

GIDR WORKING PAPER SERIES

No. 190 : January 2009

**Looking Beyond Literacy:
Disparities in Levels of and Access to Education
in a Kerala Village**

Suma Scaria



*Gujarat
Institute of
Development
Research*

Working Paper No. 190

**Looking Beyond Literacy:
Disparities in Levels of and Access to Education
in a Kerala Village**

Suma Scaria

January 2009

Gujarat Institute of Development Research
Gota, Ahmedabad 380 060

Abstracts of all GIDR Working Papers are available on the Institute's website.
Working Paper No 121 onwards can be downloaded from the site.

All rights are reserved. This publication may be used with proper citation and due acknowledgement to the author(s) and the Gujarat Institute of Development Research, Ahmedabad.

© **Gujarat Institute of Development Research**

First Published January 2009
ISBN 81-89023-47-0
Price Rs. 35.00

Abstract

Kerala, the southernmost state of India, is increasingly celebrated as a 'model' for third world countries to emulate due to its higher levels of literacy, universal enrollment in schools and better educational facilities. This paper discusses the findings of a micro level study conducted in a village in Kerala and presents a picture that calls for a critical re-thinking of the widely circulated and celebrated indicators of education in the state. The study brings to light certain disquieting tendencies such as high inequalities in the educational attainments of the population despite the overall positive outcomes. The scheduled castes still stand at the bottom of the ladder in terms of educational attainments. Drop out rates at the tenth standard are relatively high and entry barriers limit the access to higher education. The narrow role of the state in the provision of higher education, especially, professional/job-oriented education has led to a situation where the vulnerable groups find themselves with limited choices in higher education. In addition, lower employment opportunities together with lower earnings among the educated groups act as disincentives for enrollment in higher education. The study highlights the imperative need for micro level studies or an approach from 'below' to bring out more nuances associated with education in Kerala.

Keywords : Kerala, Literacy, Higher education, Inequalities, Enrolment, Village

JEL Classification : J31, J64, I20, I28

Acknowledgements

This paper is part of the author's PhD thesis submitted to the Department of Economics, University of Hyderabad, 2008. She gratefully acknowledges the comments and suggestions of her supervisor Dr. G. Omkarnath. She is also grateful to Professor D. Narayana, Centre for Development Studies, Trivandrum for his comments on an earlier draft.

Contents

	Page No
Abstract	i
Acknowledgements	i
Contents	ii
List of Tables	ii
1. Introduction	1
2. The Changes in Education in Wadakkancherry Village: An Overview	6
3. An Outline of the History of Education in Wadakkancherry Village	10
4. Differentiated Access to Higher Education	13
5. Labour Market Outcomes	20
6. Conclusion	24
References	25

List of Charts / Tables

Table 1	Percentage distribution of households by community	5
Table 2	Trends in literacy rates in Wadakkancherry village 1941-2001	6
Table 3	Educational profile of Wadakkancherry	7
Table 4	Percentage distribution of sample population by completed education and community	8
Table 5	Community-wise enrollments in the government boy's high school – 1917/18	9
Table 6	Gross enrollment ratio in higher education among the 18-25 age group	14
Table 7	Gross enrollment ratio of scheduled castes in higher education among 18-25 age group	14
Table 8	Student enrollment in tenth and twelfth standards	15
Table 9	Distribution of students enrolled in higher education by course and community	16
Table 10	Distribution of students enrolled in higher education by course and type of institution	17
Table 11	Occupational profile of households where students are enrolled for self-financing courses	18
Table 12	Source of finance for self-financing courses	18
Table 13	Distribution of students enrolled in higher education by type of institution and community	19
Table 14	Percentage distribution of sample population by main activity by community wise	22
Table 15	Average monthly income by occupation	23-24

Looking Beyond Literacy: Disparities in Levels of and Access to Education in a Kerala Village

Suma Scaria

1. Introduction

Kerala, the southernmost Indian state, occupies a unique position in the educational map of India. This tiny state with a population of 32 million is having a literacy rate of 90.86 per cent with a male-female literacy gap of only 6.52 per cent (Department of Economics and Statistics, 2007). This is in complete contrast with the all India situation, where literacy rate is only around 64.84 per cent with a huge gap in male-female literacy. Another noteworthy feature of educational development in Kerala is the narrow urban-rural disparities in literacy rates and the near total enrollment in schools among the school going age group.¹ The dropout rate in classes I-X is only 8.58 per cent, which is the lowest among the states in India. These achievements of Kerala in conventional indicators of education have been increasingly celebrated as a 'model' for developing countries to emulate without high economic growth (UN/CDS, 1975; Franke and Chasin, 1999; Sen, 2000).

Of late there has been a growing recognition of 'disturbances' within the conventional indicators in terms of socio-economic disparities in literacy levels, enrollment rates and drop out rates, besides unequal access to quality education, especially, at the school level (Mencher, 1980; Kurien, 1995; Varghese, 1999; Deshpande, 2000; Chandrasekhar, 2001; Omvedt, 2006; Saradmoni, 2006). There are only a few studies that look beyond the level of school education and bring to our attention the problems that confront the higher education sector in Kerala (Nair and Nair, 2008). These studies mainly focus on the entry barriers in higher education, particularly, in professional/job oriented education, drop out rates and wastages in higher education. A few studies also highlight the issue of relatively lower enrollment in higher education in the state compared to many less literate ones in India (George, 2006; Prakash, 2007).

¹ The rural and urban literacy rates in India are 58.74 and 79.92 per cent respectively, see *Department of Economics and Statistics* (2007:74-5).

The issue of inequality in educational attainments, however, has not prominently figured in the extant academic deliberations on education in Kerala. This paper aims to augment the scanty literature on higher education in the state by drawing attention to the inequalities prevalent in the educational attainments of the population. The paper also strives to bring out the complex processes through which social hierarchies are perpetuated in Kerala through education. In other words, this paper makes an attempt at understanding why inequalities continue to exist in the educational profile of the population despite high literacy, universal enrollment in schools and relatively better infrastructural facilities. In this connection, the questions relating to entry barriers in higher education and labour market outcomes gain considerable significance.

The academic discussions on education in Kerala have so far been largely based on macro level studies that tend to homogenize the various divergent units within a system. Only an approach from 'below' could reveal the heterogeneities and interrelationships in the development process relating to education.² These insights would unravel the complexities that get swept under the carpet in macro level understandings of education in Kerala. A village as a micro unit provides an appropriate framework for such a close enquiry. Further, a caste or community framework is also necessary since community organizations like the Nair Service Society (NSS), Sree Narayana Dharma Paripalana Yogam (SNDP), Muslim Educational Society (MES) and the churches are involved in the provision of education in the state. The current academic discussions on education are, however, largely dominated by the class discourse.

Paradoxically, education is increasingly becoming an important medium through which inequality is perpetuated. Addressing inequality is important since it is the root cause of poverty (Saith, 2005; Breman, 2007). The present micro level study reveals the wide disparity in educational attainments among the population. This inequality is more apparent in the educational attainments of different social groups, especially between scheduled castes and others. Unlike in earlier times, there are no explicit entry barriers in education, but they exist in different obscure forms at

² For a discussion on micro versus macro level studies, see Bardhan (1989) and Breman et al. (1997).

different levels. The share of population enrolled for higher education is quite low and the number of drop outs at the tenth standard is very high. Substantial share of population, especially, of the scheduled castes, are still dependent on manual labour for their livelihood. The increasing privatization of higher education or the narrowing role of the state has limited the access of socially and economically vulnerable groups to higher education, particularly, to job- oriented/professional education despite the efforts at affirmative policy action. This is clearly reflected in their poor labour market outcomes. The lower employment opportunities together with lower earnings among the educated groups act as disincentive for enrollment in higher education. The questions relating to education and inequality are quite important in the context of Kerala since social mobility is largely perceived through education due to high fragmentation of landholdings and diversification of livelihoods from agriculture to non-agricultural sources.³

Wadakkancherry village, situated in Thrissur district of Kerala, provides an appropriate setting for a closer scrutiny of processes linked with the development of education in the state. This village shares certain general characteristics associated with the state as a whole and also shows certain specific features of its own. Like the rest of the state, Wadakkancherry village is multi-communitarian in character where there are Hindus, Muslims and Christians.⁴

Secondly, the village is having a higher level of literacy and many community organizations like the NSS, the SNDP and the Churches are engaged in the provision of education. This village also has a long history of modern education and had its first modern school even by the second half of the nineteenth century. Importantly, since Wadakkancherry village was surveyed by Gilbert Slater and his students in the first half of the twentieth century, longitudinal data is available for mapping out the changes from a long time

³ The proportion of the population engaged in non-agricultural occupation in Kerala is around 77 per cent compared to 47 per cent in India. See, *Economic Review* (2006)

⁴ The community configuration in Kerala is Hindus 56.2 per cent, Muslims 24.7 per cent, Christians 19.02 per cent and Others 0.12 per cent respectively compared to the all-India situation of 80.5 per cent, 13.4 per cent, 2.3 per cent and 3.8 per cent respectively. *Op. cit.*

historical perspective. The dominance of Christians in the total population of the village and a higher population density compared to the rest of Kerala constitute unique features of this village.

We have drawn on a variety of secondary sources apart from the primary sources based on field work. The important secondary sources used are Census Reports (1875-2001) and Development Reports of Wadakkancherry Panchayat (1997, 2002). The geographical area covered for the primary level field work is Wadakkancherry revenue village which comprises eight wards. The primary level field work is done in two stages: first, a household census and second, a sample survey. The household census was conducted during December 2005, mainly to understand the caste/community configuration in the village as neither the official Census nor any other secondary sources provides information on it.

According to the household census conducted by the author, there are 2381 households in the village distributed across 14 communities (Table 1). In the second stage, a sample survey was conducted during the period from June to September, 2006 to collect details on education. A stratified systematic random sampling method was followed in selecting the sample households from among each community present in the village. This exercise resulted in a sample of 327 households. Each of these households was interviewed using a structured questionnaire. Case studies and oral testimonies were also used to capture the complexities relating to education.

Table 1: Percentage distribution of households by community

	Name of the caste/community	% share in total HH
a.	Brahmins	2.2
1	Nambudiris	0.8
2	Tamil Brahmins	1.5
b.	Ambalavasis	0.8
c.	Nairs	15.2
d.	OBCs	24.4
1	Ezhava	16.8
2	Ezhuthachen	3.70
3	Viswakarma	3.9
e.	Scheduled Castes	7.9
1	Pulayas	5.6
2	Paraiyas	2.3
f.	Other Castes	3.4
g.	Christians	29.8
1	Syrian Catholic	27.9
2	Syrian Orthodox	1.5
3	Protestants	0.4
h.	Muslims	16.3
	Total Households	100.0 (2381)

Note: HH denotes households. Figure in brackets denotes total number of households.

Source: Household census by the author, 2005.

This paper proceeds as follows: the first section provides an overview of the changes in the sphere of education in Wadakkancherry village over a period of time. What follows in section two is a brief discussion of the various historical factors that contributed to the outcomes in education. The next section discusses the entry barriers in higher education. The relationship between labour market outcomes and the enrollment in higher education is discussed in the subsequent section followed by a brief conclusion.

2. The Changes in Education in Wadakkancherry Village: An Overview

Wadakkancherry village shows very impressive picture of achievements in the sphere of education through conventional indicators such as literacy, infrastructural facilities and enrollment in schools. The literacy in the village has registered remarkable increase from an abysmally lower rate of 44.9 per cent in 1941 to 89.5 per cent in 2001 (Table 2). The male-female literacy rates too have increased over a period, thus considerably narrowing the gender gap.

Table 2: Trends in literacy rates in Wadakkancherry village 1941-2001

Year	Total	Males	Females
1941	44.9	55.5	34.7
1951	41.9	49.6	35.1
1961	48.4	54.6	42.9
1971	63.6	69.9	57.9
1981	71.8	74.9	68.8
1991	88.2	92.7	84.1
2001	89.5	93.0	86.3

Source: *Census of India*, 1941, Cochin State, 1944; *Census of India*, 1951, District Census Handbook, Thrissur District, 1952; *Census of Kerala*, District Census Handbook, Thrissur District. 1961, 1971, 1981, 1991, and 2001,

The household census reveals that around 97 per cent of the population in the village is literate (Table 3). The number of educational institutions also has increased from around five in 1951 to 14 in 2003.⁵ The village is also endowed with a private aided college run by the NSS. This college offers graduate and post graduate courses in traditional arts and science disciplines (B.A, B.Sc., M.A and M.Sc.). There is almost total enrollment in schools among the school going age group irrespective of class and community. The Gross Enrollment Ratio of school going children in the age group 6-15 is almost 100 per cent.

These achievements in education, however, look bleak once we move beyond the conventional indicators like literacy, infrastructural facilities

⁵ For 1951, see, *Census of India* (1951)

and enrollment in schools. The educational scenario in Wadakkancherry reveals significant inequalities in the educational attainments of population in the village. The proportion of the population who have completed high school education and above is just 28 per cent (Table 3).

Table 3: Educational profile of Wadakkancherry

		2001	2005
Adult Literacy (In per cent)		89.5	96.7
Male		93	97.5
Female		86.3	95.9
No. of Educational Institutions		15	14
Primary schools		8	7
Middle schools		3	3
High school		2	2
Higher Secondary School		1	1
College		1	1
Levels of Education (In Per cent)			
Illiterates	Total		11.9
	Male		9.9
	Female		13.9
Pre-primary (1-3)	Total	-	11.6
	Male	12.4	
	Female		10.8
Primary (4-6)	Total	-	17
	Male		16.5
	Female		17.5
Middle school (7-9)	Total	-	31.8
	Male		35.7
	Female		28.1
High School (10-11)	Total	-	13.3
	Male		12.3
	Female		14.4
Above High School (12 & above)	Total	-	14.4
	Male		13.2
	Female		15.3
Population	Total	-	(1537)100.0
	Male		(758) 100.0
	Female		(779) 100.0

Note: Figures in brackets are absolute numbers. '-' denotes information not available.

Source: For 2001, *Census of Kerala, 2001*, District Census Handbook, Thrissur District; For 2005, household census conducted by the author.

The highest proportion of the population belongs to the educational category of middle school completed (32 per cent) followed by high school completed (28 per cent) and then primary school completed (17 per cent). This means that the majority of the population (73 per cent) has not progressed beyond the high school level.

The inequalities in educational attainments among different social groups are also high. The scheduled caste population (Pulayas and Paraiyas) stands at the very bottom of the ladder in terms of educational attainments. The share of population that has completed high school and above among the Pulayas and Paraiyas are only 11.3 per cent and 17.3 per cent respectively (Table 4).

Table 4: Percentage distribution of sample population by completed education and community

Caste/community	Illiterate	Literates (1-3)	Primary (4-6)	Middle (7-9)	High school & above	Total
Nambudiris	0	5.0	5.0	10.0	80.0	100 (20)
Tamil Brahmins	4.5	4.5	4.5	18.2	68.5	100 (22)
Ambalavasis	0	4.5	0	40.9	54.9	100 (22)
Nairs	12.7	10.6	14.7	24.4	37.3	100(197)
Ezhuthachen	6.8	8.2	8.1	29.7	47.5	100 (74)
Ezhavas	6.2	13.5	24.5	35.4	20.3	100(192)
Viswakarma	8.8	7.6	24.5	41.5	17.5	100(159)
Pulaya	20.8	16.1	15.1	36.8	11.3	100(106)
Paraiya	24.6	11.5	10.1	36.2	17.3	100 (69)
Other Castes	19.0	12.4	13.2	24.8	30.6	100(121)
Orthodox Christians	2.6	10.2	7.7	38.5	40.8	100 (39)
Protestant Christians	14.2	8.4	16.7	37.5	33.5	100 (24)
Syrian Catholics	8.4	13.8	20.1	27.7	29.8	100(274)
Muslims	18.4	11.5	17.0	35.3	17.9	100(218)
Total	11.9	11.6	17.0	31.8	27.5	100(1537)

Note: The figures in the brackets show total sample population in each community.

Source: Sample Survey, 2006.

The Muslims and the Viswakarmas too account for a lower share in educational attainments. The share of the population who have completed high school and above are highest among upper castes such as the Brahmins (Nambudiris and Tamil Brahmins) and the Ambalavasis (55 per cent).

A survey conducted in the beginning of the twentieth century in Wadakkancherry village shows that the access to school education was unequal among the different social groups (Table 5). The majority of the population that enrolled in school in those times constituted the upper castes including the Brahmins and the Nairs who accounted for only less than half of the total population in the village. The enrollments of the lower castes/communities were significantly limited. The lower presence of Christians in enrollment could be on account of the presence of a church school in the village.

Table 5: Community-wise enrollments in the government boys' high school – 1917/18

Caste/community	% share of students in each community (1)	% share of each community in total population(2)
Brahmins	34.6	13.8
Nairs	36.6	18.5
Other Castes	17.0	25.7
Muslims	2.3	21.8
Christians	9.5	20.2
Total(N)	(517)100	(5952)100

Note: Other castes include backward communities and depressed classes.

Source: Subbarama Aiyar, 1918, p.140; *Census of India*, 1941, Cochin State.

The above situation is in complete contrast with the present situation where there is universal access to education irrespective of caste. However, disparities in access to education still continue in an intricate form at the level of higher education since the lower castes, especially, the scheduled castes stand at the bottom in educational attainments. In other words, social hierarchies still maintain the *status quo* despite universal access to education and enrollment in schools. This raises several questions: What are the factors that contributed to the higher levels of literacy and total enrollment in schools? Why do inequalities in educational attainments exist

despite remarkable indicators in education? What are the various processes through which social hierarchies are reproduced through education regardless of the 'progressive' intervention of the state? These issues are addressed in the following sections.

3. An Outline of the History of Education in Wadakkancherry Village

Prior to the formation of unified Kerala, Wadakkancherry village was part of the erstwhile Cochin State, one of the princely states indirectly ruled by the English under the subsidiary alliance system.⁶ The larger developments in the Cochin state such as the spread of commercialization, establishment of modern bureaucracy, formulation of educational policies of the state and emergence of community reform movements had their own repercussions on the educational scenario of the village of Wadakkancherry. It had its first modern school established in 1873 as part of Munro's larger policy to create clerks and accountants for the state service.⁷ As discussed before, the access to education was monopolized by the upper castes in the village even as late as the dawn of the twentieth century. The access of lower castes/communities was substantially limited. According to the 1875 Census of the Cochin state, the average daily attendance of the state school was nineteen and all the students were upper caste Hindus.⁸

The educational needs of the lower castes, during the early days when modern education was introduced, were met mainly through missionary schools since Sirkar schools were not accessible or open to them. Wadakkancherry had one missionary school established by the Church Missionary Society (CMS).⁹ This was one of the first schools established in those times in the village. The fieldwork done in the village reveals that most of those who attended this school were from the Ezhava, non-catholic

⁶ The present state of Kerala was formed in 1956. Prior to this, the entire region was divided into three political units, Travancore, Cochin and Malabar. Travancore, like Cochin, was a princely state under the subsidiary alliance, while Malabar was part of the Madras presidency directly ruled by the British.

⁷ For a discussion on the emergence of modern bureaucracy, see, Jeffrey (1976:1-8)

⁸ *A General Report on the Census of Native Cochin* (1875:49)

⁹ The school authorities are not clear about the year of its establishment. According to them it existed even in 1916.

Christian and poor Nair families. The teachers were mainly Christians and Nairs. It should be noticed that the wealthy upper castes in the village never attended this school due to the social stigma attached to it on account of the lower castes attending it. For instance, *Valiayaparambu Mana*, a Nambudiri family who had ruling powers in the village, never sent their wards for education in this school even though the family resided nearby. The elder son in this family received education through private tutors at home and the younger one attended a primary school established by a Nair family in the village. At present this school is an aided primary school under the direct management of the Church of South India (CSI).

Besides the state school and the missionary school, there were a few schools that were established and maintained by different communities that included the Syrian Catholics and Nairs. These schools mainly served the specific educational needs of the respective communities.¹⁰ The Native Syrian Catholics established a school in 1916 in the village. Initially this school was run in a building attached to the Church. Even though the majority of the students were drawn from the Catholic community, the school admitted students from all other communities. This school too is an aided primary school currently, managed directly by the Roman Catholic Church.

The growing demands for education by the Nairs in the village were mainly met through a school established by a Nair family in 1938. The majority of the teachers, both male and female, were drawn from the community. Prior to the establishment of this school, the Nairs were mainly dependent on the *Ezhuthachens* or the hereditary schoolmasters for their education. It is possible that by the time the school was established a strong educated group had already emerged within the community. In 1978 this primary school was taken over by the NSS, which also runs a private aided college in the village.

¹⁰ These schools were mainly established as a result of social reform movements, which emphasized the entry into modern education and government service as the only way for emancipation. In the post-independent period these schools were brought within the ambit of the private aided category. For a discussion on social reform movements, see, Ramachandran (1999:308) and Saradmoni (1980: 139-45).

It may be noted that the private educational institutions under the grant-in-aid system were brought within the ambit of the private aided category following the formation of the Kerala state in 1956. Measures were also adopted to bring uniformity between private aided schools and state schools in the matter of pay scales and in terms of service conditions of the teachers. The state undertook the responsibility of direct payment of the salaries to the teachers employed in the private aided sector, though the right to appoint the teachers still rests with the private managements.¹¹ These institutions were mostly established under the aegis of community organizations who acted as pressure groups in demanding educational institutions during the post-unification period. The need for more 'resources' in education and the promise of employment opportunities encouraged them to agitate for more educational institutions.¹²

At the same time, measures such as mid-day meals scheme, compulsory education and compulsory promotion scheme were also adopted to increase the enrollment rates in schools. The mid-day meal scheme, initially started by the rulers of the princely states, continued even after the unification and proved to be a real inducement for the children to go to school. The state also declared primary education as compulsory and education up to higher secondary as free, while the fee rates were kept extremely low. Another important measure to reduce the dropout rates in schools was the compulsory promotion scheme enunciated in 1972-73. It came to the notice of the educational authorities in the 1960s that the dropout rates were higher among the grade repeaters. In order to rectify this, the 'whole promotion scheme' was introduced. Initially it was applied to standards I and II and later on was extended to the other standards too with an allowance of about 10 per cent of the strength as the maximum which may be detained in each standard. This policy succeeded in reducing the dropout rates, though it has been criticized for the deterioration in the quality of education in Kerala. Apart from these, the students are entitled to travel concessions – they pay about 25 per cent of the actual fare - to and from the school.¹³

¹¹ Usually these private managements make appointments against heavy donation.

¹² For a discussion of educational policies during post-independent period, see, Salim and Nair (2002:174-213).

¹³ *Ibid.*

Thus, the state both in the pre- and post-independence periods has played an active role in the popularization of education among the masses. The educational policies in the post-independence period were largely a corollary of the policies during the pre-independence period. The outcomes of these measures are reflected in the higher levels of literacy, universal enrollment in schools irrespective of class and caste and better educational facilities in the village. But, as mentioned before, alongside the positive outcomes certain disquieting tendencies relating to education exist in Wadakkancherry village that deserve serious attention.

4. Differentiated Access to Higher Education

The differentiated access to higher education played a decisive role in perpetuating disparities in Wadakkancherry village. Unequal and discriminatory access to higher education reproduces not only economic inequalities but also social inequalities.

The Gross Enrollment Ratio (GER) in higher education (above higher secondary) among the 18-25 age group is only around 23 per cent in Wadakkancherry (Table 6). If the private registration students are excluded, the GER is only around 15 per cent in the same age group. A community-wise analysis of the enrollment in higher education shows that there are disparities among the communities. The Brahmins, other castes, Nairs and Christians have a higher enrollment ratio compared to that of other social groups. The Muslims and scheduled castes show the lowest enrollment rate.

Table 6: Gross enrollment ratio in higher education among the 18-25 age group

Caste/community	No. of persons enrolled in higher education (1)	Total no. of persons in the age group 18-25 (2)	Gross enrollment ratio in the relevant age group 18-25 (1)/(2)
Brahmins	2	3	66.7
Nairs	5	20	25.0
OBCs	11	56	19.6
Scheduled Castes	5	28	17.8
Other castes	7	18	38.9
Christians	10	42	23.8
Muslims	5	30	16.7
Total	45	197	22.8

Note: Higher education includes those under private registration also.

Source: Sample Survey, 2006.

The enrollment of the scheduled castes is relatively better compared to Muslims. But a further disaggregated analysis shows that the Pulayas, a dominant scheduled caste community has zero enrollment in higher education (Table 7). The enrollment of Paraiyas, another scheduled caste community, in higher education is around 38 per cent in the relevant age group.

Table 7: Gross enrollment ratio of scheduled castes in higher education among 18-25 age group

Caste/community	No. of persons enrolled in higher education (1)	Total no. of persons in the age group 18-25 (2)	Gross enrollment ratio in the relevant age group 18-25 (1)/(2)
Pulayas	0	15	0
Paraiyas	5	13	38.5

Source: Sample Survey, 2006.

An important reason for the lower enrollment in higher education could be the higher dropouts in the tenth standard. The ratio of students in the 12th standard in proportion to the 10th standard is only 0.68 (Table 8). This means that major dropout happens soon after the 10th standard.

Table 8: Student enrollment in tenth and twelfth standards

Levels of education	No. of students currently enrolled	Ratio of students in 12 th standard to 10 th standard
Tenth standard	63	
12th standard	43	0.68

Source: Sample Survey, 2006.

The share of the population who has completed the 9th standard is the highest followed by those finished the 10th standard. This implies that majority of the population in this village fail to complete the 10th standard and those who do so fail to enroll for higher education. To address the question of why many persons drop out from education after the 10th standard, certain tentative explanations are attempted.

One possible reason for higher dropouts in the 10th standard could be the lack of adequate educational facilities in Wadakkancherry village for pursuing higher secondary education. More than half of the students enrolled for higher secondary education depend on the unaided private schools in the neighbouring villages because of the inadequate government initiative at that level. In fact, Wadakkancherry village has only one government-run higher secondary school for both boys and girls. Another possible reason could be the lower pass percentage in the 10th standard. The pass percentage in the 10th standard in the Wadakkancherry boy's high school (the only high school for boys) and the girl's high school (the only high school for girls) is only 40 per cent and 61 per cent respectively (Development Report, 2002:61). Such a lower pass percentage naturally compels many to drop out of the education at this stage. The failure to complete the 10th standard is in a sense an upshot of the compulsory education scheme promoted by the state. The scheme has succeeded in reducing the dropout rates in the lower standards, but has increased dropouts at the higher levels. This finding fortifies our hypothesis that the fewer enrollments in higher education could

be because of the higher dropouts in the 10th standard and also due to the entry barriers in higher education.

The entry barriers to higher education take on many intricate forms. An understanding of mere access to education is not sufficient enough. It is also important to understand the kind of education. It is pointed out that an important factor that increases global inequalities is the market driven economy, which is biased in favour of skilled workforce (Wood, 1995). The individuals who have access to and control over the ‘new information economy’ are rewarded with increasing returns. The people in Wadakkancherry village have access only to the conventional education in arts and science courses that might fail to fetch returns in a market driven economy. Both the private aided college and the unaided tutorial colleges enroll students for graduation and post graduation for such courses. The other option open to students is correspondence courses in arts and science subjects that can be accessed easily and cheaply. These could be the possible reasons for more than half of the students in the village being enrolled for the conventional university education in arts and science courses (Table 9).

Table 9: Distribution of students enrolled in higher education by course and community

Community	Arts and Science courses (B.A, B.Sc., B.Com, M.A., M.Sc., M.Com.)	Professional courses	Total
Brahmins	1	1	2
Nairs	4	1	5
OBCs	4	7	11
Scheduled castes	3	2	5
Other castes	6	1	7
Christians	4	6	10
Muslims	3	2	5
Total	25	20	45

Note: Professional courses listed here are lab technician, computer diploma, nursing, engineering, ITI, polytechnic, biotechnology, computer science, x-ray technician, d-pharm and health inspector course.

Source: Sample Survey, 2006.

As evident from Table 10, the majority of these students are dependent on private registration or private unaided tutorial institutions. Relatively less number of students are enrolled in professional/job-oriented education in this village. In the new context of the market economy those who attain professional education have more employment opportunities than those who get traditional university education. However, the access to professional education is largely determined by the economic status since it is mainly offered through self-financing courses in the private sector.

The share of the private sector in the higher education scenario is around 78 per cent, with government sector is having only a minimal role in the provision of professional/job oriented courses (Table 10).

Table 10: Distribution of students enrolled in higher education by course and type of institution

Courses offered	Government and pvt. aided	Self financing	Pvt. unaided	Total
Polytechnic	1	0	0	1
Lab technician	2	0	1	3
Biotechnology	0	1	0	1
Computer science	0	1	0	1
X-ray technician	0	1	0	1
Computer diploma	0	1	2	3
D.pharm	0	1	0	1
Health inspector	0	1	0	1
Arts and Science courses	6	3	16	25
Nursing	0	3	0	3
Engineering	1	2	0	3
ITI	0	2	0	2
Total	10	16	19	45

Note: Arts and science courses are B.A, B.Sc., B.Com, M.A, M.Sc. and M.Com.
Source: Sample Survey, 2006.

Our estimate of the average annual cost of education in the self-financing courses comes to around Rs.16000. This means that only those households belonging to the higher income groups could afford to send their wards for such education. The occupational profile of the households who send their

wards for professional education shows the predominance of self-employed and government employed households followed by the Gulf migrant households in this category (Table 11). The access to higher education, particularly to professional education is seen to be very much constrained by the income status of the household.

Table 11: Occupational profile of households where students are enrolled for self-financing courses

Main occupation of the households	No. of households
Self employment	6
Government employment	5
Gulf	2
Non agricultural labour	2
Total	15

Note: Total no. of households is not equal to no. of students enrolled in self-financing courses because of multiple enrollment from the same household.

Source: Sample Survey, 2006.

The importance of the income status of the household in enrolling children for professional education could also be gauged from the fact that these households depend on their own sources of income for financing education (Table 12). The expensive nature of higher education is thus seen to dissuade people from enrolling for higher education.

Table 12: Source of finance for self-financing courses

Source of finance	No. of households
Own fund	12
Voluntary organizations	2
Loan	1
Total	15

Source: Sample Survey, 2006.

The unequal access to higher education has not only economic dimensions but also social implications. As seen earlier, there are community-wise differences in the proportion of the population enrolled for higher education. The social dimension in the access to higher education could be gauged

from the fact that no student from the Pulaya community, one of the scheduled caste communities, has enrolled for higher education.

On the other hand, among the Paraiyas there are a few students who have enrolled for higher education and their relative position in enrollment is better than that of many other communities in Wadakkancherry village. Though this is a progressive aspect of the Paraiya community, if one goes beyond that, it is noticeable that they are more or less enrolled for traditional university education in arts and science (Table 13). Moreover their dependence on the government and private aided sectors for higher education limits their choices in higher education since it is the private sector that plays a key role in the provision of professional/job-oriented courses in the state.

Table 13: Distribution of students enrolled in higher education by type of institution and community

Community	Govt. and Pvt. aided	Self financing	Pvt. unaided	Total
Brahmins	0	1	1	2
Nairs	2	1	2	5
OBCs	1	6	4	11
Scheduled Castes	5	0	0	5
Other castes	2	0	5	7
Christians	0	6	4	10
Muslims	0	2	3	5
Total	10	16	19	45

Source: Sample Survey 2006.

The limited role of the state in the provision of higher education, in particular, professional/job oriented education may fail to uplift the socio-economic conditions of the depressed classes despite the positive reservation policy. This is in some sense an outcome of the new development paradigm dictated by the neo-liberal policies that stand for withdrawal of the state in the provision of higher education (Tilak, 2005). The narrow role of the state in the provision of higher education has resulted in the mushrooming of unaided self-financing institutions. According to one estimate nearly 80 per cent of the engineering colleges in Kerala are accounted for by the self-

financing system (Nair and Nair, 2008:6). This privatization policy makes professional/job-oriented courses virtually inaccessible to economically and socially vulnerable groups.

There are several instances in the village where many of the students had to discontinue studies because of their inability to pay for self-financing courses. To cite a typical case, Suja is the daughter of a railway gang-man and belongs to the Paraiya caste. She is a graduate in library science and wanted to pursue her studies up to the master's level as she found it necessary for employment prospects. But to her dismay she could not find any government institution that offers post graduation in library science with good infrastructure facilities. Most of the institutions both in the government and in the private aided sectors offer this course as a self-financing one. Since she was unable to pay the fees demanded by such institutions, she had to drop the idea of pursuing higher studies. Subsequently, she had to settle for a job as an accountant in a private enterprise in the village earning just around Rs. 2000 per month.

This case study signals the limited choices that economically and socially vulnerable groups in this village have in higher education. The peripheral role that the government plays renders higher education beyond the reach of vulnerable groups. As a result higher education fails to assume the role of an 'equalizer'. Such a situation is especially relevant for the scheduled castes, who are mostly labourers.

5. Labour Market Outcomes

The enrollment in higher education depends on the potentialities of both employment and earnings. As indicated earlier, the share of the population enrolled for higher education is less in Wadakkancherry village despite higher levels of literacy, universal enrollment among school going age groups and reasonably better facilities available for pursuing higher education. People seem to be discouraged from pursuing higher education as chances of employment and levels of earnings are less among the educated groups.

The fact that mere access to education has failed to uplift the economically and socially vulnerable groups is quite evident from the employment pattern of the Scheduled castes in Wadakkancherry village. Barring the dependants including students and housewives who form half of village population,

majority of the people in the village are engaged in non-agricultural pursuits (Table 14). This is quite unlike the villages in other parts of India. The highest proportion of the working population is engaged in occupations such as non-agricultural labour (12.9 per cent), self-employment (7.3 per cent), working with private enterprises (5.9 per cent), government employment (3.8 per cent), agricultural labor (3.0 per cent) and cultivators (2.7 per cent).

The differences in the employment patterns between the scheduled and other castes in the village are also noteworthy. Firstly, the share of manual labour both in the agricultural and the non-agricultural labour sectors is the highest among the scheduled castes. This means that access to education/higher education has failed to elevate them from their downtrodden status. Secondly, their presence in the new sources of 'mobility' like migration, both within and outside the country, is nil. The total absence of the scheduled castes in the migration profile of the village needs special enquiry and is beyond the scope of the present study. Thirdly, the scheduled castes are also conspicuously absent in the traditional sources of 'power' like cultivation. This is not surprising given the fact that these castes - the former slave castes - continue to position at the bottom of the ladder in terms of land ownership (Scaria, 2008). Lastly but not less importantly, the highest incidence of unemployment in the village is among these castes. Within the scheduled castes, unemployment is especially prevalent among the Paraiyas. This is surprising since the Paraiyas as a community show very impressive enrollment rates in higher education. The lower employment potential of traditional university education and the minimal role of the state in the provision of professional/job oriented courses could be the possible reasons for the higher rates of unemployment among scheduled castes.

Table 14: Percentage distribution of sample population by main activity by community

Caste/ community	Dependents	NAL	SE	Private enterprises	Govt. employed	AL	Cultivator	Gulf	Pensioners	HHI	Teacher	Unemployed	Outside Kerala	Total
Brahmins	50.0	0	16.7	2.4	11.9	0	7.1	2.4	0	0	7.1	0	2.4	100 (42)
Ambalavasis	45.4	0	22.7	13.6	18.3	0	0	0	0	0	0	0	0	100 (22)
Nairs	53.3	11.6	5.1	8.2	8.6	1.5	3.6	2.5	3.0	0	0.6	1.0	1.0	100(197)
OBCs	55.3	16.7	6.3	7.3	2.8	1.6	3.5	1.2	2.8	1.5	0	0.5	0.5	100(425)
Scheduled castes	42.3	20.0	2.3	4.6	3.4	15.4	0	0	6.3	2.9	1.1	1.7	0	100(175)
Other castes	61.2	12.4	9.9	3.3	3.3	1.7	0	4.1	0.8	2.5	0	0	0.8	100(121)
Christians	57.9	9.2	10.4	5.0	1.8	1.8	4.5	2.3	2.7	0.3	1.9	0.9	1.3	100(337)
Muslims	66.1	10.6	5.9	4.6	1.8	0.5	0.5	7.3	0.5	0	0.9	1.3	0	100(218)
Total	55.8	12.9	7.3	5.9	3.8	3.0	2.7	2.7	2.5	1.0	0.9	0.8	0.7	100(1537)

Note: NAL-Non-agricultural manual labour, SE-Self employed, HHI-Household industry includes beedi making, basket weaving and thread making. Dependents include students, house wives and other dependents. Pensioners are widow pensioners, agricultural pensioners, physically handicapped pensioners; Govt. employees include pensioners also. Figures in brackets are total sample population in each community.

Source: Sample survey, 2006.

The lower employment potential and lower earnings among the educated groups may, in turn, be acting as a

disincentive for enrollment in higher education. A comparison of earnings between occupations of less educated and higher educated (high school educated and above) shows that the difference is minimal. Those who are educated in traditional university education either remain unemployed or end up accepting low income employment as shop assistants, computer operators, construction supervisors, accountants and electricians or mechanics. Even those jobs which are commonly available in the private aided education sector such as teaching can be acquired only if huge sums of 'donation' are paid to the managements for appointment. On the other hand, if a person enters into manual labour that includes construction work, driving or carpentry, even before the completion of high school, he could very easily earn nearly or more than what the white-collar jobs could offer (Table 15).

The perception that higher education is of no value is widely prevalent in the village. When many young people were asked why they did not continue their studies, the response was 'what is the use of all these degrees?' Such a perception is cemented by the fact that those who are educated in traditional university streams (available cheaply and easily) either remain unemployed or end up taking low income employment. Such economic considerations dissuade people from enrolling for higher education. These issues assume importance especially in the context of depressed classes/scheduled castes, the majority of whose members still belong to the labouring class.

Table 15: Average monthly income by occupation

Occupation	Av.monthly income (in Rs.)
Agricultural labour	1576
Tailor	1856
Painter	2202
Petty shop	2507
Electrician	2561
Shop assistant	2639
Construction Supervisor	2743
Head load worker	2759
Mechanic	2789
Accountant	2843
Driver	3063
Construction Labour	3183
Carpenter	3266

(contd...)

Occupation	Av.monthly income (in Rs.)
Government Peon	3291
Cultivator	3599
Gulf migrant (labour)	3727
Business	4408
Gulf migrant (white collar)	4970
Nurse	5019
Paramedical	5157
Government Clerk	6089
School Teacher	6269
Gulf migrant (professionals)	9697
Government officer	11672
Engineer	12483

Note: The average income of the Gulf migrants denotes the average amount they sent home per month.

Source: Aravindan (ed), 2006.

6. Conclusion

The discussion in the paper with respect to the education scenario in the village of Wadakkancherry in Kerala reveals certain patterns that complicate macro level understandings that tend to blanket the variations and exceptions that are too glaring to ignore when approached with a micro-perspective. There is no doubt that literacy, universal enrollment and the number of educational institutions is important as indicators of achievements in the education sector. However, as the discussion in this paper shows, those impressive indicators alone do not guarantee equality in choices opportunities. This is well reflected in the glaringly high inequality in the educational attainments of the population. The scheduled castes still remain at the bottom in educational attainments despite the positive discrimination policy of the state. The state needs to adopt a more egalitarian approach in the provision of higher education, specifically professional/job oriented education. Unless the state plays a more proactive, positive and vigilant role in this respect, education will not only be rendered powerless in ensuring equality and conferring dignity, but will also lead to exclusions. The story of Wadakkancherry village also underscores the imperative need for conducting micro level studies to bring out more 'tensions' associated with education in Kerala.

References

Aravindan, K.P (ed), 2006, *Keralam Engane Jeevikunne? Keralam Engane Chintikkunu? (Mal)* (How Kerala lives? How Kerala Thinks?), Kozhikode: Kerala Shastra Sahitya Parishad.

Bardhan, Pranab (ed), 1989, *Conversation between Economists and Anthropologists*, New Delhi: Oxford University Press.

Breman, Jan, Peter Kloos and Ashwani Saith (eds), 1997, *The Village in Asia Revisited*, New Delhi: Oxford University Press.

Breman, Jan, 2007, *The Poverty Regime in Village India: Half a Century of Work and Life at the Bottom of the Rural Economy in South Gujarat*, New Delhi: Oxford University Press.

Chandrasekhar, C.P., V.K. Ramachandran and R.Ramakumar 2001, 'Issues in School Education in Contemporary Kerala', Paper prepared for UNICEF, New Delhi.

Cochin, Census Operations, 1944, *Census of India 1941, Vol. XIX, Cochin, Pt. I & II*. Cochin.

Deshpande, Ashwini, 2001, 'Does Caste Still Define Disparity? A Look at Inequality in Kerala, India', *The American Economic Review*, Vol.90 (2), January 7-9.

Franke, Richard W. and Barbara H. Chasin, 1999, 'Is Kerala Model Sustainable? Lessons from the Past: Prospects for the Future', in M.A. Oommen (ed) *Kerala's Development Experience*, Vol.I, New Delhi: Concept Publishing Company.

George, K.K., 2006, 'Kerala's Education System: an Insider's View', in Joseph Tharamangalam (ed) *Kerala: the Paradoxes of Public Action and Development*, Hyderabad: Orient Longman.

Government of Kerala, 2007, *Indicators of Kerala Development*, Department of Economics and Statistics, Thiruvananthapuram.

Government of Kerala, 2007, *Economic Review: 2006*, State Planning Board, Trivandrum.

India Census, 1877, *A General Report on the Census of Native Cochin*, 1875, Madras.

India, Census Commissioner, 1952, *Census of India*, 1951, Travancore-Cochin, District Census Handbook, Thrissur District.

India, Census Commissioner, *Census of Kerala*, 1961, 1971, 1981, 1991, 2001, District Census Handbook, Thrissur District.

Jeffrey, Robin, 1976, *The Decline of Nair Dominance*, New Delhi: Manohar Publishers.

Kurien, C.T., 1995, 'Kerala's Development Experience: Random Comments about the Past and Some Considerations for the Future', *Social Scientist*, Vol.23 (1-3).

Mencher, Joan P., 1980, 'The Lessons and Non-Lessons of Kerala: Agricultural Labourers and Poverty', *Economic and Political Weekly*, Vol.15 (41/43), October.

Nair, K.N and P.R Gopinathan Nair (eds), 2008, *Higher Education in Kerala: Micro level Perspectives*, Delhi: Daanish Books.

Omvedt, Gail, 2006, 'Kerala is part of India: The Kerala Model of Development, Dalits and Globalisation', in Joseph Tharamangalam (ed) *Kerala: The Paradoxes of Public Action and Development*, New Delhi: Orient Longman.

Prakash, Ved, 2007, 'Trends in Growth and Financing of Higher Education in India', *Economic and Political Weekly*, Vol.42 (31), August 4-10.

Ramachandran, V.K., 1999, 'On Kerala's Development Achievements', in Jean Dreze and Amartya Sen (eds) *Indian Development: Selected Regional Perspectives*, New Delhi: Oxford University Press.

Saith, Ashwani, 2005, 'Poverty lines versus the Poor: Method versus Meaning', *Economic and Political Weekly*, Vol. 40 (43), October 22 – 28.

Scaria, Suma, 2008, *Developmental Trajectories of a Kerala Village: Land, Education, Health and Women in Wadakkancherry*, PhD thesis submitted to the Department of Economics, University of Hyderabad, Hyderabad.

Saradmoni, K., 1980, *Emergence of a slave Caste: Pulayas of Kerala*, New Delhi: People's Publishing House.

Saradmoni, K., 2006, 'Women and the Changed Family in Kerala: Some Masked Realities' in Joseph Tharamangalam (ed) *Kerala: The Paradoxes of Public Action and Development*, New Delhi: Orient Longman.

Salim, A. Abdul and P.R Gopinathan Nair., 2002, *Educational Development in India: The Kerala Experience since 1800*, New Delhi: Anmol Publishers Private Limited.

Sen, Amartya, 2000, *Development as Freedom*, New Delhi: Oxford University Press.

Subbarama Aiyar, S., 1918, 'Watakanchery, Talapally Taluk', in Gilbert Slater (ed) *Some South Indian Villages*, Humphrey Milford: Oxford University Press.

Tilak, Jandhyala B.G., 2005, 'Higher Education in 'Trishanku': Hanging between State and Market', *Economic and Political Weekly*, Vol.40 (37), September 10 - 16.

United Nations and Centre for Development Studies (UN/CDS), 1975, *Poverty, Unemployment and Development Policy: A Case Study of Selected Issues with reference to Kerala*, New York: United Nations.

Varghese, N.V., 1999, 'Access versus Achievement: A Study of Primary Education in Kerala', in M.A. Oommen (ed) *Kerala's Development Experience II*, New Delhi: Concept Publishing Company.

Wadakkancherry Gram Panchayat, 1997, 2002, *Development Reports*.

Wood, Adrian, 1995, 'How Trade hurt Unskilled Workers', in *Journal of Economic Perspectives*, Vol.9 (3).

THE GIDR WORKING PAPER SERIES (No. 140 onwards)

- 140*. Uma Rani, "Economic Growth, Labour Markets and Gender in Japan", July 2003. Rs. 45.
- 141*. R. Parthasarathy and Jharna Pathak, "The Guiding Visible Hand of Participatory Approaches to Irrigation Management ", August 2003. Rs. 30.
- 142*. Keshab Das, "Competition and Response in Small Firm Clusters: Two Cases from Western India", September 2003. Rs. 30.
143. B.L. Kumar, "Target Free Approach for Family Welfare in Gujarat: A Review of Policy and Its Implementation", October 2003. Rs. 40.
- 144*. Amita Shah, "Economic Rationale, Subsidy and Cost Sharing for Watershed Projects: Imperatives for Institutions and Market Development", March 2004. Rs. 35.
145. B.L. Kumar, "Tribal Education in Gujarat: An Evaluation of Educational Incentive Schemes", June 2004. Rs. 45.
- 146*. R. Parthasarathy, "Objects and Accomplishments of Participatory Irrigation Management Programme in India: An Open Pair of Scissors", July 2004. Rs. 40.
147. R. Parthasarathy, "Decentralisation Trajectories with Multiple Institutions: The Case of PIM Programme in India", August 2004. Rs. 30.
- 148*. Amita Shah, "Linking Conservation with Livelihood: Lessons from Management of Gir-Protected Area in Western India", September 2004. Rs. 40.
149. B.L. Kumar, "Primary Health Care in Gujarat: Evidence on Utilization, Mismatches and Wastage", October 2004. Rs. 40.

150. B.L. Kumar, "Schools and Schooling in Tribal Gujarat: The Quality Dimension", November 2004. Rs. 35.
- 151*. N. Lalitha, "A Review of the Pharmaceutical Industry of Canada", December 2004. Rs. 35.
152. Satyajee Nanda, "Micro Determinants of Human Fertility: Study of Selected Physiological and Behavioural Variables in SC and ST Population", January 2005. Rs. 35.
- 153*. Jaya Prakash Pradhan, "Outward Foreign Direct Investment from India: Recent Trends and Patterns", February 2005. Rs. 35.
- 154*. Puttaswamaiah S., "Drinking Water Supply: Environmental Problems, Causes, Impacts and Remedies – Experiences from Karnataka", March 2005. Rs. 35.
- 155*. Keshab Das and Pritee Sharma, "Potable Water for the Rural Poor in Arid Rajasthan: Traditional Water Harvesting as an Option", March 2005. Rs. 30.
156. Jaya Prakash Pradhan and Vinoj Abraham, "Attracting Export-Oriented FDI: Can India Win the Race?", April 2005. Rs. 30.
- 157*. Jaya Prakash Pradhan and Puttaswamaiah S., "Trends and Patterns of Technology Acquisition in Indian Organized Manufacturing: An Inter-industry Exploration", May 2005. Rs. 50.
- 158*. Keshab Das and Ruchi Gupta, "Management by Participation? Village Institutions and Drinking Water Supply in Gujarat", June 2005. Rs. 30. (OS)
- 159*. Keshab Das, "Industrial Clusters in India: Perspectives and Issues for Research", July 2005. Rs. 30. (OS)
160. Jeemol Unni and Uma Rani, "Home-based Work in India: A Disappearing Continuum of Dependence?", August 2005. Rs. 35. (OS)

- 161*. N. Lalitha, "Essential Drugs in Government Healthcare: Emerging Model of Procurement and Supply", September 2005. Rs. 35. (OS)
- 162*. Puttaswamaiah S., Ian Manns and Amita Shah, "Promoting Sustainable Agriculture: Experiences from India and Canada", October 2005. Rs. 35. (OS)
163. Amalendu Jyotishi, "Transcending Sustainability beyond CBA: Conceptual Insights from Empirical Study on Shifting Cultivation in Orissa", November 2005. Rs. 30. (OS)
164. Sashi Sivramkrishna and Amalendu Jyotishi, "Monopsonistic Exploitation in Contract Farming: Articulating a Strategy for Grower Cooperation", December 2005. Rs. 30. (OS)
165. Keshab Das, "Infrastructure and Growth in a Regional Context: Indian States since the 1980s", December 2005. Rs. 30. (OS)
166. Leela Visaria, Alka Barua and Ramkrishna Mistry, "Medical Abortion: Some Exploratory Findings from Gujarat", January 2006. Rs. 35.
- 167*. Manoj Alagarajan and P.M. Kulkarni, "Trends in Religious Differentials in Fertility, Kerala, India: An Analysis of Birth Interval", February 2006. Rs. 30. (OS)
- 168*. N. Lalitha and Diana Joseph, "Patents and Biopharmaceuticals in India: Emerging Issues, March 2006. Rs. 35.
169. Sashi Sivramkrishna and Amalendu Jyotishi, "Hobbes, Coase and Baliraja: Equity and Equality in Surface Water Distribution", April 2006. Rs. 30.
170. Amita Shah, "Changing Interface Between Agriculture and Livestock: A Study of Livelihood Options under Dry Land Farming Systems in Gujarat", May 2006. Rs. 35.

- 171*. Keshab Das, "Micro and Small Enterprises during Reforms: Policy and Concerns", July 2006. Rs. 25.
- 172*. Keshab Das, "Electricity and Rural Development Linkage", August 2006. Rs. 30.
173. Keshab Das, "Traditional Water Harvesting for Domestic Use: Potential and Relevance of Village Tanks in Gujarat's Desert Region", November 2006. Rs. 30.
- 174*. Samira Guennif and N. Lalitha, "TRIPS Plus Agreements and Issues in Access to Medicines in Developing Countries", May 2007. Rs. 30.
- 175*. N. Lalitha, "Government Intervention and Prices of Medicines: Lessons from Tamil Nadu", July 2007. Rs. 30.
- 176*. Amita Shah and Jignasu Yagnik, "Estimates of BPL-households in Rural Gujarat: Measurement, Spatial Pattern and Policy Imperatives", August 2007. Rs. 35.
- 177*. P.K. Viswanathan, "Critical Issues Facing China's Rubber Industry in the Era of Economic Integration: An Analysis in Retrospect and Prospect", September 2007. Rs. 35.
178. Rudra Narayan Mishra, "Nutritional Deprivation among Indian Pre-school Children: Does Rural-Urban Disparity Matter?", October 2007. Rs. 35.
- 179*. Amita Shah, "Patterns, Processes of Reproduction, and Policy Imperatives for Poverty in Remote Rural Areas: A Case Study of Southern Orissa in India", November 2007. Rs. 40.
- 180*. N. Lalitha and Samira Guennif, "A Status Paper on the Pharmaceutical Industry in France", December 2007. Rs. 30.
- 181*. Keshab Das, "Micro, Small and Medium Enterprises in India: Unfair Fare", January 2008. Rs. 40.

182. Bharat Ramaswami, Carl E Pray and N. Lalitha, "The Limits of Intellectual Property Rights: Lessons from the spread of Illegal Transgenic Cotton Seeds in India", February 2008. Rs. 45.
183. Keshab Das, "Drinking Water and Sanitation in Rural Madhya Pradesh: Recent Initiatives and Issues", April 2008. Rs. 40.
184. N. Lalitha, "Doha Declaration and Compulsory License for Access to Medicines", June 2008. Rs. 40.
- 185*. Keshab Das and Aswini Kumar Mishra, "Ensuring Horizontal Equity: Challenges before the 13th Finance Commission", July 2008. Rs. 35.
- 186*. Jeemol Unni, "Are Gender Differentials in Educational Capabilities Mediated through Institutions of Caste and Religion in India?", September 2008. Rs. 40.
- 187*. Amita Shah and Sajitha O.G., "Poverty and Livelihood among Tribals in Gujarat: Status, Opportunities, and Strategies", October 2008. Rs. 45.
- 188*. S. Visalakshi, "Role of critical infrastructure and incentives in the commercialisation of Biotechnology in India: An analysis", November 2008. Rs. 40.
189. P.K. Viswanathan, "Co-operatives and Collective Action: Case of a Rubber Grower Co-operative in East Garo Hills in Meghalaya, North East India", December 2008. Rs. 40 (IP).

* Also published elsewhere

IP In Print

OS Out of Stock

About GIDR

The Gujarat Institute of Development Research (GIDR), established in 1970, is a premier social science research institute recognised and supported by the Indian Council of Social Science Research (ICSSR) of the Government of India, and the Government of Gujarat.

The major areas of research at the institute are the following:

- **Natural Resource Management** : Research under this area relates to the major development interventions like watershed development, participatory irrigation management, joint forest management, protected area management and fisheries development. Studies have focused mainly on aspects of economic viability, equity and institutional mechanisms.
- **Human Development** : The main focus of research under this area has been on population, employment, poverty and issues in the social sector, broadly relating to the quality of life, education, health, family welfare, social infrastructure, migration, informalisation of labour and social security.
- **Industry, Infrastructure and Trade** : Some of the themes pursued under this area include regional industrialization, small enterprise development, industrial clusters, intellectual property regimes, knowledge-based industries, trade and development and basic infrastructure.

Much of the research directly informs national and regional policies. The institute also undertakes collaborative research and has a network with governments, academic institutions, international organisations and NGOs. A foray into specialized teaching and training has just been made.



Gota, Ahmedabad - 380 060. Gujarat, India
Tel: 91-2717-232623/366/368
Fax: 91-2717-242365
Email: gidr@gidr.ac.in
Website: www.gidr.ac.in