High-91</b>	Maharashtra Tamil Nadu Gujarat Punjab		Kerala	Kerala Maharashtra West Bengal Gujarat and Tamil Nadu		
<b>Medium-91</b>	Haryana	Karnataka Madhya Pradesh	West Bengal Orissa	Medium-97	Punjab Karnataka Madhya Pradesh	Haryana Uttar Pradesh
<b>Low level-91</b>	Rajasthan	Andhra Pradesh Uttar Pradesh Bihar		Low-97	Rajasthan Andhra Pradesh	Orissa Bihar

TABLE 6  
Two-way Tables Relating Growth of NSDP and Literacy Level for Selected Indian States, 1991 and 1997

<i>NSDP gr i</i> <i>LR -&gt;</i>		<i>1991</i>			<i>NSDP gr I</i> <i>LR-&gt;</i>			<i>1997</i>	
<b>High-91</b>	<b>High-91 Maharastra</b>	<b>Medium -91 Tamil Nadu Gujarat Punjab</b>	<b>Low level - 91 Kerala</b>	<b>High-97</b>	<b>High-97 Kerala Maharastra Tamil Nadu Gujarat</b>	<b>Medium-97 West Bengal</b>	<b>Low-97</b>		
<b>Medium-91</b>	<b>Haryana Madhya Pradesh</b>	<b>Karnataka</b>	<b>West Bengal Orissa</b>	<b>Medium-97</b>	<b>Haryana</b>	<b>Punjab Madhya Pradesh</b>	<b>Karnataka Uttar Pradesh</b>		
<b>Low level-91</b>	<b>Andhra Pradesh Rajasthan</b>	<b>Uttar Pradesh</b>	<b>Bihar</b>	<b>Low-97</b>		<b>Rajasthan Andhra Pradesh</b>	<b>Orissa Bihar</b>		

TABLE 7

**Two-way Tables Relating Growth of Per Capita Educational Expenditure and Literacy Level for Selected Indian States, 1991 and 1997**

<i>Per Capita Educational Expenditure Growth Rate J-LR -&gt;</i>	1991			<i>Per Capita Educational Expenditure Growth -I LR -&gt;</i>	1997		
	High-91	Medium -91	Low level - 91		High-97	Medium-97	Low-97
High-91	Punjab	Maharashtra Tamil Nadu	Kerala Gujarat	High-97	Maharashtra West Bengal	Tamil Nadu Gujarat	Kerala
Medium-91		West Bengal Orissa Madhya Pradesh	Karnataka Haryana	Medium-97	Punjab Haryana	Karnataka	Madhya Pradesh Uttar Pradesh
Low level-91	Uttar Pradesh Rajasthan Bihar		Andhra Pradesh	Low-97	Rajasthan Andhra Pradesh	Orissa Bihar	

Uttar Pradesh, Bihar and Orissa are consistently poor performers in the social sector indicators mainly due to low growth which was consequent to low-level of social capital. Gujarat appears to maintain its high performance in social indicators particularly literacy levels due to prioritization of social sector expenditure which was possible because of high income growth.

What is the relative importance of economic growth as against public intervention in improving the living standards in poor countries? This question has given rise to a strong controversy regarding development policy. On the one hand, we have the major studies by Isenman (1980), Sen (1981), Anand and Kambur (1991) and Anand and Ravellion (1993). They contend that it is public expenditure on health and education that plays a crucial role in promoting the 'quality of life' - and that the role of economic growth is merely as an intermediary variable. Their conclusion is based on very carefully performed empirical studies based on the experiences of two exceptional countries - Sri Lanka and China.

In the other side of the controversy, we have Preston (1975), Rodgers (1979), Bhalla (1988), Kakwani (1993) and Pritchett and Summers (1996). They have observed a positive relationship between economic growth and quality of life. Economic growth leads to increase in individual incomes and hence, people enjoy better standard of living.

Most of these studies are based on cross-country data. Of these, the study by Anand and Ravellion (1993) is replicated using data across Indian states for two time points. This study by Anand and Ravellion provides a useful analytical framework to examine the complex interrelationship between income level and two important components of human development - life expectancy and literacy. They observed a high positive correlation between life expectancy in years and private consumption per capita in \$ PPP (Purchasing Power Parity) for the year 1985 across a set of underdeveloped countries. This high correlation is, however, considered to be 'spurious correlation' because of the influence of many other variables that are closely related to both economic growth and life expectancy or literacy. An ingenious use of the regression method by Anand and Ravellion disentangles these relations to draw the causal links and thus provide meaningful and useful policy conclusions.

They specify the model at the micro-level by postulating that for an individual  $I_i$ ,  $(C^i = C^i(y^i, g^i))$  where,  $C^i$  is her capability (health or education)  $y^i$  is her command over privately produced goods and services and  $g^i$  is her command over publicly provided goods and services. It is also assumed that the marginal impact of both  $y^i$  and  $g^i$  on  $C^i$  (i.e.,  $dc^i/dy^i$  and  $dc^i/dg^i$ ) are non-negative for an individual.

Using this simple model and making further assumption on the relative influence of  $y^i$  and  $g^i$  they arrive at three alternative rates or theoretical

explanations for the observed positive correlation between human development and average affluence. The three alternative explanatory theories are:

- a) Assume that  $c'$ , an individual's capability such as educational attainment depends solely on  $y$  his private income and that the State's economic growth process is such that it increases the incomes of all people in the State. This leads to the explanation that growth directly enhances human capabilities and, therefore, contributes to human development.
- b) Assume that the relation between income and capabilities at the individual level differs from one individual to another, but the main divide is between the poor and the non-poor. The link between income and education is thus very steep and strong for people below poverty line while it is flat and, therefore, very weak or non-existent among the non-poor. This assumption leads to the second explanation for the aggregate level correlation between income and human capabilities. In this route, economic growth must be "pro-poor" to be able to promote human development. Thus, only if economic growth reduces income poverty considerably, it will lead to higher human development. An increase in average levels of income by itself may not bring about a reduction in income poverty which is recognized as an effective instrument to enhance human development.
- c) The third explanation is based on the assumption that public provision of goods and services, 'g' having over-riding influence on  $c'$  and private income,  $y'$  or its distribution between poor and non-poor is not important for promoting human development. Hence, economic growth has an impact on human capabilities only because economic growth ensures that more and better quality public goods and services are provided.

These assumptions and the alternative explanations give rise to testable hypothesis in the familiar regression framework. Although there is a high and positive simple correlation between income and human development index, it vanishes or becomes negligible or nil when the influence of poverty level or public expenditure on social sectors such as health or education is controlled or accounted for. Anand and Ravellion perform this exercise taking life expectancy at birth which measures longevity to indicate the health status of a country as the dependent variable. They use cross-country data, with a sample set of 22 developing countries for the year 1985. They conclude that the partial correlation between life expectancy and average income vanishes when income poverty variation and variation in per capita public expenditure on health are controlled.

They carry the analysis further by specifying a non-linear relation between life expectancy and public health spending per person below the poverty line. This allows them to bifurcate the influence of average income on life expectancy

between the alternative channels - poverty reduction versus public spending on health. The relative importance of these two routes is measured by the magnitude of the income elasticity of poverty ratio and of the income elasticity of public expenditure on health. They find that income poverty reduction contributes to one-third of the impact while public expenditure on health carries a weight of two-thirds. Public spending is, thus, more effective than poverty reduction in promoting human development.

We intend to explore this relation despite the caution given by Anand and Ravellion. They maintain the results that they have obtained in the case of life expectancy may not be generalisable to other indicators of human development. They also report that the positive correlation between literacy and average income persisted even after controlling for incidence of income, poverty and public expenditure on education. They also report absence of correlation between literacy and public spending on education which may be due to the fact that most often a large part of public expenditure on education is on secondary and higher levels of schooling. Following their suggestion that there is need for re-examining this relationship in different contexts, we attempt to examine the relation between literacy and net state domestic product per capita while allowing for poverty incidence and public spending on education per capita for the years 1991-92 and 1997-98 across the 14 major Indian States. In our empirical exercise, the dependent variable is literacy ratio measuring the capability - educational attainment and we wish to see how it is related to average income levels i.e., SDP per capita.

The results are as follows. For the year 1991-92

1.  $-\log(100-LR91) = -6.011 + 0.291 \log SDP91$  with  $R^2 = 0.0$   
(0.767)
2.  $-\log(100-LR91) = -7.627 - 0.963 \log SDP91 + 2.361 \log PERED91$   
(2.654) (4.414)  
 $-0.0131 \log Pov.92$   
(0.714)  
with  $R^2 = 0.598$

and for the year 1997-98

3.  $-\log(100-LR97) = -6.648 + 0.393 \log SDP97$  with  $R^2 = 0.029$   
(1.18)
4.  $-\log(100-LR97) = -4.906 - 0.497 \log SDP97 + 1.24 \log PERED97$   
(1.57) (2.041)  
 $-0.245 \log POV-97$  with  $R^2 = 0.269$   $R^2 = 0.269$   
(1.029)

where	LR91	Literacy level in 1991
	LR97	Literacy level in 1997
	SDP91	Net State domestic product in 1991
	SDP97	Net State domestic product in 1997.
	PERED91	Per capita real expenditure in education in 1991
	PERED97	Per capita real expenditure in education in 1997
	POV 92	Incidence of poverty in 1992
	POV 97	Incidence of poverty in 1997

In explaining the variation in literacy rate, across the Indian States, average income did not exhibit any importance. The regression exercises do not - as cautioned by Anand and Ravellion - show dramatic changes in sign and statistical significance as in the case of the health indicator, life expectancy across countries; but the results are on similar lines. We too observe a change or a reversal of sign for the coefficient associated with SDP from positive to negative when the variables - per capita public spending on education and incidence of poverty - are introduced. However, there is one important difference. The income variable is significantly different from zero as indicated by the t-value and p-value only in the presence of these two variables i.e., public spending and poverty incidence. The simple regression between literacy and SDP indicates that SDP was not statistically significant. Probably this explains that economic growth is effective in influencing education attainment only when it is coupled with enhanced public expenditure on education. This is close to the third explanation that economic growth works through its influence on  $g'$ , that is, publicly provided goods and services.

Almost similar conclusions emerge when the results for 1997 are analysed. The variable, public expenditure on education dominates in both the years. It has the expected sign throughout (positive); the t-value is quite high and p-value low indicating "statistical significance and further - the beta-coefficients indicate that this is relatively the most influential explanatory variable.

The overall explanation provided by SDP alone is almost nil in both the periods. The  $R^2$  improves considerably when the variable PERED is introduced. However, the variable - incidence of poverty - does not seem to explain much of the variation in literacy deprivation. Its coefficient is not significantly different from zero although it is of the expected sign - i.e., negative. Its introduction does not seem to improve the goodness of fit either, both in 1992 and 1999.

Thus, there is overwhelming evidence in support of the third explanation provided by Anand and Ravellion. This implies that public provision of education is of over-riding importance for promoting literacy in the Indian context. Though there is no exact replication of the dramatic results, such as total reversal of both sign and significance of the coefficient associated with average

income in explaining variation of life expectancy - our results with literacy as the dependent variable are on similar lines.

We, therefore, safely conclude that the role of the State in promoting educational attainment is of critical importance. The other two handles to improve educational attainment i.e., income growth and lower poverty incidence are effective only when they are accompanied by an increase in public expenditure on education. Its importance doubles under those conditions.

### **Summary of Conclusions and Policy Implications**

Emerging theoretical perceptions and the available evidence have shown clearly the need for and the importance of sector-specific policy initiatives focusing on education and health. Augmenting human resources by raising literacy levels, and improving life expectancy have contributed to a sustained improvement in the living conditions while accelerating the growth rate. Societies that did not prioritize social sector investments have suffered in terms of both quality of living and growth of output.

Analyses of data pertaining to selected Indian States largely corroborate the results of the earlier studies. The high degree of association between social development expenditures, expenditure on education with literacy rates across the selected Indian States and the significant improvement in the quality of life as defined by literacy levels in West Bengal and Kerala and the movement of Tamil Nadu, towards high performance because of continued focus on social and educational development and the initial emphasis on educational development respectively, explains the importance of social sector prioritization. In contrast, the performance of States like Orissa, Bihar and U.P. continues to be grim, as these States did not give enough priority to the educational sector and, in particular, female education.

Therefore, we conclude that future development initiatives in Indian States must focus on educational development. And in the context of globalization, the need for educational sector prioritization becomes more critical. The need for educational sector prioritization seems to be more urgent in States with low levels of social development. In such States, the government must play a more proactive role in basic education.

### **References**

- Addelman and Morris (1967), *Society, Politics and Economic Development*. Baltimore: Johns Hopkins University Press.**
- Adelman, Irma (1997), *Fifty Years of Economic Development: What Have We Learned?* (Mimeo)**
- Anand, Sudhir and S.M. Ravi Kambur (1991), *Public Policy and Basic Needs Provision: Intervention and Achievement in Sri Lanka*, in Dreze Jaul A.K. Sen (eds.). *The Political Economy of Hunger*. Clarendon Press. Oxford.**



- Bhall. S. (1988), *Is Sri Lanka an Exception? A Comparative Study of Living Standards*, in Srinivasan, T.N. and P.K. Bardhan (eds.), *Rural Poverty in South Asia*, Colombia University Press, New York.
- Centre for the Study of the Global South (CSGS) (1994), *Social Summit; Copenhagen: Expectations of the Global South*. Washington D.C. American University.
- Chenery, H. et.al (1974), *Redistribution with Growth*, Oxford, Oxford University Press.
- Dreze, J and A. Sen (1989), *Hunger and Public Action*, Oxford: Clarendon Press.
- Galbraith, J.K.(1996), *The Good Society*. Boston, Houghton Mifflin.
- Griffin, K, (1996), "Culture, Human Development and Economic Growth", University of California, Riverside, Working Paper in Economics, 96-17.
- Haq Mul (1995), *Reflections on Human Development*, New York: Oxford University Press.
- Isaac T.M. et.al. (1995), "Kerala: Towards a New Agenda", *Economic and Political Weekly*, 5-12 August: 1993-2004.
- Isenman, P. (1980). *Basic Needs: The Case of Sri Lanka* World Development, 8.
- Kakwani, N. (1993), *Performance in Living Standard: An International Comparison* Journal of Development Economics, 41.
- Lipton, Michael (1996), *Success in Anti-Poverty'*, Issues in Development. Discussion Paper No.8, Development and Technical Cooperation Department, ILO, Geneva
- Midgley, J.(1995), *Social Development: The Developmental Perspective in Social Welfare*, London: Sage.
- Mizamer Rahman Shelly (1994), *Center for the Study of Global South*.
- Myrdal, G. (1968), *Asian Drama: An Enquiry into the Poverty of Nations* New York- Twentieth Century Fund.
- Pritchett. L and H. Summers (1996), *Wealthier is Healthier*. The Journal of Human Resources. 31 (4)
- Richard Jolly, "Profiles in Success: Reasons for Hope and Priorities for Action" In Richard Jolly and Others, eds. "Social Development, Growth and Poverty."
- Rodgers. G. (1979), *Income and Income Inequality as Determinants of Mortality An International Cross-section Analysis*, Population Studies, 33(2)
- Sen, A.K. (1981), *Public Action and the Quality of Life in Developing Countries* Oxford Bulletin of Economics and Statistics, November 43 (4)
- Sen, A.K. (1985), *Commodities and Capabilities*, Oxford: Oxford University Press
- Sudhir Anand and Martin Ravallion (1993), "Human Development in Poor Countries- On the Role of Private Incomes and Public Services", *Journal of Economic Perspectives* Vol 7, Number 1, Winter 1993, Pages 133-150.
- UNRISD (1995), *After the Social Summit: Implementing the Programme of action* Geneva: UN Research Institute for Social Development.

Journal of Educational Planning and Administration  
Volume XVI No. 3, July 2002

**I N T E R N A T I O N A L  
L A B O U R  
R E V I E W**

Volume 141 (2002), No. 1-2

Employment, social justice and societal well-being

**J. E. STIGLITZ**

Core labour standards and foreign direct investment

**D. KUCERA**

The greying population: A wasted human  
capital or just a social liability?

**V. SPIEZIA**

The challenge of decent work

**R. B. REICH**

An empirical assessment of the informational society:  
Employment and occupational structures of  
G-7 countries, 1920-2000

**Y. AOYAMA and M. CASTELLS**

*Perspectives*

Towards a policy framework for decent work

ANNUAL SUBSCRIPTION TO THE PRINT EDITION  
4 issues: 99 Swiss francs; £48; US\$80; euros 60.

*Books*

ANNUAL SUBSCRIPTION TO THE ELECTRONIC EDITION  
4 issues: US\$40; euros 30

ILO Publications, International Labour Office, 1211 Geneva 22, Switzerland  
Fax: (41-22) 799 6938; Tel.: 799 78 28; E-mail: [pubvente@ilo.org](mailto:pubvente@ilo.org);  
USA., Fax: (1-301) 843-0159; Tel.: 638-3152;  
Germany, Fax: (49-228) 35 21 86; Tel.: 36 23 22;  
United Kingdom, Fax: (44-171) 233 59 25; Tel.: 828 64 01;  
India, Fax: (91-11)460 21 11; Tel.: 460 21 01;  
Italy, Fax: (39-6) 679 21 97; Tel.: 678 43 34;

The Review on the Internet: <http://www.ilo.org/revue>

## RESEARCH NOTES/COMMUNICATIONS

# Elementary Education, Poverty and Gender Differentials in North-East India: Some Issues''

Nirankar Srivastav  
Amaresh Dubey\*

### Abstract

*The issue of Universalisation of Elementary Education (UEE) among the northeastern states of India using household level data from the 1993-94 NSS surveys, is examined, particularly in respect of the status of school enrollment of children in the age group of 5-14 years among these states and relationship between poverty and non-enrollment in the schools. Another issue relates to the question of gender bias among the seven states as far as schooling of the children is concerned. We find that poverty has practically no effect on school enrollment and there is no evidence of gender bias. The traditional hypothesis about lack of schooling and lower school enrollment among the socially deprived groups, STs and SCs, is not supported by the data.*

### Introduction

India has made an impressive progress in elementary education sector. The number of primary schools in the country has increased by over four times - from 2,31,000 in 1950-51 to 9,30,000 in 1998-99. During the same period, primary school enrolment increased six times, from 19.2 million to 110 million. The increase in the number of schools and enrollment in primary schools has perceptible change in the female literacy rates that increased steadily from 7.9% in 1951 to 39.29% in 1991 at all India level. Possible reason for these changes is educational spending. It increased from 1% of Gross National Product in 1947 to

\* We would like to thank Smita Das for excellent research support and the referee for their several useful suggestions on an earlier version of this paper. However, authors bear full responsibility for errors in the paper.

' Department of Economics, North Eastern Hill University, Nongthymmoi, Shillong; E-mail: [nirankarsrivastav@yahoo.com](mailto:nirankarsrivastav@yahoo.com); [amareshd@yahoo.com](mailto:amareshd@yahoo.com)

3.5% in 1991. Accessibility to primary school is enhanced in rural and urban areas, where 94% of country's rural population has schooling facilities within one-kilometer range (Government of India, 2000). Despite impressive achievements, the country is far from achieving the goal of Universalisation of Elementary Education (UEE), there are about 60 million children out of the 200 million children of school going age group (6-14 years) who do not go to school.<sup>1</sup> Out of this group of children, who are not attending school, a large proportion is that of girls and children of tribal and other disadvantaged categories.

The issues and problems related to elementary education have been investigated in several studies, for example, Minhas (1991), Tilak (1995), Dreze and Sen (1995), Bhatta (1998), Mcdougall (2000) and Banerjee (2000), Lieten (2001) and others. Which can be classified broadly in two categories: (i) those using primary data, e.g. Bhatta (1998), Mcdougall (2000) and Banerjee (2000), Lieten (2001) based on the field surveys and (ii) the others using secondary data, for instance, Tilak (1995), Minhas (1991), and Dreze and Sen (1995).

One of the important features of these studies is that their focus is the major states in the Indian Union. Consequently, the smaller states like those located in the northeastern region (NER) have either been left out or the characteristics of Assam (one of the major states in the region) have been assigned to them. Issues related to elementary education among the northeastern states and the effect of poverty and gender differentials in elementary education are thus examined in this write up.

The northeastern region possesses some peculiar characteristics. Our endeavour is to show how the scenario of elementary education is similar (or dissimilar?) to all India level in the light of regional specificities and peculiarities. Further, we would also like to examine the issues related to male-female children of the school going age in rural and urban sectors of the states of NER. More specifically, the focus is on the following issues:

- (1) The relationship of poverty with the level of elementary education for male and female children for the rural and urban sectors.
- (2) The literacy rates and gender differentials.
- (3) The status of working children.
- (4) The distribution of children neither in school nor working.
- (5) The status of school going and working children belonging to ST/SC social groups.
- (6) To investigate the possible reasons for not attending school.

<sup>1</sup>The estimated number of children not attending school, however, varies in different secondary sources. For example, as per 1991 census, there were over 75 million children out of school. Agarwal (2000) reports that out of school children in the age group of 6-14 years are in the range of 50-80 million.

In addition, some of the established facts regarding schooling and child labour in India and their implications among the NER states are:

- (1) Gender differentials are higher in rural sectors than urban sectors.
- (2) Households belonging to ST/SC population face higher degree of poverty than general population.
- (3) Children belonging to ST/SC group are more vulnerable to working for wages and less likely to attend school.
- (4) *Ceteris paribus* female children are more likely to be out of school than male children.

Thus the issues examined relate to comparability of the data and poverty measures, special characteristics of the states in the region, the incidence of poverty among the states and its possible consequences on the elementary education, and the consequences of regional characteristics on the schooling in the region.

#### **Data Issues and Methodology**

##### *Data and Coverage*

All the seven states in the northeastern region, namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura using the household level data collected by the National Sample Survey Organisation (NSSO), for the reference period of agricultural year, July 1993 to June 1994, have been covered. Besides data collected through the socioeconomic survey, consumer expenditure (schedule 1.0) and Employment and Unemployment (Schedule 10.0), NSS data has also been used for two advantages; first, this data is in the form of unit record and suitable for detailed analysis of the problem; and secondly, because uniform design of data collection is comparable for all the northeastern states.

In the 50<sup>th</sup> round of socio-economic survey of NSS, the entire country was divided into 77 regions, each with rural and urban sectors. The seven states of NER consist of ten regions, Assam has three regions, Manipur has two and the remaining five states one each. For all the regions, the NSS collects data from the entire rural and urban sectors except the rural areas of Nagaland.<sup>2</sup>

The poverty measures are estimated from the household consumer expenditure data, while distribution of activities of the children of school going age, i.e., 5-14 years, are based on employment and unemployment household

<sup>2</sup>Though the data is collected by the NSS for rural sector for Nagaland also but in a limited manner. The coverage is limited to the radius of five kilometers from the Bus route in the rural areas.

schedule. The major economic characteristics of NER are based on statistics published by the North-Eastern Council, Shillong.

*Poverty Measurement*

The simplest index of poverty is Head Count Ratio (HCR), which is defined as

$$(1) \quad HCR = \frac{q}{n}$$

Where, the population consists of n individuals with per capita total household expenditure (PCTE),  $y_k$  ranked in ascending order by their subscripts of whom 'q', fall below the poverty line, V. HCR gives the proportion of the population that lives below poverty line or in poverty. This index is criticized as; it is insensitive to the depth of poverty of the poor, thus violating what Sen (1976) defines as the monotonicity axiom. This axiom ensures that any poverty index should fall if there is a drop in the income of any poor individually, *ceteris paribus*.

The Weighted Poverty Gap Index (PGI), satisfies the above axiom, which is measured as:

$$(2) \quad PGI = \frac{1}{n} \sum_{k=1}^q (z - y_k)$$

However, the PGI is insensitive to the transfer of income from the poor, thus violating Sen's Weak Transfer Axiom - the requirement that any transfer of income from a poor person to any one richer should increase poverty, so long as no one crosses the poverty line (as a result of such a transfer). There are several such measures described in literature, which satisfy the above-mentioned two and other relevant axioms. Foster, Greer and Thorbecke (1984) index satisfies these axioms (henceforth, FGT). FGT (a), a generalized index, is a normalized weighted sum of the poverty gaps of the poor, with weights given by those poverty gaps themselves raised to an appropriate power. The FGT index is defined as

$$(3) \quad FGT(a) = \frac{1}{n} \sum_{k=1}^q (z - y_k)^a, a > 0$$

For  $a=0$ , the FGT (a) equals HCR, for  $a=1$ , the index equals PGI. In case of  $a=2$

$$(4) \quad FGT(2) = \frac{1}{n} \sum_{k=1}^q (z - y_k)^2$$

The advantages of using weights independent of position in the distribution is that this ensures decomposability of the index across different household types. We have estimated all the three poverty indices namely, HCR, PGI and FGT (a), for  $a=2$ , i.e., FGT (2).

Recall that the NSS collects data expenditure distribution of the population. Consequently, we are using household consumer expenditure data for rather than income data for quantifying the poverty. We have used Official Poverty Line (OPL) based on official norm. For the year 1993-94, we have accepted the states-wise OPL from Dubey and Gangopadhyay (1998).

#### *Gender Differentials*

Gender gap in literacy is used in this study as a reliable and simple indicator of gender bias. This gap is measured as a difference between percentage point male literacy rate to female literacy rate. The sex ratio, i.e., the number of literate females per thousand literate males, is also used as an alternative index (of gender bias).

To assess the status of elementary education, it is essential to do an in-depth analysis of the activities of school going age children between age group 5 to 14 years. Since NSS data permits such disaggregation, the estimated number of children is further sub-divided in three categories; children in school, children working for wages, and children neither in school nor working. Children in school are those attending school. The working children are classified on the basis of activity particulars defined in the data set. This category includes children engaged in household enterprise (self-employed), workers as regular wage employee, as casual labour and in other types of works. The third group of children are those who are neither in school nor working. This category includes the children working as helper in household enterprise (un-paid), did not work but available for work and attend domestic duties only including in free collection of goods. Children of these three categories have been identified separately for male and female children, for rural and urban sectors and for all population and ST/SC population for all the states of NER.

#### **Major Characteristics of Northeastern Region<sup>3</sup>**

As mentioned earlier, the northeastern region of India comprises seven states.<sup>4</sup> The region as a whole accounts for 7.7 per cent of the total geographical area of the country and has 3.88 per cent of the total population. The states Mizoram, Nagaland, Meghalaya and Arunachal Pradesh have predominantly tribal population. This region is rich in natural resources like land, water and forest resources, of which larger proportion is under-utilized. Assam is, relatively speaking, a more economically active state surrounded by less economically

<sup>3</sup> Unless specified otherwise, all the statistics reported in this section is taken from various issues of the Basic Statistics of North-Eastern Region published by the North-Eastern Council, Shillong.

<sup>4</sup> Sikkim has also been included in NER, under the jurisdiction of North-Eastern Council since 1997. However, as basic statistics on Sikkim is not yet published by the North-Eastern Council (Basic Statistics of NER: 2000), we have included Sikkim as the part of NER in this study.

active and smaller states. Population is mainly concentrated in Assam, whereas other states are sparsely populated.

Process of urbanization, which was initially slow before independence, got momentum afterwards with the reorganization of administrative units. Urban nodes became service centres and places for government jobs. Some industrial estates also developed in and around urban centres. The level of urbanization measured in percentage of urban population to total population is 13.89 per cent in the region, which is significantly lower than the all India level of 26.13 per cent in 1991. Assam Tripura and Nagaland are the least urbanized states while Mizoram is the most urbanized state (46.10%).<sup>5</sup>

Economy of NER is predominantly agriculture based. There are the places where most primitive form of cultivation i.e., slash and burn, is still being practised and there are places in the plains where modern techniques are increasingly being used in cultivation. The variety in economic structure and distribution has significant impact on social settings, which is reflected in the behaviour pattern of the people of the region.

Industrial sector is not very much developed in the region. There were only 177 large and medium scale industries in 1998, out of which 72.3 % were in Assam alone, the other six states were sharing only 27.7 % industries. Tripura, Nagaland and Mizoram were the least industrialized states sharing less than five per cent of industries. The distribution of small scale industries (SSIs) depicted the almost similar picture where almost half of SSIs of the region are located in Assam, while Arunachal Pradesh, Meghalaya, Mizoram and Nagaland are sharing less than 10% industries in each state<sup>6</sup>. So, Assam is an industrially active state, relatively speaking, while the other states of the region are yet to be industrially developed.

The Infrastructural sector is also less developed in the region than all India level. Per capita consumption of electricity for the year 1995-96 was much below the national average of 335.42 KW and the lowest among Tripura, Arunachal Pradesh and Nagaland. Similarly, percentage of surface road to total road length is the lowest in Assam The per capita net state domestic product at current prices for the year 1993-94 is also lower than per capita net domestic product at the national level except in Arunachal Pradesh<sup>7</sup>. These observations show that NER is less economically developed than the rest of India.

The basic household statistics derived from the NSS household level data for rural and urban sectors are shown in Tables 1 and 2 for all estimated households

<sup>5</sup> See, Table-6. Basic Statistics of NER2000. NKC. Ministry of Home Affairs. Govt, of India, Shillong. based on Census of India 1991, Series - I, paper-2 of 1992.

<sup>6</sup> See. Table -148 and 149. Basic Statistics of NER2000. NEC. Ministry of Home Affairs. Govt, of India, Shillong,.

<sup>7</sup> See. Table-129 and 175, Basic Statistics of NER2000. NEC. Ministry of Home Affairs, Govt, of India, Shillong, Table no. 129 and 175.



(henceforth, All) and households belong to schedule tribes/schedule casts (henceforth, ST/SC). The Average Per Capita Total Expenditure (henceforth, APCTE) in Assam is lower and in all other remaining states are having higher than the all India average in rural sector. The APCTE among ST/SC households is not much lower than All households level in the states of NER, as it was expected on the basis of similar statistics at all India level.

TABLE 1  
Basic Household Statistics of the Northeastern Region (Rural) (1993-94)

State	NER All		SC/ST		% of ST/SC to Total Pop.
	Estimated HHDs (WO)	Estimated Pop. ('0,000)	Estimated HHDs (WO)	Estimated Pop. ('0,000)	
Arunachal Pradesh	132	608	108	521	85.74
Assam	3547	1807	844	4277	23.67
Manipur	207	111	89	442	39.99
Meghalaya	284	126	268	1194	94.92
Mizoram	70	35	68	344	98.46
Nagaland	74	39	69	369	94.70
Tripura	499	222	186	818	36.82
NER All	4813	2400	1632	7965	33.18
All India <sup>1</sup>	1190	5830	398	1860	31.88

Note: 1. The APCTE figures are expenditure (in Rupees) over 30 days.

2. The Estimated HHDs and Estimated Population is in Lakh.

Source: Tabulated by authors using NSS data.

Almost similar picture is emerging in urban sectors (Table 2), but APCTE is invariably higher in urban sectors for both the groups of population and among all the states compared to rural sector. There are four states namely Arunachal Pradesh, Meghalaya, Mizoram and Nagaland representing the predominantly higher proportion of ST/SC population to total population. Since the share of ST population is significantly higher in these regions, these states are addressed as tribal dominated states of NER.<sup>8</sup> It is interesting to note that all these four tribal

<sup>8</sup>The attempt to disaggregate the data by ST and SC groups turned out to be unfeasible as many of the states have fairly low proportion of SC population. For example, in Arunachal Pradesh estimated proportion of SC population was 0.34 per cent. Similarly, in Assam 9.02 percent, Manipur 0.26 percent, Meghalaya 0.66 percent, Mizoram 0.42 % percent and Nagaland 0.33 percent. It is only in Tripura that we have SC population to the tune 21.12 percent (see Dubey and Kharpuri, 1999 for details on sample size etc.). Consequently, separate analysis could be possible by two social groups only in Tripura. But Tripura being a very small state, the number of household surveyed by NSS is as such is small. Dividing it into SC and ST separately would reduce the sample size further. Thus, we combined SC and ST households in Tripura also for comparability.

population dominated states are having higher APCTE than all India level both in rural and urban sectors for all and SC/ST categories of households.

TABLE 2  
Basic Household Statistics of the Northeastern Region (Urban) (1993-94)

State	NER All			NER SC/ST			%of ST/SC to total Pop.
	Estimated HHDs (•000)	Estimated Pop. C0.000)	APCTE <sup>i</sup>	Estimated HHDs C000)	Estimated Pop. C0.000)	APCTE <sup>i</sup>	
Arunachal Pradesh	23	8	493.28	7	2	432.58	29.01
Assam	477	205	458.57	52	22	400.91	10.74
Manipur	82	42	319.68	16	1	314.79	16.72
Meghalaya	50	20	530.47	34	14	507.32	68.00
Mizoram	35	16	549.64	35	16	548.43	98.80
Nagaland	28	14	508.62	17	1	515.15	67.72
Tripura	79	34	489.88	17	7	420.20	19.01
NER All	775	339	456.22	178	77	459.37	22.70
All India <sup>i</sup>	434	1930	458.58	74	327	352.19	16.96

Note: As in Table I.

Source: As in Table I.

### Poverty Levels and Elementary Education

#### *Poverty Levels*

State level poverty indices, the HCR, PGI and FGT, are reported in Tables 3 and 4 for rural and urban sectors. There is 50.77 % of population living below poverty line, which is much higher than all India level (42.68%). But the poverty is mainly concentrated in rural areas of Assam and Arunachal Pradesh. This fact reveals the spatial variation with in NE states; Nagaland and Mizoram reported the lowest proportion of poor people as 4.24 and 10.10% respectively.

As mentioned earlier, the HCR as a poverty index does not measure the "depth" and "severity" of poverty among the poor people and to incorporate these, we have quantified PGI and FGT respectively. The level of poverty is more severe in Arunachal Pradesh and Assam, where the value of PGI and FGT are the highest among the NER states and also higher than all India level. This shows that poor in rural Arunachal Pradesh and Assam are more deprived than poor in other NER states. However, poverty is much less severe in Nagaland, Mizoram and Manipur in that order.

TABLE 3  
Poverty Measures Among the NER States in the Rural Sector (1993-94)

<i>States</i>	<i>All Population</i>			<i>ST/SC</i>		
	<i>HCR</i>	<i>PGI</i>	<i>FGT</i>	<i>HCR</i>	<i>PGI</i>	<i>FGT</i>
Arunachal Pradesh	51.98	0.1231	0.0426	52.85	0.1310	0.0468
Assam	57.05	0.1241	0.0371	58.49	0.1092	0.0285
Manipur	33.08	0.0428	0.0091	41.42	0.0600	0.0134
Meghalaya	34.36	0.0552	0.0132	34.72	0.0553	0.0132
Mizoram	10.10	0.0145	0.0034	10.25	0.0147	0.0034
Nagaland	4.24	0.0048	0.0007	3.98	0.0047	0.0007
Tripura	32.04	0.0731	0.0249	39.97	0.0930	0.0307
NER All	50.77	0.1084	0.0325	47.10	0.0893	0.0244
All India	42.68	0.1030	0.0356	54.88	0.1424	0.0514

Note: HCR is in percentage and PGI & FGT are ratios  
Source: As in Table 1.

TABLE 4  
Poverty Measures Among the NER States in the Urban Sector (1993-94)

<i>States</i>	<i>All Population</i>			<i>ST/SC</i>		
	<i>HCR</i>	<i>PGI</i>	<i>FGT</i>	<i>HCR</i>	<i>PGI</i>	<i>FGT</i>
Arunachal Pradesh	12.36	0.0264	0.0091	17.96	0.0481	0.0179
Assam	10.03	0.0127	0.0030	13.66	0.0242	0.0060
Manipur	26.67	0.0264	0.0052	27.19	0.0340	0.0059
Meghalaya	3.48	0.0056	0.0012	2.62	0.0038	0.0009
Mizoram	0.33	0.0001	0.0000	0.33	0.0001	0.0000
Nagaland	2.82	0.0020	0.0002	1.35	0.0016	0.0002
Tripura	7.31	0.0142	0.0043	11.57	0.0216	0.0071
NER All	10.70	0.0134	0.0032	8.59	0.0142	0.0036
All India	32.87	0.0820	0.0298	48.26	0.1350	0.0528

Note: As in Table 3.  
Source: As in Table 1.

The poverty level in the rest of India among the ST/SC population group is higher for well-known historical and socio-economic reasons. This fact is also revealed from all India statistics from Tables 3 and 4 for rural and urban sectors both that all the three indicators of poverty are higher for ST/SC population than all India average for over-all population. But this scenario is different in NER where poverty levels for SC/ST population are less than its share in over-all population in NER rural sector. Assam and Arunachal Pradesh are not only having higher population living below poverty line but also SC/ST population has higher HCR than HCR of over-all population in these states. Arunachal

Pradesh has the highest 'depth' and -severity' of poverty among the NE states but still lower than all India average.

Poverty measures among the NER states in urban sector in Table 4 display lower levels of poverty in general. Manipur has the highest HCR (26.67), which is still lower than all India average (32.87). The extent of poverty measured in terms of PGI reveals that depth of poverty is much less in Mizoram, Nagaland, Meghalaya and Tripura.

The gap between rural and urban poverty is more glaring in NER than all India level i.e., this gap is about four times more than the gap at all India level. This suggests that poverty in NER is concentrated mainly in rural sector, especially in Assam and Arunachal Pradesh. This fact supports the view that major economic activities and developments are highly urban biased and growth impulses are not percolating to the rural sectors. Employment opportunities are concentrated and located in urban sectors due to upcoming of state sponsored economic activities because of administrative reorganizations.

#### *Elementary Education*

In order to capture the status of elementary education, we first discuss the distinctive features of the literacy rates among the various groups of population and across the region. Tables 5 and 6 express the literacy rate in terms of percentage literate persons to total population based on 1991 census for rural and urban sectors. It shows that except Arunachal Pradesh and Meghalaya, the remaining NE states have higher literacy rate than all India average. Mizoram has the highest literacy rate of 82.27% in the region. As expected, the literacy rate in urban sector is higher than rural sectors.

TABLE 5  
State-wise Literacy Rates in NER (Rural)

<i>States</i>	<i>Males</i>	<i>Females</i>	<i>All Persons</i>	<i>Gender Gap</i>
<b>Arunachal Pradesh</b>	<b>47.00</b>	<b>25.31</b>	<b>37.02</b>	<b>21.69</b>
<b>Assam</b>	<b>58.66</b>	<b>39.19</b>	<b>49.32</b>	<b>19.17</b>
<b>Manipur</b>	<b>67.64</b>	<b>43.26</b>	<b>55.79</b>	<b>24.38</b>
<b>Meghalaya</b>	<b>44.83</b>	<b>37.12</b>	<b>41.05</b>	<b>07.71</b>
<b>Mizoram</b>	<b>77.36</b>	<b>67.03</b>	<b>72.47</b>	<b>10.33</b>
<b>Nagaland</b>	<b>63.42</b>	<b>50.36</b>	<b>57.23</b>	<b>13.06</b>
<b>Tripura</b>	<b>67.07</b>	<b>44.33</b>	<b>56.08</b>	<b>22.74</b>
<b>All India</b>	<b>57.87</b>	<b>30.62</b>	<b>44.69</b>	<b>27.25</b>

Note: Literacy rate is reported as percent of total population in the age group of 6 years and above.  
Source: Table-125, based on 1991- Census. Basic Statistics of NER: 2000. N.E.C. Ministry of Home Affairs, Government of India. Shillong

TABLE 6  
State-wise Literacy Rates in NE R (Urban)

<i>States</i>	<i>Males</i>	<i>Females</i>	<i>All Persons</i>	<i>Gender Gap</i>
<b>Arunachal Pradesh</b>	77.99	62.03	71.59	15.96
<b>Assam</b>	84.37	79.39	81.88	04.98
<b>Manipur</b>	82.11	58.67	70.53	23.44
<b>Meghalaya</b>	85.72	77.32	81.74	08.44
<b>Mizoram</b>	95.15	93.45	94.30	01.70
<b>Nagaland</b>	85.14	79.10	83.10	06.84
<b>Tripura</b>	89.00	76.93	83.09	12.07
<b>All India</b>	81.09	64.05	73.08	17.04

Note: As in Table 5.

Source: Same as in Table 5.

Turning to the literacy rate among males and females for the rural and urban sectors in order to capture the nature and extent of gender bias in literacy in NE R, it is noticed that the female literacy is invariably lower than corresponding male literacy irrespective of states. But in all the NE states, female literacy rate is higher than all India average literacy (30.62%) in both the sectors. Mizoram (urban) has female literacy rate as high as 93.45%. The degree of urban bias is the difference of urban and rural literacy rate that is the highest in Meghalaya followed by Arunachal Pradesh and Assam and higher than all India average for all the three states. The urban bias of literacy is more against the females in the states of Assam and Tripura, whereas in other states this difference is well within the all India average.

The gender differentials, as shown in Tables 5 and 6, are obtained by subtracting the female literacy with male literacy rate. The degree of gender differential is lower than all India average for all the regions and the states except for Manipur (rural). Gender gap is lowest in Meghalaya (rural) followed by Mizoram. All the four tribal dominated states have lower gender gap except in the case of Arunachal Pradesh. Though the gender gap in the case of Arunachal Pradesh is relatively higher than other NE states, it is still lower than all India average. It is not surprising in the case of Meghalaya (rural), which is a tribal dominated region where major tribes practise matrilineal social system.

Literacy rate and gender gap in literacy against poverty (HCR) both for rural and urban sectors are shown in Figures 1 and 2 respectively. In the rural areas poverty, literacy and gender gap appear to be uncorrelated. However, some negative correlation between poverty and literacy and weak positive correlation between poverty and gender gap could be seen from Figure 2. This could mean that some parents are not able to send their children to school for economic reasons. The better performance of Mizoram (having highest literacy and lowest

gender gap) and to some extent Nagaland appears to be related to lower poverty levels. This, however, needs further investigation.<sup>9</sup>

Figure 1: Scatter Plot of Poverty, Literacy and Gender Gap: Rural

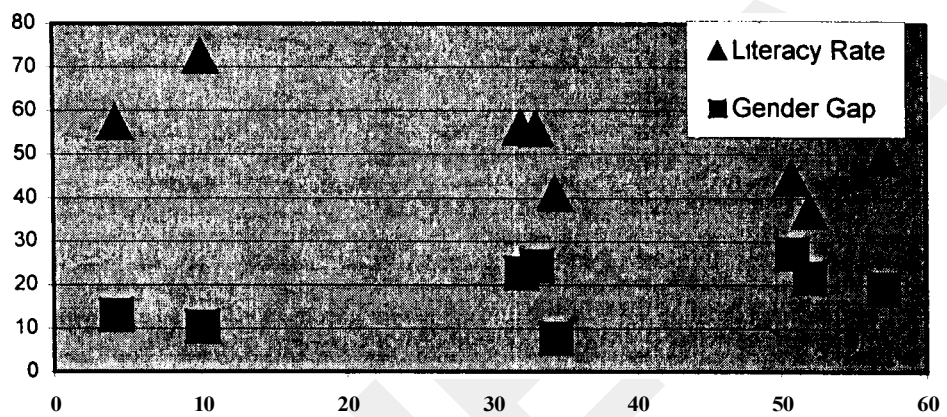
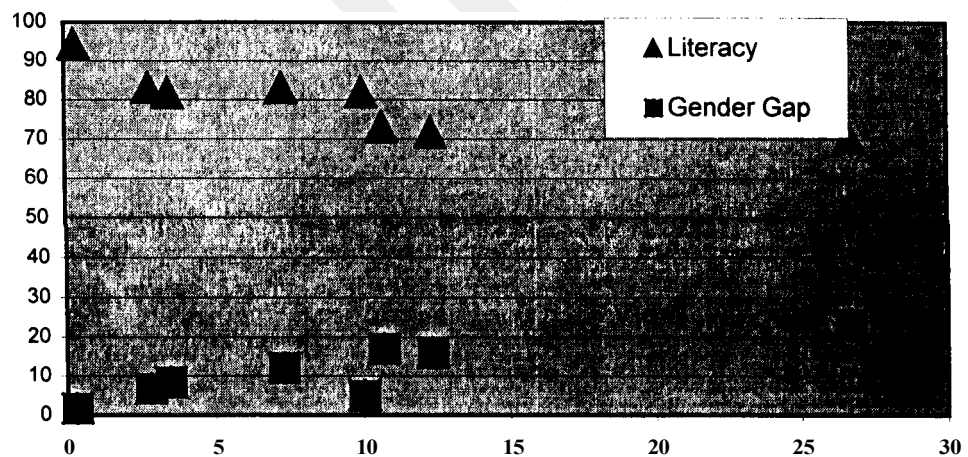


Figure 2: Scatter Plot of Poverty, Literacy and Gender Gap: Urban



Note: In both figures, x-axis represents poverty (HCR) and y-axis is the literacy rate and gender gap in per cent.

<sup>9</sup> One might argue that higher achievement in literacy could be due to missionary schools. However, the same argument does not hold in case of Meghalaya that has substantial missionary influence.

As pointed out earlier, Arunachal Pradesh (rural) and Assam (rural) are relatively poorer regions than the all India average, but Arunachal Pradesh has lower literacy rate, while Assam has higher literacy rate than the all India level. Gender differentials are lower in both the states despite the higher poverty levels. This observation indicates towards an important feature that condition of poverty doesn't lead to gender bias against the females in providing the elementary education in this part of India. This is contrary to the observation noted in other states of India (Kaul, 2001). Female literacy is considered as one of the proxy measures of social status of women. On this front, the women in NER have better social status than the all India level. It appears that the factors which discourage the female education in other parts of India like property rights and family system, which results into a lower "economic worth" and "cultural worth" of women, are not the dominating factors in determining the role of women in the society of NER, in general and tribal societies, in particular. This evidence supports the major finding of Murthy, Guio and Dreze (1997) that in traditional societies, the status of women is found better when compared with the contemporary sector of people among non-tribal societies.

The status of elementary education is further examined taking into consideration the activities of school age going children between age group 5 to 14 years. Recall that we have divided children in three categories. The distribution of the children for all population for rural and urban sectors is reported in Tables 7 and 8. The larger percentages of children are in school in the region as a whole and in all the states, except Arunachal Pradesh compared to that in India in the rural sector. Importantly the percentage of female children going to school is higher in all the states of the region. Among the tribal dominated states, Nagaland and Mizoram have almost 90 % of female children attending school. The gender differential gaps among the school going children are much lower in NER states than the all India average.

The higher proportion of school going children reduces the proportion of working children. Only close to 1% of children are working for wages, out of which female children constitute less than 1% and male children slightly more than 1%, which is below the all India average (2.99%) in rural sector. But major hurdle in the Universalisation of elementary education (UEE) is significantly large number of children that are neither in school nor working. The proportion of these children in age group of 5-14 years is 24%, though smaller than the all India average (32.89%), but still a sizeable number to tackle with. The percentage of female children not going to school is higher than male children but the gap is much smaller than the all India average. Arunachal Pradesh (rural) has the highest proportion of female children not going to school (44.35%).

The proportion of children, neither in school nor working, is about 10% in the urban sector of NER, out of which the proportion of female children is smaller than male children. Arunachal Pradesh, Assam and Manipur are the

TABLE 7  
Activity-wise Distribution of All Children in NER (Rural)

States	Working			In School			Neither in School Nor Working			Total Children		
	Male Child	Female Child	Total	Male Child	Female Child	Total	Male Child	Female Child	Total	Male	Female	Total
Arunachal Pradesh	1.71	0.44	1.08	66.10	55.21	60.69	32.19	44.35	38.23	100	100	100
Assam	1.31	0.42	0.92	75.59	70.89	73.52	23.10	28.69	25.56	100	100	100
Manipur	0.44	0.00	0.21	87.17	86.35	86.75	12.40	13.65	13.04	100	100	100
Meghalaya	0.36	0.44	0.40	72.38	71.61	72.00	27.26	27.95	27.60	100	100	100
Mizoram	1.68	1.81	1.74	80.76	88.28	84.24	17.56	9.91	14.02	100	100	100
Nagaland	1.18	1.57	1.37	90.62	90.14	90.39	8.20	8.29	8.24	100	100	100
Tripura	1.05	0.49	0.79	83.63	82.95	83.32	15.32	16.56	15.89	100	100	100
NER All	1.22	0.45	0.87	76.78	73.08	75.11	21.99	26.48	24.02	100	100	100
All India	3.19	2.76	2.99	71.63	55.55	64.12	25.18	41.68	32.89	100	100	100

Note: (1) Figures are in percentage of respective total number of children

(2) Children are of school going age, i.e., of 5 to 14 years.

Source: As in Table 1.



TABLE 8  
Activity-wise Distribution of AH Children in NER (Urban)

States	Working			In School			Neither in School Nor Working			Total Children		
	Male Child	Female Child	Total	Male Child	Female Child	Total	Male Child	Female Child	Total	Male	Female	Total
Arunachal Pradesh	0.00	0.00	0.00	70.58	83.53	76.39	29.42	16.47	23.61	100	100	100
Assam	2.83	4.51	3.66	83.94	82.88	83.41	13.23	12.61	12.92	100	100	100
Manipur	0.00	0.19	0.09	96.20	97.44	96.78	3.80	2.37	3.13	100	100	100
Meghalaya	0.00	0.14	0.07	96.31	93.76	95.07	3.69	6.10	4.86	100	100	100
Mizoram	0.00	0.00	0.00	95.55	95.12	95.34	4.45	4.88	4.66	100	100	100
Nagaland	0.71	0.00	0.44	91.12	94.10	92.25	8.17	5.90	7.31	100	100	100
Tripura	1.53	1.41	1.47	91.89	91.21	91.55	6.59	7.38	6.98	100	100	100
NER All	1.77	2.79	2.26	87.83	87.45	87.64	10.40	09.75	10.10	100	100	100
All India	2.12	1.35	1.76	85.69	80.85	83.41	12.19	17.79	14.83	100	100	100

Note: As in Table 7.

Source: As in Table 1.

states where proportion of male children not attending school is higher than female children. But there are also the states like Manipur, Meghalaya and Mizoram where the proportion of children not attending school is less than 5%.

The situation of school attending children is relatively much better in urban sectors, as a whole, in NER. The five out of seven states of NER (except Arunachal Pradesh and Assam) have reported more than 90% school going children. It is worth mentioning that in Arunachal Pradesh, Manipur and Nagaland the percentage of school going female children is higher than male children. This gap is the largest in Arunachal Pradesh in favour of female children. Further an in-depth analysis is needed to explain this phenomenon in urban sectors.

At the all India level, the proportion of working children in rural sector (2.99) is higher than in urban sector (1.76), but this proportion for NER urban sector (2.26) is much higher than NER rural sector (.87%). This reveals that the problem of working children is more severe in rural sector of India, while it is a serious problem in the urban sector of NER. Similarly, in the urban sector at the national level the proportion of male working children (2.12%) is higher than female working children (1.35%), but this order is reversed for NER, where the proportion of female working children (2.79%) is higher than male child labour (1.77%).

Analyzing the distribution of working children among the NE states, it is found that Arunachal Pradesh, Manipur, Meghalaya and Mizoram don't report any number of working male child, while Arunachal Pradesh, Mizoram and Nagaland have not reported the cases of female working children. Assam has the largest proportion of female children (4.51%) and male children (2.83%), engaged in wage employment. This result should be seen in the light of the fact that Assam is the only state within the region, which has the largest number of small and medium scale industries, located mainly in urban areas. However, this aspect needs further investigation especially to identify the economic sectors where the working children are engaged and the possible explanations for such a high proportion of working children in particular in the case of female children.

On the basis of above observations, it can be concluded that the problems of the children not attending school is very complex as well as heterogeneous by nature. So, in order to achieve the long cherished goal of UEE, there is a need to pay special attention which should be region specific and separately for the distinctive groups of population rather than dealing the situation in an aggregate and centralized manner.

#### **Elementary Education and Special Group of Population**

The Scheduled Castes and Scheduled Tribes have been traditionally considered a social and economically disadvantaged group for well-known and established socio-cultural reasons prevailing in India since long. As a result, children of these

categories are reported to have lower literacy rate, higher proportion of working children and of children not attending school than the corresponding category of children belonging to general population at all India level both for rural and urban sectors. So it is proposed to pay special attention to tackle with the problems of the children of ST/SC population.

The distributions of children that belong to ST/SC population for rural and urban sectors are given in Tables 9 and 10. Reviewing the proportion of school going children in NER (rural), it is noticed that this proportion (77.64) is higher not only than the all India average of ST/SC category (55.01), but is also higher than all India average for all population (64.12). The gender gap among school going children is significantly small in tribal dominated states. The proportion of working children in ST/SC category (0.65) is much smaller than all India average (4.57) in rural sector. The 21.07% of children are not going to school out of which the proportion of female children is higher than male children. Arunachal Pradesh has the highest proportion of children (38.11), not going school among the NE states. It appears that the factors inhibiting the children of ST/SC category of population to attend the school do not prevail in NE states. So, the proportion of such children is much higher in this region. This is point to be elaborated in much detail.

The proportion of school going children in urban sector of NE is much better than rural sector, where more than 90% children are going to school among SC/ST categories of population. Manipur recorded 100% school going female children. Arunachal Pradesh, Assam, Manipur and Nagaland have higher proportion of female school going children than male children. This is in contrast with all India average for children belonging to special group population.

Five states of NE, out of which four are tribal dominated states, do not report any ST/SC children working for wages in urban sector while Assam and Tripura show the proportion of male and female children working higher than the all India averages. These two states witness the problem of having children working for wages and that is why they are not in a position to go to school. This has to be tackled by identifying the causes of this phenomenon and taking suitable remedial measures. The proportion of children, which are neither in school nor working for male and female category, is 8.8 and 7.37 respectively in the urban sector of NE. This proportion is the highest for Arunachal Pradesh, followed by Assam.

In order to achieve the goal of UEE, it is necessary to focus attention on the children, who are not attending the school. Foregoing analysis helps us in identifying the extent of such children among NE states. What comes next is to find out the reasons for not attending the school. This is an important aspect of present study, as with the knowledge of the factors, which are responsible for keeping children away from school; it would be possible to suggest the remedial measures to tackle major hurdle in achieving the goal of UEE. Tables 11 and 12

TABLE 9  
Activity-wise Distribution of Children of Among ST/SC in NER (Rural)

States	Working			In School			Neither in School Nor <u>Working</u>			Total Children		
	Male Child	Female Child	Total	Male Child	Female Child	Total	Male Child	Female Child	Total	Male	Female	Total
Arunachal Pradesh	2.00	0.49	1.23	65.48	55.96	60.66	32.52	43.55	38.11	100	100	100
Assam	0.54	0.28	0.42	81.73	75.85	79.06	17.73	23.86	20.52	100	100	100
Manipur	0.52	0.00	0.27	76.34	73.60	75.00	23.13	26.40	24.73	100	100	100
Meghalaya	0.38	0.46	0.42	72.01	71.04	71.53	27.61	28.50	28.05	100	100	100
Mizoram	1.73	1.85	1.79	81.95	89.32	85.37	16.31	8.82	12.85	100	100	100
Nagaland	1.27	1.64	1.45	91.75	90.20	90.98	6.98	8.17	7.57	100	100	100
Tripura	1.77	0.28	1.08	79.98	78.85	79.46	18.25	20.86	19.46	100	100	100
NER All	0.83	0.45	0.65	79.66	75.35	77.64	19.51	24.19	21.70	100	100	100
All India	4.91	4.18	4.57	63.20	45.54	55.01	31.89	50.28	40.42	100	100	100

Note: As In Table 7.

Source: As In Table 1.

TABLE 10  
Activity-wise Distribution of Children Among ST/SC in NER (Urban)

States	Working			In School			Neither in School Nor Working			Total Children		
	Male Child	Female Child	Total	Male Child	Female Child	Total	Male Child	Female Child	Total	Male	Female	Total
Arunachal Pradesh	0.00	0.00	0.00	72.29	78.61	75.89	27.71	21.39	24.11	100	100	100
Assam	3.09	1.39	2.26	77.28	86.26	81.64	19.62	12.36	16.10	100	100	100
Manipur	0.00	0.00	0.00	95.82	100.00	97.76	4.18	0.00	2.24	100	100	100
Meghalaya	0.00	0.19	0.10	97.08	95.42	96.24	2.92	4.39	3.67	100	100	100
Mizoram	0.00	0.00	0.00	95.51	95.06	95.29	4.49	4.94	4.71	100	100	100
Nagaland	0.00	0.00	0.00	96.03	97.31	96.56	3.97	2.69	3.44	100	100	100
Tripura	2.81	2.82	2.82	89.24	85.72	87.23	7.96	11.45	9.95	100	100	100
NER All	0.98	0.67	0.83	90.22	91.96	91.07	8.80	7.37	8.10	100	100	100
All India	1.83	1.53	1.69	79.48	70.75	75.42	18.69	27.72	22.89	100	100	100

Note: As In Table 7.

Source: As In Table 1.

highlight the reasons for not attending school by male and female children of all and ST/SC population for rural and urban sectors of NE.

TABLE 11  
Reason-wise Distribution of Children not Attending School in NE R (Rural)

<i>Reasons for Not Attending School</i>	<i>(Percentage)</i>			
	<i>All</i>		<i>ST/SC</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
Too young to go to school	24.36	25.81	25.15	28.01
Unable to cope up	8.68	5.60	3.63	3.21
School facility not available	0.86	1.09	2.08	2.42
To participate in household activities	3.14	2.07	3.75	4.38
To work for wages and salary	0.71	0.04	0.57	0.12
To take care of sibling	0.01	0.05	0.03	0.12
To attend household chores	0.22	0.33	0.11	0.60
Other members engaged in work	0.04	0.80	0.00	0.83
Cannot afford.	9.25	8.08	11.92	8.15
Not interested	27.89	30.20	19.83	21.22
Others	24.84	25.94	32.92	30.93
All	100.00	100.00	100.00	100.00

Source: As in Table 1.

TABLE 12  
Reason-wise Distribution of Children Not Attending School in NE R (Urban)

<i>Reasons for Not Attending School</i>	<i>(Percentage)</i>			
	<i>All</i>		<i>ST/SC</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
Too young to go to school	30.17	25.07	36.48	25.82
Unable to cope up	9.04	20.04	22.61	25.90
School facility not available	0.15	0.39	0.00	0.00
To participate in household activities	2.90	1.35	0.00	0.48
To work for wages and salary	0.45	0.00	0.00	0.00
To take care of sibling	0.07	0.48	0.40	0.00
To attend household chores	0.00	0.00	0.00	0.00
Other members engaged in work	0.00	0.00	0.00	0.00
Cannot afford	4.62	6.74	0.91	2.62
Not interested	15.96	13.08	15.50	8.02
Others	36.63	32.86	24.09	37.15
All	100.00	100.00	100.00	100.00

Source: As in Table 1.

In rural sector, the highest number of children is not attending school. As the respondents reported, they are "not interested". This happens in respect of children of all population, though this proportion is higher for female than male children. This clearly indicates the lack of awareness towards the importance and utility of school education in the mind-set of rural people, whereas in the case of SC/ST category, the respondents did not disclose the reason clearly as more than 30% children are not attending school for "other" reasons. Almost 25% of respondents disclosed that children are not attending school as "they are too young to go to school". The 10% children, more or less, could not attend school as the respondents said that they "cannot afford". In both the cases, for all and SC/ST population, the proportion of female children not going to school because they "cannot afford" is lower than it is stated for male children. This observation implies that: one, poverty is not a major reason for children not attending school; two, poverty doesn't create any gender bias against the female child or in favour of male child for depriving the school education in the rural sector of NER.

A small number of respondents mentioned the reasons for children not attending the school, like 'to work for wages', 'to take care of siblings', 'to attend the household chores', 'as other member of households are engaged in work' etc. However, to take care of siblings and attending the household chores were given major reasons for not attending school, especially by the female children in rural areas (Lieten, 2000). It appears that this is not true in the case of NE (rural) where only a small number of female children are not attending school for these reasons. Another worth mentioning fact is that the reasons for not attending school by the children in order of priority are almost same for children belonging to all SC/ST population. This is an important revelation that children belonging as well as to ST/SC population are not deprived of elementary school because of any group specific reason, while such factors are considered relevant for deprivation of school education to children of special group of population.

In the case of children belonging to households residing in urban areas of NER, the reasons for not attending school are slightly different. Though the largest proportion of respondents did not disclose the reasons, they have preferred the "other" reasons for children not attending school. Whereas, children are "too young to go to school", mentioned by about 30% of households in the case of male children and 25% in case of female children, it is important to note that in rural sector a sizeable proportion of households mentioned "not interested" as the reason for not attending the school by the children, though this proportion of households is much smaller in urban sector. This clearly indicates the high degree of awareness and understanding of the value, importance and relevance of school education prevailing in urban sector. This suggests as a policy measure, that there is a need for much more concerted efforts to enhance awareness among the rural population towards the relevance of school education.

As the level of poverty is mainly rural-centered and less severe in urban sector, the proportion of households in urban sector is much lower than in rural sector, which reported 'can not afford' as the main reason for children not attending school. But the proportion of female children not attending school for the reason 'can not afford' is higher than their respective proportion for male children, both for all and ST/SC population. The other reasons like 'school facilities are not available', 'participate in household chores', and 'take care of siblings' are not very significant reasons for not attending school both for male and female children in urban sector too, just like rural sector of NER.

It is clear from Tables 11 and 12 that both for rural and urban sectors as well two population groups, a significant proportion of children are not attending school for unspecified (second last row in the tables) reasons. The possible explanation for this may be that the respondents in the household might not like to specify the reason intentionally. And we do not have any way to correct for this. This is one limitation of the survey data that we have to bear with.

### **Summary and Conclusions**

The issues and problems related to Elementary Education have generated a large literature. But the present study is an attempt to discuss the status of elementary education and its relationship with poverty and gender differentials among the north-eastern states. It is based on unit record data collected by the NSS on household expenditure and employment-unemployment for rural and urban India for the year 1993-94. The northeastern region of India comprises of the seven states, out of which four states, namely Arunachal Pradesh, Meghalaya, Mizoram and Nagaland are predominantly tribal population states.

The major findings can be summarized as follows:

- (1) This region as a whole is economically less developed than the all India average in many respects. Poverty is mainly concentrated in the rural sectors of Arunachal Pradesh and Assam, where a large proportion of population of households are living below poverty line. The 'depth' and 'severity' of poverty is also higher in these states.
- (2) The level of poverty among the NER states is concentrated in rural areas and the gap between rural and urban poverty is four times than the all India average. This indicates the initial stage of development, where 'economic duality' exists in the form of urban-rural dichotomy and economic growth in the urban centre does not appear to percolate and stimulate the rural economy.
- (3) The view that households belonging to ST/SC classes face higher degree of deprivation than the general population appears to be valid for Assam and Arunachal Pradesh only.



- (4) Despite low levels of economic development, the entire region has higher literacy rates. The degree of gender differentials in the male and female literacy rates appears to be on the lower side in the region. Even the poorest regions have higher literacy rates than at national averages. This suggests that poverty does not lead to gender bias against the female in accessing the elementary education.
- (5) In the urban sector of the tribal dominated states, the population of female school going children is higher than male children. The problem of working children is concentrated mainly in the urban sector of Assam. This aspect needs further investigation.
- (6) There is no evidence of poverty of the households affecting school enrollment of the girls unlike in the country as a whole. The schooling among children belonging to ST/SC groups does not differ significantly from the children belonging to other social groups.

It is to be noted that these conclusions are based on a preliminary analysis of the data. A more rigorous and robust analysis is indeed necessary to firmly establish these findings.

#### References

- Agarwal, Y. (2000), *DPEP2000: An Assessment of Trends in Access and Retention*, National Institute of Educational Planning and Administration, New Delhi.
- Banrejee, R. (2001), "Poverty and Primary Schooling: Field Studies from Mumbai and Delhi", *Economic and Political Weekly*, 35 (10), March 4-10, pp. 795-802.
- Bhatty, K. (1998), "Educational Deprivation in India: A Survey of Field Investigations", *Economic and Political Weekly*, 33 (27), July 4-10, pp. 1731-40.
- Dreze, J. and A. Sen, (1995), *India: Economic Development and Social Opportunity*, Oxford University Press, New Delhi.
- Dubey, A. and S. Gangopadhyay (1998), *Counting the Poor: Where are the Poor in India*, *Sarvekshana: Analytical Report*, No. 1, February.
- Dubey, A. and O. J. Kharpuri (1999), Poverty Incidence in North-Eastern States, *Labour and Development*, Vol 4 (i), pp. 32-51.
- Lieten, G.K. (2000), "Child Work and Education-II: Field Work in Two UP Villages", *Economic and Political Weekly*, 35 (25), June 17-23, pp. 2171-78.
- Foster J, J. Greer and E. Thorbecke, (1984), "A Class of Decomposable Poverty Measures", *Econometrica*, 52 (3), May-June, pp.
- Kaul, R. (2001), "Accessing Primary Education: Going Beyond the Class Room", *Economic and Political Weekly*, 36 (2), January 13-19, pp. 155-62.
- Mcdougall, L. (2000), "Gender Gap in Literacy in Uttar-Pradesh: Question for Decentralized Educational Planning", *Economic and Political Weekly*, 35 (19), May 6-12, pp. 1649-58
- Minhas, B. S., L. R. Jain, S. M. Kansal and M. R. Saluja, (1988), "Measurement of General Cost of Living for Urban India, All India and Different States", *Sarvekshana*, 12(1), July-September, pp. 1-23.

- Murthy M., A. C. Guio and Jean Dreze, (1997), "Mortality, Fertility and Gender-Bias in India: A District Level Analysis", in *Indian Development: Selected Regional Perspective*, (eds), Jean Dreze and A.Sen, Oxford University Press for UNU/WIDER, Delhi.**
- Minhas, B.S. (1991), "Educational Deprivation and Its Roles as a Spoiler of Access to Better Life in India", Indian Statistical Institute, New Delhi ((Mimeo.).**
- Sen, A K (1976), "Poverty: An Ordinal Approach to Measurement", *Econometrica*, 44 (2), March-April, pp. 219-31.**
- Tilak, J.B.J. (1987), "How Free is 'Free' Primary Education in India?", *Occasional Paper*, 21, NIEPA, New Delhi.**
- Government of India (2000), "Sarva Shiksha Abhiyan: A Programme for Universal Elementary Education in India\ Ministry of Human Resource Development, Department of Elementary Education and Literacy, New Delhi.**

## EDUCATION REVIEW

Contents Volume 34 Number 3 Summer 2002

3 Maths should not be hard: the case for making academic knowledge more palatable by Michael Wood. The author, from Portsmouth University, argues that simplifying academic knowledge may be the most effective way of assisting its development.

21 Reality: how to make it better by Joanna Swann. The author from Kings College, London argues that a Popperian approach is a practical method of pursuing the truth in educational research and educational improvement.

35 Marketing university education: the South African experience by Felix Maringe and Nick Foskett. This article presents a case study of a developing country's marketing strategy in the framework of western marketing concepts and reveals the extent to which marketing in higher education is set within the macro-economic environment. The authors are from the University of Southampton

53 Enlightenment and university by Martin L Davies. The author, from the University of Leicester, discusses what happens to knowledge in corporate universities operating in a knowledge economy. This article reveals the extent to which 'Move of knowledge' is resented and the implications of this

71 Notes from No'-th America: Bingeing and Parkinson by Paul Alper

78 Book reviews by Yvonne Hillier, Martyn Hammersley, John Wyatt, Audrey Stewart, Michael Locke, John Barratt and Patricia Worgan.

95 Selected annotated list of books received, compiled by Patricia Worgan.

## **Gender Discrimination: A Hurdle in Primary Education**

Shilpi\*  
Suniti Sanwal

Socialization of girls and gender-based division of roles determine whether girls will be sent to school, for how long and why? In other words, gender ideology underlies the societal perception regarding the goal of girls' education. A large number of drop-out school girls is a symptom of systematic failure and hence, our inability to provide this basic human right to girls. Socio-cultural biases and emphasis on domestic role are almost universal, yet their combination with poverty has an extremely determinant effect on continuation of girls' education in school. Also, parent motivation for male education is widely accepted but this is not true for female education. The issue of motivation in case of female education is complicated by the fact that social norms and restriction play a dominant role in determining motivation. In this context, Bhatti (1998) reported that parents perceive that the more educated the girl, the more difficulty it would be for her to find groom, affecting the motivation of parents. Upbringing of girls starts with the notion that they are the temporary members of the family. They are even denied basic rights and necessities such as nutrition, health and education. Though education is made free up to 14 years of age, yet majority of girls drop out due to various socio-cultural factors. Studies have revealed that education of the girls is an important variable affecting the demographic behaviour of women such as marriage, reproduction, mortality, migration and labour force participation. The present study is an attempt to find out gender discrimination in home and school resulting in drop-out at primary level. It tries to explore and analyze various factors, such as social, education and financial, which are directly or indirectly responsible for discontinuation of their education. Above all, it plans strategies including intervention programmes addressed to the problem of drop-outs. Its findings will be helpful for guiding the teaching style to improve their quality of education and administration of primary school. Keeping this in view, various gender sensitization programmes are needed and can be planned to reduce gender disparity in school and family.

\* BI/3, Tirhut College of Agriculture, Dholi, Muzaffarpur, Bihar.  
E-mail: [shilpij9782001@yahoo.co.in](mailto:shilpij9782001@yahoo.co.in)

### **Methodology**

A survey of 'primary school drop-out: its causes and consequences' in the campus of G.B. Pant University of Agriculture and Technology, Pantnagar, was conducted during 2000. Geographically, Pantnagar lies in between Rudrapur, Haldwani and Kichcha. For the purpose of sample selection, first of all a preliminary survey was conducted in four primary schools located in Pantnagar to know the prevalence of drop-outs in the particular study area. From the total drop-outs from each school, approximately 25% of the drop-outs were selected randomly. From the list, every fifth drop-out was short-listed as a study subject. Also, an attempt was made to include an equal number of male and female drop-outs in the sample to access gender discrimination. Thus, sample of the study comprised parents of hundred drop-outs and twenty teachers. Tools used for data collection were interview schedules and observation techniques. The collected data were tabulated and analyzed. Frequency and percentage analyses were carried out.

### **Result and Discussion**

The study revealed that families of most of the drop-outs were of nuclear type and large size i.e. 7 members in a family. About half of the heads of the families (49%) were engaged as farm labourers and more than one-third (28%) were engaged in miscellaneous work like carpenter, watchman, whitewasher etc. Majority of mothers (72%) were housewives and only one-fifth (19%) were engaged as housemaids. About half of the drop-out families (44%) had per capita monthly income below Rs.200 followed by 41% of the drop-outs with income between Rs.200-300. Though the average monthly income of respondents (Rs.1809) was enough to meet the basic necessity of life but due to large family size, the per capita expenditure on individual member becomes low that resulted in economic backwardness. Majority of drop-outs had between 3 to 5 siblings, followed by 34% of the drop-outs who had more than 5 siblings, which increased the responsibility of older siblings.

The results of the study are discussed under the sub-heads i.e. gender discrimination, child assistance in the family, financial factors, school life of child, government assistance programme and causes of drop-outs.

#### ***Gender Discrimination in the Family***

The difference in educational attainment that is observed between boys and girls provides evidence that educational motivation is highly gender-specific. Keeping this point in view, parents of drop-outs were asked certain gender-specific questions related to their preference for son, participation in household chores and also questions to assess parents' level of motivation in relation to education.

It was revealed that more than three-fourth of the parents (79%) preferred son over daughter while only 21% didn't have any preference. Parents preferred son over daughter for old age security, financial support and social status. Parents also responded that they would gain economic return by investing in case of sons as against daughter who are considered as liability and others' property. Khanna (1997) also reported that in spite of improvement in educational and economic status, there is reinforcement for son preference and daughter disfavour.

Parent's opinion was also sought regarding the importance of education for boys and girls. Majority of the respondents agreed that education is important for their children. Only 23% viewed education as more important for daughters than for sons. They felt that as the daughters have to go other's houses and adjust after marriage, therefore, they must be educated so that they can handle emergencies and earn money. About half of the respondents (44%) viewed that education is more important for boys than for girls. The reasons cited were that education would help their son to find employment, earning money and for old age security. About 33% of the people felt that education was equally important both for son and daughter, as it is a necessity of life.

Parental motivation for male education is widely accepted but this is not true for female education. It is complicated by social constraint and parental return from female education. Due to increase in communication with outside world, there is an increase in educational aspiration for children. Though majority of the parents (89%) viewed that education is important for both sexes but parental perception toward education of son and daughter is quite different.

TABLE 1  
Percentage of Distribution of Opinion Regarding the Importance of Education for their Children

S. No.	Purpose of Education	Son (%)	Daughter (%)
1.	Employment and earning money	63	7
2.	Prestige in society	17	-
3.	Marriage	-	48
4.	For better life adjustment and home caring	11	15
5.	For educating children	9	12
6.	Ability to read and write	-	18

Reference: Survey of Primary School Drop-outs, Pantnagar (2000)

Table 1 indicates that majority of the parents viewed that education is important for sons because they get better employment and earn money but for daughters they perceived that education is important for better marriage partner (48%), ability to read and write (18%), for educating their children and for better adjustment (12%). Kantikar (1988) reported similar results. For further

verification, parents were asked about the level of education desired at the time of enrollment.

Table 2 indicates that majority of the parents wanted to educate their son till they get employment (37%) followed by as much as desired (29%). But for the daughters, parents were willing to educate them till their marriage (30%), followed by as much as desired (23%). Nayar (1995) also reported that preference for son's education was upto graduation whereas for girls, upto higher secondary or the desired level of education as perceived by most of the parents. In the same context, Bhatti (1998) reported that parents perceived that the more educated the girl, the more difficult it would be to find out her groom which is affecting the motivation of parents towards educating their daughters. Parents were also asked about the preference for Government/private School for both the sexes. Due to financial constraint and large family size, parents were unable to send their children to private school. Majority of parents (76%) responded that they preferred co-educational government school while 24% parents preferred separate schools for both boys and girls. Parents didn't hesitate to send their daughter to co-educational system till primary level. The schools present in Pantnagar locality were co-educational. The study, however, also indicated that the parents spent equally on son and daughter in term of food, clothing, education and health. They said that children are God's gift and the mother underwent same pain in giving birth to the child of either sex. In contrast to the above result, Chanana (1996) observed the fact that the parents spent less on girl students than boys in government as well as private schools.

TABLE 2  
Percentage Distribution for Level of Education Desired by their Child

S. No.	Level of education	Son (%)	Daughter (%)
1.	Ability to read and write	-	9
2.	Primary	-	7
3.	Secondary	5	16
4.	Intermediate	15	6
5.	Graduate	14	2
6.	Till their marriage	-	30
7.	As much as desired	29	23
8.	Employment	37	7

Reference: Survey of School Drop-out, Pantnagar 2000.

When the parents were asked about the task that should be performed by children, majority of them (77%) agreed that gender-specific tasks should be performed by the children i.e. washing and cleaning home, cooking etc. should be performed by daughter while outside work such as buying grocery, paying

bill, farm labour etc should be performed by son. In contrast to this, 23% parents responded that both types of work (masculine and feminine) could be performed by both the sexes.

#### *Child Assistance In Family*

Children from the poor family assist their parents in various household activities, so costs of schooling rather than return from schooling are the basic determinants of parental decision in poor socio-economic context. The finding of the study indicates that majority of the girls (64%), while only 36% of boys, assisted in family chores during the course of schooling. In the present study, as most of the families were nuclear in structure and of large family size, it became hard for the mother to manage responsibilities of her home alone. In this case, the girl child suffered from disadvantage as parents valued son's education more than that of girls. Also the issue of female educational motivation is complicated by social norms and restriction of parents as the parent perceived that the daughter had to leave parental home and to go to their in-laws home after marriage and their training in parental home was to equip them for household work. Patel (1998) also conducted a similar study in Mongra and reported that due to gender disadvantage, the parents usually send sons to school but not their daughters.

TABLE 3  
Percentage Distribution of Activities Engaged by Children  
During Course of Schooling

S. No.	Activities	Son(%)*	Daughter(%)*
1.	Washing /cleaning home	-	37.5
2.	Washing dishes	-	31.25
3.	Cooking	-	25.00
4.	Buying grocery	16.0	.
5.	Looking after sibling	22.2	28.12
6.	Cattle care	44.4	-
7.	Help in shop	11.11	-
8.	Independent work	11.11	6.25

\*Percentage exceeding hundred due to multiple response  
Reference: Survey of School Dropout, 2000

From Table 3, it is revealed that majority of girls assisted their family in washing cleaning the house and dishes, followed by looking after sibling. Due to financial constraint, only a few boys and girls were engaged in independent work and earning to support family while schooling. In this context, Das (1988) reported about gender discrimination in household and stated that male students do not bring their younger sibling to school while females do so. In contrast to this,

Unni (1996) concluded that the over-all work participation of children is not very high.

After discontinuing their education, majority of girls (78%) spent more time in doing household chores, followed by grass cutting while majority of boys and only 28% of girls were engaged in independent employment.

Table 4 indicates that in both the cases before and after discontinuing education, the girl child devoted more time than the boy in household chores. Majority of girls spent 1-2 hours before dropping from school that increased to twenty percentage points for more than 4 hours in a day. In this context, Basir (1994), Kanbari & Kulkarni (1991) found that girls worked for more hours in all age groups.

TABLE 4  
Percentage Distribution of Time Devoted in Household Chores

<i>Time devoted</i>	<i>Before discontinuing education</i>		<i>After discontinuing education</i>	
	<i>Male (n=50)%</i>	<i>Female (n=50)%</i>	<i>Male (n=50)%</i>	<i>Female (n=50)%</i>
More than 4 hrs	-	-	-	20
2-4hrs	6	14	12	42
1-2hrs	30	50	58	28
Does not work	64	26	30	10

Reference: Survey of School Drop-outs. Pantnagar. 1000.

#### ***Financial factors***

According to the Constitution of India and official policies, elementary education is provided in India free to everyone. But in contrast to this, students and families are found incurring huge amount of expenditure on acquiring it. Keeping this point in view, parents were interviewed about various financial issues such as total expenditure incurred, fees paid and their financial constraints etc. Majority of parents (62%) told that expenses on education were beyond their resources and only 28% parents said that expenses of education were within their resources. Parents sometime took debt or reduced other expenses to fulfil the demand of child's education.

Table 5 shows that average fees were not too large but other direct cost such as books, uniform, footwear added to the substantial amount. Contrary to the general impression that household didn't spend much on primary education, the above table shows that the household spent considerable amount on primary education. Also for the family with several school going children, the direct cost for sending all of them to school became unaffordable and this resulted in discontinuing their education. NSSO (1991) reported that at primary level, the



household spent at least one-third on primary education. Similarly, Sharief (1994) found that the lowest segment spent only 7% of the household income on education. While 87% parents of the drop-outs paid school fees at primary level though it was free, 13% parents didn't pay fees as they were exempted, being schedule caste. The teachers also agreed that they charged fees from the students. The reason cited by them was that they get little fund for purchasing chalk first aid box etc. and the students were also charged examination fees twice a year. Above all, the school also provided free books, stationery and uniform. In this context, Tilak (1996) using NSSO (1986-87) reported that a sizeable number of the student didn't receive primary education free in contrast to the government policies.

TABLE 5  
Total Annual Expenditure Borne by Parents Before  
Discontinuing Child's Education

<i>Sexes</i>	<i>Fees (Rs.)</i>	<i>Books and Stationery (Rs.)</i>	<i>Uniform (Rs.)</i>	<i>Footwear (Rs.)</i>
Male mean	39.50	119.6	182.89	62.50
Female mean	33.75	121.6	175.98	54.38

Reference: Survey of School Drop-outs in Pantnagar, 2000.

#### *School Life of the Child*

There are various school-related variables such as age of enrollment, interest in school, deficiency in the subject, parent-teacher meeting etc. which directly or indirectly affect the phenomenon of the drop-out. In the absence of various facilities, school performance of the students gets affected and this often leads to undervalue education and high drop-out. Keeping this in view, various questions were asked from parents to know their perception towards school variables.

The present survey indicates that majority of the children from both the groups (82%) were enrolled at the age of 5 years, it being minimum age prescribed by the government for enrollment in primary school. Majority of fathers (62%) took initiative in enrolling their child in school. Majority of parents (52%) perceived that their child was regular in school while 28% of parents perceived that their child was sometime irregular due to illness, didn't like the school and went to some other place for a short period of time. Twenty per cent parents perceived that their child rarely or never went to the school due to fear of doing homework and punishment given by teachers. Also, parent didn't persuade their children to go to school due to lack of time and motivation. When parents were asked about parent teacher meeting, majority of them (79%) perceived that parent-teacher meeting was important for acquainting them with the periodical progress of the child and to develop mutual understanding with the teacher, while

21% of parents perceived that parents didn't have any role and it is the duty of teacher to handle the child in school. In spite of this, majority of the parents (64%) didn't visit the school. This is due to busy schedule of their hard work. Thirty-six per cent parents visited school to pay fees and to attain employment. Very few parents visited school to get acquainted with the performance of the child.

#### ***Perception Towards Government Assistance Programme in Primary School***

As government has made lots of effort for increasing the enrollment of children in school, views of parents and teachers were taken about the effectiveness of incentive provided by the government in primary school. When parents were asked whether the incentives provided in the school encouraged them to send their children to school, majority of parents (72%) were not encouraged. They gave the reasons that the scholarship money was not enough to meet the expenditure of education. Likewise for food grain programme, the response of these parents was indifferent. They said that the rice provided is irregular and not in prescribed quantity. Only 11% of parents were encouraged to send their child as 3 Kg rice was added to their ration at home.

It was also found that more than half of the parents (53%) responded that they were not satisfied with the government programme because of irregularity, uneven distribution, poor quality of rice while 20% of the parents showed indifferent attitude toward the government programme.

Majority of the teachers (78%) were also dissatisfied with the government. Instead of time devoted to teaching, they had to spend 3-4 hours in checking registers, keeping records and in procurement and distribution of rice. Teachers of primary school also complained that there were some parents who come only to receive three Kg. of rice from school and if the teachers didn't give them, due to shortage of attendance of the child, the parent argued and fought with the teachers. In turn, parents develop negative attitude toward teacher and school. In contrast to this, a few teachers perceived that the government programme increased enrollment and reduced the drop-out rate.

#### ***Drop-out Process and Its Impact***

The drop-out from education system is the danger signal to our educational system. So, to know causes responsible for discontinuing child's education, parents of drop-out were interviewed.

It was found that more than half of the boys and more than one-third of the girls discontinued their education due to repeated failure. Higher percentage of parents of male drop-outs (52%) than parents of female drop-outs (36%) viewed personal problems such as disinterest in the school, failure in the school, illness and wish to earn money leading to discontinuance of their education. Higher

\  
j  
j  
|  
I  
f  
?

percentage of parents of females drop-outs (40%) than parents of male drop-outs (28%) viewed home-related problems such as lots of household work, financial constraint, long duration of stay at the native place responsible for discontinuing their education. Higher percentage of parents of female drop-outs (24%) than male drop-outs (20%) perceived that shortage of attendance, failure in school, lack of teacher motivation and persuasion, unattractive school environment, high teacher-pupil ratio are the school problems, responsible for children's discontinuing education.

Teachers were also requested to express their opinion about the causes of drop-out. Majority of the teachers perceived that it were the home-related factors such as poverty, illiteracy of parents, low education of parents and indifferent attitude of parents towards education that lead the children to drop out from school. Lack of motivation and gender discrimination were also viewed as responsible factors for child's discontinuing education. This was followed by personal factors like poor performance, low education level and lack of interest. The teachers also opined that some of the school factors such as high pupil ratio, physical facilities and heavy syllabus for children were responsible for discontinuing their education. A few teachers also responded that food grain programme, on the one side, benefited the students while, on the other, it affected the efficiency of teacher, as at least one week in a month was wasted for keeping records, procurement and distribution of rice to students.

#### Recommendations

Based on the present survey on school drop-outs in Pantnagar, the following recommendations are offered:

- As too large a family size was the major factor responsible for educational deprivation among low socio-group, knowledge should be provided regarding family planning methods and contraceptives, using mass media. They should be motivated to use contraceptives and be made aware about the benefits of small family size in improving the quality of life.
- Community participation activities such as street plays, rallies, cultural programme and orientation programmes should be organized at regular intervals to highlight social evils such as early marriage, child labour and gender biases which are directly or indirectly related to the drop-out phenomenon.
- Level of education was found to be low in parents of low socio-economic group, thus, making it necessary to open adult education centres to help parents to broaden their horizon and educate them regarding baselessness of the traditional biases and prejudices between the sexes.

In this context, mother's education should be given prime importance, as she is the backbone of entire family.

- To compensate for the disadvantage of the children such as excessive absenteeism, frequent failure or constant dissatisfaction from grade, it should be beneficial to provide counselling service to the children. For the children who dropped from school and were not engaged in any kind of activity, vocational training courses such as tailoring, embroidery, basket weaving etc. for girls and photography, carpentry etc. for boys should be introduced to encourage their participation in work experience, which can help them earn money in later years.
- As high pupil-teacher ratio was found in all primary schools affecting their teaching ability, efforts should be made to appoint sufficient number of teachers to achieve the 1:35 NCERT norm of teacher-pupil ratio.
- Refresher training should be provided to teachers at regular intervals to improve their teaching skills.
- Also at regular interval parent-teacher meetings should be organized for discussing child's performance and developing mutual understanding.
- The provision for starting a centre for Early Childhood Care and Education (ECCE), close to the primary school, should be made and their timing should be adjusted accordingly. This would relieve the girl child from the responsibilities of sibling care.
- Various incentives such as the best teacher award, promotion policies etc. should be provided by the Government to efficient teachers, who are key of the entire educational system. This will encourage and motivate teachers to improve their teaching method and improve school environment.

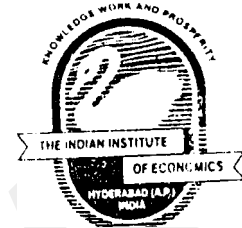
#### References

- Basir, Sajitha. (1994): Public Verses Private in Primary Education: Comparisons of School Effectiveness and Cross in Tamil Nadu. Thesis (Ph.D.), London, London School of Economics.
- Bhatty, Kiran. (1998): Educational Deprivation in India. *Economic and Political Weekly*, 33 (28): 1858-69.
- Chanana, Karuna. (1996): Gender Inequality in Primary School in India. *Journal of Educational Planning and Administration*, 10 (4): 361 -81.
- Das, G.M. 1988. Selective Discrimination against Female Children in Rural Punjab. *Population and Development Review*, 13(1): 77-100.
- Kanbari, R. and Kulkarni, P.N. (1991): Child Work, Schooling and Fertility in Rural Karnataka. In: Ramesh Kanbargi.. Ed. Child Labour in the Indian Sub-continent Dimension and Implication. New Delhi, Sage Publication, 82-85.
- Kantikar, T. (1988): Aspiration of Decision Makers of Education of Girls, Bihar. *Indian Journal of Social Weekly*, 49(2): 165-178.

- Khanna, S.K. (1997): Traditional and Reproductive Technology in Urbanizing North India Village. *Social Science and Medicine*, 44(2): 171-180.
- Nayar, U. and Nayer A. (1995): The Girl Child in India. *Journal of Indian Education*, 21 (3): 10-16.
- NSSO. (1991): Participation in Education (NSSO 42<sup>nd</sup> round July, 1986- June, 1987). *Sarvekshana*, 14(46): 86-93.
- Patel, T. (1998): Primary Schooling the Girl Child in Rural Areas. *Women Link*, 12 (4): 13-16.
- Sareif, A. (1994): Human Development Profile of Rural India: Participation and Wastage, Agriculture Research Centre, University of Delhi. 163p.
- Tilak, J.B.G. (1996): How Free is "Free Primary Education in India". *Economic and Political Weekly*, 31(5,6): 355-366.
- Unni, J. (1996): Who is in School and Why? Paper presented at the Conference on "Gender Perspective in Population, Health and Development at NCAER, New Delhi.

ISSN : M 7 2 - 3 U 2	
<b>INDIAN JOURNAL OF SOCIAL DEVELOPMENT</b>	
Chief Editor: S.Vijaya Kumar Council for Social Development, Hyderabad (India)	
Volume 2	No.1
June 2002	
<b>CONTENTS</b>	
<b>ARTICLES</b>	
• Social Economic Environmental Development and Population and Growth : Prospects and Consequences	SurendarYadava K N.SYadava
• Social Security for Non-Coverage Population in China	Yansui Yang
• Labor Reform and Social Safety Net	R.K.A. Subrahmanya
• Agricultural Development in India and Its Impact on Povtfty Reduction	K N. Selvarai
• Land Reforms and Rural Poverty : A study of Surplus Land Distribution in Uttar Pradesh (India)	Awadhesh Kumar Singh
• Employees State Insurance Scheme : An Analysis of Its Performance and Growing Resentment	M Mahadeva
• Provision of Two Child Norm in Panchayat Raj Act of Rajasthan : A Critical Review of Impact and Perception	AdeshChaturvedi, Anoop Khanna, Devendra Kothari
• Janmabhoomi Program in Andhra Pradesh: A Critical Review	K Bhaskar Reddy
• Horizontal & Vertical Linkages Between Formal and Informal Credit Markets in Backward Agriculture : A Theoretical Analysis	Sarbajit Chaudhuri and Jayantha Kumar Dwibedi
• Local Self Governance in Andhra Pradesh : A Need of Convergence	T Prabhakar Reddy
<b>ANNUAL SUBSCRIPTION KATES</b>	
India	Rs. 675 00
Foreign	US \$ 125.00
Publisher: -	
<b>SERIALS PULICAnOMS</b>	
TUSWA 4 B.S.S. Hall, Khyber Pass Market, Civil Lines, Delhi-110054 (India)	
Ajga&r Phone No. 91-11-3811659 Fax No.: 91-11-3812678	
E-mail. <a href="mailto:serials@satyam.net.in">serials@satyam.net.in</a>	

Journal of Educational Planning and Administration  
Volume XVI No. 3, July 2002



# The Asian Economic Review

Journal of the Indian Institute of Economics.

Volume 44

April 2002

No. 1

## CONTENTS

### I. ARTICLES

\*Dr. C. Rangarajan & Dr. A. Prasad: East Asian Crisis - A Review. \*Subhra Bhattacharjee: Policy Failure during Financial Crises - The Japanese Experience. Mimes T. Miller \*Walter Block -- Broken Windows: A Perspective on the Japanese Economy. \*Dr. Abdulla M. Ahemoud: Impact of Fluctuations in Oil Revenue on Aggregate Consumer Expenditures in the GCC Countries. \*Dr. P.P. Ekere: Marketing of petroleum products and the national economy of Nigeria. \*Prof. Sadefjh Bakhtiari: The Challenges of Islamic Banking in Iran. \*Dr. T. N. Jha: Micro Credit Finance Models in Bangladesh - A Visitor's Perspective. \*Ramin Cooper Maysaini & Sim Msien Hui: Macroeconomic variables and their relationship with Stock returns: Error correction model evidence from Hong Kong and Singapore. \*J.C. Sharma: Do Indian Stock Prices follow Random walk? An Enquiry. \*Nityananda Sarkar - Day-of-the-week effect on M.Kk returns in India: Effect of Economic Reforms. \*Nikhil Saood Hassan Chowdhury, M. Shihley Sadique and M. Selim Akhter: The size effect on the speed of stock price adjustment to information in the Indian stock market. \*Ghanashyama Mahanty - Regional Development and Human Development in Andhra Pradesh: A District-Wise Analysis. \*Dr. G. Gangadhar Rao - Regional significance and determinations of rural non-farm employment: A micro level Study from India. \*P.N. Jayakumar, Ch. Radhika Rani, K.N. Ravikumar, N. Sathesh and T. Krishna Prasad: Food Security, Poverty and Consumption Pattern among the Rural Households in Kancheepuram District of Tamil Nadu. \*Sujit Kumar Mishra: Equity Impact Assessment" - A Case Study of a Resettled village of Rengali Dam, Orissa.

### II. BOOK REVIEWS:

Subscription rates			
Category	1st yr	2 yrs	3 yrs
Indian (Rs)	300	575	850
Foreign (in \$US)			
Airmail	80	150	-
Scamail	57	105	-

The Indian Institute of Economics, CIRCULATION HOUSE, 11-6-841, Red Hills, Hyderabad-500 (K)4.  
(India). Phone: (0) 339.3512, fax: 91-40-3395083

## **Modern Technology Adoption Under Varying Levels of Education - A Micro-Level Analysis\***

R.K. Panda\*\*

The relationship between education and agricultural growth has been studied by many scholars and researchers. While majority of such studies dwell mostly on explaining positive relationship between the two (Wharton, 1965, Mellor, 1976, Chaudhri, 1979, Duraisamy, 1992, Tilak, 1993 etc.), the studies of Hayami and Ruttan, 1970 and Schultz, 1975, Sarap and Vashist, 1994 have measured the role of education in raising agricultural productivity. Studies in this context have argued for a minimum threshold education for better adoption of modern inputs (Lockheed et. al. 1980). While studying the relationship between education and adoption of modern farm technology, studies use different variants of education. While some studies discuss the relationship using level of education of the head of the household, others use the ratio of adult educated members to the total family members. In this context, however, no such study has so far been conducted to measure adoption with variation in the level of education among farm families. Under the same agro-climatic and infrastructural conditions, it is very much pertinent to examine the behaviour of the farm families with different educational status towards adopting modern farm technology and the factors affecting adoption thereof. The present study is an attempt in that direction. As paddy happens to be the predominant crop in the study area, the study seeks to investigate the issue for paddy crop only.

The following are the specific objectives of the study:

### Objectives

- 1) To study the cropping pattern and intensity of cropping among the farm households with varying levels of education;
- 2) To analyse the extent of adoption of modern technology among the varying educational status of farm households; and
- 3) To find out the causal factors affecting the adoption thereof and suggest policy measures for higher use of modern inputs in agriculture.

Revised version of the paper presented in the Annual Conference of the Indian Agricultural Economics (2001)

\*\* Department of Analytical and Applied Economics, Utkal University, Vani Vihar, Bhubaneswar-751005; Res: BL-I 15, V.S.S. Nagar, Bhubaneswar - 751004, Orissa

### **Methodology**

The study was conducted in two villages in Pipli Block of Puri district, Orissa. With the consultation of the agricultural officials of the Block, these villages were chosen as they are considered progressive from the point of view of adopting H Y V (High Yielding Variety) cultivation and possessing uniform agro-climatic and infrastructural conditions. Canal irrigation is the major source of irrigation in the sample villages. Besides, there are also lift irrigation points. Nearly 85 per cent of the cultivated area is irrigated. In the cropping pattern, Paddy happens to be the dominant crop and it covers more than 80 per cent of the cultivated area in Kharifas well as in Rabi. H Y V Paddy largely forms the crop of the study area.

As a first step in the sampling process, all the farm-households of the two villages were enumerated and classified into three groups on the basis of educational status of the head/chief earner of the family- (i) Low-education Households (those below primary level), (ii) Medium-education Households (those above primary but below secondary, (iii) High-education Households (those secondary and above). From each group, 30 per cent samples were drawn at random. Accordingly, a total of 140 sample households (37 from the first group, 79 from the second group and 24 from the third group) were selected for collecting various data for the study. A pre-tested questionnaire was served through survey method to get relevant information. The data pertain to 1998-99.

### **Results and Discussion**

The cropping pattern adopted by the sample farm households along with intensity of cropping are presented in Table 1. From the Table, it is observed that Paddy is the predominant crop and it occupies more than 90 per cent of the cropped area during Kharif and about 86 per cent during Rabi seasons. Within Paddy, H Y V takes a sizeable cultivated area both in Kharif and Rabi. Crops like Potato, Groundnut etc are of minor importance from the point of view of acreage under cultivation. Between households, there is not much difference in the cropping pattern followed except that the farms with low level education have less adoption of H Y V Paddy as compared to medium and high education farms. The average intensity of cropping of the sample farms works out to 165.74 per cent and it varies inversely with the level of education of the farm households the farms under low and medium education categories have intensity of cropping of 163.08 and 169.47 per cent as compared to high education households (157.59 per cent). This may be because of the farm households, having higher education, go for more non-farm activities as compared to farm activities.



TABLE 1  
**Cropping Pattern and Cropping Intensity Among the Farm Households  
 Under Varying Levels of Education During 1997-98**

<i>Farm Households under varying levels of education</i>	<i>Average size of operational holding</i>								(Area in hects.)		
		<i>Kharriff</i>			<i>Rabi</i>				<i>NCA</i>	<i>GCA</i>	<i>CI</i>
		<i>Paddy (Local)</i>	<i>Paddy (HYV)</i>	<i>Others</i>	<i>Paddy (HYV)</i>	<i>Groundnut</i>	<i>Potato</i>	<i>Others</i>			
<b>Within Primary (37)</b>	<b>1.82</b> (100)	<b>0.52</b> (28.57)	<b>1.20</b> (65.93)	<b>0.10</b> (5.50)	<b>1.52</b> (83.52)	<b>0.07</b> (3.85)	<b>0.04</b> (2.20)	<b>0.02</b> (1.10)	<b>67.34</b>	<b>109.82</b>	<b>163.08</b>
<b>Primary-Secondary (79)</b>	<b>1.79</b> (100)	<b>0.34</b> (18.99)	<b>1.25</b> (69.83)	<b>0.20</b> (11.18)	<b>1.63</b> (91.06)	<b>0.05</b> (2.79)	<b>0.06</b> (3.35)	<b>0.03</b> (1.67)	<b>141.41</b>	<b>239.65</b>	<b>169.47</b>
<b>Secondary and Above (24)</b>	<b>1.86</b> (100)	<b>0.56</b> (30.11)	<b>1.17</b> (62.90)	<b>0.13</b> (6.99)	<b>1.41</b> (75.81)	<b>0.10</b> (5.38)	<b>0.05</b> (2.69)		<b>44.64</b>	<b>70.35</b>	<b>137.59</b>
<b>Total (140)</b>	<b>1.81</b> (100)	<b>0.42</b> (23.20)	<b>1.22</b> (67.40)	<b>0.17</b> (9.40)	<b>1.56</b> (86.19)	<b>0.06</b> (3.31)	<b>0.05</b> (2.76)	<b>0.02</b> (1.10)	<b>105.24</b>	<b>176.31</b>	<b>165.74</b>

The extent of the use of modern technology on the farm and the level of output realised by the farm households are presented in Table 2. Three inputs like HYV seeds, chemical fertilisers and machinery and implements are taken to represent the use of modern technology by the farm households. While fertiliser and machinery and implements are calculated on their per hectare use, for HYV seeds, their ratio to total seeds used by the farmers are taken to denote the rate of adoption.

TABLE 2  
Use of Modern Inputs and Level of Output Between Farm Household Under Varying Levels of Education

Particulars	Farm Households			Pooled
	Within Primary Education	Between Primary-Secondary Education	Secondary Education and Above	
HYV Seeds (% to total seeds used)	85.26	91.65	83.82	88.62
Chemical Fertilisers (Kg./ha.)	38.84	44.28	41.69	42.40
Machinery and Implements (Rs./ha.)	548.45	817.36	855.02	752.75
HYV Paddy Output (qntl./ha.)	18.57	22.70	22.15	21.51

The calculation in this context reveals disparity in the use of modern technology and realisation of output between the farms. The disparity is found to be statistically significant (Table 3). Between the farms, the difference in the use of modern inputs like fertilisers, farm machinery and implements (excepting HYV seeds) as well as realisation of output is found higher between low to medium education farms than between medium to high and low to high education farms. With regard to the adoption of HYV seeds, there lies greater difference between medium to high education farms.

#### Factors Affecting the Use of Modern Technology

In view of the significant difference in the adoption of modern inputs between the sample farms, it becomes imperative to examine the possible factors associated in the adoption for each category of farms. For the purpose, in the present study multiple regression analysis (linear model) has been fitted to the data to examine the influence of different factors on the adoption of modern technology by the sample farmers. The equation in the model is:  $Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5$ , where  $Y$  = Amount of expenditures incurred on

modern technology (fertiliser, HYV seeds and machinery and implements) per hectare,

X1=Proportion of non-farm income to total income of the farm family,

X2= Years of formal education of the Head/ Chief earner of the family,

X3= Amount of institutional support received during the year towards agriculture (credit and non-credit)

X4= Age of the Head/ Chief earner of the family,

X5=Hours spent on extension education by the Head /Chief earner of the family per week (It includes attending training organised at the Block level, attending to Radio and T. V. Programme on agriculture, consulting with V. A. W etc).

TABLE 3  
Statistical Significance of Difference in Use of Modern Inputs and level of Output Among Farm Households Under Varying levels of Education

Particulars	t-value Between		
	Farm Households within Primary and Primary to Sec. Education	Farm Households Primary-Sec. and Above Sec. Education	Farm Households within Primary and Above Sec. Education
HYV Seeds	1.71*	2.40**	1.13
Chemical Fertilisers	3.14***	1.93*	1.77*
Machinery & Implements	4.96***	1.32	6.09***
HYV Paddy Output/Yield	1.97**	0.92	1.68*

Significance at 10 per cent level

Significance at 5 per cent level

Significance at 1 per cent level

Simple correlation matrices for all the independent variables, as mentioned, have been worked out for the presence of multi-collinearity. The results do not exhibit the problem of multi-collinearity in any of the case and the data then are put through the regression model. Linear model has been tried for getting the result. Regression co-efficients of the independent variables along with their t-values and co-efficient of multiple determination ( $R^2$ ) for each category of farms are presented in Table 4. Observation reveals that the independent variables taken in the equation explain the dependent variable significantly. The value of  $R^2$

TABLE 4  
**Estimated Value of Registration Co-efficients and Related Statistics for Farm Households  
 Under Varying Levels of Education**

<i>Variables</i>	(Linear Model)					
	<i>Within Primary Level</i>		<i>Primary to Sec. Levels</i>		<i>Above Secondary Levels</i>	
	<i>Reg. Coeffs.</i>	<i>t-value</i>	<i>Reg. Coeffs.</i>	<i>t-value</i>	<i>Reg. Coeffs.</i>	<i>t-value</i>
Constant (a)	649.837	-	600.2508	-	445.3844	-
Ratio of Non-farm Income to Total Income (X <sub>1</sub> )	6.2851	1.2760	10.5351	1.8100*	2.7877	2.1039**
Years of Formal Education (X <sub>2</sub> )	16.6675	0.3895	179.9722	3.5398***	79.6487	1.8252*
Amount of Institutional Support (X <sub>3</sub> )	1.1292	4.4596***	0.6489	3.4242***	0.1001	0.3295
Age of the Head/Chief Earner (X <sub>4</sub> )	8.5939	1.5983	18.8117	1.2474	37.4012	0.8861
Hours spent on attending to extension education (X <sub>5</sub> )	51.8264	1.8755*	139.9120	1.9662**	225.8977	1.7956*
R <sup>2</sup>	0.75		0.80		0.69	
N	37		79		24	

Significant at 10 per cent level

Significant at 5 per cent level

Significant at 1 per cent level

-varies from 0.69 to 0.80 between three categories of farms. As regards the individual factors' contribution to influence the dependent variable, observation reveals that out of the five factors, factors like ratio of non-farm income to total family income, years of formal education of the Head/Chief earner, amount of institutional support received towards agriculture and hours spent on attending extension education are found influencing the dependent variable significantly. For the farm category, within primary education, factors like amount of institutional support received for agriculture during the year and hours spent on attending to extension education are found influencing the dependent variable significantly. The values of the coefficients are found to be statistically significant at 1 per cent and 10 per cent levels respectively. In case of farms between primary to secondary education, the ratio of non-farm income to total income, years of formal education, amount of institutional support for agriculture and hours spent on attending to extension education are found influencing the dependent variable significantly. The values of these coefficients are found statistically significant at 10, 1, 10 and 5 respectively. For the farms having secondary and above education, ratio of non-farm income to total income, years of formal education and hours spent on attending extension education have shown significant association with the dependent variable. The values of these coefficients are found statistically significant at 5 and 10 per cent levels respectively.

#### **Conclusion and Policy Implication**

The study reveals that under uniform agro-climatic and infrastructural conditions, the rate of adoption of modern technology varies significantly with the level of education of the farms. Among the households with varying education, the factors that affect adoption are the ratio of non-farm income to total income, years of formal education, institutional support towards agriculture and time spent on extension education. From the findings, it is suggested that since modern technology is a costly proposition and needs better decision-making as regards timing and combination of inputs to be used for getting higher productivity, a reasonable years of formal education of the farmers is of utmost importance. Along with this, the farmers must be provided with sufficient extension education and institutional support to take up adoption at a faster rate. Particularly, the farmers in the category of below primary level education being at a greater disadvantageous position in respect to knowledge as compared to other two categories, these farm households must be provided with regular extension services for higher adoption of modern technology. Being less educated, these households have less access to different non-farm activities as supplementary sources of income. As such, these households must be provided with higher institutional support in terms of provision of HYV seeds, chemical fertilisers and credit to raise the rate of adoption. For the farms between primary

to secondary and above secondary education, the use of the modern inputs like HYV seeds and fertilisers being less than the recommended doses, these farms should be provided with more extension education and follow-up services for the application of the right doses of these key inputs for higher yield from agriculture.

### References

- Chaudhuri, D. P (1979),. *Education, Innovations and Agricultural Development*, room Helm, London.
- Duraisamy, P. (1992), Effects of Education and Extension Contacts on Agricultural Production, *Indian Journal of Agricultural Economics*, Vol. 47 (2), April- June, PP.201-214.
- Hayami, Y and V.W. Ruttan (1970), Agricultural Productivity Differences among Countries, *American Economic Review*, Vol. 60 (5) December.
- Lockheed, M.E, D. T. Jamison and L.J. Lau (1980), Farmer Education and Farm Efficiency: A Survey, *Economic Development and Cultural Change*, Vol. 29 (1), October.
- Mellor, J .W. (1976), *The New Economic Growth*, Cornell University Press, New York, U.S. A.
- Sarap Kailas and Vashist, D. C. (1994), Adoption of Modern Varieties of Rice in Orissa: A Farm Level Analysis, *Indian Journal of Agricultural Economics*, Vol. 49 (1), Jan-March, PP. 88-93.
- Schultz, T .W. (1975), The Value of Ability to Deal with Disequilibria, *Journal of Economic Literature*, Vol. 13 (3), September.
- Tilak, B G. J (1993), Education and Agricultural Productivity in Asia: A Review, *Indian Journal of Agricultural Economics*, Vol. 48 (2), April- June, PP. 187-200.
- Wharton, jr, C.R. (1965), The Role of Education in Early Stage of Agriculture, in C.A. Anderson and M. J. Bowman (eds.)(1965). *Education and Economic Development*, Aldine, Chicago, U.S.A.

### book reviews:

LAKSHMI REDDY, M.V. (2000): *Dynamic Role of Adult Education: Marching Towards A Learning Society*, New Delhi: Aravali Books International (P) Ltd., ISBN 81-86880-74-7, Pages: 101, Price: Rs. 150/-, U.S \$15 (Hard Cover).

The title under review is a good piece of work in the field of Adult Education which has gained momentum and evolved into a separate discipline. Divided into four Sections - Dynamism in Concept of Adult Education; Administration and Resource Support Structures of Adult Education in India; Literacy Situation and Campaigns in India; and Towards a Learning Society in India - comprising ten chapters give an authentic and lucid picture of adult education in the country. Section I contains three chapters viz., 1) Concept of Adult Education 2. Current Concepts in Adult Education, and 3) Conceptual Proliferations in Adult Education: Clarity and Confusion? In Chapter 1, the author, as a student of Adult Education, has brought out the conceptual clarity on adult education which has different dimensions such as liberal education, basic education, remedial education, vocational education, literacy, continuing education, life long education and so on, and also that the term of adult education has been used to refer to different things in different countries - literacy in developing countries where literacy is a major problem, liberal education for adults in U.K., and education of adults in the USA. It is also expressed that there are supporters as well as the opponents of different definitions of the concept and in that no definition is acceptable to all. However, it has tried to examine the term adult education as a process by looking at the definitions of Liveright and Haygood (1069), Freedman (1972), Faure (1972), UNESCO (1976), Legge (1982), Jarvis (1990) as an education that starts at a particular stage or level of education by quoting the definitions of Lindeman (1961), Directorate of Adult Education (1992); as an activity or a programme that encompasses so many things by examining the definitions of Paulo Freire (1970), Education Committee of the OECD (1975); as a self or others-directed efforts aimed at finding solutions to certain problems as per the definitions of Sharma (1984) and Kundu (1986). Further, the term adult education stands restricted to mere provision of educational facilities out of which the learners pick and choose according to their needs and interests (de Castell, et al, 1989).

Introducing the related terms and concepts, currently in use in the field of adult education, as given in order to understand the similarities and subtle differences among different concepts and their meaning vis-a-vis adult education, it has been attempted to classify education/life long education into two major divisions viz., Pre-adult education and Adult education. Pre-adult education includes Open pre-adult education and Closed pre-adult education while Adult education is broadly categorized as Further education; Continuous/Continuing education; and Recurrent

education proposed to be offered through contiguous (closed) or distance (open) mode of education that may help in promoting better international and more scientific development of the field. Terms such as adult education and 'education of adults' has also been explained in order to differentiate and distinguish between them. As expected, there is much to be debated and discussed on the proposed classification.

It has perceived and presented that the conceptual developments are so fast, vast and proliferating that the concepts on adult education have multiplied manifold. After thoroughly discussing on the conceptual proliferation in adult education, it has explained how the new concepts are emerging as a result of discovering the proposition of possible synonyms or alternatives to certain existing terms and concepts. Besides, the literature reviewed is presumably an indication of pace of conceptual development in the field so as to reorganize and systematise these concepts and their various elements and establish their interrelationships with each other and their delimitations from one another in international perspective.

The next Section focuses on administration of adult education with a view to explaining and understanding the changes in organisational and administrative structures; and the impact of these changes on adult education which discuss different kinds of adult education programmes implemented in India and the nature and administration of these programmes under three periods viz., Pre-British period, British Period and Post-Independence period revealing a clustered and scattered administration of adult education during Pre-British period, a subject of colonial rule during early British period and a system of parallel administration during later British period. During post-Independence period, efforts have been made for streamlining adult education administration by creating different Boards/Committees to make the administration more comprehensive, vogue and well-planned for effective administration of the adult education programmes.

As the changes and trends in adult education administration have been discussed in detail with some reference to the resource support structures, the focus of discussion is on the nature and quality of changes brought about and the trends in resource support structures of adult education such as IAEA (1939), Social Education Officers Training Centres (1951-56), NFEC (1956), DAE (1971), SRCs (1979), DRUs (1988), NIAE (1991). Though many changes have been brought in the nature and nomenclature of the existing programmes and structures, there have been no significant changes in the basic functions of the resource structures. However, some changes did occur particularly, either in the programmes or in the education policy of the government. The author expresses anguish against these changes which have fragrant deception or have paid only lip-service to illiterate adults, an eye-wash to eminent academics and adult



educationists, a death blow to the competent professionals and a luxury to the high profile bureaucrats.

The Literacy situation in India, with particular reference to coverage of the districts under Total Literacy and Post-literacy projects/campaigns in different States/Union Territories have been discussed in Section III to provide information relating to the progress of literacy till 1996, when out of 500 districts in the country, only 300 districts were covered by a total of 322 projects. The magnitude of illiteracy with particular reference to the situation of gender disparity at State/Union Territory level have been discussed by analyzing the literacy rates of male, female, rural, urban and all areas in 1991, providing the rank correlations between literacy rates and gender disparity so as to understand the gravity of the situation and the need for bridging the gap between the literacy of males and females in rural and urban areas. It is observed that the trend shows that any rise in literacy will continue to bridge the gap (disparity) between male and female literacy.

Various efforts undertaken for addressing the gigantic problem of illiteracy have been explained such as Total Literacy Campaigns, Post-literacy and Continuing education programmes and the roles of Zilla Saksharatha Samithis, District Resource Units, State Resource Centre, Directorate of Adult Education in organisation and administration of the programmes.

Section IV provides a holistic view of the educational system in India with focus on evolving a strategy for convergence of conventional and non-conventional Education systems and the efforts put in by the Central and State Governments to gear up the formal system (primary level through University education) and non-formal education (NAEP to NLM); to strengthen the administrative, training, research and resource support structures (DAE, SRCs, DRUs, JSS etc.,) and to expand the secondary and tertiary education through distance education mode (Open Schools, Correspondence institutes, Open Universities).

The last Section tries to establish meaningful linkages between various educational institutions at different levels to coordinate and maintain them for promotion of speedy, effective and enduring education among different sections of the society, giving a picture of different kinds of institutions under formal and non-formal system of education which would help to understand the proposed magnitude of the convergence at different levels. It has suggested a strategy for convergence of conventional and non-conventional system of education at different levels viz., grassroot level, district level, state level and national level. The author proposes new structures for this purpose providing a detailed strategy along with the proposed coordination committees, their composition and the functions at each level which would facilitate effective pooling, sharing, improvement and utilisation of the physical, material and human resources so as

to provide a comprehensive and strong base towards a learning society in tune with global trend of a 'learning globe'.

Since the contents of some of the chapters are based on articles published by the author either partly or fully in the Journals and Reports, there is repetition and verbosity in styles of presentation. However, this book is packed with useful information. The references at the end of each chapter add to its value. The cover page contains the pictures of books on the top of stems of a tree in lieu of flowers which give fragrance so as the books disseminate knowledge and the people are depicted on the leaves who are eager to learn. The get up of the book is attractive. The price is moderate. The publication is hard-bound and will be a very valuable addition to the libraries, students and teachers of adult education in colleges and universities.

Dept. of Adult and Continuing Education  
Sri Venkateswara University  
Tirupati-517502, A.P.

M.C. Reddeppa Reddy  
E-mail: [mcreddy\\_adedn@yahoo.com](mailto:mcreddy_adedn@yahoo.com)

BARTLETT, STEVE; BURTON, DIANA; and NICK PEIM (2001): *Education Studies*, Paul Chapman Publishing, A Sage Publication Company, 6, Bonhill Street, London, EC2A 4PU, Pp. 277. Price £16.99

The book under review is addressed to what we call B.A. Education as distinct from the B. Ed. in India. Presented in 9 chapters, it also carries an Introduction that explains the purpose of the publication under a title: What is 'Education Studies'? The Introduction is very illuminating. In a way, Education stands defined both as a discipline area as well as a skill area depending upon what you propose doing with what you have got. Whereas the former is meant for those who take it as part of a degree along with one or two other subjects to which it is complementary, those who wish to take to teaching as a profession opt for the latter. If the matters remain unclear even now, the Quality Assurance Agency of Great Britain defines the same as follow:

'Education Studies' is concerned with understanding how people develop and learn throughout their lives. It facilitates the study of the nature of knowledge, and a critical engagement with a variety of perspectives, and ways of knowing and understanding drawn from a range of appropriate disciplines. Education studies courses all involve the intellectually rigorous study of educational processes, systems and approaches, and the cultural, societal, political and historical contexts within which they are embedded (QAA, 2000:4).

This approach to the study of education can be seen to be far more searching than simply training how to teach specific content and how to 'control' classes.

The first chapter explains The Nature of Teaching. In so doing it discusses Education as a process, Education as a product, its involvement with others and the place where education takes place. Education is deeper than mere learning facts or the development of cognitive skills alone. Functionally, education is good both for the individual and the society. It enables one by giving ones skills to participate in a modern society. Education remains a battleground for numerous ideologues ranging from Karl Marx to Rousseau because ideologies are defined. The set of ideas and beliefs held by a group of people about the formal arrangements for education, specially schooling, and often, by extension or implication, also about informal aspects of education, e.g. learning at home.

Education continues to be defined according to one's ideology, interest, political or social agenda etc. and since it changes with time it refuses to be restricted to an eternal definition. Philosophy, Sociology, History and Psychology each has in their turn impact both on Education's process and also on its products.

The second chapter is Researching Education describes its methodology and the areas of its immediate concerns. For a graduate it is advanced enough for the purpose of understanding its elements.

The third chapter is on Knowledge, Beliefs and the Curriculum. The bulk of the content in the chapter discusses Curriculum in all its dimensions right up to its National form and the content. Of course, there is some mention of Knowledge and its epistemology.

The fourth chapter talks of Individual Achievement: Major Psychological Theories. As the title suggests, it carries a brief introduction to behavioural psychology, Gestalt and Personality theories, psychoanalytic theory and the psychometric approach to personality, Piaget, emotional intelligence and several other related topics. In fact this is the most comprehensive of all the chapters running into 29 pages.

The next chapter is titled: Education and Psychological Research: Contemporary Influences. For a graduate student it explains those theories, which in India, we teach at much higher or specialized levels. For instance, Constructivist theory of Vygotsky is rarely taught here but we are more familiar with Bruner and his role in this theory. It would be a good idea if in this country too we taught the latest that is available elsewhere.

Social Perspectives on Education and The Influence of Social Factors on Achievement are the two next chapters. Both these chapters have their own place in education and understanding its complex nature. The authors have also addressed the questions pertaining to class and gender. For the students, exposed as they are to contemporary socio-political debates, it is no longer difficult to appreciate why and how these factors influence one's academic achievement. Chapter 8 is on Politics and Policy in Education - something extremely relevant for understanding anything in a social system. For an Indian, it is more than

**Journal of Educational Planning and Administration**  
**Volume XVI No. 3. July 2002**

elementary because Indian politicians belong to a category, all by themselves. The way Marx stands improved or the Fabians get re-interpreted should be an Englishman's delight, should he understand the local lingo.

I like the conclusion because for the authors, this is a contested enterprise. That this is so, no one can deny, but is also at once least understood.

I wish we too also had someone who attempted a similar book for the Indian students in the language that they understand.

Recommended reading for all.

Pocket A-4/206, Kalkaji Extension  
New Delhi 110019

**R.P. Singh**  
E-mail: [rpsingh2@vsnl.net](mailto:rpsingh2@vsnl.net)

BERRYMAN SUE E. (2000): *Hidden Challenges to Education Systems in Transition Economies*, The World Bank, Europe and Central Asia Region, Human Development Sector, pages: ix+133, Price- £ 22.

"The hidden challenges to education system in transition economies" examines the 28 countries in the Europe and Central Asia (ECA) region, that is, the erstwhile socialist countries that have undergone transition to market economies for nearly a decade or more.

The foreword, preface and introduction of the book repeatedly refer to the fact that in the transition economies of Europe and Central Asia (ECA) region, the communist regime had been successful to achieve universal adult literacy rates, high participation and completion rates for children and youth of both the sexes at all levels of education. Besides, teachers were punctual; students had the textbooks and the students participating in international assessments of Mathematics and Science performed well.

It is then pointed out that the transition economies have not adjusted themselves, in the decade or so, to the changed rules of the game i.e. to the rules for market economies and open political systems. It is being argued that change from planned to market economy and to the open political system requires strategies to deal with the uncertainties and continuous changes which are characteristic of market economies, broader knowledge base and skill for flexible production, problem-solving skills and evaluative skills instead of memorized, factual and procedural knowledge characteristics of the predictability of a planned economy. Besides, under the changed rules, the productivity focus, accountability to taxpayers and management to self sustain the educational system and its responsiveness to the larger society must be the top concerns of educational planners which the transition economies have so far not fully evolved. As a result, the fault lines beneath the region's education system need to be repaired. Five fault lines under the headings of alignment, fairness, financing,

efficiency and governance, management and accountability along with suggestions have been treated to highlight their implications for the Bank's business strategy.

The transition economies are moving at varying pace towards market economies. This transition, albeit slowly, means that profiles of human capital required to compete in labour market must change in order to meet global standards and flexible productive system at competitive prices. Changing profiles of human capital in response to market conditions imply that certain technology and hence, skill may become outdated whereas new technologies and skills along with associated organisational and informational system must evolve fast. It also means that civil society institutions must come up fast to create an environment conducive for investors. This reduces the transaction costs as shared value and human cooperation; social cohesion ensures fast decisions based on co-ordination. The report also focuses light on the essential changes relating to curriculum content and pedagogy and the points of intervention, wherever needed, in order to re-align the education system to the needs of the market economy.

The market economies increase income inequalities and access to education is related to the cost of education; rising income inequalities reflect in falling enrolments in rural areas, amongst minority communities and, in general, at all levels of education, except for tertiary level of education and at upper secondary academic level. The expected years of education completed for OECD countries in 1998 were 15.4 years whereas in transition economies it has fallen from 11.2 years in 1989 to 10.6 years in the year 1999. Southeast Europe and Baltic states are exceptions where, after an initial decline in enrolments, it has picked up since mid-1990's. The individual's level of human capital determines the expected years in employment and the earnings and since the market adversely affects the learning opportunities by increasing income inequalities, the major area of concern dealt with is to address the issue of fairness in transition economies.

The third major area of concern in transition economies is educational finance to ensure fiscal sustainability for quality education and access of education to all. The reason why in the transition, from socialist economy to market economy, the fiscal constraints have emerged is that true prices and costs have surfaced. As a result energy bill, maintenance of infrastructure, printing costs of books and teachers' wages have shown the tendency to rise. Fiscal constraints have either led to reduced inputs affecting quality adversely or the fiscal burden has been transferred to the private sector affecting fairness. The adjustment policies suggested in the report are: Supplement central revenue with local taxes, formal user charges, informational user charges and entrepreneurial activities to raise money. Since local taxes have limitation, demand side financing is considered a useful alternative as the guiding principle of resource

distribution is suggested to be that money must follow students rather than schools.

The central message, however, is to efficiently use the resources. The report's observation may be quoted. "Much of today's inefficiency is a legacy of pre-transition economies when planners, not market forces, determined wages, subsidies and prices. These inherited inefficiencies interact with new realities. The sector has to pay much higher prices for some inputs, especially energy, and it has less public financing available for the sector." The implication is that quality related inputs are used less, affecting learner's outcome adversely. In the above statements, the efficiency norms in planned economies have got mixed up with the efficiency norms in market economies. In the planned economies, price does not provide the basis for allocative efficiency. It may be the case that the prices of educational inputs may be kept low artificially to maximise output in education. This is precisely the reason why pre-transition economies achieved success in educational sector. It is altogether a different point that transition to market economies by raising the market value of inputs reduced benefits in terms of costs. Hence, on the basis of market prices, no inference should be drawn on efficiency of socialist or planned economy. Nonetheless, there is the need to reduce energy bills, rationalise teaching units, increase class size by consolidating schools and make use of distance learning. However, postponing specialised curricula to tertiary level of education may not be a desirable strategy.

Governance, management and accountability are required not only to achieve better outcomes but are also desirable from the point of view of the World Bank which is investing on a large scale in any country. The World Bank's lending policies are guided by the market wisdom of 'efficient' resource allocation, good governance and management and security of finance.

The perspective that emerges from the book is that education is treated purely as a marketable good just like any other good. Hence, on a pure cost benefit analysis, the cost of inputs per unit of output is to be minimised subject to the restriction that resources are given; and the required skill formation in each sector is to be made. Thus, it views educational institutions as manufacturing units, capable of supplying the requisite human capital demanded from the market. However, in a Socialist economy or even in a Capitalist economy, education is a social good. It is a means to enrich the quality of life in material as well as non-material terms. It is a means to progress intellectually and socially and hence, looking through the eyes of market guided by the principle of resource allocational efficiency may not always be desirable in transition economies. However, various points raised in the report certainly merit consideration in the specific context of each and every country so that right kind of education and right type of skills are generated in the globalised world.

Vaniya Mahavidyalaya  
Patna University, Patna-5.

**Sudhanshu Bhushan**

DYER, CAROLINE (2000): *Operation Blackboard: Policy Implementation in Indian Elementary Education*, Monographs in International Education, Symposium Books, Oxford, pp.181, ISBN 1 873927-88-6, price: not indicated

The Constitution of India, Article 45, National Education Commission (1966), National Policy on Education (1968), National Policy on Education (1986), the Programme of Action (1992) and the various five year plans in India and recently the 93<sup>rd</sup> amendment bill relating to Elementary Education a Fundamental Right reiterate the goal of achieving universal elementary education. With the National Policy on Education (1986), there has been a momentum of interest in universalising elementary education in the country. It was identified that the state of educational infrastructure in elementary schools was dismal to achieve the set goal. Hence, a centrally sponsored scheme called Operation Blackboard was initiated in 1987 to improve the educational infrastructure in primary schools all over the country with three components, viz. class rooms, teachers and teaching-learning equipment.

The book under review is a doctoral research, which explores the gap between the policy rhetoric and practice i.e., implementation of the Operation Blackboard scheme in a district of Baroda in Gujarat. Research method adopted is a backward mapping, qualitative methods such as classroom observations and teacher interviews in 30 government primary schools in the study area. The analysis is presented in six well-outlined chapters, relating to educational development in India, progress and challenges of universal elementary education in Gujarat, review of theoretical analysis on implementation, implementing the scheme operation blackboard, analysis of the primary information from the teachers, educational administrators and, at the end, a highly critical evaluation of the centrally sponsored scheme under consideration wherein emerge suggestions for a more dynamic policy implementation.

Operation Blackboard as a policy instrument in terms of *additional classrooms* in Gujarat raised legitimate concerns regarding the control of development agenda of the state - leading to the issues of centre-state relations, for which, the author suggests both federal and the state governments to work towards the development of spatial norms per child outlined in the state plans. This could be worked out in accordance with the needs of each village at the district level with the help of micro-studies and population projections, wherein community participation is also involved.

With regard to *teachers*, as identified in many other studies, it is not the number of teachers that matters but the quality of them. More than quality, motivation of the teachers is mandatory for achieving universal elementary education with satisfactory quality. Dyer highlights that for policy adoption, the OB scheme neglected the relationship between teachers and students and their pedagogical competencies. The third component of operation blackboard is

provision of *teaching-learning equipment*. She argues that the blanket national scheme did not allow for local adjustments to fit teaching-learning equipments within existing levels of teacher capacity and the local circumstances of schools. It was suggested that more research inputs prior to implementation would have boosted the morale by making the administration understand and responding to teachers' circumstances.

Dyer highlights a number of lacunae in the implementation of OB that:

- Conception and implementation processes of education were subsumed by implicit political agendas which conflicted with the priorities of the scheme.
- The basic document prepared by NCERT was theoretically sound but was not pragmatic.
- A strategy of tight control from the top appears not to be tenable in view of the federal set-up and it is imperative to maintain state's interest as well in participating in the scheme.
- Operation Blackboard illustrated that a centrally sponsored scheme is very difficult to implement as the centre could only suggest and prescribe.
- States have enormous difficulties in taking on a centrally sponsored scheme in addition to its regular workload, which get reflected in slow implementation and lack of response.
- Gujarat, though in its state plans and the Minimum Needs Programme, claims to treat elementary education as a developmental priority, in practice education has not been viewed as an integral part of a development strategy, but as an obligation. This, with the demand of OB to treat elementary education as a top-most priority, clashed and manifested in funding problems - the issue of centre-state relations.

Despite the many limitations with its implementation it offered many rich policy lessons as a policy innovation.

DPEP has been a move towards decentralisation, creating a balanced partnership between the centre and the states; between the state and the district; and between the district and the sub-district levels - is highly challenging. However, the problem with DPEP is that though external finance is growing, domestic resources either stagnate or decline. Yet another centrally sponsored scheme, namely *Sarva Shiksha Abhiyan* (SSA) is launched in all non-DPEP districts for achieving universal elementary education.

The lessons drawn by the author from her analysis and field experience on implementing a centrally sponsored scheme - Operation Blackboard - is rich and vital. The pitfalls identified should be meaningfully rectified in the centrally sponsored schemes that have been initiated later on viz, DPEP and SSA. This



book will serve as a necessary reading for the planners and policy makers and also for researchers and students of planning and development.

NIEPA  
New Delhi - 110016

P. Geetha Rani  
E-mail: [geetharani@niepa.org](mailto:geetharani@niepa.org)

COLEMAN PETER. *Parent, Student and Teacher Collaboration- The Power of Three*. Corwin Press Inc., A sage Publications Company. Thousand Oaks, California, 1998, pp. viii + 216, Price: £ 15.99 (Paperback).

The book under review has arrived at a very opportune time, when policy makers and educational administrators in democratic countries are at least willing to concede that student participation, in some form or the other at various levels of educational activities, is desirable and essential to make learning a meaningful experience. There cannot be another more attractive and refreshingly appealing title of the book that beautifully symbolizes the tremendous power inherent in the collaboration of school, family and child. The text in the book provides reasons, advantages, mechanisms and examples for implementation and research.

Besides an outline of key elements, the book introduces, in addition to parents and teachers, students as partners in the classroom triad to co-produce learning. It is argued that the concept of triad is central to interactions, as each member contributes to instructional relationship. Interactions determine students' willingness and readiness to learn, predict student satisfaction and commitment to school and schooling, and shape attitude towards school and learning as well as student achievement. The interactions are alterable to a good extent through the initiatives of teachers. Parents' involvement includes the notion of the curriculum of the home, patterns of habit formation, and attitude development that prepares a child for academic learning and for years of schooling. In line with emphasis on the use of multiple methods in an explicit manner, the author makes use of case study and survey methods. A pilot analysis, done on the survey data from the first year of study, suggested that the teacher practices of parent/student communication and student perception of collaboration with the teacher are critical to improve student and parent attitudes to school. The families included are representatives of the population in British Columbia, the teachers are typical and the students are of middle school level. The teacher/family collaboration has been found to be particularly important during the transition from elementary to junior high school. The author also specifies the organization of the book, its audience and the author's beliefs and assumptions. Four beliefs form the base of the text. These are: (1) Primarily, parents shape the student commitment to schooling through the 'curriculum of the home', and parent involvement can be altered by the school and teacher practices; (2) Student

commitment to schooling is a useful measure of how well the school has served the interests of individual students and their families; (3) The family influence must be incorporated into models of school effectiveness and improvement; and (4) Triad collaboration at the level of classroom promotes student bonding and is central to school effectiveness. Leadership is vital to better schools, which provide for more responsive and integrated environments. These are discussed in relation to three main topics, namely parent involvement and school effectiveness; the political and social context of public schooling; and the internal politics of schools.

Based on the five years of qualitative and quantitative data on interactions and consequences, obtained from students, teachers and parents, the focus has been on the hidden link, namely the influence of the parents upon student commitment. In the framework, for the analysis of family influence, parents are seen in two different relationships with other triad members, either as mediators between child and teacher, or as intervenors/catalysts. Pressure and support implicit in home and school practices are found vital to student achievement and commitment. An attempt is made to seek answers on the ways in which home practices of pressure and support shape student expectations, mediate between student and school, and intervene to change attitudes and behaviour of students or school to support and sustain student commitment. Answers have been sought independently first by using survey responses, and then by the interview data. Six portraits have been presented, three each from the most positive and the most negative cases, by organizing with respect to three elements of home practices and attitudes (expectations, mediator, catalyst or intervenor). Both mediating and intervening activities are found common which often shape students' views. The four anomalous cases show that parents cannot school-proof their children. The twelve cases that sustain the hypotheses indicate the specific and dynamic within-family forms of 'social capital', the norms, the social networks and the relationships between adults and children that are of value in child's growing up. There are, however, many families at all social levels that fail to provide an environment in which their children can benefit from the prevalent school. Parents derive their efficacy from many sources, in addition to invitations by school and teacher to participate. The mediating and intervening activities prove vital in forging the connection of parents and students to school and schooling, predictive of working career and citizenship, beyond educational future. It is recognized that schools cannot inculcate positive attitudes, although some teachers try to forge strong connections with students in order to compensate for home disadvantage.

The theme of teacher collaboration is examined further from the perspectives of the students, together with parents. It is expected that collaboration will involve mutuality and that it should be perceptible to all those involved in it. The visibility of collaboration is a vital intermediate step in shaping attitudes to

school, or to home. Students' and parents' views on teacher collaboration are elicited from a single cohort of grade 6 and 7 students enrolled in a variety of suburban schools. In Step 1, composite portraits of four classrooms are created, in the second, between classrooms of two sites are compared, and in the third, the reports of survey and interview data are compared. Collaboration between parents and students is found which varies widely between classrooms. Parents initiate more, although there is mutuality. Student reports of parent/teacher collaboration are very limited. Students and teachers report different levels of collaboration in almost every triad, and the students report more student-initiated collaboration. The collaboration between parents and students indicates the importance of helping parents learn what they need to know to help their children; perceived barriers to parent/student collaboration; supporting and encouraging home instructional activity; and encouraging parent presence in the classrooms. A comparison of the two classrooms showed that in classroom 21 parents found teacher impact on student responsibility and student's positive comments about the teacher. Academic as well as social interactions are important to students. In an era of 'engaged' parents, teachers must collaborate with parents as well as students. The author examines the student acceptance of responsibility for learning as one area in which parents can make a difference. This analysis used the Year 1 and the year 2 populations of the Co-production Project.

The focus is also on change in teacher collaborative practices because of the impact of parent involvement. This is done by analyzing teacher interview data related to: (a) attempts to strengthen parent involvement in instructional activities; (b) instances of teacher/student collaborations; and (c) instances of practice change judged, likely to affect student commitment. The general pattern is that some teachers have consistent positive impact upon students and their parents. These teachers shape both home-based and school-based attitudes. Other teachers have equally consistent effects on the low end of the attitude scales, modeling a kind of professional distance. In one classroom, negative comments from students about student/teacher collaboration are one and a half time more, while in another classroom (also top ranked on the parent measure) the teacher could elicit many times more positive comments from students. Yet this classroom shows only moderate practice change. The student reports are very distinctive to suggest that practice change is not the best measure. More than teacher practice, the general teacher attitudes are important to students, expressed in the daily treatment of students. Student commitment can be sustained and strengthened by collaborative teacher attitudes, and strong connections with home are essential to the task. Teachers who combine challenge with support are the best for instructional practice, but are rare. Most successful teachers are expected to create a demanding but an enjoyable climate in their classrooms.

They enjoy successful careers and students respond to them positively to work in collaboration and enjoy learning.

The discussions are finally summarized around the 'power of three: lessons for school improvement'. It dismisses the four myths about parents and students, believed by educators, in general. The first myth is that some parents and their children do not care about school and schooling. This is found absurd as in the research reported here, all parents care and all students care. The second myth is that some parents cannot help their children to be successful in school. Indeed, it is not important who these parents are, but what they do, with and for their children, they do prepare them for success in school. Myth 3 is that the parents are involved and are influential in schools at present. Parents are widely supportive of schools and teachers, and are yet conscious that much more can be done to help students learn in classrooms and in the home, if their own willingness to help is not discounted and undervalued. Myth 4 is that parent involvement is a way for parents to control schools. However, little evidence is found so far that the parents can successfully govern schools. Nothing in the data suggests that ordinary parents are interested in school governance. At present, parents see little connection between governance arrangements and teaching and learning activities as the latter are fully controlled by teachers.

It would only be fair to observe that the book makes an interesting reading overall, with explicitly spelled out logic in a lucid format and an unambiguous language. The book has thus its own strengths to the credit of the author than a typical research monograph. It does leave one looking for a few things however, which do not come out quite clearly. Not much is indicated, for example, about the improvement (nature and kind) required in either the pre-service training of teachers or modules for in-service teacher training. Nor it is clear almost what kind of outreach programmes for the parents can be worked out to get them actively involved in collaboration. There seems to be an assumption that all parents and students constitute a homogeneous group and are actively interested in collaboration, if invited by teachers, but this may not be true. There are parents, who are difficult to be sought, irrespective of the fact that their children are doing very well or very poorly. The scenario of change in the research is of classroom, but how the classroom collaboration will be affected by the school ethos and value attached to collaboration in the outside society are important to consider. The role of leadership and policy-makers cannot be considered unimportant, and the book does not say much on this. Collaboration is an ideal goal and interesting to work for, but it not easy to attain. The book would certainly be useful to researchers, teachers, administrators and policy-makers in education.

194-B Mount Kailash  
East of Kailash, New Delhi-110065

**Sushila Singhal**  
[E-mail.sushilasinghal@hotmail.com](mailto:E-mail.sushilasinghal@hotmail.com)

SCHEERENS, JAAP (2000): *Improving School Effectiveness: Fundamentals of Educational Planning*, Series No. 68. UNESCO: International Institute for Educational Planning (HEP), Paris 07 SP. ISBN 92-803-1204-9, pp.123.

The monograph primarily deals with a central theme of Educational Planning and Management with a special reference to the School Effectiveness. It presents a normative approach to School Effectiveness by examining several spheres of educational planning and management in a micro perspective. The author is critical in understanding the concept of educational productivity from different perspectives on the basis of a thorough review of research findings that have been obtained from researches on school effectiveness in developed and developing countries. The monograph has been designed in five chapters, from conceptualization of the concept of school effectiveness to the implications of it for the educational planners. The Swedish International Development Co-operation Agency provided financial assistance for the publication of this monograph

School is a formal system through which the cultural heritage, accumulated knowledge, values and skills are transmitted from one generation to the other. This basic schooling process has gained an important place in educational scenario. As the world is moving at a faster rate and getting transformed in all spheres of life, the schooling process has also undergone a sea change in terms of its objectives, climate, methodology of teaching, and management and administration. At this juncture, the significant question is what constitutes effectiveness in schools? And what effect they make on their customers - students/parents? There is always a parental choice in selecting the school for their children's education. This choice may depend on several parameters such as facilities, qualified and competent staff, leadership, pupils' performance, public demand, innovative curriculum transactions etc. Therefore, a clear distinction between effective schools and ineffective schools can be traced initially from the way they impress the community.

•School Effectiveness' has become a great concern to the educational thinkers in the recent past. As the concept is so complex, efforts have been made to review and overview the processes of education, necessary and sufficient conditions, worthwhile outcomes and, thereby, the indicators that determine school effectiveness. It is very difficult to define the terms 'Effectiveness' and 'Quality' in Education. The systems' thinking suggests that the Quality Inputs can be processed through quality mechanisms so that the quality outcome can be obtained. Researches in School Effectiveness identified the key factors and these are: professional leadership, shared vision and goals, a learning environment, concentration on teaching and learning, purposeful teaching, positive reinforcement, monitoring progress, pupils' rights and responsibilities, home-

school partnership and sound educational management. However, it is beyond the control of the educational planners to have control on quality parameters.

The author has argued that the effectiveness refers to the attainment of the goal and the school effectiveness refers to the performance of the organizational unit called 'school'. The first chapter refers to a wide range of theoretical approaches to organizational effectiveness by emphasizing its foci - being productivity, adaptability, involvement, continuity and responsiveness to the external consumers. Conceptualizing the modes of schooling, the main components identified are such as goals, organizational structure, culture, environment and primary process, which can be manipulated or influenced in the schooling process.

The detailed review of researches in the area of school effectiveness and the meta-analyses of such studies revealed the relevance of variables such as achievement-oriented school policy, educational leadership, consensus and co-operation among staff, opportunity for professional development, parental involvement, time on task, opportunity to learn, feedback mechanisms and co-operative learning styles for school effectiveness.

The monograph also embodies the theoretical perspectives of school effectiveness, pre-supposing the rationality paradigm as a framework for discussion which is mainly based on the fundamental principles such as goal-oriented behaviour, optimal choice between alternative means to reach the given goals and recognizing that the alignment of individual preferences and organizational goals is a major issue in organizational settings. This rationality paradigm is interpreted in synoptic terms that focus on a proactive structuring of all types of activities to optimize the tasks in the school. The public-choice interpretation of rationality paradigm refers to the conditions that stimulate schools to be task-oriented instead of being guided by preferences. The retroactive planning stresses on information gatherings and using them for evaluation, feedback, motivation and also corrective action. The way the author analyzed the empirical research studies on school effectiveness is critical and the conclusions, on the basis of the analysis, seem to be grounded on the theory for school effectiveness.

The significance of this monograph is the elaboration on the usage of evolved knowledge base for monitoring and evaluation procedures. The monograph provides a set of general principles that are useful for educational planners and these are:

- The general conditions of education on the basis of the core set of indicators such as poverty level of the region, enrolment rates and availability of resources.
- Development of conditions that stimulate the intended participation.
- Investment in substantive educational programmes.

- Decentralization and enhancing community participation
- Multi-media approach.
- Instructional procedures matching with cultural conditions.

The above principles of school effectiveness were well represented by explanatory diagrams. At the end, the author concludes that to some extent schools do have control over the quality indicators that determine school effectiveness. Therefore, the mode of schooling is a crucial point while the

**of the** researchers working in the area of School Effectiveness. Though the book presented wide range of theoretical base, it has failed to precipitate **on the changing** roles and modes of schooling, the impact of internationalization of **The** Preparation programmes and micro-politic, the author would have elaborated the emerging trends in the schooline **in** the contemporary world and discussed the possible quality indicators **in** cases.

This monograph will be an essential guide for a wide range of reader. For academicians, it is a reference book that provides conceptual clarity on school effectiveness. For researchers, it is a compass that shows the direction and guides the thinking process in formulating the research questions. For Educational Planners, it is a tool for analyzing the educational processes and for **controlling** effect. Comprehensive and unique report on school systematics. This book's rigorous and

Faculty of Education and Psychology  
M.S. University of Baroda  
Baroda-390 002, Gujarat

**K. Pushpanadham**  
**A. J. Khirwadkar**

BHALLA, A.S. (ed.): *Globalization, Growth and Marginalization* International Development Research Centre, P.O. 8500, Ottawa, Canada K1G 3H9. Published in hardbound by Macmillan Press Ltd., London and St. Martin's Press not given. ISBN 0-88936-839-2. Pp- 224+xvii, (paperback), price:

The rising tempo of globalisation, specifically since the 1980s has attracted considerable attention of the social scientists, along with experts from other disciplines. Its spread is so wide that each and every aspect of life is under its influence in one way or other. While its promoters see a whole lot of benefits

flowing to the society, the critics have much more to add on its adverse impacts on the masses, and low income population, in particular. In fact, it is one of the most controversial themes on which experts have worked simultaneously and also differed radically. It is in this background, that the current edited volume, which has attempted to analyze the impact of globalisation on growth, productivity, poverty, inequality and employment, should be looked upon.

Globalisation promotes growth and productivity through enhancing efficiencies but its impact on income distribution and employment generation is little known. On this basic submission, the current volume makes an attempt to highlight the growing marginalization of people in poor countries in the process of globalisation and spread of information technology (IT). Contributors in general are in agreement with the postulation that globalisation and IT spread will have a positive productivity/growth effect but negative distribution effect. Its broad message is: ***free and unmanaged globalisation can cause economic and social hardship by exacerbating poverty and income distribution.***

The edited volume includes eight papers by seven researchers apart from an introductory remark by the editor. It has dealt not only with the conceptual aspects of the globalisation but has also analyzed at length its impact in regional context on Latin America, South Asia, East and South-East Asia, and Africa separately. It further provides an overview of the regional perspectives and discusses themes for future research. The coverage of the volume, thus, appears to be fairly wide. However, while dealing with different impacts of globalisation, contributions largely focus on economic aspects and within it, on poverty and income distribution, and, to a lesser extent, on employment generation.

A fairly long introductory chapter by the editor provides a good overview of the subject and the book. It begins with defining globalisation and highlighting its key economic and non-economic features and ends with a brief outline of the studies included in the volume.

Paul Streeten's contribution entitled ***Globalisation: Threat or Salvation*** provided a strong foundation to the various regional studies included in the volume. It reviews progress of globalisation in terms of trade, financial flows, role of technology and transnational corporation, as also international convergence of real wages. It amply highlights beneficial and harmful impacts of globalisation, examines the role of government in the globalizing regimes and indicates wide ranging undesirable dangers of *laissez faire* policies.

The book argues for a more crucial role of governments in the globalizing world so as to avoid national disintegration manifesting in growing unemployment, poverty and marginalization. In the course of analysis, several important observations of far reaching implications are made. With regard to unemployment, for example, it observed that simple Keynesian remedies, such as expanding effective demand, may no longer work in the post-globalizing world.



Jeffery Jame's contribution highlights marginalization of the developing countries in the context of the spread of IT. It has identified many trade and foreign investment induced mechanisms of technological influence that are based on IT in its various forms. It also shows that developments in the high-tech fields have benefited a fewer relatively advanced developing countries from east and south Asia and Latin America while relatively less advanced countries like those from Africa became more marginalized than at any time in the past half century. Korea, Taiwan, Malaysia, the Philippines, India and Brazil are identified as major beneficiaries from IT revolution. What is more, within each of them, the gainers tend to be large scale, foreign-owned urban-based firms. All these clearly show that IT may also have contributed to income inequality.

The next four contributions in the volume are the regional studies, one each on Latin America, South Asia, South East Asia and Africa. First three of them have revealed that the process of economic reforms and globalisation has coincided with an accentuation of income inequality to a varying extent in different geographical regions. In South Asia, for example, progress towards a reduction in the incidence of absolute poverty was found to have slowed down, halted or reversed in the wake of reforms in the period of globalisation. Impact of integration process on employment was not encouraging either, employment elasticities of output being negative or marginal.

As a matter of fact, the degree of integration with the global economy of South Asian countries was found to be less than that of the Latin American ones. This is attributable to slower reforms accompanied with ineffective governance, failure in developing an incentive system for investment, poor infrastructure and slower human capital formation. Thus, countries in this part of the world failed to witness a powerful growth impulse.

The Latin American study has paid greater attention to the developments in the field of IT and its impact, while the other two briefly touched such developments. A greater attention to IT developments in both the later studies was desirable, India being a part of South Asian study and Taiwan and China that of the South East Asian one. Leaving this aside, all the three do not provide any conclusive evidence about its impact on income distribution and employment, though the Latin American study has considered IT and other technological changes as "obvious candidates" for factors contributing income inequality.

The East Asian countries, which followed outward oriented policies, were diagonally opposite to the South Asian ones in terms of policy regimes. They witnessed much better growth performances but not without growing inequality and halting reduction in poverty, in general.

The African experience was most disappointing among all the four regions focused in the volume. Most African countries introduced policies of globalisation under the structural adjustment programmes. They witnessed a small and falling share in world trade, as also in total foreign investment in the

developing countries. The region lacks a widespread application of IT and investment in it was also nominal. Understandably, their growth performance was not promising and the situation regarding poverty and income inequality was even worse.

The overview on regional perspective presents a comparative picture in an analytical manner across different regions and sub-regions. This is followed by a detailed chapter on the direction of future research by the editor of the volume. A comprehensive bibliography is an added useful component of the book.

In totality, this is a thought-provoking volume worth reading carefully. It is difficult to be ignored by any researcher working on globalisation and its consequences, especially on income distribution and poverty.

S.G.T.B. Khalsa College (ev.), University of Delhi and Pradeep Kumar Mehta  
Project Visitor, Indian Statistical Institute, New Delhi

DAHIYA, BHIM S. (2001): *The University Autonomy in India: The Idea and the Reality*, Indian Institute of Advanced Study, Shimla, pp.146, Price: Rs. 200

The higher education system in India, as well as in other countries of the world, specifically the developing countries, is facing numerous problems in the present days. The problem related to political interference in the affairs of the university in general and by the government which finances them in particular are very common in India. It, many a time, leads to disruption of academic atmosphere in the universities and thus these institutions of higher learning become the centre for political game plan of the government and the political party that is in power. The bureaucracy of the government machinery directly gets indulged in the decision making process of the universities which not only weakens the internal decision making bodies like Executive Council and Academic Council but also makes them more or less redundant. The decisions taken by the political masters and their bureaucrat helpers are imposed upon the university. This whole process blows up the idea of autonomy of the universities which is so crucial for the smooth functioning as well as for maintaining academic excellence of the institution.

The book under review highlights this very important aspect, i.e. autonomy, of university system in India. Referring to the reports of various committees and commissions appointed by the government on higher education as well as the studies conducted by educationists of the country, the author comments that these are largely descriptive in nature. However, they produce full of informative material on various aspects of university system as it obtains today and some raise quite a few searching questions with regard to responsibility for the crisis situation on the university campuses. However, the moot question of university's

status as an organization discharging social obligations in a democratic state remains rather unanswered. Also, while condemnation and blaming flow fluently from the learned pens, concrete and practical solutions to the various problems comprising the crisis remain elusive.

The question of university autonomy, according to the author, is not divisible into different sections. University is an organism which is one whole, and defies all divisions, however convenient for academic discussion. In order that we may arrive at a viable and lasting solution to the problem of university autonomy, we shall have to examine both the basic idea of the university on which came to be erected the present structure, as well as the history of the struggle that has been going on between the men of knowledge and men of power, or between the university and the state. In this regard, it is important to note that the question of university autonomy will remain a far cry till the time the university is de-linked from the government no matter what form of government we have.

Commenting upon the suggestions and recommendations made by various committees/commissions as well as studies conducted by educationists on higher education in India, the author writes that none of them is radical enough to examine the structural principles of the university autonomy, its intents and purposes. These reports do have their own ability and utility, but they do not at all touch the vital chords that constitute the core problem of universities in India. It is therefore felt that the most urgent need in India today, so far as functioning of the universities is concerned, is to hit the nail in the head, to strike at the root cause of the malady, and offer a fresh model of governance, rather than present a report with an appendix of repairs to be effected.

The intention of the author in this book is to examine the very concept of autonomy, as it has come down to us in its chequered history through the ages. It is further intended to examine the implications of the model that we inherited from the British and indigenised. A detailed account of the university in reality is also intended to demonstrate how the basic flaw in the original model leads to its exploitation for furthering the designs of those interested in expanding their control on universities, as well as an account of the consequent decline in its norms and standards implied in the conception of the university. Finally, the author intends to offer an altogether new model which can ensure the kind of autonomy the universities have been looking for all through the ages. Without making any claim to the invention of a magic model for our ailing universities, the author hopes to present a viable suggestion which, if tried, may transform our universities into more efficient and useful instruments of material and spiritual development of our nation.

The idea of autonomy is inherent in the very idea of the university. Although the concept may have gained conscious currency in the recent times, the idea of autonomy for the institutions of higher learning has always been there right from the inception of these institutions, which originated first, in the East, and later, in

the West. The oldest proper university in the modern sense was the university of Nalanda in India, which was the nearest realization of Lord Buddha's dream of an autonomous institution of learning. It is therefore, according to author, in the spirit and structure of this university of ancient India that we should look for the idea of autonomy.

If we trace back the history of autonomy of the institutions of higher learning we may see the origin of the idea of university as well as that of its autonomy in the vision that Buddha realized in the creation of university of Nalanda. Now, there was nothing in the West to compare with this university until the 13<sup>th</sup> century when the first universities in Italy, France and England came up. Prior to that we had, at the earliest in the 4<sup>th</sup> century BC, the Greek Academy run by individual teachers such as Plato and Aristotle. However, the Greek schools of higher learning were more dependent on the government than were the Indian institutions of higher learning during the same historical period, dependent as they were on the government-owned public buildings; nor did they have physical autonomy, there being no separate campus away from the city as it was in the case of Indian *viharas*. Unlike the ancient Indian universities and the medieval British universities, the Greek schools could be subjected to various kinds of restrictions by the state.

The author suggests that the university and its autonomy cannot remain static concepts, they also have to undergo a continuous process of change, remaining always ready to define both the university's role as a social institution as well as the nature of its autonomy. Another thing that we must remember is that we are very sensitive to our freedom; we should be equally sensitive to our obligations, for every fresh assault on the university autonomy always comes as a reaction to some fresh failure on our part in discharging our duties. The recent attacks on the university autonomy, in other words, are linked directly with its abuse or misuse by those enjoying the fruits of freedom.

There is a need to consider the issue of university autonomy in view of the growing complexity of the nature and function of the university, on the one hand, and the growing complexity of the nature and function of the state, on the other. Also, we need to view the issue of autonomy in relation to the scope for its misuse by those inside the system of higher education. Thus, if we have to look for the safeguard to protect it against outside interference, we have to look for the safeguards to protect it against its abuse from inside.

Referring to the Programme of Action, NPE 1986 and its modified version of 1992, the author points out that the University Grants Commission (UGC), which was created in order that the state governments could be prevented from their direct interference in the governance of the universities, has become more or less helpless as the state governments have determined not to allow any measure of autonomy to the universities by recklessly undermining, undercutting and under-sizing the status of the universities; They have been constantly disregarding,

diluting and dismantling the statutes meant to ensure some measures of autonomy to the universities. Not only that, they have been systematically manipulating, mauling and mutilating the fragile autonomous fabric of the universities.

An important issue concerning the university autonomy, according to author, is the mode of selection adopted in the universities. In many a state, the norms laid down in the "Model Act" as well as in the reports of Radhakrishnan Commission and the Gajendragedakar Committee have been flagrantly ignored, and alternate modes, convenient to the state governments, have been imposed on the universities. The selection of university staff, teaching as well as non-teaching, is expected to be made by the university itself, for otherwise, the university cannot be called an autonomous institution. To have the right to recruit your own personnel is the minimum measure of autonomy expected for the universities. Most university Acts did originally provide for such an authority for the university. It is only later that many impatient state authorities snatched this right from the universities and appropriated it to the agencies directly under the influence of the state government. The important point to be noted is that despite the Government of India and the UGC's competence to exercise control over the state universities in matters like framing or amendment of the university Acts, the state governments feel free to destroy the autonomous edifice of the universities.

Describing the details of the enormous powers given to the Vice Chancellors of the universities, who are academic and executive head of the institution, the author is of the view that the only way to ensure academic freedom on our campuses is to drastically curtail the powers of the Vice Chancellor, for it is these powers that have impaired the academic freedom as much as the "supervisory" powers of the state government. In case we wish to improve the state of affairs in our universities, the author suggests that one of the two things will have to be done at once. Either we specify the academic qualifications for the office of the Vice Chancellor and transfer the powers to make the appointment of the Vice Chancellor to the judicial authority from the present political one, or we democratize the powers of the Vice Chancellor, which are rather autocratic. In case the environment of the university campus is to be made really academic and truly democratic, then one of the things, that is imperative, is to weaken the position of Vice Chancellor and strengthen the position of university bodies. Further, if the university bodies are to be made truly academic, then they ought to be manned with academics only, and not with the non-academics, certainly not with the bureaucrats and politicians.

Intervention by the state in the affairs of the universities has become a common phenomenon now. Highlighting the point, the author writes that the state intervention has increased because of two reasons: one, because the university's financial reliance as well as administrative reliance on the state has increased; two, because the role of the university in the various developmental

sectors of the society to be managed by the state has increased manifold now. Leaving aside a few universities in the world, others are heavily dependent on state funding. Also, in the absence of any legal authority with the universities for punishing those indulging in criminal activities, the university has to depend entirely on the state police and administration. The university cannot, therefore, insulate itself against state intervention unless it is made financially independent and legally strong. Its autonomy, in practical terms, is directly dependent on these two factors. Thus, whatever model or measure we intend to evolve for the safeguard of the university autonomy in the context of our time, we shall have to address the problems of financing and administration.

In order to deal with the problem of university autonomy effectively, the author suggests that the power to create the universities should, by an amendment of the Constitution, be vested in the University Grants Commission, which could be renamed as the Supreme Council for Higher Education. The governments of the day, in the state or at the centre, can propose to the UGC their plans to start a university, but the authority to create a university should rest with the UGC which, after due examination of the proposal and its actual feasibility, can grant or refuse approval. Once approved, the university, so created, shall be given the Act and Statutes by the UGC for its proper functioning. In fact, the UGC should have the same Act for all the universities in the country, except for some minor departures in case of private universities.

Keeping in view the important role of the Chancellor in the university, the author suggests that the Chief Justice, and the Chief Justice alone, should be the Chancellor of the universities. In the case of central universities, the Chancellor should be the Chief Justice of India; and in case of state universities, the Chief Justice of the state High Court should be the Chancellor of all universities in that state; and he should be so, not by election, nor by convention, nor by nomination, but by virtue of his office as Chief Justice. By doing this, the author is of the view that our universities shall be really liberated from the stranglehold of the politicians as well as the bureaucrats, inseparable as they are in the operation of the levers of power.

The most important aspect of university autonomy is its source of funding. Since in most cases this source is the State Government, the university is made to surrender its autonomy to the pay master. Here, the author suggests two steps that need to be taken immediately: one, the universities must be made less dependable on the Government for their sustenance; two, Finance Committee of the university, responsible for the preparation and primary sanction of annual budget, must be free from the representatives of the Government.

An ideal of autonomy for our universities is to be seen in terms of an ideal of autonomy for the entire system of education. One reason why the university autonomy has been under attack is because at no other level, not even at the college, it is being demanded or discussed. Those used to dealing with schools

and a colleges in a particular fashion find it too much of a demand on them to treat the universities very differently. Neither the politician nor the bureaucrat is able to comprehend the special status of the university. Naturally, knowing fully well their orientation and their objectives we should, according to the author, not feel surprised that they are unable to appreciate concepts like autonomy.

Commenting on the privatization of higher education in India, the author writes that it may have some hazards, such as making higher education more expensive, increasing insecurity for teachers, and lowering down of standards; but there are also several positive aspects, such as increasing autonomy, enhancing competition, augmenting self reliance and encouraging initiative. In India, the experimentation of privatization in case of technical, medical, and management education has not been a very happy one. According to the author, we can say that while privatization of higher education is very much desirable for giving greater autonomy to enterprise, we cannot at the same time lose sight of the fact that autonomy so received may end with the entrepreneur alone, and may not reach those for whom it is actually meant. In other words, safeguards for autonomy of the university will be much required in the private sector as they are required in the public sector. The principle of self-governance will have to be understood in the right perspective; that there has to be the governance by the teachers primarily, and not by the Vice Chancellor, nor by the private management. No safeguards have ever been effective unless they are built into the very structure of the organization provided in the Act.

In the concluding section of the book, the author remarks that the universities today are no longer self-directed; rather they are other-directed. Driven by the market forces, promoted by market economy, and dominated by super state, the universities have lost the initiative they once had. In such a situation, the demand for autonomy rings alien, unless it is meant to echo within the inside of the "temple of learning". The outside world only wonders about the reasonableness of the demand. On the contrary, the authorities have, without much resistance from within the universities, preferred to impose stringent measures of accountability. In the author's view, the best way to strengthen our universities, and the best way to make their autonomy invulnerable, is to give them the best teachers and leave the rest to them.

FISZBEIN, ARIEL (ed.) (2001), *Decentralizing Education in Transition Societies: Case Studies from Central and Eastern Europe*. Washington DC : WBI Learning Resources Series, World Bank. ISBN 0—8213-4876-0, pp. 111. Price: not listed.

Despite a significant historical transition, information about the state of the post-communist countries of central Europe is rarely part of the circle of academic and popular interest. This book provides some details, focusing on school education in the six former communist countries; Poland, Bulgaria, Romania, Republic of Czech, Hungary and Albania. However, as a product of the World Bank's intellectual bank (the World Bank Institute), the book represents the perspectives of the World Bank's consultants and researchers and is primarily a document on ways to rationalize and restructure school education in these countries. Though there is a separate chapter for each country, the book provides no background data or details about the existing levels of education in the countries and each chapter focuses on identifying the problems and the ways in which to streamline the system. The introductory chapter by the editor provides a summative overview of the concept of institutions and the methodology of institutional analysis which in reality are a reflection of the World Bank's approaches to restructuring the education systems. The reform orientation of the World Bank that supposedly centres on the three goals of equity, quality and efficiency are defined. And in what is perhaps an understated comment on the stereotypical imagery of the inefficiency of communist administration, the report notes "even in a system of shared responsibilities, the centre of gravity must reside somewhere" (p 7). And, typical of the World Bank prognostic reports, it doesn't tell us where the power must lie.

The chapter on Albania identifies the problems with the country's overcentralised system in which only 0.3 per cent go to private schools while 99.7 per cent attend the public schools. Other problems are identified as the centralization of school management with the principals also not having authority over teachers, inadequate funds for teacher training, little scope for teacher based inputs into teaching-learning transactions, a stagnant curriculum and little infrastructure support. For such maladies, the World Bank suggests a focus on new teaching-learning, redesigning the financial arrangements, and redefining the roles of principals, teachers and schools administrators.

For Bulgaria, the diagnostic overview indicates the problem of a negative population growth rate with declining school going children, inadequate teacher networks and training. For the Czech Republic, the report contextualises the restructuring to be made in terms of linking education administration to the new decentralized administrative structures and the eventual integration of the nation into the European Union. Revealing the report's bias that such countries have been undemocratic, the report refers to the 1989 end of the communist rule as



"the democratic turnover". The chapter on Hungary identifies some of the changes that have been introduced since the political shift to be that of the right of minorities to maintain schools, and the presence of parent groups which are both vocal and "volatile" (p 60). For Poland, the chapter identifies the iniquitous system, including tracking at the school level, which lead to the "unequal distribution of educational opportunities" (p 71) and the vast differences between rural and urban schools. The chapter on Romania notes the several changes that have been introduced since the post-reform period (1989) and though the reduction of compulsory schooling to eight years is noted, the report does not comment on the negative implications of such developments. The report also summarises Bulgaria's elementary schooling as suffering from "ad hococracy" which, marked by many rules and little accountability, has led to being the main reason for the multiple deficits in the system.

Though the report is thorough in its application of methodology to study the system or structure of schools in these six countries, the underlying orientation drawn from the World Bank is also evident. For one, it sees every child as human capital and emphasizes economic efficiency as the key principle in which the schools as institutions and the schooling system can be assessed. Though not specifically noted, the report suggests a market linked regulation in which the schools and the opportunity to be in school is determined. With such an orientation, the report resembles the World Bank's 1997 report on Primary Education in India, in which the efficiency of schools is also assessed primarily in terms of the government's financial allocations. An interesting report that lends some perspective to the ongoing restructuring of the post-communist nations and to the orientations of the World Bank.

**National Institute of Advanced Studies**  
**Bangalore**

A.R. Yasavi  
E-mail: [arvasavifknias.iisc.ernet.in](mailto:arvasavifknias.iisc.ernet.in)

POSTIGLIONE, GERRAKD A., and GRACE C.L. MAK (eds.) *Asian Higher Education: An International Handbook and Reference Guide*. Westport, Connecticut and London: Greenwood Press, 1997, pp. 403, ISBN: 0-3 13-28901-8, (Hard bound).

There has been a virtual educational explosion in the Asian countries in the 20<sup>th</sup> century, more particularly during the later half of the century. There have been astonishing successes on some fronts and 'conspicuous failures' in case of others in the last century. There are several commonalities and vast differences between several countries of the region, including their education policies as well. The several countries have adopted not necessarily uniform policies of development of education in general and higher education in particular. What has happened

and what will happen in these countries is of great significance, not only here but also everywhere, in that, the book under review would be of considerable interest not only to those in Asian countries, but also to outsiders. -

The vast Asian region consists of a large number of small and big countries - in all about fifty - spreading over a vast area of the world from Japan in the far-east to the West Asian countries in the middle-east, broadly divided into East Asia, Southeast Asia, South Asia, Central Asia and West Asia. Accordingly, one finds a diverse and rich a variety of cultures, people and development patterns. The region includes the world's largest countries (China and India), some of the smallest countries (e.g., Bhutan), the poorest countries (Bhutan and Cambodia), and the wealthiest countries (Japan, Singapore and Korea) as well. Essentially because of geographical, cultural and socio-economic factors, many studies on Asian countries confined themselves to South and East Asian countries, including countries in the South-East Asian region. This, Postiglione and Mak's edited, volume is also confined to these regions. In all, twenty major countries in the region are covered in the volume, including Iran and Papua New Guinea (and the Pacific islands). There is also a useful description of the system in North Korea (Gay Garland Reed and Bong Gun Chung).

In terms of the levels of development, there are, in fact, two distinct sectors of *Asia*: East Asia and South Asia, which present two different pictures. All the countries in the two sectors of Asia together can be classified into six groups: Japan, one of the most developed countries in the world; the East Asian tigers, also known as the newly industrialising countries (NICs) viz., Korea, Singapore, Hong Kong, and Taiwan; the 4-ASEAN countries (Indonesia, Malaysia, the Philippines, and Thailand); the so-called transition economies of South-East Asia (Cambodia, Lao, Myanmar, Viet Nam); the fast growing gigantic China; and South Asia (Bangladesh, Bhutan, India, Pakistan, Maldives, Nepal and Sri Lanka). But even in case of each sub-group, the levels of development vary both in case of education and other socio-economic sectors. The volume includes country studies on most of these countries, except Maldives.

The several contributors to the volume present very useful accounts of the higher education systems - levels of development, policies that shaped the development, emerging problems and future developments - in various countries. The issues analysed include the changing functions and patterns of higher education, administration, governance, financing, admission policies, curriculum, student activism, unemployment, internationalisation, academic profession, relationship with economic development, etc. The several contributions also present brief accounts of historical evolution of higher education systems, and colonial impact on the development of higher education. An important strength of the volume is that most of the country studies were prepared by local experts, highly knowledgeable of their respective systems.

Education and development policies in the several countries provide contrasting experiences. A few major contrasts of the countries in the two regions in their development policies are worth noting. The two most populous countries of the world, viz., China and India had adopted different policies. China had historically emphasised primary and lower secondary education, while India expanded higher education at a relatively low cost but at a much faster rate. China's expansion of higher education is recent, and is more closely tied to economic needs. India expanded higher education rapidly and could develop high quality institutions of higher education.

The contrasts between Sri Lanka and South Korea are interesting. The most striking aspect of Sri Lanka is that, with a low per capita income, it could universalise basic education, ensure equity in education and its performance with respect to indicators of human development is impressive, but it could not expand higher education. On the other hand, Korea did not only universalise basic education, but also made rapid progress in secondary and higher education. Korea at the time of take-off in the early 1960s lacked every factor of production, except an educated and skilled labour force, which made all the difference for growth in the subsequent decades. Same is true in varying degrees in case of Taiwan and Singapore. The experience of these countries demonstrates that *even economically poor developing countries can afford to make huge investments in education and thereby achieve economic miracles.*

South Korea, Hong Kong, Singapore and Taiwan could expand high quality secondary and higher education. This seems to be appropriate and is consistent with their economic strategies of developing and producing sophisticated, world-market competitive goods and services. They had adopted policies of balanced or 'equilibrium' development of education. For example, South Korea expanded primary education during 1955-65; and also paid greater attention to secondary education. Policies of quantitative expansion of school facilities during 1955-70 were followed by quality improvement of school education and rapid expansion of higher education.

The middle-income industrialising countries, like Indonesia and Pakistan, have huge domestic markets. Sri Lanka and Indonesia have large exports - tea and oil respectively. Development policies towards more industrialisation and modernisation of traditional industries in these countries, including Pakistan, Thailand, Malaysia, and the Philippines, require improvement in the quality of secondary education and general higher education. Pakistan is at a disadvantageous position even with respect to literacy and basic education. The educational levels of the labour force in these countries are also low.

Higher education has expanded well in the newly industrialising East Asian countries, the gross enrolment ratio being comparable to that in some of the developed countries. The gross enrolment ratio in Korea, Singapore and Hong Kong is above twenty per cent. In the Philippines and Thailand also they are

high. Countries like Indonesia and Malaysia are rapidly expanding their system, but still the enrolment ratios are only around ten per cent. On the other side, all countries in South Asia and also those in Southeast Asia like Cambodia and Viet Nam have very low enrolment ratios in higher education.

It can be noted that no nation that has not expanded reasonably well its higher education system could achieve high level of economic development. International evidence shows that all advanced countries are those that have a gross enrolment ratio of above 20 per cent. Among the advanced countries, there is no single country, where higher education was not well expanded. In most developed countries, higher education is fairly democratised and is accessible to all. In fact, there are significant trends towards massification of the base of higher education. The gross enrolment ratio in higher education in advanced countries varies between 20 per cent and as high as 90 per cent. The four high-income countries in Asia, viz., Japan, Korea, Singapore, and Hong Kong have an enrolment ratio above 20 per cent. All other countries in the Asian region, except the Philippines, have an enrolment ratio much below - below 20 per cent. Thus 20 per cent enrolment ratio in higher education seems to be the critical threshold level for a country to become economically advanced.

The experience of the Asian countries with the policies of globalisation and structural adjustment is also rich. Comparing the experiences of several countries in the region, one may conclude that these policies succeeded only in those countries that have invested heavily in education, including specifically higher education. The converse is also true. These policies could not yield good results in those countries that have made low and inadequate levels of investment in education, particularly higher education, reflected in low levels of educational levels of workforce, as in countries in South Asia, and also in Southeast Asia like Viet Nam, Lao, Cambodia, etc., compared to the countries like Korea and to some extent Thailand, Indonesia and the Philippines. After all, globalisation, including international competition, to be successful, requires highly skilled manpower, produced by higher education systems. Countries that have succeeded with globalisation policies are those that have built up strong and vibrant higher education systems:

An important issue of concern in development of higher education in the last quarter century refers to private education. There are very interesting descriptions of private higher education in the volume - Japan (Kumiko Fujimura-Fanselow), Taiwan (Shun-fen Chen), South Korea (Sungho Lee), and Philippines (Andrew Gonzalez). Private education is not a new phenomenon in the Asian region, though modern private education is of a recent origin. Presently a sizeable number of students are enrolled in private institutions, particularly in higher education and to some extent at secondary level. Many of the private institutions in the region are privately managed, but are funded by the State to a substantial extent. 'Complete' or 'pure' private institutions may be very few in number. It

may be stated that except in Japan and to some extent Korea, it is only in the economically poor countries where private education is large in size, relative to the advanced countries. Public complacency in the developing countries may necessitate increased role of the private sector.

All systems of education are under severe financial strain and efforts are made to recover costs of education, particularly higher education from the students in the form of student fees and other mechanisms. Many countries, including specifically in Asia, are experimenting with alternative forms of financing and cost recovery mechanisms. Several country studies, e.g., Japan, and China (Weifang Min) and Hong Kong (Mak and Postiglione) provide detailed accounts of cost recovery mechanisms through fees and other sources adopted in the respective countries. The rates of cost recovery in Asian countries are somewhat comparable to those in the advanced countries and hence the general presumption, that higher education in Asian countries - the tiger economies or the developing - is heavily subsidised by the state, may not be true.

In all, the country studies presented in the volume suggest that:

- Economic growth is not possible without investments in higher education. One of the most important reasons widely agreed upon for the ability of some of the countries in East Asia, to transform themselves from very low levels of development into industrial tigers, was the high level of investments in human capital, particularly education. Similarly, the low levels of investment in education in South Asia - Pakistan, India, Bangladesh and Nepal are also associated with low levels of economic growth.
- It is only those Asian countries, that have developed their higher education systems and attained a gross enrolment ratio of at least 20 per cent, could achieve economic miracles, and not the others. The low enrolment ratios in higher education are also associated with low income of the countries.
- While some of the East Asian countries like Japan and Korea highlight the importance of private sector higher education, other countries like Singapore stress how important it is for the government to finance higher education. The problem of quality in the Philippines and the Philippines' inability to economically grow fast, despite having higher enrolment ratios in higher education, are largely attributed to its rapid growth of private sector. Growth of private sector also contributed to the neglect of public education in South Asian countries. Thus, the evidence on the role of private sector in education in the Asian countries is mixed.

The book is indeed a rich source of information and useful analyses of higher education systems in as many as twenty major countries in Asia. One major aspect.

that seems to have been decided by design, is that few country studies in the volume refer to other countries in the region, not to speak of countries - developing or developed - outside the region. That would have enhanced the value of the book considerably. Similarly, but for the introduction by Postiglione, there has been no attempt to paint the whole Asian picture. Postiglione does present a good picture of the three sub-regions of Asia - East Asia, South-East Asia and South Asia - but in brief. The foreword by Altbach though short, it yet does provide a very good appetizing account. The 19-page bibliography at the end of the book should be very useful to the researches interested in higher education in Asia. On the whole, it serves as an excellent reference guide on higher education systems in several Asian countries.

NIEPA, New Delhi 110016

**Jandhyala B G Tilak**

E-mail: [jtilak@niepa.org](mailto:jtilak@niepa.org) [or] [jtilak@vsnl.com](mailto:jtilak@vsnl.com)



INDIAN JOURNAL OF AGRICULTURAL ECONOMICS (Organ of the Indian Society of Agricultural Economics)		
Vol. 57	APRIL-JUNE 2002	No. 2
<b>CONTENTS</b>		
<b>ARTICLES</b>		
<b>Infrastructure, Cost and Labour Income in Agriculture</b>	<i>Nilabja Ghosh</i>	
<b>Factors Affecting Cropping Intensity and Use of Fertilisers and High-Yielding Variety Seeds in Barak Valley</b>	<i>M.P. Bezbaruah and Niranjan Roy</i>	
<b>Groundwater Markets in Fragile Environments: Key Issues in Sustainability</b>	<i>Dalbir Singh</i>	
<b>Contract Farming in Tomato: An Economic Analysis</b>	<i>B.K. Dileep, R.K. Graver and K.N. Rai</i>	
<b>RESEARCH NOTES</b>		
<b>Farm Planning in Hills of Meghalaya for Augmentation of Income and Employment vis-a-vis Preservation of Natural Resource Base</b>	<i>S.N. Goswami</i>	
<b>Economic Analysis of Commercial Dairy Herds in Arid Region of Rajasthan</b>	<i>Khem Chand, Kulwant Singh and Raj Vir Singh</i>	
<b>Seasonal Variations in Buffalo Milk Production in Ranga Reddy District of Andhra Pradesh</b>	<i>D.S. Prasad</i>	
<b>Who Have More Access to Cheap Credit in Vietnam?</b>	<i>S.M.P. Senanayake and DP. Ho</i>	
<b>BOOK REVIEWS *</b>	<b>REVIEWS IN BRIEF *</b>	<b>PUBLICATIONS RECEIVED *</b>
<b>ANNOUNCEMENT *</b>		

Annual Subscription Rates

Individual Membership Fee	: Rs. 150.00; £ 35.00; \$ 63.00
Lite Membership Fee	: Rs. 1.500; £ 350.00; \$ 630
Institutional Subscription	: Rs. 300.00; £ 54.00; \$ 100.00.

Please address correspondence to the Hon. Secretary & Treasurer, The Indian Society of Agricultural Economics, 46-48, Esplanade Mansions, M G. Road, Mumbai-400 001 (India).

Telephone : 022-2842542 Fax:091-022-2838790 email : [isacfebonv@vsnl.net](mailto:isacfebonv@vsnl.net)

Journal of Educational Planning and Administration  
Volume XVI No. 3, July 2002

ISSN: 0972-3986

## ASIAN-AFRICAN JOURNAL OF ECONOMICS AND ECONOMETRICS

Chief Editor : Prof. K. Sham Bhat  
Head Department of Economics  
Pondicherry University  
Pondicherry-14 (India)

Volume 2

June 2002

Number 1

### CONTENTS

#### ARTICLES

1. Foreign Investment, Externalities, and Growth in Less Developed Countries : William R. DiPietro  
Bansi L. Sawhney
2. Money Versus Credit View of Monetary Transmission Mechanism; Evidence from Cointegration and Error Corrections Tests : Puma Chandra Padhan
3. Torpid Revenue Performance in India's Tax System : M Upender
4. A General Procedure for Decentralized Planning with Special Reference to India : T.R. Kundu
5. A Method to Analyse Changing Trends in Inequality by Subgroup Decomposition : Pundarik  
Mukhopadhaya
6. Distribution and Determinants of Child Morbidity in Rural Tamil Nadu : Malathy Duraisamy  
S. Sukanya

#### ANNUAL SUBSCRIPTION RATES

Individuals	Rs. 625.00 or US \$75.00
Institutions	Rs. 925.00 or US \$155.00

Publisher



#### SERIALS PUBLICATIONS

Head Office : 4, B.S.S. Hall, Khyber Pass Market, Civil Lines,  
Delhi-110054 (India)

Phone No. 91-11-3811659 Fax No. : 91-11-3812678

E-mail: [serials@satyam.net.in](mailto:serials@satyam.net.in)

Branch Office : 4830/24 Ansari Road, Darya Ganj, New Delhi-110002  
Ph : 3245225



# The PAKISTAN DEVELOPMENT REVIEW

ISSN 0030-9729

*An International Journal of Development Economics*

*Editor*

A. R. KEMAL  
L t o ) Editor  
AURANGZEB A. HASHMI  
Book Review Editor  
MIR ANNICE MAHMOOD  
Co-Editor  
ATHER MAOSOOD AHMED  
FAIZ BILOUEES  
M. GHAFAR CHAUOHRY  
NAUSHIN MAHMOOD  
SHAMIM A SAHIBZADA

*Editorial Board*

RASHIO AMJAO  
PER PINSTRUP ANDERSEN  
ROBERT E. BALDWIN  
ANDREW P. BARKLEY  
FREORIK BARTH  
JERE R. BEHRMAN  
R. ALBERT BERRY  
J. C. CALDWELL  
ANSLEY J. COALE  
S. I. COHEN  
P. A. CORNELISSE  
GHAZI M. FAROOQ  
MAURICE QUOELIER  
NADEEM UL HAGUE  
KENNETH HILL  
S. HIRASHIMA  
MUNAWAR IQBAL  
NURUL ISLAM  
GAVIN JONES  
A. R. KHAN  
M. ALI KHAN  
M. FAHIM KHAN  
MOHSIN S. KHAN  
DAVID P. LAUXER  
JONALD W. L'RSOON  
CYNTHIA LLOYD  
JOHN W. MELLOR  
FAIZ MUHAMMAD  
OUSTAV F. PAPANEK  
OERRY RODOERS  
MARK R. ROSENZWEIG  
ANWAR SHAH  
NASRA M. SHAH  
ISMAIL SIRAGELDIN  
T. N. SRINIVASAN  
WILLIAM C. THIESENHUSEN  
AMY ONO TSUI  
LUTHER Q. TWEETEN  
PAN A. YOTOPOULOS

**Directions of U.S. Farm Programmes under a Freer Trade Environment**

Lulher G. Tweelen 89

**The Stock Market and the Economy in Pakistan**

Fazal Husain and Tariq Mahmood 107

**Performance of the Public Electric Power Industry: Evidence from Pakistan**

Abdul Ghafoor and John Weiss 115

**Assessing Energy Consumption and Energy Intensity Changes in Pakistan: An Application of Complete Decomposition Model**

Shaista Alam and Mohammad Sabihuddin Butt 117

**BOOK REVIEWS**

**Karamat Ah (ed). Pakistan: The Political Economy of Human Resource Development**

Zafar Mueen Nasir 149

**Shahid Javed Burki. Changing Perspectives and Altered Realities: Emerging Economies in the 1990s**

Illhan Niaz 153

**Tasneem Ahmad Siddiqui. Towards Good Governance**

Hyder Hussain Khan Yusufzai 157

**SHORTER NOTICES 162**

Volume 40

Summer 2001

Number 2

Annual Subscription for Individuals US\$ 1000; Pak Rs 300 00 by surface mail and US\$ 125.00; Pak Rs 450.00 by air mail. Per regular issue US\$ 40.00; Pak Rs 125.00 by surface mail and US\$ 55 00; Pak Rs 150.00 by air mail Per Papers and Proceedings issue US\$ 100 00; Pak. Rs 400.00 by surface mail and US\$ 150.00; Pak. Rs 500.00 by air mail—for Institutions US\$ 150.00; Pak Rs 450.00 by surface mail and US\$ 200.00; Pak Rs 600.00 by air mail. Subscriptions are entered on a calendar year basis Payment should be made directly through a demand draft, issued in the name of the Pakistan Institute of Development Economics, Post Box 1091, Islamabad-44000 (Pakistan)



INDIAN ASSOCIATION OF SOCIAL SCIENCE INSTITUTIONS  
(IASSI)  
(SOCIAL SCIENCE JOURNAL DEVOTED TO ADVANCEMENT OF  
SOCIETY THROUGH GREATER SOCIAL UNDERSTANDING)

Vol.20

July-September 2001

No.1

CONTENTS

Managing Social Change	S.P.Ahuja
Theories in Social Work Vs.Social Work Theory: Predicament for Profession and Indications for Possible Curriculum Change and Practice Reorientation	Rajeshwar Prasad
Government-NGO Collaboration in Health and Population Management in Bangladesh: Experience from the Field	Afroza Begum
Community Development in India : An Overview	Narayan G.Hegde
Civil Society, Planned Development and Governance in the North-Eastern Region of India	Bhupinder Singh
An Experiment on the Interdependence of Knowledge and Skill	Rupasi Tiwari, H.P.S.Arya and Rahul Tiwari
Culture, Society and Violence: Emerging Issues	Birinder Pal Singh
Re-inventing Women's Development: The Trickle up Strategy	Deepak Bhatnagar
Imparting Vocational Education - The Institutional Way	M.S.Chhikara
Some Selected Factors Affecting Aged Population in Bangladesh	Md.Ripter Hossain
Internalizing Social Costs and Social Benefits in Economics of Production	T.R.Shanmugam.V.Venkatesa Palanichamy and N.Mahesh
Book Review	
Modern Psychophysical and Scaling Methods and Experimentation by M.Rajamanickam	G.C.Gupta
National Income Accounts and Data System by B.S.Minhas	A.K.Dasgupta

SUBSCRIPTION RATES

For India and SAARC Countries, including postage: Rs.250/- for one year. Single Copy Rs.70/-

For other countries: US \$ 40 per year or equivalent, including postage by surface mail, and US \$ 50 by airmail. Single copy US \$ 15 by Airmail and US \$ 12 by Surface mail.

Enquiries and Correspondence should be addressed to Member Secretary, Indian Association of Social Science Institutions (IASSI) care Institute of Applied Manpower Research, Indraprastha Estate, New Delhi-110 002 (Tel: 331-5284, 335-6834, 3324581, Fax: 011-331-5284, E.Mail:[stiassi@bol.net.in](mailto:stiassi@bol.net.in))

Journal of Educational Planning and Administration  
Volume XVI No. 3, July 2002

**Journal of Social and Economic Development**

*Editor : M Govinda Rao*

<b>Aims and Scope</b>		
<p>The Journal provides a forum for in-depth analysis of problems of social, economic, political, institutional, cultural and environmental transformation taking place in the world today, particularly in developing countries. It welcomes articles with rigorous reasoning, supported by proper documentation. Articles, including field-based ones, are expected to have a theoretical and/or historical perspective. The Journal would particularly encourage inter-disciplinary articles that are accessible to a wider group of social scientists and policy makers, in addition to articles specific to particular social sciences. The Journal also gives scope to Research Notes, Comments, Book Reviews and Review Articles'.</p>		
<b>Vol. IV</b>	<b>January - June 2002</b>	<b>No.1</b>
<b>Articles</b>		
		<i>Barbara Harms-White</i>
<b>Environmental and Social Conflicts of Aquaculture in Tamilnadu and Andhra Pradesh-</b>		<i>I. Emerson Kagoo &amp; N. Rajalakshmi</i>
<b>Occupational Diversification and Rural-Urban Migration in India: A Review of Evidence and Some Issues for Research</b>		<i>Uma Rani and H. S. Shylendra</i>
<b>Globalisation and the State: Interrogating the Farmers' Movement in India</b>		<i>Muzaffar Assadi</i>
<b>Identifying Patterns of Socio-Economic Development Using Self-Organizing Maps</b>		<i>Ashok K. Nag and Amit Mitra</i>
<b>V. K. R. V. Rao on Some Macroeconomic Relationships</b>		<i>K. S. Krishnaswamy</i>
<b>Book Reviews</b>		
<b>Annual Subscription Rates</b>		
<b>SAARC Countries: and India</b>	<b>Institutions : Rs.200 Individuals : Rs. 120</b>	<b>Other countries : US \$ 50 (by Airmail) US \$ 25 (by Airmail)</b>

Institute for Social and Economic Change, Dr. V K R V Rao Avenue, Nagarabhavi Post,  
Bangalore-560 072, India.

**Subscription Form**  
for the

**JOURNAL OF EDUCATIONAL PLANNING AND  
ADMINISTRATION**

Please enter my subscription of the  
JOURNAL OF EDUCATIONAL PLANNING AND ADMINISTRATION

Name and Address \_\_\_\_\_  
(in Capital Letters)

I Subscription for the year \_\_\_\_\_, Annual Subscription commences with  
I January and ends with October ever year.

I [Please tick mark ( V ) the appropriate one]

- | g      **Rs. 120 subscription for individuals in India**
- **Rs. 250 subscription for institutions in India**
  - **US\$ 50 subscription for individuals (+ US\$ 10 for air mail) outside India**
  - **US\$ 75 subscription for institutions (+ US\$ 10 for air mail) outside India**

I Please make out payment (Bank draft payable at any Branch in New Delhi) in favour of  
| *National Institute of Educational Planning and Administration.*

| Bank Draft No.....dated.....Drawn on.....

I

| Please mail this subscription order form along with bank draft to :

| **Director**  
| **National Institute of Educational Planning and Administration**  
I **17-B, Sri Aurobindo Marg, New Delhi 110 016 (India)**

! **Tel: 91.11.6962120      Fax:91.11-685 3041**